UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

Form 20-F

☐ REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) or (g) OF THE SECURITIES EXCHANGE ACT OF 1934

OR

☒ ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2021

OR

☐ TRANSITION REPORT PURSUANT TO SECTION 13 or 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

OR

☐ SHELL COMPANY REPORT PURSUANT TO SECTION 13 or 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

Commission File Number 000-30668

NOVA LTD.

(Exact name of Registrant as specified in its charter)

Nova Ltd.
(Translation of Registrant's name into English)

Israel
(Jurisdiction of incorporation or organization)

5 David Fikes St., Rehovot 7632805, Israel
(Address of principal executive offices)

Dror David, +972-73-2295833, +972-8-9407776, Rehovot 7632805, Israel
(Name, Telephone, E-mail and/or Facsimile number and Address of the Registrant's Contact Person)

Securities registered or to be registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Ordinary Shares	NVMI	The Nasdaq Global Select Market

Securities registered or to be registered pursuant to Section 12(g) of the Act:

None

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act:

None

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report: 28,579,044 ordinary shares, as of December 31, 2021.

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

Yes ☐ No ☒

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934.

Yes ☐ No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).

Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or an emerging growth company. See definition of "accelerated filer and large accelerated filer" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer ☒ Accelerated filer ☐ Non-accelerated filer ☐

Emerging growth company ☐

If an emerging growth company that prepares its financial statements in accordance with U.S. GAAP, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act. ☐

Indicate by check mark whether the registrant has filed a report on the attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report.

Yes ☒ No ☐

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing:

U.S. GAAP ☒

International Financing Reporting Standards as issued by the International Accounting Standards Board ☐

Other ☐

If "Other" has been checked in response to the previous question, indicate by check mark which financial statement item the registrant has elected to follow:

Item 17 ☐ Item 18 ☐

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes ☐ No ☒

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INTRODUCTION

In this annual report (this "**Annual Report**"), references to "we," "us," "our," "our business," "the Company," "Nova" and similar references refer to Nova Ltd. and, where appropriate, its consolidated subsidiaries.

This annual report contains estimates, projections and other information concerning our industry and our business, as well as data regarding market research, estimates and forecasts prepared by our management. Information that is based on estimates, forecasts, projections, market research or similar methodologies is inherently subject to uncertainties, and actual events or circumstances may differ materially from events and circumstances that are assumed in this information. The industry in which we operate is subject to a high degree of uncertainty and risk due to a variety of factors, including those discussed under the headings "Special Note Regarding Forward-Looking Statements" and Item 3.D. "Risk Factors" in this Annual Report.

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report contains estimates and forward-looking statements, principally in the sections entitled Item 3.D. "Key Information—Risk Factors," Item 4. "Information on the Company," and Item 5. "Operating and Financial Review and Prospects." In some cases, these forward-looking statements can be identified by words or phrases such as "may," "might," "will," "could," "would," "should," "expect," "plan," "anticipate," "intend," "seek," "believe," "estimate," "predict," "potential," "continue," "contemplate," "possible" or similar words. Statements regarding our future results of operations and financial position, growth strategy and plans and objectives of management for future operations, including, among others, expansion in new and existing markets, are forward-looking statements.

Our estimates and forward-looking statements are mainly based on our current expectations and estimates of future events and trends which affect or may affect our business, operations and industry. Although we believe that these estimates and forward-looking statements are based upon reasonable assumptions, they are subject to numerous risks and uncertainties.

These forward-looking statements are subject to a number of known and unknown risks, uncertainties, other factors and assumptions, including the risks described in Item 3.D "Key Information—Risk Factors" and elsewhere in this Annual Report, regarding, among other things:

Our estimates and forward-looking statements may be influenced by factors including:

- Our business could be disrupted by catastrophic events, such as the outbreak of COVID-19.
- Increased information technology security threats and more sophisticated computer crime could disrupt our business.
- We are dependent on international sales, which expose us to foreign political and economic risks that could impede our plans for expansion and growth.
- Changes in Global trade policies and other factors beyond our control may adversely impact our business, financial condition and results of operations.

- Because of the technical nature of our business, our intellectual property is extremely important to our business, and our inability to protect our intellectual property or our involvement in related litigation could harm our competitive position.
- We may incorporate open source technology in some of our software and products, which may expose us to liability and have a material impact on our product development and sales.
- We operate in an extremely competitive market, and if we fail to compete effectively or to respond to the rapid technological changes, our revenues and market share will decline.
- The ongoing consolidation in our industry may harm us if our competitors are able to offer a broader range of products and greater customer support than we can offer.
- The markets we target are cyclical and it is difficult to predict the length and strength of any downturn or expansion period.
- Our operations may be delayed or interrupted, and our business could suffer if we violate environmental, safety and health, or ESH, regulations
- Because most of our current sales are dependent on few specific product lines, factors that adversely affect the pricing and demand for these product lines could reduce our sales.
- We depend on a small number of large customers, and the loss of one or more of them could significantly lower our revenues.
- There can be no assurance that revenues from future products or product enhancements will be sufficient to recover the development costs or to ensure the sale of related inventory.
- New product lines that we may introduce in the future may contain defects, which will require us to allocate time and financial resources to correct.
- Our dependence on a single manufacturing facility per product line magnifies the risk of an interruption in our production capabilities.
- We may not be successful in our efforts to complete and integrate current and/or future acquisitions, which could disrupt our current business activities and adversely affect our results of operations or future growth.
- We depend on a limited number of suppliers, and in some cases a sole supplier. Any disruption, delay or termination of these supply channels may adversely affect our ability to manufacture our products and to deliver them to our customers.
- Our operations may be disrupted by loss of key personnel or failure to attract, recruit, retain and develop qualified employees due to intense competition for highly skilled personnel.
- Our lengthy sales cycle increases our exposure to customer delays in orders, which may result in obsolete inventory and volatile quarterly revenues.
- Political, economic, and military instability in Israel may impede our ability to operate and harm our financial results.
- Our convertible senior notes may impact our financial results, result in the dilution of existing shareholders, create downward pressure on the price of our ordinary shares, and restrict our ability to take advantage of future opportunities. We may not have the ability to raise the funds necessary to settle conversions, and the accounting method for the Convertible Notes could adversely affect our reported financial condition and results
- Our profit margin may be seriously harmed by currency fluctuations.
- We participate in government programs under which we receive research and development grants. Some of these programs impose restrictions on our ability to use the technologies developed under these programs. The reduction or termination of these programs would increase our costs.
- We experience quarterly fluctuations in our operating results, which may adversely impact our share price.
- Our investment portfolio may be adversely affected by market conditions and interest rates.

You should not rely on forward-looking statements as predictions of future events. We have based the forward-looking statements contained in this Annual Report primarily on our current expectations and projections about future events and trends that we believe may affect our business, financial condition and operating results. The outcome of the events described in these forward-looking statements is subject to risks, uncertainties and other factors described in the section titled "Risk factors" and elsewhere in this Annual Report. Moreover, we operate in a very competitive and rapidly changing environment. New risks and uncertainties emerge from time to time, and it is not possible for us to predict all risks and uncertainties that could have an impact on the forward-looking statements contained in this Annual Report. The results, events and circumstances reflected in the forward-looking statements may not be achieved or occur, and actual results, events or circumstances could differ materially from those described in the forward-looking statements.

In addition, statements that "we believe" and similar statements reflect our beliefs and opinions on the relevant subject. These statements are based on information available to us as of the date of this Annual Report. While we believe that information provides a reasonable basis for these statements, that information may be limited or incomplete. Our statements should not be read to indicate that we have conducted an exhaustive inquiry into, or review of, all relevant information. These statements are inherently uncertain, and investors are cautioned not to unduly rely on these statements.

The forward-looking statements made in this Annual Report relate only to events as of the date on which the statements are made. We undertake no obligation to update any forward-looking statements made in this Annual Report to reflect events or circumstances after the date of this Annual Report or to reflect new information or the occurrence of unanticipated events, except as required by law. We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements, and you should not place undue reliance on our forward-looking statements. Our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, joint ventures or investments.

OUR FUNCTIONAL CURRENCY

Unless otherwise indicated, all amounts herein are expressed in United States dollars ("U.S. dollars", "dollars", "USD", "US$" or "$").

The currency of the primary economic environment in which we operate is the U.S. dollar, since substantially all our revenues to date have been denominated in U.S. dollars and over 50% of our expenses are in U.S. dollars or in New Israeli Shekels linked to the dollar. Transactions and balances denominated in dollars are presented at their original amounts. Non-dollar transactions and balances have been re-measured into dollars as required by the principles in ASC 830 Foreign Currency Matters. All exchange gains and losses from such re-measurement are included in the net financial income when they arise.

PART I

Item 1. Identity of Directors, Senior Management and Advisors

Not applicable.

Item 2. Offer Statistics and Expected Timetable

Not applicable.

Item 3. Key Information

3A. Selected Financial Data

[Reserved]

3B. Capitalization and Indebtedness

Not applicable.

3C. Reasons for the Offer and Use of Proceeds

Not applicable.

3D. Risk Factors

You should carefully consider the risks described below before making an investment decision. Additional risks not presently known to us or that we currently deem immaterial may also impair our business operations. Our business, financial condition or results of operations could be materially and adversely affected by any of these risks. The trading price and value of our ordinary shares could decline due to any of these risks, and you may lose all or part of your investment. This Annual Report also contains forward- looking statements that involve risks and uncertainties. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of certain factors, including the risks faced by us described below and elsewhere in this Annual Report.

Economic and External Risks

Our business could be disrupted by catastrophic events, such as the outbreak of COVID-19.

The COVID-19 pandemic has caused substantial global disruptions, including in the jurisdictions where we develop our products and conduct business and may cause additional disruptions in the future. Local, regional and national authorities in numerous jurisdictions, including the United States and Israel, have implemented a variety of measures designed to slow the spread of the virus, including social distancing guidelines, quarantines, banning of non-essential travel and requiring the cessation of non-essential activities on the premises of businesses and various other measures and restriction. Such measures and restrictions are subject to occasional updates by the authorities, hard to predict and depend on the spread of the virus and its variants.

Some of the risks associated with the pandemic or a worsening of the pandemic in the future include:

cancellation or reduction of routes available from common carriers, which may cause delays in our ability to deliver or service our products or receive components from suppliers necessary to manufacture or service our products;

- travel bans or the requirement to quarantine for a lengthy period after entering a jurisdiction, which may delay our ability to install the products we sell or service those products following installation;

- governmental orders or employee exposure requiring us, our customers or our suppliers to discontinue manufacturing products at our respective facilities for a period of time;

- increased costs or inability to acquire components necessary for the manufacture of our products due to lower availability;

- Financial difficulties of one of our suppliers, which will affect our ability to manufacture our products on time for delivery to our customers;

- absence of liquidity at customers and suppliers caused by disruptions from the pandemic, which may hamper the ability of customers to pay for the products they purchase on time or at all, or hamper the ability of our suppliers to continue to supply components to us in a timely manner or at all; and

- loss of efficiencies due to remote working requirements for our employees.

As a result, the COVID-19 pandemic may adversely affect our business and financial results, and may also have the effect of heightening many of the other factors described in this section and in the "Risk Factors'" section in this Annual Report.

The occurrence of unforeseen or catastrophic events such as terrorist attacks, extreme terrestrial or solar weather events or other natural disasters, emergence of a pandemic, or other widespread health emergencies (or concerns over the possibility of such an emergency), could create economic and financial disruptions, and could lead to operational difficulties that could impair our ability to manage our business.

Increased information technology security threats and more sophisticated computer crime, could disrupt our business.

Our global operations are linked by information systems, including telecommunications, the internet, our corporate intranet, network communications, email and various computer hardware and software applications. In light of information technology security threats, we have implemented network security measures and engaged the services of a cybersecurity consulting firm to conduct an information security risk assessment review which was reviewed and discussed by our audit committee and board of directors. In the current environment, there are numerous and evolving risks to cybersecurity and privacy, including criminal hackers, hacktivists, state-sponsored intrusions, industrial espionage, employee malfeasance and human or technological error. High-profile security breaches at other companies and in government agencies have increased in recent years, and security industry experts and government officials have warned about the risks of hackers and cyberattacks targeting businesses such as ours. Computer hackers and others routinely attempt to breach the security of technology products, services and systems, and to fraudulently induce employees, customers, sub-contractors, agents, distributors or others to disclose information or unwittingly provide access to systems or data. In addition, some of our software and products utilize open-source technologies, which may also be used by computer hackers for purpose of cyber-attacks.

Although we have invested in measures to reduce these risks, we can provide no assurance that our current IT systems are fully protected against third-party intrusions, viruses, hacker attacks, information or data theft or other similar threats. The cost and operational consequences of implementing, maintaining and enhancing further data or system protection measures could increase significantly to overcome increasingly intense, complex, and sophisticated global cyber threats. Despite our best efforts, we are not fully insulated from data breaches and system disruptions and, accordingly, we have experienced and expect to continue to experience actual or attempted cyberattacks of our IT networks. Although none of these actual or attempted cyberattacks has had a material adverse effect on our operations or financial condition thus far, we cannot guarantee that any such incidents will not have a material adverse effect on our operations or financial condition in the future. For instance, during 2020 and 2021, we experienced a few fraud attempts involving instructions given by a fraudster to third parties working with the Company, and in one of these attempts a financial institution used by the Company for certain financial transactions, wired out Company funds without Company's authorization. Although almost all of such funds have been retrieved in full by the Company, there is no assurance that such events, at a larger scale, will not happen in the future. Any material breaches of cybersecurity or media reports of perceived security vulnerabilities to our systems or those of the Company's third parties, even if no breach has been attempted or occurred, could cause us to experience reputational harm, loss of customers and revenue, regulatory actions and scrutiny, sanctions or other statutory penalties, litigation, liability for failure to safeguard our customers' information, or financial losses that are either not insured against or not fully covered through any insurance maintained by us. Any of the foregoing may have a material adverse effect on our business, operating results and financial condition.

As such, our tools and servers are vulnerable to computer viruses, break-ins and similar disruptions from unauthorized tampering with our computer systems and tools located at our facility or at customer sites, or could be subject to system failures or malfunctions for other reasons. Increased information technology security threats and more sophisticated computer crime pose a risk to the security of our systems and networks and the confidentiality, availability and integrity of our data or customer data. Cybersecurity attacks could also include attacks targeting the security, integrity and/or reliability of the hardware and software installed in our products. System failures or malfunctioning could disrupt our operations and our ability to timely and accurately process and report key components of our financial results.

Further, the regulatory framework for privacy and security issues worldwide is rapidly evolving and is likely to remain uncertain for the foreseeable future. In particular, in the European Union, the General Data Protection Regulation (GDPR) imposes more stringent data protection requirements and provides for greater penalties for noncompliance. Any inability to adequately address privacy and security concerns or comply with applicable privacy and data security laws, rules and regulations could have an adverse effect on our business prospects, results of operations and/or financial position.

We are dependent on international sales, which expose us to foreign political and economic risks that could impede our plans for expansion and growth.

Our principal customers are located in Taiwan, South Korea, China, Japan and the United States, and we produce our products in Israel and the United States. International operations expose us to a variety of risks that could seriously impact our financial condition and impede our growth including:

- instability in political or economic conditions, including but not limited to inflation, recession, foreign currency exchange restrictions and devaluations, restrictive governmental controls on the movement and repatriation of earnings and capital, and actual or anticipated military or political conflicts, particularly in emerging markets; Rising inflation and elevated U.S. budget deficits and overall debt levels, including as a result of federal pandemic relief and stimulus legislation and/or economic or market and supply chain conditions, can put upward pressure on interest rates and could be among the factors that could lead to higher interest rates in the future. Higher interest rates could adversely affect our overall business or reduce our liquidity.

- intergovernmental conflicts or actions, including but not limited to armed conflict, trade wars and acts of terrorism or war, including current war between Russia and the Ukraine; and

- interruptions to the Company's business with its largest customers, distributors and suppliers resulting from but not limited to, strikes, and financial instabilities. For instance, trade restrictions, changes in tariffs and import and export license requirements could adversely affect our ability to sell our products in the countries adopting or changing those restrictions, tariffs or requirements. This could reduce our sales by a material amount.

Specifically, starting 2018 and to date, the U.S. Department of Commerce has taken actions to restrict exports to several Chinese based semiconductor manufacturers, such as Fujian Jinhua Integrated Circuit Company, Ltd. ("JHICC") and Semiconductor Manufacturing International Corporation ("SMIC"). These customers have acquired several of our metrology solutions in the past. Due to the abovementioned export restrictions, our U.S. subsidiary is currently restricted from shipping tools or parts or provide any form of service to JHICC and tools to some specific sites of SMIC, until it is cleared to resume by the appropriate authorities.

In addition, in 2020 the US Department of State introduced restrictions on exporting to customers who are suppliers to Huawei, which is a Chinese based electronics supplier. Since the introduction of these restrictions, our US subsidiary has put in place a procedure to ensure compliance with these restrictions.

In some cases, the abovementioned export restrictions might also be applicable to the products which we export from other countries.

Additionally, the uncertainty of the economic, financial, regulatory, trade, tax and legal implications of the withdrawal of the U.K. from the E.U. ("Brexit") and other significant political developments could also have a materially adverse effect on our business.

All of these risks could result in increased costs or decreased revenues, either of which could have a materially adverse effect on our profitability.

Changes in global trade policies and other factors beyond our control may adversely impact our business, financial condition and results of operations.

The international environment in which we operate is affected from inter-country trade agreements and tariffs. As a result of recent revisions in the U.S. administrative policy there are, and may be additional, changes to existing trade agreements, greater restrictions on free trade and significant increases in tariffs on goods imported into the United States, particularly those manufactured in China, Mexico and Canada. Future actions of the U.S. administration and that of foreign governments, including China, with respect to tariffs or international trade agreements and policies remains currently unclear.

The escalation of a trade war, tariffs, retaliatory tariffs or other trade restrictions on products and materials either exported by us to China or raw materials imported by us from China may significantly impede our ability to provide our solutions and service our customers in China or other effected locations. Such developments may result in a decrease in demand for our products and technologies as well as delays in payments from our customers. Furthermore, other governmental action related to tariffs or international trade agreements, changes in U.S. social, political, regulatory and economic conditions or in laws and policies governing foreign trade, manufacturing, development and investment in the territories and countries, where our customers are located, could adversely affect our business, financial condition, operating results and cash flows.

We may be affected by instability in the global economy and by financial turmoil.

There is an inherent risk, based on the complex relationships among China, Japan, Korea, Taiwan, and the United States, that political, diplomatic and national security influences might lead to trade disputes, impacts and/or disruptions, in particular those affecting the semiconductor industry. This would adversely affect our business with China, Japan, Korea, and/or Taiwan and perhaps the entire Asia Pacific region or global economy. A significant trade dispute, impact and/or disruption in any area where we do business could have a materially adverse impact on our future revenue and profits. Instability in the global markets and in the geopolitical environment in many parts of the world, including current war between Russia and the Ukraine, as well as other disruptions may continue to put pressure on global economic conditions. In the event global economic and market conditions, or economic conditions in key markets, remain uncertain or deteriorate further, we may experience material impacts on our business, operating results, and financial condition.

Because we derive a significant portion of our revenues from sales in Asia, our sales could be hurt by instability of Asian economies.

A number of Asian countries have experienced political and economic instability. For instance, Taiwan and China have had a number of disputes, as have North and South Korea, and Japan has for a number of years experienced significant economic instability. Additionally, the Asia-Pacific region is susceptible to the occurrence of natural disasters, such as earthquakes, cyclones, tsunamis and flooding. We have subsidiaries in Taiwan, South Korea, China and Japan and we have significant customers in Taiwan, South Korea and China. An outbreak of hostilities or other political upheaval, economic downturns or the occurrence of a natural disaster in these or other Asian countries would likely harm the operations of our customers in these countries, causing our sales to suffer.

Risks related to technology and Intellectual Property

Because of the technical nature of our business, our intellectual property is extremely important to our business, and our inability to protect our intellectual property could harm our competitive position.

Our continued success depends upon our ability to protect our core technology and intellectual property. We therefore have an extensive program devoting resources to seeking patent protection for our inventions and discoveries that we believe will provide us with competitive advantages. Our patents and applications principally cover various aspects of optical measurement systems and methods, integrated process control implementation concepts, and optical, opto-mechanical and mechanical design. In addition, our patents and applications cover various aspects of X-ray based measurement systems and methods, including process control implementation concepts, X-ray energy sources, electron optics and detection, vacuum systems and equipment integration.

We cannot assure that:

- pending patent applications will be approved; or

- any patents will be broad enough to protect our technology, will provide us with competitive advantages or will not be challenged or invalidated by third parties. We also cannot assure that others will not independently develop similar products, duplicate our products or, if patents are issued to us, design around these patents. Furthermore, because patents may afford less protection under foreign law than is available under U.S. law, we cannot assure that any foreign patents issued to us will adequately protect our proprietary rights.

In addition, number of the patents which relating to our main-stream products have already expired or are expected to be expired in the coming years. Such expiration may add significant competition to our tools in this area, which may lead to a decrease in our incomes. In addition, not all of our patents are covering all territories we operate in, and thus in some territories there is less coverage to some product lines.

In addition to patent protection, we also rely upon trade secret protection, employee and third-party nondisclosure agreements and other intellectual property protection methods to protect our confidential and proprietary information. Despite these efforts, we cannot be certain that others will not otherwise gain access to our trade secrets or disclose our technology.

Additionally, as part of our long-term technological collaboration, we are engaged with joint development activities with some of our strategic customers and vendors as well as with research institutes. These activities impose some limitations on the joint intellectual property developed as part of these programs.

Furthermore, we may be required to institute legal proceedings to protect our intellectual property. If such legal proceedings are resolved adversely to us, our competitive position and/or results of operations could be harmed. For additional information on our intellectual property, see “Item 4B. Business Overview — Intellectual Property” in this Annual Report.

There has been significant litigation involving intellectual property rights in the semiconductor and related industries, and similar litigation involving Nova could force us to divert resources to defend against such litigation or deter our customers from purchasing our systems.

We have been, and may in the future be, notified of allegations that we may be infringing intellectual property rights possessed by others. In addition, we may be required to commence legal proceedings against third parties, which may be infringing our intellectual property, in order to defend our intellectual property. In the future, protracted litigation and expense may be incurred to defend ourselves against alleged infringement of third-party rights or to defend our intellectual property against infringement by third parties. Adverse determinations in that type of litigation could:

- result in our loss of proprietary rights;
- subject us to significant liabilities, including triple damages in some instances;
- require us to seek licenses from third parties, which licenses may not be available on reasonable terms or at all; or
- prevent us from selling our products.

Any litigation of this type, even if we are ultimately successful, could result in substantial cost and diversion of time and effort by our management, which by itself could have a negative impact on our profit margin, available funds, competitive position and ability to develop and market new and existing products. For additional information on our intellectual property, see "Item 4B. Business Overview — Intellectual Property" in this Annual Report.

We may incorporate open source technology in some of our software and products, which may expose us to liability and have a material impact on our product development and sales.

In order to leverage big data and distributed computing, some of our software and products utilize open source technologies. These technologies may be subject to certain open source licenses, including but not limited to the General Public License, which, when used or integrated in particular manners, impose certain requirements on the subsequent use of such technologies, and pose a potential risk to proprietary nature of products. In the event that we have or will in the future, use or integrate software that is subject to such open source licenses into or in connection with our products in such ways that will trigger certain requirements of these open source licenses, we may (i) be required to include certain notices and abide by other requirements in the absence of which we may be found in breach of the copyrights owned by the creators of such open source technologies; and/or (ii) be required to disclose our own source code or parts thereof to the public, which could enable our competitors to eliminate some or any technological advantage that our products may have over theirs. Any such requirement to disclose our source code or other confidential information related to our products, and the failure to abide by license requirement resulting in copyright infringement, could materially adversely affect our competitive position and impact our business results of operations and financial condition.

Risks related to our industry

We operate in an extremely competitive market, and if we fail to compete effectively, our revenues and market share will decline.

Although the market for process control systems used in semiconductor manufacturing is currently concentrated and characterized by relatively few participants, the semiconductor capital equipment industry is intensely competitive. We compete mainly with Onto Innovation Inc. (formerly Nanometrics Inc. and Rudolph Technologies Inc., who have merged during the second half of 2019), and KLA Corp., which manufacture and sell integrated and/or stand-alone process control systems. In addition, we compete with process equipment manufacturers ("PEMs"), such as ASML Holdings N.V., and Applied Materials Inc., which develop (or might as well acquire companies which develop) in-situ sensors and metrology products. Established companies, both domestic and foreign, compete with our product lines, and new competitors enter our market from time to time. Some of our competitors have greater financial, engineering, manufacturing and marketing resources than we do. If a particular customer selects a competitor's capital equipment, we expect to experience difficulty in selling our solution to that customer for a significant period of time. A substantial investment is required by the customers to evaluate, test, select and integrate capital equipment into a production line. As a result, once a manufacturer has selected a particular vendor's capital equipment, we believe that the manufacturer generally relies upon that equipment for the specific production line application and frequently will attempt to consolidate its other capital equipment requirements with the same vendor. Accordingly, unless our systems offer performance or cost advantages that outweigh a customer's expense of switching to our systems, it will be difficult for us to achieve significant sales from that customer once it has selected another vendor's system for an application. We believe that our ability to compete successfully depends on a number of factors both within and outside of our control, including:

- the contribution and value our solutions bring to our customers;
- our product innovation, quality and performance;
- our global technical service and support;
- the return on investment (ROI) of our equipment and its cost of ownership;
- the breadth of our product line;
- our success in developing and marketing new products; and
- the extendibility of our products.

If we fail to compete in a timely and cost-effective manner against current or future competitors, our revenues and market share will decline.

If we do not respond effectively and on a timely basis to rapid technological changes, our ability to attract and retain customers could be diminished, which would have an adverse effect on our sales and ability to remain competitive.

The semiconductor manufacturing industry is characterized by rapid technological changes, new product introductions and enhancements and evolving industry standards. Our ability to remain competitive and generate revenue will depend in part upon our ability to develop new and enhanced systems at competitive prices in a timely and cost-effective manner and to accurately predict technology transitions. Because new product development commitments must be made well in advance of sales, new product decisions must anticipate the future demand for products. If we fail to correctly anticipate future demand for products, our sales and competitive position will deteriorate. In addition, the development of new measurement technologies, new product introductions or enhancements by our competitors could cause a decline in our sales or loss of market acceptance of our existing products.

The ongoing consolidation in our industry may harm us if our competitors are able to offer a broader range of products and greater customer support than we can offer.

We believe that the semiconductor capital equipment market has undergone consolidation over the last few years. For example, Lam Research Corporation acquired Novellus Systems Inc. in 2016 and Coventor in 2017; Thermo Fisher Scientific Inc. acquired FEI Company, Inc. in 2016; ASML Holdings N.V. acquired Hermes Microvision Inc. in 2016; KLA Corporation acquired Orbotech Ltd. in 2019; and Nanometrics Inc. and Rudolph Technologies, Inc. merged in 2019. We believe that similar acquisitions and business combinations involving our competitors, our customers and the PEMs may occur in the future. These acquisitions could adversely impact our competitive position by enabling our competitors and potential competitors to expand their product offerings and customer services, which could provide them an advantage in meeting customers' needs, particularly with those customers that seek to consolidate their capital equipment requirements with a smaller number of vendors. The greater resources, including financial, marketing, intellectual property and support resources, of competitors involved in these acquisitions could allow them to accelerate the development and commercialization of new competitive products and the marketing of existing competitive products to their larger installed bases. Accordingly, such business combinations and acquisitions by competitors and/or customers could jeopardize our competitive position.

The markets we target are cyclical and it is difficult to predict the length and strength of any downturn or expansion period.

The semiconductor capital equipment market and industries, which are cyclical, experienced steep downturns and upturns in the last two decades. In recent years, we have seen a more stable overall capital investment patterns, yet we cannot predict the length and strength of potential future downturns or expansions and the impact on our business.

Our operations may be delayed or interrupted and our business could suffer if we violate environmental, safety and health, or ESH, regulations.

Some of our activities require the use of various gases, chemicals, hazardous materials and other substances such as solvents and sulfuric acid which may have an impact on the environment. We are subject to ESH regulations, and a failure to manage the use, storage, transportation, emission, discharge, recycling or disposal of raw materials or to comply with these ESH regulations could result in (i) regulatory penalties, fines and other legal liabilities, (ii) suspension of production or delays in operation and capacity expansion, (iii) a decrease in our sales, (iv) an increase in pollution cleaning fees and other operation costs, or (v) damage to our public image, any of which could harm our business. In addition, as ESH regulations are becoming more comprehensive and stringent, we may incur a greater amount of capital expenditures in technology innovation and materials substitution in order to comply with such regulations, which may adversely affect our results of operations.

Operational risks

Because substantially most of our current sales are dependent on few specific product lines, factors that adversely affect the pricing and demand for these product lines could substantially reduce our sales.

We are currently dependent on few process control product lines. We expect these product lines to continue to account for a substantial portion of our revenues in the coming years. As a result, factors adversely affecting the pricing of, or demand for, these product lines, such as competition and technological change, could significantly reduce our sales.

We depend on a small number of large customers, and the loss of one or more of them could significantly lower our revenues.

Like our peers serving the semiconductor front end market, our customer base is highly concentrated among a limited number of large customers. We anticipate that our revenues will continue to depend on a limited number of major customers, although the companies considered to be our major customers and the percentage of our revenue represented by each major customer may vary from period to period. As a result of our customer concentration, our financial performance may fluctuate significantly from period to period based, among others, on exogenous circumstances related to our clients. For example, it is possible that any of our major customers could terminate its purchasing relationship with us or significantly reduce or delay the amount of orders for our products, purchase products from our competitors, or develop its own alternative solutions internally. The loss of any one of our major customers would adversely affect our revenues. Furthermore, if any of our customers become insolvent or have difficulties meeting their financial obligations to us for any reason, we may suffer losses. For more information regarding our sales by major customers as percentage of our total sales, see Note 15 to our consolidated financial statements contained elsewhere in this Annual Report.

Our inability to significantly reduce spending during a protracted slowdown in the semiconductor industry could reduce our prospects of achieving continued profitability.

Historically, we have derived all our revenues, and we expect to continue to derive practically all of our revenues, from sales of our products and related services to the semiconductor industry. Our business depends in large part upon capital expenditures by semiconductor manufacturers, which in turn depend upon the current and anticipated demand for semiconductors. The semiconductor industry has experienced severe and protracted cyclical downturns and upturns. Cyclical downturns, as those we have experienced in the past, may cause material reductions in the demand for the products and services that we offer, and may result in a decline in our sales. In addition, our ability to significantly reduce expenses during such cyclical downturn may be limited because of:

- our continuing need to invest in research and development;
- our continuing need to market our new products; and
- our extensive ongoing customer service and support requirements worldwide.

Furthermore, during 2021, we increased our leased facilities and related investments and our operating expenses. In the event of a global recession or certain other economic conditions forcing the Company to materially reduce its expenses, portions of such facilities may be rendered obsolete. As a result, we may have difficulty achieving continued profitability during a protracted slowdown.

There can be no assurance that revenues from future products or product enhancements will be sufficient to recover the development costs or to ensure the sale of inventory related to these products.

We must continue to make significant investments in research and development in order to introduce new products and technologies, or to enhance the performance, features and functionality of our existing products, to keep pace with the competitive landscape and to satisfy customer demands. Substantial research and development costs are typically incurred before we confirm the technical feasibility and commercial viability of a new product, and not all development activities result in commercially viable products. There can be no assurance that revenues from future products or product enhancements will be sufficient to recover the development costs associated with such products or enhancements. In addition, we cannot be sure that these products or enhancements will receive market acceptance or that we will be able to sell these products at prices that are favorable to us. Our business will be seriously harmed if we are unable to sell our products at favorable prices or if the market in which we operate does not accept our products. In addition, in some cases, we accumulate inventories based on sales forecasts. If such sales forecasts are not materialized, we might need to write-off the related inventory, which will increase our losses.

New product lines that we may introduce in the future may contain defects, which will require us to allocate time and financial resources to correct.

Our new product lines may contain defects when first introduced. If there are defects, we will need to divert the attention of our personnel from our ongoing product development efforts to address the detection and correction of the defects. We cannot provide assurances that we will not incur any costs or liabilities or experience any lags or delays in the future. Moreover, the occurrence of such defects, whether caused by our products or the products of another vendor, may result in significant customer relations problems and adversely affect our reputation and may impair the market acceptance of our products.

If any of our systems fail to meet or exceed our internal quality specifications, we cannot ship them until such time as they have met such specifications. If we experience significant delays or are unable to ship our products to our customers as a result of our internal processes or for any other reason, our business and reputation may be adversely affected.

Our products are complex and require technical expertise to design and manufacture. Various problems occasionally arise during the manufacturing process that may cause delays and/or impair product quality. We actively monitor our manufacturing processes to ensure that our products meet our internal quality specifications. Any significant delays stemming from the failure of our products to meet or exceed our internal quality specifications, or for any other reasons, would delay our shipments. Shipment delays could be harmful to our business, revenues and reputation in the industry.

Our dependence on a single manufacturing facility per product line magnifies the risk of an interruption in our production capabilities.

We have one manufacturing facility for our Optical CD and Raman technology related product lines, which is located in Weizmann Science Park, Nes Ziona, Israel, and one manufacturing facility for our XPS and secondary ion mass spectrometry (“SIMS”) technology related product lines, which is located in Fremont, CA, US (the "Manufacturing Facilities"). These Manufacturing Facilities include special clean room environments and manufacturing jigs, which are customized to our needs. In addition, most of our ongoing inventories, including our main warehouse and work in process, are located in these Manufacturing Facilities. Although we adopted measures to protect these manufacturing facilities and inventories, and a disaster recovery plan, any event affecting any of our Manufacturing Facilities, including natural disaster, labor stoppages or armed conflict, may disrupt or indefinitely discontinue our manufacturing capabilities and could significantly impair our ability to fulfill orders and generate revenues, thus negatively impacting our business.

Our lease agreements for our Manufacturing Facilities include provisions that exempt the landlord and others from liability for damages to our Manufacturing Facilities.

Pursuant to the lease agreements for our Manufacturing Facilities, the landlord and anyone on its behalf, and additional tenants are exempt from any liability for direct or consequential damages to our Manufacturing Facilities, except in the event of willful misconduct. While we have obtained insurance policies against certain damages, the aforementioned exemption of liability could compromise our ability to recover the full amount of such damages, and consequently we may incur substantial costs upon the occurrence of such damages.

Because shipment dates may be changed and some of our customers may cancel or delay orders with little or no penalty, and since we encounter difficulties in collecting cancellation fees from our customers, our backlog may not be a reliable indicator of actual sales and financial results.

We schedule production of our systems based upon order backlog and customer forecasts. We include in backlog only those orders received from the customers in which a delivery date has been specified. In general, our ability to rely on our backlog for future forecasting and planning is limited because shipment dates may be changed, some customers may cancel or delay orders with little or no penalty, and our ability to collect cancellation fees from customers is not assured. Thus, our backlog may not be a reliable indicator of actual sales and financial results and this may affect the accuracy of our forecasts.

We may not be successful in our efforts to complete and integrate current and/or future acquisitions, which could disrupt our current business activities and adversely affect our results of operations or future growth.

Any acquisition may involve many risks, including the risks of:

- diverting management’s attention and other resources from our ongoing business concerns;
- entering markets in which we have no direct prior experience;
- improperly evaluating new services, products and markets;
- being unable to maintain uniform standards, controls, procedures and policies;
- failing to comply with governmental requirements pertaining to acquisitions of local companies or assets by foreign entities;
- being unable to integrate new technologies or personnel;
- incurring the expenses of any undisclosed or potential liabilities; and
- the departure of key management and employees.

If we are unable to successfully complete our future acquisitions or to effectively integrate our current acquisition of ancosys GmbH (hereinafter: "ancosys") or future acquisitions, our ability to grow our business or to operate our business effectively could be reduced, and our business, financial condition and operating results could suffer. Even if we are successful in completing acquisitions, we cannot assure that we will be able to integrate the operations of the acquired business without encountering difficulty regarding different business strategies with respect to marketing and integration of personnel with disparate business backgrounds and corporate cultures. The integration of ancosys acquisition, which closed in January 2022, is in its early stages and, as of the date of this Annual Report, we cannot assure that such process will be completed without encountering difficulties. Further, in certain cases, mergers and acquisitions require special approvals, or are subject to scrutiny by the local authorities, and failing to comply with such requirements or to receive such approvals, may prevent or limit our ability to complete the acquisitions as well as expose us to legal proceedings prior or following the consummation of such acquisitions. In some cases, such proceedings, if initiated, may conclude in a requirement to divest portions of the acquired business. As of the date of this Annual Report, we are not aware of any pending proceedings as such in connection with the acquisition of ancosys.

We depend on continuous cooperation with Process Equipment Manufacturers ("PEMs") to enable sales of our systems which are integrated with the process equipment, and the loss of PEMs as business partners could harm our business.

We believe that sales of systems which are integrated with the process equipment will continue to be an important source of our products revenues. Sales of such systems depend upon the ability of PEMs to sell semiconductor equipment products that are able to integrate with these metrology systems. If our PEMs are unable to sell such products, if they choose to focus their attention on products that do not integrate our systems, or if they choose to develop their own metrology solutions, our business could suffer. If we were to lose our PEMs as business partners for any reason, our inability to realize sales from such systems could significantly harm our business. In addition, we may not be able to develop or market such new systems, which could slow or prevent our growth.

Some of our commercial agreements with PEMs and customers may include exclusivity provisions and limitations on the use of certain intellectual property. Such limitations may prevent us from engaging in certain business relationships with third parties, and may limit our ability to use certain elements of our intellectual property. As a result, our ability to introduce new products in relevant markets might be affected.

Some of our commercial agreements with PEMs and customers may include exclusivity provisions, which prevent us from engaging in certain business relationships with third parties. In addition, some of our commercial agreements with PEMs also include limitations on the use of certain joint intellectual property. These exclusivity obligations and limitations are often used as a tool to promote the development and the penetration of innovative new solutions, and are usually limited in terms of scope and length. When considering whether to enter into any such exclusivity arrangements or accepting such limitations, we usually take into consideration the terms of the exclusivity (e.g., length and scope), the expected benefit to the Company, and the risks and limitations associated with such exclusivity or limiting undertakings. Exclusivity obligations or limitation of use relating to certain parts of our technology and products may affect our ability to commercialize our products, engage in potentially beneficial business relationships with third parties (including by means of a merger or acquisition), or introduce new products into relevant markets, which could slow or prevent our growth.

We depend on a limited number of suppliers, and in some cases a sole supplier. Any disruption, delay or termination of these supply channels may adversely affect our ability to manufacture our products and to deliver them to our customers.

We purchase components, subassemblies and services from a limited number of suppliers and occasionally from a single or a sole source. Disruption or termination of these sources could occur (due to several factors, including, but not limited to, supplier capacity limitations, low availability of raw materials, bankruptcy, work stoppages due to COVID-19 or other reasons, acts of war, terrorism, fire, earthquake, energy shortages, flooding or other natural disasters), and these disruptions could have at least a temporary adverse effect on our operations. Although we generally maintain an inventory of critical components used in the manufacture and assembly of our systems, such supplies may not be sufficient to avoid potential delays that could have an adverse effect on our business.

To date, we have not experienced any material disruption or termination of our supply sources.

A prolonged inability on our part to obtain components included in our systems on a cost-effective basis could adversely impact our ability to deliver products on a timely basis, which could harm our sales and customer relationships.

The disclosure rules regarding the use of conflict minerals may affect our relationships with suppliers and customers.

The Securities and Exchange Commission, or SEC, requires certain disclosure by companies that use conflict minerals in their products, with substantial supply chain verification requirements in the event that the materials come from, or could have come from, the Democratic Republic of the Congo or adjoining countries. These rules and verification requirements may impose additional costs on us and on our suppliers, and limit the sources or increase the prices of materials used in our products. Among other things, this rule could affect sourcing at competitive prices and availability in sufficient quantities of certain minerals used in the manufacture of components that are incorporated into our products. In addition, the number of suppliers who provide conflict-free minerals may be limited, and there may be material costs associated with complying with the disclosure requirements, such as costs related to the process of determining the source of certain minerals used in our products, as well as costs of possible changes to products, processes, or sources of supply as a consequence of such verification activities. We may not be able to sufficiently verify the origins of the relevant minerals used in components manufactured by third parties through the procedures that we implement, and we may encounter challenges to satisfy those customers who require that all of the components of our products be certified as conflict-free, which could place us at a competitive disadvantage if we are unable to do so. While we have created processes and procedures designed to enable compliance to these rules, if in the future we are unable to certify that our products are conflict free, we may face challenges with our customers, which could place us at a competitive disadvantage and harm our reputation.

Our lengthy sales cycle increases our exposure to customer delays in orders, which may result in obsolete inventory and volatile quarterly revenues.

Sales of our systems depend, in significant part, upon our customers adding new manufacturing capacity or expanding existing manufacturing capacity, both of which involve a significant capital commitment. We may experience delays in finalizing sales while a customer evaluates and approves an initial purchase of our systems. Our sales cycle for new customers, products or applications, may take longer than twelve (12) months to complete. During this time, we may expend substantial funds and management effort, but fail to make any sales. Lengthy sales cycles subject us to a number of significant risks, including inventory obsolescence and fluctuations in operating results, over which we have limited control.

Due to intense competition for highly skilled personnel, we may fail to attract, recruit, retain and develop qualified employees, which could materially and adversely impact our business, financial condition and results of operations.

We compete in a market that involves rapidly changing technological and regulatory developments that require a wide-ranging set of expertise and intellectual capital. In order for us to successfully compete and grow, we must attract, recruit, retain and develop the necessary personnel who can provide the needed expertise across the entire spectrum of our intellectual capital needs. While we have a number of our key personnel who have substantial experience with our operations, we must also develop and exercise our personnel to provide succession plans capable of maintaining continuity in the midst of the inevitable unpredictability of human capital. Our principal research and development activities are conducted from our headquarters in Israel and our subsidiary in the US. and we face significant competition for suitably skilled developers in this region. The high-tech industry in Israel, the US and other territories we operate in has experienced significant levels of employee attrition and is currently facing a severe shortage of skilled human capital. We may encounter higher attrition rates in the future, particularly if Israel continues to experience strong economic growth. We may not succeed in recruiting additional experienced or professional personnel, retaining current personnel or effectively replacing current personnel who depart with qualified or effective successors. Many of the companies with which we compete for experienced personnel have greater resources than us.

Our effort to retain and develop personnel may also result in significant additional expenses, which could adversely affect our profitability. There can be no assurance that qualified employees will continue to be employed or that we will be able to attract and retain qualified personnel in the future. Failure to retain or attract qualified personnel could have a material adverse effect on our business, financial condition and results of operations.

Risks Related to Our Incorporation and Location in Israel

Political, economic and military instability in Israel may impede our ability to operate and harm our financial results.

Our principal executive offices and research and development facilities are located in Israel and therefore may be influenced by regional instability and extreme military tension. Accordingly, political, economic and military conditions in Israel and the surrounding region could directly affect our business. Any armed conflicts, political instability, terrorism, cyberattacks or any other hostilities involving Israel or the interruption or curtailment of trade between Israel and its present trading partners could affect adversely our operations. Ongoing and revived hostilities or other Israeli political or economic factors, could prevent or delay shipments of our products, harm our operations and product development and cause any future sales to decrease. In the event that hostilities disrupt the ongoing operation of our facilities or the airports and seaports on which we depend to import and export our supplies and products, our operations may be materially adverse affected.

Our operations may be disrupted by the obligation of key personnel to perform military service.

Some of our executive officers and employees in Israel are obligated to perform significant periods of military reserve service until the age of 40 for soldiers and until the age of 45 for officers. This time-period may also be extended by the Military Chief of the General Staff and the approval of the Minister of Defense or by a directive of the Minister of Defense in the event of a declared national emergency. Our operations could be disrupted by the absence for a significant period of one or more of our executive officers or key employees due to military service. To date, our operations have not been materially disrupted as a result of these military service obligations. Any disruption in our operations due to such obligations would adversely affect our ability to produce and market our existing products and to develop and market future products.

Risks Related to Our Indebtedness and Capital Structure

Our convertible senior notes due 2025 ("Convertible Senior Notes") may impact our financial results, result in the dilution of existing shareholders, create downward pressure on the price of our ordinary shares, and restrict our ability to take advantage of future opportunities.

In October 2020, we closed an offering of $200 million aggregate principal amount of 0% Convertible Senior Notes due 2025 in a private offering to qualified institutional buyers pursuant to Rule 144A under the Securities Act of 1933, as amended. The Convertible Senior Notes may affect our earnings per share figures, as accounting procedures may require that we include in our calculation of earnings per share the number of ordinary shares into which the Convertible Senior Notes are convertible. The Convertible Senior Notes may be converted, under the conditions and at the premium specified in the Convertible Senior Notes, into cash and our ordinary shares, if any (subject to our right to pay cash in lieu of all or a portion of such shares). Given the prevailing market price of our ordinary shares during the relevant periods in 2021, the Convertible Senior Notes were convertible at the election of the holders thereof in the fourth quarter of 2021 and in the first quarter of 2022 and are expected to be convertible also looking forward. If our ordinary shares are issued to the holders of the Convertible Senior Notes upon conversion, there will be dilution to our shareholders' equity and the market price of our ordinary shares may decrease due to the additional selling pressure in the market. Any downward pressure on the price of our ordinary shares caused by the sale or potential sale of ordinary shares issuable upon conversion of the Convertible Senior Notes could also encourage short sales by third parties, creating additional downward pressure on our share price**.**

Furthermore, the indenture for the Convertible Senior Notes will prohibit us from engaging in certain mergers or acquisitions unless, among other things, the surviving entity assumes our obligations under the Convertible Senior Notes. These and other provisions in the indenture could deter or prevent a third party from acquiring us even when the acquisition may be favorable.

We currently anticipate that we will be able to rely on and to implement certain clarifications from the applicable Tax Authorities, with respect to the administration of our Israeli withholding tax obligations in relation to considerations to be paid to the holders of the Convertible Senior Notes upon their future conversion and settlement as well as other related tax aspects. Unexpected failure to ultimately obtain such anticipated clarifications from the Israeli Tax Authorities could potentially result in increased Israeli withholding tax gross-up costs.

We may not have the ability to raise the funds necessary to settle conversions of the Convertible Senior Notes, if we are obligated to settle such conversions, in whole or in part, in cash, repurchase the Convertible Senior Notes upon a fundamental change or repay the Convertible Senior Notes in cash at their maturity, and our future debt may contain limitations on our ability to pay cash upon conversion or repurchase of the Convertible Senior Notes.

As per the date of these financial statements, holders of the Convertible Senior Notes have the right, and could have it again in the future, under the indenture governing the Convertible Senior Notes to require us to repurchase all or a portion of their Convertible Senior Notes upon the occurrence of a fundamental change before the applicable maturity date, at a repurchase price equal to 100% of the principal amount of such Convertible Notes to be repurchased, plus accrued and unpaid interest, if any. Moreover, we will be required to repay the Convertible Notes in cash at their maturity, unless earlier converted, repurchased or redeemed. We may not have enough available cash or be able to obtain financing at the time we are required to make such repurchases of the Convertible Senior Notes and/or repay the Convertible Senior Notes upon maturity. In addition, we have the right to elect to settle conversions of the Convertible Senior Notes in cash.

Our ability to repurchase or to pay cash upon conversion of Convertible Senior Notes may be limited by law, regulatory authority or agreements governing our future indebtedness. Our failure to repurchase the Convertible Senior Notes at a time when the repurchase is required by the indenture or to pay cash upon conversion of the Convertible Senior Notes when required or at maturity as required by the indenture would constitute a default under the indenture. A default under the indenture or the fundamental change itself could also lead to a default under agreements governing our future indebtedness. If the payment of the related indebtedness were to be accelerated after any applicable notice or grace periods, we may not have sufficient funds to repay the indebtedness and repurchase the Convertible Senior Notes or to pay cash upon conversion of the Convertible Senior Notes or at maturity.

The accounting method for the Convertible Notes could adversely affect our reported financial condition and results.

Under applicable accounting standards we separately account for debt and equity components of convertible notes that may be settled in cash. The carrying amount of the debt component was based on the fair value of a similar hypothetical debt instrument excluding the conversion feature, valued using an effective borrowing rate which was based on our synthetic credit risk. Issuance costs were allocated to the debt and equity components in proportion to the allocation of proceeds to those components. The difference between the principal amount of the Convertible notes and the amount allocated to the debt component was considered to be debt discount, which is subsequently amortized through non cash interest expenses over the expected life of the Convertible Notes.

In August 2020, the Financial Accounting Standards Board published an Accounting Standards Update ("ASU") eliminating the separate accounting for the debt and equity components as described above. The ASU will be effective for public entities for fiscal years beginning after December 15, 2021, including interim periods within those fiscal years, early adoption is permitted but not earlier than fiscal years beginning after December 15, 2020. When effective, the elimination of the separate accounting described above may impact the amortization of debt discount and issuance costs that we expect to recognize for the Convertible Notes for accounting purposes. The ASU described above also eliminates the possibility of treasury stock method for convertible instruments such as the Convertible Notes (unless we make the relevant election eliminating the option to settle the principal amount of the relevant instrument in shares) and instead require application of the "if-converted" method. Under that method, diluted earnings per share would generally be calculated assuming that all the Convertible Notes were converted solely into ordinary shares at the beginning of the reporting period, unless the result would be anti-dilutive. The application of the if-converted method is expected to reduce our reported diluted earnings per share. For details, see Note 2.X to our consolidated financial statements contained elsewhere in this report.

Financial, legal, regulatory and taxation risks

Because most of our revenues are generated in U.S. dollars, but a significant portion of our expenses is incurred in currencies other than U.S. dollars, and mainly New Israeli Shekels, our profit margin may be seriously harmed by currency fluctuations.

We generate most of our revenues in U.S. dollars, but incur a significant portion of our expenses in currencies other than U.S. dollar, and mainly New Israeli Shekel, commonly referred to as NIS. In addition, starting January 1, 2019, in accordance with ASC 842 of lease accounting standard, we are required to present a significant NIS linked liability related to our operational leases in Israel. As a result, we are exposed to risk of devaluation of the U.S. dollar in relation to the NIS and other currencies. In such event, the dollar cost of our operations in countries other than the U.S. will increase and our dollar measured results of operations will be adversely affected. During 2021, the U.S. dollar devaluated against the NIS by 3.3%, after being devaluated by approximately 7.3% in the previous three years. We cannot predict the future trends in the rate of devaluation or revaluation of the U.S. dollar against the NIS, and our cost of operations also could be adversely affected.

We participate in government programs under which we receive research and development grants. Some of these programs impose restrictions on our ability to use the technologies developed under these programs. The reduction or termination of these programs would increase our costs.

Until the end of 2016, we received royalty-bearing grants from the Israel Innovation Authority, or IIA (formerly known as the Office of the Chief Scientist of the Ministry of Economy and Industry, or the OCS), for the financing of certain of our research and development programs that meet specified criteria. Starting 2018, we have participated only in IIA royalty free grant programs.

In addition, through the years, we participated in consortiums which are either solely managed by the IIA, or are joint consortia of the IIA and the European Research Area, or only European managed consortia. To maintain our eligibility for these programs, we must continue to meet certain conditions.

All these programs also restrict our ability to manufacture particular products and transfer particular technology, which were developed as part of the IIA's programs, outside of Israel. The restrictions associated with these IIA's programs may require us to obtain approval of the research and development committee nominated by the IIA for certain actions and transactions and pay additional payments to the IIA. Approval to manufacture products, which their development was partially funded by IIA grants, outside of Israel or consent to the transfer of technology, if requested, might not be granted and if granted, may increase our financial liabilities to the IIA. In addition, if we fail to comply with certain restrictions associated with formerly received IIA's funding, we may be subject to criminal charges.

We are further exposed to risks related to the receipt of funding from other governments or governmental agencies in connection with strategic development programs, under which we receive funding. Under such strategic development programs, governments and governmental agencies typically have the right to terminate the program's funding at any time. In addition, a project may be terminated by a mutual agreement, if the parties determine that the project's goals or milestones are not being achieved. As a result, there is no assurance that these sources of external funding will continue to be available to us in the future, and we currently expect such external funding to significantly reduce in 2022 and future years. Moreover, under the terms of certain governmental funding programs in which we receive funding, the applicable granting agency has the right to audit the costs that we incur, directly and indirectly, in connection with such programs. Any such audit could result in modifications to, or even termination of, the applicable governmental funding program. Any adverse finding resulting from any such audit could lead to penalties (financial or otherwise), termination of funding programs, suspension of payments or other adverse consequences to our ability to receive governmental funding. In addition, obligations related to grants received from the IIA grants bear an annual interest rate based on the 12-month LIBOR. Currently, there is considerable uncertainty regarding the publication of LIBOR beyond 2021, and it is not possible to determine precisely whether, or to what extent, the replacement of LIBOR would affect companies' existing or future liabilities to the IIA.

The application of tax laws is subject to interpretation and if tax authorities challenge our methodologies or our analysis of our tax rates it could result in an increase to our worldwide effective tax rate and cause us to change the way we operate our business.

The application of the tax laws of various jurisdictions to our international business activities is subject to interpretation and also depends on our ability to operate our business in a manner consistent with our corporate structure and intercompany arrangements. The tax authorities of the jurisdictions in which we operate may challenge our methodologies for valuing developed technology or intercompany arrangements, including our transfer pricing, or determine that the manner in which we operate our business does not achieve the expected tax consequences, which could result in tax and penalty payments and in an increase of our worldwide effective tax rate, and could adversely affect our financial position and results of operations.

A certain degree of judgment is required in evaluating our tax positions and determining our provision for income taxes. In the ordinary course of business, there are many transactions and calculations for which the ultimate tax determination is uncertain. For example, our effective tax rates could be adversely affected by earnings being lower than anticipated in countries where we have lower statutory rates and higher than anticipated in countries where we have higher statutory rates, by changes in foreign currency exchange rates or by changes in the relevant tax, accounting and other laws, regulations, principles and interpretations. As we operate in numerous taxing jurisdictions, the application of tax laws can be subject to diverging and sometimes conflicting interpretations by tax authorities of these jurisdictions. It is not uncommon for tax authorities in different countries to have conflicting views. In addition, tax laws are dynamic and subject to change as new laws are passed and new interpretations of the law are issued or applied. For example, the work being carried out by the OECD on base erosion and profit shifting as a response to increasing globalization of trade could result in changes in tax treaties or the introduction of new legislation that could impose an additional tax on businesses. As a result of changes to laws or interpretations, our tax positions could be challenged, and our income tax expenses could increase in the future.

For instance, if tax authorities in any of the countries in which we operate were to successfully challenge our transfer prices, they could require us to reallocate our income to reflect transfer pricing adjustments, which could result in an increased tax liability to us. In addition, if the country from which the income was reallocated did not agree with the reallocation asserted by the first country, we could become subject to tax on the same income in both countries, resulting in double taxation. If tax authorities were to allocate income to a higher tax jurisdiction, subject our income to double taxation or assess interest and penalties, it could increase our tax liability, which could adversely affect our financial position and results of operations.

The enactment of legislation implementing changes in taxation of international business activities, the adoption of other corporate tax reform policies, or changes in tax legislation or policies could impact our future financial position and results of operations.

There can be no assurance that our effective tax rate for the year ended December 31, 2021 will not change over time as a result of changes in corporate income tax rates or other changes in the tax laws the jurisdictions in which we operate. Any changes in tax laws could have an adverse impact on our financial results. Corporate tax reform, base-erosion efforts and tax transparency continue to be high priorities in many tax jurisdictions where we have business operations. As a result, policies regarding corporate income and other taxes in numerous jurisdictions are under heightened scrutiny and tax reform legislation is being proposed or enacted in a number of jurisdictions.

For example, there is growing pressure in many jurisdictions and from multinational organizations such as the Organization for Economic Cooperation and Development (OECD) and the EU to amend existing international taxation rules in order to align the tax regimes with current global business practices. Specifically, in October 2015, the OECD published its final package of measures for reform of the international tax rules as a product of its Base Erosion and Profit Shifting (BEPS) initiative, which was endorsed by the G20 finance ministers. Many of the initiatives in the BEPS package required and resulted in specific amendments to the domestic tax legislation of various jurisdictions and to existing tax treaties. We continuously monitor these developments. Although many of the BEPS measures have already been implemented or are currently being implemented globally (including, in certain cases, through adoption of the OECD's "multilateral convention" (to which Israel is also a party) to effect changes to tax treaties which entered into force on July 1, 2018 and through the European Union's "Anti Tax Avoidance" Directives), it is still difficult in some cases to assess to what extent these changes our tax liabilities in the jurisdictions in which we conduct our business or to what extent they may impact the way in which we conduct our business or our effective tax rate due to the unpredictability and interdependency of these potential changes. In January 2019 the OECD announced further work in continuation of the BEPS project, focusing on two "pillars." On October 8, 2021, 136 countries approved a statement known as the OECD BEPS Inclusive Framework, which builds upon the OECD's continuation of the BEPS project. The first pillar is focused on the allocation of taxing rights between countries for in-scope large multinational enterprises (with revenue in excess of Euro 20 Billion and profitability of at least 10%) that sell goods and services into countries with little or no local physical presence. The second pillar is focused on developing a global minimum tax rate of at least 15 percent applicable to in-scope multinational enterprises (with revenue in excess of Euro 750 million). Israel is one of the 136 jurisdictions that has agreed in principle to the adoption of the global minimum tax rate. Given these developments, it is generally expected that tax authorities in various jurisdictions in which we operate may increase their audit activity and may seek to challenge some of the tax positions we have adopted. It is difficult to assess if and to what extent such challenges, if raised, might impact our effective tax rate.

In addition, the U.S. government may enact significant changes to the taxation of business entities including, among others, an increase in the corporate income tax rate. While different versions of United States tax legislation have been discussed and considered by Congress, the likelihood of these changes being enacted or implemented is unclear. We are currently unable to predict whether such changes will occur and, if so, the ultimate impact on our business or results of our operations.

Our entitlement to certain tax benefits under the Israeli Capital Investment Encouragement Law may increase our ETR.

Starting 2017, we made an election to receive Tax benefits under Israeli "Economic Efficiency Law" as a "Preferred Technological Enterprise". While we believe that we meet the statutory conditions to entitle us to such benefits there can be no assurance that the tax authorities in Israel will concur to our position in general and for each specific year separately. Should it be determined that we have not, or do not meet such conditions, the benefits received would be cancelled. We would also be required to pay increased taxes or refund any benefits previously received, adjusted to the Israeli consumer price index and interest, or other monetary penalty.

For additional information regarding Approved and Benefited Enterprise, Preferred Enterprise and Preferred Technological Enterprise see, "Item 10E. Taxation – Israeli Taxation" in this Annual Report.

It should be noted that the Israeli government may reduce or eliminate the above-mentioned benefits in the future. The termination or reduction of these grants or tax benefits could harm our financial condition and results of operations, and result in significantly higher tax payment. In addition, if we increase our activities outside Israel due to, for example, future acquisitions or outsourcing of manufacturing or development activities, these activities generally will not be eligible for inclusion in Israeli grants or tax benefit programs. Accordingly, our effective corporate tax rate could increase significantly in the future.

We experience quarterly fluctuations in our operating results, which may adversely impact our share price.

Our quarterly operating results within a specific year can fluctuate significantly. A principal reason is that we derive a substantial portion of our revenue from the sale of a relatively small number of systems to a relatively small number of customers. As a result, our revenues and results of operations for any given quarter may decrease due to factors relating to the timing of orders, the timing of shipments of systems, and the timing of recognizing these revenues. Furthermore, our quarterly results are affected by the cyclical nature of the semiconductor capital equipment market and industries.

We also have a limited ability to predict revenues for future quarterly periods and, as a result, face risks of revenue shortfalls. If the number of systems we actually ship, and thus the amount of revenues we are able to record in any particular quarter, is below our expectations, the adverse effect may be magnified by our inability to adjust spending quickly enough to compensate for the revenue shortfall.

Some of our contracts and arrangements potentially subject us to the risk of significant or non-limited liability.

We produce highly complex optical and electronic components and, accordingly, there is a risk that defects may occur in any of our products. Such defects can give rise to significant costs, including expenses relating to recalling products, replacing defective items, writing down defective inventory and loss of potential sales. In addition, the occurrence of such defects may give rise to product liability and warranty claims, including liability for damages caused by such defects.

In our commercial relationship with customers, we attempt to negotiate waivers of consequential and indirect damages arising from damages for loss of use, loss of product, loss of revenue and loss of profit caused by our products. Similarly, with respect to our commercial relationship with subcontractors and suppliers, we attempt to negotiate arrangements which do not include a limitation of liabilities and limitation of consequential and indirect damages. However, some contracts and arrangements we are bound by, expose us to product liability claims resulting in personal injury or death, up to an unlimited amount, and the incurrence of the risk of material penalties for consequential or liquidated damages. Additionally, under such contracts and arrangements, we may be named in product liability claims even if there is no evidence that our products caused the damage in question, and such claims could result in significant costs and expenses relating to attorneys' fees and damages.

In addition, such contracts and arrangements may include non-limited liability provisions for infringement of a third party's intellectual property rights in connection with our products.

Although we have not incurred in the past any material penalties for consequential or liquidated damages, we may incur such penalties in the future. Such penalties for consequential or liquidated damages may be significant (and so is the legal process conducted in connection with such penalties) and could negatively affect our financial condition or results of operations.

A large number of our ordinary shares continue to be owned by a relatively small number of shareholders, whose future sales of our shares, if substantial, may depress our share price.

If our principal shareholders sell substantial amounts of our ordinary shares, including shares issued upon the exercise of outstanding options or warrants, the market price of our ordinary shares may fall. For additional information on our major shareholders, see "Item 7A – Major Shareholders" in this Annual Report.

Certain shareholders may control the outcome of matters submitted to a vote of our shareholders, including the election of directors.

To the best of our knowledge, approximately 30% of our outstanding ordinary shares are cumulatively held by four of our shareholders. As a result, and although we are currently not aware of any voting agreement between such shareholders, if these shareholders voted together or in the same manner, they would have the ability to control the outcome of corporate actions requiring an ordinary majority vote of shareholders as set in the Company's Amended and Restated Articles of Association. Even if these shareholders do not vote together, each one of them may have the ability to influence the outcome of corporate actions requiring the vote of shareholders as set in the Company's Amended and Restated Articles of Association. For additional information on our major shareholders, see "Item 7A – Major Shareholders" in this Annual Report.

The market price of our ordinary shares may be affected by a limited trading volume and may fluctuate significantly.

In the past, there has been a limited public market for our ordinary shares and there can be no assurance that an active trading market for our ordinary shares will continue. An absence of an active trading market could adversely affect our shareholders' ability to sell our ordinary shares in short time periods. Our ordinary shares have experienced, and are likely to experience in the future, significant price and volume fluctuations, which could adversely affect the market price of our ordinary shares without regard to our operating performance.

In addition, the price of our ordinary shares could also be affected by possible sales of our ordinary shares by investors who view our convertible senior notes as a more attractive means of equity participation in our company, and by hedging and arbitrage trading activity that such investors may engage in.

We manage our available cash through various bank institutions and invest large portions of our cash reserves in bank deposits. A bankruptcy of one of the banks in which or through which we hold or invest our cash reserves, might prevent us to access that cash for an uncertain period of time.

We manage our available cash through various bank institutions and invest large portions of our cash reserves in bank deposits. As of December 31, 2021, a large portion of our cash reserves were invested in bank institutions, of which approximately 22% was invested in one institution. A bankruptcy of one of the banks in which we hold our cash reserves or through which we invest our cash reserves, might prevent us to access that cash for an uncertain period of time.

Our investment portfolio may be adversely affected by market conditions and interest rates.

We maintain substantial balances of liquid investments, for purposes of financing our operations and acquisitions. Our marketable securities totaled $199 million as of December 31, 2021. The performance of the capital markets affects the values of funds that are held in marketable securities. These assets are subject to market fluctuations and various developments, including, without limitation, rating agency downgrades that may impair their value. We generally buy and hold our portfolio positions, while minimizing credit risk by setting limits for minimum credit rating and maximum concentration per issuer. Our investments consist primarily of government and corporate debentures, which are primarily fixed-income securities.

Although we believe that we generally adhere to conservative investment guidelines, the continuing turmoil in the financial markets may result in impairments of the carrying value of our investment assets. In addition, as our investment portfolio is invested primarily in fixed-income securities it is affected by changes in interest rates. Interest rates are highly sensitive to many factors, including governmental monetary policies and domestic and international economic and political conditions. Any significant decline in our financial income or the value of our investments as a result of the changes in interest rates and interest rate expectations of the financial markets, deterioration in the credit rating of the securities in which we have invested, or general market conditions, could have an adverse effect on our results of operations and financial condition. We classify our investments as available-for-sale. Changes in the fair value of investments classified as available-for-sale are not recognized as income during the period, but rather are recognized as other comprehensive income, or OCI, which is a separate component of equity until realized. Realized losses in our investments portfolio may adversely affect our financial position and results.

We may fail to maintain effective internal control over financial reporting in accordance with Section 404 of the Sarbanes-Oxley Act of 2002.

The Sarbanes-Oxley Act of 2002 imposes certain duties on us and our executives and directors. Our efforts to comply with the requirements of Section 404 (Assessment of Internal Control), which started in connection with our Annual Report on Form 20-F for the fiscal year ended December 31, 2007, have resulted in increased general and administrative expense and a diversion of management time and attention, and we expect these efforts to require the continued commitment of resources. Section 404 of the Sarbanes-Oxley Act of 2002 requires (i) management's annual review and evaluation of our internal control over financial reporting and (ii) an attestation report issued by an independent registered public accounting firm on our internal control over financial reporting, in connection with the filing of our Annual Report on Form 20-F for each fiscal year. We have documented and tested our internal control systems and procedures in order for us to comply with the requirements of Section 404. While our assessment of our internal control over financial reporting resulted in our conclusion that as of December 31, 2021, our internal control over financial reporting was effective, we cannot predict the outcome of our testing in future periods. If we fail to maintain the adequacy of our internal controls, we may not be able to ensure that we can conclude on an ongoing basis that we have effective internal controls over financial reporting. Failure to maintain effective internal control over financial reporting could result in investigation or sanctions by regulatory authorities, and could have a material adverse effect on our operating results, investor confidence in our reported financial information, and the market price of our ordinary shares.

Provisions of our Amended and Restated Articles of Association and Israeli law may delay, prevent or make difficult an acquisition of Nova, which could prevent a change of control and negatively affect the price of our ordinary shares.

Israeli corporate law regulates mergers, requires tender offers for acquisitions of shares above specified thresholds, for special approvals for transactions involving directors, officers or significant shareholders and regulates other matters that may be relevant to these types of transactions. Furthermore, Israeli tax considerations may make potential transactions unappealing to us or to some of our shareholders. See Exhibit 2.1 to this Annual Report, "Description of the Securities". For a more detailed discussion regarding some anti-takeover effects of Israeli law.

These provisions of Israeli law may delay, prevent or make difficult an acquisition of Nova, which could prevent a change of control and therefore depress the price of our shares.

The rights and responsibilities of our shareholders are governed by Israeli law and differ in some respects from the rights and responsibilities of shareholders under U.S. law.

We are incorporated under Israeli law. The rights and responsibilities of holders of our ordinary shares are governed by our Amended and Restated Articles of Association and by the Israeli Companies Law, 1999 (the "Companies Law"). These rights and responsibilities differ in some respects from the rights and responsibilities of shareholders in typical U.S. corporations. In particular, pursuant to the Companies Law each shareholder of an Israeli company has to act in good faith in exercising his or her rights and fulfilling his or her obligations toward the company and other shareholders and to refrain from abusing his power in the company, including, among other things, in voting at the general meeting of shareholders and class meetings, on amendments to a company's articles of association, increases in a company's authorized share capital, mergers, and transactions requiring shareholders' approval under the Companies Law. In addition, a controlling shareholder of an Israeli company or a shareholder who knows that it possesses the power to determine the outcome of a shareholder vote or who has the power to appoint or prevent the appointment of a director or officer in the company, or has other powers toward the company has a duty of fairness toward the company. However, Israeli law does not define the substance of this duty of fairness. Because Israeli corporate law has undergone extensive revision in recent years, there is little case law available to assist in understanding the implications of these provisions that govern shareholder behavior.

Any shareholder with a cause of action against us as a result of buying, selling or holding our ordinary shares may have difficulty asserting a claim under U.S. securities laws or enforcing a U.S. judgment against us or our officers, directors or Israeli auditors.

We are organized under the laws of the State of Israel, and we maintain most of our operations in Israel. Most of our officers and directors as well as our Israeli auditors reside outside of the United States and a substantial portion of our assets and the assets of these persons are located outside the United States. Therefore, if you wish to enforce a judgment obtained in the United States against us, or our officers, directors and auditors, you will probably have to file a claim in an Israeli court. Additionally, you might not be able to bring civil actions under U.S. securities laws if you file a lawsuit in Israel. We have been advised by our Israeli counsel that Israeli courts generally enforce a final executory judgment of a U.S. court for liquidated amounts in civil matters after a hearing in Israel. If a foreign judgment is enforced by an Israeli court, it will be payable in Israeli currency. However, payment in the local currency of the country where the foreign judgment was given will be acceptable, subject to applicable foreign currency restrictions.

Our shares are listed for trade on more than one stock exchange, and this may result in price variations.

Our ordinary shares are listed for trading on the Nasdaq Global Select Market and on the Tel Aviv Stock Exchange Ltd., or TASE. This may result in price variations. Our ordinary shares are traded on these markets in different currencies, U.S. dollars on the Nasdaq Global Select Market and New Israeli Shekels on the TASE. These markets have different opening times and close on different days. Different trading times and differences in exchange rates, among other factors, may result in our shares being traded at a price differential on these two markets. In addition, market influences in one market may influence the price at which our shares are traded on the other.

Our business could be negatively affected as a result of actions of activist shareholders, and such activism could impact the trading value of our securities.

In recent years, certain Israeli issuers listed on United States exchanges have been faced with governance-related demands from activist shareholders, as well as unsolicited tender offers and proxy contests. Although as a foreign private issuer we are not subject to U.S. proxy rules, responding to these types of actions by activist shareholders could be costly and time-consuming, disrupting our operations and diverting the attention of management and our employees. Such activities could interfere with our ability to execute our strategic plan. In addition, a proxy contest for the election of directors at our annual meeting would require us to incur significant legal fees and proxy solicitation expenses and require significant time and attention by management and our board of directors. The perceived uncertainties due to these potential actions of activist shareholders also could affect the market price and volatility of our securities.

We may be classified as a "passive foreign investment company" for U.S. income tax purposes, which could have significant and adverse tax consequences to U.S. shareholders.

Generally, if for any taxable year 75% or more of our gross income consists of specified types of passive income, or, on average, at least 50% of our assets are held for the production of, or produce, passive income, we may be characterized as a passive foreign investment company (a "PFIC") for U.S. federal income tax purposes. Classification of Nova as a PFIC could result in adverse U.S. tax consequences to our U.S. shareholders, such as ineligibility for any preferential tax rates on capital gains or on dividends, interest charges on certain taxes treated as deferred, and additional reporting requirements under U.S. federal income tax laws and regulations. If we are a PFIC, it may be possible for U.S. holders of our ordinary shares to mitigate certain of these consequences by making an election to treat us as a "qualified electing fund" under Section 1295 of the Internal Revenue Code of 1986, as amended (the "Code") or a "mark-to-market election" under Section 1296 of the Code. U.S. shareholders should consult with their own U.S. tax advisors with respect to the U.S. tax consequences of investing in our ordinary shares.

We believe that for our 2021 taxable year we were not a PFIC. Nonetheless, because the determination of whether we are, or will be, a PFIC for a taxable year depends on the application of complex U.S. federal income tax rules, which are subject to various interpretations, there is a risk that we were a PFIC in 2021. Absent one of the elections referenced above, if we are a PFIC for any taxable year during which a U.S. holder holds our ordinary shares, we generally will continue to be treated as a PFIC with respect to such U.S. holder in all succeeding years regardless of whether we cease to meet the PFIC tests in one or more subsequent years. Currently we expect that we will not be a PFIC in 2022 or subsequent years. However, PFIC status is determined based on our assets and income over the course of each taxable year, and is dependent on a number of factors, including the value of our assets, the trading price of our ordinary shares and the amount and type of our gross income. Therefore, there can be no assurances that we will not become a PFIC for the 2022 taxable year, or any future year, or that the Internal Revenue Service will not challenge any determination made by us concerning our PFIC status. For a discussion on how we might be characterized as a PFIC and related tax consequences, please see the section of this Annual Report entitled "Taxation - U.S. Taxation – Passive Foreign Investment Companies." Investors should consult their own tax advisors regarding all aspects of the application of the PFIC rules to our ordinary shares.

If a United States person is treated as owning at least 10% of our shares, such holder may be subject to adverse U.S. federal income tax consequences.

If a United States person is treated as owning (directly, indirectly or constructively) at least 10% of the value or voting power of our shares, such person may be treated as a "United States shareholder" with respect to each "controlled foreign corporation" in our group. Because our group includes one or more U.S. subsidiaries, certain of our non-U.S. subsidiaries will be treated as controlled foreign corporations (regardless of whether we are or are not treated as a controlled foreign corporation). A United States shareholder of a controlled foreign corporation may be required to annually report and include in its U.S. taxable income its pro rata share of the controlled foreign corporation's "Subpart F income", "global intangible low-taxed income" and investments in U.S. property, whether or not such controlled foreign corporation makes any distributions. An individual that is a United States shareholder with respect to a controlled foreign corporation generally would not be allowed certain tax deductions or foreign tax credits that would be allowed to a United States shareholder that is a U.S. corporation. A failure to comply with these reporting obligations may subject you to significant monetary penalties and may prevent the statute of limitations with respect to your U.S. federal income tax return for the year for which reporting was due from starting. We cannot provide any assurances that we will assist investors in determining whether any of our current or future non-U.S. subsidiaries are treated as a controlled foreign corporation or whether such investor is treated as a United States shareholder with respect to any of such controlled foreign corporations or furnish to any United States shareholders information that may be necessary to comply with the aforementioned reporting and tax paying obligations. The Internal Revenue Service provided limited guidance on situations in which U.S. shareholders may rely on publicly available information to comply with their reporting and tax paying obligations with respect to foreign-controlled CFCs. A United States investor should consult their own advisors regarding the potential application of these rules to its investment in the shares.

New United States tax legislation may impact our results of operations and financial condition.

The U.S. government may enact significant changes to the taxation of business entities including, among others, an increase in the corporate income tax rate and the imposition of minimum taxes, the capitalization of certain costs related to research and development or surtaxes on certain types of income. The likelihood of these changes being enacted or implemented is unclear. We are currently unable to predict whether such changes will occur. If such changes are enacted or implemented, we are currently unable to predict the ultimate impact on our business.

Item 4. Information on the Company

4.A History and Development of the Company

Nova Ltd. was incorporated in May 1993 under the laws of the State of Israel. We commenced operations in October 1993 to design, develop and produce integrated process control systems for use in the manufacture of semiconductors, also known as integrated circuits or chips.

In April 2000, we conducted an initial public offering and our shares were listed for trading on the Nasdaq stock exchange.

In June 2002, we listed our shares on the TASE, pursuant to legislation which enables Israeli companies whose shares are traded on certain stock exchanges outside of Israel to be registered on the TASE, while reporting, in substance, in accordance with the provision of the relevant foreign securities law applicable to the Company.

Until 2008, most of our products were sold to process equipment manufacturers such as Applied Materials, Inc. and Ebara Corp., which later sold these products to semiconductor manufacturers. Since then, we have changed our business model, selling substantially all of our products directly to semiconductor manufacturers. Through this process, which has also enabled us to introduce to these customers additional products and features, we have improved our products gross margins and net profitability.

In April 2015, we acquired ReVera Inc., a privately held company headquartered in Santa Clara, California, which develops, manufactures and sells stand-alone metrology tools for measurements of thin-films and composition applications in the semiconductor industry, and on December 31, 2017, we merged ReVera into its parent company, Nova Measuring Instruments, Inc.

In July 25, 2021, we changed the legal name of our Company from Nova Measuring Instruments Ltd. to Nova Ltd. to match the Company's long-term strategy. The Company has retained its NVMI ticker symbol and its Process Insight® tagline

At the end of 2021, we had six direct fully owned subsidiaries, in the U.S., Taiwan, Korea, China, Japan and Germany.

In November 2021, we signed a definitive agreement to acquire ancosys, a privately held company Headquartered in Pliezhausen Germany which is a leading provider of chemical analysis and metrology solutions for advanced semiconductor manufacturing, supporting both frontend and backend semiconductor manufacturing. The transaction's closing was completed in January 2022.

Our headquarter office is located in Israel at 5 David Fikes St., 10th Floor, Rehovot.

4.A.8.

The SEC maintains an internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC (http://www.sec.gov). The information is also available on our website (http://www.novami.com).

4.B Business Overview

Our Company

Nova is a leading innovator and key provider of metrology solutions for advanced process control used in semiconductor manufacturing. Nova delivers continuous innovation by providing high-performance metrology solutions for effective process control throughout the semiconductor fabrication process. We bring pioneering metrology solutions to semiconductors process control, by industrializing lab and research-grade technologies and developing emerging metrology solutions. Nova's product portfolio, deployed at the world's largest integrated-circuit manufacturers, combines high-precision hardware and cutting-edge software, and provides its customers with deep insight into the development and production of the most advanced semiconductor devices. Nova's capability to deliver innovative Optical, X-ray and SIMS technology solutions enables its customers to improve performance, enhance product yields and accelerate time to market.

Nova's market offering is driven by product divisions: The Dimensional Metrology Division (DMD) which is responsible for optical technology-based metrology solutions (integrated and standalone), and the Materials Metrology Division (MMD) which is responsible for x-ray based solutions. The corporate units, such as marketing, next generation technology, human resources, finance and global business group, support both divisions. This structure allows the company to focus management attention on each product line separately, as well as to facilitate the integration of additional businesses or technologies in the future.

In January 2022, through the acquisition of ancosys, we expanded our technology base. ancosys is a leading provider of chemical analysis metrology solutions for advanced semiconductor manufacturing. ancosys' automated analytical systems combine flexible architecture with industry-grade capabilities and support both frontend and backend semiconductor manufacturing. We believe that the combined advanced portfolio will deliver cutting edge solutions for advanced semiconductor process control and will expand Nova's total available market beyond frontend semiconductor manufacturing into the backend and advanced packaging markets.

Our Market

Semiconductor Industry and the Metrology Market

The semiconductor manufacturing process starts with a flat silicon disc known as a silicon wafer upon which integrated circuits are constructed. To construct the integrated circuits, a series of layers of thin films that act as conductors, semiconductors or insulators are applied. During the manufacturing process, these film layers are subjected to processes which remove portions of the film, create circuit patterns and perform other functions. The semiconductor manufacturing process requires numerous precise steps and strict control of equipment performance and process sequences. Tight process control can be achieved through monitoring silicon wafers and measuring relevant parameters before' during or after each process step, with metrology tools.

The demand for our metrology systems is driven by capital equipment spending of the semiconductor manufacturers, which is in turn driven by the worldwide demand for semiconductor components embedded in technology devices. Industry data indicates worldwide demand for semiconductors will continue to grow, driven by the growing adoption of 5G and advanced network infrastructure, artificial intelligence ("AI") and internet of things ("IoT") applications, as well as network and data centers thriving through the work-from-home, learn-from-home, buy from home and gaming trends.

The growing investment in advanced technology nodes introduces growing complexity and new challenges into the semiconductor manufacturing process, as manufacturers are continuously pushed to improve performance and cost to gain competitive advantage. In a climate of constant growth, suppliers and manufacturers are asked to constantly come up with new products with greater functionality, better performance at lower prices. As a result, many new complex materials, advanced structures and processes are being introduced into the semiconductor manufacturing ecosystem. An environment of growing complexity in chip design and manufacturing set favorable business conditions for process control demand.

The Semiconductor Manufacturing Process

Semiconductors devices typically consist of transistors, memory cells or other components connected by an intricate system of circuitry on silicon wafers. Integrated circuit manufacturing involves many individual steps, some of which are repeated several times, through which numerous copies of an integrated circuit are formed on a single silicon wafer. Because semiconductor specifications are extremely tight, and integrated circuits are becoming more complex, the process steps are constantly monitored, and critical parameters are measured at each step using metrology equipment. Key process steps, such as Deposition, Photolithography, Etch and Chemical-Mechanical Planarization, rely on metrology systems to monitor film thickness, uniformity, and critical dimensions and material characteristics, to ensure the correct result has been achieved.

The measurements taken by metrology systems during the manufacturing process help ensure process uniformity and help semiconductor manufacturers avoid costly rework and misprocessing, therefore increasing efficiency, yield and time to market.

The Need for Effective Process Control and Metrology Tools

Several technical and operational trends within the semiconductor manufacturing industry are strengthening the need for more effective process control and metrology solutions. These trends include:

- Smaller IC Devices. The development of advanced smaller features means a larger numbers of integrated circuits per wafer. As feature geometries decrease, the manufacturing process tolerances decreases as well, and manufacturing yield becomes increasingly sensitive to processing deviations and defects. In addition, the increased complexity means higher chance of error during manufacturing, leading to additional inline monitoring and metrology steps.

- Transition to 3D Device. The transition to ever more complex 3D Integration technology, in order to improve performance, requires complex fabrication and as a result more sophisticated metrology solutions to be capable of measuring critical dimensions and materials properties in these 3D structures.

- Faster Time to Market. The accelerating rate of obsolescence of technology and the faster ramp to yield required by customers makes early achievement of high manufacturing yields a critical component of profitability and metrology has a critical role in achieving these demanding results.

- Materials Engineering. In order to overcome limitations in the continued shrink of transistor dimensions, which is used to improve performance, leading manufacturers are introducing new novel materials to IC production. New materials introduction requires new processing and metrology solutions in the atom level and thus represent a challenging development for the semiconductor manufacturing industry. It also representing a growing demand for more tighter materials control and therefore increasing demand for Materials Metrology solutions to control parameters such as composition, stress, ultra-thickness, crystallization and more.

- New Manufacturing Steps. Multiple Lithography technologies including multi-patterning and E-Beam are increasing the number of Etch and CMP process steps and EUV poses unique metrology challenges.

- Foundry Model. The rising investment needed for leading edge semiconductor process development and production, as well as the proliferation of different types of devices, lead to manufacturing increasingly being outsourced to foundries. A foundry typically runs several different processes and makes numerous different semiconductor product types in one facility. Since Foundries are running multiple products at the same time, the need for process control and metrology is increasing in order to qualify multiple devices on the same wafer at the same high process quality.

- Advanced Memory Technology (SSD). Memory manufacturers are going through technology evolution and build vertical devices to manage layers of NAND Memory. Such a complex device that can hold up to hundreds of thin high aspect ratio vertical layers requires significant changes in the manufacturing process. These changes require also many more steps to control through different Metrology solutions and increase the overall process control intensity for these High Aspect Ratio evolving structures.

In order to address the continuous increasing costs and challenges associated with these trends, semiconductor manufacturers must improve manufacturing procedures, production yields and time to market. Beyond improving the technology, introducing new process steps and innovative fabrication capabilities, Semiconductors manufacturers must tighten the control over the process and therefore must increase the Metrology intensity as well as introduce new innovative Metrology solutions. These new solutions will allow manufactures to overcome new challenges in dimensions and materials engineering.

The Semiconductor Market – Update

According to Gartner, semiconductor revenues are expected to grow by 25.1% in 2022, compared to growth of 10.4% in 2021. In addition, Gartner forecasts capital spending and wafer fab equipment to grow in 2022 by 11.5% and 10.7% respectively, following growth of 31.8% in CAPEX and 35.8% in WFE in 2021. (Gartner Forecast Semiconductor Wafer Fab Equipment, Worldwide, 4Q21 Update, published December 2021).

According to research reports, future demand drivers for semiconductors include 5G mobile devices, data center and cloud infrastructure, Artificial Intelligence, Augmented and Virtual Reality, Smart Sensors, internet-of-things and other electronic equipment.

Products & Technologies

Our product portfolio includes a complete set of metrology platforms suited for dimensional, films ,materials and chemical metrology measurements for process control across multiple semiconductor manufacturing process steps including lithography, Etch, CMP, deposition, electrochemical plating and advanced packaging. Our offering is comprised of several key product lines, spanning multiple technologies and addressing key challenges in semiconductor process control, from R&D to High-Volume-Manufacturing.

Our strategy to offer holistic and diversified portfolio supports the industry's frequent transitions, establishing the advantages and unique value we bring to our customers. With the introduction of new technologies and products, we cover a wider variety of applications, which increase our served and available markets and footprint in the semiconductor manufacturing market.

Technology	Product Line	Key applications	Product families
• Broadband Spectrophotometry • Scatterometry • Spectral Reflectometry • Imaging and Image Processing	Dimensional Optical CD Integrated Metrology	Critical Dimensions Thin films	Nova i Platform Nova 3090 Nova 2040 Nova ASTERA
	Dimensional Optical CD Stand-Alone Metrology		Nova T-platform Nova MMSR
• Spectral Interferometry			Nova PRISM
• X-Ray Photoelectron Spectroscopy • X-Ray Fluorescence	X-Ray Materials Metrology	Thin film Composition	Nova VERAFLEX
• Secondary Ion Mass Spectrometry	SIMS Materials Metrology	Composition depth-profiling	Nova METRION
• Raman Spectroscopy	Optical Materials Metrology	Strain Crystallinity	Nova ELIPSON
• Computational Modeling for Metrology Platforms	Physical modeling (Modeling Software Solutions)		Nova Mars
• Machine Learning • Advanced Algorithms	Mathematical modeling algorithms (Software solutions)		Nova FIT
• Big Data Analytics • High Power Computing	Fleet Management (Software solutions)		Nova FM Nova HPC QED

Following the acquisition of ancosys in January 2022, we have expanded our technology offering by adding Chemical Analytical methods (such as CVS, HPLC, Titration, Spectroscopy) with applications of Chemical metrology in various steps.

About the product lines

Our product portfolio is composed from 3 major product lines.

1. *Dimensional Metrology*

Nova's integrated metrology (IM) - Integrated platforms that enable advanced process control (APC) required for the most advanced logic and memory technology nodes. Nova' IM solutions offer fast metrology with high productivity, targeting manufacturing of advanced logic and memory device technologies. Integrated metrology systems are directly integrated with manufacturing process equipment and provide semiconductor manufacturers with effective and efficient process control by measuring wafers within the process environment. This family of products allows within-wafer and within-die variation control. Enriched with Nova's advanced modeling and algorithmic solutions, Nova's integrated metrology provides enhancements in metrology accuracy, precision, and tool matching.

Nova's stand-alone metrology platforms are utilized to characterize critical dimensions such as width, shape and profile with high precision and accuracy and are used in multiple areas of the fabrication process such as photolithography, etch, CMP and deposition steps. Nova's stand-alone platforms are targeted for critical dimensions (CD) and thin films measurements at the most advanced logic and memory technology nodes across all semiconductor leading customers. The expression "stand-alone metrology" generically describes free standing metrology equipment, located in line, i.e., next to the processing equipment measuring wafer samples in a station of its own. Nova's stand-alone metrology product line is comprised of several platforms, ranging from normal channel only to multiple channels of information in one tool. Nova's unique channels of information enables high metrology performance combined with high productivity. When incorporating Nova's advanced suite of modeling and machine learning solutions, the Optical CD stand-alone platform provides cutting-edge performance for critical dimensions (CD) and thin films measurements of the most complex layer stacks and 3D structures.

2. *Modeling and Software*

All of Nova's hardware products are combined with our suite of advanced algorithms and software modeling solutions. Nova's software modeling solutions combine top notch algorithms in the field of Artificial Intelligence and machine learning. Nova's suite of software modeling products is comprised of Nova MARS physical and geometrical modeling and Nova FIT data driven machine learning modeling solutions. These solutions are supported by Nova HPC, a computational management layer, which also serves as the foundation for Nova's Centralized Fleet Management and Control. Our comprehensive software modeling portfolio provides customers with a complete modeling and application development solution designed for complex 3D and HAR structures in the most advanced logic and memory technology nodes.:

- Nova MARS - Nova MARS software package is a multi-channel metrology modeling engine designed for the most advanced 3D structures in advanced process nodes of semiconductor manufacturing. It's a complete modeling solution for scatterometry and interferometry models' development, material characterization and recipe optimization which is crucial for facing increasing challenges in semiconductor metrology. The Nova MARS also injects physical and process related knowledge to solve complex structures.

- Nova FIT - Nova FIT modeling suite compliments traditional modeling of Optical Critical Dimensions by machine learning and data driven algorithmic solutions. The algorithmic suite works in conjunction with Nova MARS physical modeling engine and Nova's fleet management solution to improve metrology performance, speed up time to solution and expand metrology envelope for enriched process control. Nova FIT embeds advanced machine learning and big data architecture into optical modeling, enhancing the way customers utilize metrology measurement data to tighten process windows, avoid process excursions and improve yield.

- Nova's Centralized Fleet Management and Control - Nova's Fleet Management and Performance Monitoring Center simplify the management and enhance the productivity of Nova tools in the fabrication site. The platform's ability to process and analyze large amounts of fleet and metrology data using advanced data analytic tools provides our customers with intelligent and predictive insights on tool performance and process trends.

- Nova HPC - The Nova HPC is a High-Performance Computing solution, which is designed to accelerate Nova MARS and Nova FIT work processes. Nova HPC significantly expedites application development by accelerating library-building, real time regression and recipe-setting processes. Its advanced computing hardware design enables optimization of Nova's proprietary algorithm performance, thus enabling the most calculation-demanding application development.

3. Materials Metrology

Materials are considered the next frontier in advancing integrated circuits beyond dimensional and architectural scaling. The growing usage of complex and novel materials in advanced technology nodes has increased the demand for metrology solutions that can measure materials properties, In Line and In Die, with high precision and accuracy. Nova's materials metrology offering utilizes powerful X-Ray, Raman and SIMS technologies that have been optimized to provide the automation, speed and reliability required in today's advanced semiconductor production environment. As part of Nova's strategic plan, Nova intends to increase its focus on the evolving materials engineering market. The demand to precisely characterize and control materials composition, thickness, stress and more, is growing in advanced Memory and Logic nodes and requires innovative metrology solutions. Our Nova ELIPSON, METRION and VERAFLEX platforms aim to provide such capabilities.

- VERAFLEX - Nova's VERAFLEX combines enhanced XPS (X-Ray photoelectron spectroscopy) capability with a unique low energy XRF (X-Ray fluorescence) channel to address logic and memory device fabrication challenges. This innovative inline technology is a surface-sensitive quantitative spectroscopic technique that is used to determine the elemental composition of thin films.

- Nova METRION - Nova METRION- targets process control of 3D logic and memory semiconductor devices. The technology enables advanced materials profile measurements by bringing secondary ion mass spectrometry (SIMS) into semiconductor production lines on both monitor and product wafer. The Nova METRION provides quantitative and actionable results on depth profiling of compositional information with high-depth resolution and precision.

- Nova ELIPSON - Nova ELIPSON utilizes Raman spectroscopy, a vibrational spectroscopy technique, to detect multiple material properties such as strain, crystallinity, phases, grain size and composition. The combination of a small spot and high speed of this non-destructive, optical method makes it a metrology of choice for both memory and logic segments.

Our Customers, Sales and Marketing

Our sales and marketing strategy is based mostly on direct sales channels where we engage with our customers from the early stages of process development, to address their challenges in the development phase, and later on support their technology transition to high volume production. We seek to establish and maintain tight cooperative relationships with our customers by consistently providing them with a high level of service, support and new capabilities. We have a global network of sales and marketing, customer service and applications support offices worldwide. Our teams are empowered by frequent trainings, remote support options, online resources and rich marketing collateral.

We serve all leading manufacturers in the logic, foundry and memory sectors of the integrated circuit manufacturing industry. Our customers are located across Asia, Europe and North America.

For the distribution of our total revenues, from products and services, by geographic areas, see Note 12A to our consolidated financial statements.

The semiconductor industry is dominated by a small number of large companies. As a result, our sales are highly concentrated among a relatively small number of customers. The following table indicates the percentage of our total revenues derived from sales to our five largest customers and the range of these revenues from these customers for the periods indicated.

	2019	2020	2021
Total revenues from five largest customers	67%	69%	70%
Range of revenues from five largest customers	3%-27%	5%-26%	4%-31%

Competition

The industries in which Nova operates are highly competitive and characterized by rapid technological change. Nova's ability to compete generally depends on its ability to develop and introduce competitive solutions, commercialize its technology in a timely manner, continuously improve its products, and develop new products that meet the evolving customer requirements. Significant competitive factors include technical capability and differentiation, productivity, cost-effectiveness and the ability to support a global customer base. The importance of these factors varies according to customers' needs, including product mix and respective product requirements, applications, and the timing and circumstances of purchasing decisions. Substantial competition exists in all areas of Nova's business.

Competitors range from small companies that compete in a single region, which may benefit from policies and regulations that favor domestic companies, to global, diversified companies. Nova's ability to compete requires a high level of investment in R&D, marketing and sales, and global customer support activities.

Research and Development

We have assembled a core team of experienced scientists and engineers who are highly skilled in their particular field or discipline. Our research and development core competencies, technologies and disciplines are in scatterometry, thin film metrology, XPS, interferometry, Raman Spectroscopy metrology and semiconductor process control, and include multidisciplinary measurement instruments, complex system engineering, algorithms, physical modeling, optical design, interpretation software, machine learning, image acquisition, pattern recognition, X-ray energy sources, electron optics and detection, vacuum systems and equipment integration. Our research and development staff consist of about 330 highly skilled members, approximately 80 of whom hold Ph.D.'s (not including skilled members of ancosys, which we acquired in January 2022). In addition, we rely on independent subcontractors and consultants in various fields. Since June 2003, our research and development operations in Israel are certified for ISO 9001 quality standard (Current ISO 9001:2015 version).

The metrology and process control market is characterized by continuous technological development and product innovations. We believe that the rapid and ongoing development of new products and enhancements to our existing product lines is critical to our success. Accordingly, we devote a significant portion of our technical, management and financial resources to developing innovative products, new applications and emerging innovative technologies.

Our vision is to continue to be an innovative leader in the semiconductor process control market, through increasing our leadership in the Dimensional and Materials metrology solutions, and

our research and development efforts and activities are designed to support this vision. Our research and development efforts are structured through different and separate development projects, which are initiated following a detailed project plan, technical feasibility, and risk analysis. The main projects are monitored throughout their life cycle in a structured process, including design reviews and project management reviews.

In the frame of our research and development activities we participate from time to time in development consortium arrangements, which also help us to support our customers in the transition to advance technology nodes. These consortia are joint collaboration programs with other semiconductors companies and are supported and funded by the IIA and\or European Joint Research. It should be noted, that in order to maintain our eligibility for these programs, we must continue to meet certain conditions. These programs might restrict our ability to manufacture particular products and transfer particular technology, which were funded by the IIA. For additional information, see “Item 5C - Grants from the Israel Innovation Authority & European programs” in this Annual Report.

As part of our long-term technological collaboration, we are also engaged with joint development activities with some of our strategic customers, as well as with research institutes and other semiconductor companies. These activities sometimes impose limitations on the joint intellectual property developed as part of these programs.

Patents and Other Proprietary Rights

Our continued success depends upon our ability to protect our core technology and intellectual property. We therefore have an extensive program devoting resources to seeking patent protection for our inventions and discoveries that we believe will provide us with competitive advantages. Our patents and applications principally cover various aspects of optical measurement systems and methods, integrated process control implementation concepts, and optical, opto-mechanical and mechanical design. In addition, our patents and applications cover various aspects of X-ray based measurement systems and methods, including process control implementation concepts, X-ray energy sources, electron optics and detection, vacuum systems and equipment integration. With the acquisition of ancosys in January 2022, our patents and applications portfolio also include aspects of Chemical metrology. To protect our proprietary rights, we also rely on a combination of copyrights, trademarks, trade secret laws, contractual provisions (e.g. confidentiality agreements) and licenses. Our copyrights include software copyrights. We constantly seek to control access to, and distribution of our proprietary information, such as our proprietary algorithms. We enter into confidentiality and proprietary rights agreements with our employees, consultants and business partners, and we control access to and distribution of our proprietary information.

Our in-house know-how is an important element of our intellectual property. The development and management of our products requires sophisticated coordination among many specialized employees. We believe that duplication of this coordination by competitors or individuals seeking to copy our products would be difficult. The risk of a competitor effectively replicating the functionality of our products is further mitigated by the fact that most of the core technology operating on our systems is not exposed to a user or to our competitors. To protect our technology, we implement multiple layers of security.

Despite our efforts to protect our proprietary rights, competitors may be able to develop similar technology independently or design around our patents and, despite our efforts, our trade secrets may be disclosed to others. Furthermore, the laws of countries other than the U.S. may not protect our intellectual property to the same extent as the laws in the U.S. We also cannot assure that: (i) our pending patent applications will be approved; (ii) any patents granted will be broad enough to protect our technology or provide us with competitive advantages or will not be successfully challenged or invalidated by third parties; or (iii) that the patents of others will not have an adverse effect on our ability to do business. We may also have to commence legal proceedings against third parties to protect our intellectual property.

From time to time, we receive communications from others asserting that our products infringe or may infringe their intellectual property rights. Typically, our in-house patent counsel investigates these matters and, where appropriate, retains outside counsel to provide assistance. We are not presently involved in any material legal proceedings in which a third party has asserted that we have violated their intellectual property rights. If, however, we become involved in any such litigation and its outcome is adverse to us, it may result in a loss of proprietary rights, subject us to significant liabilities, including triple damages in some instances, require us to seek licenses from third parties which may not be available on reasonable terms or at all, or prevent us from selling our products. Furthermore, any litigation relating to intellectual property, even if we are ultimately successful, could result in substantial costs and diversion of time and effort by our management. This in and of itself could have a negative impact on us. While we believe that we would be successful in any litigation seeking to enforce our patent rights, the ultimate outcome of any litigation or other legal proceedings cannot be predicted.

Manufacturing

We have one manufacturing facility for our Optical based product lines (including the Raman technology), which is located in Ness-Ziona, Israel, and one manufacturing facility for our X-ray and SIMS based product lines, which is located in Fremont, CA, US.

In addition, we are expecting to expand our production and development capabilities with a new state-of-the-art clean room in Rehovot Israel that will support the Company's newly introduced technologies and continuous growth. This new clean room is expected to become operational by the end of 2022. In addition to the expansion of our Israel cleanroom footprint, we are also in the process of establishing a cleanroom in a new facility to our Fremont site. This cleanroom is expected to become operational in the first half of 2022. As part of Nova's corporate social responsibility, the construction is also expected to support high sustainability standards.

Our principal manufacturing activities include assembly, integration, final testing and calibration. Our production activities are conducted in our manufacturing and repair center facility in Israel and in Fremont. We rely and expect to continue to rely on subcontractors and turnkey suppliers to fabricate components, build subassemblies and perform other non-core activities in a cost-effective manner. While we use standard components and subassemblies wherever possible, most mechanical parts, metal fabrications, optical components and other critical components used in our products are engineered and manufactured to our specifications. A small portion of these components and subassemblies are obtained from a limited group of suppliers, and occasionally from a single source supplier.

In order to leverage the relatively high volume of systems we manufacture, and in order to decrease production costs, we continue to focus our internal manufacturing activities on processes that add significant value or require unique technology or specialized knowledge and outsource others. Our site in Israel received the ISO 9001 quality mark by an international certification institute in October 1999. Since then, we have upgraded our quality systems to conform to ISO 9001:2015 requirements. Our site in Fremont received the ISO 9001:2015 quality mark in November 2021. We received the formal certification of ISO 14001 in 2010 which was upgraded to ISO 14001:2015 in 2016 and in 2014 we received the formal certification of OHSAS 18001:2007 for our manufacturing operations in Israel which was upgraded to ISO 45001 in 2019. We are being annually recertified for these standards.

Environmental, Social and Governance (ESG)

Nova ESG 2021 Status

Based on our ESG plan that was launched in 2020 we aim at creating an advanced ethical, inclusive, and sustainable ecosystem that improves the lives of the communities and the environment we are a part of. Recognizing the far-reaching implications that corporate behavior has over the socio-economic environment, we have been working towards full integration of ESG principles into our everyday operations and decision-making processes.

In 2020 we forged ahead on our environmental, social and governance (ESG) journey, and focused on developing a broader perspective and meaningful examination of the ESG aspects we affect. When COVID-19 disrupted everyday operations and lives of every person on the planet, our top priority was keeping our employees and their families safe, secure, and cared for. Hence, we quickly adapted our operations and health and safety measures to support our global teams.

In addition to the emphasis on the safety and wellbeing of our employees, Nova recognized the growing need to streamline the ESG management within the company. As such, Nova launched its ESG strategy in 2020, with the review and guidance of the company’s board of directors and with the cooperation with a global steering committee comprised of several Officers and Employees.

Following the adoption of this strategy, we instituted initiatives and working programs across the organization to provide clarity and coherence on Nova's ESG positions and activities.

We are proud of our ESG achievements throughout 2020 and 2021, and we plan to continue and develop our corporate ESG strategy. Our existing and planned ESG activities which are described below, indicate our growing commitment and engagement in this matter.

In order to highlight the different directions we are taking in our ESG plans we describe it in the following chart:

Environment	**Building a Sustainable Future** We strive to play our part in building a better future by protecting our environment and making a positive impact on the planet for the next generations to inherit.
Community Relations	**Lifting our Communities** We welcome members of the community into our family and provide them with the resources required to promote equality, belonging and self-worth
Diversity	**Expanding Cultural Diversity** We're committed to building a diverse organization with a unique sense of belonging. We strive to expand our multidisciplinary platform with diverse talents and inspire the various segments of society.
Inclusion	**Empowering Every Voice** Our organization fosters an inclusive, open-minded and accepting environment. We respect all individuals and ensure everyone is seen, heard, feel valued and respected.
Ethics & Governance	**Championing our Employees** People at Nova always come first. We strive to create an ethical, safe and motivational workplace for our employees, one in which they belong, while their privacy, interests and well-being are protected.

General:

ESG Steering Committee

Composed of several executive officers and company employees and under the guidance of our board of directors and management, we have established an ESG steering committee. The committee, led by the Chief Human Resources Officer is responsible to set the annual targets, evaluate the ESG implementation progress as a whole, review counsels' recommendations, and lead internal work plans and their alignment with our ESG strategy and commitments, with special emphasis on Nova's annual ESG report.

Global ESG Lead

Nova's main internal focal point to run all programs is the Global ESG Lead. The incumbent is working as an integral part of Nova's HR division, as well as aligned with, and under the guidance of the aforementioned head of ESG steering committee. The incumbent is responsible for:

- Communicating with business leaders across all Nova departments and sites on ESG
- Developing and coordinating the strategies which underpin the company's ESG objectives
- Conducting research into best practices to further ensure Nova's positive impact on local communities and the environment, and
- Representing and raising public awareness regarding our ESG commitment

Nova's ESG Current Analysis:

In 2021, we contracted Ernst & Young (Israel) Ltd. to conduct a full initial analysis of ESG maturity throughout identified material topics, across all Nova global locations. The analysis was based on global ESG standards, such as GRI and SASB, and leading ESG raters' expectations, including MSCI and Sustainalitycs. Key findings of the review indicated the following:

- The company is at an ESG medium-high maturity level with Business Continuity Plan indicating high level understanding of risk management and preparedness
- The Company demonstrates wide range of Social and Governance activities, including employees' trainings on code of ethics, promoting gender equality, supporting of employees and suppliers during COVID19, putting emphasis on product quality, and more.

Nova is planning to release public disclosure of these activities in its planned ESG report 2022.

1. **Environment:**

Nova is a global organization, with operations and supply chains which span over multiple countries and cultures. It is for this reason that the nature of our work and the countries we source from and operate in, mean that despite our best intentions and efforts, there is always a risk that various forms of environment hazards and risks may exist. Yet, we believe sustainability is an indisputable force of change in our current environment, transforming how we live and work, and impacting our understanding of social and economic value and growth. This defines Nova's environment standards and dictates our approach to our operations, supply chain and partners management, as well as our approach to promoting long-standing solutions and alternatives to improving our environmental impact.

Nova's responsibility to advance sustainability and environmental responsibility, lies first and foremost with entering building our new headquarters in 2019 with sustainability of a "Leed Gold" certificate - LEED (Leadership in Energy and Environmental Design), which is a widely used green building rating system and provides a framework for healthy, safe, highly efficient, and cost-saving green buildings. The building includes installed control management systems with sensors for light and air conditioning, and with anti-sun layered curtains on all windows, which allow efficient energy consumption. Furthermore in all of Nova's new buildings and facilities across the globe - U.S., Taiwan, and China - we strive to follow the sustainability standards.

We also implemented recycling measures in our facilities, which allow proper gathering and recycling.

In general, our production lines don't ~~not~~ involve industrial waste, and any waste that is created from used metal and electronics components is being processed through authorized companies which manage the disposal of toxic substances (IPA - "Tabib"). We also implemented recycling measures of production line related waste, such as packing materials, including crates and wooden pallets. In 2022, we will be focusing on the creation of Climate Change / EHS policy that discusses the commitment of Nova to the various activities that are in place; create standardization and unification of data collection in all sites; and finally, set KPI's and Goals for the following years based on data collected and benchmarks.

2. **Social:**

Nova's unique DNA and operating culture, along with its position as a leader in the semiconductor process control market, with approximately 1,000 employees and almost a dozen worldwide sites, position us with an extraordinary opportunity and responsibility to have a meaningful impact on the community surrounding us. We believe that by welcoming diverse cultures, experiences and opinions, we can develop technologies and ideas that transform lives and shape and impact the population around us.

Our strategy, shaped in 2020, is focused on the **Human Capital**. A top priority for us is ensuring all our employees and their families are safe, secure, and cared for. Along with the **Access to Health Care** we provide globally, this concern has increased with the disruption of COVID-19 to everyday lives and our daily operations have changed accordingly. Furthermore, in 2021, we decided to deepen our human capital focus on the Diversity, Equity and Inclusion (DE&I) pillars, and to frame our various operation programs accordingly:

- We set a goal to increase the number of our female recruits by 10 percent during the year, a goal we have successfully achieved worldwide. As a result, the absolute number of female recruits in 2021 was doubled from 2020 and tripled from 2019.
- We implemented inclusive language across several companywide documents and procedures
- We conducted training to our leadership and HR teams on DE&I challenges and opportunities
- We established employee resource groups devoted to the issue of DE&I
- We nominated a Disability Services and Compliance Officer to provide care and support for individuals with disabilities and assist them to integrate into the organization, and
- We adjusted Nova's website to the latest accessibility requirements and standards.

In 2021 we have deepened our relationships with our surrounding communities and strengthened our **Community Relations**. Nova has been striving for years to provide members of our local and global communities with resources to generate true social change by making a difference in people's lives. With the help of our most valuable assets, our employees, we have chosen to focus on four critical areas**: empowering women, people with disabilities, youth at risk, and national emergencies**. In 2021, we established a donation committee led by our executive leadership and adopted a Donation and Charitable Contribution Policy which was approved by our board of directors. We are committed to make a significant impact on our community by mentoring and nurturing related projects and activities together with numerous non-profit organizations worldwide. As such, in 2021 we have dedicated our resources to the following activities:

- Supporting youth at risk - through working with our partners, we have reached approximately 500 youths around Israel, supporting them with a unique program that runs "Night Vans" equipped with professional counsels who meet youths and provides support to the youths on their "own territory", helping them integrate into society.
- Keeping our communities physically safe from harm - we have supported the addition of a new mobile bomb shelter in the heavily bombarded City of Ashkelon in Israel.
- We offered Nova employees opportunities to volunteer and contribute to supporting youth via private tutoring in English and STEM (science, technology, engineering and mathematics) professions or other endeavors and topics which are close to their hearts and can help and inspire the youth.
- We have strategically partnered with organizations in Taiwan and the U.S., that are best connected to the local communities and can help us promote aspects of STEM education among children and youth and empowering women.

Moving forward into 2022, investing in our Human Capital, and developing the diversity and inclusion pillars will continue to be a central focus. In addition to preserving human rights and social justice, we believe that increasing diversity, inclusion, and gender equality at the company will deliver a range of potential business benefits, including a more talented and satisfied team of employees.

3. Governance:

As part of our sustainable operations policies, we aim that our corporate governance and corporate behavior mechanisms align the interest of all our stakeholders. To do so, we developed a strong set of corporate values that inspire ethical behavior across all decision-making processes, and a management and control system to ensure that ethics and security issues are given their due weight, as following:

- **Board Practices**:

  - Our board of directors consists of seven (7) members, of whom six (6) are independent and three (3) are women. In 2021, 26 meetings of our board of directors and its committees were held, with the directors' attendance rate being higher than 90%.
  - The **Audit Committee** of our board of directors currently consists of four (4) members, all independent directors, three (3) of whom are women and two (2) of whom hold deep financial expertise. The primary function of the committee is to assist the board of directors in fulfilling its oversight responsibilities by reviewing financial information, internal controls and the audit process. In addition, the committee is responsible for oversight of the work of our independent auditors, as well as the implementation of our internal enforcement plan and governance policies. The committee meets at regularly scheduled quarterly meetings.
  - The function of our **Nominating Committee** of the board of directors' includes responsibility for identifying individuals qualified to become board members and recommending that the board of directors consider the director nominees for election at the general meeting of shareholders. The Committee currently consists of three (3) members, two (2) of whom are independent directors.

- The committee overseeing our pay practices is the **Compensation Committee** of our board of directors, whose function includes assisting the board of directors in discharging its responsibilities relating to compensation of the Company's officers, directors and executives and the overall compensation programs and reviewing and approving, or if required by law, approving, and recommending for approval by the board of directors, grants and awards under the Company's equity incentive plans. The primary objective of the committee is to oversee the development and implementation of the compensation policies and plans that are appropriate for the Company in light of all relevant circumstances, and which provide incentives that fit the Company's long-term strategic plans and are consistent with the culture of the Company and the overall goal of enhancing shareholder's value. The Committee currently consists of four (4) members, all independent directors and two (2) of whom are women.

For further details on our board of directors and its Committees' practices, refer to Item 6.C in this Annual Report.

- **Compensation Policy:**
  Our Compensation committee and board of directors have adopted a policy regarding the compensation and terms of employment of their directors and officers ("**Compensation Policy**"), which pursuant to the Companies Law is presented for re-approval of the Company's shareholders at least once in every three years. Our shareholders voted on June 17, 2019 for the Compensation Policy recommended by our board of directors. Our Compensation Policy is designed to promote our objectives, business plan and long-term strategy, to create appropriate incentives to our office holders while taking into consideration the size and nature of operations of our Company as well as the competitive environment in which we operate. As such, our Compensation Policy is intended to incentivize superior individual excellence and to align the interests of our office holders with our long-term performance, and as a result, with those of our shareholders. To that end, a portion of an office holder compensation package is targeted to reflect both our short- and long-term goals, the office holder's individual performance, as well as measures designed to reduce office holder's incentive to take excessive risks that may harm us in the long-term. For example, the Policy limits office holders' value of cash bonuses and equity-based compensation and sets a minimum vesting period for equity-based compensation. Our Compensation Policy also addresses each office holder's individual characteristics (such as position, education, scope of responsibilities, seniority and contribution to the attainment of our goals) as the basis for compensation variation among our office holders, and considers the internal ratios between compensation of our office holders and directors to those of other employees. For further details on our pay practices, refer to Item 6.B in this Annual Report.

- **Shareholder Control & Ownership:**
  Nova is publicly traded whose securities are listed on the Nasdaq and TASE, and over 99% of our shares are held in free float. To our best knowledge, none of our shareholders is a controlling shareholder which can direct the Company's activities. In addition, each share is entitled to one vote on each matter to be voted on at any Company's shareholders meeting. Based on information provided to us, as of February 14, 2022 our 15 directors and officers, have had, as a group, sole voting and investment power of less than 2% of the issued and outstanding ordinary shares of our Company as of such date. For further details on our Pay practices, refer to Item 6.E and Item 7 in this Annual Report.

- **Ethical Business Conduct:**
  Nova depends on its reputation for innovation, quality, service, and integrity. We are committed to upholding the highest professional standards of business conduct and maintaining confidence and trust in our relationships with each other, with our employees, customers, investors, suppliers, business partners, regulators, and others. We are committed to ethical business practices and compliance with all applicable standards, laws and regulations, and we believe that maintaining high standards of Corporate Governance is important for our success. We have hundreds of employees working worldwide, and each facility upholds its individual organizational culture while committed to the global Nova Code of Conduct and other Corporate Governance Policies. Our Executive and Financial Officers have leadership responsibilities that include nurturing this culture of commitment to ensure standards and compliance. In order to anchor this strategy in our day to day activities, we have adopted the following policies and practices:

  - **Code of Conduct**. All of our directors, officers, service providers and employees must conduct themselves in accordance with our Code and seek to avoid even the appearance of improper behavior. The code is intended to promote the following:Compliance with Laws, Regulations and Company Policies; Avoiding conflict of interests and personal exploitation of corporate opportunities; Competition and Fair Dealing, handling of business inducements, and preventing anti-trust violations; Prevention of Discrimination and Harassment and promoting healthy and safe work environment; Preserving complete and accurate business information and records and engaging in an accurate accounting practices, and confidentiality of the company's information; handling of public fillings and Protection and Proper Use of Company Assets; The Code sets principals and standards for: Insider trading policies, Anti-fraud, Anti-corruption policies, Whistleblower Policy. The Code is available on our employees portal, and each employee must familiarize with upon joining the company, and on an annual basis. The code is also posted on Nova's website. Employees are clearly encouraged to report violations to the compliance team, senior management, or other officers as deemed appropriate. If matters concern accounting or auditing issues, employees can directly report to the Audit committee of the board of directors. Whistleblowers who make reports in good faith of suspected violations are protected from retaliation such as demotion or termination of employment because of reporting. Any Employee who wants to bring an ethical issue to light, can also write an anonymous complaint to the Corporate Secretary.
  - **Insider Trading Policy.** Nova has adopted an Insider Trading Policy that all employees must be familiar with and adhere to. Officers and employees may not trade in Nova's securities while in the possession of "material non-public information" concerning Nova, its customers and suppliers, or during any quarterly or special blackout periods. Officers, Employees, and their immediate family members may trade in Nova's securities only outside of the clearly defined blackout periods. A failure to comply with the Policy could result in a serious violation of the securities laws and may involve both civil and criminal penalties.

- **Anti-Fraud and Anti Bribery Policies**. We are committed to ethical behavior and values. It is amongst our first priorities to establish a corporate and working culture that enhances the value of ethics and promote the individual responsibility as well. To this effect, the Company has established an Anti-Fraud and Anti-Bribery Policies and Guidelines and a Complaint Procedure, which set the highest standards for personnel conduct related to ethical behavior and alertness. The cornerstone in preventing fraud is the creation of an environment that fosters morality, integrity and business conduct. Our Anti-Fraud policy outlines the responsibilities of all the involved parties with respect to fraud prevention, the actions to be taken if fraud is suspected and the mechanism of verifying suspicion of fraud, the reporting process and the recovery action plan. Our Anti-Bribery sets forth rules governing the giving, offering or receiving of anything of value to or from any non-Nova personnel with the intention of obtaining, securing, promoting or retaining any business activity. The purpose of the policy is to make sure that Nova and its employees do not violate applicable corruption laws and to protect the reputation of the Company. In addition to the anti-fraud policy, in 2021, we implemented an anti-fraud steering committee and forum which oversees and identifies fraud risks across the Company, and implemented an anti-fraud program which is tested and verified on a yearly basis.

- **Accounting and Tax Transparency:**
  Our approach to global taxation for all types of taxes is to consistently comply with legal, regulatory, and internal control requirements as well as support our business and commercial strategy. We are committed to adhere to all applicable global tax laws, filings, and reporting disclosures. We account for tax risks in accordance with the applicable accounting standards and have internal controls in place over our tax reporting processes. Our transfer pricing policies are aligned with the guidelines of the Organization of Economic Co-operation and Development (OECD), as well as with all of the jurisdictions in which we operate. We apply the arm's length principle when conducting intercompany transactions. We have an established network of internal and external tax and finance professionals who are knowledgeable in various direct and indirect taxes and who monitor ongoing tax law and business changes, so that we may adapt processes and deliverables accordingly. This network, along with our framework regarding internal policies and controls, seeks to ensure the complete and accurate communication of tax positions and risks, through established governance and reporting processes to our management and board of directors. Further details on our accounting and tax practices can be found in Items 10.E of this Annual Report.

Moving forward into 2022

Nova is committed to continue playing a major part in transforming societies to become more responsible, diverse, and sustainable. Indeed, we will continue to embed ESG responsibilities into our core business, culture and continue influence all our stakeholders. Our planned ESG policies and practices for 2022 will include (but are not limited to):

- Considering the relevance of social development goals for our ESG overall strategy, as well as the wider community in which we operate
- Further exploring how a broader ESG approach can underpin good practice for our company and its impact
- Documentation, standardization and publication of company policies
- Setting KPI's and goals for the following years to assess company's progress
- Further investigating ESG priorities such as safety, belonging of our employees, sustainability development and collaborating with the local community.

Capital Expenditures

Our capital expenditures are primarily for network infrastructure, computer hardware and software, leasehold improvements of our facilities, expansion of clean room facilities and demonstration and development tools. None of these assets are held as collateral or guarantee other obligations. For additional information on our capital expenditures, see "Item 5B. Liquidity and Capital Resources" in this Annual Report.

Government Regulation

For information relating to the impact of certain government regulations on our business, see "Item 5.C – Grants from the Israel Innovation Authority" on this Annual Report.

4.C Organizational Structure

Our Subsidiaries

Our subsidiaries as of the end of 2021 and the countries of their incorporation are as follows. All of our subsidiaries are wholly owned by the Company:

Name of Subsidiary	Country of Incorporation
Nova Measuring Instruments, Inc.	Delaware, U.S.
Nova Measuring Instruments K.K.	Japan
Nova Measuring Instruments Taiwan Ltd.	Taiwan
Nova Measuring Instruments Korea Ltd.	Korea
Nova Measuring Instruments GmbH	Germany
Nova Measuring Instruments (Shanghai) Co.,Ltd	China

As of January 25, 2022, with the closing of the acquisition transaction of ancosys GmbH, the following subsidiaries were added:

Name of Subsidiary	Country of Incorporation	Ownership
ancosys GmbH	Germany	100% owned by Nova Measuring Instruments GmbH
ancosys Korea LLC	Korea	100% owned by ancosys GmbH
ancosys Instrument Taiwan Ltd	Taiwan	100% owned by ancosys GmbH
ancosys Inc.	Delaware	100% owned by ancosys GmbH

4.D Property, Plant and Equipment

As of the end of 2021, our main facilities, located in Rehovot and Ness-Ziona, Israel, are currently occupying an aggregate of approximately 13,000 square meters, including: approximately 2,000 square meters of production facilities, approximately 5,700 square meters of research and development offices (including approximately 1,400 square meters of laboratories) and approximately 6,000 square meters of headquarters, operations, sales and marketing, service and support and administration facilities.

In September 2019, our Israel headquarters moved to a new building at the Science Park in Rehovot. The lease agreement in Rehovot is expected to extend until 2029. We have the option to extend this lease period by two periods of five years each, subject to customary conditions. The lease period for an additional space of approximately 2,500 square meters in Rehovot, began in 2021 and will extend through the same lease periods.

As of the end of 2021, the lease agreement in Ness Ziona is expected to extend until January 31, 2026.

Our subsidiaries lease offices in various locations, for use as a research and development, manufacturing, service and pre-sale facility (depending on each subsidiary's needs). Our U.S. subsidiary, Nova Measuring Instruments, Inc. leases approximately 3,800 square meters in Fremont, CA, which includes approximately 850 square meters of production facilities. In addition to this space, the US entity entered into a new lease agreement for an additional 2,880 square meter facility, of which approximately 700 square feet will be allocated as an engineering cleanroom. Both Fremont leases are now synchronized to expire on March 31, 2029 with an option to extend for additional five years, subject to customary conditions. In addition, we lease approximately 70 square meters in New York, approximately 200 square meters in Oregon and approximately 160 square meters in Idaho. Our Taiwanese subsidiary leases a new space of approximately 1,750 square meters which includes a cleanroom facility, our Korean subsidiary leases approximately 1,250 square meters, our Subsidiary in China leases approximately 1,200 square meters our European subsidiary leases approximately 150 square meters in Germany and France, and our Japanese subsidiary leases approximately 100 square meters.

ancosys and its subsidiaries, which we acquired in January 2022, hold leased offices in each of their respective locations. In addition, ancosys owns a 15,800 square meters of real estate located in Bad Urach, Germany, out of which approximately 8,000 square meters can be utilized for ancosys' operations.

We believe that our facilities and equipment are in good operating condition and adequate for their present usage.

Item 4A. Unresolved Staff Comments

None.

Item 5. Operating and Financial Review and Prospects

Information in this Operating Review and Financial Prospects Section should be read in conjunction with our consolidated financial statements and notes thereto which are included elsewhere in this report.

Executive Overview

Nova is a leading innovator and key provider of metrology solutions for advanced process control used in semiconductor manufacturing. Nova delivers continuous innovation by providing state-of-the-art high-performance metrology solutions for effective process control throughout the semiconductor fabrication lifecycle. We bring pioneering metrology solutions to the world of process control, by industrializing lab and research-grade technologies and developing emerging metrology solutions. Nova's product portfolio, deployed by the world's largest integrated-circuit manufacturers, combines high-precision hardware and cutting-edge software, provides its customers with deep insight into the development and production of the most advanced semiconductor devices. Nova's unique capability to deliver innovative metrology solutions enable its customers to improve performance, enhance product yields and accelerate time to market. We market and sell our metrology systems mainly to semiconductor manufacturers, and in some cases to semiconductor process equipment manufacturers.

Our business is greatly affected by the level of spending on capital equipment by semiconductor manufacturers. In addition, demand for our products and services is affected by the timing of new IC capacity expansion and ramping up of new technology nodes, by the timing of releasing products by us and our competitors, market acceptance of our new or enhanced products and changes or improvements in semiconductor design or manufacturing processes.

In the recent five years (2016-2021), we were able to achieve positive Compound Annual Growth Rate (CAGR) of products revenues of approximately 22%, while Gartner Inc. estimates that the Process Control segment has achieved a CAGR of approximately 16.9% (Gartner Q4-2021 forecast, published on December 2021). During these years, we successfully diversified our technology to include X-Ray capabilities on top of our Optical technology, to measure both Dimensional and Material parameters, we added advanced machine learning algorithms on top of our physical modeling, and we advanced our traditional tool set to include advanced capabilities in both hardware and software. We also diversified our revenue mix across semiconductor segments and territories. During these years, we were also able to increase our total available market through development of new technologies used for Materials and Dimensions metrology, addressing emerging applications in Memory and Foundry/Logic.

In 2021, product sales accounted for approximately 81.0% of our total revenues, and services accounted for approximately 19.0%.

As of the end of 2021, we had cash reserves, net of long term debt related to convertible senior notes, of approximately $370 million, and working capital of approximately $278 million. In January 2022, we used approximately $80 million of this cash to pay for the acquisition of ancosys.

Our service organization is operating on a profit and loss basis and the objectives of our service organization are defined and measured by: customer satisfaction, quality support parameters; and by profit and loss criteria. The service organization provides support to all products we sell, during both the warranty period and the post warranty period. Service revenues are mostly driven by extended warrant, Time and Materials requests, service contracts and proactive sales to the install base to improve productivity and metrology capabilities.

Significant Events in 2021 and Outlook for 2022

During 2021, we demonstrated several significant achievements:

- Significant business growth
- Meaningful growth in both Products and Service sales
- Growth in systems' production and deliveries by all our global sites.

- Diversified customer mix, including several major leading customers.
- Further market adoption of Nova's advanced portfolio by wafer fabrication customers:
    - Hardware and Software coupling
    - Unique Optical and X-Ray solutions
    - Holistic offering, including Integrated and Standalone metrology
    - Materials and Dimensions solutions
- Continuous proliferation of Nova's recent optical solutions – PRISM and ELIPSON.
- Continued investments in research and development programs aimed to generate new organic growth engines for advanced process control.
- Introduction of Nova METRION®. Nova METRION® targets process control of 3D logic and memory semiconductor devices. The technology enables advanced materials profile measurements by bringing secondary ion mass spectrometry (SIMS) into semiconductor production lines and provides quantitative and actionable results on depth profiling of compositional information with high-depth resolution and precision.
- Introduction of several new generations of Dimensional and Materials metrology platforms. Introduction of Machine Learning solutions (NovaFIT) to enhance metrology measurements and to complement the traditional Physical modeling (NovaMARS).
- Deepening collaboration with several research institutes and customers' development centers, utilizing a variety of our products, leading to our positioning as a long-term technology development and high-volume manufacturing partner.
- The acquisition of ancosys, a privately held company headquartered in Germany, closed in January 2022. ancosys is a leading provider of chemical analysis and metrology solutions for advanced semiconductor manufacturing.
- ESG (Environment, Social and Governance) – during 2021 the company has built & embraced an enhanced Corporate Social Responsibility Strategy. We are determined as a company to play a vital role in creating a world that values equality, safety and environmental health for the benefit of future generations to come. We are committed to proactively invest in embedding social responsibility as part of our culture and business management to support our values.

In 2022, we plan to focus on the following:

- Investing in the organization development to enhance the human capital and the strength of the global teams based on our values and culture.
- Continue to strengthen our competitive and market position, through unique innovation and technical leadership.

- Continue executing our innovation and development plans for meeting future industry challenges.
- Expand our total available markets by addressing new emerging metrology applications and market segments, through solutions delivery to the challenging buildup of advanced Logic technology nodes, memory scaled VNAND nodes and DRAM scaled devices at leading edge customers.
- Continue delivery of advanced metrology systems to the trailing edge technology nodes to support new applications ramp up.
- Executing our plans to meet Nova's long-term strategy, which defines the Company's growth path in revenue, customers, technology and financial performance, to support our profitable growth.
- Continue leading the emerging metrology markets with innovative and disruptive solutions.
- Continue the collaborations and joint research programs with leading semiconductor manufacturers and relevant leading research institutes.
- Continue our products innovation and diversification through several new product introductions to extend the Company's market leadership and total available market.
- Continue our plans to generate revenues and competitive edge through SW algorithm and Machine Learning solutions.
- Strengthening the partnership with our customers and build a "Customer Centric" approach to accommodate and deliver customers' requirements along the semiconductor lifecycle.
- Build an extensive roadmap for ancosys' chemical metrology products in order to enhance Nova's existing product's offering.
- Create synergy between Nova and ancosys' technologies towards a combined offering for advanced applications, which require dimensional, material and chemical metrology.
- Grow our clean room and production facilities to meet the semiconductor demand cycle around the globe.
- Elevate our investment in ESG programs in order to promote social responsibilities programs through our five pillars program (for details refer to Environmental, Social and Governance (ESG) chapter in Item 4.B in this Annual Report).

The challenges and risks Nova faces in meeting its plans include:

- Meeting strategic, development, operational and delivery targets in light of the COVID-19 global pandemic and the various influences across the world.
- Overcoming supply chain challenges in light of shortage, demand and cost.

- On time delivery of the required solutions to meet the current and future needs of our existing and new customers.
- Correctly understanding the market trends and competitive landscape to ensure our products retain proper differentiation to win customer confidence.
- Creating aggressive, innovative and competitive roadmap deliverables at reasonable costs in order to properly control expenses.
- Identifying the metrology evolution roadmap for future industry needs to meet process control requirements and lead the market.
- Achieving long-term growth targets while supporting extensive growth in all our activities.
- Building a solid global infrastructure to accommodate further growth.

In order to address the risks and challenges associated with the COVID 19 pandemic Nova implemented a thorough and detailed global plan to secure the employees safety and health, guarantee supply chain resiliency, assure business continuity and continuous support to our customers.

In order to address the technical and roadmap risks and challenges, we are working closely with leading customers' development and research groups and with the leading process equipment manufacturers as well as with leading technology research institutes. The purpose of working closely with these entities is to receive as early as possible information and feedback on their current and future metrology and process control needs and tune our roadmap to support such needs.

It is our belief that Nova has been able to consistently improve its market position as a result of a combination of factors:

- Optical metrology has become an enabler for the entire industry over the last few years, sometimes on the account of other metrology capabilities.
- Material Metrology has been widely adopted by leading memory and logic/foundry customers.
- Nova's unique metrology portfolio, combining Optical and X-Ray metrology for both dimensions and materials, provide the most advanced solution, combining the best innovative metrology capabilities with the best reliability and return on investment.
- The ability to provide a unique and differentiated technology portfolio sets Nova apart from the competition and adding a competitive edge to our offering.
- Our solutions are well accepted by leading customers that allow us to gain more market share with additional process steps and new applications.
- Our ability to closely team with our customers allows us to predict the industry evolution and process control challenges and by that introduce innovative and advanced metrology solutions to solve industry needs.

- Our diversified portfolio, which is a result of continuous investment in research and development, is becoming more attractive to our customers.
- Extending our solutions' base to include hardware and software elements in a coupled offering.
- Successful track record in completing and integrating inorganic products , as a result of M&A, which allows us to diversify our product offering to expand our addressable markets.
- Well controlled P&L and operating model to support our profitable growth and operational resiliency.

Understanding the industry's challenges for the next several years, it is our belief that we should continue our long-term growth as the adoption of our solutions increases as a function of process complexity and industry development. We believe that our served addressable market is continuously expanding as we penetrate to more steps of the semiconductor manufacturing processes and, as we continue innovating our portfolio for leading new emerging metrology opportunities. We also believe that going forward, as the semiconductor production process is becoming much more complicated with variety of challenges, the necessity for our unique portfolio, combining multiple technologies for both Materials and Dimensional metrology, will grow in the next few years.

Critical Accounting Policies

Our discussion and analysis of our financial condition and results of operations are based upon our consolidated financial statements, which have been prepared in accordance with the United States of America generally accepted accounting principles. We believe the following critical accounting policies, among others, affect our more significant judgments and estimates used in the preparation of our consolidated financial statements.

Use of Estimates – General

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Our management evaluates its estimates on an ongoing basis, including those related to, but not limited to income taxes and tax uncertainties, collectability of accounts receivable, inventory accruals, fair value and useful lives of intangible assets, lease discount rate, lease period, convertible senior notes borrowing rate, and revenue recognition. These estimates are based on management's knowledge about current events and expectations about actions the Company may undertake in the future. Actual results could differ from those estimates.

Revenue Recognition

Under ASC 606, the company derives revenue from the sales of advanced process control systems, spare parts, labor hours (mainly systems installation) and service contracts.

Revenues derived from sales of advanced process control systems, spare parts and labor hour are recognized at point in time, when control of the promised goods or services is transferred to the customers, upon fulfillment of the contractual terms.

Revenues derived from service contract, which generally specify fixed payment amounts and contractual terms for periods longer than one month, are recognized ratably over time.

The amount recognized reflects the consideration that the Company expects to be entitled to in exchange for those performance obligations.

Revenues from sales which were not yet determined to be final sales due to acceptance provisions are deferred.

Contracts with customers may include multiple performance obligations. For such arrangements, the Company allocates revenue to each performance obligation based on its relative Standalone Selling Price ("SSP"). Judgment is required to determine the SSP for each distinct performance obligation. The Company uses a range of amounts to estimate SSP when it sells each of the products and services separately and needs to determine whether there is a discount to be allocated based on the relative SSP of the various products and services.

The Company enters into revenue arrangements that includes products and services which are generally distinct and accounted for as separate performance obligations. The Company determines whether arrangements are distinct based on whether the customer can benefit from the product or service on its own or together with other resources that are readily available and whether the Company's commitment to transfer the product or service to the customer is separately identifiable from other obligations in the contract.

Marketable Securities

The Company accounts for marketable securities in accordance with ASC Topic 320, "Investments – Debt and Equity Securities". The Company's investments in marketable securities consist of high-grade treasury, corporate and municipal bonds.

Investments in marketable securities are classified as available for sale at the time of purchase. Available for sale securities are carried at fair value based on quoted market prices, with unrealized gains and losses, reported in accumulated other comprehensive income (loss) in shareholders' equity. Realized gains and losses on sales of marketable securities, are included in financial expenses (income), net. The amortized cost of marketable securities is adjusted for amortization of premium and accretion of discount to maturity, both of which, together with interest, are included in financial expenses (income), net.

The Company classifies its marketable securities as either short term or long term based on each instruments' underlying contractual maturity date. Marketable securities with maturities of 12 months or less are classified as short-term and marketable securities with maturities greater than 12 months are classified as long-term.

The Company accounts for Credit losses in accordance with ASU 2016-13, Topic 326 "Financial Instruments – Credit Losses: Measurement of Credit Losses on Financial Instruments" which modified the other than temporary impairment model for available for sale debt securities. The guidance requires the Company to determine whether a decline in fair value below the amortized cost basis of an available for sale debt security is due to credit related factors or noncredit related factors. A credit related impairment should be recognized as an allowance on the balance sheet with a corresponding adjustment to earnings, however, if the Company intends to sell an impaired available for sale debt security or more likely than not would be required to sell such a security before recovering its amortized cost basis, the entire impairment amount would be recognized in earnings with a corresponding adjustment to the security's amortized cost basis.

Inventories

Inventories are stated at the lower of cost or net realizable value. Inventory write-downs are provided to cover risks arising from slow-moving items, technological obsolescence, excess inventories, discontinued products, and for market prices lower than cost, if any. We periodically evaluates the quantities on hand relative to historical and projected sales volume (which is determined based on an assumption of future demand and market conditions), the age of the inventory and the expected consumption of service spare parts. At the point of the loss recognition, a new lower cost basis for that inventory is established. Any adjustments to reduce the cost of inventories to their net realizable value are recognized in earnings in the current period.

Inventory includes costs of products delivered to customers and not recognized as cost of sales, where revenues in the related arrangements were not recognized.

To support the our service operations, we maintains service spare parts inventory and reduce the net carrying value of this inventory over the service life

Goodwill

Goodwill and other purchased intangible assets have been recorded as a result of the acquisition of ReVera. Goodwill represents the excess of the purchase price in a business combination over the fair value of net tangible and intangible assets acquired, and related liabilities. Goodwill amount on December 31, 2021 was $20.1 million. We have not yet concluded the purchase price allocation analysis of ancosys acquisition, which was closed in January 2022. We expect this analysis to significantly increase the goodwill amounts in future balance sheets.

Goodwill is not amortized, but rather is subject to an impairment test. In accordance with ASC 350, “Intangibles – Goodwill and Other”, at least annually (in the fourth quarter), or more frequently if events or changes in circumstances indicate that the carrying value may be impaired. The Company has an option to perform a qualitative assessment to determine whether it is more-likely-than-not that the fair value of a reporting unit is less than its carrying value prior to performing the quantitative goodwill impairment test. The Company operates in one operating segment, and this segment comprises its only reporting unit.

Following the adoption of ASU 2017-04, "Simplifying the Test for Goodwill Impairment", as part of the quantitative goodwill impairment test, any excess of the carrying value of the reporting unit over its fair value is recognized as an impairment loss, and the carrying value of goodwill is written down to the fair value of the reporting unit. For the year ended December 31, 2021, we performed an annual impairment analysis, and no impairment losses have been identified.

Intangible assets

As a result of the acquisition of ReVera in April 2015, our balance sheet included acquired intangible assets, in the aggregate amount of approximately $5.1 million and $2.6 million as of December 31, 2020 and 2021, respectively. We have not yet concluded the purchase price allocation analysis of ancosys acquisition, which was closed in January 2022. We expect this analysis to significantly increase the intangible assets amounts in future balance sheets.

In 2015, we allocated the purchase price of ReVera to the tangible and intangible assets acquired and liabilities assumed, based on their estimated fair values. These valuations require management to make significant estimations and assumptions, especially with respect to intangible assets. Critical estimates in valuing intangible assets include future expected cash flows from technology acquired, backlog and customer relationships. Management's estimates of fair value are based on assumptions believed to be reasonable, but which are inherently uncertain and unpredictable.

Intangible assets are comprised of acquired technology, customer relations, backlog and IP R&D**.**

Accounting for income tax

We are subject to income taxes in Israel, the United States and numerous foreign jurisdictions. Significant judgment is required in evaluating our uncertain tax positions and determining our taxes. Although we believe our reserves are reasonable, no assurance can be given that the final tax outcome of these matters will not be different from that which is reflected in our historical income tax provisions and accruals. We adjust these reserves in light of changing facts and circumstances, such as the closing of a tax audit or the refinement of an estimate. To the extent that the final tax outcome of these matters is different than the amounts recorded, such differences will affect the provision for income taxes in the period in which such determination is made.

Our accounting for certain income tax effects is incomplete, but we have determined reasonable estimates for those effects. Our reasonable estimates are included in our financial statements as of December 31, 2021.

Significant judgment is also required in determining any valuation allowance recorded against deferred tax assets. In assessing the need for a valuation allowance, we consider all available evidence, including past operating results, estimates of future taxable income, and the feasibility of tax planning strategies. In the event that we change our determination as to the amount of deferred tax assets that can be realized, we will adjust our valuation allowance with a corresponding impact to the provision for income taxes in the period in which such determination is made.

Convertible senior notes

The Company accounts for its convertible senior notes in accordance with ASC 470-20 "Debt with Conversion and Other Options". Pursuant to ASC Subtopic 470-20, issuers of certain convertible debt instruments, such as the Notes, that may be settled wholly or partially in cash upon conversion are required to separately account for the liability (debt) and equity (conversion option) components of the instrument. The liability component at issuance is recognized at fair value, based on the fair value of a similar instrument of similar credit rating and maturity that does not have a conversion feature. The equity component is based on the excess of the principal amount of the convertible senior notes over the fair value of the liability component and is recorded in additional paid-in capital. The equity component, net of issuance costs and deferred tax effects is presented within additional paid-in-capital and is not remeasured as long as it continues to meet the conditions for equity classification. The difference between the principal amount and the liability component represents a debt discount that is amortized to financial expense over the respective terms of the Notes using an effective interest rate method. The Company allocated the total issuance costs incurred to the liability and equity components of the convertible senior notes based on their relative values.

Issuance costs attributable to the liability and equity components were $5,894 and $518, respectively. Issuance costs attributable to the liability are netted against the principal balance and will be amortized to financial expense using the effective interest method over the contractual term of the notes. The effective borrowing rate of the liability component of the notes (after deduction of the abovementioned issuance costs attributed to the liability component) is 2.365%. This borrowing rate was based on Company's synthetic credit risk rating.

For a discussion of other significant accounting policies used in the preparation of our financial statements and recent accounting pronouncements, see Note 2 to our consolidated financial statements contained elsewhere in this report.

New Accounting Pronouncements

For information regarding new accounting pronouncements, see Note 2X to our consolidated financial statements contained elsewhere in this Annual Report.

5.A Operating Results

Overview

A substantial portion of our revenues is coming from a small number of customers, and we anticipate that our revenues will continue to depend on a limited number of major customers.

For the distribution of our total revenues, from products and services, by geographic areas, see Note 15a to our consolidated financial statements.

The sales cycle of our systems is long and the rate and timing of customer orders may vary significantly from month to month as a function of the specific timing of fab expansions. We schedule production of our systems based upon order backlog and customer forecasts.

Our revenues increased by 54.5% in 2021 following an increased by 19.8% in 2020, and decrease of 10.4% in 2019.

The following table shows the relationship, expressed as a percentage, of the listed items from our consolidated income statements to our total revenues for the periods indicated:

Percentage of Total Revenues Year ended December 31,:

	2019	2020	2021
Revenues from product	74.3%	77.7%	81.0%
Revenues from services	25.7%	22.3%	19.0%
Total revenues	100.0%	100.0%	100.0%
Cost of revenues products	29.9%	29.2%	31.1%
Cost of revenues services	15.9%	14.1%	11.9%
Total cost of revenues	45.8%	43.2%	43.0%
Gross profit	54.2%	56.8%	57.0%
Operating expenses:			
Research and development, net	19.8%	19.7%	15.8%
Sales and marketing	12.5%	10.9%	9.5%
General and administrative	4.5%	4.6%	4.2%
Amortization of intangible assets	1.2%	0.9%	0.5%
Total operating expenses	38.0%	36.1%	30.0%
Operating income	16.2%	20.6%	27.0%
Financial income (expenses), net	1.4%	0.3%	(0.8)%
Income before income taxes	17.6%	21.0%	26.2%
Income tax expenses	1.9%	3.2%	3.8%
Net income	15.6%	17.8%	22.4%

Comparison of Years Ended December 31, 2021 and 2020

Revenues. Our revenues in 2021 increased by $146.7 million, or 54.5%, compared to 2020. Revenues attributable to product sales were $337.0 million, an increase of $127.7 million, or 61.0%, compared to 2020. Revenues attributable to services were $79.1 million, an increase of $19.0 million, or 31.6%, compared to 2020. The increase in product revenues in 2021 was attributed to higher demand for our products across all main product lines, including revenues from new product line introduced in 2021. The increase in services revenues in 2021 was attributed mainly to the increase in our systems installed base and to higher professional services and time and materials sales.

Cost of Revenues and Gross Profit. Cost of revenues consists of labor, material and overhead costs of manufacturing our systems, royalties, and the costs associated with our worldwide service and support infrastructure. It also consists of inventory write-offs and provisions for estimated future warranty costs for systems we have sold. Our cost of revenues attributable to product sales in 2021 was $129.5 million. Our gross margin attributable to product revenues in 2021 was 61.6%, compared to 62.5% in 2020. The decrease in products gross margins in 2021 is related mainly to the different product mix as well as to higher supply chain costs.

Our cost of services in 2021 was $49.2 million, compared to $37.9 million in 2020. Gross margin attributable to service revenues in 2021 was 37.8%, compared to 36.9% in 2020. The increase in services gross margins in 2021 is related mainly to the increase in service revenues which also included a more favorable service revenue mix.

Research and Development Expenses, net. Consist primarily of salaries and related expenses and also include consulting fees, subcontracting costs, related materials and overhead expenses, after offsetting grants received or receivable from the IIA and the European Community, as well as other funding for research and development activities. Our net research and development expenses in 2021 were $65.9 million, an increase of $12.9 million, or 24.2%, compared to 2020, after offsetting grants received of $4.9 million in 2021 and $5.6 million in 2020. Research and development expenses excluding grants received or receivable in 2021 were $70.8 million, compared to $58.6 million in 2020, and increased due to higher investment in existing and new products and technologies and higher personnel costs. In 2021, net research and development expenses represented 15.8% of our revenues, compared to 19.7% of our revenues in 2020.

Sales and Marketing Expenses. Sales and marketing expenses are mainly comprised of salaries and related costs for sales and marketing personnel, travel related expenses, overhead and commissions to our representatives and sales personnel. Our sales and marketing expenses in 2021 were $39.3 million, an increase of $10.0 million, or 34.0%, compared to 2020. The increase in sales and marketing expenses in 2021 was mainly attributed to the higher personnel costs and higher commissions due to the increase in revenues. Sales and marketing expenses represented 9.5% of our revenues in 2021 compared to 10.9% of our revenues in 2020.

General and Administrative Expenses. General and administrative expenses are comprised of salaries and related expenses and other non-personnel related expenses such as legal expenses. Our general and administrative expenses in 2021 were $17.3 million, an increase of $4.8 million, or 38.4%, compared to 2020. The increase in general and administration expenses was attributed mainly to higher personnel costs and related overhead, including acquisition related expenses. In 2021, general and administration expenses represented 4.2% of our revenues, compared to 4.6% of our revenues in 2020.

Amortization of Intangible Assets. As part of the acquisition of ReVera on April 2, 2015, the Company acquired $12.3 million of intangible asset related to technology. In both 2021 and 2020, the Company recorded $2.5 million of amortization of intangible assets respectively.

Financial income (expense), net. Financial income (expenses), net is comprised of interest income, financial expenses related to the Convertible Senior Notes, exchange rate impact and bank charges. In 2021, we recorded $3.1 million of net financial expenses compared to $0.9 million of net financial income in 2020. The increase in financial expenses was mainly attributed to the $4.3 million of financial expenses related to the Convertible Senior Notes which reflect full year expenses compared to $0.9 million in 2020 which reflect expenses of less than one quarter. In addition, in 2021 our interest income was $2.2 million compared to $4.1 million in 2020 which mainly attributed to the less favorable interest economic environment. This was offset by $0.9 million exchange rate loss in 2021 compared to $2.2 million exchange rate loss in 2020 which was attributed to strengthen of the NIS compared to the USD.

Income Tax Expenses. Income tax expenses are comprised of current tax expenses and deferred tax expenses/income. In 2021, we recorded $16.2 million of income tax expenses, reflecting effective tax rate of 14.8 %. In 2020, we recorded $8.6 million of income tax expenses, reflecting effective tax rate of 15.2%. The decrease in the effective tax rate in 2021 is attributed mainly to increase in US territory tax benefits, which was partially off-set by $3.7 million taxes related to elective tax settlement in Israel.

Comparison of Years Ended December 31, 2020 and 2019 is incorporated by reference to the Company's Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 1, 2021.

5.B Liquidity and Capital Resources

As of December 31, 2021, we had working capital of approximately $278.6 million, compared to working capital of approximately $497.8 million as of December 31, 2020. The decrease in our reported working capital in 2021 was related mainly to classification of convertible senior notes in the amount of $183.0 million to current liabilities, and to classification of marketable securities investment with maturity dates which are longer than one year in the amount of $137.4 million to non-current assets. Excluding these classifications, our working capital increased by approximately $101.2 million mainly as a result of our fluent net profits in 2021.

Cash and cash equivalents, short-term and long-term deposits and marketable securities as of December 31, 2021 were $552.9 million compared to $427.9 million as of December 31, 2020, and increased mainly as a result our fluent operating cash flow. In January 2022, we used approximately $80 million of this cash to pay for the acquisition of ancosys.

Trade accounts receivables increased from $63.3 million as of December 31, 2020 to $68.4 million as of December 31, 2021.

Inventories increased from $61.7 million as of December 31, 2020 to $78.7 million as of December 31, 2021. The increase in inventory is related to new products as well as to the overall increase in our business levels for products and services.

Operating activities in 2021 generated positive cash flow from operating activities of $132.3 million compared to a positive cash flow from operating activities of $60.3 million in 2020. The increase in operating cash flow in 2021 is mainly related to higher profitability.

The following table describes our investments in capital expenditures during the last three years (US dollars, in thousands):

	2019		2020		2021	
	Domestic	**Abroad**	**Domestic**	**Abroad**	**Domestic**	**Abroad**
Electronic equipment	3,975	418	2,742	431	2,356	1,134
Office furniture and equipment	2,192	604	28	510	22	283
Leasehold improvements	11,231	2,849	1,865	867	371	650
Total	**17,398**	**3,871**	**4,635**	**1,808**	**2,749**	**2,067**

In 2021, the investment in capital expenditures was financed from our fluent operating cash flow, and included mainly investments in electronic equipment. In 2022, we expect our capital spending to significantly increase to more than $20 million, mainly as a result of expected investments in manufacturing and demonstration facilities in Israel.

Our principal liquidity requirement is expected to be for working capital and capital expenditures, as well as additional acquisitions. We believe that our current cash reserves will be adequate to fund our planned activities for at least the next twelve months. Our long-term capital requirements will be affected by many factors, including the success of our current products, our ability to enhance our current products and our ability to develop and introduce new products that will be accepted by the semiconductor industry. We plan to finance our long-term capital needs with our cash reserves together with positive cash flow from operations, if any. If these funds are insufficient to finance our future business activities, which may include acquisitions, we would have to raise additional funds through the issuance of additional equity or debt securities, through borrowing or through other means. We cannot assure that additional financing will be available on acceptable terms.

Presently, our short-term debt is comprised from Convertible Senior Notes.

We do not have a readily available source of long-term debt financing such as a line of credit.

With regard to usage of hedging financial instruments and the impact of inflation and currency fluctuations, see “Item 11. Quantitative and Qualitative Disclosures about Market Risk” in this Annual Report.

5.C Research and Development, Patents and Licenses, etc.

For information regarding our research and development activities, see “Item 4B – Research and Development” in this Annual Report.

Grants from the Israeli Innovation Authority & European Programs

IIA sponsoring for generic research and development projects of large Israeli companies

We participate in a generic research and development programs sponsored by the IIA, available for Israeli companies that meet specific criteria's set forth by the IIA. Companies eligible to participate in these programs receive IIA funding intended to focus on long-term creation of know-how and technological infrastructure, used for the development or production of future innovative products. These programs do not require payments of royalties to the IIA, but all other restrictions under the Innovation Law, such as local manufacturing obligations and know-how transfer limitations, as further detailed hereunder, are applicable to the know how developed by us with the funding received in such programs.

IIA sponsoring for Israeli research and development consortiums

In 2020 and 2019, and in previous years, we participated in a consortium program sponsored by IIA. Under the terms of this program, we cooperate with additional companies, Universities and research institutes in Israel, organized in a consortium for the development of new technologies. The rules of the consortium include several references to the distribution of knowledge between the consortium members, requires us to provide the other members in the consortium with a non-sub-licensable license to use the "new information" developed by such member, without consideration. These programs do not require payments of royalties to the IIA, but all other restrictions under the Innovation Law, such as local manufacturing obligations and know-how transfer limitations, as further detailed hereunder, are applicable to the know how developed by us with the funding received in such programs. *Joint programs of the European Research Area and the IIA*

We participate in European consortia, which are joint programs governed by the Electronic Component Systems for European Leadership Joint Undertaking (the "JU") as part of the Horizon 2020 cooperation between the European Research Area and the IIA (the "EU Consortiums").

Some of the obligations and undertakings specified hereunder in connection with our IIA activities (such as the restrictions under the Innovation Law and obligation to grant certain access rights to our technology and intellectual property rights) apply with respect to some of these joint projects. In addition, the participation in an EU Consortium includes specific obligations, such as the following: The budgeted grant will be paid to the company pursuant to certain rules regarding 'eligible costs'; Obligation to properly implement the activities assigned under the specific EU Consortium project; Restrictions in contributions of third parties (by service or otherwise); Obligation to keep information up to date and to inform about events and circumstances likely to affect the consortium activity; Obligations related to records keeping, investigations and audits by the JU in order to verify the proper implementation of the specific EU Consortium project and compliance with the obligations under the terms of the program, including assessing deliverables and reports during a period of up to two years following the receipt by the company of the full grant payment; Obligations related to Intellectual property allocation generated by an EU Consortium, background intellectual property designation prior to the commencement of the EU Consortium's project and the provision of access rights to results obtained as part of the EU Consortium. Breach of such obligations may result in the reduction of the aggregate expected grant amount or claiming back previously received grants. In addition, the company may be subject to administrative and financial penalties such as temporary exclusion from all JU European Consortiums and fines of up to 10% of the maximum expected grant, as well as to contractual liabilities.

European Research Area program

We also participate in European consortiums which are not part of the JU (Joint Undertaking) program, thus, these programs are funded only by the European commission with no national funding from the Israel Innovation Authority. The restrictions under the Israeli Innovation Law do not apply to the project under these programs. Some of the specific obligations mentioned in the previous paragraph apply to the projects under these programs.

Past royalty bearing programs and royalties arrangements

Some of our previous research and development efforts were financed in part through royalty-bearing grants. We were obligated to pay royalties from sales of products funded with these grants. This obligation included different annual interest rates ranging up to 5%. In August 2016, we entered into a royalty buyout arrangement, or the Arrangement, with the IIA. As part of the Arrangement we paid approximately $12.9 million to the IIA in September 2016. The contingent net royalty liability to the IIA at the time we executed the Arrangement was approximately $24 million. As a result of the foregoing payment, we are released from any future royalty payments on these previous funds received from the IIA. However, to the extent that we will be able to commercialize products that were developed as part of IIA programs and were declared as "failed" at the time of the Arrangement, we will be required to pay royalties to the IIA from income generated from such commercialization. Currently, we do not anticipate that such failed projects will generate revenues in the future. We note that the Arrangement does not release the Company from other obligations towards the IIA as further detailed herein. In addition, in the future, we may, alone or together with third parties, participate in research and development programs, which may bear royalty obligations (depending on the specific terms of the applicable program).

Pertinent obligations under the Israeli Encouragement of Research, Development and Technological Innovation in the Industry Law 1984

Under the Encouragement of Research, Development and Technological Innovation in the Industry Law 1984 and the provisions of the applicable regulations, rules, procedures and benefit tracks, together the Innovation Law, a qualifying research and development program is typically eligible for grants of up to 50% of the program's pre-approved research and development expenses. The program must be approved by a committee of the IIA. The recipient of the grants is required to return the grants by the payment of royalties on the revenues generated from the sale of products (and related services) developed (in whole or in part) under IIA program up to the total amount of the grants received from IIA, linked to the U.S. dollar and bearing annual interest (as determined in the Innovation Law). Following the full payment of such royalties and interest, there is generally no further liability for royalty payment for our currently developed and sold products. Nonetheless, the restrictions under the Innovation Law (as generally specified below) will continue to apply even after our company has repaid the grants, including accrued interest, in full.

The main pertinent obligations under the Innovation Law are as follows:

- *Local Manufacturing Obligation*. The terms of the grants under the Innovation Law require that we manufacture the products developed with these grants in Israel. Under the regulations promulgated under the Innovation Law, the products may be manufactured outside Israel by us or by another entity only if prior approval is received from the IIA (such approval is not required for the transfer of less than 10% of the manufacturing capacity in the aggregate, as declared to be manufactured out of Israel in the applications for funding, in which case a notice should be provided to the IIA). This approval may be given only if we abide by all the provisions of the Innovation Law and related regulations. Ordinarily, as a condition to obtaining approval to manufacture outside Israel, we would be required to pay royalties at an increased rate (usually 1% in addition to the standard rate and increased royalties cap between 120% and 300% of the grants, depending on the manufacturing volume that is performed outside Israel). We note that a company also has the option of declaring in its IIA grant application an intention to exercise a portion of the manufacturing capacity abroad, thus, if the grant application is approved by IIA, such company will avoid the need to obtain additional approvals and pay the increased royalties cap for manufacturing outside of Israel at portions which were mentioned in such approved grant applications.

- *Know-How transfer limitation*. The Innovation Law restricts the ability to transfer know-how funded by the IIA outside of Israel, including by way of a license to a non-Israeli entity. Transfer of IIA funded know-how outside of Israel requires prior approval of the IIA. The IIA approval to transfer know-how created, in whole or in part, in connection with an IIA-funded project to third party outside Israel is subject to payment of a redemption fee to the IIA calculated according to a formula provided under the Innovation Law that is based, in general, on the ratio between the aggregate IIA grants to the company's aggregate investments in the project that was funded by these IIA grants, multiplied by the transaction consideration, taking into account depreciation mechanism, and less royalties already paid to the IIA. The regulations promulgated under the Innovation Law establish a maximum payment of the redemption fee paid to the IIA under the above mentioned formulas and differentiates between two situations: (i) in the event that the company sells its IIA funded know-how, in whole or in part, or is sold as part of an M&A transaction, and subsequently ceases to conduct business in Israel, the maximum redemption fee under the above mentioned formulas will be no more than six times the total grants received (plus accrued interest) for development of the know-how being transferred, or the entire amount received from the IIA, as applicable; (ii) in the event that following the transactions described above (i.e., asset sale of IIA funded know-how or transfer as part of an M&A transaction) the company undertakes to continue its R&D activity in Israel (for at least three years following such transfer and maintain at least 75% of its R&D staff employees it had for the six months before the know-how was transferred, while keeping the same scope of employment for such R&D staff), then the company is eligible for a reduced cap of the redemption fee of no more than three times the amounts received (plus accrued interest) for the applicable know-how being transferred, or the entire amount received from the IIA, as applicable. No assurance can be given that approval to any such transfer, if requested, will be granted and what will be the amount of the redemption fee payable.

  Approval of the transfer of IIA funded technology to another Israeli company requires a pre-approval by IIA and may be granted only if the recipient undertakes to fulfil all the liabilities to IIA and undertakes abides by all the provisions of the Innovation law and related regulations, including the restrictions on the transfer of know-how and manufacturing rights outside of Israel and the obligation to pay royalties. In light of the Arrangement (as further discussed below), in certain circumstances, under such sale transactions (i.e., the transfer of IIA funded technology or portion thereof to another Israeli company), we might be obligated to pay royalties to the IIA from any income derived from such a sale transaction.

- *Licensing arrangements*. Under the terms of the Innovation Law, licensing know how developed under the IIA programs outside of Israel, requires prior consent of IIA and payment of license fees to IIA, calculated in accordance with the licensing rules promulgated under the Innovation Law. The payment of the license fees does not discharge the company from the obligation to pay royalties or other payments due to IIA in accordance with Innovation Law.

These restrictions may impair our ability to enter into agreements for those products or technologies which were developed with assistance of the IIA grants without the approval of the IIA. We cannot be certain that any approval of the IIA will be obtained on terms that are acceptable to us, or at all. Furthermore, in the event that we undertake a transaction involving the transfer to a non-Israeli entity of know-how developed with IIA funding pursuant to a merger or similar transaction, the consideration available to our shareholders may be reduced by the amounts we are required to pay to the IIA. Any approval, if given, will generally be subject to additional financial obligations. Failure to comply with the requirements under the Innovation Law may subject us to mandatory repayment of grants received by us (together with interest and penalties), as well as may expose us to criminal proceedings. In addition, IIA may from time-to-time audit sales of products which it claims incorporate technology funded via IIA programs and this may lead to additional royalties being payable on additional products.

5.D Trend Information

For Information regarding most significant recent trends in our market, see "Item 4B– Our Market – The World Economy – Update" in this Annual Report.

Item 6. Directors, Senior Management and Employees

6.A Directors and Senior Management

The following is the list of senior management and directors as of February 14, 2022:

Name	Age	Position
Michael Brunstein (3)	78	Chairman of the Board of Directors
Avi Cohen (1)(2)	68	Director
Raanan Cohen (2)(3)	66	Director
Zehava Simon (1)(2)	63	Director (External Director until May 2018)
Dafna Gruber (1)(3)	56	Director (External Director until May 2018)
Sarit Sagiv (1)(2)	53	Director
Eitan Oppenhaim	56	Director, President and Chief Executive Officer
Dror David	52	Chief Financial Officer
Shay Wolfling	50	Chief Technology Officer
Adrian S. Wilson	50	President of US subsidiary & General Manager Material Metrology Division
Effi Aboody	51	Corporate VP and General Manager Dimensional Metrology Division

(1) Member of the audit committee

(2) Member of the compensation committee

(3) Member of the Nominating committee

Dr. Michael Brunstein was named chairman of our board of directors in June 2006, after serving as member of our board of directors from November 2003. During the years 1990 and 1999, Dr. Brunstein served as Managing Director of Applied Materials Israel Ltd. Prior to that, Dr. Brunstein served as President of Opal Inc., and as a Director of New Business Development in Optrotech Ltd. Dr. Brunstein holds a B.Sc. in Mathematics and Physics from The Hebrew University, Jerusalem, and a M.Sc. and a Ph.D. in Physics from Tel Aviv University, Israel.

Mr. Avi Cohen has served as a director of the Company since 2008. He also, serves as executive chairman of XJet Ltd. (a private company) and Chakratec Ltd. (a public company) as well as on the board of directors of Cortica Ltd. and CGS Tower Networks Ltd. From July 2016 to September 2017 Mr. Cohen served as the chief executive officer of MX1, a global media service provider founded in July 2016 as a result of the acquisition of RR Media (Nasdaq: RRM) by SES S.A. and the following merger between RR Media, and SES Platform Services GmbH. From July 2012 till the merger, Mr. Cohen served as the chief executive officer of RR Media. Prior to that, until March 2012, Mr. Cohen served as president and chief executive officer of Orbit Technologies, a public company traded on the TASE. From September 2006 to December 2008, Mr. Cohen served as chief operating officer and deputy to the chief executive officer of ECI Telecom Ltd. Prior to joining ECI, Mr. Cohen served in a variety of executive management positions at KLA (Nasdaq: KLAC). From 2003 he was a group vice president, corporate officer and member of the executive management committee. From 1995 he was the president of KLA Israel responsible for the optical metrology division. Prior to joining KLA, Mr. Cohen also spent three years as managing director of Octel Communications, Israel, after serving as chief executive officer of Allegro Intelligent Systems, which he founded and which was acquired by Octel. Mr. Cohen holds B.Sc. and M.Sc. degrees in electrical engineering and applied physics from Case Western Reserve University, USA.

Mr. Raanan Cohen was appointed as a director of the Company by our board of directors in February 2014. Prior to that and until December 2012, Mr. Cohen has served as the President and Chief Executive Officer of Orbotech Ltd., a public company traded on Nasdaq. Mr. Cohen has also served in a range of other executive positions at Orbotech Ltd, including Co-President for Business and Strategy, EVP and President of the Printed Circuit Board (PCB) Division, Vice President for the PCB-AOI product line and President and chief executive officer of Orbotech, Inc. Prior to its merger with Orbotech in 1991, Mr. Cohen held various positions at Orbot, another manufacturer of AOI systems. Prior to joining Orbot in 1984, he worked at Telrad Networks Ltd. Mr. Cohen currently serves as the Chief Executive Officer of EyeWay Vision Ltd., a private company. Mr. Cohen holds a B.Sc. in Computer Science from the Hebrew University in Jerusalem, Israel.

Ms. Zehava Simon was elected as the Company's external director in accordance with the provisions of the Companies Law in June 2014 and reelected in June 2017. Effective as of May 2018, and our adoption of the exemption under the Regulation (as defined below), Ms. Simon is no longer classified as an external director under the Companies Law. Ms. Simon served as a Vice President of BMC Software from 2000 until 2013 and in her last position (as of 2011) acted as Vice President of Corporate Development. From 2002 to 2011, Ms. Simon served as Vice President and General Manager of BMC Software in Israel. In this role, she was responsible for directing operations in Israel and India as well as offshore sites. Prior to that, Ms. Simon held various positions at Intel Israel., which she joined in 1982, including leading of Finance & Operations and Business Development for Intel in Israel. Ms. Simon is currently a board member of Audiocodes Ltd., a public company traded on Nasdaq and TASE, Nice Systems, a public company traded on Nasdaq and TASE. Ms. Simon is a former member of the board of directors of Insightec Ltd. (2005-2012), M-Systems Ltd., a Nasdaq listed company which was acquired in 2006 by SanDisk Corp., a public company traded on Nasdaq as well (2005-2006) and Tower Semiconductor Ltd., a public company traded on TASE and Nasdaq (1999-2004). Ms. Simon holds a B.A. in Social Sciences from the Hebrew University, Jerusalem, Israel, a law degree (LL.B.) from the Interdisciplinary Center in Herzliya and an M.A. in Business and Management from Boston University, USA.

Ms. Dafna Gruber was elected as the Company's external director in accordance with the provisions of the Companies Law in April 2015 and reelected in April 2018. Effective as of May 2018, and our adoption of the exemption under the Regulation, Ms. Gruber is no longer classified as an external director under the Companies Law. Ms. Gruber has broad experience, serving as chief financial officer and a senior executive management member in leading hi-tech companies traded on both Nasdaq and TASE. Ms. Gruber serves as the chief financial officer of Netafim Ltd., a private company. Prior to that as chief financial officer in various companies including Aqua security Ltd. Landa Corporation Ltd. and Clal Industries Ltd. From 2007 until 2015, Ms. Gruber served as the chief financial officer of Nice Systems Ltd., a public company traded on Nasdaq and TASE. responsible, *inter alia*, for finance, operation, MIS and IT, legal and investor relations. From 1996 until 2007, Ms. Gruber was part of Alvarion Ltd., a public company traded on Nasdaq and TASE, mostly as chief financial officer. Ms. Gruber currently serves as an as an external at ICL group ltd., Tufin software technologies Ltd and a board member of Cellebrite Ltd. Ms. Gruber is a certified public accountant and holds a Bachelor's degree in Accounting and Economics from Tel Aviv University, Israel.

Ms. Sarit Sagiv was appointed to serve as a director of the Company by our board of directors in August 2021. Ms. Sagiv serves as a member of the Investments Committee of Phoenix Insurance and as a member of the board of directors of OPC Energy Ltd., a public company traded on TASE. Ms. Sagiv had served as General Manager of the Global Business division at Amdocs (Nasdaq: DOX) in the years 2016-2020. Prior to this role, Ms. Sagiv served as the Chief Financial Officer of Nice Ltd. (NASDAQ and TASE: NICE), with responsibility for the finance, legal, operations and IT areas, as well as the Chief Financial Officer of Retalix Ltd. (Nasdaq and TASE: RTLX), playing a key role in the transaction with NCR. Ms. Sagiv also held various other Chief Financial Officer and senior financial positions. Ms. Sagiv is a certified public accountant. She holds a B.A. in Accounting and Economics and an MBA, both from Tel Aviv University, and an MA in Law from Bar Ilan University.

Mr. Eitan Oppenhaim has been serving as the President and Chief Executive Officer of the Company since July 31, 2013, and was appointed by our board of directors to also serve as a director of the Company in October 2019. He has previously served as the Executive Vice President Global Business Group, since November 2010. From 2009 until 2010, Mr. Oppenhaim served as Vice President and Europe General Manager of Alvarion Ltd., a public company traded on Nasdaq. During the years 2007 through 2009, Mr. Oppenhaim served as Vice President of sales and marketing of OptimalTest Ltd.. Prior to that, from 2002 till 2006, Mr. Oppenhaim served as Vice President – Business Manager of the Flat Panel Displays division of Orbotech Ltd., a public company traded on Nasdaq. From 2001 till 2002, Mr. Oppenhaim served as Managing Director of Asia Pacific at TTI Telecom International, a leading provider of assurance, analytics and optimization solutions to communications service providers (CSP) worldwide. Prior to that, from 1994 till 2001, Mr. Oppenhaim held several key executive positions at Comverse Network Systems Ltd., a public company traded on Nasdaq. Mr. Oppenhaim holds a BA in Economics from the Haifa University, Israel and an MBA from Ben-Gurion University, Beer-Sheva, Israel.

Mr. Dror David has served as the Chief Financial Officer since November 2005. Mr. David joined Nova in April 1998, as the Company's Controller, and since then served in various financial and operational positions, including the position of Vice President of Resources, in which he was responsible for the finance, operations, information systems and human resources functions of the Company. Mr. David was also a leading member in the Company's initial public offering on Nasdaq in 2000, the Company's private placement in 2007 and the Company's secondary offering in 2010. Prior to joining Nova, Mr. David spent five years in public accounting with Deloitte Touch in Tel Aviv, specializing in industrial high-tech companies. Mr. David is a Certified Public Accountant in Israel, holds a B.A. in Accounting and Economics from Bar Ilan University, and an M.B.A. from Derby University of Britain.

Dr. Shay Wolfling joined Nova in 2011, as Chief Technology Officer. Prior to joining Nova, Dr. Wolfling was an R&D manager at KLA-Tencor-Belgium (formerly ICOS Vision Systems, a public traded company acquired by KLA in 2008), where he led multidisciplinary metrology & inspection development projects. From 2000 until its technology acquisition by ICOS in 2005, Dr. Wolfling was a founder and Vice President of Research and Development of Nano-Or-Technologies, a start-up company with a proprietary technology for 3D optical measurements. Dr. Wolfling took Nano-Or from the idea stage to initial product sales. Prior to founding Nano-Or, Dr. Wolfling was a project manager in Y-Beam-Technologies, a start-up offering laser-based skin treatments. Dr. Wolfling has several patents under his name in the field of optical measurements. Dr. Wolfling holds a B.Sc. in physics and mathematics from the Hebrew University of Jerusalem, Israel, a second degree in physics from Tel-Aviv University, Israel and a Ph.D. in physics from the Hebrew University of Jerusalem, Israel.

Mr. Adrian S. Wilson Joined Nova in January 2018 as General Manager Material Metrology Division and President of our US subsidiary, Nova Measuring Instruments, Inc. Mr. Wilson has over 25 years of Semiconductor capital equipment and materials experience. Mr. Wilson joins us from Nanometrics Inc, where he held the position of Vice President & General Manager of Advanced Imaging and Analytics Business Unit. Prior to Nanometrics Inc, he held the position of Managing Director of Element Six Technologies Ltd., the non-abrasive arm of the synthetic diamond group of DeBeers, focused on thermal management and optical components for the semiconductor industry. Mr. Wilson has experience in leading both start-ups and divisions within large public multi-national companies, including KLA, FormFactor Inc. and Phoenix X-ray Systems & Services Inc., a capital equipment start-up. Mr. Wilson holds a bachelor's degree in Electronics Engineering, post Grad in Marketing Management and a MBA in Technology Management. Mr. Wilson's accreditations include Fellow of the Chartered Institute of Marketing (UK) and Fellow of the Institute of Directors (UK).

Mr. Effi Aboody has served as our Corporate VP and General Manager Dimensional Metrology Division since September 2019. Mr. Aboody joined Nova in 2016 as Vice President and Head of the Global Applications team. Mr. Aboody started his career at Intel Corporation Ltd in 1996 as an Integration engineer, working in Portland and California R&D centers, in both logic and memory devices, followed by several managerial positions including Process Integration , Sort testing manager and Yield manager. In 2008 Mr. Aboody served as Yield and Integration Departments at Numonyx Ltd focusing on NOR flash memory process and reliability. In 2011 Mr. Aboody managed the Engineering and Yield Departments at Micron Technology Ltd Fab12. In 2013 Mr. Aboody returned to Intel Corporation to manage the Fab28 Yield Organization, responsible for CPU and SoC outgoing yield performance, defects and Labs. Effi holds an Executive MBA from Tel Aviv University and a B.Sc. in Materials Engineering from Ben-Gurion University.

Voting Agreement

We are not aware of any voting agreement currently in effect.

6.B Compensation

The aggregate compensation expensed, including share-based compensation and other compensation expensed by us, to our senior management members listed in item 6.A in this Annual Report, with respect to the year ended December 31, 2021 (consisting of 5 persons) was approximately $10 million. This amount includes approximately 0.5 million set aside or accrued to provide pension, severance, retirement, or similar benefits and amounts expensed by the Company for automobiles made available to its executive officers).

Disclosure regarding the compensation of our senior executives on an individual basis will be disclosed in our proxy statement in connection with the 2021 annual general meeting of shareholders in accordance with Israeli regulations.

Terms of employment of Mr. Eitan Oppenhaim, our President and Chief Executive Officer and a member of the board of directors, as approved by our shareholders, are as follows:

General

(i) a monthly base salary of NIS 161,000; (ii) an annual bonus of up to fourteen (14) monthly base salaries (with additional payment of up to 100% of the target bonus in the case of over achievement), subject to objectives which are annually predetermined by the board of directors and its committees, in accordance with our compensation policy; (iii) in connection with termination of employment (other than for cause), a three month advance notice and a six month adjustment period, during which Mr. Oppenhaim will be entitled to all of his compensation elements, and to the continuation of vesting of his options. In the event of employment termination during a fiscal year (unless for cause), the bonus shall be prorated (subject to certain adjustments); (iv) customary social benefits such as pension fund or management insurance, education fund, vacation pay, sick leave and convalescence pay; (v) subject to required approvals under applicable law, a directors and officers insurance, including a "run-off" insurance policy; (vi) non-disclosure, non-compete and ownership of intellectual property undertakings; and (vii) monthly travel expenses or a Company car, cellular phone, a land line phone, toll road expenses, a laptop computer and other expense reimbursements pursuant to the Company general policies.

Equity-Based Compensation

Since January 1, 2019 until December 31, 2021, per the approval of the respective annual general meeting of shareholders, Mr. Oppenhaim was granted a total of 70,000 options to purchase ordinary shares of the Company with an exercise price of $25.89, and 61,225 restricted share units. The options vest in equal annual installments over a terms of four years commencing one year following the grant date and the restricted share units vest in equal annual installments over a terms of three years commencing one year from the grant date; All options and restricted share units expire seven (7) years after each grant date; can be cancelled in accordance with the terms and conditions of the applicable incentive plan of the Company or the employment terms of Mr. Oppenhaim; and, were made in accordance with and subject to Section 102 of the Income Tax Ordinance of 1961 (New Version) (the "Ordinance"). In addition, Mr. Oppenhaim was granted in July 2019, July 2020 and July 2021, a total of 91,225 performance based restricted units that vest over a period of three (3) years, provided that the Company meets or exceeds the performance targets for vesting set by the compensation committee and board of directors of the Company, unless such restricted share units have been cancelled in accordance with the terms and conditions of the share incentive plan of the Company or the employment terms of Mr. Oppenhaim. In the event a portion of these restricted share units fails to vest, such portion will be carried forward to the third vesting date and will vest if the Company's average annual return on equity based on net income during the previous three (3) years shall be no less than ten percent (10%).

Compensation upon Significant Event

Upon the occurrence of a Significant Event, unvested options granted to Mr. Oppenhaim will vest upon the consummation of the Significant Event, and unexercised options may be exercised until the earlier of two years from the consummation of the Significant Event, and termination of the options. Such arrangements will not apply if Mr. Oppenhaim remains the chief executive officer of our company or the surviving entity, and unvested options are replaced for new options of the surviving entity as part of the Significant Event with a vesting schedule and terms identical to the replaced options. Further, upon a Significant Event, Mr. Oppenhaim will be entitled to a special bonus of up to 12 monthly salaries, subject to the approval of the compensation committee and our board of directors and subject to the limitation on a special bonus imposed by our compensation policy. In the event of termination of employment (up to 12 months from the Significant Event), Mr. Oppenhaim will be entitled to the retirement terms under his employment agreement, the special bonus described above and the payment of the annual bonus in full for the year in which the Significant Event has occurred, subject to the annual bonus plan, on an annual basis calculation, and subject to the approval of the compensation committee and our board of directors prior to the consummation of the transaction, or the respective body in the new surviving entity following the transaction, as applicable. A "Significant Event" is defined for this purpose as: (1) the sale of all or substantially all of our company's assets; (2) a merger of our company with or into another company or entity after which our shareholders will hold 50% or less of the surviving entity; (3) our company becoming a division or a subsidiary of another company; or (4) the purchase of our company's shares, after which the purchaser will hold 50% or more of our company's shares, provided, however, that the purchaser is not one of our institutional investors upon execution of the purchase agreement.

Compensation upon Acquisition

Upon Acquisition of a company (which is not an affiliate of the company), Mr. Oppenhaim will be entitled to receive a bonus of up to 12 monthly salaries subject to the approval of the compensation committee and our board of directors and subject to the limitation on a special bonus imposed by our compensation policy. An "Acquisition" includes, among others, a merger of our company or a subsidiary of our company with or into another entity, such that upon consummation of such transaction our shareholders will hold more than 50% of the surviving entity. In accordance with this entitlement, on February 2022 our compensation committee and board have approved a bonus of 12 monthly salaries for the acquisition of ancosys, to be paid to Mr. Oppenhaim in April 2022.

Directors and Officers Equity Based Compensation

As of February 14, 2021, a total of 317,266 options to purchase our ordinary shares and 207,921 RSU's were outstanding and held by certain directors and senior management members listed in item 6.A in this Annual Report (consisting of 11 persons), of which 208,817 options are currently exercisable or exercisable within 60 days of February 14, 2021, 68,038 shares are held by trustee due to vested RSUs and 2,595 RSU's will vest within 60 days of February 14, 2021. See "Item 6E. Share Ownership" in this Annual Report.

In accordance with our current equity-based compensation policy, the exercise price of granted options is equal to the closing sale price of the Company's ordinary shares on Nasdaq on the day of grant.

Compensation of Directors

The total amount paid or payable to the directors (consisting of seven persons, not including Mr. Oppenhaim), for 2021 was approximately $0.35 million.

The compensation arrangement of our directors (excluding the chairman of the board of directors and, unless approved otherwise, any other director who is also an employee of the Company) includes an annual payment of NIS 92,000 (approximately US$28,500) and a payment per meeting of NIS3,000 (approximately US$930) (for each execution of a written consent in lieu of a meeting, an amount of NIS 1,500 and for each meeting that the director attends by teleconference, an amount of NIS 1,800).

The compensation arrangement of Dr. Michael Brunstein, the chairman of our board of directors includes a gross annual fee of US$110,000 payable monthly in NIS.

In the 2019 annual general meeting, our shareholders approved an amendment to the equity-based compensation paid to our directors, such that each member of our board of directors (excluding the chairman) will be granted an annual award of options to purchase 3,340 ordinary shares and 2,220 restricted share units, or, options and restricted share units with an aggregate fair market value of US$100,000 (with the same ratio of options and restricted share units), the lower of the two. Such grant will be made to each director on the date of each annual general meeting at which such director is elected or reelected. Our chairman will be granted an annual award of options to purchase 15,850 ordinary shares and 10,550 restricted share units, or, options and restricted share units with an aggregate fair market value of US$600,000 (with the same ratio of options and restricted share units), the lower of the two. Such grant will be made on the date of each annual general meeting at which our chairman is elected or reelected. The exercise price of each option will be determined pursuant to our equity-based compensation policy and the equity awards will vest annually over a period of four years.

On June 17, 2019, our shareholders approved our current compensation policy, and on June 25, 2020, our shareholders approved an amendment to the compensation policy related to directors and officers liability insurance policy premium.

The full text of our current compensation policy was included as Appendix A to the proxy statement attached to our report on Form 6-K, furnished to the Securities and Exchange Commission on May 7, 2019.

6.C Board Practices

Our Amended and Restated Articles of Association, as adopted by the Company's shareholders and recently amended on June 24, 2021, or the Articles, provide that we may have between five and nine directors. Our board of directors currently consists of seven directors, three of which are women.

Under the Companies Law, companies incorporated under the laws of the State of Israel that are "public companies," including companies with shares listed on the Nasdaq Global Select Market, are required to appoint at least two external directors.

Pursuant to regulations promulgated under the Companies Law, companies with shares traded on a U.S. stock exchange, including the Nasdaq Global Select Market, may, subject to certain conditions, "opt out" from the Companies Law requirements to appoint external directors and related Companies Law rules concerning the composition of the audit committee and compensation committee of the board of directors. In accordance with these regulations, in May 2018, we elected to "opt out" from the Companies Law requirements to appoint external directors and related Companies Law rules concerning the composition of the audit committee and compensation committee of the board of directors.

Under these regulations, the exemptions from such Companies Law requirements will continue to be available to us so long as: (i) we do not have a "controlling shareholder" (as such term is defined under the Companies Law), (ii) our shares are traded on a U.S. stock exchange, including the Nasdaq Global Select Market, and (iii) we comply with the director independence requirements, the audit committee and the compensation committee composition requirements, under U.S. laws (including applicable Nasdaq Rules) applicable to U.S. domestic issuers.

Our board of directors has determined that all of our directors qualify as ''independent directors'' as defined by The Nasdaq Stock Market Rules.

Our Articles provide that directors may be elected at our annual general meeting of shareholders by a vote of the holders of more than 50% of the total number of votes represented at such meeting, not taking into consideration abstention votes. In addition, our board of directors is authorized to appoint directors, at its discretion, provided that the total number of directors does not exceed the maximum number of directors permitted by the Articles. Our directors (other than the directors who were in the position of external directors until May 2018) serve as such until the next annual general meeting of our shareholders. Effective as of May 2018, and our adoption of the exemption under the Israeli Companies Regulations (Reliefs for Public Companies whose Shares are Listed on a Stock Exchange Outside of Israel), 2000, or the Regulation, our directors in office who were elected and classified as external directors, Ms. Dafna Gruber and Ms. Zehava Simon, are no longer classified as such under the Companies Law.

According to the Companies Law, the board of directors of a public company must establish the minimum number of board members that are to have accounting and financial expertise while considering, *inter alia*, the nature of the company, its size, the scope and complexity of its operations and the number of directors stated in the Articles.

Our board of directors resolved that the minimum number of board members that need to have accounting and financial expertise is one (1).

Our board of directors determined that each of Ms. Dafna Gruber and Ms. Sarit Sagiv has accounting and financial expertise as described in the regulations promulgated pursuant to the Companies Law, and that, therefore, the requirements of the minimum number of board members that need to have accounting and financial expertise, as set by the board of directors, has been met.

Our board of directors has adopted a training program for newly appointed directors. Once appointed and following the completion of their onboard training, our directors continue to receive ongoing training as part of our directors training and development efforts.

Family Relationships

There are no family relationships between any members of our executive management and our directors.

Board of Directors' Committees

The Company's board of directors has appointed the following committees:

Audit Committee

Our Audit Committee is comprised of Dafna Gruber (Chairperson), Zehava Simon, Avi Cohen and Sarit Sagiv. The audit committee is responsible to provide oversight of the accounting and financial reporting process of the Company and the audits of the financial statements of the Company, and assist the Board in its oversight of (i) the integrity of the Company's financial statements and other published financial information, (ii) the Company's compliance with applicable financial and accounting related standards, rules and regulations, (iii) the selection, engagement and termination, subject to shareholder approval, of the Company's independent auditor, (iv) the pre-approval of all audit, audit-related and all permitted non-audit services, if any, by the Company's independent auditor, and the compensation therefor, (v) the Company's internal controls over financial reporting and (vi) risk assessment and risk management, including cyber risks.

Under the Companies Law, the audit committee is responsible, among others, for (i) identifying deficiencies in the business management practices of the Company, including by consulting with the internal auditor, and recommending remedial actions with respect to such deficiencies; (ii) reviewing and approving related party transactions, including, among others, determining whether or not such transactions are deemed material actions or extraordinary transactions; (iii) ensuring that a competitive process is conducted for related party transactions with a controlling shareholder (regardless of whether or not such transactions are deemed extraordinary transactions), optionally based on criteria which may be determined by the audit committee annually in advance; (iv) setting forth the approval process for transactions that are 'non-negligible' (i.e., transactions with a controlling shareholder that are classified by the audit committee as non-negligible, even though they are not deemed extraordinary transactions), as well as determining which types of transactions would require the approval of the audit committee, optionally based on criteria which may be determined annually in advance by the audit committee; (v) evaluating the Company's internal audit program and the performance of the Company's internal auditor and the resources at his/her disposal; (vi) reviewing the scope of work of the Company's external auditor and making recommendations regarding his/her salary; and (vii) creating procedures relating to the employees' complaints regarding deficiencies in the administration of the Company as well as adopting against retaliation. The audit committee is also responsible for reviewing and approving any material change or waiver in the Company's Corporate Code of Conduct regarding directors or executive officers, and disclosures made in the Company's annual report in such regard. The audit committee operates under a charter dully adopted by the board of directors.

Our board of directors has determined that each member of our audit committee is independent as such term is defined in Rule 10A-3 under the Exchange Act, and that each member of our audit committee satisfies the additional requirements applicable under the Nasdaq rules to members of an audit committee.

Compensation Committee

Our Compensation Committee is comprised of Zehava Simon (Chairperson), Avi Cohen Raanan Cohen and Sarit Sagiv. The function of the compensation committee is described in the approved charter of the committee, and includes assisting the board of directors in discharging its responsibilities relating to compensation of the Company's officers, directors and executives and the overall compensation programs and reviewing and approving, or if required by law, approving and recommending for approval by the board of directors, grants and awards under the Company's equity incentive plans. The primary objective of the committee is to oversee the development and implementation of the compensation policies and plans that are appropriate for the Company in light of all relevant circumstances, and which provide incentives that fit the Company's long-term strategic plans and are consistent with the culture of the Company and the overall goal of enhancing shareholder's value.

Our board of directors has determined that each member of our compensation committee is independent under the Nasdaq rules, including the additional independence requirements applicable to the members of a compensation committee.

Under the Companies Law and our compensation committee charter, our compensation committee is responsible, among others, for (i) recommending to the board of directors regarding its approval of a compensation policy in accordance with the requirements of the Companies Law, and any other compensation policies, incentive-based compensation plans and equity-based plans; (ii) overseeing the development and implementation of such compensation plans and policies that are appropriate in light of all relevant circumstances and recommending to the board of directors regarding any amendments or modifications that the compensation committee deems appropriate; (iii) determining whether to approve transactions concerning the terms of engagement and employment of our officers and directors that require compensation committee approval under the Companies Law or our compensation plans and policies; and (iv) taking any further actions as the compensation committee is required or allowed to under the Companies Law or the compensation plans and policies.

Nominating Committee

Our *Nominating Committee* is comprised of Raanan Cohen (Chairperson), Michael Brunstein, and Dafna Gruber. The function of the nominating committee is described in the approved charter of the committee, and includes responsibility for identifying individuals qualified to become board members and recommending that the board of directors consider the director nominees for election at the general meeting of shareholders. The nominating and corporate governance committee is also responsible for developing and recommending to the board of directors a set of corporate governance guidelines applicable to the Company, periodically reviewing such guidelines and recommending any changes thereto.

Our audit committee also acts as our investment committee.

All committees are acting according to written charters that were approved by our board of directors. Additionally, we adopted an internal enforcement plan which was approved by our board of directors. The internal enforcement plan, as part of which we adopted and implementing procedures and policies in order to comply with the provisions of the Israeli Securities Law, 5728-1968 (the "Israeli Securities Law"), the Companies Law. The internal enforcement plan includes, among others, the board committees' charters and the internal auditor charter, procedures with respect to related party transactions, insider trading, which prohibits hedging activities, equity-based compensation policy, reporting and complaints, anti-bribery and anti-fraud policies and a code of conduct. Each of our committees have the power to retain, terminate and approve the related fees and other retention terms, as it deems appropriate, outside counsel and other experts and consultants to assist the committee in connection with its responsibilities without our board of directors' approval and at the Company's expense.

Approval of Related Party Transaction

The Companies Law requires that office holders of a company, including directors and executive officers, promptly disclose to the board of directors any personal interest they may have and all related material information known to them about any existing or proposed transaction with such company. The approval of the board of directors is required for 'non-extraordinary' transactions between a company and its office holders, or between a company and other persons in which an office holder has a personal interest, unless such company's articles of association provide otherwise. Under the Companies Law, a 'non-extraordinary' transaction between a company or between the company and a third party in which an office holder of a company has a personal interest, will require the approval of the board of directors or a committee authorized by the board of directors, unless such company's articles of association provide otherwise. Our Articles do not provide otherwise, and therefore such transaction requires the approval of our board of directors. If a transaction is an "extraordinary transaction", it is subject to the approval of the audit committee prior to its approval by the board of directors. For information regarding the necessary approvals under the Companies Law for transactions with office holders and directors regarding their terms of engagement with the company, see "— Compensation of Officers and Directors" in this Item below.

In addition, an extraordinary transaction between a public company and a controlling shareholder (i.e. a shareholder who has the ability to direct the activities of a company, including a shareholder that owns 25% or more of the voting rights if no other shareholder owns more than 50% of the voting rights, but excluding a shareholder whose power derives solely from its position on the board of directors or any other position with the company), or in which a controlling shareholder has a personal interest, including a private placement in which the controlling shareholder has a personal interest, a transaction between a public company and a controlling shareholder, the controlling shareholders' relative, or entities under its control, directly or indirectly, with respect to services to be provided to the public company, and a transaction concerning the terms of compensation of the controlling shareholder or the controlling shareholder's relative, who is an office holder or an employee, requires the approval of the audit committee or, in some cases, the compensation committee (see "— Compensation of Officers and Directors" in this Item below), the board of directors and a majority of the shares voted by the shareholders of the company participating and voting on the matter in a shareholders' meeting. In addition, the shareholder approval must fulfill one of the following requirements: (i) the majority must include at least a majority of the shares of the voting shareholders who have no personal interest in the transaction (in counting the total votes of such shareholders, abstentions are not taken into account); or (ii) the total of opposition votes among the shareholders who have no personal interest in the transaction may not exceed 2% of the aggregate voting rights in the company. Any such transaction the term of which is more than three years, must be approved in the same manner every three years, unless with respect to certain transactions as permitted by the Companies Law, the audit committee has determined that longer term is reasonable under the circumstances.

According to the Companies Law, if an extraordinary transaction is discussed by the board of directors or the audit committee, directors and office holders that have personal interest in the proposed transaction, may not participate in the discussion or vote. However, if the majority of the members of the audit committee or the board of directors (as applicable) have personal interest in the proposed transaction, then all directors (including those with personal interest) may participate in the discussion and vote, provided that in the event the majority of the members of the board of directors have personal interest in the transaction, said transaction will also be subject to the approval of the Company's shareholders.

Compensation of Officers and Directors

Under the Companies Law, Israeli public companies are required to establish a compensation committee and adopt a policy regarding the compensation and terms of employment of their directors and officers. For information on the composition, roles and objectives of the compensation committee pursuant to the Companies Law and our compensation committee charter, see above "—Board of Directors' Committees — Compensation Committee" in this Annual Report.

Pursuant to the Companies Law, the compensation policy must be approved by the company's board of directors after reviewing the recommendations of the compensation committee. The compensation policy also requires the approval of the general meeting of the shareholders, which approval must satisfy one of the following (the "Majority Requirement"): (i) the majority should include at least a majority of the shares of the voting shareholders who are non-controlling shareholders or do not have a personal interest in the approval of the compensation policy (in counting the total votes of such shareholders, abstentions are not be taken into account) or (ii) the total number of votes against the proposal among the shareholders mentioned in paragraph (i) does not exceed two percent of the aggregate voting power in the company. Under certain circumstances and subject to certain exceptions, the board of directors may approve the compensation policy despite the objection of the shareholders, provided that the compensation committee and the board of directors determines that it is for the benefit of the company, following an additional discussion and based on detailed arguments.

The Companies Law provides that the compensation policy must be re-approved (and re-considered) every three years, in the manner described above. Moreover, the board of directors is responsible for reviewing from time to time the compensation policy and deciding whether or not there are any circumstances that require an adjustment to the company's compensation policy. When approving the compensation policy, the relevant organs must take into consideration the goals and objectives listed in the Companies Law, and include reference to specific issues listed in the Companies Law. Such issues include, among others (the "Compensation Policy Mandatory Criteria"): (i) the relevant person's education, qualifications, professional experience and achievements; (ii) such person's position within the company, the scope of his responsibilities and previous compensation arrangements with the company; (iii) the proportionality of the employer cost of such person in relation to the employer cost of other employees of the company, and in particular, the average and median pay of other employees in the company, including contract workers, and the impact of the differences between such person's compensation and the other employees' compensation on the labor relations in the company; (iv) the authority, at the board of director's sole discretion, to lower any variable compensation components or set a maximum limit (cap) on the actual value of the non-cash variable components, when paid; and (v) in the event that the terms of engagement include any termination payments - the term of employment of the departing person, the company's performance during that term, and the departing person's contribution to the performance of the company.

In addition, the Companies Law provides that the following matters must be included in the compensation policy (the "Compensation Policy Mandatory Provisions"): (i) the award of variable components must be based on long term and measurable performance criteria (other than non-material variable components, which may be based on non-measurable criteria taking into account the relevant person's contribution to the performance of the company); (ii) the company must set a ratio between fixed and variable pay, set a cap on the payment of any cash variable compensation components as of the payment of such components, and set a cap on the maximum cash value all non-cash variable components as of their grant date; (iii) the compensation policy must include a provision requiring the relevant person to return to the company any compensation that was awarded on the basis of financial figures that were subsequently restated; (iv) equity based variable compensation components should have an appropriate minimum vesting periods, which should be linked to long term performance objectives; and (v) the company must set a clear limit on termination payments.

Pursuant to the Companies Law, any transaction with an office holder (except directors and the chief executive officer of the company) with respect to such office holder's compensation arrangements and terms of engagement, requires the approval of the compensation committee and the board of directors. Such transaction must be consistent with the provisions of the company's compensation policy, provided that the compensation committee and the board of directors may, under special circumstances, approve such transaction that is not in accordance with the company's compensation policy, if both of the following conditions are met: (i) the compensation committee and the board of directors discussed the transaction in light of the roles and objectives of the compensation committee (also see above "—Board of Directors' Committees — Compensation Committee" in this Annual Report) and after taking into consideration the Compensation Policy Mandatory Criteria and including in such transaction the Compensation Policy Mandatory Provisions; and (ii) the company's shareholders approved the transaction, provided that in public companies the approval must satisfy the Majority Requirement. Notwithstanding the above, the compensation committee and the board of directors may, under special circumstances, approve such transaction even if the shareholders' meeting objected to its approval, provided that (i) both the compensation committee and the board of directors re-discussed the transactions and decided to approve it despite the shareholder's objection, based on detailed arguments, and (ii) the company is not a 'Public Pyramid Held Company'. For the purpose hereof, a "Public Pyramid Held Company" is a public company that is controlled by another public company (including companies that issued only debentures to the public), which is also controlled by another public company (including companies that issued only debentures to the public) that has a controlling shareholder.

Transactions between public companies (including companies that have issued only debentures to the public) and their chief executive officer, with respect to his or her compensation arrangement and terms of engagement, require the approval of the compensation committee, the board of directors and the shareholder's meeting, provided that the approval of the shareholders' meeting must satisfy the Majority Requirement. Notwithstanding the above, the compensation committee and the board of directors may, under special circumstances, approve such transaction with the chief executive officer even if the shareholders' meeting objected to its approval, provided that (i) both the compensation committee and the board of directors re-discussed the transactions and decided to approve it despite the shareholder's objection, based on detailed arguments, and (ii) the company is not a Public Pyramid Held Company. Such transaction with the chief executive officer must be consistent with the provisions of the company's compensation policy, provided that the compensation committee and the board of directors may, under special circumstances, approve such transaction that is not in accordance with the company's compensation policy, if both of the following conditions are met: (i) the compensation committee and the board of directors discussed the transaction in light of the roles and objectives of the compensation committee (see above —"Board of Directors' Committees – Compensation Committee" in this Annual Report) and after taking into consideration the Compensation Policy Mandatory Criteria and including in such transaction the Compensation Policy Mandatory Provisions; and (ii) the company's shareholders approved the transaction, provided that in public companies the approval must satisfy the Majority Requirement. In addition, the compensation committee may determine that such transaction with the CEO does not have to be approved by the shareholders of the company, provided that: (i) the chief executive officer is independent based on criteria set forth in the Companies Law; (ii) the compensation committee determined, based on detailed arguments, that bringing the transaction to the approval of the shareholders may compromise the chances of entering into the transaction; and (iii) the terms of the transaction are consistent with the provisions of the company's compensation policy. Under the Companies Law, non-material amendments of transactions relating to the compensation arrangement or terms of engagement of office holders (including the chief executive officer), require only the approval of the compensation committee.

With respect to transactions relating to the compensation arrangement and terms of engagements of directors in public companies (including companies that have issued only debentures to the public), the Companies Law provides that such transaction is subject to the approval of the compensation committee, the board of directors and the shareholders' meeting. Such transaction must be consistent with the provisions of the company's compensation policy, provided that the compensation committee and the board of directors may, under special circumstances, approve such transaction that is not in accordance with the company's compensation policy, if both of the following conditions are met: (i) the compensation committee and the board of directors discussed the transaction in light of the roles and objectives of the compensation committee (see above "—Board Practices –Board of Directors' Committees – Compensation Committee" in this Annual Report) and after taking into consideration the Compensation Policy Mandatory Criteria and including in such transaction the Compensation Policy Mandatory Provisions; and (ii) the company's shareholders approved the transaction, provided that in public companies the approval must satisfy the Majority Requirement.

Pursuant to the Companies Law, a compensation policy must be re-approved (and re-considered) at least once in every three years. The current compensation policy was approved by our shareholders in June 2019, and on June 25, 2020, our shareholders approved an amendment to the compensation policy with respect to the premium payable in connection with our directors and officers liability insurance policy.

Internal Auditor

Under the Companies Law, the board of directors must also appoint an internal auditor nominated by the audit committee. Our internal auditor is Ms. Dana Gottesman-Erlich, CPA (Isr.) of BDO Ziv Haft, an independent registered accounting firm which is a part of the BDO international accounting firm. The role of the internal auditor is to examine whether a company's actions comply with the law and proper business procedure. The internal auditor may not be an interested party or office holder, or a relative of any interested party or office holder, and may not be a member of the company's independent accounting firm or its representative. The Companies Law defines an interested party as a holder of 5% or more of the shares or voting rights of a company, any person or entity that has the right to nominate or appoint at least one director or the general manager of the company or any person who serves as a director or as the general manager of a company. Our internal auditor is working based on a risk survey and audit plan, which is determined by our audit committee and approved by our board of directors.

6.D Employees

Set forth below is a chart showing the number of people we employed at the times indicated:

As of December 31,	2019(*)	2020(*)	2021(*)
Total Personnel	646	713	819
Located in Israel	349	385	428
Located abroad	297	328	391
In operations	108	129	176
In research and development	251	300	328
In global business	247	263	240
In general and administration	40	49	75

(*) The numbers of employees set forth in this table do not include contractors and an insignificant number of temporary employees retained by the Company from time to time. The numbers do not include employees of ancosys, acquired in January 2022.

In the high-tech industry in general and specifically in the semiconductors industry, there is intense competition for high-skilled employees. Nova believes that the company's future success will depend, by a large part, on our continued ability to attract, hire and retain qualified and highly motivated employees in every role and seniority level.

We were a member of the Industrialists Association in Israel, an employer's union until December 31, 2006. Under applicable Israeli law, we and our employees are subject to protective labor provisions such as restrictions on working hours, minimum wages, paid vacation, sick pay, severance pay and advance notice of termination of employment as well as equal opportunity and anti-discrimination laws. Orders issued by the Israeli Ministry of Economy and Industry make certain industry-wide collective bargaining agreements applicable to us. These agreements affect matters such as cost of living adjustments to salaries, length of working hours and week, recuperation and travel expenses. In Israel, we are subject to the instructions of the Extension Order in the Industrial Field for Extensive Pension Insurance 2006 according to the Israeli Collective Bargaining Agreements Law, 1957 (the "Extension Order"). The Extension Order determines the pension terms of the employees which fall under its criteria.

6.E Share Ownership

Based on information provided to us, our 11 directors and senior management members listed in Item 6.A in this Annual Report, have had, as a group, sole voting and investment power for 279,450 shares beneficially owned by them as of February 14, 2022 (representing approximately 1% of the 28,586,276 issued and outstanding ordinary shares of our company as of such date). Such number includes 208,817 shares subject to options that are immediately exercisable or exercisable within 60 days of February 14, 2022 (with expiration dates ranging between 2022 and 2028; exercise prices ($/share) ranging between $11.68 and $102.35), 68,038 shares held by the trustee due to vested RSUs, and 2,595 RSUs to be vested within 60 days as of February 14, 2022. Each of such directors and senior management members beneficially owned less than 1% of our company's shares as of such date.

Beneficial ownership of shares is determined in accordance with the rules of the SEC and generally includes any shares over which a person exercises sole or shared voting or investment power. Ordinary shares that are subject to warrants or options that are presently exercisable or exercisable within 60 days of the date of February 14, 2022 are deemed to be outstanding and beneficially owned by the person holding the options for the purpose of computing the percentage ownership of that person, but are not treated as outstanding for the purpose of computing the percentage of any other person.

Employee Benefit Plans

The share option plans under which we have outstanding equity grants, are described below:

2007 Incentive Plan (which was active until October 2017) - As of December 31, 2021, options to purchase 4,304,112 ordinary shares at an exercise prices which range from $0.43 to $24.96, the fair market value of our shares on the dates of grant, were granted under this plan of which, as of December 31, 2021, 2,940,323 options were exercised, 156,639 options were outstanding and exercisable, 1,207,150 options had been cancelled and no options were outstanding and unvested. As of December 31, 2021**,** a total of 834,142 RSU's had been granted, of which 728,223 had vested, 105,919 had been cancelled and no RSU's were outstanding. Following adoption of 2017 share incentive plan, as detailed herein, we have ceased granting equity under the 2007 incentive plan.

2017 Share Incentive Plan - The maximum number of ordinary shares to be issued under the plan, which was adopted by our board of directors on August 1, 2017, is 2,500,000, subject to future increases or decreases by the Company. As of December 31, 2021, options to purchase 635,877 ordinary shares at an exercise prices which range from $22.56 to $102.35, the closing price of the Company's ordinary shares on Nasdaq on the day of grant, were granted under this plan of which, as of December 31, 2021, 134,245 options were exercised, 171,223 options were outstanding and exercisable, 172,729 options had been cancelled and 157,680 were outstanding and unvested. As of December 31, 2021**,** 849,823 RSU's had been granted, of which 310,479 RSU's had vested, 76,292 had been cancelled and 463,014 RSU's were outstanding.

On June 17, 2019, our shareholders (following an approval by our compensation committee and board of directors), approved the Company's compensation policy, which includes, among others, provisions relating to equity-based compensation for Nova's executive officers.

The compensation policy provides, among others, that: (i) such equity based compensation is intended to be in a form of share options and/or other equity based awards, such as RSUs, in accordance with the Company's equity incentive plan in place as may be updated from time to time; (ii) all equity-based incentives granted to executive officers will be subject to vesting periods in order to promote long-term retention of the awarded executive officers. Unless determined otherwise in a specific award agreement approved by the compensation committee and the board of directors, grants to executive officers (other than directors) will vest gradually over a period of between three to five years; and (iii) all other terms of the equity awards will be in accordance with Nova's incentive plans and other related practices and policies. The board of directors may, following approval by the compensation committee, extend the period of time for which an award is to remain exercisable and make provisions with respect to the acceleration of the vesting period of any executive officer's awards, including, without limitation, in connection with a corporate transaction involving a change of control, subject to any additional approval as may be required by the Companies Law. The compensation policy also provides that the equity-based compensation will be granted from time to time and be individually determined and awarded according to the performance, educational background, prior business experience, qualifications, role and the personal responsibilities of the executive officer. The fair market value of the equity-based compensation for the executive officers will be determined according to acceptable valuation practices at the time of grant. Our compensation policy provides that equity-based compensation awarded to employees, executive officers or directors shall not be, in the aggregate, in excess of 10% of our share capital on a fully diluted basis at the date of the grant.

Our equity-based compensation policy, which was initially adopted in February 2007 and was most recently amended in May 2021, provides, among others, that the exercise price for each option will be equal to the closing sale price of the Company's ordinary shares on Nasdaq on the day of grant.

For additional information regarding our employees' incentive plans, see Note 9 of our consolidated financial statements, contained elsewhere in this report.

Item 7. Major Shareholder and Related Party Transactions

A. Major Shareholders

The following table sets forth certain information regarding the beneficial ownership of our outstanding ordinary shares as of the dates indicated below for each shareholder who we know beneficially owns five percent or more of the outstanding ordinary shares.

Beneficial ownership of shares is determined under rules of the SEC and generally includes any shares over which a person exercises sole or shared voting or investment power. Applicable percentages are based on 28,586,276 ordinary shares outstanding as of February 14, 2022.

Name	Number of Ordinary Shares Beneficially Owned	Percentage of Ordinary Shares Beneficially Owned
Wasatch Advisors Inc. (1)	2,651,946	9.28%
Migdal Insurance & Financial Holdings Ltd. (2)	1,939,093	6.78%
Harel Insurance Investments & Financial Services Ltd. (3)	1,890,099	6.61%
Menora Mivtachim Holdings Ltd. (4)	1,730,937	6.06%
FMR LLC (5)	1,514,015	5.30%

(1) The information is based upon Amendment no. 2 Schedule 13G filed with the SEC by Wasatch Advisors Inc. on February 10, 2022 regarding holdings as of December 31, 2021.

(2) The information is based upon Schedule 13G filed with the SEC by Migdal Insurance & Financial Holdings Ltd. on February 2, 2022 regarding holdings as of December 31, 2021.

(3) The information is based upon Amendment no. 8 to Schedule 13G filed with the SEC by Harel Insurance Investments & Financial Services Ltd. on January 31, 2022 regarding holdings as of December 31, 2021.

(4) The information is based upon Amendment no. 4 to Schedule 13G filed with the SEC by Menora Mivtachim Holdings Ltd., Menora Mivtachim Pensions and Gemel Ltd., Menora Mivtahim Insurance Ltd., Menora Mivtachim Vehistadrut Hamehandesim Nihul Kupot Gemel Ltd. and Shomera Insurance Company Ltd. on February 10, 2022 regarding holdings as of December 31, 2021.

(5) The information is based upon Schedule 13G filed with the SEC by FMR LLC, its subsidiaries and Abigail P. Johnson on February 10, 2022 regarding holdings as of December 31, 2021.

All the shareholders of the Company have the same voting rights.

To our knowledge, the significant changes in the percentage of ownership held by our major shareholders during the past three years have been: (i) the decrease in the percentage of ownership by Clal Insurance Enterprises Holdings Ltd. below 5% in 2019; (ii) the decrease in the percentage of ownership of Psagot Investment House Ltd. below 5% in 2019; (iii) the increase in the percentage of ownership of Migdal Insurance & Financial Holdings above 5% in 2020; (iv) the decrease in the percentage of ownership by The Phoenix Holdings Ltd., Itshak Sharon (Tshuva), and Delek Group Ltd below 5% in 2020; and (v) the increase in the percentage of ownership by Adage Capital Partners LP, Adage Capital Partners GP, L.L.C and Adage Capital Advisors L.L.C above 5% in 2019 and the decrease to below 5% in 2021; (vi) the increase in the percentage of ownership by Wasatch Advisors Inc. above 5% in 2020. (vii) the increase in the percentage of ownership by FMR LLC above 5% in 2021.

As of February 14, 2022, our ordinary shares were held by 13 registered holders (not including CEDE & Co.). Based on the information provided to us by our transfer agent, as of February 14, 2022, 10 registered holders were U.S. domicile holders and held approximately 0.02% of our outstanding ordinary shares.

Control of Registrant

To the Company's knowledge, it is not owned or controlled by a foreign government. Except for the shareholders identified above owning more than five percent of the Company's ordinary shares, the Company has no knowledge of any corporation or other natural or legal person owning a controlling interest in the Company.

B. Related Party Transactions

In June 2021, we obtained directors' and officers' liability insurance for our officers and directors with coverage in an aggregate amount of $30 million (including $10 million Side A DIC). This directors' and officers' liability insurance was presented and approved by our compensation committee in accordance with the framework under our compensation policy.

Our compensation policy authorizes the Company, as long as the compensation policy is in effect, to extend and/or renew the directors' and officers' liability insurance or enter into a new insurance policy, provided however, that the insurance transaction complies with the following conditions: (i) the annual premium to be paid by us will not exceed 9% of the aggregate coverage of the insurance policy; (ii) the limit of liability of the insurer will not exceed the greater of $50 million or 30% of our shareholders equity based on our most recent financial statements at the time of approval by the compensation committee; and (iii) the insurance policy, as well as the limit of liability and the premium for each extension or renewal will be approved by the compensation committee (and, if required by law, by the board of directors) which will determine that the sums are reasonable considering our exposures, the scope of coverage and the market conditions and that the insurance policy reflects the current market conditions, and it will not materially affect our profitability, assets or liabilities.

Further, upon circumstances to be approved by the compensation committee (and, if required by law, by the board of directors), we will be entitled to enter into a "run off" insurance policy of up to seven years, with the same insurer or any other insurance, as follows: (i) the limit of liability of the insurer will not exceed the greater of $50 million or 30% of our shareholders equity based on our most recent financial statements at the time of approval by the compensation committee; (ii) the annual premium will not exceed 300% of the last paid annual premium; and (iii) the insurance policy, as well as the limit of liability and the premium for each extension or renewal will be approved by the compensation committee (and, if required by law, by the board of directors) which shall determine that the sums are reasonable considering our exposures covered under such policy, the scope of cover and the market conditions, and that the insurance policy reflects the current market conditions and that it will not materially affect our profitability, assets or liabilities.

We may also extend the insurance policy in place to include cover for liability pursuant to a future public offering of securities as follows: (i) the additional premium for such extension of liability coverage will not exceed 50% of the last paid annual premium; and (ii) the insurance policy as well as the additional premium will be approved by the compensation committee (and if required by law, by the board of directors) which will determine that the sums are reasonable considering the exposures pursuant to such public offering of securities, the scope of cover and the market conditions and that the insurance policy reflects the current market conditions, and it does not materially affect our profitability, assets or liabilities.

In addition, following the approval by our shareholders at the annual general meeting held on June 24, 2021, we undertook to indemnify our officers and directors up to the greater of (a) twenty-five percent (25%) of the Company's total shareholders' equity according to the Company's most recent financial statements as of the time of the actual payment of indemnification; (b) US$200 million; (c) ten percent (10%) of the Company "total market cap" (which shall mean the average closing price of the Company's ordinary shares over the 30 trading days prior to the actual payment of indemnification multiplied by the total number of issued and outstanding shares of the Company as of the date of actual payment); and (d) in connection with or arising out of a public offering of the Company's securities, the aggregate amount of proceeds from the sale by the Company and/or any shareholder of Company's securities in such offering. Pursuant to our amended and restated compensation policy, we may indemnify our directors and officers to the fullest extent permitted by applicable law, for any liability and expense that may be imposed on the director or the officer, as provided in the indemnity agreement between us and such individuals, all subject to applicable law and our articles of association. Our amended and restated compensation policy also provides that we may exempt our directors and officers in advance for all or any of their liability for damage in consequence of a breach of the duty of care vis-a-vis our company, to the fullest extent permitted by applicable law.

For information relating to options granted to officers and directors, see "Item 6E. Share Ownership" in this Annual Report. For information regarding our compensation policy and compensation arrangements with our directors and executive officers (including our chairman and chief executive officer), please refer to "Item 6B. Compensation" in this Annual Report.

7.C Interest of Experts and Counsel

Not applicable.

Item 8. Financial Information

8.A Consolidated Statements and Other Financial Information

See “Item 17. Financial Statements” in this Annual Report.

Legal Proceedings

From time to time, we or our subsidiaries may be a party to legal proceedings and claims in the ordinary course of business. While the outcome of these matters cannot be predicted with certainty, we do not believe they will have a material effect on our consolidated financial position, results of operations, or cash flows.

We are currently not involved in any significant legal proceedings.

Dividend Policies

We anticipate that, for the foreseeable future, we will retain any earnings to support operations and to finance the growth and development of our business. Therefore, we do not expect to pay cash dividends for at least the next several years.

The distribution of dividends may be limited by the Companies Law, which permits the distribution of dividends only out of retained earnings or earnings derived over the two most recent fiscal years, whichever is higher, provided that there is no reasonable concern that payment of a dividend will prevent a company from satisfying its existing and foreseeable obligations as they become due. Our Amended and Restated Articles of Association provide that dividends will be paid at the discretion of, and upon resolution by, our board of directors.

In addition, distribution of dividends may be subject to certain tax implication. For additional information regarding tax implication of dividends' distribution, see “Item 10E. Taxation – Israeli Taxation” in this Annual Report.

Export Sales

Substantially all of our products are sold to customers located outside Israel .

8.B Significant Changes

Not applicable.

Item 9. The Offer and Listing

9.A Offer and Listing Details

Our ordinary shares began trading on Nasdaq on April 11, 2000 under the symbol "NVMI". Our ordinary shares were registered for trading on the Tel Aviv Stock Exchange Ltd. in 2002 under the symbol "נובה".

9.B Plan of Distribution

Not applicable.

9.C Markets

Our ordinary shares are quoted on the Nasdaq Global Select Market under the symbol "NVMI" and on the Tel Aviv Stock Exchange Ltd.

9.D Selling Shareholders

Not applicable.

9.E Dilution

Not applicable.

9.F Expenses on the Issue

Not applicable.

Item 10. Additional Information

10.A Share Capital

Not applicable.

10.B Memorandum and Articles of Association

On July 25, 2021, and in pursuant to the approval of our shareholders in the annual general meeting held on June 25, 2020, we changed the legal name of our Company from Nova Measuring Instruments Ltd. to Nova Ltd. to Match the Company's long-term strategy.

At the annual general meeting held on June 24, 2021, our shareholders approved the following changes in our amended and restated articles of association: (i) an increase of the authorized share capital of the Company by an additional 20,000,000 (twenty million) ordinary shares, such that the authorized share capital of the Company following such increase consists of 60,000,000 (sixty million) ordinary shares (ii) elimination of the par value of our ordinary shares; (iii) an amendment to Article 94 concerning jurisdiction.

A copy of our amended and restated articles of association is attached as Exhibit 1.1 to this Annual Report. The information called for by this Item is set forth in Exhibit 2.1 to this Annual Report and is incorporated by reference into this Annual Report.

10.C Material Contracts

Acquisition of ancosys GmbH

In January 2022, we consummated from existing funds the acquisition of 100% of the equity of ancosys GmbH, a privately held company headquartered in Pliezhausen Germany, in an all-cash transaction valued at approximately $90 million, including a performance based earnout of $10 million. The agreement dated November 16, 2021 by and among Nova Ltd., Nova Measuring Instruments GmbH, ancosys GmbH and the Representative (named therein) is filed as exhibit to this Annual Report.

Israeli Lease Agreement

On May 3, 2018, we entered into a lease agreement, or the Lease Agreement, with Bayside Land Corporation Ltd., or Bayside.

Pursuant to the Lease Agreement, we are currently leasing from Bayside a total of approximate 10,000 square meters, or the Initial Space, in a new building at the Science Park in Rehovot.

The lease period for the Initial Space extends until 2029, or the Initial Lease Period. We have the option to extend the lease period by two periods of five years each, subject to customary conditions.

The Lease agreement also includes a leasing of an additional space of approximately 3,000 square meters, or the Additional Space, which has started in 2021, and will extend through the same lease periods as the Initial Space.

These leases cannot be terminated by us during the Initial Lease Period. Under certain circumstances, Bayside may terminate the Agreement in the event of change of control in the Company.

The average monthly lease, parking and management costs for the Initial and Additional Space are expected to be approximately NIS 700,000 per month in 2022. After the first 5 years of the Initial period the monthly lease and parking payments for the Initial and Additional Space will be increased by 4%. During each of the additional lease option periods, the monthly lease and parking payments for the Initial and Additional Space will be increased by 2.5%. The monthly lease, parking and management costs are linked to the Israeli consumer price index.

For a description of our issuance of convertible notes, see Note 16 to our consolidated financial statements included within this annual report.

10.D Exchange Controls

Israeli law and regulations do not impose any material foreign exchange restrictions on non-Israeli holders of our ordinary shares.

Dividends, if any, paid to holders of our ordinary shares, and any amounts payable upon our dissolution, liquidation or winding up, as well as the proceeds of any sale in Israel of our ordinary shares to an Israeli resident, may be paid in non-Israeli currency or, if paid in Israeli currency, may be converted into freely repatriable dollars at the rate of exchange prevailing at the time of conversion.

10.E Taxation

Israeli Taxation

The following is a summary of the material Israeli tax laws applicable to us, and some Israeli Government programs benefiting us. This section also contains a discussion of some Israeli tax consequences to persons owning our ordinary shares. This summary does not discuss all the aspects of Israeli tax law that may be relevant to a particular investor in light of his or her personal investment circumstances or to some types of investors subject to special treatment under Israeli law. Examples of this kind of investor include traders in securities who are subject to special tax regimes not covered in this discussion. Some parts of this discussion are based on a new tax legislation which has not been subject to judicial or administrative interpretation. The discussion should not be construed as legal or professional tax advice and does not cover all possible tax considerations.

SHAREHOLDERS ARE URGED TO CONSULT THEIR OWN TAX ADVISORS AS TO THE ISRAELI OR OTHER TAX CONSEQUENCES OF THE PURCHASE, OWNERSHIP AND DISPOSITION OF OUR ORDINARY SHARES, INCLUDING, IN PARTICULAR, THE EFFECT OF ANY FOREIGN, STATE OR LOCAL TAXES.

General Corporate Tax Structure in Israel

Israeli companies are generally subject to corporate tax on their taxable income at the rate of 23% for the 2018 tax year and thereafter. However, the effective tax rate payable by a company that derives income from an Approved Enterprise, a Beneficiary Enterprise, a Preferred Enterprise, a Special Preferred Enterprise, a Preferred Technology Enterprise or Special Preferred Technology Enterprise (as discussed below) may be lower. Capital gains derived by an Israeli company are generally subject to the prevailing regular corporate tax rate.

Income Tax Regulations (Rules on Bookkeeping by Foreign Invested Companies and Certain Partnerships and Determination of their Taxable Income), 1986

As a “foreign invested company” (as defined in the Israeli Law for the Encouragement of Capital Investments-1959), the Company's management has elected to apply Income Tax Regulations (Rules for Maintaining Accounting Records of Foreign Invested Companies and Certain Partnerships and Determining Their Taxable Income) - 1986. Accordingly, its taxable income or loss is calculated in US Dollars.

Tax Benefits under the Law for the Encouragement of Capital Investments, 1959

Tax benefits prior to the 2005 Amendment

The Law for the Encouragement of Capital Investments, 1959, generally referred to as the “Investments Law”, provided (prior to the 2005 amendment) that a capital investment in eligible facilities may, upon application to the Israeli Authority for Investments and Development of the Industry and Economy (the “Investment Center”), be granted the status of an Approved Enterprise. Each certificate of approval for an Approved Enterprise relates to a specific investment program delineated both by its financial scope, including sources or funds, and by its physical characteristics or the facility or other assets, e.g., the equipment to be purchased and utilized pursuant to the program.

A company owning an Approved Enterprise is eligible for a combination of grants and tax benefits (the “Grant Track”). The tax benefits under the Grant Track include, among others, accelerated depreciation and amortization for tax purposes. The benefits period is ordinarily seven years commencing with the year in which the Approved Enterprise first generates taxable income. The benefits period is limited to 12 years from the earlier of the commencement of production by the Approved Enterprise or 14 years from the date of approval of the Approved Enterprise.

A company owning an Approved Enterprise may elect to forego its entitlements to grants and tax benefits under the Grant Track and apply for alternative package of tax benefits for a benefit period of between seven and ten years (the “Alternative Track”). Under the Alternative Track, a company’s undistributed income derived from the Approved Enterprise will be exempt from corporate tax for a period of between two and ten years, starting from the first year the company derives taxable income under the Approved Enterprise program. The length of this exemption will depend on the geographic location of the Approved Enterprise within Israel. After the exemption period lapses, the company shall be subject to tax at a reduced corporate tax rate between of 10% to 25% depending on the level of foreign investment in the company in each year for the remainder of the benefits period.

We elected to be taxed under the Alternative Track.

Dividends paid to Shareholders out of income attributed to an Approved Enterprise (or out of dividends received from a company whose income is attributed to an Approved Enterprise) are generally subject to withholding tax at the rate of 15% or at a lower rate provided under an applicable tax treaty (subject to the receipt in advance of a valid certificate from the ITA allowing for a reduced tax rate). The 15% tax rate is limited to dividends and distributions out of income derived during the benefits period and actually paid at any time up to 12 years thereafter. After this period, the withholding tax is applied at a rate of up to 30%, or at the lower rate under an applicable tax treaty (subject to the receipt in advance of a valid certificate from the Israel Tax Authority allowing for a reduced tax rate). In the case of a company which is considered a Foreign Investment Company as defined in the Investment Law, the 12-year limitation on reduced withholding tax on dividends does not apply.

A dividend distributed or deem distributed out of income derived from the Approved Enterprise which was exempt from tax ("**Trapped Profits**") will be subject to corporate tax (on grossed up the amount reflecting such pre-tax income from which such dividend was distributed) at the rate which would have been applied had the income not been exempt, which is at ranged between 10%-25%, depending on the level of foreign investment in the company in each year.

On November 15, 2021 a new amendment of the Investment Law was enacted (i) providing a reduced corporate income tax on the Trapped Profits distributed within a year from such amendment. The reduced corporate income tax is based on a certain formula and subject to reinvestment of certain amounts in enumerated assets/activities; (ii) harshening the rules with respect to determining the profits from which a dividend was distributed and providing that part of any dividend distribution, will be deemed as distributed from the Trapped Profits, according to a certain formula.

In December 2021, we entered into an elective tax agreement with the Israeli Tax Authorities and opt-in with the new amendment. The reduced corporate income tax on the Trapped Profits was approximately $5.8M, or 10%, and was provided for in the 2021 financial statements of operations, net of related provisions. We currently intend to reinvest any income derived from our Approved Enterprise program and not to distribute such income as a dividend. See also Note 11B to our consolidated financial statements contained elsewhere in this report.

Tax benefits under the 2005 Amendment

An amendment to the Investments Law, which is effective as of April 1, 2005, has changed certain provisions of the Investments Law, or the 2005 Amendment. An eligible investment program under the 2005 Amendment qualifies for benefits as a "Beneficiary Enterprise" (rather than as an Approved Enterprise, which status is still applicable for investment programs approved prior to April 1, 2005 and/or investment programs under the Grant Track). According to the 2005 Amendment, only Approved Enterprises receiving cash grants require the prior approval of the Investment Center. As a result, a company was no longer required to obtain the advance approval of the Investment Center in order to receive the tax benefits previously available under the alternative benefits program. Rather, a company may claim the tax benefits offered by the Investment Law directly in its tax returns, provided that its facilities meet the criteria for tax benefits set forth in the 2005 Amendment. A company that had a Beneficiary Enterprise may, at its discretion, approach the ITA for a pre-ruling confirming that it is in compliance with the provisions of the Investment Law.

The duration of the tax benefits described herein is limited to the earlier of seven (7) or ten (10) years (depending on the geographic location of the Beneficiary Enterprise within Israel) from the Commencement Year (as described below) or 12 or 14 years from the first day of the Year of Election (as described below), depending on the location of the company within Israel. Commencement Year is defined as the later of the first tax year in which a company had derived liable income for tax purposes from the Beneficiary Enterprise, or the Year of Election, which is defined as the year in which a company requested to have the tax benefits apply to the Beneficiary Enterprise. The tax benefits granted to a Beneficiary Enterprise are determined, depending on the geographic location of the Beneficiary Enterprise within Israel.

Similar to the previously available Alternative Track, exemption from corporate tax may be available on undistributed income for a period of two to ten years ("Trapped Profits"), depending on the geographic location of the Beneficiary Enterprise within Israel, and a reduced corporate tax rate of 10% to 25% for the remainder of the benefits period, depending on the level of foreign investment in each year. If the company pays a dividend out of income derived from the Beneficiary Enterprise during the benefits period and such dividend is actually paid at any time up to 12 years thereafter, except with respect to a foreign investment company (an "FIC"), in which case the 12-year limit does not apply, such income will be subject to withholding tax at the rate of 15% or a lower rate under a tax treaty, if applicable (subject to the receipt in advance of a valid certificate from the ITA, allowing for a reduced tax rate). A Company that pays dividend out of Trapped Profits will be subject to tax with respect to the amount distributed (grossed up to reflect such pre-tax income that it would have had to earn in order to distribute the dividend) at the corporate tax rate which would have otherwise been applicable.

The benefits available to a Beneficiary Enterprise are subject to the continued fulfillment of conditions stipulated in the Investment Law and its regulations. If a company does not meet these conditions, it would be required to refund the amount of tax benefits, as adjusted by the Israeli consumer price index and interest, or other monetary penalty.

As a result of the 2005 Amendment, tax-exempt income generated under the provisions of the Investments Law, as amended, will subject us to taxes upon distribution or liquidation and we may be required to record deferred tax liability with respect to such tax-exempt income. On November 15, 2021 a new amendment of the Investment Law was enacted (i) providing a reduced corporate income tax on the Trapped Profits distributed within a year from such amendment. The reduced corporate income tax is based on a certain formula and subject to reinvestment of certain amounts in enumerated assets/activities.; (ii) harshening the rules with respect to determining the profits from which a dividend was distributed and providing that part of any dividend distribution, will be deemed as distributed from the Trapped Profits, according to a certain formula.

In December 2021, we entered into an elective tax agreement with the Israeli Tax Authorities and opt-in with the new Amendment. The reduced corporate income tax on the Trapped Profits was approximately $5.8M, or 10%, and was provided for in the 2021 financial statements of operations, net of related provisions. We had three Approved Enterprise plans under the Investments Law, which entitled us to certain tax benefits. In addition, in 2011, based on Company investments in property and equipment in the years 2008 and 2009, the Company submitted the applicable form as a Benefited Enterprise in accordance with the 2005 Amendment to the Investments Law. The year of election was 2010.

Tax benefits under the 2011 Amendment

On December 29, 2010, the Israeli Parliament approved the 2011 amendment to the Investments Law (the "2011 Amendment"). The 2011 Amendment significantly revised the tax incentive regime in Israel, commencing on January 1, 2011.

The 2011 Amendment introduced a new status of "Preferred Enterprise", replacing the existed status of "Beneficiary Enterprise" and introduced new benefits for income generated by a "Preferred Company" through its Preferred Enterprise. A Preferred Company is an industrial company that meets certain conditions (including a minimum threshold of 25% export). However, under the 2011 Amendment the requirement for a minimum investment in productive assets in order to be eligible for the benefits granted under the Investments Law as with respect to "Beneficiary Enterprise" was cancelled.

A Preferred Company is entitled to a reduced flat tax rate with respect to its preferred income attributed to the Preferred Enterprise, at the following rates:

Tax Year	Development Region "A"	Other Areas within Israel
2011-2012	10%	15%
2013	7%	12.5%
2014-2016	9%	16%
2017 onwards	7.5%	16%

* In December 2016, the Israeli Parliament (the Knesset) approved an amendment to the Investments Law pursuant to which the tax rate applicable to Preferred Enterprises in Development Region "A" would be reduced to 7.5% as of January 1, 2017.

The classification of income generated from the provision of usage rights in know-how or software that were developed in the Preferred Enterprise, as well as royalty income received with respect to such usage, as preferred income is subject to the issuance of a pre-ruling from the ITA stipulates that such income is associated with the productive activity of the Preferred Enterprise in Israel.

In addition, the 2011 Amendment introduced a new status of "Special Preferred Company" which is an Industrial company meeting, in addition to the conditions prescribed for "Preferred Company" certain additional conditions (including that the total Preferred Enterprise income is at least NIS 1 billion and part of a group that generates income of at least NIS 10 billion). The tax rate applicable for a period of 10 years to income generated by such an enterprise will be reduced to 5%, if located in Development Region "A", or to 8%, if located in other area within the State of Israel.

Dividends distributed from preferred income which is attributed to a "Preferred Enterprise" or a "Special Preferred Enterprise" will be subject to withholding tax at source at the following rates: (i) Israeli resident corporations – 0% (although, if such dividends are subsequently distributed to individuals or a non-Israeli company, withholding tax at a rate of 20% or such lower rate as may be provided in an applicable tax treaty will apply), (ii) Israeli resident individuals – 20% (iii) non-Israeli residents - 20% (or a lower rate under a tax treaty, if applicable, subject to the receipt in advance of a valid certificate from the ITA allowing for a reduced tax rate).

The 2011 Amendment also revised the Grant Track to apply only to the approved programs located in Development Region "A" and shall provide not only cash grants (as prior to the 2011 Amendment) but also the granting of loans. The rates for grants and loans shall not be fixed but up to 20% of the amount of the approved investment. In addition, a company owning a Preferred Enterprise under the Grant Track may be entitled also to the tax benefits which are prescribed for a Preferred Enterprise.

The provisions of the 2011 Amendment do not apply to existing "Beneficiary Enterprises" or "Approved Enterprises", which will continue to be entitled to the tax benefits under the Investments Law, as has been in effect prior to the 2011 Amendment, unless the company owning such enterprises had made an election to apply the provisions of the 2011 Amendment (such election cannot be later rescinded), which is to be filed with the ITA, not later than the date prescribed for the filing of the company's annual tax return for the respective year. A company owning a Beneficiary Enterprise or Approved Enterprise which made such election by June 30, 2015, will be entitled to distribute income generated by the Approved/Beneficiary Enterprise to its Israeli corporate shareholders tax free.

Until the end of 2015, we did not utilize tax benefits related to Preferred Enterprises. In 2016, we started utilized such benefits, with a related tax rate of 16%.

The New Technological Enterprise Incentives Regime—the 2017 Amendment

The 2017 Amendment was enacted as part of the Economic Efficiency Law that was published on December 29, 2016, and became effective on January 1, 2017. The 2017 Amendment provides new tax benefits for two types of "Technology Enterprises", as described below, and is in addition to the other existing tax beneficial programs under the Investment Law.

The new incentives regime will apply to "Preferred Technological Enterprises" that meet certain conditions, including: (1) the R&D expenses in the three years preceding the tax year were at least 7% on average of one year out of the company's turnover or exceeded NIS 75 million (approximately $21 million) for a year; and (2) one of the following: (a) at least 20% of the workforce (or at least 200 employees) are employees whose full salary has been paid and reported in the Company's financial statements as R&D expenses; (b) a venture capital investment approximately equivalent to at least NIS 8 million was previously made in the company and the company did not change its line of business; (c) growth in sales by an average of 25% or more, over the three years preceding the tax year, provided that the turnover was at least NIS 10 million (approximately $2.8 million), in the tax year and in each of the preceding three years; or (d) growth in workforce by an average of 25% or more, over the three years preceding the tax year, provided that the company employed at least 50 employees, in the tax year and in each of the preceding three years.

A “Special Preferred Technological Enterprise” is an enterprise that meets conditions 1 and 2 above, and in addition is part of a group that has total annual consolidated revenues at least NIS 10 billion.

Preferred Technological Enterprises will be subject to a reduced corporate tax rate of 12% on their income that qualifies as “Preferred Technology Income”, as defined in the Investment Law. The tax rate is further reduced to 7.5% for a Preferred Technology Enterprise located in Development Region "A". These corporate tax rates shall apply only with respect to the portion of intellectual property developed in Israel. In addition, a Preferred Technology Company will enjoy a reduced corporate tax rate of 12% on capital gain derived from the sale of certain “Benefited Intangible Assets” (as defined in the Investment Law) to a related foreign company if the Benefited Intangible Assets were acquired from a foreign company on or after January 1, 2017 for at least NIS 200 million (approximately $56 million), and the sale receives prior approval from the IIA. Special Preferred Technological Enterprises will be subject to 6% on “Preferred Technology Income” regardless of the company’s geographic location within Israel.

In addition, a Special Preferred Technology Enterprise will enjoy a reduced corporate tax rate of 6% on capital gain derived from the sale of certain “Beneficiary Intangible Assets” to a related foreign company if the Beneficiary Intangible Assets were either developed by the Special Preferred Technology Enterprise or acquired from a foreign company on or after January 1, 2017, and the sale received prior approval from the IIA.

A Special Preferred Technology Enterprise that acquires Benefited Intangible Assets from a foreign company for more than NIS 500 million (approximately $142 million), will be eligible for these benefits for at least ten years, subject to certain approvals as specified in the Investment Law.

Dividends distributed by a Preferred Technology Enterprise or a Special Preferred Technology Enterprise, paid out of Preferred Technology Income, are generally subject to withholding tax at source at the rate of 20% or such lower rate as may be provided in an applicable tax treaty (subject to the receipt in advance of a valid certificate from the ITA allowing for a reduced tax rate). However, if such dividends are paid to an Israeli company, no tax is required to be withheld. If such dividends are, distributed to a foreign company that holds solely or together with other foreign companies at least 90% of the shares of the distributing company and other conditions are met, the withholding tax rate will be 4% (or a lower rate under a tax treaty, if applicable, subject to the receipt in advance of a valid certificate from the ITA allowing for a reduced tax rate).

We reviewed the criteria for the tax rate of a “Preferred Technological Enterprise” and a “Special Preferred Technological Enterprise” and concluded that we are entitled to the reduced tax rate under the “Preferred Technological Enterprises” tax incentive regime starting 2017. We have notified the ITA that we elected applying this status starting 2017. As part of these tax incentives, the Company is required to allocate its taxable income between income from preferred technological enterprise and income related to preferred enterprise or regular corporate income.

Law for the Encouragement of Industry (Taxes), 5729-1969

The Law for the Encouragement of Industry (Taxes), 1969, or the Industry Encouragement Law defines "Industrial Company" as an Israeli resident company which was incorporated in Israel, which 90% or more of its income in any tax year (exclusive of income from certain government loans) is generated from an "Industrial Enterprise" that it owns and located in Israel or in the "Area", in accordance with the definition under section 3A of the Israeli Income Tax Ordinance (New Version) 1961, or the Ordinance. An "Industrial Enterprise" is defined as an enterprise whose principal activity in a given tax year is industrial manufacturing.

An Industrial Company is entitled to certain tax benefits, including: (i) an amortization of the cost of purchased patent, the right to use patent or know-how that were purchased in good faith and are used for the development or promotion of the Industrial Enterprise, over an eight-year period, beginning from the year in which such rights were first used, (ii) the right to elect to file consolidated tax returns with additional Israeli Industrial Companies controlled by it, and (iii) the right to deduct expenses related to public offerings in equal amounts over a period of three years beginning from the year of the offering.

Eligibility for benefits under the Encouragement of Industry Law is not contingent upon the approval of any governmental authority.

We believe that we qualify as an "Industrial Company" within the meaning of the Industry Encouragement Law. There is no assurance that we qualify or will continue to qualify as an Industrial Company or that the benefits described above will be available to us in the future.

Taxation of the Company Shareholders

Capital Gains

Capital gain tax is imposed on the disposition of capital assets by an Israeli resident, and on the disposition of such assets by a non-Israeli resident if those assets are either (i) located in Israel; (ii) are shares or a right to a share in an Israeli resident corporation, or (iii) represent, directly or indirectly, rights to assets located in Israel, unless a tax treaty between Israel and the seller's country of residence provides otherwise. The Ordinance distinguishes between "Real Gain" and the "Inflationary Surplus". Real Gain is the excess of the total capital gain over Inflationary Surplus computed generally on the basis of the increase in the Israeli Consumer Price Index (CPI) or, in certain circumstances, according to the change in the foreign currency exchange rate, between the date of purchase and the date of disposition.

Generally, the capital gain accrued by individuals on the sale of our ordinary shares will be taxed at the rate of 25%. However, if the individual shareholder is a "Controlling Shareholder" (i.e., a person who holds, directly or indirectly, alone or together with such person's relative or another person who collaborates with such person on a permanent basis, 10% or more of one of the Israeli resident company's means of control) at the time of sale or at any time during the preceding twelve (12) months period (or claims a deduction for interest and linkage differences expenses in connection with the purchase and holding of such shares), such gain will be taxed at the rate of 30%.

The Real Gain derived by corporations will be generally subject to the ordinary corporate tax rate (23% in 2018 and thereafter).

Individual and corporate shareholder dealing in securities in Israel are taxed at the tax rates applicable to business income – 23% for corporations in 2018 and thereafter and a marginal tax rate of up to 47% in 2020 for individuals, unless the benefiting provisions of an applicable treaty applies.

Notwithstanding the foregoing, capital gain derived from the sale of our ordinary shares by a non-Israeli shareholder may be exempt under the Ordinance from Israeli taxation provided that the following cumulative conditions, among other things, are met: (i) the shares were purchased upon or after the registration of the securities on the stock exchange, (ii) the seller does not have a permanent establishment in Israel to which the derived capital gain is attributed. ; and (iii) with respect to our ordinary shares listed on a recognized stock exchange outside of Israel, so long as neither the shareholder nor the particular capital gain is otherwise subject to the Israeli Income Tax Law (Inflationary Adjustments) 5745-1985. Non-Israeli corporations will not be entitled to the foregoing exemptions if (i) an Israeli resident has a controlling interest, directly or indirectly, alone or together with another (i.e., together with a relative, or together with someone who is not a relative but with whom, according to an agreement, there is regular cooperation in material matters of the company, directly or indirectly), or together with another Israeli resident, exceed 25% in one or more of the means of control in such non-Israeli resident corporation or (ii) Israeli residents are the beneficiaries of, or are entitled to, 25% or more of the revenues or profits of such non-Israeli resident corporation, whether directly or indirectly.

In addition, the sale of shares may be exempt from Israeli capital gain tax under the provisions of an applicable tax treaty. For example, the U.S.-Israel Double Tax Treaty exempts U.S. resident from Israeli capital gain tax in connection with such sale, exchange or disposition provided, among others, that (i) the U.S. resident owned, directly or indirectly, less than 10% of an Israeli resident company's voting power at any time within the 12 month period preceding such sale; (ii) the seller, being an individual, is present in Israel for a period or periods of less than 183 days in the aggregate at the taxable year; (iii) the capital gain from the sale was not derived through a permanent establishment of the U.S. resident which is maintained in Israel; (iv) the capital gain arising from such sale, exchange or disposition is not attributed to real estate located in Israel; (v) the capital gains arising from such sale, exchange or disposition is not attributed to royalties; and (vi) the shareholder is a U.S. resident (for purposes of the U.S.-Israel Double Tax Treaty) and is holding the shares as a capital asset. However, under the U.S.-Israel Double Tax Treaty, a U.S. resident would be permitted to claim a credit for the Israeli tax against the U.S. federal income tax imposed with respect to the sale, exchange or disposition, subject to the limitations in U.S. laws applicable to foreign tax credits. The U.S.-Israel Double Tax Treaty does not provide such credit against any U.S. state or local taxes.

Either the purchaser, the stockbrokers or financial institution, through which payment to the seller is made, are obliged, subject to the above-mentioned exemptions, to withhold Israeli tax at source from such payment. Shareholders may be required to demonstrate that they are exempt from tax on their capital gains in order to avoid withholding at source at the time of sale. Specifically, in transactions involving a sale of all of the shares of an Israeli resident company, in the form of a merger or otherwise, the ITA may require from shareholders who are not liable for Israeli tax to sign declarations in forms specified by this authority or obtain a specific exemption from the ITA to confirm their status as non-Israeli resident.

At the sale of securities traded on a stock exchange a detailed return, including a computation of the tax due, must be filed and an advanced payment must be paid on January 31 and July 31 of every tax year in respect of sales of securities made within the previous six months. However, if all tax due was withheld at source according to applicable provisions of the Ordinance and regulations promulgated thereunder the aforementioned return need not be filed and no advance payment must be paid. Capital gain is also reportable on the annual income tax return.

Dividends

A distribution of dividends from income, which is not attributed to an Approved Enterprise/Beneficiary Enterprise/Preferred Enterprise /Preferred Technological Enterprise to an Israeli resident individual, will generally be subject to income tax at a rate of 25%. However, a 30% tax rate will apply if the dividend recipient is a "Controlling Shareholder" (as defined above) at the time of distribution or at any time during the preceding 12 months period. If the recipient of the dividend is an Israeli resident corporation, such dividend will be exempt from income tax provided the income from which such dividend is distributed was derived or accrued within Israel.

Distribution of dividends from income attributed to a Preferred Enterprise or a Preferred Technological Enterprise is generally subject to a withholding tax at source at the rate of 20%. However, if such dividends are distributed to an Israeli company, no withholding tax is imposed, although, if such dividends are subsequently distributed to individuals or a non-Israeli company, withholding tax at a rate of 20% or such lower rate as may be provided in an applicable tax treaty may apply (subject to the receipt in advance of a valid certificate from the Israel Tax Authority allowing for an exemption). Dividends distributed from income attributed to an Approved Enterprise and/or a Beneficiary Enterprise are generally subject to a withholding tax at source at the rate of 15%. Those rates may be further reduced under the provisions of any applicable double tax treaty (subject to the receipt in advance of a valid certificate from the ITA allowing for a reduced tax rate).

The Ordinance generally provides that a non-Israeli resident (either individual or corporation) is subject to an Israeli income tax on the receipt of dividends at the rate of 25% (30% if the dividends recipient is a "Controlling Shareholder" (as defined above), at the time of distribution or at any time during the preceding 12 months period); those rates are subject to a reduced tax rate under the provisions of an applicable double tax treaty (subject to the receipt in advance of a valid certificate from the ITA allowing for a reduced tax rate). For example, under the U.S.-Israel Double Tax Treaty the following rates will generally apply in respect of dividends distributed by an Israeli resident company to a U.S. resident: (i) if the U.S. resident is a corporation which holds during that portion of the taxable year which precedes the date of payment of the dividend and during the whole of its prior taxable year (if any), at least 10% of the outstanding shares of the voting stock of the Israeli resident paying corporation and not more than 25% of the gross income of the Israeli resident paying corporation for such prior taxable year (if any) consists of certain type of interest or dividends – the maximum tax rate is 12.5% on dividends, not generated by an Approved Enterprise, (ii) if both the conditions mentioned in section (i) above are met and the dividend is paid from an Israeli resident company's income which was entitled to a reduced tax rate applicable to an Approved Enterprise– the tax rate is 15%, and (iii) in all other cases, the tax rate is 25%, or the domestic rate (if such is lower). The aforementioned rates under the U.S.-Israel Double Tax Treaty will not apply if the dividend income was derived through a permanent establishment of the U.S. resident maintained in Israel.

If the dividend is attributable partly to income derived from an Approved Enterprise, a Beneficiary Enterprise a Preferred Enterprise, or a Technological Preferred Enterprise, and partly to other sources of income, the withholding rate will be a blended rate reflecting the relative portions of the two types of income.

Payors of dividends on our shares, including the Israeli stockbroker effectuating the transaction, or the financial institution through which the securities are held, are generally required, subject to any of the foregoing exemption, reduced tax rates and the demonstration of a shareholder of his, her or its foreign residency, to withhold taxes upon the distribution of dividends at a rate of 25%, provided that the shares are registered with a Nominee Company (for corporations and individuals, whether the recipient is a Controlling Shareholder or not).

A non-Israeli resident who receives dividends from which tax was withheld is generally exempt from the obligation to file tax returns in Israel with respect to such income, provided that (i) such income was not generated from business conducted in Israel by the taxpayer, (ii) the taxpayer has no other taxable sources of income in Israel with respect to which a tax return is required to be filed, and (iii) the taxpayer is not obligated to pay excess tax (as further explained below).

Excess Tax

Individuals who are subject to tax in Israel are also subject to an additional tax at a rate of 3% on annual income exceeding NIS 663,240 for 2022 and thereafter, which amount is linked to the Israeli Consumer Price Index, (including, but not limited to income derived from dividends, interest and capital gains).

Estate and Gift Tax

Israeli law presently does not impose estate or gift taxes.

Foreign Exchange Regulations

Non-residents of Israel who hold our ordinary shares are able to receive any dividends, and any amounts payable upon the dissolution, liquidation and winding up of our affairs, repayable in non-Israeli currency at the rate of exchange prevailing at the time of conversion. However, Israeli income tax is generally required to have been paid or withheld on these amounts. In addition, the statutory framework for the potential imposition of currency exchange control has not been eliminated, and may be restored at any time by administrative action.

U.S. Taxation

The following discussion describes certain material United States ("U.S.") federal income tax consequences generally applicable to U.S. holders (as defined below) of the purchase, ownership and disposition of our ordinary shares. This summary addresses only holders who acquire and hold ordinary shares as "capital assets" for U.S. federal income tax purposes (generally, assets held for investment purposes).

For purposes of this discussion, a "U.S. holder" is a beneficial owner of ordinary shares who is:

- An individual citizen or resident of the U.S. (as determined under U.S. federal income tax rules);

- a corporation (or another entity taxable as a corporation for U.S. federal income tax purposes) created or organized in or under the laws of the U.S., any state thereof, or the District of Columbia;

- an estate, the income of which is subject to U.S. federal income taxation regardless of its source; or

- a trust, if (a) a U.S. court is able to exercise primary supervision over its administration and one or more U.S. persons have the authority to control all of its substantial decisions; or (b) the trust has in effect a valid election in effect under applicable Treasury Regulations (as defined below) to be treated as a United States person.

This summary is for general information purposes only and does not purport to be a comprehensive description of all of the U.S. federal income tax considerations that may be relevant to a decision to purchase, hold or dispose of the Company's ordinary shares. In addition, the possible application of U.S. federal estate or gift taxes or any aspect of state, local or non-U.S. tax laws is not considered. This discussion is based on current provisions of the Internal Revenue Code of 1986, as amended (the "Code"), Treasury Regulations promulgated under the Code by the U.S. Treasury Department (including proposed and temporary regulations) (the "Treasury Regulations"), rulings, current administrative interpretations and official pronouncements by the Internal Revenue Service (the "IRS"), and judicial decisions, all as currently in effect and all of which are subject to differing interpretations or to change, with a retroactive effect. Such changes could materially and adversely affect the tax consequences described below. No assurance can be given that the IRS would not assert, or that a court would not sustain, a position contrary to any of the tax consequences described below.

This discussion does not address all aspects of U.S. federal income taxation that may be relevant to any particular U.S. holder based on the holder's particular circumstances, including, but not limited to:

- persons who own, directly, indirectly or constructively, 10% or more (by voting power or value) of our outstanding voting shares;

- persons who hold the ordinary shares as part of a hedging, straddle or conversion transaction;

- persons whose functional currency is not the U.S. dollar;

- persons who acquire their ordinary shares in a compensatory transaction;

- broker-dealers;

- insurance companies;

- regulated investment companies;

- real estate investment companies;

- qualified retirement plans, individual retirement accounts and other tax-deferred accounts;

- traders who elect to mark-to-market their securities;

- tax-exempt organizations;

- banks or other financial institutions;

- persons subject to special tax accounting rules as a result of any item of gross income with respect to ordinary shares being taken into account in an applicable financial statement;

- U.S. expatriates and certain former citizens and long-term residents of the United States; and

- persons subject to the alternative minimum tax.

The tax treatment of a partner in a partnership (or other entity or arrangement classified as a partnership for U.S. federal income tax purposes) may depend on both the partnership's and the partner's status and the activities of the partnership. Partnerships (or other entities or arrangements classified as a partnership for U.S. federal income tax purposes) that are beneficial owners of ordinary shares, and their partners and other owners, should consult their own tax advisers regarding the tax consequences of the acquisition, ownership and disposition of ordinary shares.

THIS SUMMARY OF MATERIAL UNITED STATES FEDERAL INCOME TAX CONSIDERATIONS IS FOR GENERAL INFORMATION ONLY AND IS NOT TAX ADVICE. EACH HOLDER SHOULD CONSULT ITS TAX ADVISOR WITH RESPECT TO THE PARTICULAR TAX CONSEQUENCES TO IT OF AN INVESTMENT IN THE ORDINARY SHARES, INCLUDING THE EFFECTS OF APPLICABLE UNITED STATES FEDERAL INCOME TAX LAWS AS WELL AS ANY TAX CONSEQUENCES ARISING UNDER THE UNITED STATES FEDERAL ESTATE OR GIFT TAX RULES OR UNDER THE LAWS OF ANY FOREIGN, STATE OR LOCAL JURISDICTION OR UNDER ANY APPLICABLE TAX TREATY.

Distributions on the Ordinary Shares

We currently do not intend to distribute dividends for at least the next several years. However, if we make any distributions of cash or other property to a U.S. holder of our ordinary shares, the amount of the distribution for U.S. federal income tax purposes will equal the amount of cash and the fair market value of any property distributed and will also include the amount of Israeli taxes withheld, if any, as described above under "[Israel Taxation] — Dividends" above. In general (and subject to the PFIC rules discussed below), any distribution paid by us on the ordinary shares to a U.S. holder will be treated as dividend income to the extent the distribution does not exceed our current and/or accumulated earnings and profits, as determined under U.S. federal income tax principles. The amount of any distribution which exceeds these earnings and profits will be treated first as a non-taxable return of capital, reducing the U.S. holder's tax basis in its ordinary shares to the extent thereof, and then as capital gain income (long-term capital gain if the U.S. holder's holding period exceeds one year), from the deemed disposition of the ordinary shares (subject to the PFIC rules discussed below). Corporate holders generally will not be allowed a deduction for dividends received on the ordinary shares.

The amount of any dividend paid in NIS (including amounts withheld to pay Israeli withholding taxes) will equal the U.S. dollar value of the NIS calculated by reference to the exchange rate in effect on the date the dividend is received by the U.S. holder, regardless of whether the NIS are converted into U.S. dollars. A U.S. holder will have a tax basis in the NIS equal to their U.S. dollar value on the date of receipt. If the NIS received are converted into U.S. dollars on the date of receipt, the U.S. holder should generally not be required to recognize foreign currency gain or loss in respect of the distribution. If the NIS received are not converted into U.S. dollars on the date of receipt, a U.S. holder may recognize foreign currency gain or loss on a subsequent conversion or other disposition of the NIS. Such gain or loss will be treated as U.S. source ordinary income or loss.

Dividends paid by us generally will be foreign source, "passive income" for U.S. foreign tax credit purposes. U.S. holders may elect to claim as a foreign tax credit against their U.S. federal income tax liability the Israeli income tax withheld from dividends received on the ordinary shares. The Code provides limitations on the amount of foreign tax credits that a U.S. holder may claim. U.S. holders that do not elect to claim a foreign tax credit may instead claim a deduction for Israeli income tax withheld, but only for a year in which these U.S. holders elect to do so for all foreign income taxes. The rules relating to foreign tax credits are complex (and may also be impacted by the tax treaty between the United States and Israel), and you should consult your tax advisor to determine whether you would be entitled to this credit.

Under current law, certain distributions treated as dividends that are received by an individual U.S. holder from a "qualified foreign corporation" generally qualify for a 20% reduced maximum tax rate so long as certain holding period and other requirements are met. A non-U.S. corporation (other than a corporation that is treated as a PFIC with respect to the U.S. holder for the taxable year in which the dividend is paid or the preceding taxable year) generally will be considered to be a qualified foreign corporation (i) if it is eligible for the benefits of a comprehensive tax treaty with the United States which the Secretary of Treasury of the United States determines is satisfactory for purposes of this provision and which includes an exchange of information program, or (ii) with respect to any dividend it pays on stock which is readily tradable on an established securities market in the United States. Dividends paid by us in a taxable year in which we are not a PFIC and with respect to which we were not a PFIC in the preceding taxable year with respect to the U.S. holder are expected to be eligible for the 20% reduced maximum tax rate, although we can offer no assurances in this regard. However, any dividend paid by us in a taxable year in which we are a PFIC or were a PFIC in the preceding taxable year with respect to the U.S. holder will be subject to tax at regular ordinary income rates (along with any applicable additional PFIC tax liability, as discussed below).

The additional 3.8% tax on "net investment income" (described below) may apply to dividends received by certain U.S. holders who meet certain modified adjusted gross income thresholds.

Sale, Exchange or Other Taxable Disposition of the Ordinary Shares

Upon the sale, exchange or other taxable disposition of the ordinary shares (subject to the PFIC rules discussed below), a U.S. holder generally will recognize capital gain or loss in an amount equal to the difference between the amount realized and the U.S. holder's tax basis in the ordinary shares. The gain or loss recognized on the sale or exchange of the ordinary shares generally will be long-term capital gain (currently taxable at a reduced rate for non-corporate U.S. holders) or loss if the U.S. holder's holding period of the ordinary shares is more than one year at the time of the disposition. The deductibility of capital losses is subject to limitations.

Gain or loss recognized by a U.S. holder on a sale or exchange of ordinary shares generally will be treated as U.S. source income or loss for U.S. foreign tax credit purposes. Under the tax treaty between the United States and Israel, gain derived from the sale, exchange or other taxable disposition of ordinary shares by a holder who is a resident of the U.S. for purposes of the treaty and who sells the ordinary shares within Israel may be treated as foreign source income for U.S. foreign tax credit purposes.

The additional 3.8% tax on "net investment income" (described below) may apply to certain U.S. holders who meet certain modified adjusted gross income thresholds, including capital gains.

Passive Foreign Investment Companies

In general, a foreign (i.e., non-U.S.) corporation will be a PFIC for any taxable year in which, after applying the relevant look-through rules with respect to the income and assets of its subsidiaries, either (1) 75% or more of its gross income in the taxable year is "passive income," or (2) assets held for the production of, or that produce, passive income comprise 50% or more of the average of its total asset value in the taxable year. For purpose of the income test, passive income generally includes dividends, interest, royalties, rents, annuities and net gains from the disposition of assets, which produce passive income. For purposes of the asset test, assets held for the production of passive income includes assets held for the production of, or that produce dividends, interest, royalties, rents, annuities, and other income that are considered passive income for purposes of the income test. In determining whether we meet the asset test, cash is considered a passive asset and the total value of our assets generally will be treated as equal to the sum of the aggregate fair market value of our outstanding stock plus our liabilities. If we own at least 25% (by value) of the stock of another corporation, we will be treated, for purposes of the PFIC tests, as owning our proportionate share of the other corporation's assets and receiving our proportionate share of the other corporation's income. The income test is conducted at the taxable year-end. The asset test is conducted on a quarterly basis and the quarterly results are then averaged together.

If a corporation is treated as a PFIC for any year during a U.S. holder's holding period and the U.S. holder does not timely elect to treat the corporation as a "qualified electing fund" under Section 1295 of the Code or elect to mark its ordinary shares to market (both elections described below), any gain on the disposition of the shares will be treated as ordinary income, rather than capital gain, and the holder will be required to compute its tax liability on that gain, as well as on dividends and other distributions, as if the income had been earned ratably over each day in the U.S. holder's holding period for the shares. The portion of the gain and distributions allocated to prior taxable years in which a corporation was a PFIC will be ineligible for any preferential tax rate otherwise applicable to any "qualified dividend income" or capital gains, and will be taxed at the highest ordinary income tax rate in effect for each taxable year to which this portion is allocated. An interest charge will be imposed on the amount of the tax allocated to these taxable years. A U.S. holder may elect to treat a corporation as a qualified electing fund only if the corporation complies with requirements imposed by the IRS to enable the shareholder and the IRS to determine the corporation's ordinary earnings and net capital gain. Additionally, if a corporation is a PFIC, a U.S. holder who acquires shares in the corporation from a decedent generally will be denied the normally available step-up in tax basis to fair market value for the shares at the date of death of the decedent and instead will have a tax basis equal to the decedent's tax basis if lower than fair market value. These adverse tax consequences associated with PFIC status could result in a material increase in the amount of tax that a U.S. holder would owe and an imposition of tax earlier than would otherwise be imposed and additional tax form filing requirements. Unless otherwise provided by the IRS, if a corporation is classified as a PFIC, a U.S. person that is a direct or indirect holder generally will be required to file IRS Form 8621, Information Return by a Shareholder of a Passive Foreign Investment Company or Qualified Electing Fund, or any applicable successor form, to report its ownership interest in such entity.

If a corporation is treated as a PFIC with respect to a U.S. holder for any taxable year, the U.S. holder will be deemed to own shares in any of the foreign entities in which such corporation holds equity interests that are also PFICs (or "lower-tier PFICs"), and the U.S. holder may be subject to the tax consequences described above with respect to the shares of such lower-tier PFIC such U.S. holder would be deemed to own.

Status of Nova as a PFIC. Under the income test, less than 75% of our gross income was passive income in 2021. Under the asset test, while we continued to have substantial amounts of cash and short-term deposits and the market value of our ordinary shares continued to be volatile, a determination of the value of our assets by reference to the average market value of our ordinary shares and our liabilities results in a conclusion that the average value of our passive assets did not exceed 50% of the average value of our gross assets in 2021. Nonetheless, there is a risk that we were a PFIC in 2021 or we will be a PFIC in 2022 or subsequent years. Additionally, due to the complexity of the PFIC provisions and the limited authority available to interpret such provisions, there can be no assurance that our determination regarding our PFIC status could not be successfully challenged by the IRS.

Available Elections. If we become a PFIC for any taxable year, an election to treat us as a "qualified electing fund" or to "mark-to-market" our ordinary shares may mitigate the adverse tax consequences of PFIC status to a U.S. holder.

If a U.S. holder makes a qualified electing fund election (a "QEF election") for its ordinary shares that is effective from the first taxable year that the U.S. holder holds our ordinary shares and during which we are a PFIC, the electing U.S. holder will avoid the adverse consequences of our being classified as a PFIC, but will instead be required to include in income a pro rata share of our net capital gain, if any, and other earnings and profits ("ordinary earnings") as long-term capital gains and ordinary income, respectively, on a current basis, in each case whether or not distributed, in the taxable year of the U.S. holder in which or with which our taxable year ends. A subsequent distribution of amounts that were previously included in the gross income of U.S. holders should not be taxable as a dividend to those U.S. holders who made a QEF election. In the event we incur a net loss for a taxable year, such loss will not be available as a deduction to an electing U.S. holder, and may not be carried forward or back in computing our net capital gain or ordinary earnings in other taxable years. The tax basis of the shares of an electing U.S. holder generally will be increased by amounts that are included in income, and decreased by amounts distributed but not taxed as dividends, under the QEF rules described above. In order to make (or maintain) a QEF election, the U.S. holder must annually complete and file IRS Form 8621, Information Return by a Shareholder of a Passive Foreign Investment Company or Qualified Electing Fund, or any applicable successor form. However, we do not expect that we will prepare or provide to U.S. Holders a "PFIC annual information statement," which would enable a U.S. Holder to make a QEF election.

Alternatively, if a U.S. holder elects to "mark-to-market" its ordinary shares, the U.S. holder generally will include in its income any excess of the fair market value of our ordinary shares at the close of each taxable year over the holder's adjusted basis in such ordinary shares. A U.S. holder generally will be allowed an ordinary deduction for the excess, if any, of the adjusted tax basis of the ordinary shares over the fair market value of the ordinary shares as of the close of the taxable year, or the amount of any net mark-to-market gains recognized for prior taxable years, whichever is less. A U.S. holder's adjusted tax basis in the ordinary shares generally will be adjusted to reflect the amounts included or deducted under the mark-to-market election. Additionally, any gain on the actual sale or other disposition of the ordinary shares generally will be treated as ordinary income. Ordinary loss treatment also will apply to any loss recognized on the actual sale or other disposition of ordinary shares to the extent that the amount of such loss does not exceed the net mark-to-market gains previously included with respect to such ordinary shares. If a U.S. holder makes a valid mark-to-market election with respect to our ordinary shares for the first taxable year of the U.S. holder in which the U.S. holder holds (or is deemed to hold) our ordinary shares and for which we are determined to be a PFIC, such holder generally will not be subject to the PFIC rules described above in respect of its ordinary shares. A mark-to-market election applies to the tax year for which the election is made and to each subsequent year, unless our ordinary shares cease to be marketable, as specifically defined, or the IRS consents to revocation of the election. No view is expressed regarding whether our ordinary shares are marketable for these purposes or whether the election will be available. However, because a mark-to-market election likely cannot be made for any lower-tier PFICs, if we are a PFIC, a U.S. holder will generally continue to be subject to the PFIC rules discussed above with respect to such holder's indirect interest in any investments that we hold that are treated as an equity interest in a PFIC for U.S. federal income tax purposes. As a result, it is possible that any mark-to-market election will be of limited benefit.

If a U.S. holder makes either the QEF election or the mark-to-market election, distributions and gain will not be recognized ratably over the U.S. holder's holding period or be subject to an interest charge as described above. Further, the denial of basis step-up at death described above will not apply. If a U.S. holder makes the QEF election, gain on the sale of the ordinary shares will be characterized as capital gain. However, U.S. holders making one of these two elections may experience current income recognition, even if we do not distribute any cash. The elections must be made with the U.S. holder's federal income tax return for the year of election, filed by the due date of the return (as it may be extended) or, under certain circumstances provided in applicable Treasury Regulations, subsequent to that date.

The foregoing discussion relating to the QEF election and mark-to-market elections assumes that a U.S. holder makes the applicable election with respect to the first year in which Nova qualifies as a PFIC. If the election is not made for the first year in which Nova qualifies as a PFIC, the procedures for making the election and the consequences of election will be different.

SPECIFIC RULES AND REQUIREMENTS APPLY TO BOTH THE QEF ELECTION AND THE MARK-TO-MARKET ELECTION, AND YOU ARE URGED TO CONSULT YOUR TAX ADVISOR CONCERNING OUR PFIC STATUS AND THE VARIOUS ELECTIONS YOU CAN MAKE.

Medicare Tax on Net Investment Income

A U.S. holder that is an individual or estate, or a trust that does not fall into a special class of trusts that is exempt from such tax, will be subject to a 3.8% tax on the lesser of (1) the U.S. holder's "net investment income" for the relevant taxable year and (2) the excess of the U.S. holder's modified adjusted gross income for the taxable year over a certain threshold. A U.S. holder's "net investment income" generally may include its dividend income and its net gains from the disposition of shares, unless such dividends or net gains are derived in the ordinary course of the conduct of a trade or business (other than a trade or business that consists of certain passive or trading activities). If you are a U.S. holder that is an individual, estate or trust, you are urged to consult your tax advisors regarding the applicability of the Medicare tax to your income and gains in respect of your investment in the shares and the interaction of these rules with the rules applicable to income included as a result of the QEF election.

United States Information Reporting and Backup Withholding

In general, U.S. holders may be subject to certain information reporting requirements under the Code relating to their purchase and/or ownership of stock of a foreign corporation such as the Company. Failure to comply with these information reporting requirements may result in substantial penalties.

Specifically, certain U.S. Holders holding specified foreign financial assets, including our ordinary shares, with an aggregate value in excess of the applicable U.S. dollar threshold, are subject to certain exceptions, required to report information relating to our Ordinary Shares by attaching a complete IRS Form 8938, Statement of Specified Foreign Financial Assets, to their tax returns, for each year in which they hold our ordinary shares. U.S. Holders are urged to consult their own tax advisors regarding information reporting requirements relating to the ownership of our Ordinary Shares.

In addition, and as discussed in the section of this Annual Report entitled "U.S. Taxation – Passive Foreign Investment Companies", if a corporation is classified as a PFIC, a U.S. person that is a direct or indirect holder generally will be required to file an informational return annually on IRS Form 8621, Information Return by a Shareholder of a Passive Foreign Investment Company or Qualified Electing Fund, or any applicable successor form, to report its ownership interest in such entity, unless otherwise provided by the IRS.

Dividend payments and proceeds from the sale or disposal of ordinary shares may be subject to information reporting to the IRS and possible U.S. federal backup withholding. Certain holders (including, among others, corporations) generally are not subject to information reporting and backup withholding. A U.S. holder generally will be subject to backup withholding if such holder is not otherwise exempt and such holder:

- fails to furnish its taxpayer identification number, or TIN, which, for an individual, is ordinarily his or her social security number;
- furnishes an incorrect TIN;
- is notified by the IRS that it is subject to backup withholding because it has previously failed to properly report payments of interest or dividends; or
- fails to certify, under penalties of perjury, that it has furnished a correct TIN and that the IRS has not notified the U.S. holder that it is subject to backup withholding.

Any U.S. holder who is required to establish exempt status generally must file IRS Form W-9 ("Request for Taxpayer Identification Number and Certification").

Backup withholding is not an additional tax and may be claimed as a refund or a credit against the U.S. federal income tax liability of a U.S. Holder, provided that the required information is timely furnished to the IRS.

10.F Dividends and Paying Agents

Not applicable.

10.G Statements by Experts

Not applicable.

10.H Documents on Display

As a foreign private issuer, are exempt from the rules under the Exchange Act related to the furnishing and content of proxy statements, and our officers, directors and principal shareholders are exempt from the reporting and short-swing profit recovery provisions contained in Section 16 of the Exchange Act. Furthermore, as a foreign private issuer, we are also not subject to the requirements of Regulation FD (Fair Disclosure) promulgated under the Exchange Act. In addition, we are not be required under the Exchange Act to file annual or other reports and consolidated financial statements with the SEC as frequently or as promptly as U.S. companies whose securities are registered under the Exchange Act. Instead, we must file with the SEC, within 120 days after the end of each fiscal year, or such other applicable time as required by the SEC, an Annual Report containing consolidated financial statements audited by an independent registered public accounting firm. We also intend to furnish certain other material information to the SEC under cover of Form 6-K.

We maintain a corporate website at www.novami.com. Information contained on, or that can be accessed through, our website does not constitute a part of this Annual Report. We have included our website address in this Annual Report solely as an inactive textual reference.

10.I Subsidiary Information

Not applicable.

Item 11. Quantitative and Qualitative Disclosures About Market Risk

Market Risk

Market risk represents the risk of loss that may impact the consolidated financial position, results of operations or cash flows of the Company. The Company is exposed to market risk in the area of foreign exchange rates, as described below.

The Company does not utilize financial instruments for trading purposes and holds no derivative financial instruments that could expose it to significant market risk.

Impact of Currency Fluctuation

Because our results are reported in U.S. Dollars, changes in the rate of exchange between the Dollar and local currencies in those countries in which we operate (primarily the NIS) will affect the results of our operations. The dollar cost of our operations in countries other than the U.S., is negatively influenced by revaluation of the U.S. dollar against other currencies. During 2021, the value of the U.S. dollar devaluated against the NIS by approximately 3.3%. As of December 31, 2021, the majority of our net monetary assets were denominated in dollars and the remainder was denominated mainly in NIS. Net monetary assets that are not denominated in dollars or dollar-linked NIS were affected by the currency fluctuations in 2021 and are expected to continue to be affected by such currency fluctuations in 2022. As of December 31 ,2021 the Company recorded a NIS and Israel CPI linked lease liability, under the implementation of ASC 842 in the amount of $27.3 million (including exchange rate differences of $0.8 million).

In 2020, we entered into currency-forward transactions and currency-put options (NIS/dollar) of approximately $100 million with settlement dates through 2020-2021, designed to reduce cash-flow exposure to the impact of exchange-rate fluctuations on firm commitments of approximately $100 million. In accordance with ASC 815-10, we recorded in 2020 an increase of approximately $0.6 million in fair market value in "Other Comprehensive Income". Short-term exposures to changing foreign exchange rates are primarily due to operating cash flows denominated in foreign currencies and transactions denominated in non-functional currencies. Our most significant foreign currency exposures are related to our operations in Israel. We have used foreign exchange forward contracts to partially cover known and anticipated exposures. We estimate that an instantaneous 10% depreciation in NIS from its level against the dollar as of December 31, 2020, with all other variables held constant, would decrease the fair value of our net liabilities denominated in NIS, held at December 31, 2020, by approximately $1.9 million.

In 2021, we entered into currency-forward transactions and currency-put options (NIS/dollar) of approximately $147 million with settlement dates through 2021-2022, designed to reduce cash-flow exposure to the impact of exchange-rate fluctuations on firm commitments of approximately $147 million. In accordance with ASC 815-10, we recorded in 2021 an decrease of approximately $0.4 million in fair market value in "Other Comprehensive Income". Short-term exposures to changing foreign exchange rates are primarily due to operating cash flows denominated in foreign currencies and transactions denominated in non-functional currencies. Our most significant foreign currency exposures are related to our operations in Israel. We have used foreign exchange forward contracts to partially cover known and anticipated exposures. We estimate that an instantaneous 10% depreciation in NIS from its level against the dollar as of December 31, 2021, with all other variables held constant, would decrease the fair value of our net liabilities denominated in NIS, held at December 31, 2021, by approximately $2.2 million.

Item 12. Description of Securities Other than Equity Securities

Not applicable.

PART II

Item 13. Defaults, Dividend Arrearages and Delinquencies

None.

Item 14. Material Modification to the Rights of Security Holders and Use of Proceeds

Not applicable.

Item 15. Controls and Procedures

a) Our management, including our chief executive officer and chief financial officer, has evaluated the effectiveness of our disclosure controls and procedures as of December 31, 2021. The term "disclosure controls and procedures", as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, means controls and other procedures that are designed to ensure that information required to be disclosed by us in the reports that we file or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the rules and forms of the SEC. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is accumulated and communicated to the our management, including our chief executive officer and chief financial officer, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure. Based on the foregoing, our chief executive officer and chief financial officer have concluded that, as of December 31, 2021, our disclosure controls and procedures were effective.

b) Our management, under the supervision of our chief executive officer and chief financial officer, is responsible for establishing and maintaining adequate internal control over our financial reporting. The Company's internal control over financial reporting, as defined in Rules 13a-15(f) and 15d-15(f) of the Exchange Act, means a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. Internal control over financial reporting includes policies and procedures that:

- pertain to the maintenance of records that in reasonable detail accurately and fairly reflect our transactions and asset dispositions;
- provide reasonable assurance that transactions are recorded as necessary to permit the preparation of our financial statements in accordance with generally accepted accounting principles, and that our receipts and expenditures are being made only in accordance with authorizations of our management and directors; and
- provide reasonable assurance regarding the prevention or timely detection of unauthorized acquisition, use or disposition of assets that could have a material effect on our financial statements.

Due to its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. In addition, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Our management evaluated the effectiveness of our internal control over financial reporting as of December 31, 2021, based on the criteria established in Internal Control —Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on this evaluation, our management concluded that, as of December 31, 2020, the Company's internal control over financial reporting was effective.

c) Kost Forer Gabbay & Kasierer, an independent registered accounting firm and a member firm of Ernst & Young, has issued an attestation report on the effectiveness of our internal control over financial reporting, as stated in their report included herein. See "Report of Independent Registered Public Accounting Firm" on page F-3.

d) There were no changes in our internal controls over financial reporting identified with the evaluation thereof that occurred during the period covered by this Annual Report that have materially affected, or are reasonable likely to materially affect our internal control over financial reporting.

Item 16A. Audit Committee Financial Expert

Our board of directors has determined that our audit committee includes two audit committee financial experts, as defined by Item 16A of Form 20-F. Our board of directors has determined that each of Ms. Dafna Gruber and Ms. Sarit Sagiv is an "audit committee financial expert" as defined by the SEC rules as well as an independent director as such term is defined by Rule 5605(a)(2) of the Nasdaq Stock Market and has the requisite financial experience as defined by the Nasdaq rules.

Item 16B. Code of Ethics

The Company has adopted a written code of conduct that applies to all Company employees, including the Company's directors, principal executive officer, principal financial officer and principal accounting officer.

You may review our code of conduct on our website: https://www.novami.com/, under "Investors/Corporate Governance".

Item 16C. Principal Accountant Fees and Services

During the last four fiscal years, Kost Forer Gabbay & Kasierer, an independent registered accounting firm and a member firm of Ernst & Young Global ("Kost Forer Gabbay & Kasierer") has acted as our registered public accounting firm and independent auditors. The following table provides information regarding fees paid by us to Kost Forer Gabbay & Kasierer for all services, including audit services, for the years ended December 31, 2020 and 2021:

	2020	2021
Audit Fees	586,000	570,000
Tax Fees	89,000	64,000
Other Fees	125,000	314,000
Total	800,000	948,000

"Audit fees" are fees associated with the annual audit of the Company consolidated financial statements and services that generally the independent accountant provides, such as consents and assistance with and review of documents filed with the SEC as well as certain fees related to the audit in connection with our issuance of convertible senior notes in October 2020. The audit fee also includes consultations on various accounting issues, performance of local statutory audits, fees associated with the audit of management assessment of internal control over financial reporting, annual tax returns and audit of reports to IIA. "Tax Fees" are fees related to ad hoc tax consulting services and opinions.

"Other Fees" include services related to SEC regulation consulting, organizational consultation, and due diligence services.

Our audit committee has adopted a pre-approval policy for the engagement of our independent accountant to perform certain services. Pursuant to this policy, which is designed to assure that such engagements do not impair the independence of our auditors, all audit, audit related and tax services must be specifically approved by the audit committee and certain other non-audit, non-audit related and non-tax services may be approved without consideration of specific case-by-case provided certain terms and procedures are met. The Company's audit committee approved all of the services provided by Kost Forer Gabbay & Kasierer in fiscal years 2021 and 2020.

Item 16D. Exemptions from the Listing Standards for Audit Committees

The Company has not obtained any exemption from applicable audit committee listing standards.

Item 16E. Purchases of Equity Securities by the Issuer and Affiliates Purchasers

None.

Item 16F. Change In Registrant's Certifying Accountant

None.

Item 16G. Corporate Governance

There are no significant ways in which the Company's corporate governance practices differ from those followed by domestic companies listed on the Nasdaq Global Select Market.

Item 16H. Mine Safety Disclosure

Not applicable.

Item 16I. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections

Not applicable.

PART III

Item 17. Financial Statements

Not applicable.

Item 18. Financial Statements

See pages F-1 through F-35.

Item 19. Exhibits

See Exhibit Index.

NOVA LTD.

CONSOLIDATED FINANCIAL STATEMENTS
AS OF DECEMBER 31, 2021

NOVA LTD.

CONSOLIDATED FINANCIAL STATEMENTS
AS OF DECEMBER 31, 2021

Contents

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and the Board of Directors of
NOVA LTD.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Nova Ltd. (the Company) as of December 31, 2021 and 2020, the related consolidated statements of operations, comprehensive income, shareholders' equity and cash flows for each of the three years in the period ended December 31, 2021, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2021 and 2020, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2021, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2021, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework), and our report dated March 1, 2022, expressed an unqualified opinion thereon.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company’s financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current period audit of the financial statements that was communicated or required to be communicated to the audit committee and that: (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matter does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Valuation of excess and obsolete inventory reserve

Description of the Matter

The Company's inventories totaled $78.7 million as of December 31, 2021. As described in Note 2i to the consolidated financial statements, the Company assesses the value of inventories, including raw materials, service inventory, work-in-process and finished goods, in each reporting period, and values its inventories at the lower of cost or net realizable value. Reserves for potential excess and obsolete inventory are made based on management's analysis of inventory levels, future sales forecasts, the expected consumption of service spare parts, and market conditions.

Auditing management's estimates for valuation of inventories involved subjective auditor judgment due to the significant assumptions made by management about the future salability of the inventories. These assumptions include the assessment, by inventory category (finished goods, work-in-process, service inventory and raw materials), of future usage and market demand for the Company's products.

How We Addressed the Matter in Our Audit

We obtained an understanding, evaluated the design, and tested the operating effectiveness of internal controls over the Company's excess and obsolete inventory reserve process, including management's assessment of the underlying assumptions and data.

Our substantive audit procedures included, among others, evaluating the significant assumptions stated above and the accuracy and completeness of the underlying data management used to value excess and obsolete inventory. We compared the cost of on-hand inventories to historical sales and evaluated adjustments to sales forecasts for specific product considerations, such as technological changes or alternative uses. We also assessed the historical accuracy of management's estimates and performed sensitivity analyses over the significant assumptions to evaluate the changes in the obsolete and excess inventory estimates that would result from changes in the underlying assumptions.

/s/ KOST FORER GABBAY & KASIERER
KOST FORER GABBAY & KASIERER
A Member of Ernst & Young Global

We have served as the Company's auditor since 2015.

Tel-Aviv, Israel
March 1, 2022

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and the Board of Directors of
NOVA LTD.

Opinion on Internal Control Over Financial Reporting

We have audited Nova Ltd.'s internal control over financial reporting as of December 31, 2021, based on criteria established in Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, Nova Ltd. (the Company) maintained, in all material respects, effective internal control over financial reporting as of December 31, 2021, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of the Company as of December 31, 2021, and 2020, the related consolidated statements of operations, comprehensive income, shareholders' equity and cash flows for each of the three years in the period ended December 31, 2021, and the related notes, and our report dated March 1, 2022, expressed an unqualified opinion thereon.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Annual Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ KOST FORER GABBAY & KASIERER
KOST FORER GABBAY & KASIERER
A Member of Ernst & Young Global

Tel-Aviv, Israel
March 1, 2022

NOVA LTD.
CONSOLIDATED BALANCE SHEETS
(U.S. dollars in thousands, except share data)

	As of December 31,	
	2021	**2020**
ASSETS		
Current assets		
Cash and cash equivalents	126,698	232,304
Short-term interest-bearing bank deposits	221,897	191,567
Marketable securities (Note 3)	61,568	-
Trade accounts receivable, net of allowance of $37 and $70 at December 31, 2021 and 2020, respectively	68,446	63,314
Inventories (Note 4)	78,665	61,734
Other current assets (Note 5)	9,242	9,782
Total current assets	566,516	558,701
Non-current assets		
Marketable securities (Note 3)	137,415	-
Interest-bearing bank deposits	3,672	2,547
Restricted interest-bearing bank deposits	1,600	1,476
Deferred tax assets (Note 14)	6,161	2,869
Severance pay funds (Note 9)	1,327	1,281
Operating lease right-of-use assets (Note 11)	30,627	29,109
Property and equipment, net (Note 6)	34,460	34,168
Intangible assets, net (Note 7)	2,601	5,059
Goodwill	20,114	20,114
Other long-term assets	661	462
Total non-current assets	238,638	97,085
TOTAL ASSETS	805,154	655,786
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities		
Convertible senior notes, net (Note 10)	183,037	-
Trade accounts payable	36,218	24,096
Deferred revenues	15,338	4,717
Operating lease current liabilities (Note 11)	4,452	3,703
Other current liabilities (Note 8)	48,885	28,418
Total current liabilities	287,930	60,934
Non-Current liabilities		
Convertible senior notes, net (Note 10)	-	178,808
Accrued severance pay (Note 9)	3,686	3,719
Operating lease long-term liabilities (Note 11)	33,450	31,905
Other long-term liabilities	6,334	8,882
Total non-current liabilities	43,470	223,314
Commitments and contingencies (Note 12)		
TOTAL LIABILITIES	331,400	284,248
SHAREHOLDERS' EQUITY (Note 13)		
Ordinary shares (Note 1):		
December 31, 2021, no par value - Authorized 60,000,000 shares, Issued and Outstanding 28,579,044.		
December 31, 2020, NIS 0.01 par value - Authorized 40,000,000 shares, Issued and Outstanding 28,176,862	-	74
Additional paid-in capital	139,847	129,274
Accumulated other comprehensive income (loss)	(814)	570
Retained earnings	334,721	241,620
Total shareholders' equity	473,754	371,538
Total liabilities and shareholders' equity	805,154	655,786

The accompanying notes are an integral part of the consolidated financial statements.

NOVA LTD.
CONSOLIDATED STATEMENTS OF OPERATIONS
(U.S. dollars in thousands, except share and per share data)

	Year ended December 31,		
	2021	**2020**	**2019**
Revenues:			
Products	337,026	209,320	167,200
Services	79,087	60,076	57,709
Total revenues	416,113	269,396	224,909
Cost of revenues:			
Products	129,535	78,555	67,300
Services	49,217	37,918	35,789
Total cost of revenues	178,752	116,473	103,089
Gross profit	237,361	152,923	121,820
Operating expenses**:**			
Research and development, net (Note 2R)	65,857	53,015	44,508
Sales and marketing	39,336	29,321	28,213
General and administrative	17,324	12,514	10,066
Amortization of intangible assets (Note 7)	2,458	2,503	2,625
Total operating expenses	124,975	97,353	85,412
Operating income	112,386	55,570	36,408
Financial income (expense), net (Note 17)	(3,133)	926	3,078
Income before taxes on income	109,253	56,496	39,486
Income tax expenses	16,152	8,589	4,315
Net income	93,101	47,907	35,171
Earnings per share:			
Basic	3.28	1.71	1.26
Diluted	3.12	1.65	1.23
Shares used in calculation of earnings per share:			
Basic	28,371,610	28,096,814	27,895,096
Diluted	29,816,066	28,949,739	28,574,202

The accompanying notes are an integral part of the consolidated financial statements.

NOVA LTD.
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(U.S. dollars in thousands)

	Year ended December 31,		
	2021	**2020**	**2019**
Net income	93,101	47,907	35,171
Other comprehensive income, net of tax:			
Available-for-sale investments (Note 3):			
Unrealized gain (loss) on available-for-sale marketable securities, net	(1,016)	-	-
Cash flow hedges (Note 16):			
Unrealized gain from cash flow hedges	74	1,351	236
Less: reclassification adjustment for net loss included in net income	(442)	(796)	(33)
Other comprehensive income (loss)	(1,384)	555	203
Total comprehensive income	91,717	48,462	35,374

The accompanying notes are an integral part of the consolidated financial statements.

NOVA LTD.

CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY

(U.S. dollars in thousands, except share amounts)

	Ordinary Shares		Additional Paid-in Capital	Accumulated Other Comprehensive Income (Loss)	Retained Earnings	Total Shareholders' Equity
	Number	Amount				
Balance as of January 1, 2019	27,917,505	$ 74	$ 122,312	$ (188)	$ 158,542	$ 280,740
Issuance of shares upon exercise of options	246,373	(*)	492	-	-	492
Issuance of shares upon vesting of RSU	118,486	(*)	(*)	-	-	-
Share based compensation	-	-	5,092	-	-	5,092
Share repurchase at cost	(276,747)	(*)	(7,159)	-	-	(7,159)
Other comprehensive income	-	-	-	203	-	203
Net income	-	-	-	-	35,171	35,171
Balance as of December 31, 2019	28,005,617	74	120,737	15	193,713	314,539
Issuance of shares upon exercise of options	302,730	(*)	367	-	-	367
Issuance of shares upon vesting of RSU	119,281	(*)	(*)	-	-	-
Share based compensation	-	-	6,949	-	-	6,949
Equity component of convertible senior notes, net of issuance costs and tax	-	-	13,770	-	-	13,770
Share repurchase at cost	(250,766)	(*)	(12,549)	-	-	(12,549)
Other comprehensive income	-	-	-	555	-	555
Net income	-	-	-	-	47,907	47,907
Balance as of December 31, 2020	28,176,862	74	129,274	570	241,620	371,538
Issuance of shares upon exercise of options	236,652	(*)	11	-	-	11
Issuance of shares upon vesting of RSU	165,530	(*)	(*)	-	-	-
Share based compensation	-	-	10,488	-	-	10,488
Elimination of the par value of the Ordinary shares (Note 1)	-	(74)	74	-	-	-
Other comprehensive income (loss)	-	-	-	(1,384)	-	(1,384)
Net income	-	-	-	-	93,101	93,101
Balance as of December 31, 2021	28,579,044	-	139,847	(814)	334,721	473,754

(*) Less than $1

The accompanying notes are an integral part of the consolidated financial statements.

NOVA LTD.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(U.S. dollars in thousands)

	Year ended December 31,		
	2021	**2020**	**2019**
Cash flows from operating activities:			
Net income	93,101	47,907	35,171
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation of property and equipment	6,475	5,875	5,401
Amortization of intangible assets	2,458	2,503	2,625
Amortization of premium and accretion of discount on marketable securities, net	1,708	-	-
Amortization of debt discount and issuance costs	4,229	868	-
Share-based compensation	10,488	6,949	5,092
Net effect of exchange rate fluctuation	(745)	(1,584)	(510)
Changes in assets and liabilities:			
Trade accounts receivables, net	(5,132)	(11,711)	1,928
Inventories	(18,457)	(16,271)	(7,518)
Other current and long-term assets	192	6,878	(6,161)
Deferred tax assets, net	(2,989)	(193)	(681)
Operating lease right-of-use assets	1,680	1,351	2,372
Trade accounts payables	11,697	3,255	1,691
Deferred revenues	10,621	2,461	(1,728)
Operating lease liabilities	(904)	91	2,685
Other current and long-term liabilities	17,919	11,520	65
Accrued severance pay, net	(79)	354	260
Net cash provided by operating activities	132,262	60,253	40,692
Cash flows from investment activities:			
Change in short-term and long-term interest-bearing bank deposits	(31,456)	(36,016)	(4,181)
Investment in marketable securities	(215,091)	-	-
Proceed from maturities of marketable securities	12,862	-	-
Purchase of property and equipment	(4,816)	(6,443)	(21,269)
Net cash used in investing activities	(238,501)	(42,459)	(25,450)
Cash flows from financing activities:			
Proceeds from the issuance of convertible senior notes, net of issuance costs	-	193,588	-
Purchases of treasury shares	-	(12,549)	(7,159)
Proceeds from exercise of options	11	367	492
Net cash provided by (used in) financing activities	11	181,406	(6,667)
Effect of exchange rate fluctuations on cash and cash equivalents	622	1,356	296
Increase (decrease) in cash and cash equivalents	(105,606)	200,556	8,871
Cash and cash equivalents - beginning of year	232,304	31,748	22,877
Cash and cash equivalents - end of year	126,698	232,304	31,748
Supplemental disclosure of non-cash activities:			
Operating right-of-use assets recognized with corresponding operating lease liabilities	3,198	2,367	31,465
Supplemental disclosure of cash flow information:			
Cash paid during the year for income taxes	13,275	3,981	8,342

The accompanying notes are an integral part of the consolidated financial statements.

NOTE 1 - GENERAL

Business Description:

Nova Ltd. (”Nova” or the “Parent Company”) was incorporated and commenced operations in 1993 in the design, development and production of process control systems, used in the manufacturing of semiconductors. Nova has wholly owned subsidiaries in the United States of America (the “U.S.”), Japan, Taiwan, Korea, China and Germany (together defined as the “Company”).

On July 25, 2021 the Company changed its name from Nova Measuring Instruments Ltd. to Nova Ltd.

The Company continues research and development for the next generation of its products and additional applications for such products. The Company operates in one operating segment.

On April 2, 2015, the Company completed the acquisition of 100% shares of ReVera Inc. (hereinafter – ReVera) a privately-held U.S. company. On December 31, 2017, ReVera, merged into Nova Measuring Instruments, Inc.

The ordinary shares of the Company are traded on the NASDAQ Global Market since April 2000 and on the Tel-Aviv Stock Exchange since June 2002.

On June 24, 2021, the Company increased its authorized share capital to 60,000,000 Ordinary Shares and eliminated the par value of the Ordinary shares.

NOTE 2 - SIGNIFICANT ACCOUNTING POLICIES

The Company’s consolidated financial statements have been prepared in accordance with generally accepted accounting principles (“GAAP”) in the United States of America.

The following is a summary of the significant accounting policies, which were applied in the preparation of these financial statements, on a consistent basis:

A. Principles of Consolidation and Basis of Presentation

The Company’s consolidated financial statements include the financial statements of Nova Ltd. and its wholly owned subsidiaries. All intercompany balances and transactions have been eliminated.

B. Use of Estimates in the Preparation of Financial Statements

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities as of the date of the financial statements, and the reported amounts of revenues and expenses during the reporting periods. The Company's management evaluates its estimates on an ongoing basis, including those related to, but not limited to income taxes and tax uncertainties, collectability of trade accounts receivable, inventory accruals, fair value and useful lives of intangible assets, lease discount rate, lease period, convertible senior notes borrowing rate and revenue recognition. These estimates are based on management's knowledge about current events and expectations about actions the Company may undertake in the future. Actual results could differ from those estimates.

The novel coronavirus (“COVID-19”) pandemic has created, and may continue to create, significant uncertainty in macroeconomic conditions, and the extent of its impact on the Company’s operational and financial performance will depend on certain developments, including the duration and spread of the outbreak and the impact on the Company’s customers and its sales cycles. The Company considered the impact of COVID-19 on the estimates and assumptions and determined that there were no material adverse impacts on the consolidated financial statements for the period ended December 31, 2021. As events continue to evolve and additional information becomes available, the Company’s estimates and assumptions may change materially in future periods.

NOTE 2 - SIGNIFICANT ACCOUNTING POLICIES (Cont.)

C. Financial Statements in U.S. Dollars

The currency of the primary economic environment in which the operations of the Company and its subsidiaries are conducted is the U.S. dollar (the "dollar"). Accordingly, the Company uses the dollar as its functional and reporting currency. Certain of the dollar amounts in the financial statements may represent the dollar equivalent of other currencies, including the New Israeli Shekel ("NIS"). Transactions and balances denominated in dollars are presented at their dollar amounts. Non-dollar transactions and balances are re-measured into dollars in accordance with the principles set forth in ASC 830, "Foreign Currency Translation".

All transaction gains and losses of the re-measured monetary balance sheet items are reflected in the statements of operations as financial income or expenses, as appropriate.

D. Cash and Cash Equivalents

Cash and cash equivalents represent short-term highly liquid investments (mainly interest-bearing deposits) with maturity dates not exceeding three months from the date of deposit.

E. Short Term Bank Deposit

Short-term bank deposits consist of bank deposits with original maturities of more than three months and up to twelve months.

F. Marketable Securities

The Company accounts for marketable securities in accordance with ASC Topic 320, "Investments – Debt and Equity Securities". The Company's investments in marketable securities consist of high-grade treasury, corporate and municipal bonds.

Investments in marketable securities are classified as available for sale at the time of purchase. Available for sale securities are carried at fair value based on quoted market prices, with unrealized gains and losses, reported in accumulated other comprehensive income (loss) in shareholders' equity. Realized gains and losses on sales of marketable securities, are included in financial income (expenses), net. The amortized cost of marketable securities is adjusted for amortization of premium and accretion of discount to maturity, both of which, together with interest, are included in financial income (expenses), net.

The Company classifies its marketable securities as either short term or long term based on each instrument's underlying contractual maturity date. Marketable securities with maturities of 12 months or less are classified as short-term and marketable securities with maturities greater than 12 months are classified as long-term.

The Company accounts for Credit losses in accordance with ASU 2016-13, Topic 326 "Financial Instruments – Credit Losses: Measurement of Credit Losses on Financial Instruments" which modified the other than temporary impairment model for available for sale debt securities. The guidance requires the Company to determine whether a decline in fair value below the amortized cost basis of an available for sale debt security is due to credit related factors or noncredit related factors. A credit related impairment should be recognized as an allowance on the balance sheet with a corresponding adjustment to earnings, however, if the Company intends to sell an impaired available for sale debt security or more likely than not would be required to sell such a security before recovering its amortized cost basis, the entire impairment amount would be recognized in earnings with a corresponding adjustment to the security's amortized cost basis.

The Company's allowance for credit losses on marketable securities was not material for the year ended on December 31, 2021.

NOTE 2 - SIGNIFICANT ACCOUNTING POLICIES (Cont.)

G. Trade Accounts Receivables

Trade accounts receivables are recorded and carried at the original invoiced amount less an allowance for any potential uncollectible amounts, in accordance with ASC 326. The Company makes estimates of expected credit losses for based upon its assessment of various factors, including historical experience, the age of the trade receivable balances, credit quality of its customers, current economic conditions, reasonable and supportable forecasts of future economic conditions, and other factors that may affect its ability to collect from customers.

H. Business Combination

The Company accounts for business combination in accordance with ASC No, 805, "Business Combination" (ASC 805). ASC 805 requires recognition of assets acquired and liabilities assumed at the acquisition date, measured at their fair values as of that date. Any access of the fair value of net assets acquired over purchased price and any subsequent changes in estimated contingencies are to be recorded in the consolidated statements of operations.

I. Inventories

Inventories are stated at the lower of cost or net realizable value. Inventory write-downs are provided to cover risks arising from slow-moving items, technological obsolescence, excess inventories, discontinued products, and for market prices lower than cost, if any. The Company periodically evaluates the quantities on hand relative to historical and projected sales volume (which is determined based on an assumption of future demand and market conditions), the age of the inventory and the expected consumption of service spare parts. At the point of the loss recognition, a new lower cost basis for that inventory is established. Any adjustments to reduce the cost of inventories to their net realizable value are recognized in earnings in the current period.

Inventory includes costs of products delivered to customers and not recognized as cost of sales, where revenues in the related arrangements were not recognized.

To support the Company's service operations, the Company maintains service spare parts inventory and reduce the net carrying value of this inventory over the service life.

Cost is determined as follows:

- Raw materials - based on the moving average cost method.
- Service inventory, work in process and finished goods - based on actual production cost basis (materials, labor and indirect manufacturing costs).

J. Property and Equipment

Property and equipment are presented at cost, net of accumulated depreciation. Annual depreciation is calculated based on the straight-line method over the estimated useful lives of the related assets. Estimated useful life is as follows:

	Years
Electronic equipment	3-7
Office furniture and equipment	3-17
Leasehold improvements	Over the shorter of the term of the lease (including its extension periods) or the useful life of the asset

Depreciation methods, useful lives and residual values are reviewed at the end each reporting year and adjusted if appropriate.

(U.S. dollars in thousands, except share and per share data)

NOTE 2 - SIGNIFICANT ACCOUNTING POLICIES (Cont.)

K. Goodwill and Intangible Assets

Goodwill and other purchased intangible assets have been recorded as a result of the acquisition of ReVera. Goodwill represents the excess of the purchase price in a business combination over the fair value of net tangible and intangible assets acquired, and related liabilities.

Goodwill is not amortized, but rather is subject to an impairment test, in accordance with ASC 350, "Intangibles – Goodwill and Other", at least annually (in the fourth quarter), or more frequently if events or changes in circumstances indicate that the carrying value may be impaired. The Company has an option to perform a qualitative assessment to determine whether it is more-likely-than-not that the fair value of a reporting unit is less than its carrying value prior to performing the quantitative goodwill impairment test. The Company operates in one operating segment, and this segment comprises its only reporting unit.

Following the adoption of ASU 2017-04, "Simplifying the Test for Goodwill Impairment", any excess of the carrying value of the reporting unit over its fair value is recognized as an impairment loss, and the carrying value of goodwill is written down to the fair value of the reporting unit.

Intangible assets with finite life (refer to note 2L for impairment assessment of intangible assets with finite life) are amortized over their useful lives using a method that reflects the pattern in which the economic benefits of the intangible assets are consumed or otherwise used, or, if that pattern cannot be reliably determined, using a straight-line amortization method.

	Weighted Average Useful Life (Years)
Technology (*)	3-7
Customer relationships	10
IPR&D (*)	3

(*) During 2021 a completion of the development and successful launch of the IPR&D related product was determined. The useful life of the IPR&D technology was determined to be 3 years and amortizing was initiated, subject to annual impairment assessment as described in Note 2L

L. Impairment of Long-Lived Assets

Long-lived assets (tangible and intangible assets with finite life), held and used by the Company are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of the assets (or asset Group) may not be recoverable. In the event that the sum of the expected future cash flows (undiscounted and without interest charges) of the long-lived assets is less than the carrying amount of such assets, an impairment charge would be recognized, and the assets (or asset Group) would be written down to their estimated fair values. During the years 2021, 2020 and 2019, no impairment losses have been identified.

IPR&D is tested for impairment annually or more frequently when indicators of impairment exist. The Company first assesses qualitative factors to determine if it is more likely than not that the IPR&D is impaired and whether it is necessary to perform a quantitative impairment test. The qualitative assessment considers various factors, including changes in demand, the abandonment of the IPR&D or significant economic slowdowns in the semiconductor industry and macroeconomic environment. If adverse qualitative trends are identified that could negatively impact the fair value of the asset, then quantitative impairment test is performed to compare the carrying value of the asset to its undiscounted expected future cash flows.

If this test indicates that there is impairment, the impaired asset is written down to fair value, which is typically calculated using discounted expected future cash flows utilizing an appropriate discount rate.

No impairment losses have been identified during 2021, 2020 and 2019 relating to goodwill and intangible assets.

NOTE 2 - SIGNIFICANT ACCOUNTING POLICIES (Cont.)

M. Accrued Warranty Costs

Accrued warranty costs are calculated with respect to the warranty period on the Company's products and are based on the Company's prior experience and in accordance with management's estimate. The estimated future warranty obligations are affected by the warranty periods, install base, labor and other related costs incurred in correcting a product failure.

N. Derivative Financial Instruments

ASC 815 requires the presentation of all derivatives as either assets or liabilities on the balance sheet and the measurement of those instruments at fair value.

For derivative instruments that are designated and qualify as a cash flow hedge (i.e., hedging the exposure to variability in expected future cash flows that is attributable to a particular risk), the gain or loss on the derivative instrument is reported as a component of other comprehensive income and reclassified into earnings in the same period or periods during which the hedged transaction affects earnings. See Note 16 for disclosure of the derivative financial instruments in accordance with such pronouncements.

O. Leases

Under ASC 842, a contract is or contains a lease when the Company has the right to control the use of an identified asset for a period of time. The Company determines if an arrangement is a lease at inception of the contract, which is the date on which the terms of the contract are agreed to, and the agreement creates enforceable rights and obligations. The commencement date of the lease is the date that the lessor makes an underlying asset available for the Company's use. On the commencement date leases are evaluated for classification and assets and liabilities are recognized based on the present value of lease payments over the lease term.

The lease term used to calculate the lease liability includes options to extend or terminate the lease when it is reasonably certain that the option will be exercised. The right-of-use ("ROU") asset is initially measured as the amount of lease liability, adjusted for any initial lease costs, prepaid lease payments and any lease incentives. Costs incurred for common area maintenance, real estate taxes, and insurance are not included in the lease liability and are recognized as they are incurred.

The Company's leases include office buildings for its facilities and car leases, which are all classified as operating leases. Certain lease agreements include rental payments that are adjusted periodically for the consumer price index ("CPI"). The ROU and lease liability were calculated using the CPI as of the adoption date and will not be subsequently adjusted, unless the liability is reassessed for other reasons. Certain leases include renewal options that are under the Company's sole discretion. The renewal options were included in the ROU and liability calculation if it was reasonably assured that the Company will exercise the option.

As the Company's lease arrangements do not provide an implicit rate, the Company uses its incremental estimated borrowing rate at lease commencement to measure ROU assets and lease liabilities. Operating lease expense is generally recognized on a straight-line basis over the lease term. For leases with a term of one year or less, the Company elected not to record the ROU asset or liability.

NOTE 2 - SIGNIFICANT ACCOUNTING POLICIES (Cont.)

P. Convertible Senior Notes

The Company accounts for its convertible senior notes in accordance with ASC 470-20 "Debt with Conversion and Other Options". Pursuant to ASC Subtopic 470-20, issuers of certain convertible debt instruments, such as the Notes, that may be settled wholly or partially in cash upon conversion are required to separately account for the liability (debt) and equity (conversion option) components of the instrument. The liability component at issuance is recognized at fair value, based on the fair value of a similar instrument of similar credit rating and maturity that does not have a conversion feature. The equity component is based on the excess of the principal amount of the convertible senior notes over the fair value of the liability component and is recorded in additional paid-in capital. The equity component, net of issuance costs and deferred tax effects is presented within additional paid-in-capital and is not remeasured as long as it continues to meet the conditions for equity classification. The difference between the principal amount and the liability component represents a debt discount that is amortized to financial expense over the respective terms of the Notes using an effective interest rate method. The Company allocated the total issuance costs incurred to the liability and equity components of the convertible senior notes based on their relative values.

Issuance costs attributable to the liability and equity components were $5,894 and $518, respectively. Issuance costs attributable to the liability are netted against the principal balance and will be amortized to financial expense using the effective interest method over the contractual term of the notes. The effective borrowing rate of the liability component of the notes (after deduction of the abovementioned issuance costs attributed to the liability component) is 2.365%. This borrowing rate was based on Company's synthetic credit risk rating.

See note 2X regarding the adoption of a new accounting pronouncement as of January 1, 2022.

Q. Revenue Recognition

Revenue Recognition Policy

The Company enters into revenue arrangements that include products and services which are distinct and accounted for as separate performance obligations. The Company determines whether promises are distinct based on whether the customer can benefit from the product or service on its own or together with other resources that are readily available and whether the Company's commitment to transfer the product or service to the customer is separately identifiable from other obligations in the contract.

The Company derives revenue from sales of advanced process control systems, spare parts, labor hours (mainly related to installation) and service contracts.

Revenues derived from sales of advanced process control systems, spare parts and labor hours are recognized at a point in time, when control of the promised goods or services is transferred to the customers, upon fulfillment of the contractual terms (typically upon shipment of the systems and spare parts or when the service is completed for labor hours).

Revenues derived from service contracts, are recognized ratably over time in accordance with the term of the contract since the Company has a stand-ready obligation to provide the service. Such contracts generally include a fixed fee.

Revenues from sales which were not yet determined to be final sales due to certain acceptance provisions are deferred.

Contracts with Multiple Performance Obligations

Contracts with customers may include multiple performance obligations. For such arrangements, the Company allocates revenue to each performance obligation based on its relative Standalone Selling Price (“SSP”). Judgment is required to determine the SSP for each distinct performance obligation. The Company uses a range of amounts to estimate SSP when it sells each of the products and services separately and needs to determine whether there is a discount to be allocated based on the relative SSP of the various products and services.

NOTE 2 - SIGNIFICANT ACCOUNTING POLICIES (Cont.)

Remaining Performance Obligations

Remaining performance obligations (RPOs) represent contracted revenues that had not yet been recognized and include deferred revenues and invoices that have been issued to customers but were uncollected and have not been recognized as revenues. As of December 31, 2021, the aggregate amount of the RPOs was $41,055 comprised of $15,338 deferred revenues and $25,717 of uncollected amounts that were not yet recognized as revenues. The Company expects the RPO to be recognized as revenues over the next year.

Contract Balances

Contract balances are presented separately on the consolidated balance sheets.

Revenues recognized during 2021, 2020 and 2019 from deferred revenues amounts included in current liabilities at the beginning of the period amounted to $3,651, $1,544 and $3,481 respectively.

In certain arrangements, the Company receives payment from a customer either before or after the performance obligation has been satisfied. The expected timing difference between the payment and satisfaction of performance obligations for the Company's contracts is one year or less; therefore, the Company applies a practical expedient and does not consider the effects of the time value of money.

R. Research and Development

Research and development costs are charged to operations as incurred. Amounts received or receivable from the Government of Israel through the Israeli Innovation Authority ("IIA", formerly known as the Office of the Chief Scientist) or from the European Community as participation in certain research and development programs are offset against research and development costs. The accrual for grants receivable is determined based on the terms of the programs, provided that the criteria for entitlement are expected to be met. Research and development grants recognized during the years ended December 31, 2021, 2020 and 2019 were $4,395, $5,645 and $6,932 respectively.

S. Income Taxes

The Company accounts for income taxes utilizing the asset and liability method in accordance with ASC 740, "Income Taxes". Current tax liabilities are recognized for the estimated taxes payable on tax returns for the current year. Deferred tax liabilities or assets are recognized for the estimated future tax effects attributable to temporary differences between the income tax bases of assets and liabilities and their reported amounts in the financial statements, and for tax loss carryforwards.

Measurement of current and deferred tax liabilities and assets is based on provisions of enacted tax laws, and deferred tax assets are reduced, if necessary, by the amount of tax benefits, the realization of which is not considered more likely than not based on available evidence.

ASC 740-10 requires a two-step approach to recognizing and measuring uncertain tax positions. The first step is to evaluate the tax position for recognition by determining if the weight of available evidence indicates that it is more likely than not that the position will be sustained on audit, including resolution of related appeals or litigation processes, if any. The second step is to measure the tax benefit as the largest amount which is more than 50% likely of being realized upon ultimate settlement.

(U.S. dollars in thousands, except share and per share data)

NOTE 2 - SIGNIFICANT ACCOUNTING POLICIES (Cont.)

T. Share-Based Compensation

The Company accounts for equity-based compensation using ASC 718 "Compensation - Stock Compensation," which requires companies to recognize the cost of employee services received in exchange for awards of equity instruments based upon the grant-date fair value of those awards.

Share Options

Under ASC 718, the fair market value of each option grant is estimated on the date of grant using the "Black-Scholes option pricing" method with the following weighted-average assumptions:

	2021	2020	2019
Risk-free interest rate	0.89%	0.38%	1.87%
Expected term of options	4.97 years	5.08 years	4.69 years
Expected volatility	39.02%	36.61%	33.18%
Expected dividend yield	0%	0%	0%

Expected volatility was calculated based on actual historical share price movements over a term that is equivalent to the expected term of granted options. The expected term of options granted is based on historical experience and represents the period of time that options granted are expected to be outstanding. The risk-free interest rate is based on the yield from U.S. treasury bonds with an equivalent term. The Company has historically not paid dividends and has no foreseeable plans to pay dividends.

The Company recognizes compensation expenses for the value of awards granted, based on the accelerated method. The Company account for forfeitures as they occur.

U. Earnings per Share

Earnings per share are presented in accordance with ASC 260-10, "Earnings per Share". Pursuant to which, basic earnings per share excludes the dilutive effects of convertible securities and is computed by dividing income (loss) available to ordinary shareholders by the weighted-average number of ordinary shares outstanding for the period, net of treasury shares. Diluted earnings per share reflect the potential dilutive effect of options and RSUs. The number of potentially dilutive options and RSUs excluded from diluted earnings per share due to the anti-dilutive effect of out of the money options amounted to 336,857 in 2021, 492,963 in 2020, 438,999 in 2019.

Additionally, 2,055,641 in 2021 (2,680,965 in 2020) shares underlying the conversion option of the Convertible Senior Notes are not considered in the calculation of diluted net income per share as the effect would be anti-dilutive. The Company intends to settle the principal amount of Convertible Senior Notes in cash and therefore will use the treasury stock method for calculating any potential dilutive effect on diluted net income per share, if applicable. The conversion will have a dilutive impact on diluted net income per share when the average market price of an ordinary share for a given period exceeds the conversion price of $74.6 per share.

V. Concentrations of Credit Risk

Financial instruments that potentially subject the Company to concentrations of credit risk consist principally of cash and cash equivalents, bank deposits, trade accounts receivable and foreign currency derivative contracts.

The majority of the Company's cash and cash equivalents and bank deposits are invested in dollar instruments with major banks in Israel. Management believes that the financial institutions that hold the Company's investments are corporations with high credit standing. Accordingly, management believes that low credit risk exists with respect to these financial investments.

NOTE 2 - SIGNIFICANT ACCOUNTING POLICIES (Cont.)

The trade accounts receivable of the Company are derived from sales to customers located primarily in Taiwan R.O.C., Korea, China and USA. The management of the Company performed risk assessment on an ongoing basis and believes it bears low risk.

The Company entered into options and forward contracts to hedge against the risk of overall changes in future cash flow from payments of payroll and related expenses as well as other expenses denominated in NIS. The derivative instruments hedge a portion of the Company's non-dollar currency exposure. Counterparty to the Company's derivative instruments is major financial institution.

W. Fair Value Measurements

The fair values of the Company's cash and cash equivalents, short-term interest-bearing bank deposits, trade accounts receivable, and accounts payable approximate their carrying amounts due to their short-term nature.

The Company follows the provisions of ASC No. 820, "Fair Value Measurement" ("ASC 820"), which defines fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

In determining a fair value, the Company uses various valuation approaches. ASC 820 establishes a hierarchy for inputs used in measuring fair value that maximizes the use of observable inputs and minimizes the use of unobservable inputs by requiring that the most observable inputs be used when available. Observable inputs are inputs that market participants would use in pricing an asset or liability, based on market data obtained from sources independent of the Company. Unobservable inputs are inputs that reflect assumptions that market participants would use in pricing an asset or liability, based on the best information available under given circumstances.

The hierarchy is broken down into three levels, based on the observability of inputs and assumptions, as follows:

Level 1 - Observable inputs obtained from independent sources, such as quoted prices for identical assets and liabilities in active markets.

Level 2 - Other inputs that are directly or indirectly observable in the market place.

Level 3 - Unobservable inputs which are supported by little or no market activity.

In accordance with ASC 820, the Company measures its marketable securities, at fair value using the market approach valuation technique. Marketable securities are classified within Level 2 because these assets are valued using quoted market prices or alternative pricing sources and models utilizing market observable inputs.

The estimated fair values of the derivative instruments are determined based on market rates to settle the instruments. The fair value of the Company's derivative contracts (including forwards and options) is determined using standard valuation models. The significant inputs used in these models are readily available in public markets or can be derived from observable market transactions and, therefore, the Company's derivative contracts have been classified as Level 2.

Inputs used in these standard valuation models include the applicable spot, forward, and discount rates. The standard valuation model for the Company options contracts also includes implied volatility, which is specific to individual options and is based on rates quoted from a widely used third-party resource.

The Company's cash and cash equivalents, Interest-bearing bank deposits and restricted interest-bearing bank deposits are classified within level 1. Marketable securities, Derivative instruments and Convertible senior notes classified within Level 2 (see Note 3, Note 16 and Note 10, respectively).

NOTE 2 - SIGNIFICANT ACCOUNTING POLICIES (Cont.)

X. New Accounting Pronouncements

Recently issued accounting pronouncements not yet adopted:

In August 2020, the FASB issued Accounting Standards Update No. 2020-06, Debt—Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging—Contracts in Entity's Own Equity (Subtopic 815-40): Accounting for Convertible Instruments and Contracts in an Entity's Own Equity (ASU 2020-06), which simplifies the accounting for certain financial instruments with characteristics of liabilities and equity, including convertible instruments and contracts on an entity's own equity. This guidance also eliminates the treasury stock method to calculate diluted earnings per share for convertible instruments and requires the use of the if-converted method. This guidance will be effective for fiscal years beginning after December 15, 2021, including interim periods within those fiscal years.

The Company will adopt this new guidance using the modified retrospective method as of January 1, 2022. The adoption of this new guidance is estimated to result in an increase of approximately $12.1 million to short-term convertible senior notes, in the consolidated balance sheets, to reflect the full principal amount of the convertible notes outstanding net of issuance costs, a reduction of approximately $13.8 million to additional paid-in capital, net of estimated income tax effects, to remove the equity component separately recorded for the conversion features associated with the convertible notes, an increase to deferred tax assets, net of approximately $1.4 million, and a cumulative-effect adjustment of approximately $3.1 million, net of estimated income tax effects, to the beginning balance of retained earnings as of January 1, 2022. The adoption of this new guidance is anticipated to reduce interest expense by approximately $3.1 million during the year ended December 31, 2022. In addition, the required use of the if-converted method by the new guidance in calculating diluted earnings per share is expected to increase the number of potentially dilutive shares in 2022 by up to 2.1 million shares.

In October 2021, the FASB issued ASU 2021-08, ASC Topic 805 "Business Combinations". The standard create an exception to the general recognition and measurement principle for contract assets and contract liabilities from contracts with customers acquired in a business combination. Under this exception, an acquirer applies ASC 606, Revenue from Contracts with Customers, to recognize and measure contract assets and contract liabilities on the acquisition date. ASC 805 generally requires the acquirer in a business combination to recognize and measure the assets it acquires and the liabilities it assumes at fair value on the acquisition date. The standard will become effective for fiscal years beginning after December 15, 2022. Early application of the amendments is permitted, and the Company is currently assessing such early adoption. See also Note 18.

In November 2021, the FASB issued ASU 2021-10, ASC Topic 832 "Disclosures by Business Entities about Government Assistance". The standard require the following annual disclosures about transactions with a government that are accounted for by applying a grant or contribution accounting model by analogy: (1) Information about the nature of the transactions and the related accounting policy used to account for the transactions (2) The line items on the balance sheet and income statement that are affected by the transactions, and the amounts applicable to each financial statement line item (3) Significant terms and conditions of the transactions, including commitments and contingencies. The standard will become effective for fiscal years beginning after December 15, 2021. The Company is currently assessing the impact of the adoption of this standard on its consolidated financial statements.

(U.S. dollars in thousands, except share and per share data)

NOTE 3 - MARKETABLE SECURITIES

The following is a summary of marketable securities amortized cost, unrealized gains, unrealized losses and fair value as of December 31, 2021:

Marketable securities	Amortized Cost	Unrealized gains	Unrealized losses*	Fair Value
Matures within one year:				
Corporate bonds	53,238	-	(67)	53,171
Governmental bonds	8,409	-	(12)	8,397
	61,647	-	(79)	61,568
Matures after one year:				
Corporate bonds	122,701	-	(1,138)	121,563
Governmental bonds	15,954	1	(103)	15,852
	138,655	1	(1,241)	137,415
	200,302	1	(1,320)	198,983

* All of the unrealized losses have been accumulated during 2021 and are for less than 12 months.

Proceeds from maturity of available-for-sale marketable securities during the year ended December 31, 2021, were $12,862.

The Company had no proceeds from sales of available-for sale, marketable securities during the year ended December 31, 2021, therefore no realized gains or losses from the sale of available for sale marketable securities were recognized.

NOTE 4 - INVENTORIES

A. Composition:

	As of December 31,	
	2021	2020
Raw materials	22,953	17,511
Service inventory	19,838	16,860
Work in process	19,125	16,364
Finished goods	16,749	10,999
	78,665	61,734

B. In the years ended December 31, 2021, 2020 and 2019, the Company wrote down inventories in a total amount of $5,126, $5,664 and $4,435, respectively.

NOTE 5 - OTHER CURRENT ASSETS

	As of December 31,	
	2021	2020
Governmental institutions	4,447	5,776
Prepaid expenses	4,412	3,331
Other	383	675
	9,242	9,782

(U.S. dollars in thousands, except share and per share data)

NOTE 6 - PROPERTY AND EQUIPMENT, NET

	As of December 31,	
	2021	2020
Cost:		
Electronic equipment	48,604	43,671
Office furniture and equipment	5,006	4,828
Leasehold improvements	24,217	27,853
	77,827	76,352
Accumulated depreciation:		
Electronic equipment	35,040	32,019
Office furniture and equipment	2,755	1,554
Leasehold improvements	5,572	8,611
	43,367	42,184
Net book value	34,460	34,168

Depreciation expenses amounted to $6,475, $5,875 and $5,401 for the years ended December 31, 2021, 2020 and 2019, respectively.

NOTE 7 - INTANGIBLE ASSETS

Intangible assets originated from the acquisition of ReVera on April 2, 2015. The following is a summary of intangible assets as of December 31, 2021 and 2020:

	As of December 31,	
	2021	2020
Original amount:		
Technology	14,232	14,232
Customer relationships	5,191	5,191
	19,423	19,423
Accumulated amortization:		
Technology	12,026	10,108
Customer relationships	4,796	4,256
	16,822	14,364
Net book value	2,601	5,059

Amortization expenses amounted as following:

	Year ended December 31,		
	2021	2020	2019
Technology	1,918	1,758	1,758
Customer relationships	540	745	867
	2,458	2,503	2,625

(U.S. dollars in thousands, except share and per share data)

NOTE 7 - INTANGIBLE ASSETS (Cont.)

Annual amortization expenses are expected as follows:

Year ending December 31,	
2022	1,378
2023	726
2024	497
	2,601

NOTE 8 - OTHER CURRENT LIABILITIES

A. Consists of:

	As of December 31,	
	2021	2020
Accrued salaries and fringe benefits	28,176	17,773
Accrued warranty costs (See B below)	8,287	4,839
Governmental institutions	12,372	5,758
Other	50	48
	48,885	28,418

B. Accrued Warranty Costs:

The Company provides standard warranty coverage on its systems. Parts and labor are covered under the terms of the warranty agreement. The Company accounts for the estimated warranty cost as a charge to costs of revenues when revenue is recognized.

Accrued warranty costs presented in:

	As of December 31,	
	2021	2020
Other current liabilities	8,287	4,839
Other long-term liability	598	313
	8,885	5,152

The following table provides the changes in the product warranty accrual for the fiscal years ended December 31, 2021 and 2020:

	As of December 31,	
	2021	2020
Balance as of beginning of year	5,152	5,132
Services provided under warranty	(8,798)	(6,752)
Changes in provision	12,531	6,772
Balance as of end of year	8,885	5,152

NOTE 9 - LIABILITY FOR EMPLOYEE SEVERANCE PAY, NET

Israeli law and labor agreements determine the obligations of the Company to make severance payments to dismissed employees and to employees leaving employment under certain other circumstances. The obligation for severance pay benefits, as determined by Israeli law, is based upon length of service and the employee's most recent salary. The liability is partially covered through insurance policies purchased by the Company and deposits in a severance fund.

The deposited funds include profits accumulated up to the balance sheet date. The deposited funds may be withdrawn only upon the fulfillment of the obligation pursuant to Israel's Severance Pay Law, 1963 or labor agreements.

Since July 2008, the Company's agreements with new Israeli employees are under Section 14 of the Israeli Severance Pay Law, 1963. The Company's contributions for severance pay have replaced its severance obligation.

Upon contribution of the full amount of the employee's monthly salary for each year of service, no additional calculations are conducted between the parties regarding the matter of severance pay and no additional payments are made by the Company to the employee.

Labor agreements in Taiwan determine the obligations of the Company to make severance payments to dismissed employees and to employees leaving employment under certain other circumstances. The obligation for severance pay benefits is based upon length of service and the employee's average salary.

Severance pay expenses for the years ended December 31, 2021, 2020 and 2019, amounted to $818, $617 and $640, respectively (excluding the Company's contributions for severance pay under section 14).

NOTE 10 - CONVERTIBLE SENIOR NOTES, NET

In October 2020, the Company issued $175,000 aggregate principal amount, 0% coupon rate, of convertible senior notes due 2025 and an additional $25,000 aggregate principal amount of such notes pursuant to the exercise in full of the over-allotment option of the initial purchasers (collectively, "Convertible Notes" or "Notes").

The Convertible Notes are convertible based upon an initial conversion rate of 13.4048 of the Company's ordinary shares per $1,000 principal amount of Convertible Notes (equivalent to a conversion price of approximately $74.60 per ordinary share). The conversion rate will be subject to adjustment upon the occurrence of certain specified events. The Convertible Notes are senior unsecured obligations of the Company.

The Convertible Notes will mature on October 15, 2025, (the "Maturity Date"), unless earlier repurchased, redeemed or converted. Prior to July 15, 2025, a holder may convert all or a portion of its Convertible Notes only under the following circumstances:

1. During any calendar quarter commencing after the calendar quarter ending on March 31, 2021 (and only during such calendar quarter), if the last reported sale price of the Company's ordinary shares for at least 20 trading days (whether or not consecutive) during a period of 30 consecutive trading days ending on, and including, the last trading day of the immediately preceding calendar quarter is greater than or equal to 130% of the conversion price on each applicable trading day;
2. During the five business day period after any 10 consecutive trading day period ("measurement period") in which the trading price, determined pursuant to the terms of the Convertible Notes, per $1,000 principal amount of Convertible Notes for each trading day of the measurement period was less than 98% of the product of the last reported sale price of the ordinary shares and the conversion rate on each such trading day;
3. If the Company calls such Convertible Notes for redemption in certain circumstances, at any time prior to the close of business on the second scheduled trading day immediately preceding the redemption date; or
4. Upon the occurrence of specified corporate events.

On or after July 15, 2025 until the close of business on the second scheduled trading day immediately preceding the Maturity Date, a holder may convert its Convertible Notes at any time, regardless of the foregoing circumstances.

(U.S. dollars in thousands, except share and per share data)

NOTE 10 - CONVERTIBLE SENIOR NOTES, NET (Cont.)

Upon conversion, the Company can pay or deliver cash, ordinary shares or a combination of cash and ordinary shares, at the Company's election.

The Company may not redeem the notes prior to October 20, 2023, except in the event of certain tax law changes. The Company may, at any time and from time to time, redeem for cash all or any portion of the notes, at the Company's option, on or after October 20, 2023, if the last reported sale price of the Company`s ordinary shares has been at least 130% of the conversion price then in effect for at least 20 trading days (whether or not consecutive) during any 30 consecutive trading day period (including the last trading day of such period) ending on, and including, the trading day immediately preceding the date on which it delivers notice of redemption at a redemption price equal to 100% of the principal amount of the notes to be redeemed, (plus accrued and unpaid special interest (if any) to, but excluding, the redemption date).

Upon the occurrence of a Fundamental Change as defined in the Indenture, holders may require the Company to repurchase for cash all or any portion of their Convertible Notes at a fundamental change repurchase price equal to 100% of the principal amount of the Convertible Notes, (plus accrued and unpaid special interest payable under certain circumstances set forth in the terms of the Convertible Notes (if any) to, but excluding, the fundamental change repurchase date). In addition, in connection with a make-whole fundamental change (as defined in the Indenture), or following our delivery of a notice of redemption, the Company will, in certain circumstances, increase the conversion rate for a holder who elects to convert its notes in connection with such a corporate event or redemption, as the case may be.

As of December 31, 2021, condition 1 as stated above has been met, as the Company share price exceeded the abovementioned threshold. The Notes are therefore convertible as of December 31, 2021 and are classified as current liability.

The net carrying amount of the liability and equity components of the Convertible Notes as of December 31, 2021 and December 31, 2020 are as follows:

	As of December 31,	
Liability component:	2021	2020
Principal amount	200,000	200,000
Unamortized discount	(12,032)	(15,032)
Unamortized issuance costs	(4,931)	(6,160)
Net carrying amount	183,037	178,808
Equity component, net of issuance costs of $518 and deferred taxes of $1,878	13,770	13,770

Interest expense related to the Convertible Notes was as follows:

	Year ended December 31,	
	2021	2020
Amortization of debt discount	3,000	616
Amortization of debt issuance costs	1,229	252
Total financial expense recognized	4,229	868

As of December 31, 2021, the total estimated fair value of the convertible senior notes was approximately $390,000. The fair value of the convertible senior notes is considered to be Level 2 within the fair value hierarchy and was determined based on quoted price of the convertible senior notes in an over-the-counter market.

(U.S. dollars in thousands, except share and per share data)

NOTE 11 - LEASES

The Company has operating leases for facilities and vehicles. The Company recognized leased assets of $30,627 and corresponding current liabilities of $4,452, and long-term liabilities of $33,450, as of December 31, 2021. The Company's leases have remaining terms of 1 to 9 years, some of which include options to extend the leases for up to additional 10 years. The weighted average remaining lease term was 14.6 years and the weighted average discount rate was 4.5% as of December 31, 2021.

Lease expenses amounted to $3,935, $4,654 and $5,166 for the years ended December 31, 2021, 2020 and 2019, respectively. The expected discounted and undiscounted lease payments under non-cancelable leases as of December 31, 2021, excluding non-lease components, were as follows:

Year	
2022	4,508
2023	4,273
2024	4,248
2025	4,028
2026	3,661
2027 and thereafter	33,436
Total lease payments	54,154
Less imputed interest	(16,252)
Total	37,902

Operating cash flows for operating leases amounted to $4,134, $5,840 and $5,326 for the years ended December 31, 2021, 2020 and 2019, respectively.

NOTE 12 - COMMITMENTS AND CONTINGENCIES

The Company is obligated under certain agreements with its suppliers to purchase specified items of inventory which are expected to be utilized during the years 2022-2026. As of December 31, 2021, non-cancelable purchase obligations were approximately $190,000.

NOTE 13 - SHAREHOLDERS' EQUITY

A. Rights of Shares:

Holders of ordinary shares are entitled to participate equally in the payment of cash dividends and bonus shares (stock dividends) and, in the event of the liquidation of the Company, in the distribution of assets after satisfaction of liabilities to creditors. Each ordinary share is entitled to one vote on all matters to be voted on by shareholders.

B. Share Repurchase:

On November 1, 2018, the Company announced $25,000 share repurchase program. In this framework, through December 31, 2021, the Company repurchased 556,603 ordinary shares for an aggregate amount of $14,509.

On October 11, 2020, as part of the authorization of the Senior Convertible Notes Offering (see note 10), the Company's board of directors approved and authorized a share repurchase for an aggregate amount of up to $20,000. In this framework, on October 14, 2020, the Company repurchased 170,910 ordinary shares for an aggregate amount of $10,000.

All treasury shares have been canceled as of the end of each respective year.

C. Equity Based Incentive Plans:

The Company's Board of directors approves, from time to time, equity-based incentive plans, the last of which was approved in August 2017. Equity-based incentive plans include stock options, restricted share units and restricted stock awards to employees, officers and directors.

(U.S. dollars in thousands, except share and per share data)

NOTE 13 - SHAREHOLDERS' EQUITY (Cont.)

Share-based compensation

The following table summarizes the effects of share-based compensation resulting from the application of ASC 718 included in the Statements of Operations as follows:

	Year ended December 31,		
	2021	2020	2019
Cost of Revenues:			
Product	1,358	927	534
Service	802	437	469
Research and Development	3,994	2,556	2,206
Sales and Marketing	2,221	1,531	1,121
General and Administrative	2,113	1,498	762
Total	10,488	6,949	5,092

As of December 31, 2021, there was $610 of total unrecognized compensation cost related to non-vested employee options and $21,231 of total unrecognized compensation cost related to non-vested employee RSUs. These costs are generally expected to be recognized over a period of four years.

Shares Options

Share options vest over four years and their contractual term may not exceed 10 years. The exercise price is the market price at the date of each grant.

The weighted average fair value (in dollars) of the options granted during 2021, 2020 and 2019, according to Black-Scholes option-pricing model, amounted to $35.94, $15.46 and $8.18 per option, respectively.

Summary of the status of the Company's share option plans as of December 31, 2021, as well as changes during the year then ended, is presented below:

	2021	
	Share Options	Weighted Average Exercise Price
Outstanding - beginning of year	797,279	22.29
Granted	9,615	102.35
Exercised	(236,652)	18.76
Expired and forfeited	(84,700)	23.85
Outstanding - year end	485,542	25.33
Options exercisable at year end	327,859	21.09

The aggregate intrinsic value represents the total intrinsic value (the difference between the Company's closing share market price on the last trading day of the fiscal year and the exercise price, multiplied by the number of in-the-money options) that would have been received by the option holders had all option holders exercised their options on the last trading day of the fiscal year. This amount changes based on the fair market value of the Company's shares.

The total intrinsic value of options outstanding as of December 31, 2021 and 2020 was $58,835 and $38,514, respectively. The total intrinsic value of options exercisable as of December 31, 2021 and 2020 was $41,117 and $24,428, respectively. The total intrinsic value of options exercised during the years 2021, 2020 and 2019 was $18,571, $10,463 and $4,570 respectively.

(U.S. dollars in thousands, except share and per share data)

NOTE 13 - SHAREHOLDERS' EQUITY (Cont.)

The following table summarizes information about share options outstanding as of December 31, 2021:

Range of Exercise Prices (US dollars)	Number Outstanding	Weighted Average Remaining Contractual Life (in years)	Weighted Average Exercise Price (US dollars)	Number Exercisable	Weighted Average Exercise Price (US dollars)
10.24-20.00	134,047	1.12	11.53	134,047	11.53
20.01-35.00	309,054	3.61	26.59	185,815	26.85
35.01-50.00	28,635	5.43	46.08	6,948	46.27
50.01-70.00	4,191	5.63	54.67	1,049	54.67
70.01-102.35	9,615	5.48	102.35	-	-
	485,542		25.33	327,859	21.09

Restricted Share Units

Restricted Share Units ("RSU") grants are rights to receive shares of the Company's ordinary shares on a one-for-one basis and are not entitled to dividends or voting rights, if any, until they are vested. RSU's vesting schedules are 25% on each of the first, second, third and fourth anniversaries of the grant date, or, 33% on each of the first, second, and third anniversaries of the grant date. The fair value of such RSU grants is being recognized based on the accelerated method over the vesting period. Performance based RSU grants vest over a period of 3 years and are subject to certain performance criteria; accordingly, compensation expense is recognized for such awards when it becomes probable that the related performance condition will be satisfied.

	2021	
	Number of RSUs	Weighted average grant date fair value (USD)
Unvested - beginning of year	468,561	39.14
Granted	197,941	103.84
Vested	(165,530)	35.88
Canceled	(37,771)	41.55
Unvested at year end	463,201	67.79

The total intrinsic value of RSUs vested during the years 2021, 2020 and 2019 was $17,341, $6,344 and $3,513, respectively.

NOTE 14 - INCOME TAXES

A. Income Tax Regulations (Rules on Bookkeeping by Foreign Invested Companies and Certain Partnerships and Determination of their Taxable Income), 1986:

As a "Controlled Foreign Cooperation" (as defined in the Israeli Law for the Encouragement of Capital Investments-1959), the Company's management has elected to apply Income Tax Regulations (Rules for Maintaining Accounting Records of Foreign Invested Companies and Certain Partnerships and Determining Their Taxable Income)-1986. Accordingly, its taxable income or loss is calculated in US Dollars.

NOTE 14 - INCOME TAXES (Cont.)

B. Law for the Encouragement of Capital Investments-1959:

Part of the Company's investment in equipment has received approvals in accordance with the Law for the Encouragement of Capital Investments, 1959 ("Approved Enterprise" status) in three separate investment plans. The Company has chosen to receive its benefits through the "Alternative Benefits" track, and, as such, is eligible for various benefits. These benefits include accelerated depreciation of fixed assets used in the investment program, as well as a full tax exemption on undistributed income in relation to income derived from the first plan for a period of 4 years and for the second and third plans for a period of 2 years. Thereafter a reduced tax rate of 25% will be applicable for an additional period of up to 3 years for the first plan and 5 years for the second and third plans, commencing with the date on which taxable income is first earned but not later than certain dates. The benefit period of the second and third plan have commenced.

On April 1, 2005, an amendment to the Investment Law came into effect ("the Amendment") and has significantly changed the provisions of the Investment Law. The Amendment limits the scope of enterprises which may be approved by the Investment Center by setting criteria for the approval of a facility as a Privileged Enterprise, such as provisions generally requiring that at least 25% of the Privileged Enterprise's Income will be derived from export. Additionally, the Amendment enacted major changes in the manner in which tax benefits are awarded under the Investment Law so that companies no longer require Investment Center approval in order to qualify for tax benefits.

However, the Investment Law provides that terms and benefits included in any certificate of approval already granted will remain subject to the provisions of the law as they were on the date of such approval. Therefore, the Israeli companies with Approved Enterprise status will generally not be subject to the provisions of the Amendment.

The entitlement to the above benefits is conditional upon the Company fulfilling the conditions stipulated by the above law, regulations published thereunder and the instruments of approval for the specific investments in "Approved Enterprises". In the event of failure to comply with these conditions, the benefits may be canceled, and the Company may be required to refund the amount of the benefits, in whole or in part, including interest.

In the event of distribution by the Company of a cash dividend out of retained earnings that were tax exempt due to its Approved Enterprise status, the Company would have to pay corporate tax of 10% - 25% on the income from which the dividend was distributed based on the extent to which non-Israeli shareholders hold Company's shares. A 15% withholding tax may be deducted from dividends distributed to the recipients.

On November 15, 2021 a new amendment of the Investment Law ("the Amendment') was enacted (i) providing a reduced corporate income tax on the Trapped Profits distributed within a year from such amendment. The reduced corporate income tax is based on a certain formula and subject to reinvestment of certain amounts in enumerated assets/activities; (ii) harshening the rules with respect to determining the profits from which a dividend was distributed and providing that part of any dividend distribution, will be deemed as distributed from the Trapped Profits, according to a certain formula.

During December 2021, as part of the Tax Assessment audit for the years 2016-2019, the Company entered into an agreement with the Israeli Tax Authorities and opted-in with the new Amendment. The reduced corporate income tax on the Trapped Profits resulted in income tax expenses (net of reductions of uncertain tax positions provisions) of approximately $3.7M, and was included in the 2021 consolidated statements of operations.

In 2008, the Company submitted a request to approve a new plan (fourth plan) as a Privileged Enterprise in accordance with the Amendment to the Investment Law. The commencing year was 2010, and the expiration year was 2021.

NOTE 14 - INCOME TAXES (Cont.)

In 2011, new legislation amending to the Investment Law was adopted. Under this new legislation, a uniform corporate tax rate will apply to all qualifying income of certain Industrial Companies (Requirement of a minimum export of 25% of the company's total turnover), as opposed to the current law's incentives, which are limited to income from Approved Enterprises during their benefits period. Under the new law, the uniform tax rate will be 10% in areas in Israel designated as Development Zone A and 15% elsewhere in Israel during 2011-2012, 7% and 12.5%, respectively, in 2013-2014, and 6% and 12%, respectively thereafter. The profits of these Industrial Companies will be freely distributable as dividends, subject to a 15% withholding tax (or lower, under an applicable tax treaty).

Under the transition provisions of the new legislation, the Company may decide to irrevocably implement the new law while waiving benefits provided under the current law or to remain subject to the current law.

In August 2013 "The Arrangements Law" (hereinafter—"the Law") was officially published. The following significant changes affecting taxation were approved:

1. The tax rate on a company in Development area A, effective January 1, 2014 is 9% (instead of 7% in 2014 and 6% in 2015 and thereafter), and the tax rate for companies in all other areas will be 16% (instead of 12.5% in 2014 and 12% in 2015 and thereafter).

2. The tax rate on dividend distributed, generated from "preferred income" or by a company that has an approved enterprise increased effective January 1, 2014 from 15% to 20%.

In 2016, most of the Company’s taxable income in Israel was attributable to Preferred Enterprises, with a related tax rate of 16%. In 2015 and 2014, most of the Company’s taxable income in Israel was attributable to Approved Enterprise programs with zero tax.

C. The New Technological Enterprise Incentives Regime - Amendment 73 to the Investment Law

In December 2016, the Economic Efficiency Law (Legislative Amendments for Applying the Economic Policy for the 2017 and 2018 Budget Years), 2016 which includes Amendment 73 to the Law for the Encouragement of Capital Investments ("the 2017 Amendment") was published. According to the 2017 Amendment, Technological preferred enterprise, as defined in the Law for the Encouragement of Capital Investments, 1959 ("the Encouragement Law"), with total consolidated revenues of less than NIS 10 billion, shall be subject to 12% tax rate on income deriving from intellectual property (in development area A - a tax rate of 7.5%).

Any dividends distributed deriving from income from the preferred technological enterprises will be subject to tax at a rate of 20%. The 2017 Amendment further provides that, in certain circumstances, a dividend distributed to a foreign corporate shareholder, would be subject to a 4% tax rate (if the percentage of foreign investors exceeds 90%).

The Company assessed the criteria for qualifying to a “Preferred Technological Enterprise,” status and concluded that the Israeli entity is entitled to the above-mentioned benefits. The Company implemented the new incentives in its tax calculations starting 2017.

D. The Tax Cuts and Jobs Act, 2017:

On December 22, 2017, the U.S. enacted the Tax Cuts and Jobs Act (the “US Tax Act”) that instituted fundamental changes to the taxation of multinational corporations. The Tax Act includes significant changes to the U.S. corporate income tax system, including a Federal corporate rate reduction from 35% to 21%, adjustments to rules relating to limitations on the deductibility of interest expense and executive compensation, the transition of U.S. international taxation from a worldwide tax system to a territorial tax system, foreign derived intangible income deduction, rules that impact the utilization of US NOLs and other corporate tax provisions.

(U.S. dollars in thousands, except share and per share data)

NOTE 14 - INCOME TAXES (Cont.)

Foreign-Derived Intangible Income:

The 2017 Tax Act provides tax incentives to U.S. companies to earn income from the sale, lease or license of goods and services abroad (i.e., the portion of a domestic corporation's intangible income that is derived from serving foreign markets) in the form of a deduction for foreign-derived intangible income ("FDII"). FDII is taxed at an effective rate of 13.125% for taxable years beginning after December 31, 2017 and at an effective rate of 16.406% for taxable years beginning after December 31, 2025. The accounting for the deduction for FDII is similar to a special deduction and should be accounted for based on the guidance in ASC 740-10-25-37. The tax benefits for special deductions ordinarily are recognized no earlier than the year in which they are deductible on a tax return.

E. Deferred Taxes:

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. Significant components of the deferred tax assets are as follows:

	As of December 31,	
	2021	2020
Deferred tax assets:		
Net operating loss carryforwards	501	505
Tax credits carryforward	1,052	740
Reserve and allowances	8,692	5,504
Operating lease liabilities, net	328	344
Deferred tax assets before valuation allowance	10,573	7,093
Valuation Allowance	(1,737)	(1,311)
Deferred tax assets after valuation allowance	8,836	5,782
Deferred tax liabilities:		
Convertible senior notes	(1,444)	(1,804)
Intangible assets	(578)	(1,109)
Reserve and allowances	(653)	-
Deferred tax liabilities	(2,675)	(2,913)
Deferred tax assets	6,161	2,869

Long-term deferred tax assets:

	Year ended December 31,	
	2021	2020
Domestic	3,414	2,011
Foreign	2,747	858
	6,161	2,869

Under ASC 740-10, deferred tax assets are to be recognized for the anticipated tax benefits associated with net operating loss and tax credits carry-forwards and deductible temporary differences; unless it is more-likely-than-not that some or all of the deferred tax assets will not be realized.

(U.S. dollars in thousands, except share and per share data)

NOTE 14 - INCOME TAXES (Cont.)

F. Income before taxes on income included in the consolidated statements of operations:

	Year ended December 31,		
	2021	2020	2019
Domestic	76,400	42,164	25,803
Foreign (mainly US)	32,853	14,332	13,683
	109,253	56,496	39,486

G. Income tax expenses (tax benefits) included in the consolidated statements of operations:

	Year ended December 31,		
	2021	2020	2019
Domestic	12,297	7,238	4,482
Foreign (mainly US)	3,855	1,351	(167)
	16,152	8,589	4,315
Current	19,311	9,620	3,340
Deferred	(3,159)	(1,031)	975
	16,152	8,589	4,315

H. Tax Reconciliation:

The following is a reconciliation of the theoretical tax expense, assuming that all income is taxed at the ordinary statutory average corporate tax rate in Israel and the actual tax expense in the statement of operations, is as follows:

	Year ended December 31,		
	2021	2020	2019
Income before taxes on income	109,253	56,496	39,486
Statutory tax expenses	13,110	6,780	5,042
Effect of non-benefited income New Technological or Preferred Enterprises statuses in Israel	88	130	144
Permanent differences, including difference between the basis of measurement of income reported for tax purposes and the basis of measurement of income for financial reporting purposes, net	(448)	(199)	(131)
Change in tax reserve for uncertain tax positions	(713)	1,806	850
Effect of foreign operations taxed at various rates	3,249	1,381	1,173
Foreign Derived Intangible Income benefit	(1,785)	(526)	(768)
Tax credits	(1,592)	(1,526)	(777)
Trapped Profits agreement net effect	3,716	-	-
Adjustments for previous year's tax	(113)	249	(2,121)
Change in valuation allowance	601	413	898
Other	39	81	5
	3,042	1,809	(727)
Actual tax expenses	16,152	8,589	4,315

(U.S. dollars in thousands, except share and per share data)

NOTE 14 - INCOME TAXESNOTE (Cont.)

I. Effective Tax Rates:

The Company's effective tax rates differ from the statutory rates applicable to the Company for tax year 2021, primarily due to stock-based compensation deductible expenses, tax credits and foreign derived intangible income benefit in the US.

The Company's effective tax rates differ from the statutory rates applicable to the Company for tax year 2020, primarily due to tax credits and foreign derived income benefit in the US.

J. Tax Assessments:

In December 2021 the Parent Company has received final tax assessments for the years 2016-2019 from the Israeli Tax Authorities.

For the US subsidiary, with regards to any tax years starting 2015 and any tax attributes carryforwards from prior periods remain subject to examination in future periods (under the standard US statute of limitation and subject to tax filing). The other subsidiaries received final tax assessments through tax years 2012 until 2016.

K. Undistributed earnings of foreign subsidiaries:

The Company considers the earnings of certain subsidiaries to be indefinitely invested outside Israel on the basis of estimates that future domestic cash generation will be sufficient to meet future domestic cash needs and the Company's specific plans for reinvestment of those subsidiary earnings. The Company has not recorded a deferred tax liability of approximately $18,381 related to the Israel income taxes of undistributed earnings of foreign subsidiaries indefinitely invested outside Israel. Should the Company decide to repatriate the foreign earnings, the Company would need to adjust the Company's income tax provision in the period the Company determined that the earnings will no longer be indefinitely invested outside Israel.

L. Uncertain Tax Positions:

The taxation of the Company's business is subject to the application of multiple and sometimes conflicting tax laws and regulations as well as multinational tax conventions. The application of tax laws and regulations is subject to legal and factual interpretation, judgment and uncertainty.

In addition, the Company classifies interest and penalties recognized in the financial statements relating to uncertain tax position under the income taxes line item.

Tax laws themselves are subject to change as a result of changes in fiscal policy, changes in legislation and the evolution of regulations and court rulings. Consequently, taxing authorities may impose tax assessments or judgments against the Company that could materially impact its tax liability and/or its effective income tax rate.

The Company believes that it has adequately provided for any reasonably foreseeable outcomes related to tax audits and settlement. The final tax outcome of its tax audits could be different from that which is reflected in the Company's income tax provisions and accruals. Such differences could have a material effect on the Company's income tax provision and net income in the period in which such determination is made.

The following table summarizes the changes in uncertain tax positions:

	As of December 31,	
	2021	2020
Balance at the beginning of the year	11,080	7,738
Increase related to prior year tax positions	271	1,950
Decrease related to prior year tax positions	(4,403)	(622)
Increase related to current year tax positions	1,187	2,014
Balance at the end of the year*	8,135	11,080

(U.S. dollars in thousands, except share and per share data)

NOTE 14 - INCOME TAXES (Cont.)

* The amount for the year ended December 31, 2021 and 2020 includes $2,412 and $2,280 unrecognized tax benefits, respectively, which are presented as a reduction from deferred tax assets, see Note 14e.

The Company recognizes interest and penalties related to unrecognized tax benefits as a component of income tax expenses.

M. Income from Other Sources in Israel:

Income not eligible for benefits under the New Technological Enterprise Laws mentioned in "C" above are taxed at the corporate tax rate of 23%.

NOTE 15 - GEOGRAPHIC AREAS AND MAJOR CUSTOMERS

A. Sales by Geographic Area (as Percentage of Total Sales):

	Year ended December 31,		
	2021	2020	2019
	%	%	%
Taiwan, R.O.C.	37	33	37
USA	23	23	25
China	21	19	18
Korea	11	17	9
Other	8	8	11
Total	100	100	100

Revenues are attributed to countries based on the geographic location of the customer.

B. Sales by Major Customers (as Percentage of Total Sales):

	Year ended December 31,		
	2021	2020	2019
	%	%	%
Customer A	31	26	27
Customer B	21	24	16
Customer C	9	8	13

C. Long-lived assets by geographic location:

	As of December 31,	
	2021	2020
	%	%
Israel	74	75
US	19	20
Other	7	5
Total long-lived assets (*)	100	100

(*) Long-lived assets are comprised of property and equipment, net and operating lease right-of-use assets.

(U.S. dollars in thousands, except share and per share data)

NOTE 16 - FINANCIAL INSTRUMENTS

A. Hedging Activities

The Company enters into forward contracts, and currency options to hedge its balance sheet exposure as well as certain future cash flows in connection with certain operating expenses (mainly payroll expense) and forecast transactions which are expected to be denominated mainly in New Israeli Shekel ("NIS"). The Company is exposed to losses in the event of non-performance by counterparties to financial instruments; however, as the counterparties are major Israeli banks, credit risk is considered immaterial. The Company does not hold or issue derivatives for trading purposes. The notional amounts of the hedging instruments as of December 31, 2021 and December 31, 2020 were $32,590, and $17,675 respectively. The terms of all of these currency derivatives are less than one year.

B. Derivative Instruments

The fair value of derivative contracts as of December 31, 2020 and December 31, 2019 was as follows:

	Derivative Assets Reported in Other Current Assets		Derivative Liabilities Reported in Other Current Liabilities	
	December 31,		December 31,	
	2021	2020	2021	2020
Derivatives designated as hedging instruments in cash flow hedge	249	644	-	-

The impact of derivative instrument on total operating expenses in the year ended December 31, 2021, 2020 and 2019 was:

	Year ended December 31,		
	2021	2020	2019
Loss (gain) on derivative instruments	$ 453	$ 796	$ 33

NOTE 17 - FINANCIAL INCOME (EXPENSE), NET

	Year ended December 31,		
	2021	2020	2019
Interest income	2,194	4,057	4,605
Financial expense related to the Convertible Senior Notes (Note 10)	(4,229)	(868)	-
Exchange rate loss, net	(948)	(2,172)	(1,428)
Bank charges	(150)	(91)	(99)
Total	(3,133)	926	3,078

NOTE 18 - SUBSEQUENT EVENTS

On January 25, 2022, the Company completed its acquisition of all of the outstanding common stock of ancosys GmbH, a provider of chemical analysis and metrology solutions for advanced semiconductor manufacturing. The Company’s total consideration is expected to be approximately $90 million in cash including a performance based contingent consideration of $10 million.

During the year ended December 31, 2021 the Company recognized $999 of acquisition-related costs in the consolidated statements of operations under general and administrative expenses.

EXHIBIT INDEX

Number	Description
1.1	Amended and Restated Articles of Association (filed herewith)
2.1	Description of Securities (filed herewith)
4.2	2007 Incentive Plan, as amended (incorporated by reference to Exhibit 4.2 to the Company's Annual Report on Form 20-F filed with the Securities and Exchange Commission on February 25, 2015)
4.3	2017 Share Incentive Plan (incorporated by reference to Exhibit 99.1 to the Company's Registration Statement on Form S-8 filed with the Securities and Exchange Commission on August 25, 2017 (File No. 333-220158)
4.4	Form of Indemnification Agreement between the Company and its present and future directors and officers (filed herewith)
4.5	Share Purchase Agreement dated November 16, 2021 by and among Nova Ltd., Nova Measuring Instruments GmbH, ancosys GmbH, and the Representative (named therein) (filed herewith) Portions of this exhibit have been redacted in compliance with SEC regulations
4.6	Summary of lease agreement dated May 28, 2000, as amended and supplemented (incorporated by reference to Exhibit 4.4 to the Company's Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 3, 2017)
4.7	Compensation Policy for Executive Officers and Directors (incorporated by reference to Exhibit 4.6 to the Company's Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 1, 2020)
4.8	Summary of lease agreement dated May 3, 2018, by and between the Company and Bayside Land Corporation Ltd. (incorporated by reference to Exhibit 4.7 to the Company's Annual Report on Form 20-F filed with the Securities and Exchange Commission on February 28, 2019).
8.1	List of Subsidiaries (filed herewith).
12.1	Certification required by Rule 13a-14(a) of the Securities Exchange Act of 1934, as amended (filed herewith).
12.2	Certification required by Rule 13a-14(a) of the Securities Exchange Act of 1934, as amended (filed herewith).
13.1	Certification Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (furnished herewith).
13.2	Certification Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (furnished herewith).
15.1	Consent of Kost Forer Gabbay & Kasierer (filed herewith).
101.INS	Inline XBRL Instance Document—the instance document does not appear in the Interactive Data File as its XBRL tags are embedded within the Inline XBRL document
101.SCH	Inline XBRL Taxonomy Extension Schema
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase
104	Cover page formatted as Inline XBRL and contained in Exhibit 101

SIGNATURES

The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and has duly caused and authorized the undersigned to sign this Annual Report on its behalf.

NOVA LTD.

By: /s/ *Eitan Oppenhaim*
Eitan Oppenhaim
President and Chief Executive Officer

Date: March 1, 2022

Exhibit 1.1

NOVA LTD.

AMENDED AND RESTATED ARTICLES OF ASSOCIATION

As Last Amended: June 24, 2021

TABLE OF CONTENTS

AMENDED AND RESTATED ARTICLES OF ASSOCIATION

of

NOVA LTD.

INTERPRETATION

1. In these Articles the following terms shall bear the meanings set opposite to them, unless inconsistent with the subject or context:

Articles	These Amended and Restated Articles of Association as may be amended from time to time.
Auditor	As defined under the Law.
Board	The Board of Directors of the Company.
CEO	Chief Executive Officer, also referred to under the Law as the general manager.
Class Meeting	A meeting of the holders of a class of shares.
Chairman	Chairman of the Board.
Company	Nova Ltd.
Companies Regulations	All regulations promulgated from time to time under the Companies Law.
Distribution	As defined under the Law.
External Director	As defined under the Law.
The Law or the Companies Law	The Israeli Companies Law, 5759 - 1999 and the Companies Regulations.
NIS	New Israeli Shekel
The Office	The registered office of the Company as may be re-located from time to time.
Office Holder	As defined under the Law.
Ordinary Shares	The Company's Ordinary Shares, with no par value.
Register	Shareholders Register maintained by or on behalf of the Company.
Shareholder	As defined under the Law.

Simple Majority	A majority of more than fifty percent (50%) of the votes cast by those Shareholders present and voting, not taking into consideration abstaining votes.
The Statutes	The Law, the Israeli Companies Ordinance (New Version) 1983, the Securities Law, 5738 - 1968 (the "Securities Law") and all applicable laws and regulations applicable in any relevant jurisdiction (including without limitation U.S. Federal laws and regulations), and rules of any stock market in which the Company's shares are registered for trading as shall be in force from time to time and to the extent applicable to the Company.

Except as otherwise provided above or elsewhere under these Articles, any word or expression mentioned herein shall have the meaning ascribed to them under the Law, and if not applicable, the meaning ascribed to them under the Companies Regulations, and if not applicable, the meaning ascribed to them under the Securities Law, and if not applicable, the meaning ascribed to them under the Securities Regulations promulgated under the Securities Law (herein the "Securities Regulations"), and if not applicable, the meaning ascribed to them under any other applicable law - in all cases if the meaning set forth therein does not contradict the purpose or the context of the relevant provision.

2. Words importing the singular shall include the plural, and vice-versa. Words importing the masculine gender shall include the feminine gender; and words importing persons shall include corporate bodies.

Any provision or part thereof of these Articles, prohibited by applicable law, shall be ineffective, without invalidating any other part of these Articles.

Articles 3,4,5,6 and 7 of these Articles shall be deemed to be the Memorandum of Association of the Company.

NAME OF THE COMPANY

3. The name of the Company is Nova Ltd.

PURPOSE

4. The purposes of the Company shall be to engage in the types of pursuits specified below:

4.1. To invent, design, plan, develop, manufacture, market and trade in the field of measuring instruments in electronics, micro-electronics, medicine, chemistry, metallurgy, ceramics, and any other field.

4.2. To initiate, participate, manage, execute, import and export any kind of project within the boarders of the State of Israel and/or outside Israel.

4.3. To register patents, trademarks, trade names, intellectual property rights marketing rights and any other right of any kind whatsoever, both in Israel and abroad.

4.4. To engage in any legal activity, both in Israel and abroad.

All purposes above shall be in addition to one another and none shall derogate from the other.

4A. The Company's headquarters shall be located in Israel, unless the Board shall otherwise resolve, by a resolution approved by at least 75% of the members of the Board then in office.

PUBLIC COMPANY

5. The Company is a public company pursuant to the Companies Law.

LIMITED LIABILITY

6. The liability of each Shareholder for the Company's debts is limited to the full payment of the original issue price of the shares first allotted to such Shareholder or his predecessors. Once such price is paid by the original owner of shares, there is no further liability of the holder and such holder's transferees for the Company's debts.

CAPITAL, SHARES AND RIGHTS

7. The registered share capital of the Company shall consist of 60,000,000 (sixty million) Ordinary Shares with no par value.

8. All issued and outstanding shares of the Company of the same class are of equal rights between them for all intents and purposes concerning the rights set forth below.

9. Each issued Ordinary Share entitles its holder to the rights as described below:

   9.1. The equal right to participate in and vote at the Company's general meetings, whether ordinary meetings or special meetings, and each of the shares in the Company shall entitle the holder thereof, who is present at the meeting and participating in the vote, whether in person, or by proxy, to one vote.

   9.2. The equal right to participate in any Distribution.

   9.3. The equal right to participate in the distribution of assets available for distribution in the event of liquidation of the Company.

10. If two or more persons are registered as joint holders of any shares, any one of such persons may give effectual receipts for any dividend or other monies in respect of such share and his or her confirmation will bind all holders of such share.

11. [Reserved].

12. A Shareholder shall not be entitled to rights as a Shareholder, including the right to dividends, unless said Shareholder fully paid all sums in accordance with the conditions of the allocation, including interest, linkage and expenses, if any, and all unless otherwise determined in the conditions of the allocation.

SHARE CERTIFICATES

13. A shareholder who is registered in the Register is entitled to receive from the Company, without payment and at such shareholder's request, within a period of three months after the allocation or registration of the transfer, one share certificate with respect to all the shares registered in his name, which shall specify the aggregate number of the shares held by such shareholder. In the event of a jointly held share, the Company shall issue one share certificate for all the joint holders of the share, and the delivery of such certificate to one of the joint holders shall be deemed to be delivery to all of them. Every certificate shall bear the Company's seal or a facsimile copy thereof and be signed by two Office Holders of the Company, or one director and the Company's secretary or by any other person appointed by the Board for such purpose.

14. The Company may issue a new certificate *in lieu of* a certificate that was issued and was lost, defaced, or destroyed, on the basis of such proof and guarantees as the Company may require, and after payment of an amount that shall be prescribed by the Company, and the Company may also replace existing certificates with new certificates, free of charge, subject to such conditions as the Company shall stipulate.

REGISTERED HOLDER

15. Except as otherwise provided in these Articles, the Company shall be entitled to treat the registered holder of any share as the absolute owner thereof, and, accordingly, shall not, except as ordered by a court of competent jurisdiction, or as required by statute, be bound to recognize any equitable or other claim to, or interest in such share on the part of any other person.

16. To the extent required by the Law a trustee must inform the Company of the fact that such trustee is holding shares of the Company in trust for another person at such time as may be required by the Law. The Company shall register that fact in the Register in respect of such shares. The trustee shall be deemed to be the sole holder of said shares.

TRANSFER OF SHARES

17. Subject to the Statutes, and subject to any applicable agreements or undertakings of any specific shareholder, the shares shall be freely transferable.

18. Transfer of registered shares shall be made in writing or any other manner, in a form specified by the Board or the transfer agent appointed by the Company, and such transfer form should be signed by both the transferee and the transferor and delivered to the Office or to such transfer agent, together with the certificates of the shares due to be transferred, if such certificates have been issued. The transferee shall be deemed to be the shareholder with respect to the transferred shares only from the date of registration of his name in the Register.

19. The Board may close the Register and suspend the registration of transfers for such period of time as the Board shall deem fit, provided that the period of closure of any such book shall not exceed 30 days each year. The Company shall notify the shareholders of such decision.

TRANSMISSION OF SHARES

20. In the case of the death, liquidation, bankruptcy, dissolution, winding-up or a similar occurrence of a Shareholder, the legal successors of such Shareholder shall be the only persons recognized by the Company as having any title to such shares, but nothing herein contained shall release the estate of the predecessor from any liability in respect of such shares.

21. The legal successors may, upon producing such evidence of title as the Board shall require, be registered themselves as holders of the shares, or subject to the provisions as to transfers herein contained, transfer the same to some other person.

ALTERATIONS OF THE REGISTERED CAPITAL

22. (a) Subject to the Statutes, a general meeting of shareholders may from time to time resolve to:

(1) Alter or add classes of shares that shall constitute the Company's authorized capital, including shares with preference rights, deferred rights, conversion rights or any other special rights or limitations.

(2) Increase the Company's registered share capital by creating new shares either of an existing class or of a new class.

(3) Consolidate and/or split all or any of its share capital.

(4) Cancel any registered shares not yet allocated, provided that the Company has made no commitment to allocate such shares.

(5) Reduce the Company’s share capital and any reserved fund for redemption of capital.

(b) In executing any resolution adopted according to Article 22(a) above, the Board may, at its discretion, resolve any related issues.

(c) If as a result of a consolidation or split of shares authorized under these Articles, fractions of a Share will stand to the credit of any Shareholder, the Board is authorized at its discretion, to act as follows:

(1) Determine that fractions of shares that do not entitle their owners to a whole Share, will be sold by the Company and that the consideration for the sale be paid to the beneficiaries, on terms the Board may determine;

(2) Allot to every Shareholder, who holds a fraction of a Share resulting from a consolidation and/or split, shares of the class that existed prior to the consolidation and/or split, in a quantity that, when consolidated with the fraction, will constitute a whole Share, and such allotment will be considered valid immediately prior to the consolidation or split;

(3) Determine the manner for paying the amounts to be paid for shares allotted in accordance with Article 22(c)(2) above, including on account of bonus shares; and/or

(4) Determine that the owners of fractions of shares will not be entitled to receive a whole Share in respect of a Share fraction.

23. Except as otherwise provided by or pursuant to these Articles or by the conditions of issue, any new share capital shall be considered as part of the original share capital, and shall be subject to the same provisions of these Articles with reference to payment of calls, lien, transfer, transmission, forfeiture and otherwise, which applies to the original share capital.

MODIFICATION OF CLASS RIGHTS

24. If at any time the share capital is divided into different classes of shares, any change to the rights and privileges of the holders of any such class of shares shall require the approval of a Class Meeting of such class of shares by a Simple Majority (unless otherwise provided by the Statutes or by the terms of issue of the shares of that class).

25. The rights and privileges of the holders of any class of shares shall not be deemed to have been altered by creating or issuing shares of any class, including a new class (unless otherwise provided by the terms of issue of the shares of that class).

BORROWING POWERS

26. The Company may, by resolution of the Board, from time to time, raise or borrow or secure the payment of any sum or sums of money for the purposes of the Company. The Company, by resolution of the Board, may also raise or secure the payment or repayment of such sum or sums in such manner and upon such terms and conditions in all respects as it deems fit, and in particular by the issue of debentures or debenture stock of the Company charged upon all or any part of the property of the Company (both present and future) including its unissued and/or its uncalled capital for the time being. Issuance of any series of debentures shall require Board approval.

GENERAL MEETINGS

27. Annual general meetings shall be held at least once a calendar year, at such place and time as determined by the Board, but not later than fifteen (15) months after the last annual general meeting. Such general meetings shall be called "Annual Meetings" and all other general meetings of the Company shall be called "Special Meetings". The Annual Meeting shall review the Company's financial statements and shall transact any other business required pursuant to these Articles or to the Law, and any other matter as shall be determined by the Board. Annual Meetings and Special Meetings shall be convened in Israel, unless the Company's headquarters shall have been transferred to another country in accordance with the provisions of these Articles.

28. The Board may convene a Special Meeting by its resolution, and is required to convene a Special Meeting should it receive a request, in writing, from a person or persons entitled, under the Companies Law, to request such meeting.

    Any request for convening a meeting must specify the purposes for which the meeting is to be called, shall be signed by the persons requesting the meeting, and shall be delivered to the Company's registered offices.

29. In addition, subject to the Law, the Board may accept a request of a shareholder holding not less than 1% of the voting rights at the general meeting to include a subject in the agenda of a general meeting, provided that such subject is a proper subject for action by shareholders under the Law and these Articles and only if the request also sets forth: (a) the name and address of the Shareholder making the request; (b) a representation that the Shareholder is a holder of record of shares of the Company, holding not less than 1% of the voting rights at the general meeting and intends to appear in person or by proxy at the meeting; (c) a description of all arrangements or understandings between the Shareholder and any other person or persons (naming such person or persons) in connection with the subject which is requested to be included in the agenda; and (d) a declaration that all the information that is required under the Law and any other applicable law to be provided to the Company in connection with such subject, if any, has been provided. In addition, if such subject includes a nomination to the Board in accordance with the Articles, the request shall also set forth the consent of each nominee to serve as a director of the Company if so elected and a declaration signed by each nominee declaring that there is no limitation under the Law for the appointment of such nominee. Furthermore, the Board, may, in its discretion to the extent it deems necessary, request that the Shareholders making the request provide additional information necessary so as to include a subject in the agenda of a general meeting, as the Board may reasonably require.

30. Subject to applicable law, the Board shall determine the agenda of any general meeting.

Notice of General Meetings

31. Unless otherwise required by the Law and these Articles, the Company is not required to give notice under section 69 of the Companies Law.

PROCEEDINGS AT GENERAL MEETINGS

Quorum

32. No business shall be transacted at any general meeting of the Company unless a quorum of Shareholders is present at the opening of the Meeting.

Except as provided in the following Article with regard to an adjourned Meeting, the quorum for any general meeting shall be the presence of at least two Shareholders in person or by proxy (including by voting deed) holding 33 1/3% or more of the voting rights in the Company. For this purpose, abstaining shareholders shall be deemed present at the Meeting.

33. If within half an hour from the time appointed for the holding of a general meeting a quorum is not present, the general meeting shall stand adjourned one day thereafter at the same time and place or to such other day, time and place as the Board may indicate in a notice to the Shareholders. At such adjourned Meeting any number of Shareholders shall constitute a quorum for the business for which the original Meeting was called.

Chairman of the General Meeting

34. The Chairman shall preside as the chairman at every general meeting, but if there shall be no such Chairman or if at any meeting the Chairman shall not be present within fifteen (15) minutes after the time appointed for holding the same, or shall be unwilling to act as chairman, then the Board members present at the meeting shall choose one of the Board members as chairman of the meeting and if they shall not do so then the Shareholders present shall choose a Board member, or if no Board member be present or if all the Board members present decline to take the chair, they shall choose any other person present to be chairman of the meeting.

35. The chairman may, with the consent of a general meeting at which a quorum is present, and shall if so directed by the general meeting, adjourn any meeting, discussion or the resolution with respect to a matter that is on the agenda, from time to time and from place to place as the meeting shall determine. Except as may be required by the Law, no Shareholder shall be entitled to any notice of an adjournment or of the business to be transacted at an adjourned meeting. No business shall be transacted at any adjourned meeting other than the business which might have been transacted at the meeting from which the adjournment took place.

36. A vote in respect of the election of the chairman of the meeting or regarding a resolution to adjourn the meeting shall be carried out immediately. All other matters shall be voted upon during the meeting at such time and order as decided by the chairman.

VOTE OF SHAREHOLDERS

37. All resolutions proposed at any general meeting will require a Simple Majority, unless otherwise required by the Statutes or these Articles. Except as otherwise required by the Statues or these Articles, alteration or amendment of these Articles shall require a Simple Majority. Notwithstanding anything in these Articles to the contrary, the provisions of Articles 4A, 27 (last sentence), 37, 50, 60(i) and 94 may only be amended by a resolution at the general meeting of the Company, provided however, that such amendment was also approved by a resolution of at least 75% of the members of the Board then in office, at a session of the Board which has taken place prior to the general meeting.

38. A declaration by the chairman of the meeting that a resolution has been carried, or has been carried unanimously or by a particular majority, or rejected, or not carried by a particular majority and an entry to that effect in the minutes of the meeting shall be *prima facie* evidence thereof.

39. The chairman of the meeting will not have a second and/or a casting vote. If the vote is tied with regard to a certain proposed resolution such proposal shall be deemed rejected.

40. If two or more persons are jointly entitled to a share, the vote of the senior one who tenders a vote, whether in person or by proxy, shall be accepted to the exclusion of the votes of the other registered holders of the share, and for this purpose seniority shall be determined by the order in which the names stand in the Register.

41. A proxy need not be a Shareholder of the Company.

42. The instrument appointing a proxy shall be in writing signed by the appointer or of his attorney-in-fact duly authorized in writing. A corporate entity shall vote by a representative duly appointed in writing by such entity.

Any instrument appointing a proxy or a representative of a corporate entity (whether for a specified meeting or otherwise) shall be in a form satisfactory to the Company.

43. Unless otherwise determined by the Board, the instrument of appointment must be submitted to the Office no later than 48 hours prior to the first general meeting to be attended by such proxy or representative. The instrument of appointment shall automatically terminate and cease to be of any force or affect on the anniversary (12 months) of the date of the instrument of appointment, unless such instrument sets out a different expiry date.

44. A proxy may be appointed in respect of only some of the shares held by a Shareholder, and a Shareholder may appoint more than one proxy, each empowered to vote by virtue of a portion of the shares.

45. A Shareholder being of unsound mind or pronounced to be unfit to vote by a competent court of law may vote through a legally appointed guardian or any other representative appointed by a court of law to vote on behalf of such Shareholder.

46. A Shareholder entitled to vote may signify in writing his approval of, or dissent from, or may abstain from any resolution included in a proxy instrument furnished by the Company. A proxy instrument may include resolutions pertaining to such issues which are permitted to be included in a proxy instrument according to the Statutes, and such other issues which the Board may decide, in a certain instance or in general, to allow voting through a proxy. A Shareholder voting through a proxy instrument shall be taken into account in determining the presence of a quorum as if such Shareholder is present at the meeting.

47. The chairman of the general meeting shall be responsible for recording the minutes of the general meeting and any resolution adopted.

48. The provisions of these Articles relating to general meetings shall, mutatis mutandis, apply to Class Meetings.

DIRECTORS

Powers, Number of Directors, Composition & Election

49. The Board shall have and execute all powers and/or responsibilities allocated to the Board by the Statutes and these Articles, including setting the Company's policies and supervision over the execution of the powers and responsibilities of the CEO. The Board may execute any power of the Company that is not specifically allocated by the Statutes or by these Articles to another organ of the Company.

50. The number of directors on the Board shall be no less than five (5) but no more than nine (9) and, to the extent required under applicable law, shall include at least two External Directors. The majority of the members of the Board shall be residents of Israel, unless the Company's headquarters shall have been transferred to another country in accordance with the provisions of these Articles.

51. The directors of the Company shall be elected at each Annual Meeting by a Simple Majority and shall hold office until the end of the next Annual Meeting and so long as an Annual Meeting is not convened, unless their office is vacated prior thereto in accordance with the provisions of these Articles and the Law. This Article shall not apply to the election and tenure of External Directors, in respect of whom the provisions of the Law shall apply.

52. As long as the number of directors serving on the Board is less than the maximal number of directors under Article 50, the Board can act to appoint directors to the Board.

53. Should a director cease serving the remaining directors may continue to act, provided that their number shall be not less than the minimal number of directors mentioned under Article 50

above. In the event the number of directors is less than the minimal number, the directors can act to appoint directors so the number of directors in office shall be equal to or higher than the minimal number mentioned under Article 50 above or alternatively can act to call a Special Meeting to elect directors.

54. The appointment of a director by the Board shall be in effect until the next Annual Meeting or until he or she shall cease serving in office pursuant to the provisions of these Articles.

55. The term of office of a director shall commence on the date of such director's election by the general meeting or by the Board or on a later date, should such date be determined in the resolution of appointment of the general meeting or of the Board.

Remuneration

56. The Company shall determine the remuneration of the directors, if any, in accordance with the Law.

Chairman of the Board

57. The Board shall appoint one of its members to serve as the Chairman and may replace the Chairman from time to time. The Chairman shall preside at meetings of the Board, but if at any meeting the Chairman is not present within fifteen (15) minutes after the time appointed for holding the meeting, the present directors shall choose a present director to be chairman of such meeting.

PROCEEDINGS OF THE DIRECTORS

58. The directors shall meet together for the dispatch of business, adjourn and otherwise regulate their meetings as they deem fit, subject to these Articles.

Unless otherwise determined by the Board, written notice of any meeting of the Board and the agenda setting out the matters to be discussed at such meeting, shall be given to all directors at least seventy two (72) hours (or such shorter notice as all the directors may agree) before the meeting. In urgent cases, a majority of the members of the Board may decide to hold a meeting without such notice.

Quorum

59. No business shall be transacted at any meeting of the Board unless a quorum of directors is present when a meeting is called to order. A quorum shall be deemed to exist when there are present personally or represented by an alternate director at least half of the directors then in office.

If a quorum is not present at the meeting of the Board within half an hour after the time scheduled for the meeting, the meeting may be adjourned to another time as shall be decided by the Chairman, or in his absence, the directors present at the meeting, provided that notice of twenty four (24) hours in advance shall be given to all the directors of the time of the adjourned meeting. The quorum for the commencement of the adjourned meeting shall be three members of the Board.

Methods of Attending Meetings

60. (i) A majority of the sessions of the Board (not including sessions held by use of means of communication) each year, but not less than four (4) sessions each year, shall be convened in Israel, unless the Company's headquarters shall have been transferred to another country in accordance with the provisions of these Articles; (ii) without derogating from sub-section (i) of this Article, some or all of the directors may attend meetings of the Board through computer network, telephone or any other media of communication, enabling the directors to communicate with each other, in the deemed presence of all of them, provided that due prior notice detailing the time and manner of holding a given meeting is served upon all the directors. The directors may waive the necessity of such notice either beforehand or retrospectively.

Any resolution adopted by the Board in such a meeting, pursuant to the provisions of these Articles, will be recorded in writing and signed by the Chairman (or in his absence by the chairman of the meeting), and shall be valid as if adopted at a meeting of the Board duly convened and held.

61. A resolution in writing signed by all of the directors eligible to participate in the discussion and vote on such resolution, or in respect of which all such directors have agreed (in writing by mail, fax or electronic mail) not to convene, shall be as valid and effective for all purposes as if passed at a meeting of the Board duly convened and held.

Any such resolution may consist of several counterparts, each signed by one or more directors. Such resolution in writing shall be effective as of the last date appearing on the resolution, or if the resolution is signed in two or more counterparts, as of the last date appearing on the counterparts.

62. While exercising his/her voting right, each director shall have one vote. Resolutions of the Board will be decided by a simple majority of the directors present and voting, not taking into consideration abstaining votes, except as otherwise provided in these Articles or by the Statutes. In the event the vote is tied, the Chairman of the Board shall not have a casting vote, and such resolution shall be deemed rejected.

Alternate Director

63. Subject to the Law, a director shall be entitled at any time and from time to time to appoint in writing any person who is qualified to serve as a director, to act as his/her alternate and to terminate the appointment of such person. The appointment of an alternate director does not negate the responsibility of the appointing director and such responsibility shall continue to apply to such appointing director - taking into account the circumstances of the appointment.

Alternate directors shall be entitled, while holding office, to receive notices of meetings of the Board and to attend and vote as a director at any meetings at which the appointing director is not present and generally to exercise all the powers, rights, duties and authorities and to perform all functions of the appointing director.

The document appointing an alternate director must be submitted to the Chairman of the Board at least 48 hours before the opening of the first Board meeting to be attended by such alternate director.

Committees

64. The Board may set up committees and appoint members to these committees subject to the Statutes. A resolution passed or an act done by such a committee pursuant to an authority granted to such committee by the Board shall be treated as a resolution passed or act done by the Board, unless expressly otherwise prescribed by the Board or the Statutes for a particular matter or in respect of a particular committee.

65. Meetings of committees and proceedings thereat (including the convening of the meetings, the election of the chairman and the votes) shall be governed by the provisions herein contained for regulating the meetings and proceedings of the Board so far as the same are applicable thereto and unless otherwise determined by the Board, including by an adoption of a charter governing the committee proceedings.

66. *[Reserved]*

Records & Validity of Acts

67. The resolutions of the Board shall be recorded in the Company's Minutes Book, as required under the Statutes, signed by the Chairman or the chairman of a certain meeting. Such signed minutes shall be deemed *prima facie* evidence of the meeting and the resolutions resolved therein.

68. All acts done bona fide by any meeting of the Board or of a committee of the Board or by any person acting as a director, shall, notwithstanding it be afterwards discovered that there was some defect in the appointment of any such director or person acting as aforesaid, or that they or any of them were disqualified, be as valid as if every such person had been duly appointed and was qualified to be a director.

Chief Executive Officer

69. The Board shall appoint at least one CEO, for such period and upon such terms as the Board deems fit.

70. The CEO shall have all managing and execution powers within the policies and guidelines set forth by the Board, and shall be under the supervision of the Board. The CEO may delegate any of his powers to his subordinates, subject to the approval of the Board; (ii)

INSURANCE, EXCULPATION, AND INDEMNITY

Insurance of Office Holders

71. The Company may insure the liability of an Office Holder, to the fullest extent permitted under the Statutes.

72. Without derogating from the aforesaid, the Company may enter into a contract to insure the liability of an officer therein for an obligation imposed on him in consequence of an act done in his capacity as an Office Holder, in any of the following cases:

72.1. A breach of the duty of care vis-a-vis the Company or vis-a-vis another person;

72.2. A breach of the fiduciary duty vis-a-vis the Company, provided that the Office Holder acted in good faith and had a reasonable basis to believe that the act would not harm the Company, or in connection with a financial sanction;

72.3. A monetary obligation imposed on him in favor of another person;

72.4. Any other matter in respect of which it is permitted or will be permitted under applicable law to insure the liability of an Office Holder in the Company, including, without limitation, matters referenced in Section 56H(b)(1) of the Securities Law.

Indemnity of Office Holders

73. The Company may indemnify an Office Holder, to the fullest extent permitted under the Statutes. Without derogating from the aforesaid, the Company may indemnify an Office Holder for a liability or expense imposed on him in consequence of an act done in his capacity as an Office Holder in the Company, as follows:

73.1. A monetary obligation imposed on him or incurred by him in favor of another person pursuant to a judgment, including a judgment given in settlement or a court approved settlement or arbitrator's award;

73.2. Reasonable legal fees, including attorney's fees, incurred by an Office Holder in consequence of an investigation or proceeding filed against him by an authority that is authorized to conduct such investigation or proceeding, provided that such investigation or proceeding (i) concludes without the filing of an indictment against the Office Holder or (ii) concluded with the imposition of a monetary payment on the Office Holder in lieu of criminal proceedings, but the criminal offense in question does not require the proof of criminal intent, all within the meaning of the Law.

73.3. Reasonable litigation costs, including attorney's fees, incurred by an Office Holder or which he is ordered to pay by a court, in proceedings filed against him by the Company or on its behalf or by another person, or in a criminal charge of which he is acquitted, or in a criminal charge of which he is convicted of an offence that does not require proof of criminal intent.

73.4. Any other obligation or expense in respect of which it is permitted or will be permitted under the Statutes to indemnify an Office Holder, including, without limitation, matters referenced in Section 56H(b)(1) of the Securities Law.

Advance Indemnity

74. The Company may give an advance undertaking to indemnify an Office Holder therein in respect of the following matters:

74.1. Matters as detailed in Article 73.1, provided however, that the undertaking is restricted to events, which in the opinion of the Board, are anticipated in light of the Company's activities at the time of granting the obligation to indemnify and is limited to a sum or measurement determined by the Board as reasonable under the circumstances. The indemnification undertaking shall specify such events and sum or measurement.

74.2. Matters as detailed in Articles 73.2, 73.3 and 73.4.

Retroactive Indemnity

75. The Company may indemnify an Office Holder retroactively with respect of the matters as detailed in Article 73, subject to any applicable law.

Exculpation

76. The Company may exempt an Office Holder in advance for all or any of his liability for damage in consequence of a breach of the duty of care vis-a-vis the Company, to the fullest extent permitted under the Statutes. However, the Company may not exempt a director in advance from his liability toward the Company due to the breach of his duty of care in the event of a Distribution, as defined in the Statutes.

Insurance, Exculpation and Indemnity - General

77. The above provisions with regard to insurance, exemption and indemnity are not and shall not limit the Company in any way with regard to its entering into an insurance contract and/or with regard to the grant of indemnity and/or exemption in connection with a person who is not an Office Holder of the Company, including employees, contractors or consultants of the Company, all subject to any applicable law.

78. Articles 71 through 76 shall apply mutatis mutandis in respect of the grant of insurance, exemption and/or indemnification for persons serving on behalf of the Company as Office Holders in companies controlled by the Company, or in which the Company has an interest.

79. An undertaking to insure, exempt and indemnify an Office Holder in the Company as set forth above shall remain in full force and effect even following the termination of such Office Holder's service with the Company.

APPOINTMENT OF AN AUDITOR

80. Subject to the Statutes, the Annual Meeting shall appoint an Auditor for a period ending at the next Annual Meeting, or for a longer period, but no longer than until the third Annual Meeting after the meeting at which the Auditor has been appointed. The same Auditor may be reappointed.

Subject to the Statutes, the terms of service of the Auditor for the audit services shall be determined by the Board, at its discretion, or a committee of the Board if such determination was delegated to a committee, including undertakings or payments to the Auditor. The Board shall report the fees of the Auditor to the Annual Meeting.

INTERNAL AUDITOR

81. So long as the Company is a public company, the Board shall appoint an Internal Auditor pursuant to the recommendation of the Audit Committee.

82. The organizational superior of the Internal Auditor shall be the Chairman. The Internal Auditor shall submit a proposed annual or periodic work plan to the Audit Committee, which will approve such plan with changes as it deems fit, at its discretion.

MERGER AND REORGANIZATION

83. Notwithstanding the provisions of section 327(a) of the Companies Law, the majority required for the approval of a merger by the general meeting or by a class meeting shall be an ordinary majority of the votes of the shareholders entitled to vote and voting themselves.

SIGNATORIES

84. Signatory rights on behalf of the Company shall be determined from time to time by the Board.

DISTRIBUTIONS

85. The Board may decide on a Distribution, subject to the provisions set forth under the Law and these Articles.

86. The Board will determine the method of payment of any Distribution. The receipt of the person whose name appears on the record date on the Register as the owner of any share, or in the case of joint holders, of any one of such joint holders, shall serve as confirmation with respect to all the payments made in connection with that share and in respect of which the receipt was received. All dividends unclaimed after having been declared may be invested or otherwise used by the Directors for the benefit of the Company until claimed, provided however that the Company shall not be required to accept any claim made following the 7th anniversary of the declaration date, or an earlier date as may be determined by the Board. No unpaid dividend shall bear interest or accrue linkage differentials.

87. For the purpose of implementing any resolution concerning any Distribution, the Board may settle, as it deems fit, any difficulty that may arise with respect to the Distribution, including determining the value for the purpose of the said Distribution of certain assets, and deciding that payments in cash shall be made to the Shareholders based on the value so determined, and determining provisions with respect to fractions of shares or with respect to the non-payment of small sums.

REDEEMABLE SECURITIES

88. The Company shall be entitled to issue redeemable securities which are, or at the option of the Company may be, redeemed on such terms and in such manner as shall be determined by the Board. Redeemable securities shall not constitute part of the Company's capital, except as provided in the Law.

DONATIONS

89. The Company may make donations of reasonable amounts of money for purposes which the Board deems to be worthy causes, even if the donations are not made in relation to business considerations for increasing the Company's profits.

NOTICES

90. Subject to the Statutes, notice or any other document which the Company shall deliver and which it is entitled or required to give pursuant to the provisions of these Articles and/or the Statutes shall be delivered by the Company to any person, in any one of the following manners as the Company may choose: in person, by mail, transmission by fax or by electronic form.

Any notice or other document which shall be sent shall be deemed to have reached its destination on the third day after the day of mailing if sent by registered mail or regular mail, or on the first day after transmission if delivered in person, transmitted by fax or electronic form.

Should it be required to prove delivery, it shall be sufficient to prove that the notice or document sent contains the correct mailing, e-mail, or fax details as registered in the Register or any other address which the Shareholder submitted in writing to the Company as the address and fax or e-mail details for the submission of notices or other documents.

Notwithstanding anything to the contrary contained herein and subject to the provisions of the Statutes, a notice to a Shareholder may be served, as general notice to all Shareholders, in accordance with applicable rules and regulations of any stock market upon which the Company's shares are listed.

In cases where it is necessary to give advance notice of a particular number of days or notice which shall remain in effect for a particular period, the day the notice was sent shall be excluded and the scheduled day of the meeting or the last date of the period shall be included in the count.

Subject to the Statutes, the Company shall not be required to send notices to any Shareholder who is not registered in the Register or has not provided the Company with accurate and sufficient mailing details.

91. Any notice to be given to the Shareholders shall be given, with respect to joint shareholders, to the person whose name appears first in the Register as the holder of the said share, and any notice so given shall be sufficient notice for all holders of the said share.

92. Any notice or other document served upon or sent to any Shareholder in accordance with these Articles shall, notwithstanding that he be then deceased or bankrupt, and whether the Company received notice of his death or bankruptcy or not, be deemed to be duly served or sent in respect of any shares held by him (either alone or jointly with others) until some other person is registered in his stead as the holder or joint holder of such shares, and such service or sending shall be a sufficient service or sending on or to his heirs, executors, administrators or assigns and all other persons (if any) interested in such share.

93. The accidental omission to give notice to any Shareholder or the non-receipt of any such notice shall not cancel or annul any action made in reliance on the notice.

JURISDICTION

94. (a) Unless the Company consents in writing to the selection of an alternative forum, with respect to any causes of action arising under the U.S. Securities Act of 1933 as amended, against any person or entity, including such claims brought against the Company, its directors, officers, employees, advisors, attorneys, accountants or underwriters, the federal district courts of the United States of America shall be the exclusive forum for the resolution of any complaint asserting a cause of action arising under the U.S. Securities Act of 1933, as amended; and (b) unless the Company consents in writing to the selection of an alternative forum, the competent courts in Tel Aviv, Israel shall be the exclusive forum for (i) any derivative action or proceeding brought on behalf of the Company, (ii) any action asserting a claim of breach of a fiduciary duty owed by any director, officer or other employee of the Company to the Company or the Company's shareholders, or (iii) any action asserting a claim arising pursuant to any provision of the Companies Law or the Securities Law. Any person or entity purchasing or otherwise acquiring or holding any interest in shares of the Company shall be deemed to have notice of and consented to these provisions. This Article 94 shall not apply to causes of action arising under the U.S. Exchange Act of 1934, as amended.

Exhibit 2.1

Description of Securities

Nova Ltd., an Israeli corporation (the "Company," "we," or "our"), currently has one class of securities registered under Section 12 of the Securities Exchange Act of 1934, as amended, the Company's ordinary shares. The following is a summary of some of the terms of our ordinary shares based on our articles of association, as may be amended and restated from time to time, and Israeli law.

The following summary is not complete and is subject to, and is qualified in its entirety by reference to, the provisions of our articles of association and Israeli law.

Name of exchange on which registered: Our ordinary shares began trading on Nasdaq on April 11, 2000 under the symbol "NVMI". Our ordinary shares were registered for trading on the Tel Aviv Stock Exchange Ltd. in 2002 under the symbol "נובה".

Restrictions on Securities: The ownership or voting of ordinary shares by non-residents of Israel is not restricted in any way by our articles of association or the laws of the State of Israel, except for anti-terror legislation and except that citizens of countries which are in a state of war with Israel may not be recognized as owners of ordinary shares.

Registration.

The Company was incepted and registered with the Israeli Registrar of Companies on May 17, 1993, under registration number 51-181-246-3.

Purpose of the Company. The purposes of the Company, as provided by Article 4 of our Articles, are (a) to invent, design, plan, develop, manufacture, market and trade in the field of measuring instruments in electronics, micro-electronics, medicine, chemistry, metallurgy, ceramics and any other field, (b) to initiate, participate, manage, execute, import and export any kind of project within the borders of the State of Israel and/or outside Israel, (c) to register patents, trademarks, trade names, intellectual property rights, marketing rights and any other right of any kind whatsoever, both in Israel and abroad and (d) to engage in any legal activity, both in Israel and abroad.

Share Capital.

Our authorized share capital consists of 60,000,000 ordinary shares. All of our issued and outstanding shares are validly issued, fully paid and non-assessable. Our ordinary shares are not redeemable and do not have any preemptive rights.

The Company currently has one class of ordinary shares. The Articles provide that the board of directors may decide on a distribution, subject to the provisions set forth under the Israeli Companies Law, 5759-1999 (the "Companies Law") and the Articles. Under the Companies Law, dividends may be paid out of net earnings, as calculated under that law, for the two years preceding the distribution of the dividend and retained earnings, provided that there is no reasonable concern that the dividend will prevent the company from satisfying its existing and foreseeable obligations as they become due. For more information, see the Company's balance sheet and the statement of shareholders' equity in the financial statements.

Each ordinary share entitles its holder to the following rights:

- the equal right to participate in and vote at general meetings of the shareholders, and each share entitles its holder thereof, who is present and participating in the vote, whether in person or by proxy, to one vote;
- the equal right to participate in any distribution; and
- the equal right to participate in the distribution of assets available for distribution in the event of liquidation of the company.

Transferring Shares

According to the Articles, our shares may be freely transferred, unless the transfer is restricted or prohibited by another agreement, undertaking or any applicable law.

Changes of Rights of Holders of the Shares.

According to the Articles, any change in the rights and privileges of the holders of any class of shares requires the approval of a class meeting of such class of shares by a simple majority (unless otherwise provided by the Companies Law or the regulations thereto or by the terms of issue of the shares of that class).

Amendments to the Articles of Association.

Our Articles may be amended by a simple majority vote of our shareholders. The amendment of certain provisions requires however the approval of at least 75% of the members of our board of directors to be obtained prior to the approval of our shareholders. These provisions provide that (i) the Company's headquarters be located in Israel; (ii) our company's annual and special meetings of the shareholders be convened in Israel, and that a majority, and not less than four, of the Company's board of director sessions be convened in Israel; (iii) a majority of the members of our board of directors must be residents of Israel; and (iv) unless otherwise consented to in writing by us, the courts of the State of Israel will be the sole and exclusive forum for (a) any derivative action or proceeding on behalf of our company, (b) any action related to claims of breach of a fiduciary duty or other wrongdoing by a director, officer of other employee of our company; (c) any action arising pursuant to any provisions of the Companies Law or the Articles; or (d) any action to interpret, apply, enforce or determine the validity of the Articles.

Shareholders Meetings.

An annual meeting should be convened at least once every calendar year, and no later than 15 months after the preceding annual meeting, to review the Company's financial statements and to transact any other business required pursuant to the Articles or to the Companies Law, and any other matter which the board of directors places on the agenda of the annual meeting, at a time and place that the board of directors will determine. A special meeting may be called by the board of directors and at the demand of any of the following: two directors or one-quarter of the directors then serving; one or more shareholders who hold at least five percent of the issued and outstanding capital stock and at least one percent of the voting rights in the Company; or one or more shareholders who hold at least five percent of the voting rights in the Company.

According to the Articles, the quorum required for an ordinary meeting of shareholders is at least two shareholders present in person or by proxy who together hold or represent in the aggregate 33 1/3 % or more of the voting power. A meeting adjourned for lack of a quorum is reconvened one day thereafter at the same time and place or to such other day, time and place as our board of directors may indicate in a notice to the shareholders. At the reconvened meeting, the required quorum consists of any number of members present in person or by proxy, regardless of the number of shares represented. The Companies Law and regulations determine that prior notice of no less than 21 days should be given to the company's shareholders, prior to convening a meeting. In the event that the issue to be resolved is an issue subject to the Israeli proxy rules, a notice of no less than 35 days should be given to the company's shareholders. In some cases, a prior notice of not less than 14 days may be given to the company's shareholders.

Changes in Capital.

Our share capital may be increased or decreased by a vote of our shareholders in accordance with the Companies Law, either by creating new shares of an existing class or of a new class. Furthermore, and subject to applicable law, our shareholders may resolve to make the following changes to our share capital:

- alter or add classes of shares, including shares with preference rights, deferred rights, conversion rights or any other special rights or limitations;
- consolidate and/or split all or any of its share capital into shares of larger or smaller par value than the existing shares;
- cancel any registered shares not yet allocated, provided we have made no commitment to allocate such shares; and
- reduce our share capital and any reserved fund for redemption of capital.

Modification of Rights

According to our Articles, if our share capital is divided into different classes of shares, any change to the rights and privileges of the holders of such class will require the approval of a meeting of such class of shares by a simple majority vote.

Borrowing Powers

Pursuant to the Companies Law and our articles of association, our board of directors may exercise all powers and take all actions that are not required under law or under our articles of association to be exercised or taken by a certain organ of the Company, including the power to borrow money for company purposes.

Acquisition of a Controlling Stake.

According to the Companies Law, an acquisition pursuant to which a purchaser will hold a "controlling stake", that is defined as 25% or more of the voting rights if no other shareholder holds a controlling stake, or an acquisition pursuant to which such purchaser will hold more than 45% of the voting rights of the company if no other shareholder owns more than 45% of the voting rights, may not be performed by way of market accumulation, but only by way of a special tender offer (as defined in the Companies Law) made to all of the company's shareholders on a pro rata basis. A special tender offer may not be consummated unless a majority of the shareholders who announced their stand on such offer have accepted it (in counting the total votes of such shareholders, shares held by the controlling shareholders, shareholders who have personal interest in the offer, shareholders who own 25% or more of the voting rights in the company, relatives or representatives of any of the above or the bidder and corporations under their control, shall not be taken into account). A shareholder may be free to object to such an offer without such objection being deemed as a waiver of his right to sell its respective shares if the transaction is approved by a majority of the company's shareholders despite his objection. Shares purchased not in accordance with those provisions will become "dormant shares" and will not grant the purchaser any rights so long as they are held by the purchaser.

Acquisition.

A person wishing to acquire shares or a class of shares of an Israeli public company and who would, as a result, own more than 90% of the target company's issued and outstanding share capital or of certain class of its shares, is required by the Companies Law to make a full tender offer (as defined in the Companies Law) to all of the company's shareholders for the purchase of all of the issued and outstanding shares of the company or class of shares. If either (i) the shareholders who do not accept the offer hold, in the aggregate, less than 5% of the issued and outstanding share capital of the company or of the applicable class, and more than half of the shareholders who do not have a personal interest in the offer accept the offer, or (ii) the shareholder who do not accept the offer hold less than 2% of the issued and outstanding share capital of the company or of the applicable class, then all of the shares that the acquirer offered to purchase will be transferred to the acquirer by operation of law. However, a shareholder that had its shares so transferred, whether or not it accepted the tender offer (unless otherwise provided in the offering memorandum), may, within six (6) months from the date of acceptance of the tender offer, petition the court to determine that the tender offer was for less than fair value and that the fair value should be paid as determined by the court. If the shareholders who did not accept the tender offer hold at least 5% of the issued and outstanding share capital of the company or of the applicable class of shares, the acquirer may not acquire shares of the company that will increase its holdings to more than 90% of the company's issued and outstanding share capital or of the applicable class from shareholders who accepted the tender offer.

The Companies Law provides that corporate mergers require the approval of both companies' boards of directors and shareholders. In the event, however, that shares of the target company are held by the acquiring company or by a person holding 25% or more of any type of controlling means of the acquiring company, the merger will not be approved if a majority of the shareholders of the target company attending and voting at the meeting at which the merger is considered (without taking into account, for that purpose, the shares held by the acquiring company or by a person holding 25% or more of any type of controlling means of the acquiring company) object to and do not vote in favor of the merger. If a person holds 25% or more of any type of controlling means of more than one merging company, the same provisions shall apply with regard to the shareholders' vote with respect to each such company. Upon the request of a creditor of either party to the proposed merger, the court may delay or prevent the merger if the court concludes that there exists a reasonable concern that as a result of the merger the surviving company will be unable to satisfy the target company's obligations. Furthermore, a merger may not close unless at least 30 days have passed from the time that the general meeting of each of the merging companies was held and at least 50 days have passed from the date on which the merger proposal was sent to the Israeli Registrar of Companies.

Exhibit 4.4

Date:

Ms.\Mr.

I.D:

Letter of Indemnification

1. The Company hereby undertakes to indemnify you for any obligation imposed on you or expense spent by you as a result of your capacity as an Officer of the Company, as defined under the Israeli Companies Law 5759-1999 (the "Companies Law") (hereinafter: the "Officer"), subject to the applicable law, the Company's Amended and Restated Articles of Association and as follows:

   1.1. A monetary obligation imposed on you or incurred by you in favor of another person pursuant to a judgment, including a judgment given in settlement or a court approved settlement or arbitrator's award, subject to Section 1.6 below.

   1.2. Reasonable litigation expenses, including attorney's fees, incurred by you in consequence of an investigation or proceeding conducted or filed against you by an authority that is authorized to conduct such investigation or proceeding, provided that such investigation or proceeding: (i) concludes without the filing of an indictment against you and without imposition of a monetary liability in lieu of criminal proceedings; (ii) concludes with the imposition of a monetary payment on you in lieu of criminal proceedings, but the criminal offense in question does not require the proof of criminal intent; or (iii) in connection with a monetary sanction.

   1.3. Reasonable litigation expenses, including attorney's fees, incurred by you or which you were obligated to pay by a court, in proceedings filed against you by the Company or on its behalf or by another person, or in a criminal charge of which you were acquitted, or in a criminal charge of which you were convicted of an offense that does not require proof of criminal intent.

   1.4. Any monetary obligation imposed on you in favor of all the injured parties by a breach in an Administrative Procedure, as stated in Section 52(54)(a)(1)(a) to the Securities Law, 5728-1968 (the "Securities Law"). The term "Administrative Procedure" shall have the following meaning: a procedure according to Chapter 8C (Financial Sanctions), 8D (Administrative Enforcement Measures Imposition by the Administrative Enforcement Committee) or 9A (Arrangement for Avoidance from or Cessation of Procedures) to the Securities Law, as amended from time to time.

   1.5. Expenses expended by you with respect to an Administrative Procedure (as defined in Section 1.4 above) relating to you, including reasonable litigation expenses, which include attorneys' fees.

   1.6. With regards to Section 1.1, this obligation to indemnify is limited to the events detailed in Annex A which according to the Board of Directors' opinion, are foreseen in light of the Company's actual activities, and which shall not exceed the Maximum Indemnification Amount, as detailed below in Section 1.7. The Board of Directors has determined that such amounts and criteria set by the Board of Directors are reasonable under the circumstances.

   1.7. The aggregate indemnification amount that the Company will pay to all of its Officers, whether in advance or post factum, under all the indemnification letters that shall be issued by the Company pursuant to this Letter of Indemnification, shall not exceed the greater of (a) twenty-five percent (25%) of the Company's total shareholders' equity according to the Company's most recent financial statements as of the time of the actual payment of indemnification; (b) US$200 million; (c) ten percent (10%) of the Company Total Market Cap (which shall mean the average closing price of the Company's ordinary shares over the 30 trading days prior to the actual payment of indemnification multiplied by the total number of issued and outstanding shares of the Company as of the date of actual payment); and (d) in connection with or arising out of a public offering of the Company's securities, the aggregate amount of proceeds from the sale by the Company and/or any shareholder of Company's securities in such offering (hereinafter the "Maximum Indemnification Amount").

1.8. In the event the indemnification amount the Company is required to pay its Officers, as set forth above, exceeds the Maximum Indemnification Amount or its remaining balance (as existing at that time), the Maximum Indemnification Amount or its remaining balance will be divided among the Officers entitled to indemnification, so that the amount of indemnification each of them will actually receive will be calculated in accordance with the ratio between the amount for which each individual may be indemnified and the aggregate amount for which all the relevant Officers may be indemnified.

1.9. **For the avoidance of doubt, it is hereby clarified that nothing contained in this Letter of Indemnification or in the above resolutions derogate from the Company's right, subject to Board of Directors approval, to indemnify you post factum for any amounts which you may be obligated to pay as set forth in Section 1 above without the limitations set forth in Section 1.7 above. The aforesaid shall however not be construed as an obligation of the Company to indemnify you after the fact.**

2. The Company shall act according to this Letter of Indemnification as detailed above in regards to any other company controlled, directly or indirectly, by the Company (a "Subsidiary") with respect to the periods such other company is a Subsidiary or in your capacity as a director, or observer at board of director meetings, of a company not controlled by the Company but where your appointment as a director or observer results from the Company's holdings in such company ("Affiliate").

3. Notwithstanding the above, in no event will the Company indemnify you for the following events:

3.1. a breach of fiduciary duty, except for a breach of a fiduciary duty to the Company, a Subsidiary or an Affiliate while acting in good faith and having reasonable cause to assume that such act would not harm the Company's interests;

3.2. a reckless or intentional breach of duty of care that was not done negligently;

3.3. an action taken with the intent of making personal gain unlawfully;

3.4. a fine, civil fine, a monetary sanction or forfeit imposed upon you for an offense;

3.5. a counterclaim made by the Company or in its name in connection with a claim against the Company filed by you.

4. The Company will make available all amounts needed in accordance with section 1 above on the date on which such amounts are first payable by you.

5. The Company shall advance to you all expenses incurred by you in connection with a claim on the date on which such amounts are first payable, but has no duty to advance payments within less than fourteen (14) days following delivery of a written request therefor. The foregoing shall not apply in circumstances where the Company shall take upon itself to manage the proceedings as provided herein below.

6. As part of the aforementioned undertaking and subject to Sections 1.1 – 1.5 above, the Company will make available to you any security or guarantee that you may be required to post in accordance with an interim decision given by a court or an arbitrator, including for the purpose of substituting liens imposed on your assets.

7. The Company will indemnify you, in accordance with this Letter of Indemnification, even if at the relevant time of indebtedness you are no longer an Officer of the Company or of a Subsidiary or a director or board observer of an Affiliate, provided that the obligations are in respect of actions taken by you while you were an Officer and/or board observer, as aforesaid, and in such capacity, including if taken prior to the above resolutions.

8. No payment hereunder shall be made to you in connection with any event for which payment is actually paid to you under a valid and collectible insurance policy or under a valid and enforceable indemnity clause or agreement (excluding this Letter of Indemnification), except in respect of any excess beyond the payment under such insurance, clause or agreement.

9. Additionally, it is emphasized that this Letter of Indemnification is not to be construed as an agreement for the benefit of any third party, including any insured party, and it is not transferable, and no insurer will have the right to request that the Company participate in any payment for which the insurer is obligated under any insurance agreement to which it is a party, other than a deductible that is specified in such agreement.

10. Subject to this Letter of Indemnification, the indemnification will, in each case, cover all sums of money (100%) that you will be obligated to pay, in those circumstances for which indemnification is permitted under law and under this Letter of Indemnification.

11. The Company will be entitled to any amount collected from a third party in connection with liabilities indemnified hereunder.

12. Indemnification by the Company as detailed in this Letter of Indemnification will also be subject to fulfilling the following procedures:

    12.1. You will inform the Company of every legal or administrative proceeding that may be brought against you in connection with any event that may entitle you to indemnification, and of every warning made to you in writing, regarding legal or administrative proceedings that may be commenced against you, and this will be done in a timely manner, immediately after you first become aware of such, and you will provide to the Company or to whom the Company will instruct you, all documents in connection with such proceedings.

    Similarly, you must advise the Company on an ongoing and current basis concerning all events which you suspect may give rise to the initiation of legal or administrative proceedings against you.

    12.2. The Company will, within a reasonable period of time (or within a shorter period of time if the matter requires filing a statement of defense or a response to a proceeding), take upon itself the handling of your defense in the legal proceeding and/or entrust such handling to any prominent attorney the Company may select at its discretion for this purpose, subject to the fulfillment of all the following conditions: (a) you have informed the Company as provided in Section 12.1 above; and (b) the legal proceedings against you solely involves a claim for monetary damages. The Company and/or the above-mentioned attorney will be entitled to act within their exclusive discretion to bring the proceeding to a close; the appointed attorney will owe his/her duty of loyalty to the Company and to you. In the event that a conflict of interests arises between you and the Company, the attorney will so inform the Company of any such conflict and you, subject to the Company's approval, which approval not to be unreasonably withheld, will have the right to appoint an attorney on your behalf, and the provisions of this Letter of Indemnification will apply to expenses you may incur as a result of such appointment. If the Company decides to settle or arbitrate a monetary obligation, the Company will be entitled to do so, as long as the lawsuit or the threat of a lawsuit against you will be fully withdrawn. At the request of the Company you will sign any document that will empower the Company and/or attorney as mentioned above, to act on your behalf with regard to your defense in the above-mentioned proceedings and to represent you in all matters relating to these proceedings, as set forth above. Without derogating from the above provision with respect to a conflict of interests, in any event where, on reasonable grounds, the attorney chosen by the Company is unacceptable to you, you shall be entitled to appoint your own attorney and the provisions of this Letter of Indemnification will apply to expenses you may incur as a result, provided, however, that the proposed appointment of such attorney including the identity and terms of engagement of such attorney be brought immediately to the attention of the Company for its *prior* written approval, which approval not to be unreasonably withheld.

12.3. You will cooperate with the Company and/or with any attorneys as set forth above in every reasonable manner required of you by any of them in connection with the handling of such legal proceedings, all subject to this Letter of Indemnification.

12.4. Whether or not the Company acts as specified in Section 12.2 above, the Company will cover all other expenditures and payments that are mentioned in this Letter of Indemnification, so that you will not be required to pay or to finance them yourself.

12.5. Your indemnification in connection with any legal proceeding against you, as set forth in this Letter of Indemnification, will not be enforceable in connection with amounts you may be required to pay as a result of a settlement or arbitration unless the Company agrees in writing to the settlement or to the entering into the arbitration proceeding, as the case may be.

If required by law, the Company's authorized organs will consider the request for indemnification and the amount thereof and will determine if you are entitled to indemnification and the amount thereof.

12.6. If, for any reason, the Company has decided not to appoint an attorney, as detailed in Section 12.2 above, you will have the right to appoint an attorney of your choice, provided that the proposed appointment of such attorney including the identity and terms of engagement of such attorney be brought immediately to the attention of the Company for its prior written approval, which approval not to be unreasonably withheld. If you do not inform the Company regarding your choice of attorney in compliance with the above, the Company will have the right in its discretion to appoint an attorney on your behalf.

13. This Letter of Indemnification is issued after receipt by the Company of all required approvals under law and the Amended and Restated Articles of Association of the Company. Should any additional approval be required, the Company will exert its best effort to obtain such approval.

14. If the Company pays to you, or on your behalf, any amount in connection with a legal proceeding as provided in this Letter of Indemnification, and thereafter it is determined that you are not entitled to such indemnification from the Company as detailed in this Letter of Indemnification, the sums paid by the Company will be considered a loan that was extended to you by the Company, which will be linked to the Consumer Price Index plus interest at the rate established in the Income Tax Regulations (Establishment of Interest Rates) – 1985, as may be in effect from time to time, and you will be required to repay these sums to the Company when requested to do so in writing by the Company and in accordance with a payment schedule that the Company determines.

15. In order to remove any doubt, in the event of death, this Letter of Indemnification will apply to your heirs.

16. No waiver, omission or grant of extension by the Company or by you will be interpreted in any manner as a waiver of rights pursuant to this Letter of Indemnification or under applicable law, and will not prevent either party from taking all legal and other measures in order to enforce such rights.

17. If any undertaking included in this Letter of Indemnification is held invalid or unenforceable, such invalidity or unenforceability will not affect any of the other undertakings which will remain in full force and effect. Furthermore, if such invalid or unenforceable undertaking may be modified or amended so as to be valid and enforceable as a matter of law, such undertakings will be deemed to have been modified or amended, and any competent court or arbitrator are hereby authorized to modify or amend such undertaking, so as to be valid and enforceable to the maximum extent permitted by law. Notwithstanding the above, if this Letter of Indemnification shall be declared or found void for any reason whatsoever then any previous undertaking of the Company for indemnification towards you, which this Letter of Indemnification is intended to replace, shall remain in full force and effect.

18. The terms contained in this Letter of Indemnification will be construed in accordance with the Companies Law, and in the absence of any definition in the Companies Law, pursuant to the Securities Law.

19. This Letter of Indemnification and the agreement herein shall be governed by and construed and enforced in accordance with the laws of the State of Israel. You should be aware, however, that, insofar as indemnification for liabilities arising under the United States Securities Act of 1933, as amended (the "Securities Act") may be permitted to the Officers of the Company, the Company has been advised that in the opinion of the U.S. Securities and Exchange Commission (the "SEC") such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event of a claim for such indemnification (other than the payment by the Company of expenses incurred or paid by an Officer in the successful defense of any action, suit or proceeding), the Company will (in accordance with an undertaking given to the SEC), unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

20. Notwithstanding anything herein to the contrary, the Company shall have no obligation to provide indemnity hereunder if a court of competent jurisdiction determines that such indemnification is not lawful.

21. This Letter of Indemnification will enter into affect upon your signature in the space provided below and return of the signed copy to the Company.

22. This Letter of Indemnification replaces and substitutes any previous undertaking of the Company for indemnification, to the extent granted.

Respectfully,

Eitan Oppenhaim
President & Chief Executive Officer

Dror David
Chief Financial Officer

on behalf of
Nova Ltd.

I accept the terms and conditions of the above. I am aware that my agreement to accept this Letter of Indemnification constitutes my irrevocable agreement that this Letter of Indemnification replaces and substitutes any previous undertaking of the Company for indemnification, to the extent granted to me. Notwithstanding, the above, if this Letter of Indemnification shall be void for any reason whatsoever than any previous undertaking of the Company for indemnification towards me shall remain in force.

_____

Name: _____
Date: _____

Annex A

Subject to any provision of law, the events are as follows:

1. The issuance of securities including, but not limited to the public according to a prospectus, a private offering, sales offering, the issuance of bonus shares, issuance of securities and/or any other manner of security offering and also tender offers for securities, the Company's purchase of its own and it subsidiaries' securities, as well as any action relating to any of the above.

2. A "Transaction" or "Activity" as defined in Article 1 of the Companies Law, including among others a negotiation regarding such Transaction and/or Activity, transfer, sale and/or purchase of assets and/or liabilities, including securities and/or the granting and/or receiving of any right in any of the above, including among others, the acquisition, sale or merger of entities and/or any action connected directly or indirectly with such a Transaction.

3. The filing of a report and/or announcement required by the Companies Law and/or Securities Law, or U.S. Securities Laws, including the regulations pertaining to these laws, and/or according to rules and/or regulations adopted by the Tel-Aviv Stock Exchange or The NASDAQ or any other stock exchange and/or any law of any other country pertaining to these issues and/or the failure to file such a report and/or announcement.

4. Any decision regarding a Distribution, as defined in the Companies Law including a Distribution pursuant to a court order.

5. Preparation of financial statements of the Company and its Subsidiaries and approval of such financials.

6. A change in the Company's structure and/or a reorganization of the Company, including any arrangement between the Company and its shareholders and/or creditors according to the Companies Law, and/or any decision relating to these issues including, but not limited to, a merger, a demerger, a change in the Company's capital, the establishment of subsidiaries and/or their liquidation or sale, and/or all allotments or distributions.

7. Expressions, announcements, statements, including a position taken, and/or an opinion made in good faith by an Officer in the course of and/or in connection with his/her duties, including during negotiations and contracting with suppliers, consultants and consumers and/or during a meeting of the Company's management, Board of Directors and/or one of its committees.

8. An action made in good faith in contradiction to the Memorandum of Incorporation and/or the Amended and Restated Articles of Association.

9. An Action and/or decision relating to employer-employee relations including employment agreements, negotiations regarding employment agreements, salary and/or other employee benefits, including employee stock option plans and/or option distributions to employees.

10. An action and/or decision relating to work safety and/or working conditions and/or employee activities and/or any event relating thereto.

11. An action or decision relating to insurance matters and/or risk management of the Company.

12. Actions relating to the Company's commercial relations, including with employees, outside contractors, customers, suppliers, and service providers.

13. Preparation of work plans, including pricing, marketing, distribution, and instructions to employees, to customers and to suppliers and to cooperative arrangements, including with competitors.

14. Actions relating to product development, to the conduct of product testing, approvals, sales, distribution of licensing in their regard.

15. Decisions and/or actions relating to environmental compliance, including pollution, contamination, and hazardous materials.

16. Granting of liens on Company assets and granting guarantees on behalf of the Company.

17. Compliance with various governmental requirements in Israel and outside Israel, including a Ministry of Defense, Antitrust Authority, Securities Authority, Environmental Compliance Agency and Tax Authorities.

18. Investigations conducted against you by any governmental or quasi-governmental authority.

19. Establishment and management of financial policy, including credit policies, hedging against changes in currency exchange rates and utilization of cash reserves.

20. Actions taken (or alleged omissions) pursuant to or in accordance with the policies and procedures of the Company, its subsidiaries and/or its affiliates, whether such policies and procedures are published or not.

21. Causing damages, including bodily injury and property damage, partial or comprehensive loss, loss of use or disability, during any action or omission relating to the Company, or relating to its employees, agents or others who act or are purported to act on behalf of the Company.

22. An event resulting from the Company being a publicly traded company or due to its shares being issued to the public.

23. Transfer of information required or permitted to be transferred under applicable law to an interested party of the Company.

24. An act that may be considered as an infringement of the intellectual property rights of a third party, or an act relating to the Company's intellectual property, *inter alia*, by taking action and filing lawsuits. Also, any action taken against Nanometrics, Inc., in regards to protection of intellectual property.

25. Any of the above specified events relating to an activity of an entity controlled by the Company or an entity affiliated with the Company or pursuant to the Officer's position in an affiliated entity and/or in an entity controlled by the Company.

26. The Company's follow-on public offering completed in 2010.

27. Any other actions which can be anticipated for companies of the type of the Company, and which the Board of Directors may deem appropriate.

28. Any indemnifiable event and/or action pursuant to the Efficiency of Enforcement Procedures in the Securities Authority Law (Legislation Amendments), 2011.

29. Any of the above specified events, whether occurring in Israel or occurring outside of Israel.

Exhibit 4.5

Certain identified information has been excluded from this exhibit because it is both not material and would be competitively harmful if publicly disclosed

Project Apollo

Share Sale and Purchase Agreement

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* * *

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The following terms shall have the meanings as defined on the specified pages:

* * *

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– Schedule 3.1	Sample Calculation of Purchase Price
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– Schedule 8.1.9e)	List of managing directors and employees entitled to remuneration more than EUR 100,000 p.a.
– (-------)	(-------)
– (-------)	(-------)
– (-------)	(-------)
– (-------)	(-------)
– (-------)	(-------)
– (-------)	(-------)
– (-------)	(-------)
– (-------)	(-------)

* * *

Share Sale and Purchase Agreement

(**Agreement**)

dated 16th November 2021 (**Signing Date**) by and between

.

(1) **Arnold Cziurlok**, (-------)

– **Seller 1**–,

(2) **Dr. Ursula Tinner**, (-------)

– **Seller 2**–,

(3) **Nikolaus Maser**, (-------)

– **Seller 3**–,

(4) **Glück-Industrie-Elektronik GmbH**,a limited liability company (*Gesellschaft mit beschränkter Haftung*) incorporated under the laws of Germany with registered business address Im Kalten Brunnen 29, 72666 Neckartailfingen, Germany, registered with the commercial register (*Handelsregister*) of the local court of Stuttgart under HRB 223119,

– **Seller 4**–,

(5) **Carsten Wagner**, (-------)

– **Seller 5**–,

(6) **Jürg Stahl**, (-------)

– **Seller 6**–,

(7) **Brigitta Stahl**, (-------)

– **Seller 7**–,

- Seller 1 to Seller 7 hereinafter each a **Seller** and together as the **Sellers** -

and

(8) **Nova Measuring Instruments GmbH**, a limited liability company (*Gesellschaft mit beschränkter Haftung*) incorporated under the laws of Germany with registered business address Gebäude Ensemble Deutsche Werkstätten Hellerau, Bruno-Paul-Haus, 1 OG, Moritzburger Weg 67, 01109 Dresden, Germany, registered with the commercial register (*Handelsregister*) of the local court of Dresden under HRB 32966,

– **Purchaser**–,
- each Seller and the Purchaser hereinafter a **Party** and collectively **Parties** -

and

(9) **Nova Ltd.,** 5 David Fikes Street, 10th Floor P.O. Box 266, Rehovot 7610201, Israel

– **Parent**–

Recitals

ancosys GmbH (**Company**) is active in the field of development, manufacturing and distribution of equipment, tools, and software for automated online process control in chemical-based manufacturing with a focus on semiconductors.

The Purchaser is engaged in pre-sales and service support for advanced metrology solutions installed in Europe for semiconductor process control. The Parent is engaged in the field of development, manufacturing, and distribution of advanced metrology solutions for semiconductor manufacturing.

The Sellers intend to sell and assign to the Purchaser all shares in the Company. The Purchaser intends to purchase and acquire these shares (**Transaction**).

NOW, THEREFORE, the Parties agree as follows:

1 Corporate Structure

1.1 Corporate Structure of the Company

1.1.1 The Company is a limited liability company (*Gesellschaft mit beschränkter Haftung*) incorporated under the laws of Germany and registered with the commercial register (*Handelsregister*) of the local court of Stuttgart under number HRB 382195, having its registered seat in Pliezhausen, and with registered business address at Siemensstraße 8, 72124 Pliezhausen, Germany.

1.1.2 The registered share capital (*Stammkapital*) of the Company equals EUR 131,210.00 (in words: one hundred thirty-one thousand two hundred ten euros) and is divided into the following shares:

a) one share with a par value (*Nennbetrag*) of EUR 13,000.00 (in words: thirteen thousand euros) (consecutive no. 1 of the shareholder list filed with the commercial register of the Company dated 10 July 2015), held by Seller 1;

b) one share with a par value (*Nennbetrag*) of EUR 8,000.00 (in words: eight thousand euros) (consecutive no. 2 of the shareholder list filed with the commercial register of the Company dated 10 July 2015), held by Seller 2;

c) one share with a par value (*Nennbetrag*) of EUR 14,000.00 (in words: fourteen thousand euros) (consecutive no. 3 of the shareholder list filed with the commercial register of the Company dated 10 July 2015) held by Seller 3;

d) one share with a par value (*Nennbetrag*) of EUR 13,350.00 (in words: thirteen thousand three hundred fifty euros) (consecutive no. 4 of the shareholder list filed with the commercial register of the Company dated 10 July 2015) held by Seller 4;

e) one share with a par value (*Nennbetrag*) of EUR 8,000.00 (in words: eight thousand euros) (consecutive no. 5 of the shareholder list filed with the commercial register of the Company dated 10 July 2015) held by Seller 5;

f) one share with a par value (*Nennbetrag*) of EUR 28,000.00 (in words: twenty eight thousand euros) (consecutive no. 6 of the shareholder list filed with the commercial register of the Company dated 10 July 2015) and one share with a par value (*Nennbetrag*) of EUR 10,000.00 (in words: ten thousand euros) (consecutive no. 8 of the shareholder list filed with the commercial register of the Company dated 10 July 2015) both held by Seller 6; and

g) one share with a par value (*Nennbetrag*) of EUR 36,860.00 (in words: thirty-six thousand eight hundred sixty euros) (consecutive no. 7 of the shareholder list filed with the commercial register of the Company dated 10 July 2015) held by Seller 7.

1.1.3 In this Agreement, all shares which the Sellers hold in the Company, are collectively referred to as the **Shares**, regardless of whether the number, nominal amounts and consecutive numbering of the shares or the registered share capital of the Company correspond to the aforementioned details.

1.2 Subsidiaries and branch

1.2.1 The Company holds directly all shares (on a fully diluted basis) in the following companies:

a) Ancosys Instrument Taiwan Ltd, having its legal seat at Rm. 2, 10F, No 8, Ziqiang S. Road, Zhubei City, Hsinchu County, Taiwan (**Taiwanese Subsidiary**), which has a registered share capital of TWD 1,500,000, divided into 150,000 shares,

b) ancosys Inc, having its registered office at 874 Walker Road, Suite C, City of Dover, County of Kent, Delaware 19904, USA (**USA Subsidiary**), which has a registered share capital of USD 150,000, divided into 150 shares,

c) ancosys Korea LLC, having its principal office at Yongin-si, Gyeonggi-do, South Korea (**South Korean Subsidiary**), which has a registered share capital of KRW 100,000,000 divided into 20,000 shares,

(the Taiwanese Subsidiary, the USA Subsidiary and the South Korean Subsidiary each a **Subsidiary** and together **Subsidiaries**; the Company and the Subsidiaries together the **Group** or the **Group Companies** and each a **Group Company**; the Shares and the shares in the Subsidiaries together the **Group Company Shares**).

1.2.2 The USA Subsidiary operates a branch (*Zweigniederlassung*) in Taiwan with business address No 33, 7th Floor, Sec 1 Zhong Xiao West End, 100 Taipei, Taiwan.

2 Sale and Assignment of the Shares; Right to Profits

2.1 Sale and Assignment of the Shares; Right to Profits

2.1.1 Subject to the terms and conditions of this Agreement, the Sellers hereby sell (*verkaufen*), and subject to the condition precedent (*aufschiebende Bedingung*) of the payment of the Preliminary Purchase Price to the Paying Agent and the Escrow Amount to the Escrow Account assign (*abtreten*) to the Purchaser the Shares. The Purchaser accepts such sale and assignment of the Shares.

2.1.2 The sale of the Shares shall include any and all rights associated with, or otherwise pertaining to, the Shares as of the Closing Date, including the rights to any undistributed profits for the current business year and for any prior business years of the Company.

2.2 Consent of the Company; Consent of spouses

2.2.1 The Company and the meeting of shareholders of the Company have already consented to the sale and assignment of the Shares. A copy of the declaration of consent of the Company and of the shareholders' resolution of the Company, also containing a waiver by each of the Sellers on any rights of first refusal and all other pre-emptive rights or similar rights, including drag and tag along rights such Sellers might have in relation to the Shares held by the other Sellers, are attached hereto as Schedule 2.2.1.

2.2.2 By way of precaution, the spouses of each Seller who lives in the German property regime of community of accrued gains (*Güterstand der Zugewinngemeinschaft*) have consented to the sale and transfer of the respective Shares in the Company in accordance with Section 1365 German Civil Code (*Bürgerliches Gesetzbuch – BGB*). Copies of the respective declarations of consent are attached as Schedule 2.2.2.

3 Purchase Price; Conditions of Payment

3.1 Purchase Price

The purchase price to be paid by the Purchaser as consideration for the Shares shall amount to

a) the balance of the following amounts:

(i) A fixed amount of EUR 75,000,000 (in words: seventy-five million euros) (the **Base Amount**)

(ii) minus the aggregate amount of the Closing Date Financial Debt;

(iii) plus the amount of the Closing Date Cash;

(iv) minus the Necessary Liquidity Adjustment Amount, if any;

(v) minus the Working Capital Adjustment Amount, if any;

(vi) minus an amount of (-------);

(vii) minus an amount of 5% of the Excess Cash Amount (the **Excess Cash Distribution Costs**);

(collectively the **Purchase Price**)

b) plus the Earn-out (if and to the extent applicable) (together with the Purchase Price the **Total Purchase Price**).

A sample calculation of the Total Purchase Price is attached hereto as Schedule 3.1.

3.2 Preliminary purchase price

3.2.1 The preliminary purchase price for the Shares to be paid by the Purchaser on the Closing (the **Preliminary Purchase Price**) shall amount to the balance of

(i) the Base Amount;

(ii) plus the estimated Closing Date Cash;

(iii) minus the estimated Closing Date Financial Debt;

(iv) minus the estimated Necessary Liquidity Adjustment Amount, if any;

(v) minus the estimated Working Capital Adjustment Amount, if any;

(vi) minus(-------);

(vii) minus the Excess Cash Distribution Costs; and

(viii) minus the Escrow Amount, which shall be paid by the Purchaser to the Escrow Account at Closing.

3.2.2 No later than ten (10) Business Days prior to the Scheduled Closing Date, Sellers shall deliver to Purchaser a notice (the **Estimate Notice**) that sets forth Sellers' good faith estimate of the Preliminary Purchase Price, together with all required supporting documentation (including, but not limited to, bank statements supporting the estimated Closing Date Cash) (the **Purchase Price Estimate**). The Purchaser may raise objections to the Purchase Price Estimate within five (5) Business Days after receipt of the Estimate Notice by providing the Sellers with a written statement of objections specifying the relevant items, sufficient reasons for each objection and the amounts in dispute in reasonable detail. If and to the extent Parties are not able to settle the disagreement until the end of the second (2^{nd}) Business Day prior to the Scheduled Closing Date,

a) and if the Disputed Amount amounts to not more than EUR 2,500,000 (in words: two million five hundred thousand euros), the Purchaser shall deduct the amount in dispute (the **Disputed Amount**) from the Preliminary Purchase Price (which shall therefore be reduced accordingly) to be paid to the Paying Agent at Closing and pay such Disputed Amount to the Escrow Account instead. The Disputed Amount paid to the Escrow Account, if any, shall (i) not be part of the Escrow Amount and (ii) be released to the respective Party as per clause 3.4.5.

b) and if the Disputed Amount exceeds EUR 2,500,000 (in words: two million five hundred thousand euros), the Scheduled Closing Date shall be deferred until the Purchase Price Estimate and accordingly the Preliminary Purchase Price has become final and binding between the Parties according to clause 3.4.3 and 3.4.4, which shall apply *mutadis mutandis* (whereby the following shortened deadlines shall apply for the purpose of this clause 3.2.2b): the Parties shall have five (5) Business Days to agree on the Preliminary Purchase Price and, if applicable, five (5) further Business Days to agree on the Neutral Auditor and the Neutral Auditor shall have thirty (30) Business Days to determine the Preliminary Purchase Price). In this case, the Purchaser shall, at Closing, pay to the Paying Agent the Preliminary Purchase Price determined by the Neutral Auditor, without paying any amount (in addition to the Escrow Amount) to the Escrow Account. The Long Stop Date shall be postponed for as many calendar days as the procedure to determine the Preliminary Purchase Price according to this clause 3.2.2b) is running.

3.3 Closing Date Cash, Closing Date Financial Debt, Necessary Liquidity Amount

3.3.1 For the purpose of this Agreement

a) **Closing Date Cash** means the consolidated amount of cash and cash equivalents of the Group Companies that can be converted into cash within a period of three (3) months after the Closing Date, including in any case the line items set forth in Schedule 3.3 under the heading "Closing Date Cash", all in euro as per the Closing Date, as determined on the basis of the Final Closing Date Balance Sheet.

b) **Closing Date Financial Debt** means the consolidated amount of the line items set forth in Schedule 3.3, in euro as per the Closing Date, as determined on the basis of the Final Closing Date Balance Sheet.

c) **Closing Date Necessary Liquidity** means the Group Companies' cash on bank accounts as set forth in Schedule 3.3 (however, for the avoidance of doubt, without deducting the Closing Date Financial Debt) which the Group Companies need to run their operations in the ordinary course of business for five (5) Business Days after the Closing Date.

d) **Necessary Liquidity Adjustment Amount** means the amount (if any) by which, as per the Closing Date each of the Group Companies' cash on bank accounts falls short of the Closing Date Necessary Liquidity.

e) **Closing Date Working Capital** means the consolidated amount of the line items set forth in Schedule 3.3 under the heading "Closing Date Working Capital" of the Group Companies in euro as per the Closing Date, as determined on the basis of the Final Closing Date Balance Sheet.

f) The **Working Capital Adjustment Amount** shall be the amount by which the Closing Date Working Capital falls below EUR 8,727,000 (in words: eight million seven hundred twenty-seven thousand euros).

g) The **Excess Cash Amount** shall be the amount by which the Closing Date Cash exceeds the Closing Date Necessary Liquidity.

3.4 Purchase Price Adjustment

3.4.1 Preparation of the Closing Date Balance Sheet

a) After the Closing Date, the Purchaser shall prepare a consolidated balance sheet of the Group based on the individual balance sheet of the Company according to German GAAP (as defined below) and the individual balance sheets of the Subsidiaries as per the relevant local GAAPs, all as applied for the establishment of the respective financial statements 2020 (together **Accounting Principles**) as of the Closing Date showing all balance sheet items required for the determination of the Closing Date Cash, the Closing Date Financial Debt, the Closing Date Necessary Liquidity and the Closing Date Working Capital (the **Closing Date Balance Sheet**).

b) The Closing Date Balance Sheet shall be prepared in the English language on a going concern basis in the same format as the pro-forma balance sheet as of 31 December 2020 attached as Schedule 3.4.1 b) (**Reference Pro-Forma Balance Sheet**); applying the Accounting Principles.

Amounts in foreign currency shall be converted into euro with the Exchange Rate (as defined below).

c) The Purchaser shall deliver the Closing Date Balance Sheet together with a calculation of the Purchase Price and the Adjustment Amount derived therefrom (together the **Closing Date Statement**) to the Sellers within forty (40) Business Days after the Closing Date. Upon the Sellers' reasonable request, the Purchaser shall make available to the Sellers copies of the documents reasonably required for the review of the Closing Date Balance Sheet.

3.4.2 Review by the Sellers

a) The Sellers shall be entitled to review the Closing Date Statement within a period of twenty (20) Business Days after the receipt from the Purchaser (**Review Period**). The review of the Closing Date Statement shall be limited to the compliance of the Closing Date Statement with this Agreement and, in particular, the provisions of clause 3.4.1. The Sellers shall notify to the Purchaser in writing any objection they may have against the Closing Date Statement, specifying the relevant items, the reasons for their objections and the amounts in dispute in reasonable detail (**Objection Statement**).

b) If and to the extent the Sellers do not submit an Objection Statement in accordance with lit. a) above, the Sellers shall be deemed to have agreed to the positions set forth in the Closing Date Statement and the Closing Date Statement shall become final and binding on such positions upon the Parties upon expiry of the Review Period.

3.4.3 Expert Proceeding

a) If and to the extent the Sellers have submitted an Objection Statement in accordance with clause 3.4.2, the Parties shall discuss the disputed items in order to reach an agreement.

b) If and to the extent the Sellers and the Purchaser cannot settle the disagreement within twenty (20) Business Days after the Purchaser has received the Objection Statement, the Sellers or the Purchaser may present the matter to a neutral auditor (**Neutral Auditor**) who is a partner of PwC, Deloitte, KPMG or BDO and must be in sufficient command of the English language (such firm the **Neutral Auditor Firm**), which firm shall be jointly designated by the Sellers and the Purchaser. If the Sellers and the Purchaser cannot agree on the Neutral Auditor Firm within fifteen (15) Business Days after the respective request for such designation, the Neutral Auditor Firm and the Neutral Auditor shall be appointed by the Chairman of the Board of German Institute of Public Accountants (*Vorsitzer des Vorstandes des Institut der Wirtschaftsprüfer in Deutschland e. V.*) at the request of the Sellers or the Purchaser after consideration of the proposals and comments by the Sellers and the Purchaser; the Neutral Auditor to be appointed must satisfy the following criteria: (i) The Neutral Auditor must have fifteen (15) years of professional experience in the area of audit services; (ii) the Neutral Auditor must have been a partner of the Neutral Auditor Firm for a period of at least five (5) years; and (iii) the Neutral Auditor must confirm that he and his firm are not conflicted from accepting the assignment and have the necessary resources to perform the required services in a timely manner. If and to the extent the Parties have not reached an agreement pursuant to lit. a) and neither Party requests that the matter in dispute is to be decided by the Neutral Expert in accordance with and within the time limit set forth in sentence 1, clause 3.4.2 b) shall apply mutatis mutandis.

c) The Sellers and the Purchaser shall jointly instruct the Neutral Auditor Firm to decide the issues in dispute in accordance with the provisions of this clause 3.4.3. To that end, the Sellers and the Purchaser agree to use commercially reasonable efforts to formalize the engagement of the Neutral Auditor Firm as promptly as practicable. The Parties in particular agree to execute, if requested by the Neutral Auditor Firm, an engagement letter with the Neutral Auditor Firm reflecting the terms of this Agreement and otherwise containing reasonable terms.

d) Unless instructed otherwise by the Sellers and the Purchaser jointly, the Neutral Auditor shall limit his decisions to the issues in dispute, but shall on the basis of such decisions and the undisputed parts of the Closing Date Statement determine the definitive content of the Closing Date Statement and in particular the definitive amount of the Purchase Price. In respect of the issues in dispute the decisions of the Neutral Auditor shall be limited to, and may not fall beyond or outside, the positions taken by the Sellers and the Purchaser. To the extent necessary for the decisions, the Neutral Auditor shall also be entitled to decide on the interpretation of this Agreement, but not upon legal issues (unless such legal issues specifically pertain to the applicable accounting and valuation standards and principles). The Neutral Auditor shall act as an expert (*Schiedsgutachter*) and not as an arbitrator (*Schiedsrichter*).

e) Before making the decision, the Neutral Auditor shall grant the Sellers and the Purchaser the opportunity to present their positions in writing.

f) The Neutral Auditor shall use best efforts to deliver its written opinion with reasons for the decisions as soon as reasonably practical and shall endeavor to do so not later than sixty (60) Business Days after the issues in dispute have been referred to the Neutral Auditor.

g) Subject to Section 319 BGB, the Neutral Auditor's decision and the Closing Date Statement as determined by the Neutral Auditor shall be final and binding upon the Parties.

h) The Neutral Auditor shall decide upon the allocation of its costs and expenses between the Parties by applying the principles of Sections 91 et seqq. German Code of Civil Procedures (*ZPO*).

3.4.4 Final Closing Date Statement

The Closing Date Statement shall be final and binding on the Parties for the purpose of determining the Purchase Price,

a) in accordance with clause 3.4.2, if and to the extent the Sellers have not submitted an Objection Statement within the time period set forth therein;

b) if and to the extent the Sellers and the Purchaser have reached an agreement concerning the disputed items;

c) in accordance with clause 3.4.3 b), if and to the extent the Parties have not reached an agreement and neither Party requests within the time limit set forth in clause 3.4.3 b) that the matter in dispute shall be decided by the Neutral Auditor; and

d) in accordance with clause 3.4.3 g), if and to the extent the Neutral Auditor has decided about the unresolved disputed items;

(the so-determined final and binding Closing Date Statement is referred to herein as **Final Closing Date Statement**).

3.4.5 Adjustment Amount

If, on the basis of the Final Closing Date Statement, the Purchase Price deviates from the Preliminary Purchase Price, the following shall apply:

a) if and to the extent the Purchase Price falls short of the Preliminary Purchase Price:

(i) if any Disputed Amount remains on the Escrow Account, the Parties shall jointly instruct the Escrow Agent to release the amount from the Disputed Amount to the Purchaser; and

(ii) if, taking into account the initially deposited Disputed Amount, any difference by which the Purchase Price falls short of the Preliminary Purchase Price remains, the Sellers shall pay to the Purchaser an amount equal to such difference; or

b) if and to the extent the Purchase Price exceeds the Preliminary Purchase Price:

(i) if any Disputed Amount remains on the Escrow Account, the Parties shall jointly instruct the Escrow Agent to release (i) an amount equal to the portion of the Disputed Amount by which the Purchase Price exceeds the Preliminary Purchase Price to the Sellers and (ii) an amount equal to the remaining portion of the amount equal to the Disputed Amount, if any, to the Purchaser; and

(ii) if, taking into account the initially deposited Disputed Amount, any difference by which the Purchase Price exceeds the Preliminary Purchase Price remains, the Purchaser shall pay to the Sellers an amount equal to such difference

(any such amount, the **Adjustment Amount**).

The Adjustment Amount payable by the Sellers or the Purchaser pursuant to lit. a) respectively b) shall become due on the fifth (5th) Business Day after the Closing Date Statement has become final and binding on the Parties.

3.5 Escrow Amount

Seven percent (7%) of the Preliminary Purchase Price (the **Escrow Amount**) shall not be paid to the Sellers at the Closing, but to an escrow account by the acting notary designated by the notary to Purchaser prior to the Scheduled Closing Date (the **Escrow Account**). The funds in the Escrow Account shall serve as collateral for the Purchaser with respect to any claims of the Purchaser against the Sellers arising out of or in connection with this Agreement. The Purchaser shall have the right to use any amounts in the Escrow Account to satisfy any of its claims under or in connection with this Agreements against the Sellers. The Escrow Amount shall be released in accordance with, and subject to the conditions and limitations of, clause 13 and the Escrow Agreement.

3.6 Earn-out

3.6.1 Earn-out Payment

In addition to the Purchase Price, the Purchaser shall pay to the Sellers an additional earn-out consideration of EUR 8,500,000 (in words: eight million five hundred thousand euros) in cash (**Earn-out Payment**) if all conditions and thresholds as provided in clause 3.6.2 are met. The thresholds shall be calculated

a) with respect to clause 3.6.2a) and b), based on the Group Companies' pro-forma consolidated financial statements for the calendar year 2021, which in turn shall be based on and consolidate (i) the Company's audited financial statements for the calendar year 2021 and (ii) the financial statements of all Subsidiaries for the calendar year 2021 (**Earn-out Financial Statements Part 1**), and

b) with respect to clause 3.6.2c), based on the Group Companies' pro-forma consolidated interim financial statements as per 30 June 2022, which in turn shall be based on and consolidate (i) the Company's interim financial statements as per 30 June 2022 and (ii) the interim financial statements of all Subsidiaries as per 30 June 2022 (**Earn-out Financial Statements Part 2**; Earn-out Financial Statements Parts 1 and 2 together **Earn-out Financial Statements**),

The relevant financial statements as well as their consolidation shall be established as set forth in clause 3.4.1b) and, in particular, by applying the Accounting Principles. However,

a) (-------) under clause 12.2, or

b) intragroup fees or charges paid or owed (for the period until 31 December 2021) by any Group Company to any Affiliate of the Purchaser (excluding the Group Companies) if and to the extent such intragroup fees or charges exceed (i) any existing intragroup fees or charges and/or (ii) any fees or costs for external services received by Group Companies in the past and which are substituted by services rendered or contracted by the Purchaser or Affiliates of the Purchaser,

shall be disregarded when calculating the EBITDA for the purpose of computing the Earn-out Financial Statements. Further, in case the Group Companies become subject to an intra-group (i.e. with Purchaser's group) merger or a de-merger or transfer a substantial part of their assets or business activities to the Purchaser or an Affiliate of the Purchaser in the period until 30 June 2022, the Purchaser undertakes to keep a separate bookkeeping for the Group Companies and any negative effects from such measures on the EBITDA and the revenues shall be disregarded for the purpose of computing the Earn-out Financial Statement.

Seven percent (7%) of the Earn-out Payment shall not be paid to the Sellers, but will be paid into the Escrow Account. It shall be released in accordance with, and subject to the conditions and limitations of, clause 13 and the Escrow Agreement.

3.6.2 Conditions for the Earn-out Payment

The Earn-out Payment is subject to achievement of all of the following conditions and thresholds:

a) The Group's consolidated revenues for calendar year 2021 amount to (-------) or more; and

b) The Group's EBITDA (as defined in Schedule 3.6.2b)) constitutes more than 19% of such calendar year 2021 revenues; and

c) The Group's consolidated revenues for the first half of calendar year 2022 amount to (-------) or more.

For the avoidance of doubt, partial completion of any of the thresholds set forth above in lit. a) through lit. c) shall not entitle the Sellers to any part of the Earn-out Payment.

3.6.3 Review by the Sellers, Expert Proceedings

Clauses 3.4.2, 3.4.3 and 3.4.4 shall apply *mutatis mutandis*. However, the Purchaser shall provide the Sellers with the Earn-out Financial Statements by 31 August 2022. The Sellers shall then have twenty (20) Business Days to review both the Earn-out Financial Statements after receipt from the Purchaser.

3.7 Allocation of the Purchase Price and Total Purchase Price

The Purchase Price and the Total Purchase Price shall be allocated between the Sellers as per the principles set forth under Schedule 3.7.

3.8 Payment Terms

3.8.1 Payments by the Purchaser to the Sellers based on this Agreement must, except as otherwise provided in this Agreement, be paid by the Purchaser in USD via bank transfer to be credited on the same day, free of charges and fees, with same day value to the account of MLL Meyerlustenberger Lachenal Froriep AG (**Paying Agent's Account**) as specified in Schedule 3.8 with debt discharging effect (*mit schuldbefreiender Wirkung*) towards each of the Sellers. Payments by the Purchaser shall be deemed to have been timely made only upon the irrevocable and unconditional crediting of the amount payable to the Paying Agent's Account or the Escrow Account, as the case may be, on the relevant date with a value date (*Wertstellungsdatum*) as of the same date.

3.8.2 Any payment under in connection with this Agreement, although expressed in euros in this Agreement, shall be paid in the equivalent amount of United States Dollars. The respective amount shall be converted into United States Dollars at a fixed exchange rate of USD 1.19 per 1 euro (the **Exchange Rate**).

3.9 No Set-Off

The Purchaser’s right to set-off against and/or to withhold the payment of the Preliminary Purchase Price, the Earn-out Payment or the Adjustment Amount due to the Sellers, as well as the Sellers' right to set-off against and/or to withhold the payment of any Adjustment Amount due to the Purchaser, are hereby expressly waived and excluded except for claims which have been accepted by the other Party in writing or have been awarded to the respective Party by a court (including arbitral tribunal) without further recourse (*rechtskräftig*).

3.10 Value Added Tax

The Parties commonly understand that all transactions contemplated under this Agreement including the sale and assignment of the Shares are either not subject to or exempt from value-added tax (or comparable foreign tax) (**VAT**). The Sellers herewith undertake not to waive the VAT exemption pursuant to Section 9 German VAT Act (*Umsatzsteuergesetz*) (or comparable foreign tax) (**VAT Option Right**) and exercise any right the Sellers might have to ensure the transactions contemplated in this Agreement are not subject to VAT or exempt from VAT. Accordingly, the Sellers will not issue an invoice and this Agreement is not an invoice in the meaning of Sections 14 et seqq. German VAT Act. In the event that, against the common understanding of the Parties, VAT should arise without the Sellers exercising any VAT Option Right, such VAT shall increase the Purchase Price and, if applicable, the Earn out Payment, to the extent the Purchaser is entitled to a corresponding input VAT refund and the Purchaser shall pay such VAT to the Sellers after receipt of a proper invoice by the Purchaser from the Sellers.

4 Commercial effect

The sale of the Shares and the rights associated therewith shall have economic effect as of the Closing Date.

5 Cooperation and Conduct of Business until Closing

5.1 Conduct in ordinary course

From the Signing Date until the Closing Date, and except for transactions contemplated by this Agreement, the Sellers shall procure (*stehen dafür ein*) that the Group Companies conduct their business operations until the Closing Date, in all material respects, only in the ordinary course of business as presently conducted and consistent with past practice, unless the Purchaser has consented to the specific measure or activity in writing.

5.2 Specific measures and activities outside ordinary course

Without prejudice to the generality of clause 5.1, the Sellers shall in particular procure (*stehen dafür ein*) that the Group Companies do not take any of the following measures or activities unless the Purchaser has consented to the specific measure or activity in writing or not objected to it by the end of the fifth (5th) Business Days after having received a respective request from the Sellers via e-mail to Dror David: (-------) with a copy to Leeat Peleg: (-------):

a) Sale, purchase, transfer or acquisition of any shares or any other equity interests in companies, including the Subsidiaries;

b) Disposal of, in whole or in material parts, the business operations of the Group Companies;

c) Opening of new divisions, branches of business or regional offices, or closure of existing divisions and/or permanent establishments;

d) Entering into or amending of any loan agreements or any other agreement resulting in financial debt exceeding a principal amount of EUR 100,000 (in words: hundred thousand euros) in the individual case;

e) Making of any capital expenditures in excess of EUR 200,000 (in words: two hundred thousand euros) in the individual case;

f) Sale, purchase or encumbrance of any real property or rights similar to real property (*grundstücksgleiche Rechte*);

g) Entering into, termination or amendment of Material Agreements other than in the ordinary course of business;

h) Assignment or transfer for security purposes, pledge, encumbering or otherwise burden tangible and intangible fixed assets (*Gegenstände des Anlagevermögens*) – whether to be shown in the balance sheet or not – in each case except (i) in the fulfilment of respective obligations entered into before the Signing Date and or (ii) in the ordinary course of business and consistent with past practice;

i) Entering into, assumption of, indemnification from, any guarantee, indemnity or other agreement to secure any obligation of a third party or creation of any encumbrance over any assets – in each case except (i) in the fulfilment of respective obligations entered into before the Signing Date and or (ii) in the ordinary course of business and consistent with past practice;

j) Entering into, amending or termination of any agreement with a labor union or collective bargaining agreement;

k) Entering into any agreement or transaction with any Sellers or any affiliate in the meaning of Sections 15 et seqq. German Stock Corporation Act (*Aktiengesetz - AktG*) (**Affiliate**) or related person in the meaning of Section 138 German Insolvency Code (*Insolvenzordnung*) of a Seller (**Related Person**);

l) (i) Making, changing or rescinding any Tax election; (ii) amending any Tax return, except as required by applicable law, (iii) changing any method of accounting for Tax purposes, (iv) change any annual Tax accounting period or (v) entering into a contractual obligation or request any binding ruling in respect of Taxes with any Governmental Authority;

m) Entering into, amending or terminating any employment, service or consultancy contracts providing for an annual gross base salary or remuneration (excluding bonus payments) exceeding EUR 80,000 (in words: eighty-thousand euros) in the individual case.

5.3 Corporate measures outside ordinary course

The Sellers shall not take any of the following corporate measures in relation to the Company between the Signing Date and the Closing Date and procure that none of the corporate measures in relation to the Subsidiaries are taken between the Signing Date and the Closing Date, in each case unless the Purchaser has consented to the specific corporate measure in writing:

a) Sell, purchase, transfer, encumber or otherwise dispose of any shares;

b) Resolution of any change in the articles of association or any other material shareholder resolution, including with respect to a reorganization, dissolution or liquidation;

c) Creation or issuance of any shares (including any options, warrants or conversion rights with respect to such shares);

d) Repurchase or redemption (*Einziehung*) of any shares;

e) Enter into company agreements within the meaning of Sections 291 et seqq. of the German Stock Corporation Act (*AktG*) or similar agreements;

f) Appointment or dismissal of managing directors *(Geschäftsführer)*, except for dismissal for cause *(aus wichtigem Grund*).

5.4 General cooperation between the Parties

The Parties shall use their respective best efforts and exchange the necessary information to ensure that the Closing Conditions shall be met as soon as possible after the Signing Date.

6 Closing Conditions; Long Stop Date

6.1 Closing Conditions

The obligations of the Parties to take the Closing Actions (**Closing**) pursuant to clause 7 shall be subject to the fulfillment or waiver of the following conditions precedent (*aufschiebende Bedingungen*) pursuant to Section 158 (1) BGB (**Closing Conditions**):

a) The Purchaser has received a compliance certificate pursuant to Section 58 (1) German Foreign Trade and Payments Ordinance (*Außenwirtschaftsverordnung, **AWV***) or, to the extent applicable, an approval (*Freigabe*) pursuant to Section 58a (1) AWV or another binding decision of the German Federal Ministry for Economic Affairs and Energy (*Bundesministerium für Wirtschaft und Energie,* **BMWi**) confirming that the transactions contemplated in this Agreement do not raise concerns with respect to the public order or security of the Federal Republic of Germany, another European Union member state or with regard to projects or programs of union interest (the **German FDI Clearance Certificate**), or (ii) a German FDI Clearance Certificate is deemed to have been issued pursuant to Section 58 (2) or Section 58a (2) AWV or restrictions (*Beschränkungen*) and obligations (*Handlungspflichten*) cannot be imposed anymore due to the expiry of the time periods set out in Section 14a German Foreign Trade and Payments Act (*Außenwirtschaftsgesetz - AWG*), in each case because the relevant time periods have expired without the BMWi initiating a formal foreign investment control review or imposing restrictions or obligations, or (iii) the BMWi has, within the time period set out in Section 14a AWG, issued binding orders (*Anordnungen*) or any other restrictions or obligations in relation to the transactions contemplated in this Agreement without prohibiting them and Purchaser has agreed, without being obliged to, to accept such orders, restrictions or obligations in writing and after having consulted the Sellers (**Clearance**).

b) No Material Adverse Change has occurred. **Material Adverse Change** shall mean an event or series of events which are negatively affecting the Group Companies, taken as a whole, and lead to damages (including, for the avoidance of doubt, costs and losses) of at least EUR 5,000,000 (in words: five million euros), such as a major industrial accident on their premises, but excluding events arising out of, resulting from, or attributable to, the Covid-19 pandemic, changes in general economic conditions, changes in conditions in the financial markets, credit markets or capital markets, general changes in conditions in the industries in which the Group Companies conduct business, changes in regulatory, legislative or political conditions, any geopolitical conditions, outbreak of hostilities, acts of war, sabotage, terrorism or military actions, earthquakes, hurricanes, tsunamis, tornadoes, floods, mudslides, wild fires or other natural disasters, weather conditions, changes or proposed changes in any GAAP applicable to any Group Company; provided that the above carve-outs shall be taken into account to assess if a Material Adverse Change occurred, if and to the extent the Group Companies, taken as a whole, are specifically and directly affected by such events.

c) No Governmental Authority or other Person has commenced any legal action in front of any competent court, arbitration tribunal or Governmental Authority seeking to prohibit or limit the exercise of any material right pertaining to the ownership by the Purchaser of the Shares or by the Company of the shares in the Subsidiaries and no respective order or decision issued by any competent court, arbitration tribunal or Governmental Authority shall be in effect.

6.2 Cooperation with respect to FDI filing

a) The Purchaser has, before the Signing Date, proceeded to any filings, requests or notifications required to obtain the Clearance (together **FDI Requests**) with the competent Governmental Authorities. The Parties shall cooperate to answer any questions from, and to provide any further documents and information which need to be provided to, the competent Governmental Authorities regarding the FDI Requests.

b) In particular, the Sellers shall and shall procure that the Group Companies cooperate with the Purchaser for the purpose of the Clearance by providing the relevant information concerning the Group Companies as may be requested by the BMWi and/or as reasonably requested by Purchaser.

6.3 Notification with respect to fulfilment or definitive failure of any Closing Condition

The Parties shall notify each other of the fulfillment or the definitive failure (*endgültiger Nichteintritt*) of any Closing Condition without undue delay (*unverzüglich*) after obtaining knowledge thereof, and shall include in such notifications all relevant evidencing documents.

6.4 Waiver of Closing Conditions

The Closing Conditions may be waived by the Purchaser only. Any waiver of a Closing Condition may be made in full or in part. The effect of a waiver of a Closing Condition shall be limited to eliminating the need that such Closing Condition be fulfilled and, unless otherwise agreed, shall not limit or prejudice any claims that a waiving Party may have with respect to any circumstances relating to such Closing Condition not having been fulfilled.

6.5 Long Stop Date

The Sellers, acting through the Representative, and the Purchaser shall, until Closing has occurred, be entitled to withdraw from (*zurücktreten*) this Agreement by written notice, if (i) the Closing Conditions can no longer be fulfilled and are not duly waived or (ii) if the closing condition in clause 6.1 a) is not fulfilled or duly waived until 28 February 2022 (**Long Stop Date**). However, if the Closing Condition provided in clause 6.1 a) is not fulfilled until ten (10) Business Days before the Long Stop Date, the Representative, or the Purchaser shall have the right to postpone the Long Stop Date by a maximum of two (2) months by written notice to the other Party/Parties.

The Sellers, acting through the Representative, on the one side and Purchaser on the other side shall also, until Closing has occurred, be entitled to withdraw from (*zurücktreten*) this Agreement (each a **Withdrawing Party**) by written notice to the respective other Party if the respective other Party (i.e. the Purchasers in case of the Sellers and one of the Sellers in case of the Purchaser) has not fulfilled all of the Closing Action(s) (as defined below) in breach (*schuldhafte Pflichtverletzung*) of the terms and conditions of this Agreement, provided that the Withdrawing Party is at the same time not in breach of its obligations under this Agreement to fulfil its Closing Action(s), and such breach by the respective other Party has not been remedied within ten (10) Business Days after having been notified by the Withdrawing Party in writing of such breach.

6.6 Withdrawal

In the event of a withdrawal (*Rücktritt*) of a Party, none of the Parties shall have any obligation or incur any liability towards any of the other Parties provided that (i) the obligation of a Party to pay damages for willful or gross negligent breach (*schuldhafte Pflichtverletzung*) of this Agreement prior to the date of withdrawal, if any, and (ii) the provisions in clauses 19 and 21 below shall in each case survive and remain in full force and effect.

7 Closing

7.1 Scheduled Closing Date

Provided that the Closing Condition provided in clause 6.1 a) has been fulfilled or duly waived (i) prior to 31 December 2021, the Closing shall occur on the 3 January 2022; or (ii) after 31 December 2021, the Closing shall occur at such date as the Parties have agreed upon, but in no case later than fifteen (15) Business Days after the day on which the aforementioned Closing Condition has been fulfilled or duly waived, at the offices of Gleiss Lutz, Dreischeibenhaus 1, 40211 Düsseldorf, Germany, at 10:00 a.m. local time provided that the Closing Conditions provided in clause 6.1 b) to c) are still fulfilled or duly waived at such date. The date on which the Closing is scheduled to occur according to the foregoing sentence shall be referred to as the **Scheduled Closing Date**.

7.2 Closing Actions

On the Scheduled Closing Date, the Parties shall take or, if applicable, cause to be taken, concurrently (*Zug um Zug*) the following actions (**Closing Actions**):

a) Purchaser shall pay the Preliminary Purchase Price to the Paying Agent's Account, as evidenced by a confirmation from the Paying Agent's bank.

b) The Parties shall execute the **Escrow Agreement** substantially in the form attached hereto as Schedule 7.2b) duly signed by the escrow agent appointed by the Parties (**Escrow Agent**).

c) Purchaser shall pay the Escrow Amount to the Escrow Agent, as evidenced by a confirmation from the Escrow Agent's bank.

d) Each Seller shall deliver to the Purchaser a confirmation substantially in the form set out in Schedule 7.2d) confirming that (i) there are no payment obligations of any Group Company to such Seller due and unpaid and (ii) that such Seller has no claims against any Group Company, subject to employment or consultancy agreements in force on the Closing Date.

e) Seller 6 or the Representative shall, on behalf of all Sellers, deliver a written confirmation that no Material Adverse Change has occurred until the Scheduled Closing Date, substantially in the form set out in Schedule 7.2e).

7.3 Waiver of Closing Actions

The Closing Actions in clauses 7.2d) to 7.2e) may be waived by the Purchaser. The other Closing Actions may only be waived by mutual agreement of the Parties, such agreement to be made in writing. Any waiver of a Closing Action may be made in full or in part. The effect of a waiver of a Closing Action shall be limited to eliminating the need that such Closing Action be taken at the Closing and, unless otherwise agreed, shall not limit or prejudice any claims that a waiving Party may have with respect to any circumstances relating to such Closing Action not having been taken at the Closing.

7.4 Closing Memorandum

Immediately after all Closing Actions have been duly taken or waived, the Parties shall confirm in a written document jointly executed by the Parties and substantially in the form as attached hereto as Schedule 7.4 (**Closing Memorandum**) that (i) the Closing Conditions have been duly fulfilled or waived, (ii) the Closing Actions have been duly taken or waived, and, therefore, (iii) the Closing has occurred. Immediately upon execution of the Closing Memorandum, the Sellers or the Purchaser shall provide the acting notary with a written copy thereof. Upon receipt of the copy of the Closing Memorandum, the acting notary shall submit a revised shareholder list (*Gesellschafterliste*) for the Company which reflects the transfer of all of the Shares to the Purchaser to the commercial register together with the certification (*Bescheinigung*) pursuant to Section 40 (2) sentence 2 German Limited Liability Companies Act (*GmbHG*).

7.5 Closing Date

The day on which all Closing Actions have been duly taken or waived is herein referred to as the **Closing Date**.

8 Sellers Guarantees

8.1 Form and Scope of Sellers Guarantees

The Sellers hereby, with respect to the Sellers Guarantees in clause 8.1.1b) and c), which are only given by each Seller in relation to himself/herself and the Shares held by such Sellers in the Company, and with respect to all other Sellers Guarantees as several debtors (*Teilschuldner* – pro rata to their holding of Shares) guarantee to the Purchaser, by way of independent promises of guarantee (*selbständige Garantieversprechen*) within the meaning of Section 311 (1) BGB and subject to the requirements and limitations provided in this Agreement, that the following statements are correct and complete as of the Signing Date and also as of the Closing Date, unless it is specifically provided that a statement is made as of a different or additional date or dates, in which case such Sellers Guarantee shall be correct as of such different or additional date or dates. The Sellers and the Purchaser agree and explicitly confirm that the guarantees in clause 8.1 (**Sellers Guarantees**) shall not be qualified or construed as quality guarantees concerning the object of the purchase (*Garantien für die Beschaffenheit der Sache*) within the meaning of Sections 443, 444 BGB or agreements on quality (*Beschaffenheitsvereinbarungen*) within the meaning of Section 434 (1) sentence 1 BGB, and that Section 444 BGB shall not and does not apply to the Sellers Guarantees.

8.1.1 Corporate Status and Authority of the Sellers

a) The statements in clause 1 regarding the Group and the Group Companies are correct and complete. The Group Companies have been duly established and validly exist under their laws of incorporation. Schedule 8.1.1 a) contains correct and complete copies of the articles of association of the Group Companies. The Group Companies have all requisite (corporate or other) power and authority to conduct their business as currently conducted. No Group Company holds any interest in any company or entity other than provided in clause 1.

b) The Group Company Shares were validly issued, the contributions (*Einlagen*) thereon have been paid in full, either in cash or in kind, and were not repaid, neither in full nor in part, or otherwise returned and (there are no obligations to make further contributions regarding the Group Company Shares and/or the Group Companies (*keine Nachschusspflichten*). The Group Company Shares are free and clear of any encumbrances or other third party rights. There are no pending assignments, enterprise agreements (*Unternehmensverträge*), trust arrangements (*Treuhandverträgen*), silent partnership agreements (*stillen Beteiligungen*), subparticipations (*Unterbeteiligungen*), rights of first refusal, pre-emptive rights, option, voting arrangements or other rights of third parties to acquire any of the Group Company Shares, and there are no agreements or commitments obligating any Seller or the Company (with respect to the shares in the Subsidiaries) to create any of the aforementioned rights, in each case except under statutory law or under the articles of association.

c) The Sellers are entitled without restriction to dispose of the Shares without thereby infringing the rights of a third party. This Agreement has been duly executed by the Sellers and constitutes legal, valid, and binding obligations of the Sellers, enforceable against the Sellers in accordance with its terms. The Sellers are fully authorized to execute this Agreement and to perform their obligations hereunder. Subject to the Clearance being obtained, (i) no Seller requires an approval or consent or waiver from any Governmental Authority to enter into this Agreement and to consummate the Transaction, (ii) the execution and consummation of this Agreement by the Sellers and the performance of the Transaction do not violate any judicial or governmental order (*gerichtliche oder behördliche Verfügung*) by which any Seller is bound. There are no proceedings or investigations pending or, to the Sellers' Knowledge, threatened against any Seller which seek to prevent or materially delay the consummation of the Transaction. **Governmental Authority** means any: (i) nation, state, commonwealth, province, territory, county, municipality, district or other jurisdiction of any nature, (ii) federal, state, local, municipal, foreign or other government, (iii) governmental authority of any nature (including any governmental division, department, agency, commission, instrumentality, official, ministry, fund, foundation, center, organization, unit, body or entity, and any court or other tribunal), or (iv) entity to whom a Governmental Authority has assigned or delegated any authority or oversight responsibilities.

d) No Seller or Group Company is required under the applicable law to take any action as a result of being illiquid (*zahlungsunfähig*), nor to the Sellers' Knowledge threatened by illiquidity (*drohend zahlungsunfähig*) or overindebted (*überschuldet*). No insolvency proceedings have been applied for or initiated against any of the Sellers or Group Company. To the Sellers` Knowledge there are no circumstances that would require a petition for the institution of insolvency proceedings, nor are there any circumstances which would justify any actions seeking to void or challenge this Agreement.

8.1.2 Financial Statements

a) The audited financial statements of the Company and the non-audited financial statements of the Subsidiaries for the fiscal years 2018, 2019 and 2020 (**Financial Statements**), certified with an unqualified audit opinion, as well as pro-forma consolidated financial statements of the Group for the fiscal years 2019 and 2020 (**Pro-Forma Consolidated Financial Statements**) are attached as Schedule 8.1.2 a).

b) The Financial Statements present, considering the principles of proper accounting, a true and fair view of the assets and liabilities, the financial position and the results of business operations (*vermitteln unter Beachtung der Grundsätze ordnungsgemäßer Buchführung ein den tatsächlichen Verhältnissen entsprechendes Bild der Vermögens-, Finanz- und Ertragslage*) of the Group Companies.

c) The Financial Statements for the Company were prepared in accordance with the German generally accepted accounting principles (*GoB*) (**German GAAP**). The Financial Statements for the Subsidiaries were prepared in accordance with local GAAP.

d) The Group Companies have no liabilities of any nature other than (i) those set forth or adequately shown in the Financial Statements and (ii) those incurred in the conduct of the business since the 31 December 2020 in the ordinary course of business consistent with past practice at arms' length terms. Except for liabilities reflected in the Financial Statements, the Group Companies have no off-balance sheet liability of any nature to, or any financial interest in, any third parties or entities, the purpose or effect of which is to defer, postpone, reduce or otherwise avoid or adjust the recording of expenses incurred by the Group Companies under the applicable local GAAP.

e) The accounts receivable of the Group Companies (the **Accounts Receivable**) as reflected in the Financial Statements arose in the ordinary course of business and represent bona fide claims against debtors for sales and other charges. Except as disclosed in Schedule 8.1.2 e)-1 the Accounts Receivables as reflected in the Financial Statements have been collected or to the Sellers' Knowledge are in all material respects collectible in the book amounts, less an amount not in excess of the allowance for doubtful accounts provided for in the Financial Statements. The Accounts Receivable arising after 31 December 2020 and until the Signing Date arose in the ordinary course of business and represent bona fide claims against debtors for sales and other charges. Except as disclosed in Schedule 8.1.2 e)-2 the Accounts Receivables arising after 31 December 2020 until the Signing Date have been collected or to the Sellers' Knowledge are in all material respects collectible in the book amounts, less allowances for doubtful accounts and warranty returns determined in accordance with relevant local GAAP consistently applied and the Group Companies' past practice that are or shall be sufficient to provide for any losses that may be sustained on realization of the applicable Accounts Receivable. To the Sellers` Knowledge and except as disclosed in Schedule 8.1.2 e)-3 no person has any encumbrance on any Accounts Receivable, and no agreement for deduction or discount has been made with respect to any such Accounts Receivable.

8.1.3 Other Assets

The Group Companies are the legal and beneficial owner of all fixed assets (*Gegenstände des Anlagevermögens*) and of all current assets (*Gegenstände des Umlaufvermögens*) which have been included in the Financial Statements as of 31 December 2020, except for such fixed or current assets (i) which have been disposed of, processed or substituted since the Financial Statements 2020 in the ordinary course of business, or (ii) which are subject to a retention of title (*Eigentumsvorbehalt)* of a supplier or a similar right in favor of a third party. To the Sellers' Knowledge, the physical assets owned by the Group Companies have in all material respects been properly maintained and are in good working order and repair except for normal wear and tear and are in a condition and quantity sufficient to run the business as currently conducted.

8.1.4 Real Estate

a) Schedule 8.1.4 a) contains a complete and accurate list of all real estate owned by the Group Companies (**Owned Real Estate**). To the Sellers` Knowledge the Owned Real Estate is free of any charges and encumbrances as well as rights of third parties of any kind, except as registered in the respective sections of the respective land registers.

b) Schedule 8.1.4 b) contains a list of all real estate leased-in (*gemietet*) by the Group Companies that has an annual net rental fee in excess of EUR 25,000 (in words: twenty-five thousand euros) in the individual case (exclusive of any ancillary costs and VAT) (**Leased Real Estate**).

c) Each Group Company is the unrestricted legal owner of the Owned Real Estate as set out in Schedule 8.1.4 a) and to the Sellers` Knowledge no Owned Real Estate is

(i) subject to any encumbrances or other third party rights except as set out in Schedule 8.1.4 a);

(ii) subject to any priority notices (*Vormerkungen*), any unregistered or otherwise pending conveyance (*Auflassung*) or other disposal;

(iii) subject to any lease.

d) The Owned Real Estates and the Leased Real Estates, the premises, constructions and fixtures thereon are free of material defects in term of construction or condition, expect for wear and tear due to normal use.

8.1.5 Intellectual Property Rights

a) Schedule 8.1.5 a) contains a list of all Registered IP Rights owned or co-owned by and registered on behalf of any Group Company (**Owned Registered IP**) and a list of all technical Know-How owned or co-owned by any Group Company which is material for the conduct of the business (**Business Know-How**), together with the Owned Registered IP, the **Owned IP Rights**)), specifying as to each Owned IP Right: (x) the type, nature and subject matter of such Owned IP Right, (y) the legal and commercial owner(s) of such Owned IP Right, and (z) if applicable, the jurisdictions in which such Owned IP Right has been registered, or in which an application for such issuance or registration has been filed, and the registration or application numbers (as the case may be). **IP Rights** means any patents, utility models (*Gebrauchsmuster*), registered designs (*eingetragene Designs*), other design rights or design patents (whether registered or not), trademarks, trade names, service marks, copyrights, internet domains and applications for any of the foregoing rights and renewals of such rights, rights in unpatented technical and other Know-How (whether patentable or not), any other intellectual or industrial property rights of any nature whatsoever in any part of the world, whether registered or unregistered. For the purpose of this definition, **Know-How** shall include any invention, discovery, development, data, information, process, method, technique, trade secret, composition of matter, formulation, article of manufacture or other know-how, and any physical (including electronic) embodiments of any of the foregoing, in each case unless part of the public domain. **Registered IP Rights** means all IP Rights which are registered in an appropriate register anywhere in the world, including applications for such registrations (such as, for example, registered patents and patent applications).

b) The Group Companies are the full and unrestricted owners of the Owned IP Rights and these rights are not subject to any pledges or other security rights of any third party. No Group Company has granted an exclusive license with respect to any IP Rights to any third party (other than to any other Group Company).

c) To the Sellers' Knowledge, except as set out in Schedule 8.1.5 c), the IP Rights are not subject to any pending judicial or regulatory proceedings in which the validity of the IP Rights is being challenged and which could adversely affect the business operations of any of the Group Companies. To the Sellers' Knowledge, all fees necessary to maintain, protect and enforce the Owned Registered IP have been paid, all necessary applications for renewal have been filed.

d) To the Sellers' Knowledge, there is no infringement, misuse, or other violation by any third party of any IP Rights, and no Group Company has made any claim, whether for infringement, damages or otherwise, against any third party regarding the use of IP Rights. No Group Company infringes any third party's rights in IP Rights. There has been no, and there are no litigation, opposition, cancellation or revocation proceedings, challenge, claims or actions pending or, threatened in writing against any Group Company relating to IP Rights of any third party which relates to the operation of the business of the Group Companies as formerly or currently conducted. To the Sellers` Knowledge no opposition, cancellation or revocation proceedings are pending against any Group Company with regard to any Owned Registered IP. No third party has challenged any Owned IP Right in writing towards the Company.

e) No Group Company has granted, and is not obliged to grant, any licence, assignment or, to the Sellers' Knowledge, other right in respect of any IP Rights, and to the Sellers` Knowledge is not obliged to disclose any IP Rights to any person.

f) The Group Companies have obtained exclusive, sublicensable, transferrable, worldwide, perpetual and unrestricted rights of use and exploitation with respect to the software listed and with a scope as disclosed in Schedule 8.1.5 f) (**Software**) from its (current and former) shareholders, directors, employees, freelancers, service providers, contractors or any other third parties, to the extent that the foregoing persons were involved in the development of the Software. The preceding sentence does not apply to Open Source Software (as defined below), and legally mandatory rights, which remain with the above persons due to mandatory law. To Sellers' Knowledge, the Software does not contain any third-party components, except for Open Source Software. **Open Source Software** means any software – including its source code – which is freely available to the public under license conditions which permit any person to use, copy, study, improve, modify or change such software – in modified or unmodified form. To the Sellers' Knowledge, the Software does not contain any Open Source Software components in a way that the current use of the Software would (a) impose a requirement or condition that the Software or any proprietary portion thereof be (i) disclosed, distributed, or made available in source code form; (ii) licensed for the purpose of making modifications or derivative works; or (iii) redistributable at no charge; or (b) otherwise impose any other material limitation, restriction, or condition on the right or ability of the Group Companies to use the Software.

g) Schedule 8.1.5 g) contains a complete list of individuals that would qualify as employee inventors under German law.

8.1.6 Information Technology

a) Each Group Company either owns or holds valid leases and/or licenses to all computer hardware, software, networks and other information technology (collectively **Information Technology**) which is used by or necessary for the respective Group Company to conduct its business.

b) During the last thirty-six (36) months prior to the Signing Date, there have been no material interruptions, data losses, malfunctions or similar incidents attributable to the Information Technology owned or used by such Group Company. To the Sellers` Knowledge the Information Technology is in usable condition and no material service or maintenance work outside the ordinary course of business is required.

8.1.7 Material Agreements

a) Schedule 8.1.7 a) contains a list of all material agreements between a Group Company and a third party (i.e., intra-group agreements shall not qualify as Material Agreements) which have not been completely fulfilled (the **Material Agreements**):

(i) agreements relating to the acquisition or sale of shares or interests in other companies or any business (*Betrieb*) or parts thereof (*Betriebsteil*);

(ii) joint venture agreements, cooperation agreements, partnership agreements or similar agreements that has involved, or is reasonably expected to involve, a sharing of revenues, profits, cash flows, expenses or losses with any other party or a payment of royalties to any other party;

(iii) loan agreements, bonds, notes or any other instruments of debt with any Group Company as borrower or lender, in each case with outstanding amount (including interest accrued) in excess of EUR 100,000 (in words: one hundred thousand euros);

(iv) guarantees, suretyships (*Bürgschaften*), indemnities, letters of comfort (*Patronatserklärungen*), performance or warranty bonds or similar instruments (x) issued by any of the Group Companies or (y) issued by any third party securing to any liability of any Group Company;

(v) any service, purchase or other agreements (not including purchase orders) with any customer or supplier providing for payments (whether fixed, contingent or otherwise) by or to any of the Group Companies in an aggregate annual amount of EUR 100,000 (in words: one hundred thousand euros);

(vi) rental and lease agreements relating to assets or real estate with a Group Company as lessor or lessee which provide for annual rental payments (without ancillary costs) in excess of EUR 50,000 (in words: fifty thousand euros)) per annum in the individual case and which cannot be terminated within twelve (12) months; and

(vii) other long-term agreements (*Dauerschuldverhältnisse*) which cannot be terminated within twelve (12) months and provide for obligations of a Group Company in excess of EUR 100,000 (in words: one hundred thousand euros) per annum in the individual case.

(viii) any contract (i) relating to an indemnity of any managing director (*Geschäftsführer*) of the Group Companies, (ii) relating to the engagement by any of the Group Companies of any consultant or contractor or any other type of contract with any of its consultants that is not terminable within three (3) months as of the Signing Date by the Group Companies without cost or other liability and having total future annual payment commitments of EUR 25,000 (in words: twenty five thousand euros) or more, (iii) requiring any of the Group Companies to make a payment to any current or former managing director (*Geschäftsführer*), employee, consultant or contractor on account of the purchase of the Shares.

(ix) any contract between any of the Group Companies and their managing directors (*Geschäftsführer*) or shareholders or any of their Affiliates or a Related Person.

(x) any contract pursuant to which any of the Group Companies has (i) acquired a business or entity, or assets of a business or entity, or (ii) disposed of any material assets or properties, in each case whether by way of merger, purchase of stock, purchase of assets or otherwise; or

(xi) any contract under which a Group Company's entering into this Agreement or the consummation of the transactions under this Agreement shall give rise to, or trigger the application of, any rights of any third party or any obligations of any of the Group Companies that would come into effect upon the consummation of the transactions under this Agreement.

b) Except as disclosed in Schedule 8.1.7 b), no Material Agreement will terminate solely as a result of the execution or performance of this Agreement or the Transaction (change of control) and no party to any Material Agreement (other than the Group Companies) is entitled to terminate or materially amend any Material Agreement solely as a result of the execution or performance of this Agreement or the Transaction (change of control). Each of the Material Agreements is in full force and effect. To the Sellers' Knowledge, there exists no material default or event of default or event, occurrence, condition or act, with respect to the Group Companies. In the last thirty-six (36) months prior to the Signing Date, the Group Companies have not received any written notice regarding any actual material breach or default under, or intention to cancel or modify, any Material Agreement.

c) Schedule 8.1.7 c) sets forth the customers with which the Group Companies generated sales in the financial year ended on 31 December 2020 of no less than EUR 500,000 (in words: five hundred thousand euros) (the **Key Customers**).

d) Schedule 8.1.7 d) correctly and completely lists all countries for which the Group Companies use external distribution persons (i.e. agents, dealers, distributors, etc.), including the name of the respective distribution person, the territory and information on exclusivity arrangements, if any.

8.1.8 Arrangements with Sellers or Sellers' Affiliates

a) There are no services necessary for the conduct of the business in the ordinary course as presently conducted which have been provided by a Seller or any of its Affiliates to any Group Company, other than as set out in Schedule 8.1.8.

b) No Group Company is under any obligation to make any payments of any kind, including, but not limited to, management charges, to any Seller or its Affiliates or any Related Person, save for payments under agreements or arrangements made on an arm's length basis and identified in Schedule 8.1.8.

c) There are no agreements or arrangements between any Group Company (on the one hand) and Sellers or their Affiliates (on the other hand), other than as set out in Schedule 8.1.8.

d) None of the Group Companies has granted an indemnification and/or hold harmless to the Sellers for claims based on the respective Seller's capacity as shareholder, managing director or employee of the Group Companies.

8.1.9 Employment Matters

a) Schedule 8.1.9 a)-1 contains for each Group Company an anonymized list all of employees (*Arbeitnehmer*) as well as managing directors and officers employed by the respective Group Company as of 31 October 2021 on the basis of full time equivalents (FTEs), setting out the start date of the relevant employment or service agreement, the position of the relevant employee, the fixed term (if any), the annual gross base salary (including bonus payments at target), part-time status, special protection from dismissal and old age part time agreement (*Altersteilzeitvertrag*). Schedule 8.1.9 a)-2 contains an anonymized list of all temporary employees (*Leiharbeitnehmer*) currently deployed by the Group Companies, setting forth the department, provider, fees and services rendered. Schedule 8.1.9 a)-3 contains an anonymized list of all freelancers who are currently active for the Group Companies, setting out the monthly fees and service rendered. There are no and have not been in the last five (5) years prior to the Signing Date temporary employees (*Leiharbeitnehmer*) or freelancers carrying out research and development in any of the Group Companies. All temporary employees (*Leiharbeitnehmer)* have been engaged in compliance with the respective labour laws.

b) Schedule 8.1.9 b) contains the standard employment agreements of the Group Companies.

c) No Group Company has a works council (*Betriebsrat*) or similar employee representation body (including a labor union in the United States), and, to the Sellers' Knowledge, no Group Company is in the process of establishing a works council or similar employee representation body in any of the Group Companies where none exists.

d) None the Group Companies is bound by any collective bargaining agreements or other material agreements with unions, works councils and similar organizational bodies.

e) Schedule 8.1.9 e) contains a complete and accurate list of all managing directors and employees of the Group Companies who are entitled to an annual remuneration (gross salary including bonus and further salary components, but excluding social security contributions) in excess of EUR 100,000 (in words: one hundred thousand euros) (all such employees listed in Schedule 8.1.9 e), the Key Employees). To the Sellers` Knowledge and except as set forth in Schedule 8.1.9 e), no Key Employee has given notice of termination of his or her employment. No Key Employee is entitled to (i) receive any payment as a result of the transaction contemplated herein from a Group Company or (ii) terminate his/her employment solely as a result of the transaction contemplated herein (*Sonderkündigungsrecht*). No Group Company has terminated the employment relationship with any Key Employee and no Key Employee has given written notice of termination.

f) Until the Signing Date, to and except as set forth in Schedule 8.1.9 f), the Group Companies are and have at all time in the last five (5) years been in compliance in all material aspects with all applicable laws as well as any national, industry or company collective agreement, order or award, employment, pension and social security (including as required by severance deposits and pension funds), employment practices, terms and conditions of employment (including individual employment agreements), wages and hours and workplace safety and fair labor practices. Every person employed or engaged by the Company has current and appropriate permission to work in Germany and to the Sellers' Knowledge, every person employed or engaged by any other Group Companies has current and appropriate permission to work in the country in which he/she is employed.

g) During the past five (5) years there have not been any legal disputes, strikes, work stoppages, work slowdowns, lockouts or other similar labour activities and no such activities or disputes are pending or, to the Sellers' Knowledge, threatened against or involve any of the Group Companies.

h) No employee or consultant engaged in the business is or will be entitled to any compensation, bonus, severance pay or any other benefits or entitlements on account of or resulting from any action taken by any of the Group Companies in connection with any of the transactions contemplated under this Agreement except as set forth in Schedule 8.1.9 h).

i) Except as set forth in Schedule 8.1.9 i), no Group Company is bound by any contracts or has entered into other forms of commitments regarding pensions (*betriebliche Altersversorgung*.

j) No Group Company has implemented or been subject to, at any time, an employee stock option or similar plan, whether with respect to virtual or actual shares.

8.1.10 Insurance Policies

The insurance policies listed in Schedule 8.1.10 are valid and in full force. To the Sellers' Knowledge all premiums due on the above policies have been duly paid up until the Signing Date and, to the Sellers' Knowledge, there are no facts or circumstances that could render any such policy unenforceable.

8.1.11 Legal Disputes

There are no judicial, arbitral or regulatory proceedings, which are pending and involve in any one case an amount in dispute of more than EUR 50,000 (in words: fifty thousand euros) to which any of the Group Companies is a party (*i.e.*, has been notified in writing), be it as plaintiff, defendant or otherwise. To the Sellers' Knowledge, no such proceedings have been threatened in writing against the Company.

8.1.12 Conduct of Business

Since 1 January 2021 until the Signing Date, the business operations of the Group Companies have been conducted in the ordinary course of business and substantially in the same manner as before, and there have been no material adverse changes with respect to the business operations as a whole. Specifically, the Group Companies have not conducted or been subject to any measure pursuant to clause 5.2 and/or 5.3 above.

8.1.13 Permits and Compliance

a) The Company and the Subsidiaries have obtained all governmental approvals, licenses, permits and other governmental authorizations that are required by applicable law for the business (**Permits**). To the Sellers' Knowledge, the business is conducted and, in the last three (3) years prior to the Signing Date, has been conducted in accordance with the Permits. To the Sellers' Knowledge, all Permits are in full force and effect (*bestandskräftig*) and there are no indications of a withdrawal, revocation, expiration, restriction or subsequent alteration of any Permit.

b) To the Sellers` Knowledge the Group Companies are not subject to any pending administrative or criminal investigation regarding alleged infringements of applicable laws.

c) The Group Companies are, and have in the last three (3) years been, in compliance with and have operated their respective business in all material respects in compliance with all applicable laws relevant to conduct their business.

d) In particular, the business of the Group Companies is currently, and has been within the last three (3) years prior to the Signing Date, conducted, in accordance with sanctions and export control laws.

e) None of the Group Companies or the Sellers nor any of their employees, has (i) taken any action directly or indirectly in furtherance of an offer, payment, promise to pay, or authorization or approval of any contribution, gift, bribe, rebate, payoff, influence payment, kickback, or other payment to any person (including any Governmental Authority (or employee or representative thereof), government owned or controlled enterprise, public international organization, political party and candidate for public office) private or public, regardless of what form, whether in money, or services (α) to obtain favorable treatment for business or a contracts, (β) to pay for favorable treatment for business or contracts secured, (γ) to obtain special concessions or for special concessions already obtained, (δ) to improperly influence or induce any act or decision, (ε) to secure any improper advantage, or (ζ) in violation of applicable law, or (ii) established or maintained any fund or asset that has not been accurately recorded in the books and records of the Group Companies. The Group Companies have in particular complied with the provisions of the United States Foreign Corrupt Practices Act (*FCPA*) and the UK Bribery Act.

f) None of the Group Companies, nor any of its advisory board members, managing directors , or to the Sellers' Knowledge, other employees: (i) has been or is designated on the OFAC Specially Designated Nationals and Blocked Persons List, Commerce's Denied Persons List or Entity List, and the State Department's Debarred List, United Nations Security Council Consolidatred List, EU Sanctions List and HM Treasury Sanctions List or other similar lists maintained by applicable jurisdictions, (ii) has participated in any transaction involving such designated person or entity, or any country subject to an embargo or substantial restrictions on trade under the United States sanctions administered by OFAC, or (iii) has exported (including deemed exportation) or re-exported, directly or indirectly, any commodity, software, technology, or services in violation of any applicable export control legislation of the European Union (or any state thereof) or the United States, or (iv) has participated in any transaction connected with any purpose prohibited by United States or European Union (or any state thereof) export control and economic sanctions laws, including, without limitation, support for international terrorism and nuclear, chemical, or biological weapons proliferation. The Group Companies have conducted its export transactions in accordance in all respects with applicable provisions of all applicable export and re-export controls in all countries in which the Group Companies conduct business. Without limiting the foregoing: (a) the Group Companies have obtained all material export and import licenses, license exceptions and other material consents, notices, waivers, approvals, orders, authorizations, registrations, declarations and filings with any Governmental Authority required for the export, import and re-export of products, services, software and technologies in context with the Group Companies' business (collectively, "**Export Approvals**"), (b) to the Sellers` Knowledge the Group Companies are in compliance with the terms of all applicable Export Approvals. The foregoing statements of this Section 8.1.13f), to the extent they relate to the Signing Date or the time thereafter, shall not be represented and warranted to the extent the representation and warranty of, or compliance with, such statements, inevitably results in a violation of, conflict with, or liability under, EU Regulation (EC) 2271/96, Section 7 AWV (each as amended from time to time) or any other similar applicable anti-boycott laws or regulations.

g) to the Sellers` Knowledge the Group Companies are and have always been in compliance, with Privacy Laws including as they relate to the collection, storage, processing and transfer of personal data related to the use of the products or services collected by the Group Companies. The Group Companies provide adequate notice of privacy practices in their privacy policies. A list of the policies (and the periods the policies have been in effect) is attached as Schedule 8.1.13 g) to the Sellers` Knowledge the Group Companies' privacy practices conform and has conformed at all times to its privacy policies. To the Sellers` Knowledge the Group Companies have been and are in compliance with all contracts pursuant to which the Group Companies process or have processed personal data of end users of the products or services of the Group Companies (the **Company Privacy Commitments**). In addition, to the Sellers` Knowledge where and when required by Privacy Laws, the Group Companies have provided all notices and obtained any necessary consents from data subjects required for the processing of personal data as conducted by or for the Group Companies. To the Sellers` Knowledge the execution of this Agreement will not cause, constitute, or result in a breach or violation of any Privacy Laws or Company Privacy Commitments. No claims have been asserted or, to the Sellers' Knowledge, are threatened against the Group Companies by any person alleging a violation of such person's privacy, personal or confidentiality rights under the privacy policies of the Group Companies. With respect to the security of personal data collected, received or processed by the Group Companies, the Group Companies have taken and take all steps reasonably necessary (including implementing and monitoring compliance with adequate technical and organizational measures) to ensure that the information is protected against loss and against unauthorized access, use, modification, disclosure or other misuse. To the Sellers' Knowledge, there has been no unauthorized access to or other misuse of that information. **Privacy Laws** shall mean all laws applicable to the Group Companies that relate to personal data, including, without limitation, related to data or information security, data transfer (including cross-border transfer), the protection or processing of personal data, data breach notification; laws regarding unsolicited email, telephone, or text message communications, and the European Union General Data Protection Regulation (**GDPR**) and European Union member state implementing laws and regulations related to the GDPR.

8.1.14 Environmental Matters

a) The Company is and has been in compliance in all material aspects with German Environmental Laws relating to it or to any of its property, activity or asset currently or formerly owned, leased, operated, carried out or used by or in connection with its business. **Environmental Laws** means all applicable German laws and, to the extent that they are legally binding, German ordinances, rules, orders (*Bescheide*), public law agreements (*öffentlich-rechtliche Verträge*) relating to environmental matters, which are matters relating to pollution or contamination or protection of the soil, subsurface, air, groundwater, surface water, soil vapor, land surface (including constructions, facilities and buildings and remains thereof) or human life or human health (including occupational safety). An on-site inspection in this regard by the Reutlingen District Office ("*Landratsamt Reutlingen*") took place on 10 November 2021, as recorded in Schedule 8.14a).

b) The Group Companies have not received any order (*bestandskräftiger Bescheid*) from any public authority imposing investigation (*Untersuchungsmaßnahmen*), remediation (*Sanierungsmaßnahmen*), securing (*Sicherungsmaßnahmen*) or protective containment measures (*Schutz- und Beschränkungsmaßnahmen*) regarding an environmental contamination, and (ii) to the Sellers` Knowledge no legal or administrative proceeding is pending against any of the Group Companies that alleges a violation of any Environmental Law. To the Sellers` Knowledge no Environmental Contamination exists on any of the Owned Real Estate or Leased Real Estate. **Environmental Contamination** means any Hazardous Materials that exist in the soil, groundwater or surface water. **Hazardous Materials** means any pollutant, contaminant or other substance identified or designated as hazardous radioactive or toxic, including solid or hazardous waste including any admixture or solution thereof, and including petroleum and all derivatives thereof or synthetic substitutes and asbestos or asbestos-containing materials, which may contaminate inter alia groundwater and soil, under applicable law.

8.1.15 Finders' Fee

No Group Company has any obligation or liability to pay any fees, commissions or to make any other payments of any similar nature to any broker, finder or agent with respect to this Agreement or the consummation of the Transaction. No Group Company has any obligation or liability to pay any bonus, fee or to make any other payments of any similar nature to any director, officer or employee of any Group Company with respect to this Agreement or the preparation or consummation of the Transaction.

8.1.16 Public Subsidies

Schedule 8.1.16 contains a list of the public grants (*Zuschüsse*), allowances (*Zulagen*), subsidies (*Subventionen*) or other aids within the meaning of Article 107 of the Treaty on the Functioning of the European Union granted to any of the Group Companies by public authorities during the five (5) years preceding the Signing Date. To the Sellers` Knowledge no circumstances exist that would justify a revocation (*Widerruf*), reduction (*Reduzierung*) or withdrawal (*Rücknahme*) of a subsidy and no subsidy can be revoked or withdrawn as a consequence of the transactions contemplated herein. In case subsidies above EUR 100,000 (in words: one hundred thousand euros) already paid-out to the any of the Group Companies will be reclaimed by the respective authorities within twenty-one (21) months from the Closing Date, the Sellers will reimburse the respective Group Company for such amount exceeding EUR 100,000 (in words: one hundred thousand euros). For the avoidance of doubt, the preceding sentence does not constitute a Sellers Guarantee and any limitation explicitly applicable to breaches of Sellers Guarantee shall not apply, except for Clause 9.6, which shall apply *mutatis mutandis*.

8.1.17 Data Room Accuracy

To the Sellers' Knowledge, none of the information disclosed in the Data Room renders any of the Sellers' Guarantees incorrect.

8.2 No other Sellers Guarantees

8.2.1 The Purchaser explicitly acknowledges to purchase and acquire the Shares and the business associated therewith in the condition they are in on the Closing Date based upon its own inspection and assessment of all the facts and circumstances, and to undertake the purchase based upon its own decision, inspection and assessment without reliance upon any express or implied representations, warranties or guarantees of any nature made by the Sellers, except for the guarantees expressly provided by the Sellers under this Agreement.

8.2.2 Without limiting the generality of the foregoing, the Purchaser acknowledges that the Sellers give no representation, warranty or guarantee with respect to

a) any projections, estimates or budgets delivered or made available to the Purchaser regarding future revenues, earnings, cash flow, the future financial condition or the future business operation of the Company or the Group;

b) any other information or documents that were delivered or made available to the Purchaser or its counsel, accountants or other advisors with respect to the Company or its business operation, except as expressly set forth in this Agreement; or

c) any Tax matters, except as provided for in clause 10.

8.3 Sellers' Knowledge

In this Agreement, the **Sellers' Knowledge** shall encompass only the positive, actual knowledge (*positive Kenntnis*) of the Sellers, as of the Signing Date.

9 Remedies

9.1 Recoverable Damages

9.1.1 In the event that a Sellers Guarantee is breached, the Sellers shall be obligated to put the Purchaser or, at the election of the Purchaser, the relevant Group Company or Group Companies in such position as the Purchaser, respectively the Group Company, would have been in, had the Sellers Guarantee not been breached (restitution in kind – *Naturalrestitution*). If the Sellers are unable to achieve such restitution in kind within four (4) weeks after having been notified by the Purchaser of the breach or if restitution in kind is either impossible, not permitted by nature or not suitable to compensate the loss, then the Purchaser may claim monetary damages with the meaning of Sections 249 et seqq. BGB (*Schäden*) to be paid to the Purchaser or, at the election of the Purchaser, to the relevant Group Company. Nevertheless, such compensation for damages shall cover only the actual damages incurred by the Purchaser or any Group Company, including (i) reasonably foreseeable consequential damages (*Folgeschäden*), (ii) reasonably foreseeable indirect damages (*mittelbare Schäden*) (ii) reasonably foreseeable loss of profits (*entgangener Gewinn*), and will specifically not cover the internal administrative or overhead costs, and the Purchaser may not claim that the Total Purchase Price was calculated based on incorrect assumptions (the damages potentially to be compensated pursuant to this clause 9.1.1 the **Damages**).

9.1.2 The Sellers shall not be liable for, and the Purchaser shall not be entitled to claim for, any breach of a Sellers Guarantee, if and to the extent that:

a) the fact upon which the claim is based, (i) is covered by any specific provision, specific reserve or specific valuation allowance made in the Financial Statements for the calendar year 2020 or (ii) has reduced the Purchase Price; and / or

b) either any of the Group Companies and/or the Purchaser actually recovers such claim from third parties, including insurance carriers; if and to the extent, the Sellers are held liable, the Purchaser and/or relevant Group Company shall (i) assign to the Representative any relevant claims against third parties, including insurance carriers, and (ii) use commercially best efforts to assist the Sellers in pursuing such claims.

9.2 Deductible; Overall-Deductible

The Purchaser is entitled to claims for breaches of Sellers Guarantees only if an individual claim exceeds an amount of (-------) (**Deductible**) and the aggregate amount of all such individual claims exceeds (-------) (**Overall Deductible**). In the event that the Deductible and the Overall Deductible are exceeded, the Purchaser can claim the entire amount and not only the amount exceeding the Deductible and the Overall Deductible.

9.3 Overall Scope of the Sellers' Liability pursuant to this Agreement

The aggregate liability for breach of any of the Sellers Guarantees pursuant to clause 8.1, except for the Sellers Guarantees under Section 8.1.1 (the **Fundamental Guarantees**), shall be limited to (-------) of the definitive Total Purchase Price (**Liability Cap**). The overall liability of each Seller under or in connection with this Agreement, except for Fundamental Guarantees, shall be capped at (-------) of the portion of the Total Purchase Price paid-out to and received by such Seller. The overall liability of each Seller for any breaches of Fundamental Guarantees shall be limited to hundred percent (100%) of the portion of the Purchase Price actually received by such Seller, whereby (i) each Seller shall, for any amount exceeding the Escrow Amount, only be liable severally, but not jointly with any other Seller, for breaches of Fundamental Guarantees pertaining to its Shares and (ii) any liability of each Seller arising under or in relation to this Agreement for any other reason that a breach of a Fundamental Guarantee shall also be counted towards the mentioned liability cap of hundred percent (100%).

Subject to the preceding paragraph, (i) the Sellers shall be severally and jointly (*gesamtschuldnerisch*) liable in an amount equal to the Escrow Amount and (ii) for any amounts exceeding the Escrow Amount, (a) with respect to Fundamental Guarantees, each Seller shall be the exclusive debtor for claims raised with respect to the Shares sold by him or her and (b) with respect to all other claims under or in connection with this Agreement, each Seller's liability shall be severally (*teilschuldnerisch*) in proportion to the numbers of Shares sold by him.

9.4 Exclusion of Certain Provisions

Sections 442 BGB and 377 German Commercial Code (*HGB*) are, to the extent legally permissible, expressly excluded.

9.5 Exclusion of Claims due to Purchaser`s Knowledge

The Purchaser shall not be entitled to bring any claim under clause 8 if the underlying facts or circumstances to which the claim relate were known to the Purchaser, taking into account that the Purchaser, prior to entering into this Agreement, has been given the opportunity to conduct a thorough review of the condition and status of the Company and their respective business from a commercial, financial and legal perspective. Subject to Clause 8.1.17 being true and correct, facts and circumstances that were (x) fairly disclosed (i.e. (i) in such a manner and in a context where a reasonably experienced purchaser could expect such information and (ii) with sufficient details on the face of such disclosure for a reasonably experienced purchaser to understand and evaluate the nature and scope of the matter and its likely impact (including its magnitude, without needing to consider or request any other information or documents)) in the documents made accessible to the Purchaser and its advisors in the virtual data room operated by Ansarada from 9 June 2020 until 29 July 2020 as well as 23 September 2021 until 11 November 2021 (the **Data Room**), or (y) in this Agreement or (z) its Schedules are deemed to be known by the Purchaser. The documents contained in the Data Room have been stored on an electronic data storage medium, a read-only copy of which, together with a copy of a letter of assurance by Ansarada, will be provided to the acting notary without undue delay after the Signing Date with the instruction to keep it in custody for a period of five (5) years from the Closing Date. Two (2) read-only copies of the data storage medium, together with a copy of letter of assurance by Ansarada, will be handed over to the Purchaser without undue delay and two (2) read-only copies of the data storage medium, together with a copy of letter of assurance by Ansarada, will be handed over to the Sellers without undue delay. The acting notary is not obliged to check whether the documents on the data storage medium are correct and complete in the required form. The acting notary is not obliged to provide technical equipment to enable the inspection of the data storage medium. The notary is instructed to hand over the data storage medium to the Party which is named by the Sellers and the Purchaser unanimously or if such notification is not made to destroy the data storage medium after expiry of the custody period.

9.6 Notification to Sellers; Procedure in Case of Third Party Claims

9.6.1 In the event of an actual or potential breach of a Sellers Guarantee, the Purchaser shall, without undue delay after becoming aware of the matter, provide the Sellers with written notice of such alleged breach, describing the potential claim in reasonable detail and, to the extent practical, stating the estimated amount of such claim and shall give the Sellers the opportunity to cure the breach within the period of time indicated in clause 9.1.1.

9.6.2 Furthermore, if, in connection with a breach of a Sellers Guarantee, any claim or demand of a third party is asserted against the Purchaser or any of the Group Companies (**Third Party Claim**), then the Purchaser shall make available to the Sellers a copy of the Third Party Claim or demand and of all time-sensitive documents.

9.6.3 If the Sellers generally accept the full responsibility for the Third Party Claim in question (*Anspruch dem Grunde nach anerkannt*), the Purchaser shall give the Sellers the opportunity to defend the Purchaser or the relevant Group Company against the Third Party Claim. In such case, to the extent this does not have a materially detrimental effect on the Group Companies or their business, the Sellers will have the right to defend against the claims by instituting all appropriate proceedings and will have the sole power to direct and control such defense, in particular, the Sellers have the unconditional right to

a) participate in and lead all negotiations and correspondence with the third party,

b) appoint and instruct legal counsel to act for and on behalf of the Purchaser or the Company, and

c) request that a claim be litigated or settled out of court in accordance with the Sellers` instructions.

The Sellers shall conduct such proceedings in good faith with reasonable regard to the concerns of the Purchaser.

9.6.4 If the Sellers do not elect to defend a Third Party Claim in accordance with the process set forth in clause 9.6.3, the Purchaser shall (i) afford the Sellers and their representatives the opportunity to comment on and review any reports and documents and to participate in all relevant audits, court hearings and any meetings (including video or telephone conference), (ii) deliver to the Sellers and their representatives without undue delay (*unverzüglich*) copies of all relevant orders (*Bescheide*), decisions, filings, motions and other documents of any court or party to the conflict or dispute, and (iii) diligently conduct the defense in order to mitigate the losses.

9.6.5 In no event shall the Purchaser or the Company be entitled to acknowledge or settle a claim or permit any such acknowledgement or settlement without the Sellers` prior written consent (not to be unreasonably withheld or delayed), to the extent that such claims may result in the Sellers' liability under this Agreement. The Purchaser and the Company shall cooperate with the Sellers in the defense of any third party claim, provide the Sellers and their representatives (including their advisory) reasonable access to the relevant business records and documents reasonably required, and permit the Sellers and its representatives to reasonably consult with the directors, officers, employees and representatives of the Purchaser or the Company. To the extent that the Sellers are in breach of a Sellers Guarantee, all costs and expenses incurred by the Sellers in defending such claim shall be borne by the Sellers. If it later emerges that the Sellers were not in breach, then any costs and expenses reasonably incurred by the Sellers in connection with the defense (including advisors' fees) shall be borne by the Purchaser and the Company. The Purchaser shall ensure that the Company fully complies with its obligations under this clause 9.5.

9.6.6 The Sellers shall not be liable under clause 8 if and to the extent the Purchaser has not complied with its obligations under clause 9.6 and if and to the extent such incompliance has (i) caused or increased the Damages of the Purchaser, or (ii) materially affected the Sellers' ability to defend against the Third Party Claim .

9.7 Mitigation

The Purchaser is obliged to prevent the occurrence of any damages and to limit the scope of any damages incurred in accordance with Section 254 BGB.

9.8 Time Limits

All claims for any breach of Sellers Guarantees pursuant to clause 8 shall become time-barred eighteen (18) months after the Closing Date, except for claims for any breach of the Sellers Guarantee in clauses 8.1.1, 8.1.5 and 8.1.6, which shall become time-barred five (5) years after the Closing Date.

9.9 Exclusion of Further Remedies

To the extent permitted by law and unless expressly provided otherwise in this Agreement, any further claims and remedies with respect to a breach of a Sellers Guarantee – irrespective of their nature, amount or legal basis – are hereby expressly waived, including without limitation claims for breach of a pre-contractual duty, claims based on a breach of duty in an obligation relationship, claims based on statutory warranty provisions and liability in tort as well as any and all other claims which could, due to a rescission, action for avoidance, reduction of the Total Purchase Price or other reasons, result in the termination, invalidity or a winding-up or restitution *ex tunc* of this Agreement, in an amendment of its content or in a refund or reduction of the Total Purchase Price, except if and to the extent that any such claim is based on intent or on fraudulent misrepresentation of the Seller.

9.10 No Double Dip

Where one and the same set of facts (*Sachverhalt*) qualifies under more than one provision entitling the Purchaser to any claim, for damages or for other reasons, under or in connection with this Agreement, there shall be only a one time consideration respectively compensation for the entirety of such claim and/or damage. For the avoidance of doubt, the "no double counting" principle set forth in this Section 9.10 shall apply *mutatis mutandis* with respect to any advantages, savings or benefits taken into account with respect to any claim under or in connection with this Agreement.

9.11 Treatment of Payments

Any payments made by the Sellers pursuant to clause 9 shall be considered a reduction of the Total Purchase Price as between the Sellers and the Purchaser.

9.12 Intent; Fraudulent Misrepresentation

Any limitation of the Sellers liability pursuant to this clause 9 shall not apply if the claim is due to intent (*Vorsatz*) or fraudulent misrepresentation (*arglistige Täuschung*) by one of the Sellers.

10 Taxes

10.1 Definitions

In this Agreement,

Taxes means (i) any taxes (*Steuern*) and auxiliary levies (*steuerliche Nebenleistungen*) as defined in Section 3 of the German Fiscal Code (*Abgabenordnung*) and equivalent taxes and levies under foreign law, (ii) any other levies or duties (*Abgaben*) under German or foreign law, including (but not limited to) customs duties and social security contributions, (iii) any obligation to repay public allowances (*Zulagen*) or subsidies (*Beihilfen*), (iv) administrative fines, (v) secondary liability (*Haftungsschulden*) for any of the aforementioned items, (vi) any liability for payment of amounts referred to in clauses (i) through (v), in particular as a result of any tax sharing, tax indemnity or tax allocation agreement and (vii) in each case together with any interest, penalty, fine or addition thereto; and

Indemnifiable Taxes means any (i) Taxes and damages arising from a breach of any Tax Guarantee and (ii) Taxes imposed on or payable by the Group Companies and relating to the time period (*Zeitraum*) prior to and including the Closing Date or resulting from actions taken on or prior to the Closing Date; and

Tax Authority means any competent Governmental Authority in charge of imposing or collecting any Tax.

10.2 Tax Guarantees

The Sellers represent and warrant to the Purchaser in the form of independent guarantees pursuant to Section 311 (1) BGB (**Tax Guarantees**) that, except as otherwise disclosed in Schedule 10.2, as of the date hereof and as of the Closing Date,

a) all Tax returns required to be filed with any Tax Authority by or on behalf of the Group Companies have been duly prepared, have been filed when due (considering all extensions granted) and are to Sellers' Knowledge true and correct;

b) the Group Companies have timely paid when due all Taxes owed by it;

c) as of the date hereof, no Tax audit, investigation, dispute or other proceeding is pending in respect of the Group Companies, and the Group Companies have not been notified in writing by any Tax Authority that such authority intends to commence any such proceeding;

d) the Group Companies have not obtained a binding ruling and have not entered into any agreements, waivers or arrangements with any Tax Authority;

e) the Group Companies keep books of accounts as required by applicable law, and the application thereof by the competent Tax Authority, and have sufficient records (including and required transfer pricing documentation) relating to past events during all times prior to and including the Closing Date and any Tax-related records, files and documents, including electronically stored data, which are under any applicable Tax law required to be available, have been stored on the respective Group Company's premises and are readily accessible in a manner as required under, and in full compliance with, all applicable Tax laws.

f) To Sellers' Knowledge the Group Companies have not taken any measures or entered into any transaction which may be regarded as resulting in a constructive dividend (*verdeckte Gewinnausschüttung*) (or comparable instrument in any jurisdiction other than Germany) by the relevant Taxing Authorities, or which could result in adjustments pursuant to Section 1 Foreign Tax Act (*Außensteuergesetz*), and all transactions entered into by the Group Companies with each other and the Sellers or any other person (as applicable) have been carried out at arm's length terms and have been properly and timely documented in accordance with applicable law.

g) No written claim has ever been made by a Governmental Authority in a jurisdiction where any Group Company does not pay Taxes or file Tax Returns asserting that the respective Group Company is or may be subject to Taxes assessed by such jurisdiction or required to file a Tax Return in such jurisdiction. In addition, no Group Company has or had employees or premises in any jurisdiction other than its jurisdiction of incorporation.

h) No Group Company has written down any asset to its going concern value (*keine Teilwertabschreibung*), has been involved in any reorganization that could lead to blocking periods (*Haltefristen*) or any other restrictions including without limitation those contained in the former Section 8b(4) Corporate Income Tax Act (*Körperschaftsteuergesetz*, KStG), Sections 6(5) and 16(3) Personal Income Tax Act (*Einkommensteuergesetz*, EStG), Sections 15(2) and 22 Reorganization Tax Act (*Umwandlungssteuergesetz*, UmwStG) or in the former Sections 21(2) and 26 UmwStG.

i) The Group Companies have obtained the required exemption certificates (*Freistel-lungsbescheinigungen*) to execute payments (including, without limitation, dividends, interest payments or royalties) prior to Closing Date without withholding Tax or at a lower withholding Tax rate as provided for in the applicable Income Tax Treaty.

10.3 Tax Indemnity

The Sellers shall pay to the Purchaser an amount equal to any Indemnifiable Tax (the **Tax Indemnification Claim**), provided that the Sellers shall not be liable vis-à-vis the Purchaser (and the Tax Indemnification Claim shall be reduced accordingly) if and to the extent:

a) the respective Tax has been paid until the Closing Date;

b) a specific liability (*Verbindlichkeit*) or provision (*Rückstellung*) for the Indemnifiable Tax is included in the Final Closing Date Statement and has reduced the Total Purchase Price;

c) the Group Companies or the Purchaser realizes a concrete cash effective Tax saving in the form of "reversal effect" as a direct consequence of the respective Tax or the circumstances underlying such Tax, respectively (e.g., resulting from the lengthening of any amortization or depreciation periods, higher depreciation allowances, a step up in the Tax basis of assets, the non-recognition of generally tax deductible liabilities or provisions (*Phasenverschiebungen*)). In such case the claim of the Purchaser pursuant to clause 10.3 will be reduced by the net present value of the respective Tax saving which shall be calculated as a lump sum on the basis of (i) a presumed uniform tax rate of 30%, (ii) a discount factor of three (3)% p.a. and (iii) the assumption that it will have been realized within five (5) years from the Closing Date;

d) Tax results from (i) any change in the accounting practices of the Group Companies introduced after the Closing Date or (ii) from any change in the exercise of any Tax election rights introduced after the Closing Date or (iii) a measure under the German Reorganization Tax Act (*Umwandlungssteuergesetz*) or equivalent laws under foreign jurisdictions initiated and implemented after the Closing Date, provided in each case of (i) – (iii) that the change or measure has a direct impact under statutory Tax law on the Pre-Closing-Date-Period and unless such change is requested by the Tax Authorities, made with Sellers' written consent or required under mandatory Law.

e) the amount of the respective Tax has been recovered by the Group Companies from a third party, or

f) the respective Tax is directly caused by the Purchaser's non-compliance with its obligations set forth in clauses 10.4 and 10.5.

Any amounts payable to the Purchaser under this clause 10.3 shall be payable and due within five (5) Business Days prior to the day on which the respective Tax is due for payment by any of the Group Companies to the competent Tax Authority, even if the assessment does not yet have binding effect (*formelle Bestandskraft*). For the avoidance of doubt, any indemnification payment on the basis of a preliminary Tax return which is later revoked must be reimbursed to the Sellers within ten (10) Business Days after receipt of the respective repayment amount (by way of cash payment, set-off or deduction).

10.4 Tax Returns after the Signing Date

The Sellers shall prepare and file, or cause the Group Companies to prepare and file, all Tax returns for the Group Companies required to be filed by or on behalf of the Group Companies before the Closing Date. The Purchaser shall prepare and file, or cause the Group Companies to prepare and file, all Tax returns required to be filed by or on behalf of the Company after the Closing Date, but – in the case of Tax returns for the period ending prior to the Closing Date (excluding monthly tax filings) only after a review and written approval from the Sellers (which may not be unreasonably withheld or delayed). All Tax return filings for periods up to and including the Closing Date shall be prepared in consistence with those prepared for prior Tax assessment periods, unless a change is requested by tax authorities or required pursuant to mandatory law. The Purchaser shall procure that (i) any Tax return which must be reviewed and approved by the Sellers, is furnished to the Sellers no later than thirty (30) Business Days prior to the due date of such Tax filing and (ii) no Tax return of the Group Companies relating to any period ending prior to or on the Closing Date will be filed, amended or changed by the Purchaser or the Group Companies without prior written approval of the Sellers (such approval not being unreasonably withheld or delayed by the Sellers).

10.5 Cooperation

10.5.1 After the Closing Date, the Purchaser and the Sellers shall reasonably cooperate, and shall cause their representatives to reasonably cooperate, with each other in connection with all Tax matters relating to any Taxes payable by the Group Companies for any period ending on or before the Closing Date, including the preparation and filing of any Tax return or the conduct of any Tax audits, investigations or other proceedings. Following the Closing Date, the Purchaser shall without undue delay notify the Sellers of any Tax audits or administrative or court proceedings that are announced or commenced and that might constitute a basis for a Tax Indemnification Claim under this clause 10 (**Tax Disputes**). Such notice shall be made in writing and shall describe the object of the Tax Dispute or the asserted Tax liability and shall include copies of any notice or other documents received from the Tax Authority or the courts in respect of any such Tax Dispute or asserted Tax liability. The Purchaser shall further ensure that the respective Group Company allows the Sellers to participate in such Tax Disputes and keeps the Sellers fully informed about such Tax Dispute.

10.5.2 The Purchaser shall procure, upon written request of the Sellers and at Sellers' expense, that objections are filed, and legal proceedings are instituted and conducted against any Tax assessment notices or judgments, in each case, if and to the extent relating to Indemnifiable Taxes, in accordance with the Sellers' reasonable directions. The Sellers shall bear all fees of external counsel and other external costs of the relevant proceeding, e.g., costs of the Tax court etc. Otherwise, the Purchaser or the respective Group Company may pay, settle or formally challenge the validity of such asserted Tax liability.

10.5.3 If and to the extent that the Purchaser or its legal successor reasonably require information or documents for tax purposes from the Sellers or legal successors in connection with the Tax matters of one of the Group Companies, in particular but not limited to section 20 et seq. of the German Reorganization Tax Act (UmwStG), Section 4h of the German Income Tax Act (EStG) or Section 8a of the German Corporate Income Tax Act (KStG), the Sellers shall procure that on written request of the Purchaser or one of the Group Companies such information or documents will be provided to them without undue delay. The Purchaser shall bear all reasonable fees of external counsel and other reasonable external costs which incur in connection with the provision of such information or documents.

10.6 Tax Refund

If any Group Company receives a Tax refund relating to any period prior to the Closing Date, the Purchaser shall pay to the Sellers the amount of the Tax refund net of any taxes payable by the Group Companies and the Purchaser on such Tax refund and its distribution to Purchaser. The Purchaser shall without undue delay notify the Sellers of any such Tax refund relating to any period prior to the Closing Date.

10.7 As-If-Agreement; Pro-Rata Share and Treatment of Payments, Miscellaneous

10.7.1 In the event Taxes relate to a Tax period beginning before the Closing Date and ending thereafter such Tax period shall deemed to be split in one Tax period ending on the Closing Date and another Tax period starting after the Closing Date and to the extent not reasonably feasible based on a *pro rata temporis* basis for the purpose of determining claims under this clause 10.

10.7.2 All payments to be made by the Sellers to the Purchaser or by the Purchaser to the Sellers under clauses 9, 10, 11 and 12 shall constitute a reduction or an increase of the Purchase Price for Tax purposes, as the case may be. If and to the extent payments are made by the Sellers directly to the Group Companies, such payments shall be construed and deemed as contributions (*Einlagen*) made by the Purchaser into the Group Companies and shall be treated as a reduction of the Purchase Price as between the Parties.

10.7.3 Clause 9.2, 9.3, 9.5, 9.10, 9.12 shall apply to the Tax Guarantees accordingly; otherwise clause 9 shall not apply to the Tax Guarantees. For the avoidance of doubt, except for claims based on a breach of the Tax Guarantees, clause 9 shall not apply to claims under this clause 10.

10.8 Time Limits

All claims of the Purchaser under this clause 10 shall be time-barred six (6) months after the final and binding assessment (*formelle und materielle Bestandskraft nach Ablauf aller Ablaufhemmungen*) of the relevant Taxes. Any claim of the Sellers under clause 10.6 shall become time-barred six (6) months after the Sellers have been notifying in writing by the Purchaser.

11 Purchaser Guarantees

11.1 Purchaser Guarantees

The Purchaser hereby guarantees, by way of an independent promise of guarantee (*selbständiges Garantieversprechen*) pursuant to Section 311 (1) BGB, as follows:

11.1.1 The Purchaser is duly incorporated and validly existing under the laws of Germany.

11.1.2 The Purchaser has all requisite corporate power and authority and has been duly authorized by all necessary corporate actions to enter into and perform this Agreement and the legal transactions (*Rechtsgeschäfte*) contemplated herein.

11.1.3 Subject to the Clearance being obtained, the execution and performance by the Purchaser of this Agreement and the consummation of the legal transactions contemplated herein do not violate the Purchaser's articles of association, by-laws or internal rules of management and do not violate any applicable statutory provision, judgment, injunction or other rule binding upon the Purchaser, and there are no legal, investigation or other proceedings pending against, or to the Purchaser's knowledge threatened against, the Purchaser before any court, arbitration tribunal or Governmental Authority which in any manner challenges or seeks to prevent, alter or delay the legal transaction contemplated in this Agreement.

11.1.4 Based on its due diligence exercise, the Purchaser is not aware of any facts or circumstances that could give rise to claims against the Sellers pursuant to clause 8 through 10.

11.1.5 The Purchaser has sufficient, immediately available funds or binding financing commitments to pay the Total Purchase Price and to make all other payments required to be made under or in connection with this Agreement.

11.2 Indemnification

If the Purchaser breaches any guarantee pursuant to clause 11.1, the Purchaser shall indemnify and hold harmless the Sellers from and against any damages incurred by the Sellers. All claims of the Sellers arising under this clause 11 shall become time-barred five (5) years after the Closing Date.

12 Additional Obligations of the Parties post-Closing

12.1 Access to Financial Information

Subject to clause 15.2, which shall apply, the Purchaser shall ensure that after the Closing Date, the Sellers and their representatives are given, at reasonable request and upon reasonable advance notice during the normal business hours, access to, and are allowed to make copies of, the books and accounts of the Group Companies for fiscal years up to and including 2021, as long as and to the extent reasonably necessary to the Sellers in connection with any audit, investigation, dispute (except as under or in connection with this Agreement against the Purchaser), tax return or audit or another, objectively justified reason.

12.2 (-------)

12.3 Non-Compete

Until the second (2nd) anniversary of the Closing Date, the Sellers shall not, directly or indirectly, compete with the Group Companies in the specific regions where the Group Companies operate at the Closing Date. The Sellers shall, in particular, not form, acquire or invest in any company which competes, either directly or indirectly, with the Group Companies, except for the acquisition of participations in publicly traded companies of less than two percent (2 %) of the capital of the relevant company for capital investment purposes.

12.4 Non-Solicit

Until the second (2nd) anniversary of the Closing Date, the Sellers shall not, directly or indirectly, (i) influence or attempt to influence any customers, suppliers, employees, consultants, distributors, salespersons, agents or other material business partners of the Group Companies to terminate or otherwise discontinue their business relationship with the Group Companies, or to reduce the volume of goods or services provided or received, as the case may be, thereunder or (ii) solicit or attempt to solicit the service or employment of any current or future managing director or employee of the Group Companies.

12.5 Renaming Ancosyslab

Seller 6 undertakes that the company ancosyslab GmbH, which is incorporated under the laws of the Swiss Confederation, changes its name to a company name not containing the phrase “ancosys” or any similar wording, without undue delay, but in no event later than four (4) weeks after the Closing Date.

12.6 Indemnification for Third Party Claims

If, after the Signing Date, a third party raises against one or more Sellers a claim which is based on the respective Seller’s former capacity as shareholder, managing director or employee of the Company and the period until the Closing Date (except for claims based intentional of fraudulent behaviour and to the extent the claim relates to actions taken in the best interest of the Group Companies and in good faith), then the Purchaser shall indemnify and hold harmless the respective Seller(s) from and against any such claim. All claims of the Sellers arising under this clause 12.6 shall be limited to a total amount of EUR 250,000 (in words: two hundred fifty thousand euros) and become time-barred two (2) years after the Closing Date.

12.7 Shareholders' meetings

The Purchaser shall, immediately after the registration of the Purchaser as new owner of the Shares in the commercial register, carry-out a shareholders' meeting of the Company and, to the extent legally permissible, grant full discharge (*Entlastung*) to Seller 6 as managing director of all relevant Group Companies, until and including the Closing Date. The Purchaser shall again grant such discharge (*Entlastung*) at the Company's ordinary shareholders meeting for the business year 2021, to be held in 2022.

12.8 Indemnification

The Sellers shall indemnify and hold harmless the Company from and against any and all costs, liabilities, taxes, claims, demands, assertions of liability, assessments directly or indirectly arising out of, resulting from the social security and tax status and treatment of external consultants in the period until and including the Closing Date. Any claims under or in connection with this clause 12.8 shall become time-barred five (5) years after the Closing Date. Clause 9.2 (provided, however, that only the Deductible, but not the Overall-Deductible shall be applicable for purpose of this clause 12.8), 9.3, 9.10 and 10.5.2 shall apply to the indemnity obligation under this clause 12.8 accordingly; otherwise clause 9 shall not apply to the indemnity obligation under this clause 12.8.

13 Escrow

The Sellers and the Purchaser shall instruct the Escrow Agent to release funds in the Escrow Account (including accrued interest thereon and less negative interest thereon as well as outstanding fees and expenses of the Escrow Agent, as the case may be) or any portion thereof only

a) According to a concurrent (*übereinstimmenden*) written instruction of the Purchaser and the Representative,

b) According to a final, non-appealable (*rechtskräftig*) decision of a competent court, an enforceable award (*für vollstreckbar erklärt gemäß § 1060 German Code of Civil Procedures*) of an arbitration tribunal or a definitive expert decision, or

c) To the Sellers if, twenty one (21) months after the Closing Date, the Purchaser has not initiated arbitration proceedings according to clause 21.2 against the Sellers for breaches of this Agreement by the Sellers (whereby if the Purchaser has initiated such arbitration proceedings, the amount in dispute shall be deducted from the amount to be released to the Sellers and released upon resolution of the claims subject to the arbitration proceedings).

Any payment from the Escrow Account shall reduce the Escrow Amount and the Sellers shall not be obliged to make any (additional) payments to the Escrow Account.

14 Parent Undertaking

The Parent shall be, together with the Purchaser, jointly and severally liable for the fulfilment of all of the Purchaser's payment obligations under, and as per the terms of, this Agreement. The Sellers shall have the right to raise any respective payment claims directly against the Parent without having to raise any such claims against the Purchaser first.

15 Confidentiality and Press Releases

15.1 Confidentiality

The Parties mutually undertake to keep the existence and the contents of this Agreement and any confidential information regarding the other Parties obtained in connection with the negotiation, execution or performance of this Agreement and the transactions contemplated herein secret and confidential vis-à-vis any third party except to the extent that the relevant facts have become into the public domain or the disclosure of which is required by law (including securities law and regulations), for the enforcement of claims under this Agreement, by the rules of any securities exchange on which the Purchaser or any of its Affiliates is traded or by a final or immediately enforceable court or governmental order. In the latter case, the Parties shall, however, if and to the extent legally permitted, inform each other prior to such disclosure and shall limit any disclosure to the minimum required by statute or the authorities. No press release or other public announcement concerning the Agreement shall be made by either Party unless the form and text of such announcement has first been approved by the other Parties, except that – if a Party is required by law or by the applicable stock exchange regulations to make an announcement (such as reporting and announcement obligations of Purchaser vis-à-vis the United States Securities and Exchange Commission (*SEC*)) – it may do so.

15.2 Post-Closing confidentiality

After Closing, the Sellers shall keep confidential and not disclose to any third party any information about the Group and their businesses and assets.

16 Power of Attorney in Favour of the Purchaser

The Sellers and the Purchaser are aware that the Purchaser is not entitled to exercise the shareholder rights against the Company until the shareholders' list in which the Purchaser is named as new shareholder is entered into the commercial register of the Company. In such period between the Closing Date and the inclusion of the new shareholders' list, the Sellers undertake not to act as shareholders of the Company.

Subject to the condition precedent of the consummation of the Closing, the Sellers hereby agree to grant to the Purchaser, who shall be released from the restrictions of Section 181 BGB and shall be entitled to grant sub-powers of attorney, a power of attorney to represent the Sellers in such powers and rights as shareholder of the Company for which the Purchaser may require such power of attorney. Any such power of attorney expires upon inclusion of a new shareholders' list showing the Purchaser as new shareholder of the Company.

17 Assignment of Rights and Transfer of Obligations

No rights and obligations under this Agreement may be assigned or transferred, either in whole or in part, without the prior written consent of the other Parties.

18 Transfer Taxes and Costs

18.1 Transfer Taxes and Costs

All registration, stamp and transfer taxes and duties (including any fees of any authorities) that are payable as a result of the transactions contemplated by this Agreement and the costs for formally notarizing this Agreement shall be borne by the Purchaser. Provided however that the transaction expenses of the Company shall be paid prior to the Closing Date, and as a rule, such transaction expenses of the Company shall be borne by the Sellers.

18.2 Costs of Advisors

Otherwise, each Party shall bear its own costs and expenses in connection with the preparation, conclusion, and performance of this Agreement, including any professional fees, charges and expenses of its respective legal, accounting, and banking advisors.

19 Appointment of Representative

Each Seller hereby irrevocably appoints and approves the designation of and designates Seller 6 (the **Representative**) as the true, exclusive representative of the Sellers and as the attorney-in-fact and lawful agent for and on behalf of such Seller with respect to this Agreement and Dr. Alexander Vogel, MLL Meyerlustenberger Lachenal Froriep AG, Schiffbaustrasse 2, 6340 Baar, Switzerland, as his substitute (the **Substitute**), and further approves the taking by the Representative or the Substitute, if applicable, of any and all actions and the making of any and all decisions required or permitted to be taken by the Representative or the Substitute, if applicable, under this Agreement. Each Seller authorizes and empowers the Representative or the Substitute, if applicable,to act on behalf of such Seller with respect to the disposition, settlement or other handling of all claims under this Agreement, and all rights or obligations arising under this Agreement. Each Seller shall be bound by all actions and decisions taken and consents and instructions given by the Representative or the Substitute, if applicable, in connection with this Agreement, and the Purchaser shall be entitled to rely on, and shall be relieved from any liability to any person for any acts done by them in accordance with, any such action, decision, consent or instruction of the Representative or the Substitute, if applicable. Notices or communications to or from the Representative or the Substitute, if applicable, shall constitute notice to or from each of the Sellers.

20 Notices

20.1 Form of Notices

All legally binding statements and other notices in connection with this Agreement (collectively **Notices**) shall be made in writing unless a formal notarization or another specific form is required by law. The written form requirement shall be satisfied through transmission by e-mail.

20.2 Notices to the Sellers

Any Notices to be delivered to the Sellers hereunder shall be addressed to the Representative to the following address:

Seller 6: (-------)

with a copy to their advisor for information purposes only:

Meyerlustenberger Lachenal Ltd
Dr. Alexander Vogel
Schiffbaustrasse 2
Post Box 1765
8031 Zurich
Switzerland
Email: alexander.vogel@mll-legal.com

and

Dentons Europe LLP
Thomas Strassner
Jungfernturmstraße 2
80333 Munich
Germany
Email: Thomas.Strassner@dentons.com

20.3 Notices to the Purchaser and the Parent

Any Notices to be delivered to the Purchaser and the Parent hereunder shall be addressed as follows:

Nova Measuring Instruments GmbH
Dror David
Gebäude Ensemble Deutsche Werkstätten Hellerau
Bruno-Paul Haus
Moritzburger Weg 67
01109 Germany
Deutschland
Email: (-------)

with copies to their advisors for information purposes only to:

Meitar l Law Offices
Shachar Hadar
16 Abba Hillel Silver Rd.
Ramat Gan
Israel
Email: shacharh@meitar.com

and

Gleiss Lutz Hotz Hirsch PartmbB
Dr Alexander Schwarz
Dreischeibenhaus 1
40211 Düsseldorf
Germany
Email: alexander.schwarz@gleisslutz.com

20.4 Change of Address

The Parties shall without undue delay give written Notice to the other Party of any changes in the addresses set forth in clauses 20.2 to 20.3 above. In the absence of such communication, the address stated above shall remain in place.

20.5 Language

Any communication to be made by one Party to another under or in connection with this Agreement shall be in English or, if in any other language, accompanied by a translation into English.

21 Miscellaneous

21.1 Governing Law

This Agreement shall be governed by the laws of the Federal Republic of Germany, excluding the United Nations Convention on Contracts for the International Sale of Goods (CISG) and all conflict of law provisions.

21.2 Arbitration

21.2.1 All disputes or claims arising out of or in connection with this Agreement shall be finally settled under the rules of the German Institution of Arbitration (*Deutsche* Institution *für Schiedsgerichtsbarkeit e.V. – DIS*) by three (3) arbitrators appointed in accordance with such rules.

21.2.2 The place of arbitration is Frankfurt am Main, Germany.

21.2.3 The language of the arbitral proceedings is English. Documents already existing in the German language may be submitted without an English translation.

21.3 Business Day

For the purposes of this Agreement, **Business Day** means a day on which banks are open for general business (except online-banking) in Tel-Aviv, Israel, and Pliezhausen, Germany.

21.4 Interest

Except as otherwise provided in this Agreement, any Party must pay interest on any amounts due and payable to the other Party under this Agreement, for the period beginning on the day following the day on which the payment is due (or the day otherwise stipulated herein as the day on which interest shall begin to accrue) and ending on (and including) the day when payment is made. The interest rate shall be three percent (3%) basis points above the rate at which euro interbank term deposits for period of one month are being offered by one prime bank to another within the EMU zone (for the purposes of this Agreement, such rate shall at least be zero (0)), published on the corresponding page of the Reuters screen at 11am CET on the date on which the interest under sentence 1 hereof begins to accrue (EURIBOR). The interest accrual shall be calculated on the basis of the days lapsed and a 360-day year. The right to claim default interest (*Verzugszinsen*) and more extensive default-related damages (*Verzugsschaden*) shall remain unaffected.

21.5 Amendments to this Agreement

Any amendment of or supplement to this Agreement, including any modification of this clause, shall be valid only if made in writing, unless more stringent form requirements (e.g. notarisation) must be satisfied under applicable law. Clause 20.1 sentence 2 shall apply *mutatis mutandis*.

21.6 Headings; References to Clauses

21.6.1 The headings and sub-headings of the clauses and sub-clauses and Schedules contained in this Agreement are for convenience and reference purposes only. They shall be disregarded for purposes of interpreting or construing this Agreement.

21.6.2 Any reference made in this Agreement to any clauses without further indication of a law or an agreement shall mean the clauses of this Agreement.

21.7 Schedules

All Schedules to this Agreement form an integral part of this Agreement.

21.8 Entire Agreement

This Agreement constitutes the final, complete expression of agreement between the Parties with respect to the subject matter covered herein and supersedes any and all previous agreements and understandings, whether written or verbal, between the Parties with respect to the subject matter of this Agreement or parts thereof. There are no side agreements to this Agreement.

21.9 Severability

Should any provision of this Agreement be or become, either in whole or in part, void, ineffective or unenforceable, then the validity, effectiveness and enforceability of the other provisions of this Agreement shall remain indisputably (*unwiderlegbar*) unaffected thereby. Any such invalid, ineffective or unenforceable provision shall, to the extent permitted by law, be deemed replaced by such valid, effective and enforceable provision as most closely reflects the economic intent and purpose of the invalid, ineffective or unenforceable provision regarding its subject-matter, scale, time, place and scope of application. The aforesaid rule shall apply *mutatis mutandis* to fill any unintentional gap that may be found to exist in this Agreement.

21.10 Instructions of the notary

The notary instructed the persons appearing as follows:

- The acting notary is obliged to submit an amended list of shareholders to the Commercial Register without undue delay after the transfer of the Shares has become effective.

- The buyer of a share assumes the unlimited liability, if any, (jointly with his legal predecessor in the share) for contributions on shares not fully paid up, for differences between the nominal value of contributions in kind theron and for repayment of contributions on shares.

- The Sellers shall be secondarily liable for any non-fulfilled contribution obligations of excluded shareholders who are the Sellers legal successors.

- The acting notary has not reviewed the economic and tax-related consequences of the above agreements and has not provided any advice in this respect. The persons appearing were advised of the possibility to have the agreements reviewed by a tax adviser in advance.

- The notary is obliged pursuant to section 54 German Income Tax Implementation Ordinance (EStDV) to submit one copy of this deed to the tax authorities.

- The parties are jointly liable for the costs of this deed, regardless of the provisions therein.

* * *

This Deed was read aloud by the notary to the persons appearing, approved by them and signed by them and the notary in their own hands as follows:

Exhibit 8.1

LIST OF SUBSIDIARIES

As of the end of 2021:	
Name of Subsidiary	**Country of Incorporation**
Nova Measuring Instruments, Inc.	Delaware, U.S.
Nova Measuring Instruments K.K.	Japan
Nova Measuring Instruments Taiwan Ltd.	Taiwan
Nova Measuring Instruments Korea Ltd.	Korea
Nova Measuring Instruments GmbH	Germany
Nova Measuring Instruments (Shanghai) Co., Ltd	China
Added in January 2022:	
ancosys GmbH*	Germany
ancosys Korea LLC**	Korea
ancosys Instruments Taiwan Ltd**	Taiwan
Ancosys Inc.**	Delaware

* Wholly owned by Nova Measuring Instruments GmbH.
** Wholly owned by ancosys GmbH

Exhibit 12.1

CERTIFICATION

I, Eitan Oppenhaim, certify that:

1. I have reviewed this Annual Report of Nova Ltd.

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the company as of, and for, the periods presented in this report;

4. The company's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the company and have:

    a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

    b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

    c) Evaluated the effectiveness of the company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

    d) Disclosed in this report any change in the company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting; and

5. The company's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the company's auditors and the audit committee of company's board of directors (or persons performing the equivalent function):

    a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the company's ability to record, process, summarize and report financial information; and

    b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the company's internal control over financial reporting.

Date: March 1, 2022

/s/ *Eitan Oppenhaim*
Eitan Oppenhaim
President and Chief Executive Officer

Exhibit 12.2

CERTIFICATION

I, Dror David, certify that:

1. I have reviewed this Annual Report of Nova Ltd.

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the company as of, and for, the periods presented in this report;

4. The company's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the company and have:

    a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

    b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

    c) Evaluated the effectiveness of the company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

    d) Disclosed in this report any change in the company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting; and

5. The company's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the company's auditors and the audit committee of company's board of directors (or persons performing the equivalent function):

    a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the company's ability to record, process, summarize and report financial information; and
    b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the company's internal control over financial reporting.

Date: March 1, 2022

/s/ *Dror David*
Dror David
Chief Financial Officer

Exhibit 13.1

CERTIFICATION PURSUANT TO SECTION 906
OF THE SARBANES-OXLEY ACT OF 2002

I, Eitan Oppenhaim, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, to my knowledge, that:

1. This Annual Report on Form 20-F of Nova Ltd. (the "Company") for the period ended December 31, 2021 (the "Report") fully complies with the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended; and

2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: March 1, 2022

/s/ *Eitan Oppenhaim*
Eitan Oppenhaim
President and Chief Executive Officer

Exhibit 13.2

CERTIFICATION PURSUANT TO SECTION 906
OF THE SARBANES-OXLEY ACT OF 2002

I, Dror David, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, to my knowledge, that:

1. This Annual Report on Form 20-F of Nova Ltd. (the "Company") for the period ended December 31, 2021 (the "Report") fully complies with the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended; and

2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: March 1, 2022

/s/ *Dror David*
Dror David
Chief Financial Officer

Exhibit 15.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statement (Forms S-8 Nos. 333-147140, 333-184585, 333-202550 and 333-220158) pertaining to the 2007 Incentive Plan and 2017 Share Incentive Plan of Nova Ltd. of our reports dated March 1, 2022, with respect to the consolidated financial statements of Nova Ltd. and the effectiveness of internal control over financial reporting of Nova Ltd., included in this Annual Report (Form 20-F) for the year ended December 31, 2021.

/s/ *Kost Forer Gabbay & Kasierer*
Kost Forer Gabbay & Kasierer
A member of Ernst & Young Global

Tel Aviv, Israel
March 1, 2022