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# Investors Presentation

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January 2021

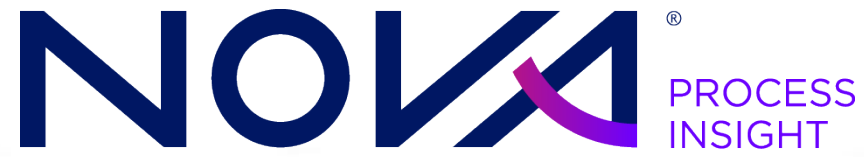
## Cautionary Statement Regarding

# Forward Looking Statements

This presentation contains forward-looking statements within the meaning of safe harbor provisions of the Private Securities Litigation Reform Act of 1995 relating to future events or our future performance, such as statements regarding, but are not limited to, the expected completion of the proposed acquisition of ancoss and the timing thereof, the satisfaction or waiver of any closing conditions of the proposed acquisition, anticipated benefits, growth opportunities and other events relating to the proposed acquisition, projections about our business and its future revenues, expenses and profitability. Forward-looking statements are based on management's current expectations and involve known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance or achievements to be materially different from any future results, levels of activity, performance or achievements expressed or implied in those forward-looking statements. These risks and other factors include but are not limited to: our ability to satisfy all the conditions to the closing of the proposed acquisition; risks related to unexpected costs, liabilities or delays in the proposed acquisition; the occurrence of any event, change or other circumstances that could give rise to the termination of the purchase agreement; the ability to recognize benefits of the proposed acquisition; risks that the proposed acquisition disrupts current plans and operations; and impact of the proposed acquisition on relationships with customers, distributors and suppliers. Factors that may affect our results, performance, circumstances or achievements include, but are not limited to, the following: catastrophic events such as the outbreak of COVID-19; increased information technology security threats and sophisticated computer crime; foreign political and economic risks; changes in U.S. trade policies; inability to protect intellectual property; open source technology exposure; failure to compete effectively or to respond to the rapid technological changes; consolidation in our industry; difficulty to predict the length and strength of any downturn or expansion period of the market we target; factors that adversely affect the pricing and demand for our product lines; dependency on a small number of large customers; dependency on a single manufacturing facility per product line; dependency on a limited number of suppliers; lengthy sales cycle and customer delays in orders; political, economic, and military instability in Israel; risks related to our convertible notes; currency fluctuations; and quarterly fluctuations in our operating results. We cannot guarantee future results, levels of activity, performance or achievements.

The matters discussed in this presentation also involve risks and uncertainties summarized under the heading "Risk Factors" in Nova's Annual Report on Form 20-F for the year ended December 31, 2020 filed with the Securities and Exchange Commission on March 1, 2021. These factors are updated from time to time through the filing of reports and registration statements with the Securities and Exchange Commission. Nova Ltd. does not assume any obligation to update the forward-looking information contained in this presentation.

This presentation provides financial measures that exclude amortization of acquired intangible assets, stock-based compensation expenses, expense related to a transaction made by a financial institution without Company authorization, revaluation of operating lease liabilities, amortization of debt discount and issuance costs and tax effect of non-GAAP adjustment, as applicable, and are therefore not calculated in accordance with generally accepted accounting principles (GAAP). Management believes that these non-GAAP financial measures provide meaningful supplemental information regarding Nova's performance because they reflect our operational results and enhance management's and investors' ability to evaluate Nova's performance before charges or benefits considered by management to be outside Nova's ongoing operating results. The presentation of this non-GAAP financial information is not intended to be considered in isolation or as a substitute for the financial information prepared and presented in accordance with GAAP. Management believes that it is in the best interest of its investors to provide financial information that will facilitate comparison of both historical and future results and allow greater transparency to supplemental information used by management in its financial and operational decision making. A reconciliation of each GAAP to non-GAAP financial measure discussed in this presentation is contained in the accompanying financial tables.



Nova is a leading innovator and a key provider of **metrology** solutions for advanced **process control** used in semiconductor manufacturing





# A Trusted Partner

We measure ourselves by our ability to transcend expectations and boundaries

We partner with our customers to craft innovative process control solutions enhanced with unique value

**Execute**

**Dare**

**Listen**

**Dream**

**Innovate**

**Win**

# KEY Facts



1993 | Date Founded | Dually Traded



1000 | Employees



Presence | Israel HQ . Global Offices



>4000 | Active Systems Installed-Base



>200 | Customer Sites



R&D | Israel, USA, Germany

# Sustainable Profitable Growth

## 2021 Performance

**20%**

Revenue CAGR

**33%**

Operating Income CAGR

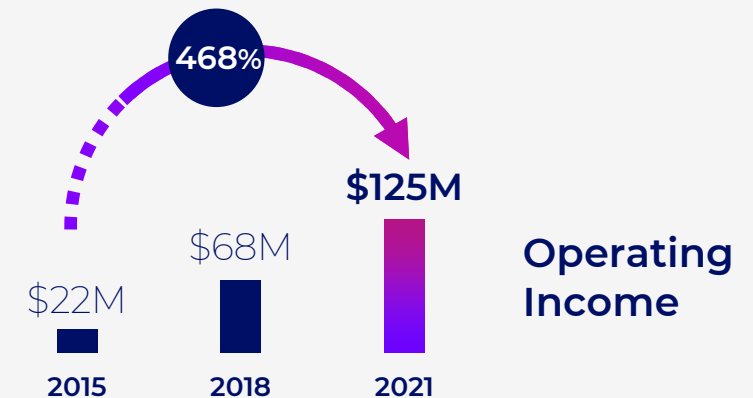
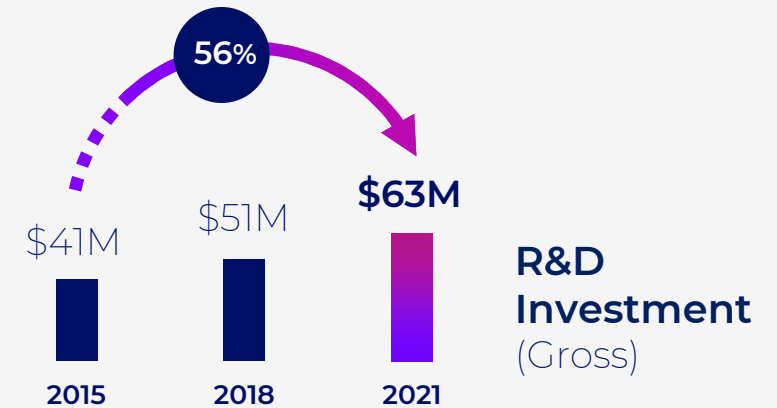
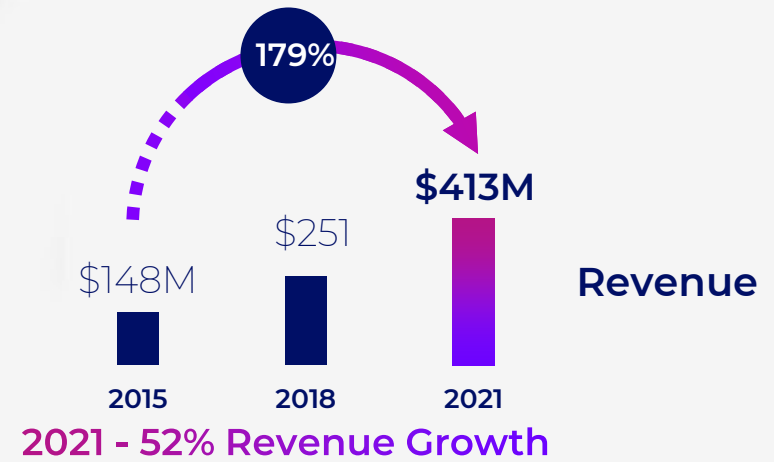
**\$413M**

Revenue

**30%**

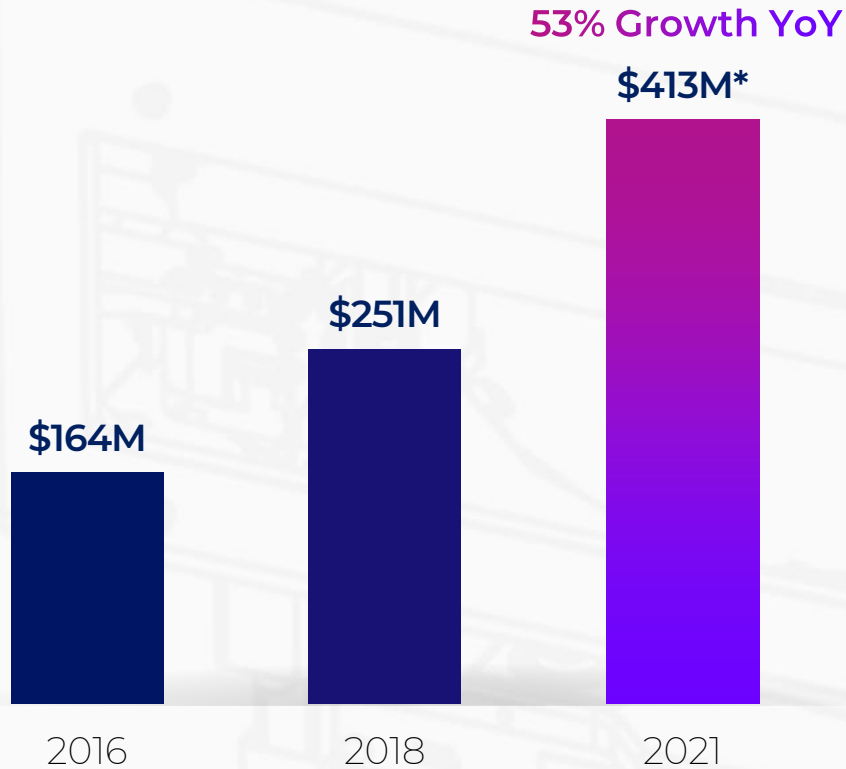
Operating Margin

CAGR – 2016-2021  
Non-GAAP Financials  
Including company Q4 21 mid-guidance



# Solid Track Record

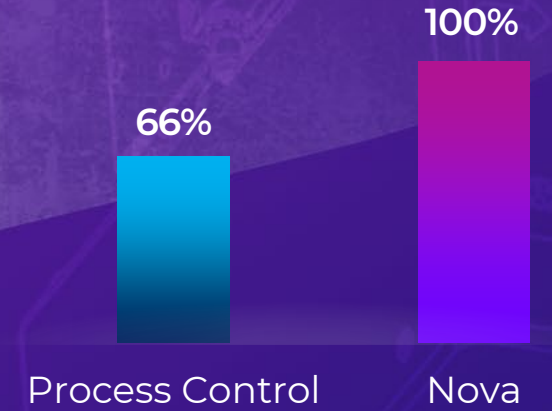
Outperforming Industry Indexes



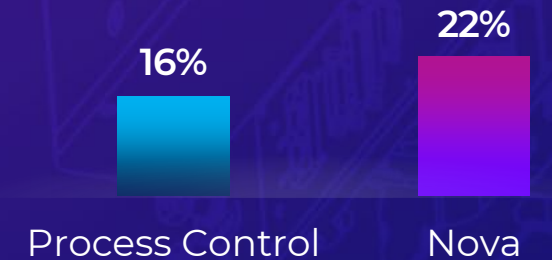
Nova Revenue Growth

- Share Gains
- Disruptive Innovation
- Diversified Revenue
- TAM Expansion
- Lab to Fab

2Y Revenue Growth  
(2019-2021)



5Y CAGR  
(2016-2021)

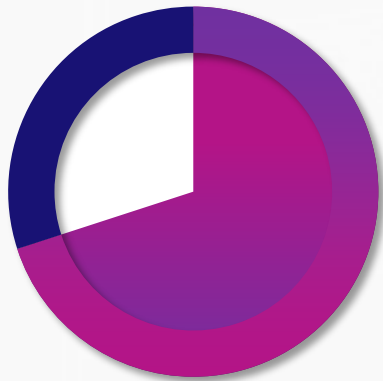


Non-GAAP Financials, Product revenue,  
Including company Q4-21 mid-guidance

# Investing in Talent

## Wide Diversity

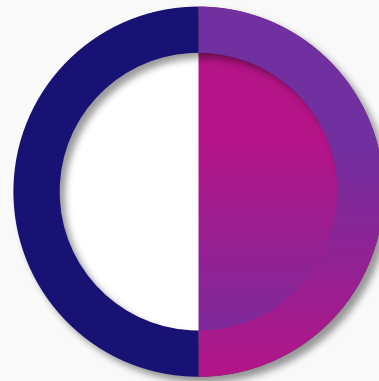
64%



**Tech Oriented**

Top Universities

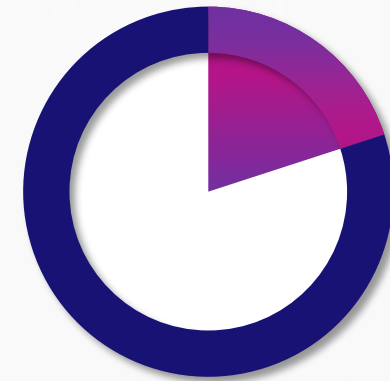
55%



**Employee Referral**

Internal & Global Mobility

20%



**PhDs, MSc.**

Breadth of Knowledge



# Nova Acquires ancossys

- ✓ **Expanded portfolio**

Dimensional,  
Materials, Chemical

- ✓ **Increases TAM**

By \$300M

- ✓ **Cross markets synergy**

**Front-end, Back-end  
& Advanced Packaging**

- ✓ **Cultural Strength  
high-end technology and  
cultural synergy**

- ✓ **Adapting to Global  
Dynamics**

Operations center in Europe

- ✓ **Potential tech synergy**

Better process insight

**A strong metrology leader with a differentiated  
portfolio for advanced process control in FE & BE Semi**

# Deal Financial Rational



## Deal Fundamentals

- Nova acquires 100% of ancossys GmbH, a privately held company for **~\$90 million USD** in cash including **\$10 million USD** performance based earnout



## Financials

- Deal expected to be **accretive within 12 months** of closing on a non-GAAP basis
- Expanding Nova's addressable market, expected to **grow by \$300M**



The combined company is expected to generate **over \$500M** in annual revenues

**Unique Portfolio**  
Dimensional, Materials & Chemical



**Disruptive Technology**  
X-Ray, Optical, Chemical, HW and SW



**Diversified Exposure**  
Segments, Customers, Territories



**Solid Operational Model**  
Agility, Resiliency, Profitability



**Cultural Advantage**  
Partnership, Values, Social Responsibility



Strong  
**Fundamentals**



# We Are in Your Pocket

Advanced devices measured by Nova tools



# IC Industry Eco System

## Fabless



## FE IC Fabrication



## Packaging



## Process Control



## Process equipment



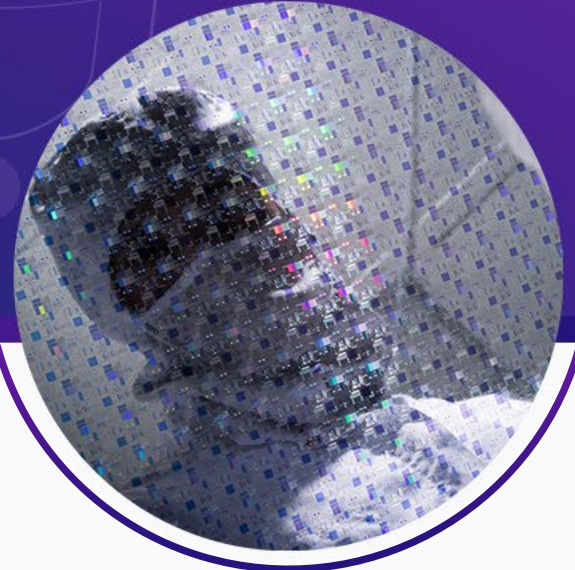
## Materials



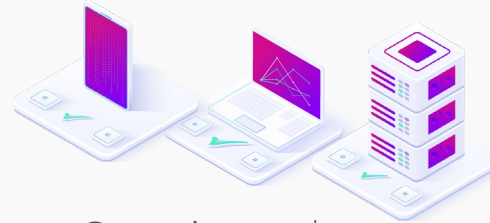
# Innovative Technology



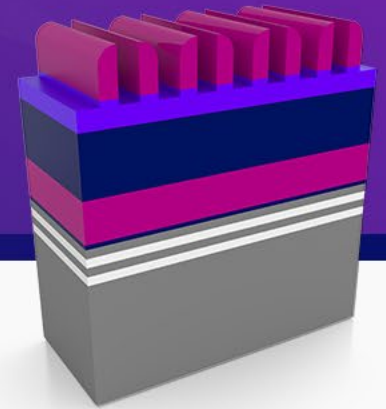
Optical / X-Ray



LOGIC • FLASH • DRAM



Semiconductor Segments

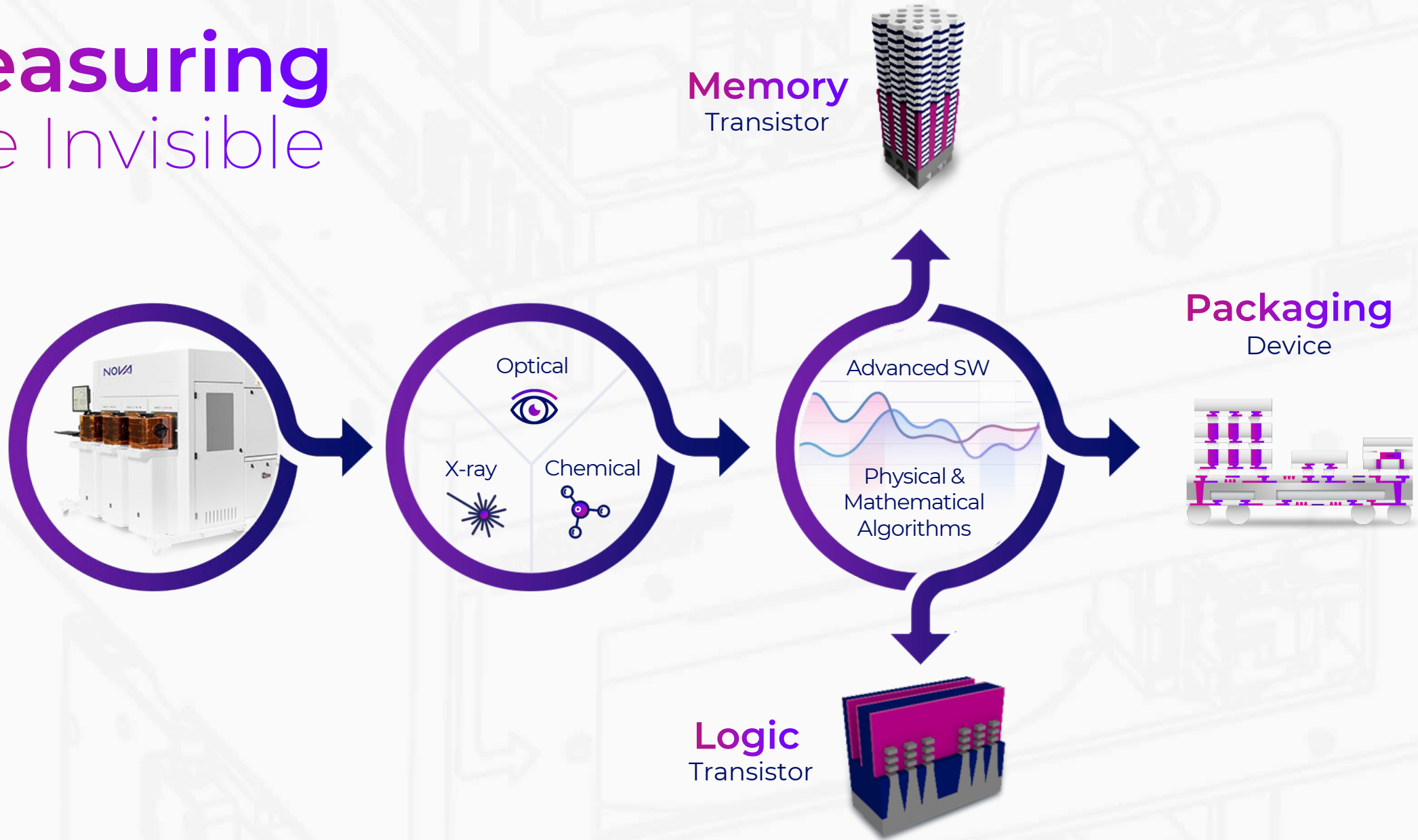


300mm Wafer • 20um Pad • 3nm Node • 0.5Å Precision

[One ten-billionth of a meter]

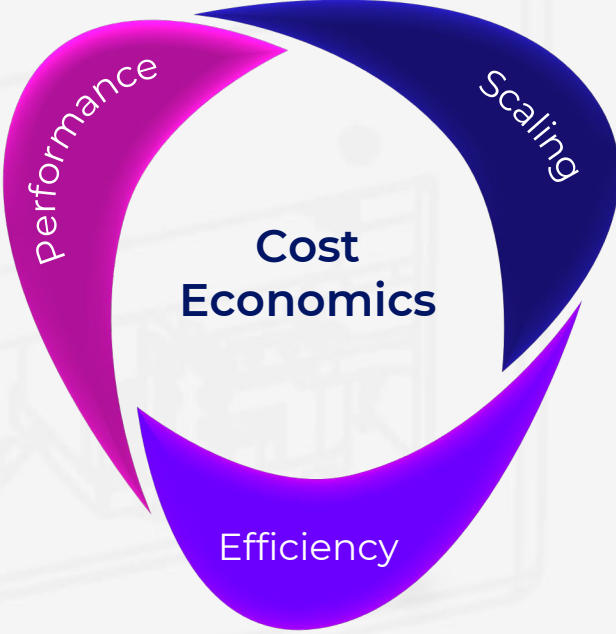
Dimensions / Materials Parameters

# Measuring The Invisible



# Expanding Into New Markets

Expanding Nova's reach to BE, Advanced Packaging and Chemical/Material Suppliers





# Rich Metrology Portfolio

## Dimensional Metrology

- Optical Critical Dimensions



**NOVA i570**  
Integrated Metrology



**NOVA ASTERA**  
Integrated Metrology



**NOVA PRISM**  
Standalone Metrology

## Materials Metrology

- Materials Properties



**NOVA VERAFLEX**  
X-Ray (XPS, XRF)



**NOVA ELIPSON**  
Raman Spectroscopy



**NOVA METRION**  
SIMS

## Chemical Metrology

- Chemical Analytics

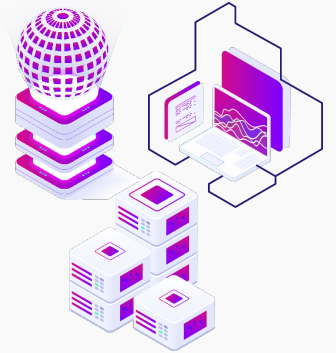


**ancosys ancolyzer**  
Front End



**ancosys ancolyzer**  
Back End

## Software




- Physical & Mathematical Modeling
- Big Data Analytics

# Core Technology

# Disruptive Technology



# Semiconductor Demand Driven By Multiple Catalysts



Robotic Process Automation

**25%**  
CAGR



VR

**36%**  
CAGR



Cloud Computing

**25%**  
CAGR



Industrial IoT

**23%**  
CAGR



Autonomous Vehicle

**20 TB**  
Per Car Daily



5G

**37%**  
CAGR



AI

**42%**  
CAGR



**2010**

Mobile Internet  
**Mobility**



**2015**

Data Augmentation  
**Productivity**



**2020**

Enhanced Connectivity  
**Resiliency**

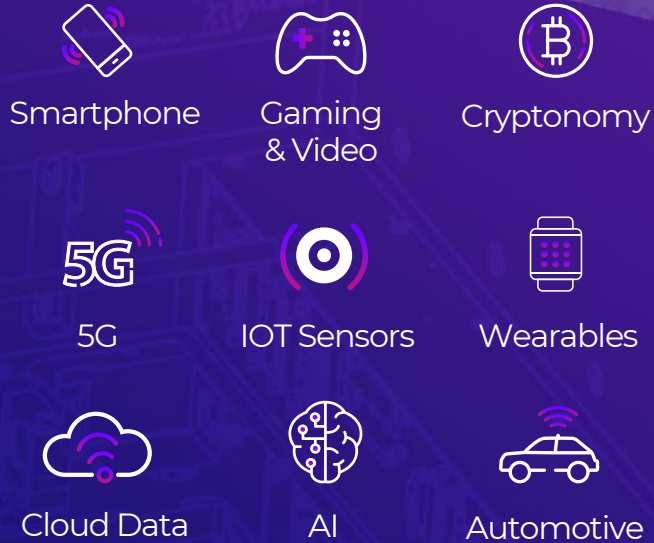


**2025**

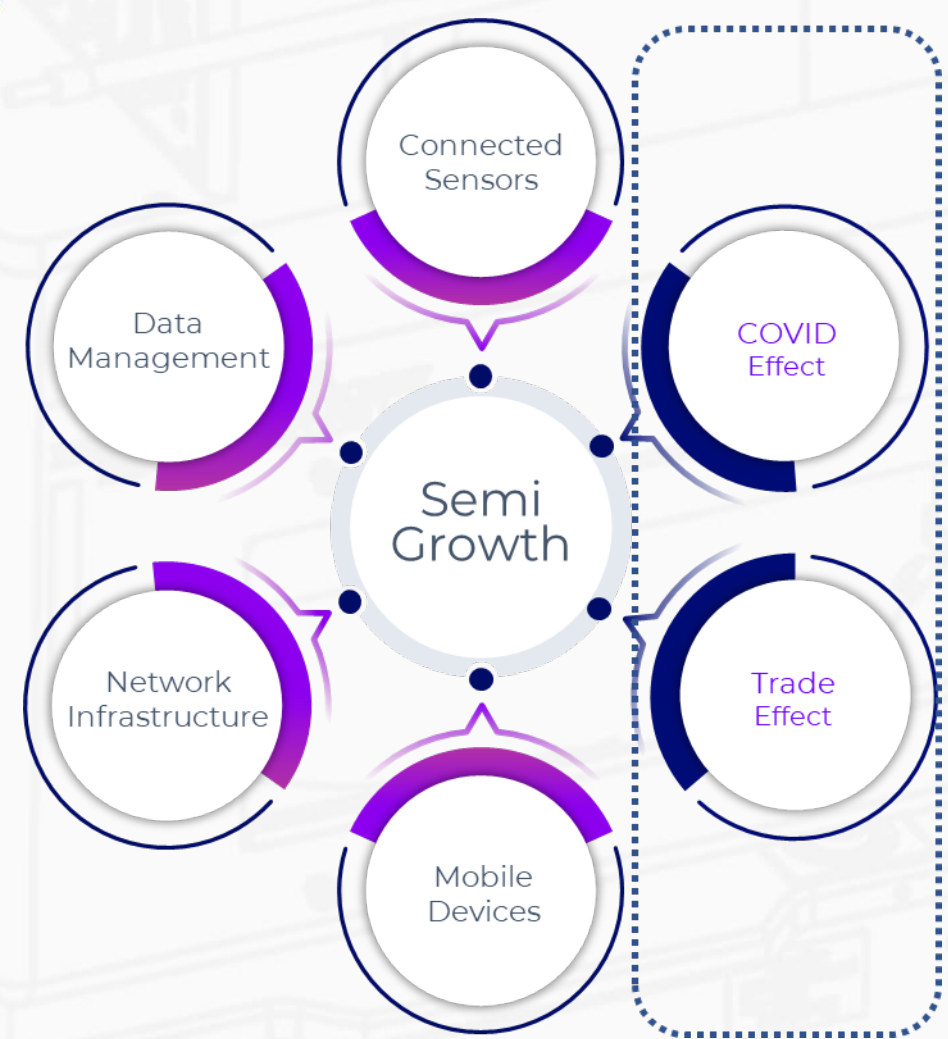
Data Efficiency  
**Veracity**

# Growing Demand

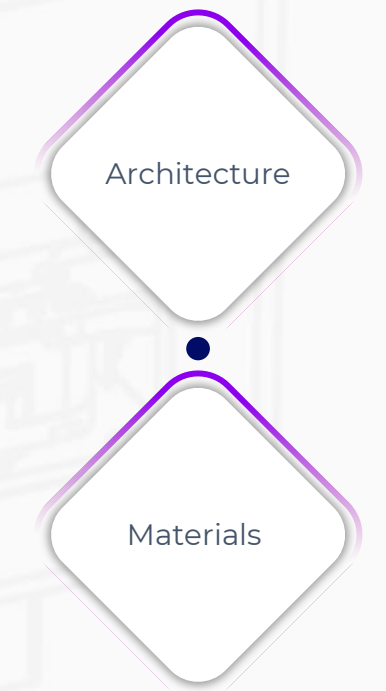
Semiconductors enable advanced digitization



## 1 Capacity Growth



## 2 Beyond Capacity Performance Demand



Acceleration

Explosion

Enablement

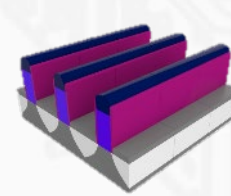


# Dimensional Metrology Intensity

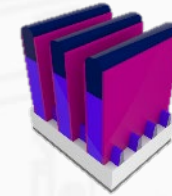
- Scaled Devices
- 3D Profiles
- Multiple Parameters
- Thinner Films
- Packaging

Increasing Complexity = Growing Demand

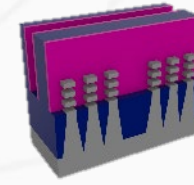
Intensity ↑



Planar



FinFet



Nano Sheet

Logic



Single Stack

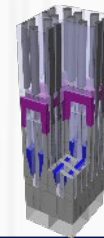


Multi-deck

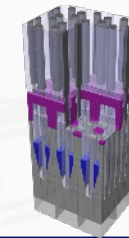


Over Periphery

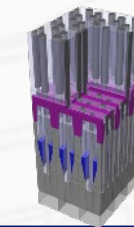
3D NAND



1Y



1a



1b

DRAM

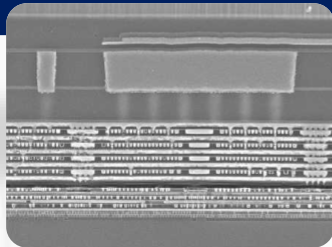
Scale & Complexity →



# Driving Forces for Chemical Metrology

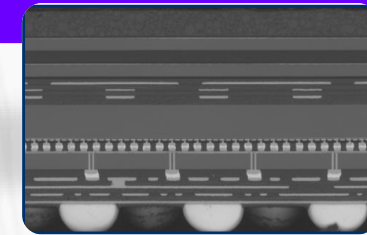
## Front End

	2015	2022
# of interconnect steps	6	18
Material purity (PPM)	5	<=1
Monitoring frequency	Hrs.	Min.



## Packaging

	2015	2022
Device Complexity	Flip-Chip	3D-IC
Organics to control	3	10
Analytic methods	X	2X



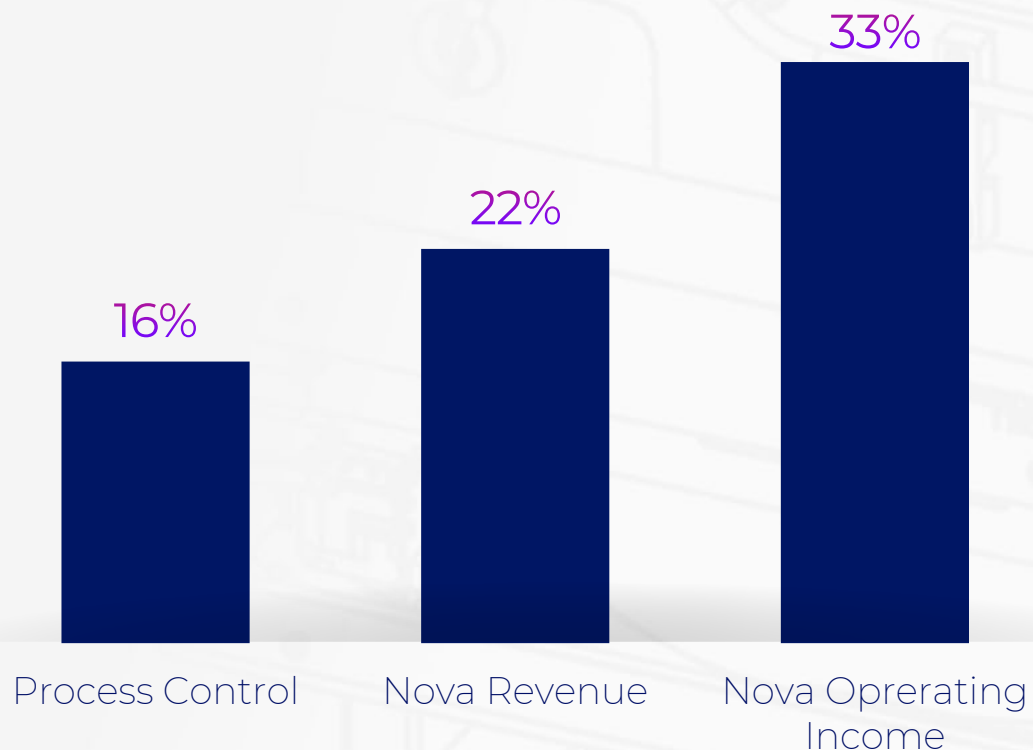
## Global Trends

- Rising cost of chemicals
- Tighter environmental regulation
- Rising waste treatment costs

**A growing need for chemical metrology and process control**

# Outperforming the Market

5 Years CAGR



Outperforming Process Control CAGR by ~25%

Operating Income Outgrows Revenue

>\$300M in Operating Cash Flow in 5 years

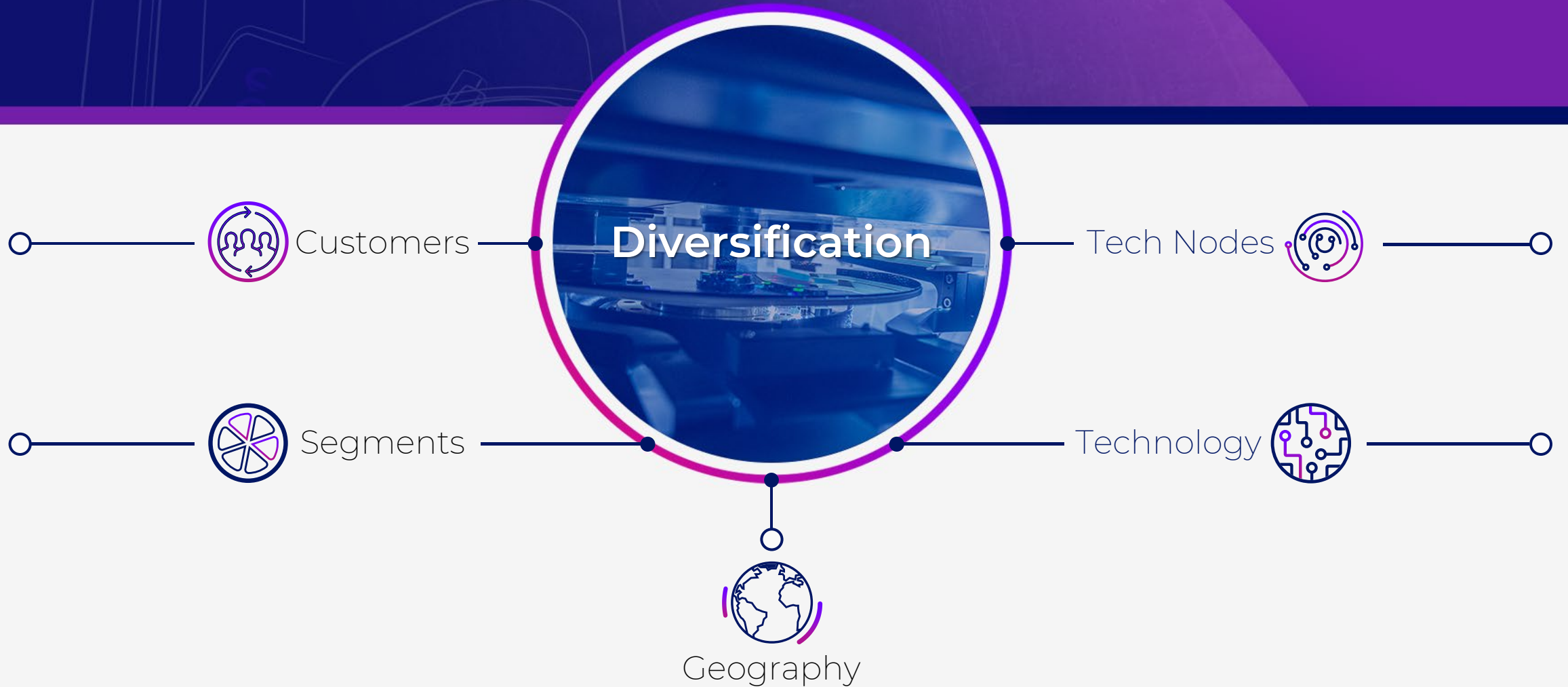
Estimated gross cash reserves by end of 2021 \$550M

Source: Gartner research and company information  
Non-GAAP Financials; Nova revenue - product only,  
including Mid-guidance Q4 2021



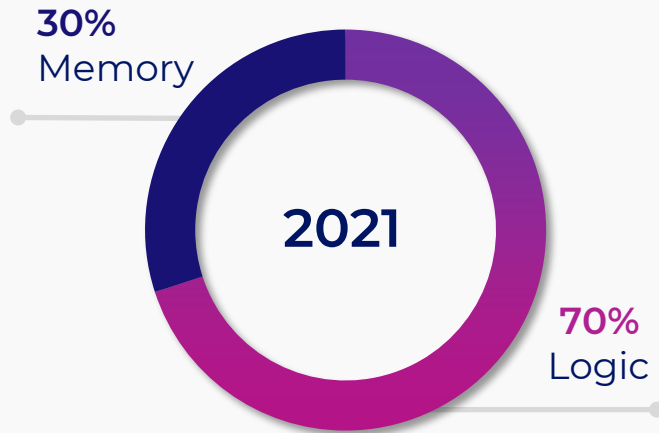
# Why Do We **CONTINUE GROWING?**

Increasing Market Share while Expanding TAM

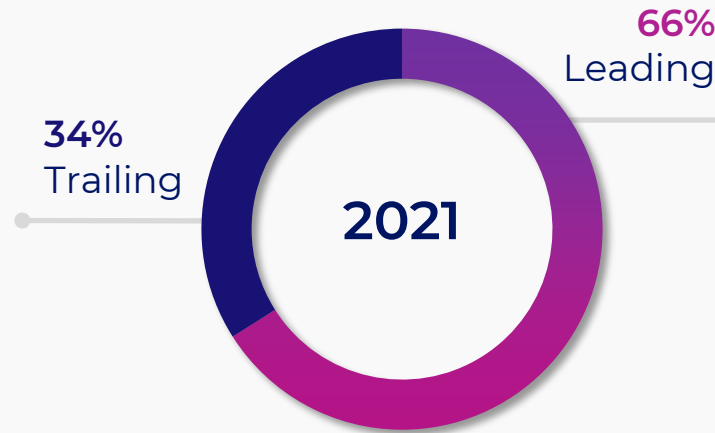


# Diversification Across the Board

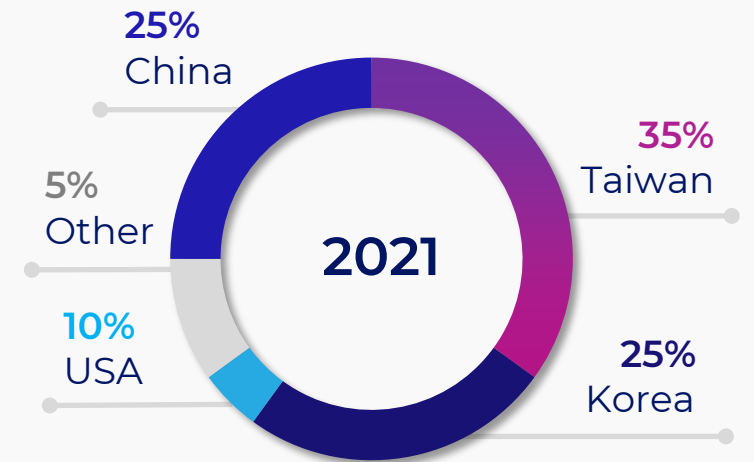
## Segments



## Nodes



## Geographies



# Organic Growth Engines



## Differentiated Technology

Innovative Metrology  
X-Ray-Optical Convolution



## Physical and ML Algorithms

Data-Driven Solutions  
Training and Prediction Capabilities



## Service Revenue

Extendibility & Enhancement  
Value Added Services



## Research Technologies

LAB to FAB

## Total Addressable Market



# Inorganic Approach

## Search Guidelines



### Early Access

Lab to Fab Technology



### Materials Leadership

Leadership



### Software Offering Enhancement

Enhancement



### Adjacent

Process Control Markets

## Screening Elements

Top Line Synergy

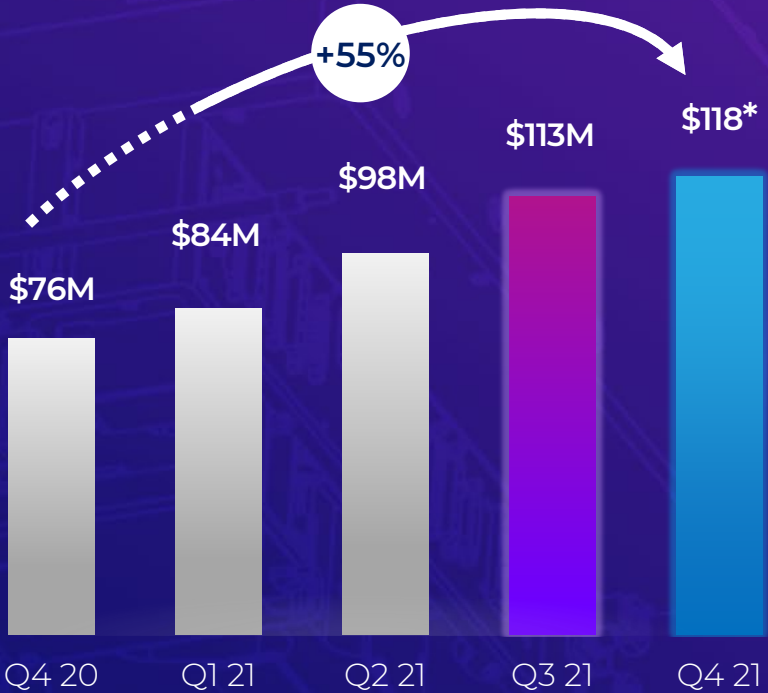
Complementary Technology

Operational Leverage (Accretion)

Diversification within Core Capabilities



# Continuous Revenue Growth



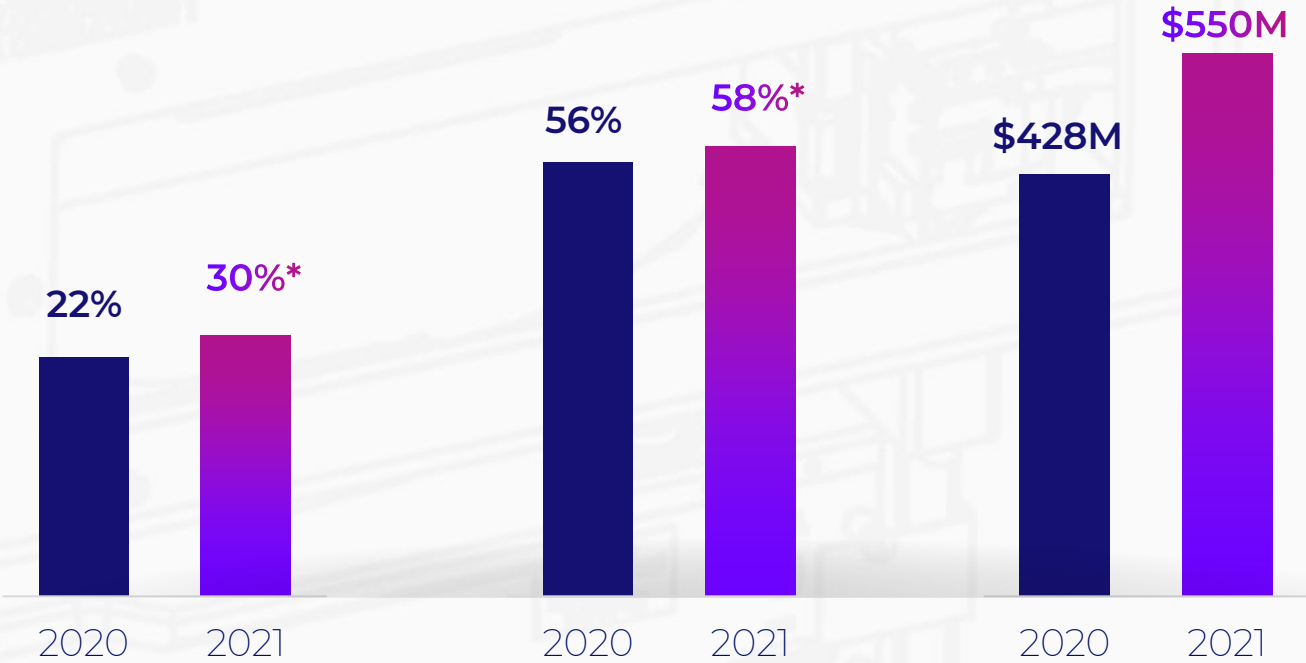
\*Mid-guidance Q4 2021

# Financial Performance

Operating Margin

Gross Margin

Cash Reserves



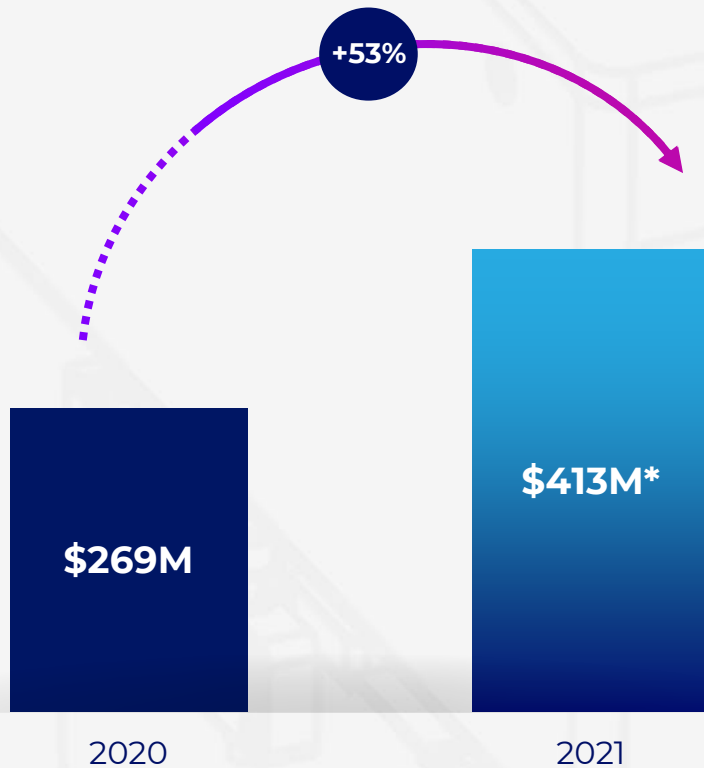
Non-GAAP Financials

Note: Our non-GAAP measures are not meant to be considered in isolation or as a substitute for comparable GAAP measures and should be read only in conjunction with our consolidated financial statements prepared in accordance with GAAP, available on our website.

# Financial Performance

## 2021 Annual Results

### Continuous Revenue Growth



\*Including Mid-guidance Q4 2021  
Non-GAAP Financials

### Earnings Per Share (Non-GAAP)



\*Including Mid-guidance Q4 2021  
Non-GAAP Financials

Note: Our non-GAAP measures are not meant to be considered in isolation or as a substitute for comparable GAAP measures and should be read only in conjunction with our consolidated financial statements prepared in accordance with GAAP, available on our website.

# Key Takeaways

Positioned for Continuous Growth



**Growing demand for IC drives capacity & Increasing complexity**  
Increasing need for advanced metrology solutions



**Unique and disruptive technology portfolio**  
Driving a stronger position and expanding TAM



**Solid operational model**  
Supports clear strategy for growth



**Proven performance towards Nova500**  
Outperforming the Industry



**Cultural elevation with new CSR strategy**  
Combining business ethics with culture and social conciseness

## Financial Target Model

Gross Margin

**56%-59%**

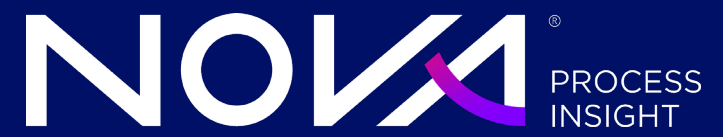
R&D Investment

**15%-17%**

Operating Margin

**26%-29%**

Non-GAAP Financials

The logo features the word "NOVA" in a bold, white, sans-serif font. The letter "V" is stylized with a diagonal slash. To the right of "NOVA" is a registered trademark symbol (®) and a graphic element consisting of a curved line that transitions from purple to pink. To the right of this graphic, the words "PROCESS" and "INSIGHT" are stacked vertically in a smaller, white, sans-serif font.

**NOVA**<sup>®</sup> PROCESS  
INSIGHT

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**Thank You**

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