



# Investor Presentation

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August 2024

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# Cautionary Statements

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## Use of Non-GAAP Adjusted Financial Measures

This presentation provides financial measures that exclude amortization of acquired intangible assets, acquisition-related expenses, inventory step-up and contingent consideration revaluation, stock-based compensation expenses, revaluation of operating lease liabilities and remeasurement of intercompany loans, 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.

## 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 not limited to, anticipated growth opportunities and projections about our business and its future revenues, expenses and profitability. Forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance or achievements to differ materially from any future results, levels of activity, performance or achievements expressed or implied in those forward-looking statements. .

Factors that may affect our results, performance, circumstances or achievements include, but are not limited to, the following: increased information technology security threats and sophisticated computer crime; foreign political and economic risks including supply-chain difficulties; regulations that could restrict our operations such as economic sanctions and export restrictions; changes in U.S. trade policies; indirect effects of the Russia – Ukraine conflict; market instability including inflation and recessionary pressures; risks related to doing business with China; catastrophic events; inability to protect our intellectual property; open source technology exposure, including risks related to artificial intelligence; failure to compete effectively or to respond to rapid technological changes; consolidation in our industry; difficulty in predicting 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; difficulty in integrating current or future acquisitions; lengthy sales cycle and customer delays in orders; risks related to conditions in Israel, including related to the recent attack by Hamas and other terrorist organizations from the Gaza Strip and Israel's war against them; 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, 2023, filed with the Securities and Exchange Commission on February 20, 2024. 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.



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



# Revealing the Invisible

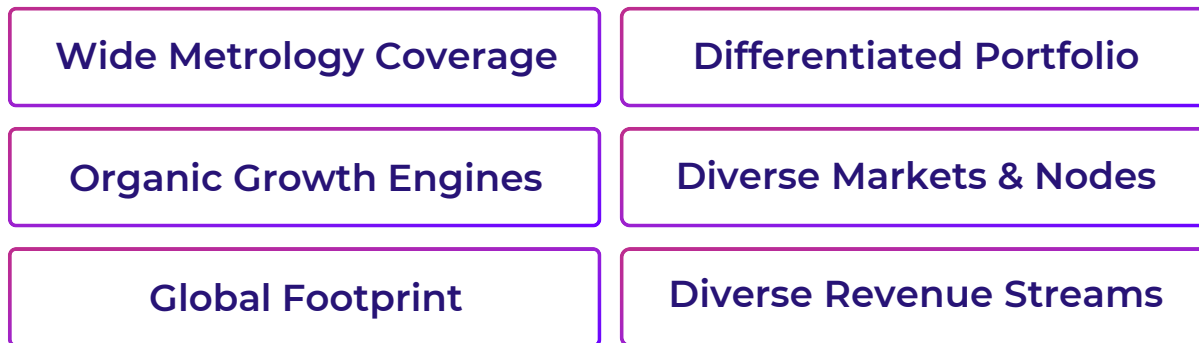
Actionable Insight, Critical Foresight



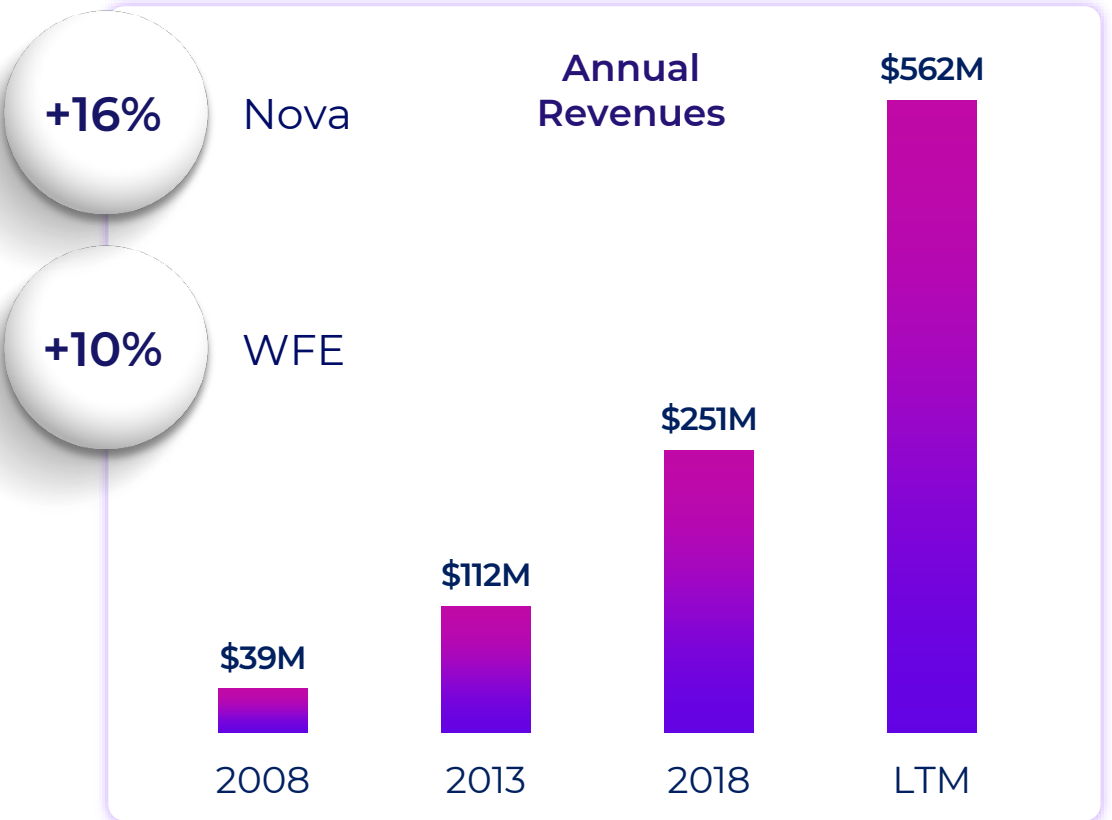
# Solid Track Record

Outperforming the WFE by >50%

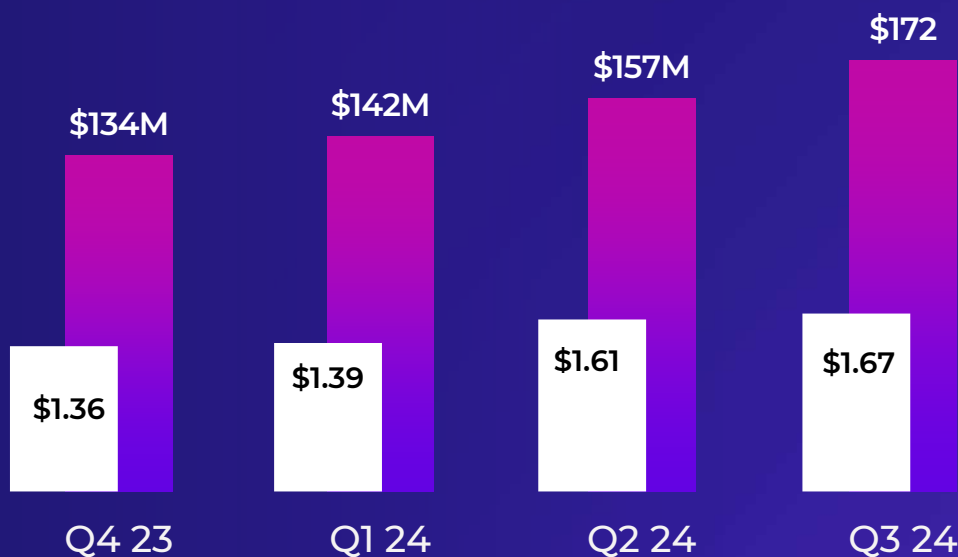
- Proven execution
- Outperforming the industry
- Doubling revenues every 5 years
- Resilient business model



5 Year CAGR



# Quarterly Performance



## Q2 24 Highlights

- Record Revenue and profitability
- Record operating and free cash flow
- Record revenue for chemical metrology
- Record booking for Materials metrology and advanced packaging

### Company Guidance

### Revenue

### EPS

Q3 2024

\$168 - \$176M

\$1.39-\$1.52 (GAAP)

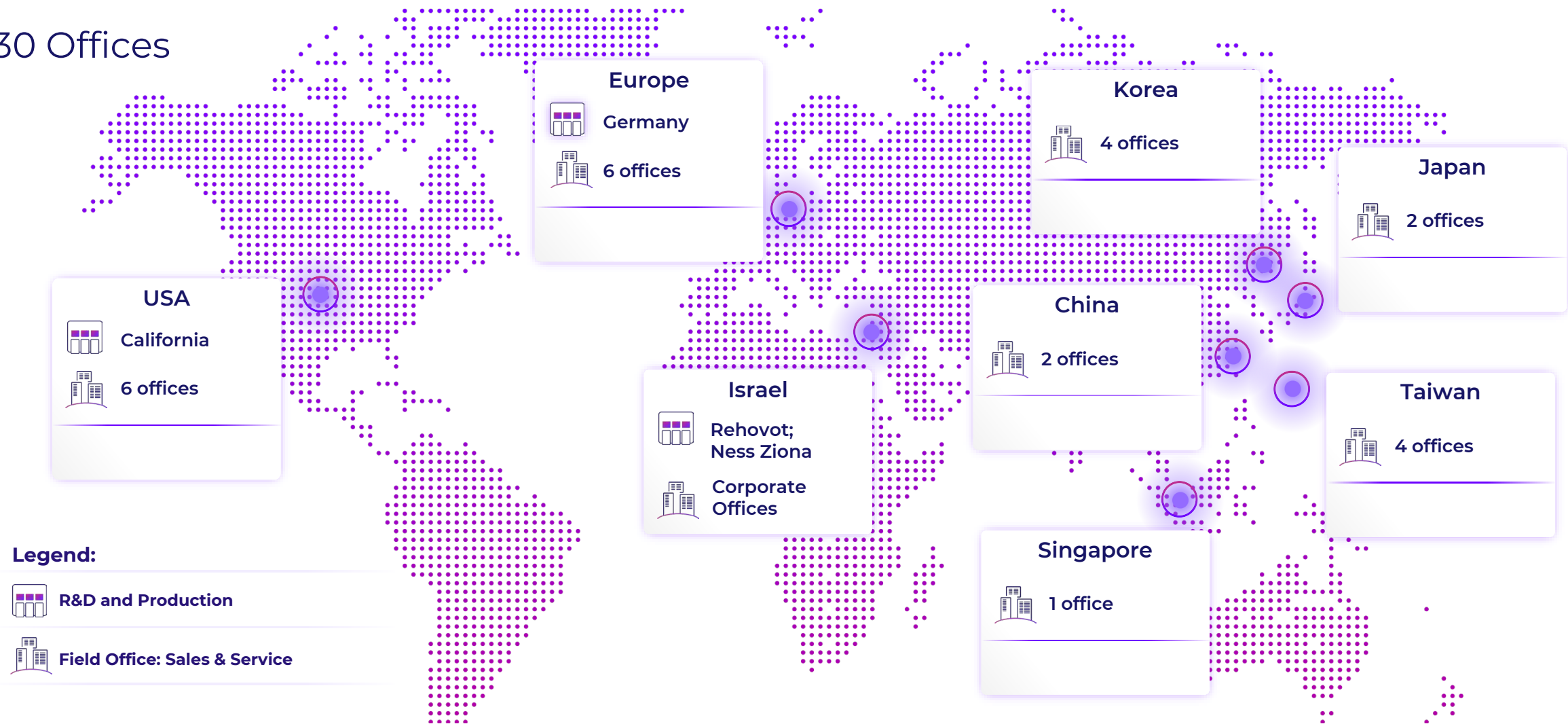
\$1.60-\$1.73 (non-GAAP)




# Global Footprint, Diversified Exposure

3 R&D and Production Centers

30 Offices



**Legend:**

 **R&D and Production**

 **Field Office: Sales & Service**



# Multiple Drivers for Secular Growth

Semiconductor Revenue Forecast – \$1T by 2030

Automotive

28%  
5Y CAGR

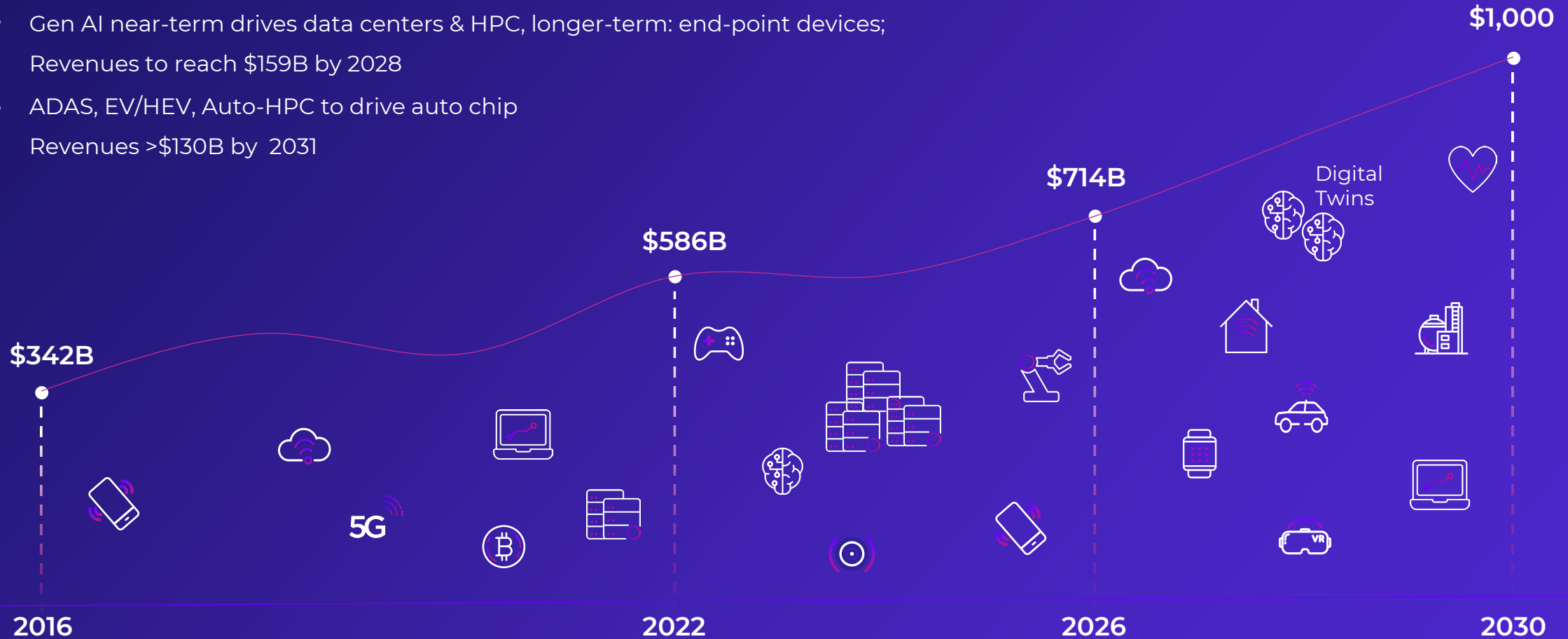
AI Semi

24%  
5Y CAGR

Industry

+8%  
5Y CAGR

- Gen AI near-term drives data centers & HPC, longer-term: end-point devices;  
Revenues to reach \$159B by 2028
- ADAS, EV/HEV, Auto-HPC to drive auto chip  
Revenues >\$130B by 2031



# Government Funding Drives Technology Advancement and Global Fabrication Footprint

>\$200B in Funding and Incentives by 2030

>100 Fabrication Projects

**USA**

\$ \$80B

 23

**Europe**

\$ \$50B

 19

**China**

\$ \$30B

 32


**Korea**

\$ \$20B

 7

**Japan**

\$ \$20B

 12


**Taiwan**

\$ \$15B



 10

**India**

\$ \$15B

 3

Legend:

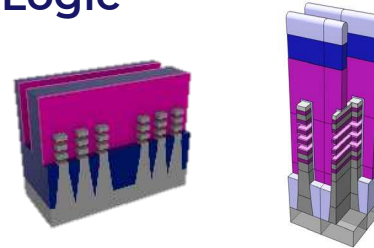
-  Government Funding/ incentives
-  New Fab facilities / construction

# Next-Gen Dimensions Driven Opportunities

Scale and Complexity Drive Metrology Intensity

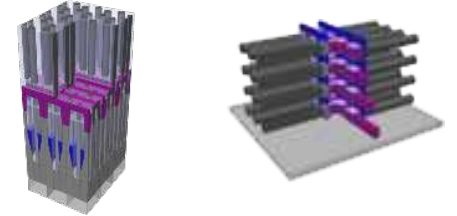
- Scaled Devices, Multiple Design Steps
- Moving toward 3D architectures
- Higher count of interconnect layers

## Logic



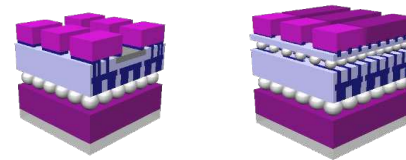
- GAA individual Nanosheets (thickness, indent)
- Buried structures

## DRAM



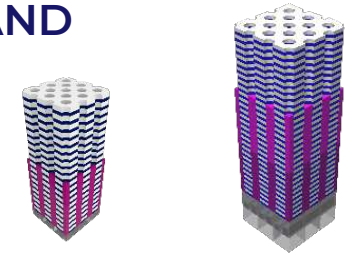
- High-Aspect Ratio Bottom gate parameters
- Tight contact holes

## Advanced Packaging



- Buried structures
- Topography & Profile

## NAND



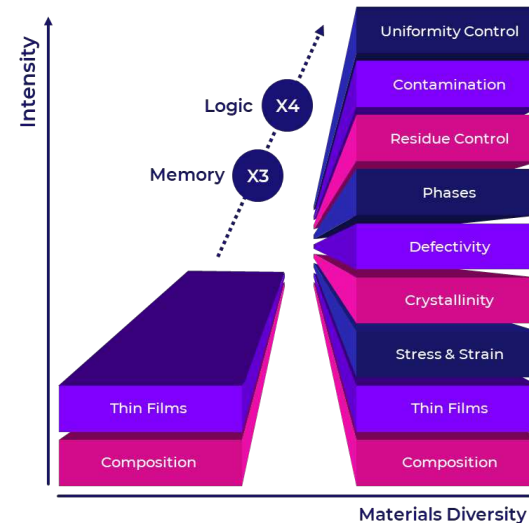
- High-Aspect Ratio Bottom parameters in multi tier
- Full profile

# Next-Gen Materials Driven Opportunities

## Materials Diversity Drives Broader Metrology Scope

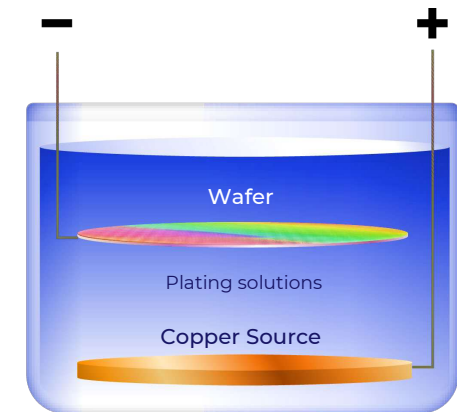
- From 12 to 67 elements
- New materials, new chemistries
- Composition, purity, stability
- Sustainability and waste management

### On-Wafer



- Uniformity & Residues
- Dielectric composition & thickness control
- Stress & strain on multiple nanosheets
- Doping control
- TSV filling

### In-Bath



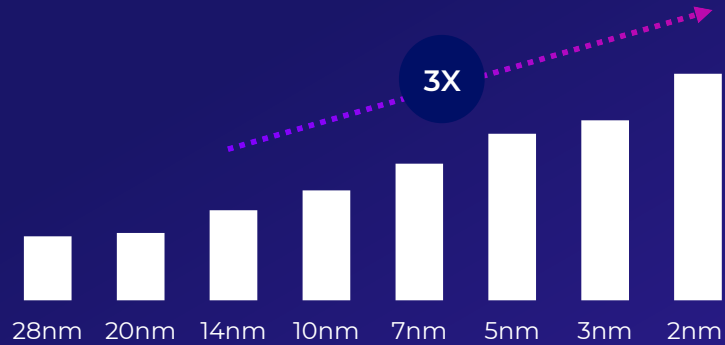
- Optimal plating
- Highly saturated bath management
- By-Products
- Contaminants and photoresist leach



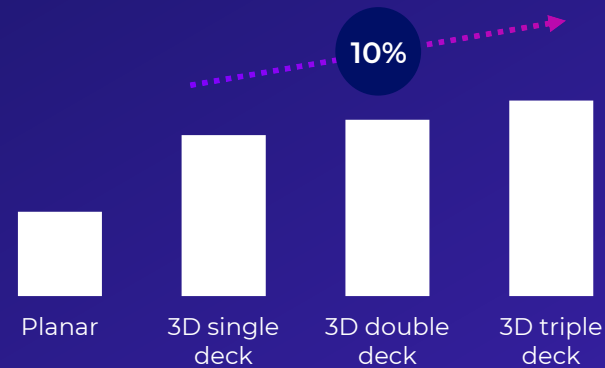
# Increasing Complexity

Driving Higher Metrology Intensity

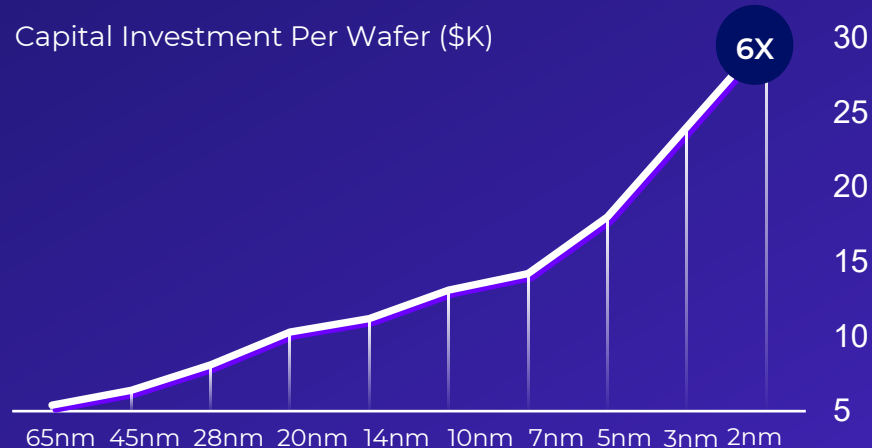
Process Steps by Node - Logic



Process Steps by Node - NAND



Capital Investment Per Wafer (\$K)



Increasing complexity:  
+30% more metrology steps  
in GAA

Cost of a large  
3nm fab:  
~ \$25B, 3X of a 28nm fab

HBM3E consumes ~X3 wafer  
supply as DDR5

# Diversified Growth Engines

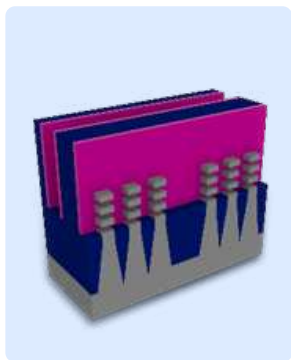
Increasing Share while Expanding TAM



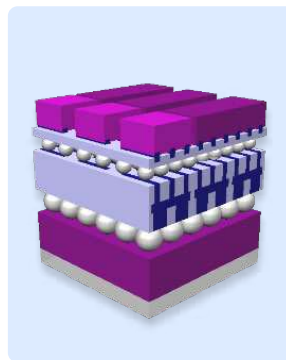
# Expanding TAM

by Addressing Multiple Markets

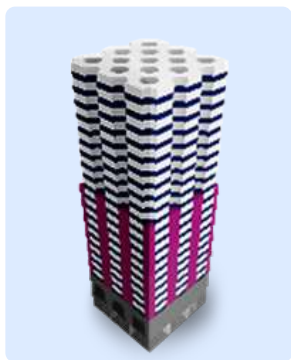
Advanced  
Logic



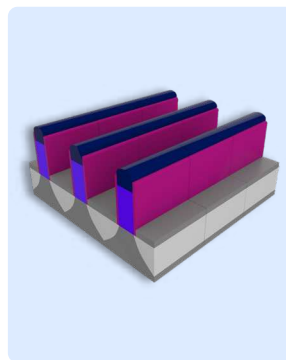
Advanced  
Packaging



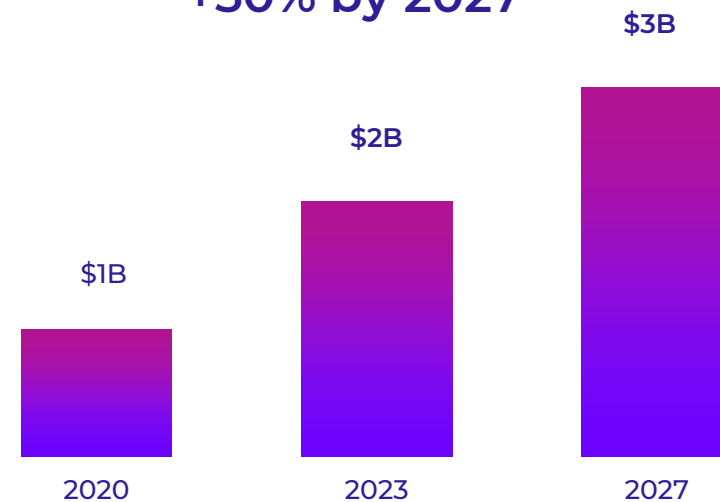
Advanced  
Memory



Legacy  
Nodes &  
specialty  
devices



Nova TAM  
+50% by 2027

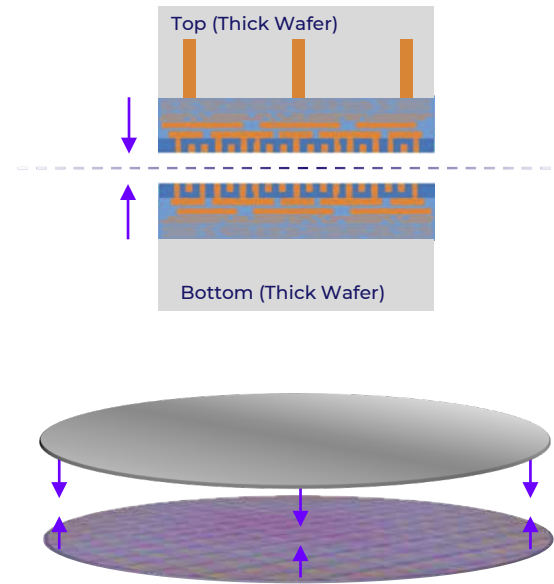


# Heterogenous Integration Driven Opportunities

Continued Scaling Requires New Integrations

- Wide Adoption: Advanced Logic, HBM, 3D NAND, 3D DRAM & advanced packaging
- CMP process control critical for successful hybrid bonding

## Hybrid Bonding

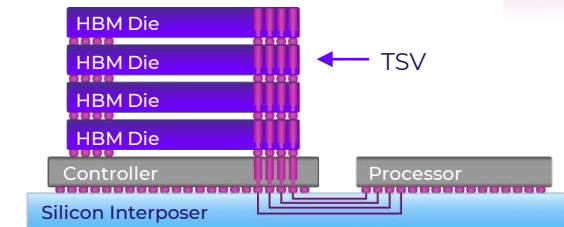


- Wafer edge profile
- Backside Thinning
- Cu dishing
- Through Silicon Via

## Through Silicon Via

Logic: Backside Power Delivery

DRAM: High Bandwidth Memory

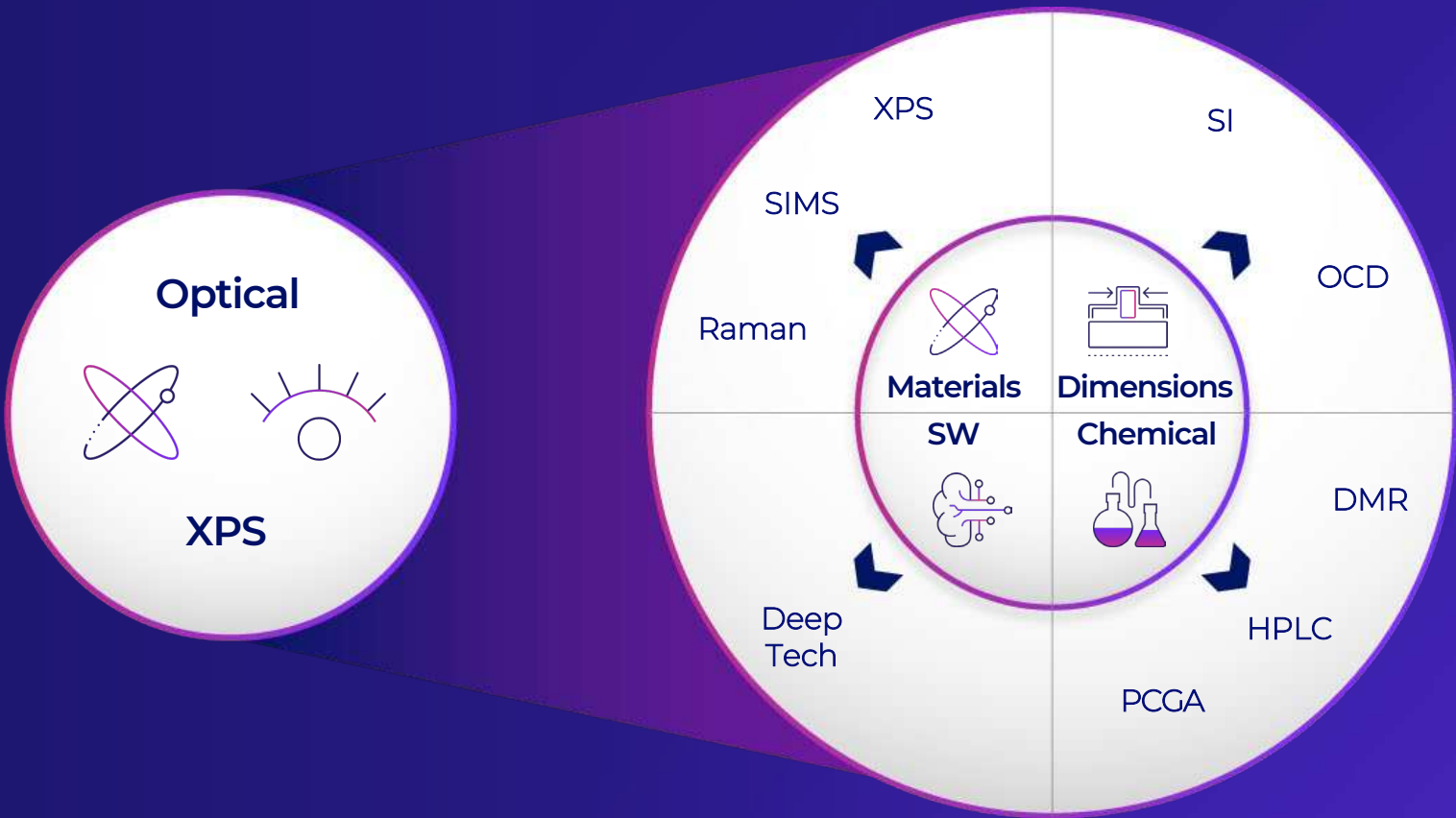


- TSV Dimensions: profile, depth & asymmetry
- TSV reveal
- TSV PR Patterning

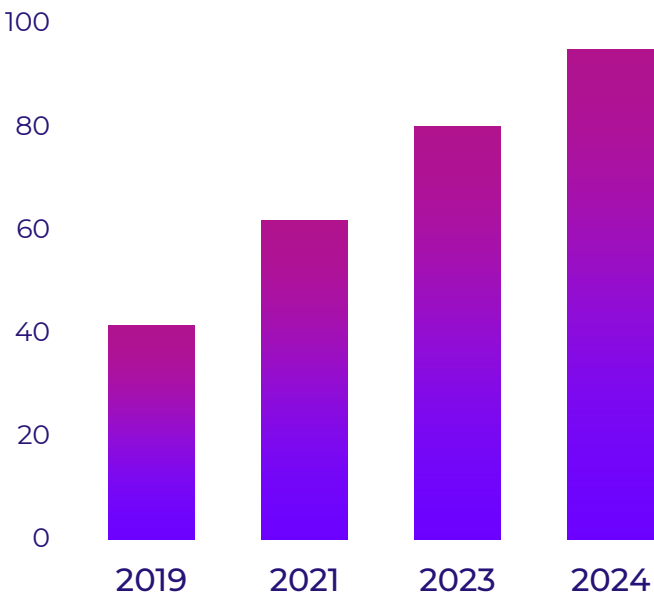


# Diversifying

Product Offering



R&D Investment  
(Net, \$M)



Non-GAAP Financials. 2024+ Forecast

# Core Technology

Spectral Reflectometry (SR)

X-Ray Photoelectron Spectroscopy (XPS) &  
X-Ray Fluorescence (XRF)

HPLC, CVS, Titration,  
Optical Spectroscopy

Physical Modeling

Fleet Management

**Constantly  
Pushing  
Boundaries**

# Disruptive Technology

Spectral Interferometry (SI)

Generative AI

Raman Spectroscopy

Secondary Ion Mass Spectrometry (SIMS)

Direct Metal Replenishment

# Rich Metrology Portfolio

## Dimensional Metrology

Critical Dimensions



**Nova i570®**  
Integrated Metrology



**Nova MMSR**  
Standalone Metrology



**Nova Prism**  
Standalone Metrology

## Materials Metrology

Material Properties



**Nova VeraFlex®**  
XPS, XRF



**Nova Elipson®**  
Raman Spectroscopy



**Nova Metrion®**  
SIMS

## Chemical Metrology

Chemical Analytics



**Nova AncoScene®**  
Front End

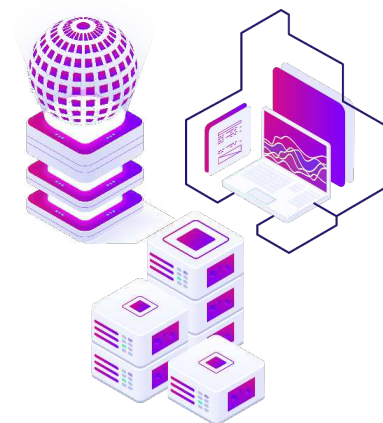


**Nova Ancolyzer®**  
Wafer Level Packaging



**Nova DMR®**  
Direct Metal Replenishment

## Software



- Physical & Mathematical Modeling
- Big Data Analytics
- Fleet Management

# Leveraging Technology Differentiation

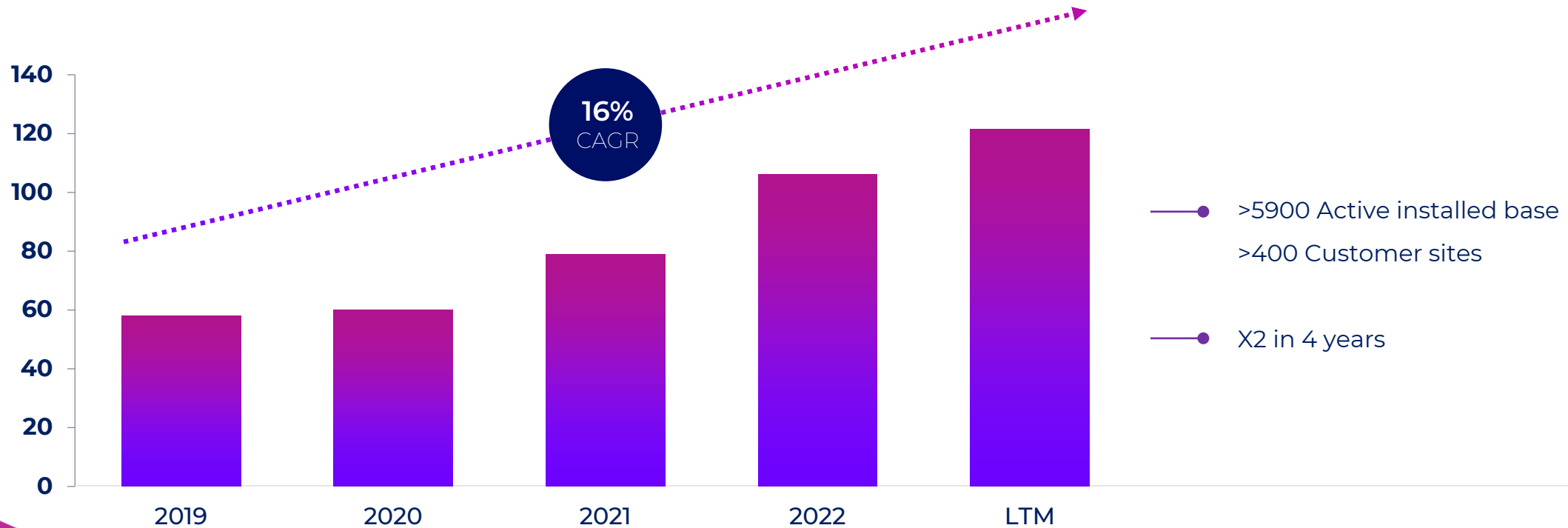
	Dimensional			Materials			Chemical		
	Integrated Optical CD	Stand alone Optical CD	Prism	VeraFlex® (XPS+SRF)	Elipson® (Inline Raman)	Metrion® (Inline SIMS)	AncoScene® Front-End	Ancolyzer® Wafer level packaging	DMR® Direct Metal Replenishment
									
Gate-All-Around	●	●	●	●	●	●	●	●	●
Advanced Memory	●	●	●	●	●	●	●	●	
Hybrid Bonding	●		●	●		●		●	●
High Bandwidth Memory	●		●	●	●		●	●	●

● Qualified by customers to measure related applications



# Service Revenue Engine

Targeting Double-Digit Annual Growth



Non-GAAP Financials, Company service revenue Last Twelve Months, CAGR 2019-LTM

# Inorganic Approach

## Search Guidelines



### Early Access

Lab to Fab Technology



### Materials

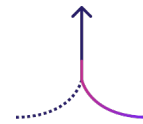
Leadership



### Adjacent

Process Control Markets

# Screening Elements



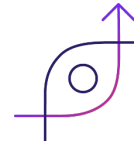
Top Line Synergy



Complementary  
Technology



Operational  
Leverage  
(Accretion)



Diversification  
Within Core  
Capabilities



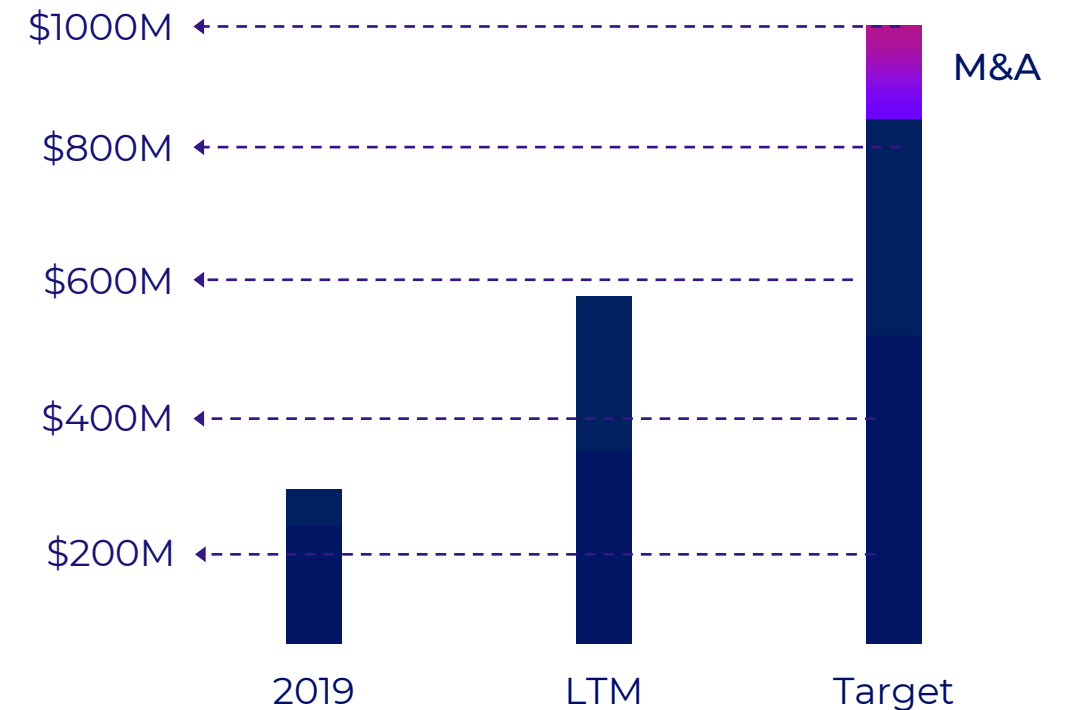
Transformational

# Nova \$1B Plan

Continuous Outperformance

- New Technologies Proliferation
- Chemical Analysis Growth
- Materials Metrology Leadership
- Diversified Markets
- Further M&A

**>\$750M Gross Cash Reserves**  
Supporting Long-Term Growth



# Financial Target Model

Organic

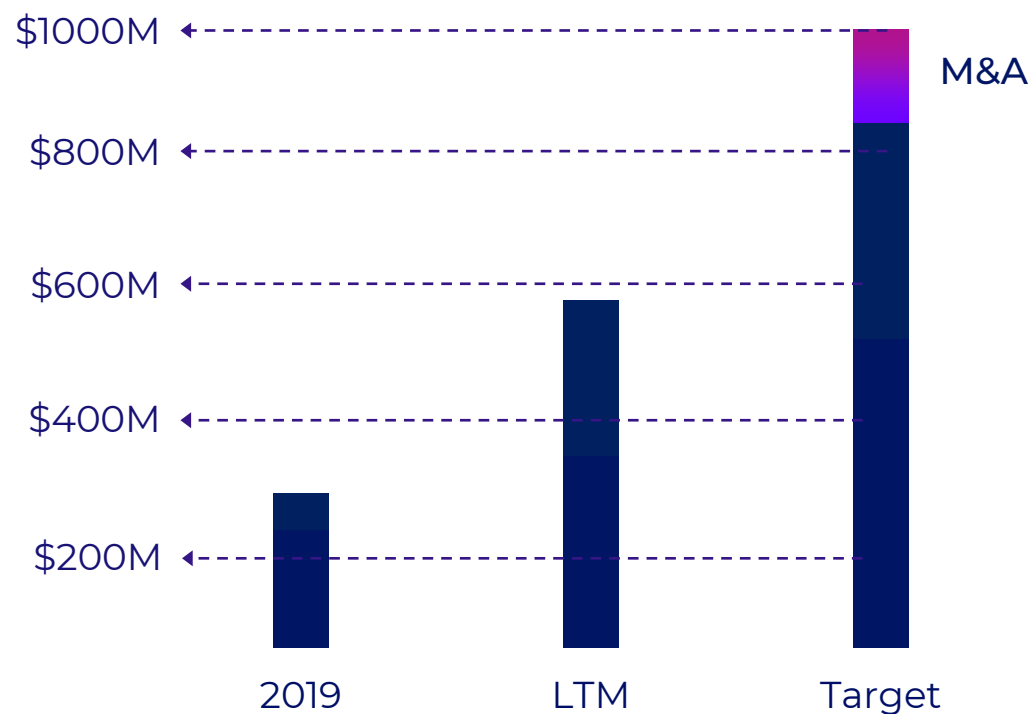
Revenue	R&D Investment	Tax
<b>\$1B</b>	<b>15%-18%</b>	<b>14%</b>
Gross Margin	SG&A	Share Count
<b>57%-59%</b>	<b>13%-15%</b>	<b>32M</b>

**Operating Margin**

**27%-31%**

**Earnings**

**>7\$**





# Preparing For Next Cycle Opportunities

## Increasing Manufacturing Capacity



**+50%**  
by 2025

Vs. 2022 capacity

## Tech Evaluations at Customer Sites



**20**  
Evaluations in Process

## R&D Plans On Track



**16%**  
of Annual Revenue - Last 3 Years

# Our ESG Vision

To become an active influencer in creating a more sustainable and equitable future.

We believe in a pragmatic approach to interlace ESG practices across daily operations, including culture, products, business, supply chain, customers, R&D and manufacturing.

## Our four Pillars

Our ESG strategy is built around four pillars- each with long-term goals and areas of focus. Annual planning and investments will align with these pillars



### Governance

As our compass



### People First

The individual as a whole & our community as our home



### Innovation

As our mission



### Environment

As our obligation

# Nova's Priority ESG topics



## Governance

- Governance compliance
- Data Privacy & cyber security
- Ethical business practices
- Product safety and quality
- Supply Chain and Procurement Management



## Social

- Talent Attraction & Retention
- Diversity, Equity and Inclusion
- Human capital development
- Occupational health and safety



## Environment

- Environmental management –
- Energy, water, waste
- Carbon footprint and GHG emissions

# Key Takeaways

Positioned for Continuous Growth



**Process complexity, new markets and geopolitics drive investments**

Increasing need for advanced metrology solutions



**Unique, disruptive technology portfolio**

Stronger position, penetrating new segments. expanding TAM



**Solid operational model**

Supports clear strategy for growth



**Proven performance towards 1B\$**

Outperforming the Industry



**Clear ESG Vision and priorities**

Implemented across the organization

## Financial Long-Term Target Model

Sales

**1B\$**

Gross Margin

**57%-59%**

Operating Margin

**27%-31%**

Non-GAAP Financials



# Thank You

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