



Investor Presentation

November 2023

Cautionary Statements

Use of Non-GAAP Adjusted Financial Measures

This presentation provides financial measures that exclude amortization of acquired intangible assets, 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: political, economic and military instability in Israel, including related to the recent attack by Hamas and other terrorist organizations from the Gaza Strip and Israel's war against them; 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 such as the outbreak of COVID-19; inability to protect our intellectual property; open source technology exposure; 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 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, 2022, filed with the Securities and Exchange Commission on February 28, 2023. 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

Execute

Dare

Listen

Dream

Innovate

Win

KEY Facts



1993 | Date Founded | Dually Traded



>1100 | Employees



Presence | Israel HQ , Global Offices



>5000 | Active Systems



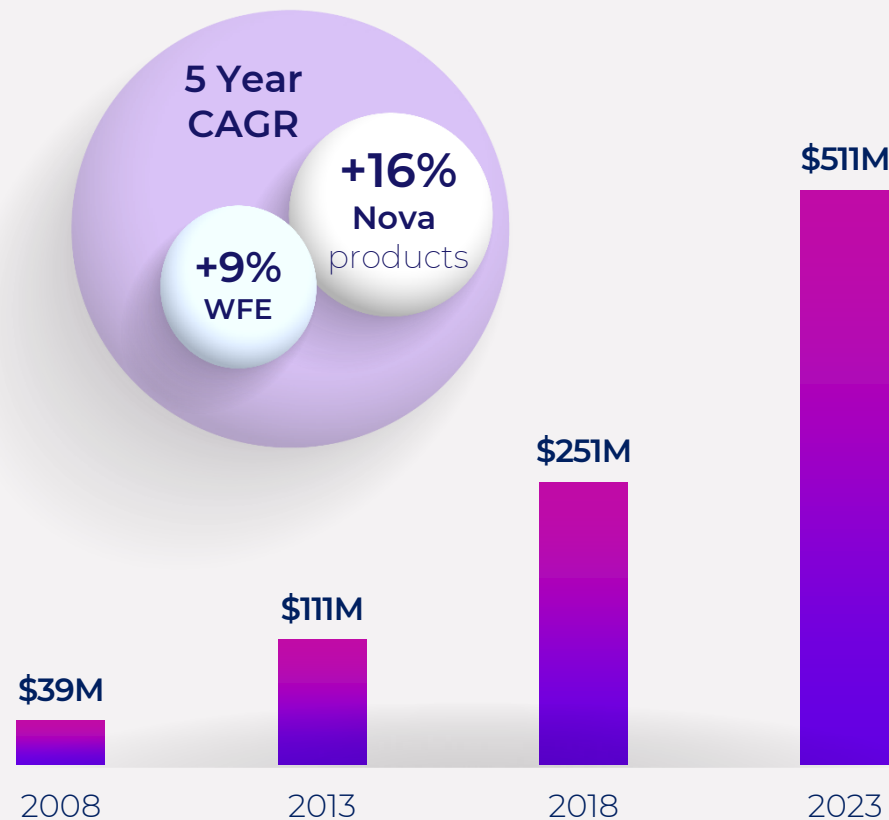
>200 | Customer Sites



R&D | Israel, USA, Germany

Solid Track Record

- Proven Execution Ability
- Relative Industry Outperformance
- Revenue doubled every 5 years



Wide Metrology Coverage

Differentiated Portfolio

New Organic Engines

Diverse Technology Mix

Diverse Customer Mix

Diverse Territory Mix

Semiconductor Industry Eco System

Chip Design (Fabless)



Front End Fabrication



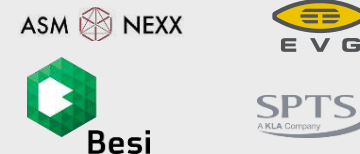
Packaging



Process Control



Process equipment

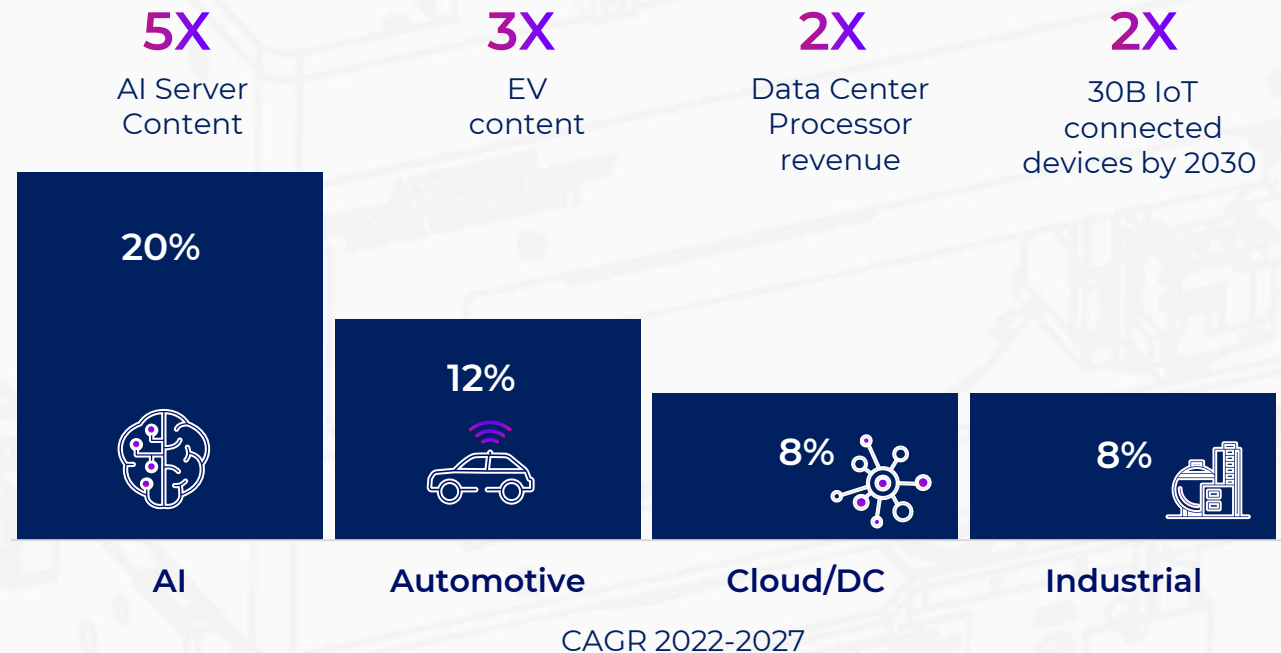


Materials



The New Market Drivers

Semiconductor Revenue 1T\$ By 2030



AI server is **5X** content and **8X** memory

By 2026, Evs/HEVs >50% of unit production

Data centers transition to parallel processing

Innovative Technology



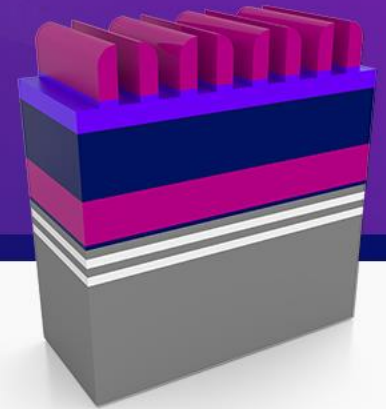
Optical / X-Ray / Chemical



LOGIC • FLASH • DRAM



Semiconductor
Segments



300mm
Wafer

20um
Pad

3nm
Node

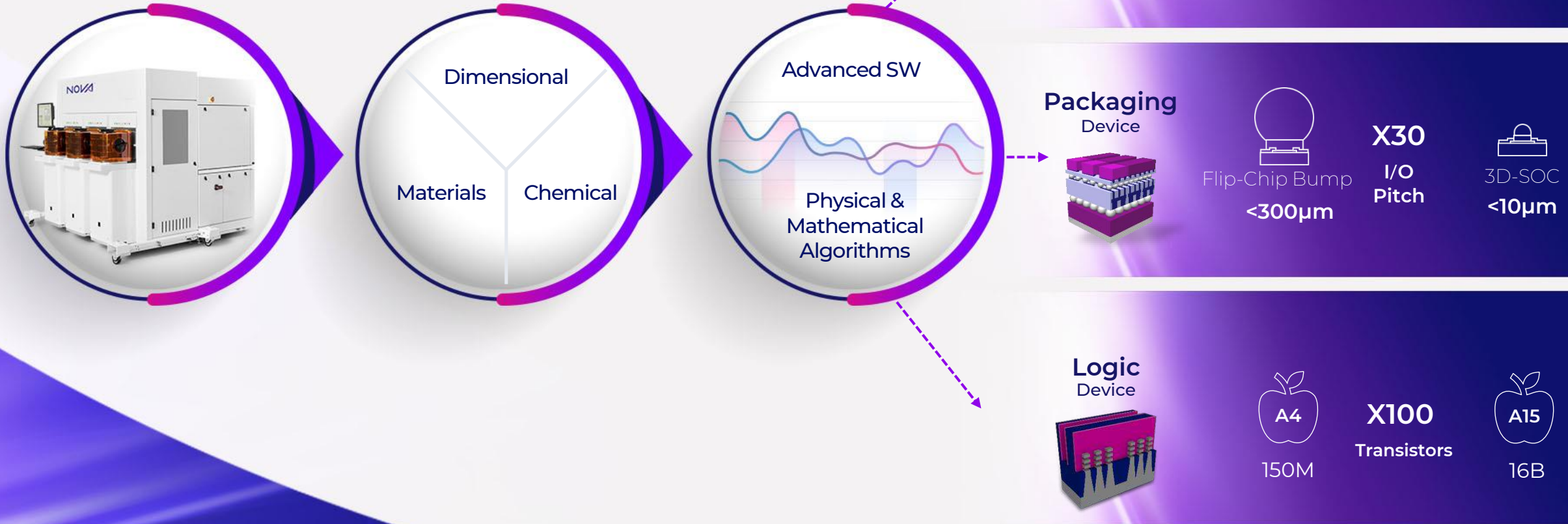
0.5Å
Precision

[One ten-billionth of a meter]

Dimensions / Materials
Parameters

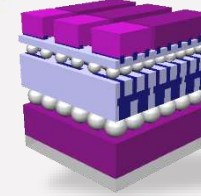
Revealing the Invisible

Actionable Insight, Critical Foresight

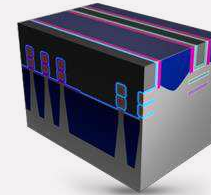


Addressing Multiple Markets

Advanced Packaging



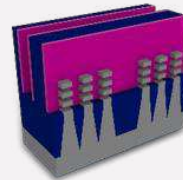
New Materials



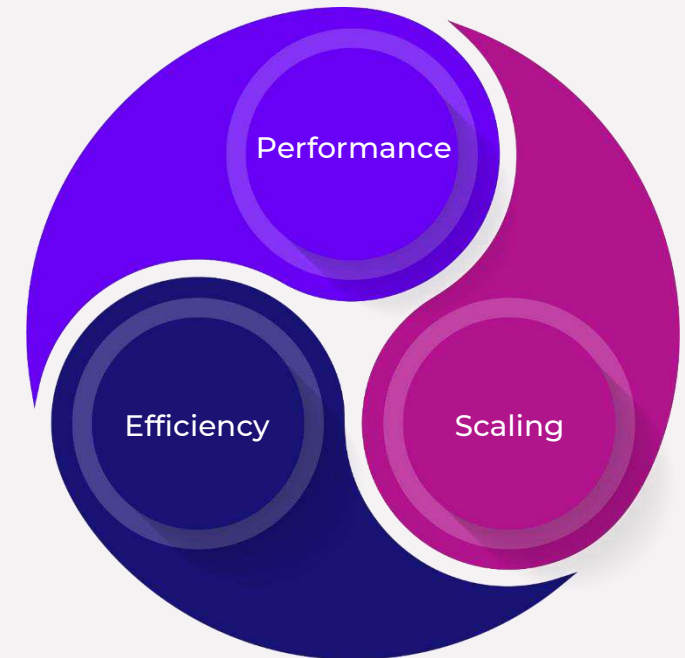
Vertical Integration



Device Scaling

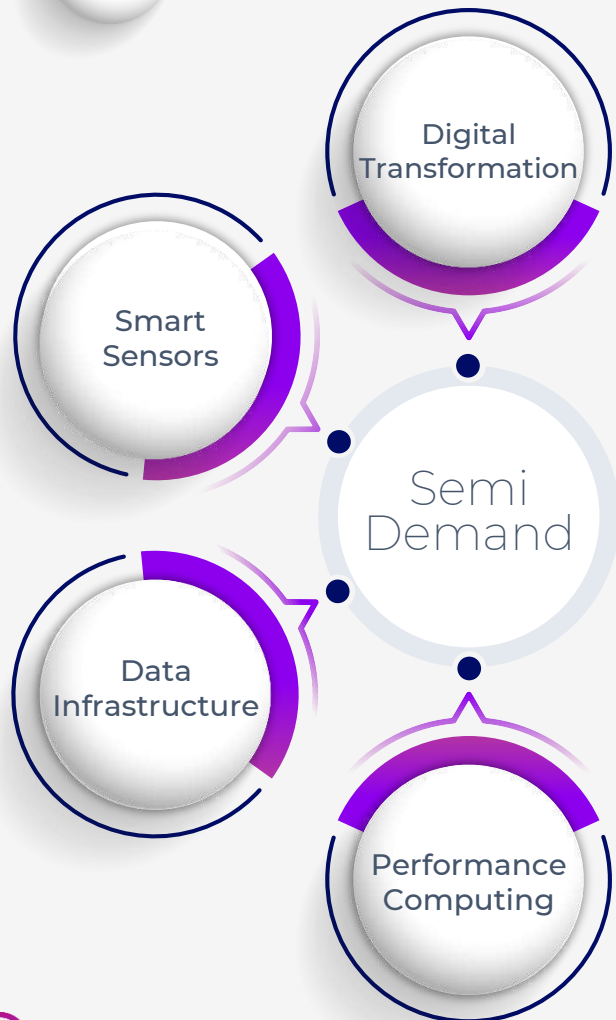


Economics



Fundamental Drivers in Cyclical Environment

1 Multiple Tech Drivers



2 Disruptive Investment

Investment across broad range of IC Devices

Technology transitions to support performance demand

Resume normal scaling cycles (EUV) below 7nm

Demand for increased content in advanced devices

Synergy between industry segments drives need for better process control

Geo-centric strategy drives diverse geographical investment

3 Technology Avenues



Dimensional Metrology Intensity

Scaled Devices

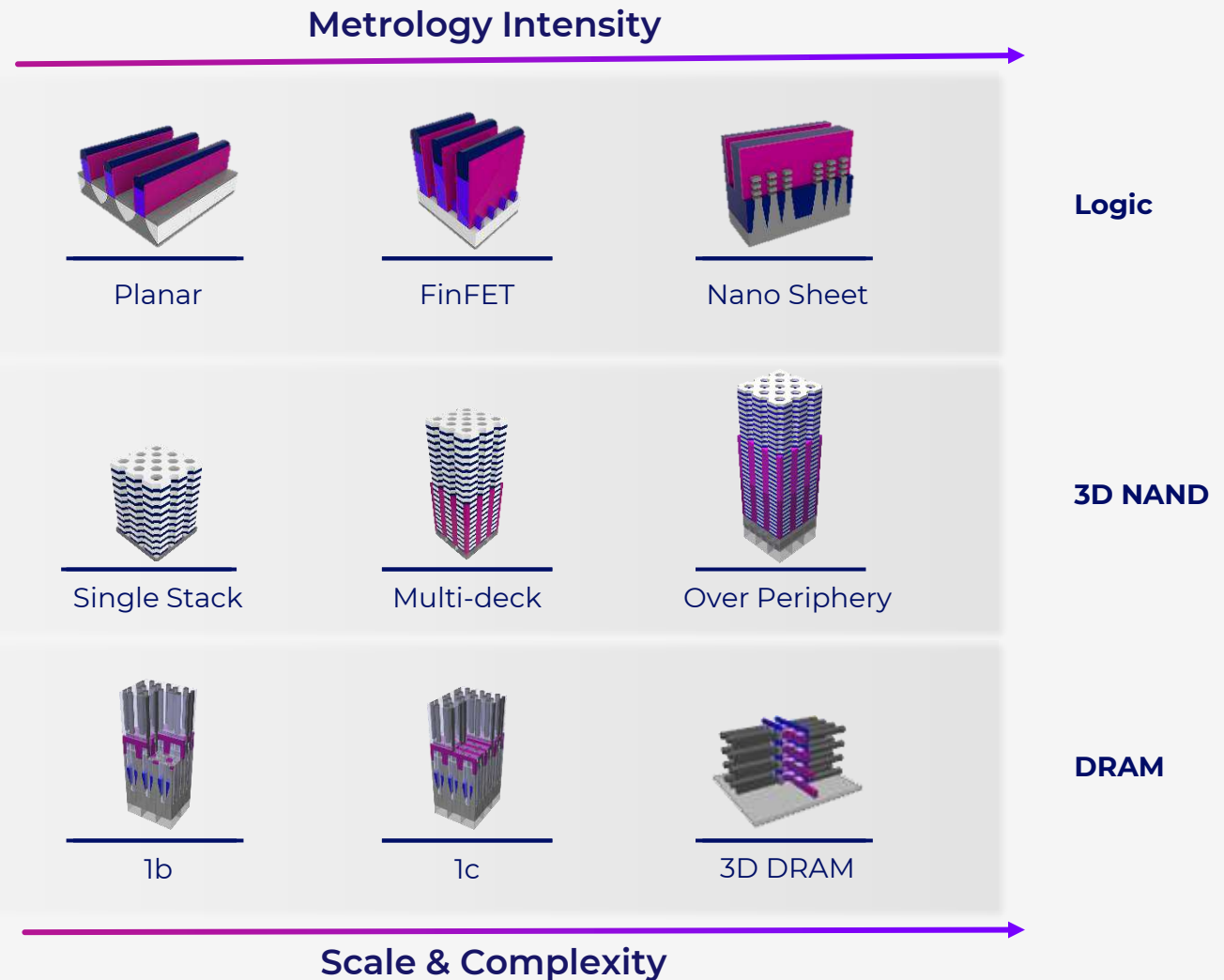
3D Profiles

Multiple Design Steps

Films Variety

Intricate Architecture

Scale & Complexity = Growing Demand Growth in Design Steps

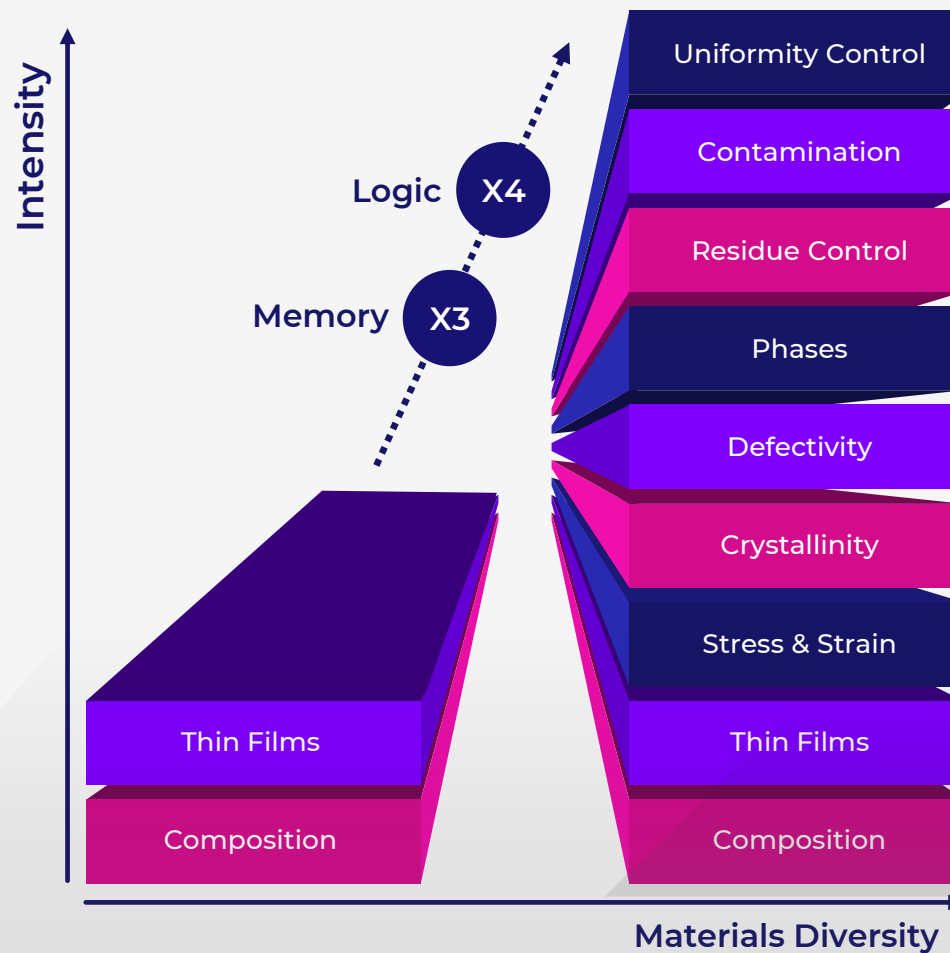


Materials Metrology Intensity

Broader Metrology Scope
from planar/single stack
to GAA/Multi stack

From 20 to 90 steps

From 21 to 62 Materials



Broader Metrology Scope

H	Past 21																Present 62																He	
Li	Be																																	Ne
Na	Mg																																	Ar
K	Ca	Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge	As	Se	Br	Kr																	
Rb	Sr	Y	Zr	Nb	Mo	Tc	Ru	Rh	Pd	Ag	Cd	In	Sn	Sb	Te	I	Xe																	
Cs	Ba	La	Hf	Ta	W	Re	Os	Ir	Pt	Au	Hg	Tl	Pb	Bi	Po	At	Rn																	
Fr	Ra	Ac	Rf	Db	Sg	Bh	Hs	Mt	Ds	Rg	Cn	Nh	Fl	Mc	Lv	Ts	Og																	
			Ce	Pr	Nd	Pm	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu																		
			Th	Pa	U	Np	Pu	Am	Cm	Bk	Cf	Es	Fm	Md	No	Lr																		

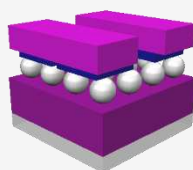
Chemical Metrology Intensity

Complexity, Scale & New Chemicals

- Complexity
- New materials
- New chemistries
- Stability and purity
- Tighter process control

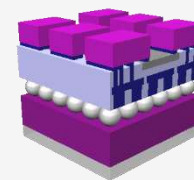
Back End:
Advanced
Packaging

<150 μ m



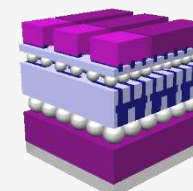
Flip-Chip

<60 μ m



Fan-Out

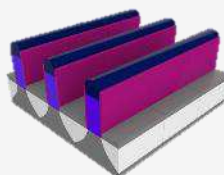
<40 μ m



Hybrid 3D

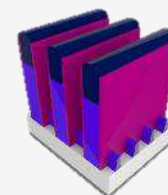
I/O Pitch

8



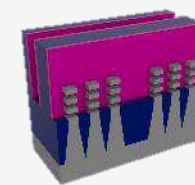
Planar

13



FinFET

17

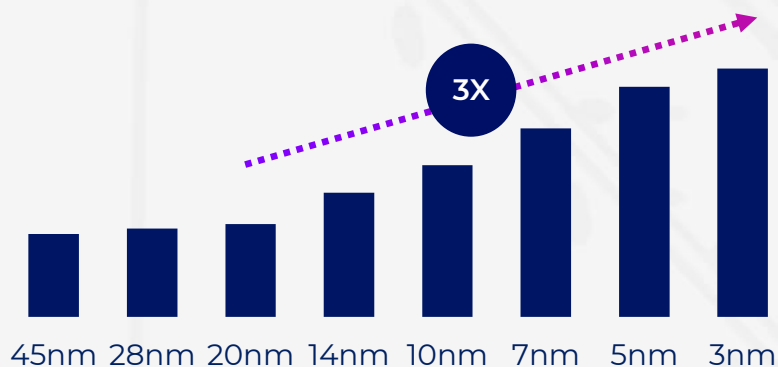


GAA

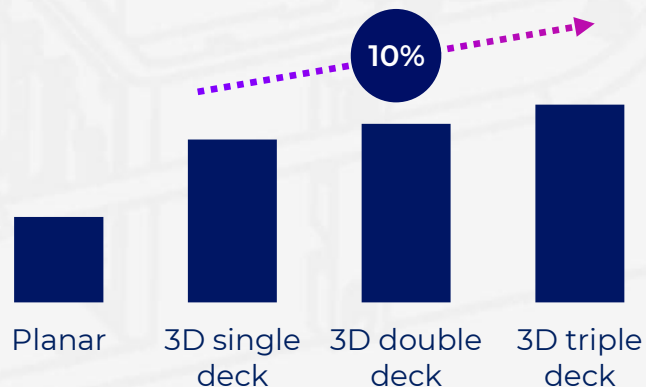
Interconnect
Layers

Complexity

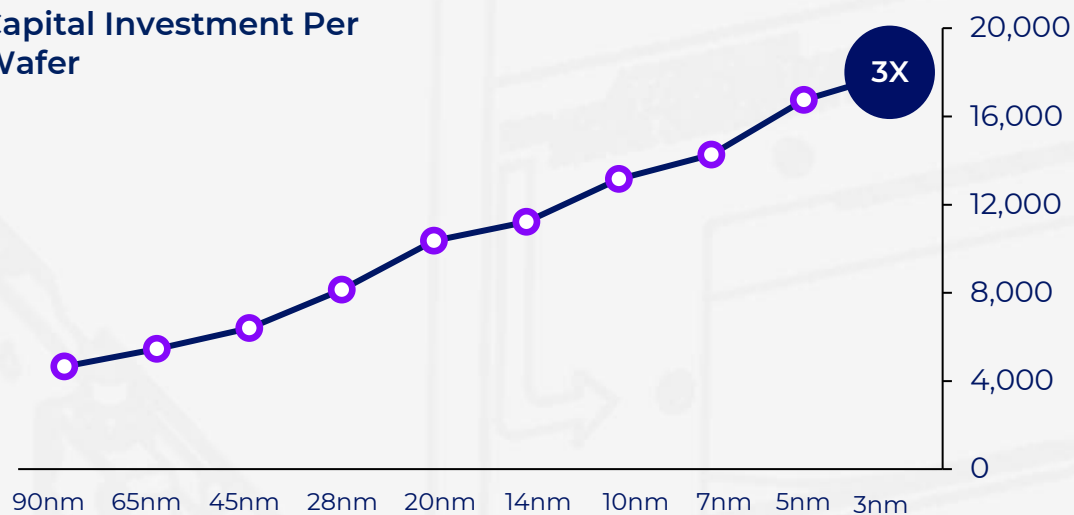
Process Steps by Node - Logic



Process Steps by Node - NAND



Capital Investment Per Wafer



Increasing Complexity Driving Higher Metrology Intensity

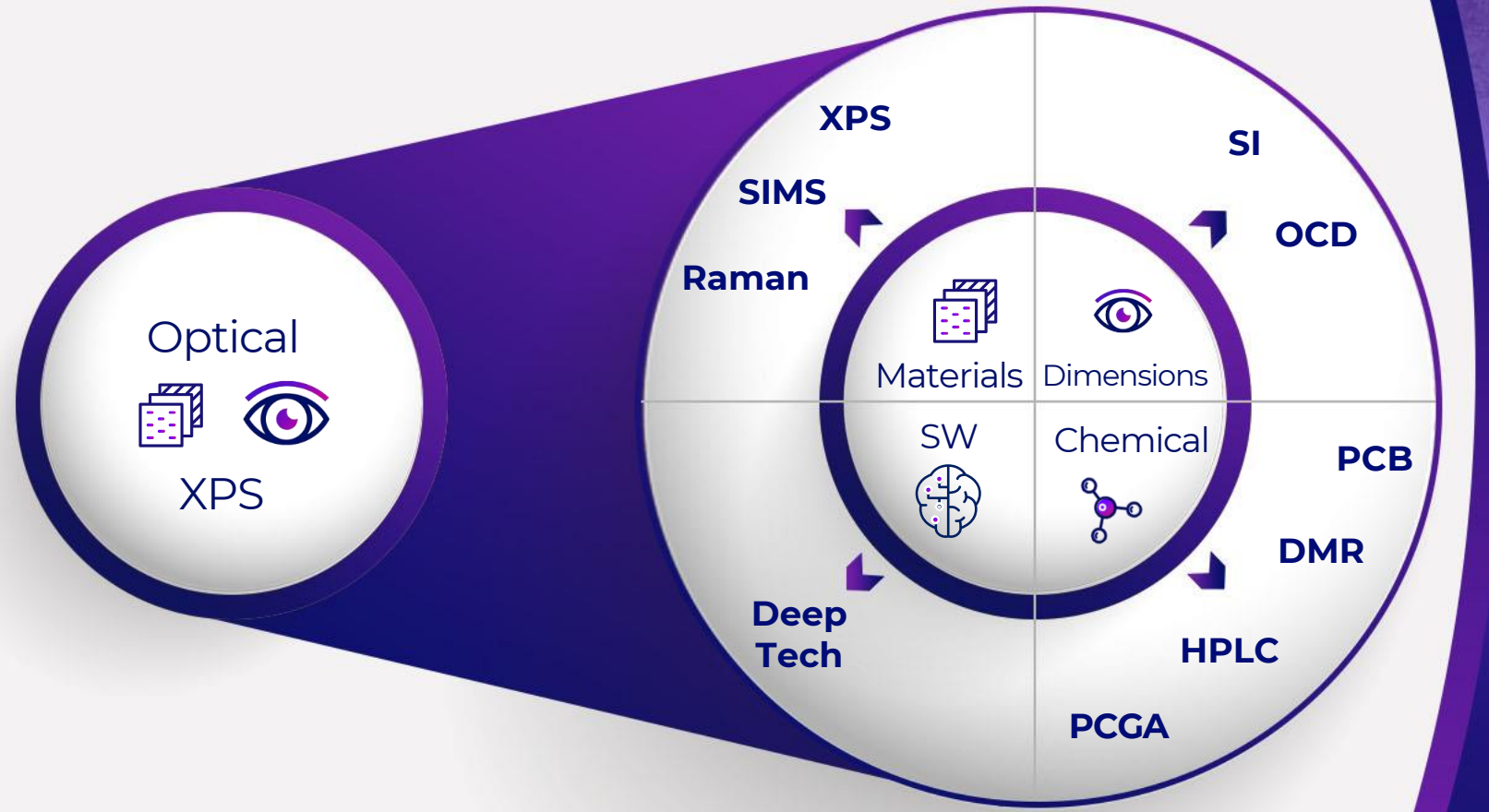
- Increasing complexity: Logic process steps **3X** since 28nm node
- WFE cost of a large 3nm fab: ~ \$20B, **2X** of a 28nm fab
- Optical metrology sampling likely to double in transition to GAA

Why Do We **PREVAIL**?

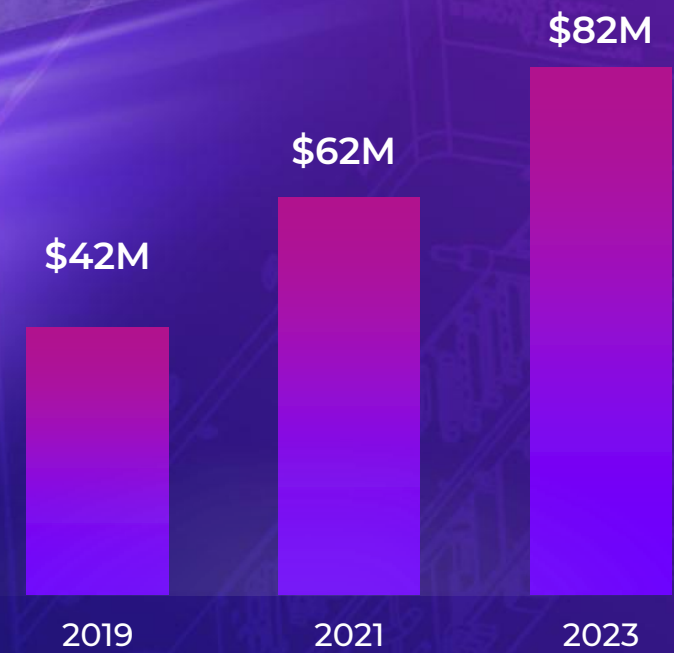
Increasing Share while Expanding TAM



Diversifying Product Offering



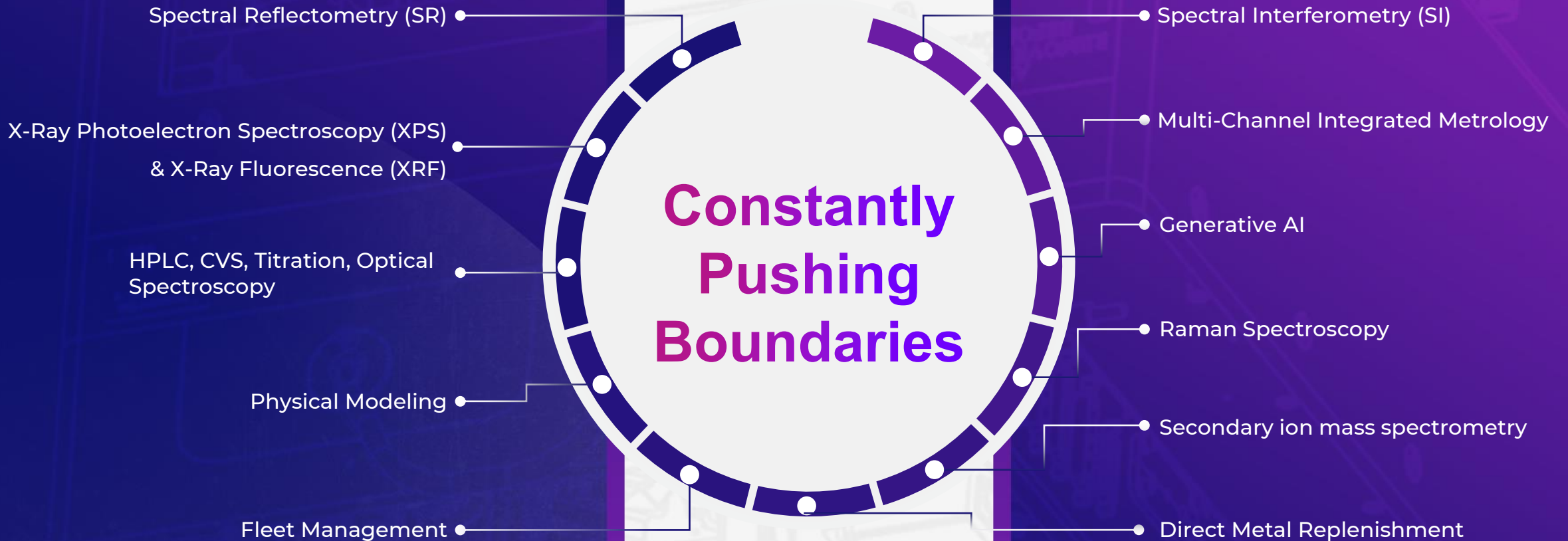
R&D Investment
(Net)



Non-GAAP Financials, based on company Q4 '23 mid-point guidance and data

Core Technology

Disruptive Technology



Rich Metrology Portfolio

Dimensional Metrology

- Critical Dimensions



Nova i570
Integrated
Metrology



Nova ASTERA
Integrated Multi
channel Metrology



Nova PRISM
Standalone
Metrology

Materials Metrology

- Materials Properties



Nova VERAFLX
X-Ray - XPS, XRF



Nova ELIPSON
Raman Spectroscopy



Nova METRION
SIMS

Chemical Metrology

- Chemical Analytics



Nova ANCOSCENE
Front End

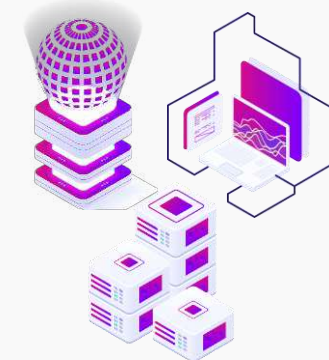


Nova ANCOLYZER
Back End



Nova DMR
Back End

Software



- Physical & Mathematical Modeling
- Big Data Analytics

Balanced Exposure

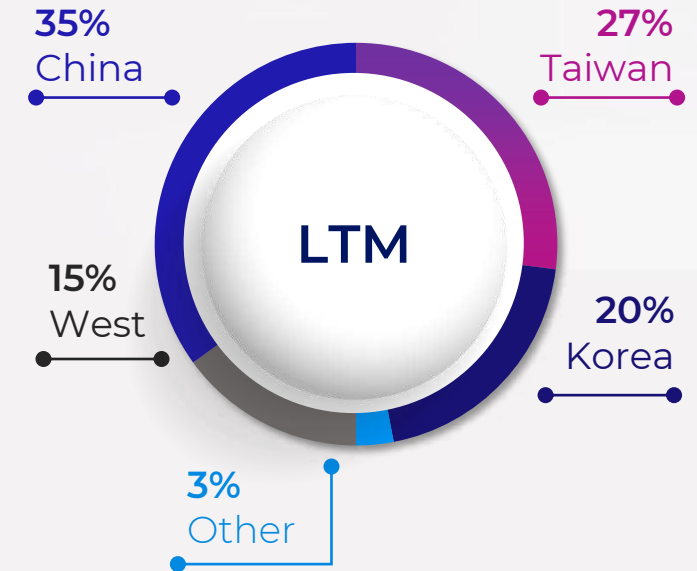
Segments



Nodes

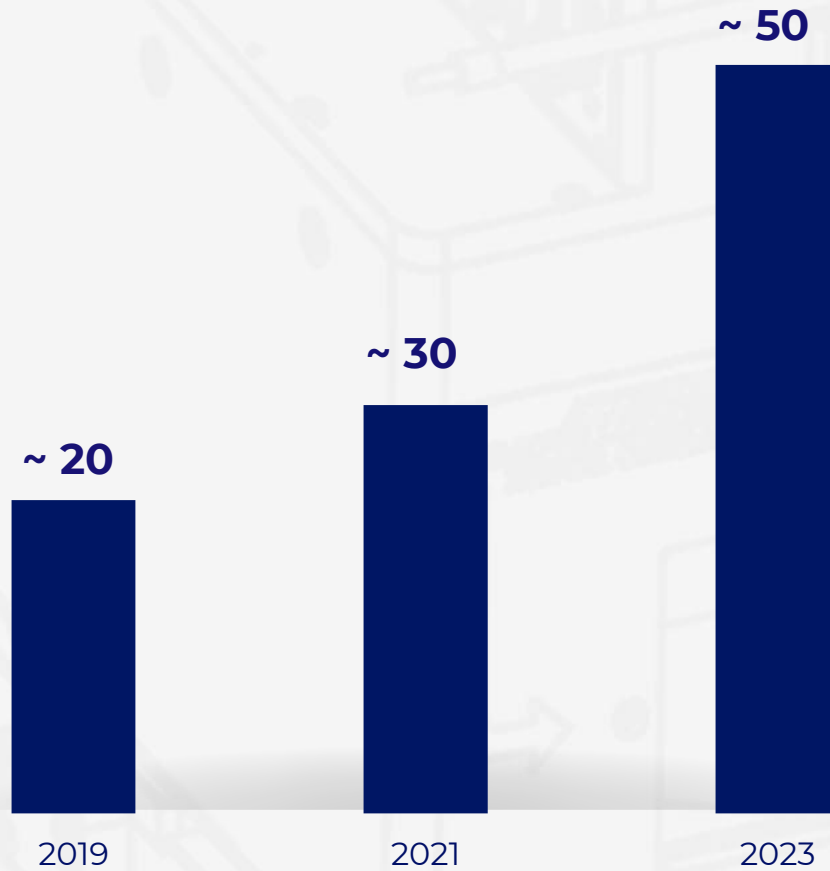


Geographies



Expanding Customer Base

Number of Customers



Regionalization driving investments and green fields in China

Penetration to new segments; Advanced Packaging, Back-End

Nova \$1B Plan

Continuous Outperformance

New Technologies Proliferation

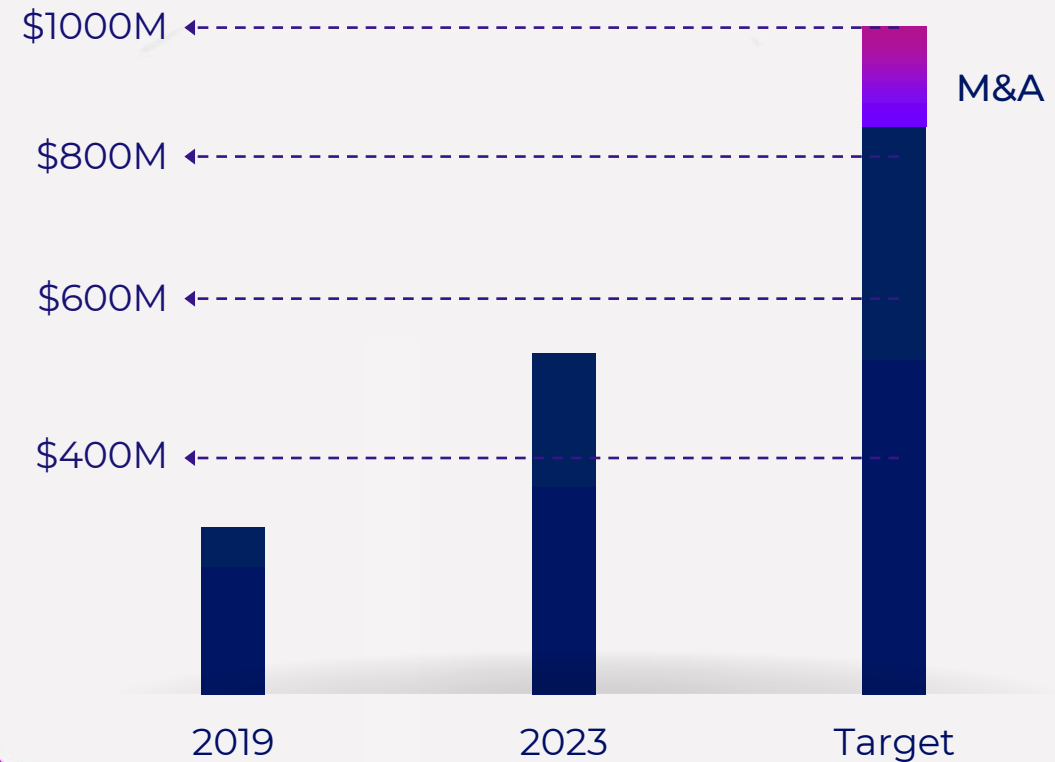
Chemical Analysis Growth

Materials Metrology Leadership

Diversified Markets

Further M&A

**>\$600M Cash Reserves Supporting
Long-Term Growth**



Financial Target Model

(Organic)

Revenue

\$1B

R&D
Investment

15%-18%

Tax

14%

Gross
Margin

57%-59%

SG&A

13%-15%

Share Count

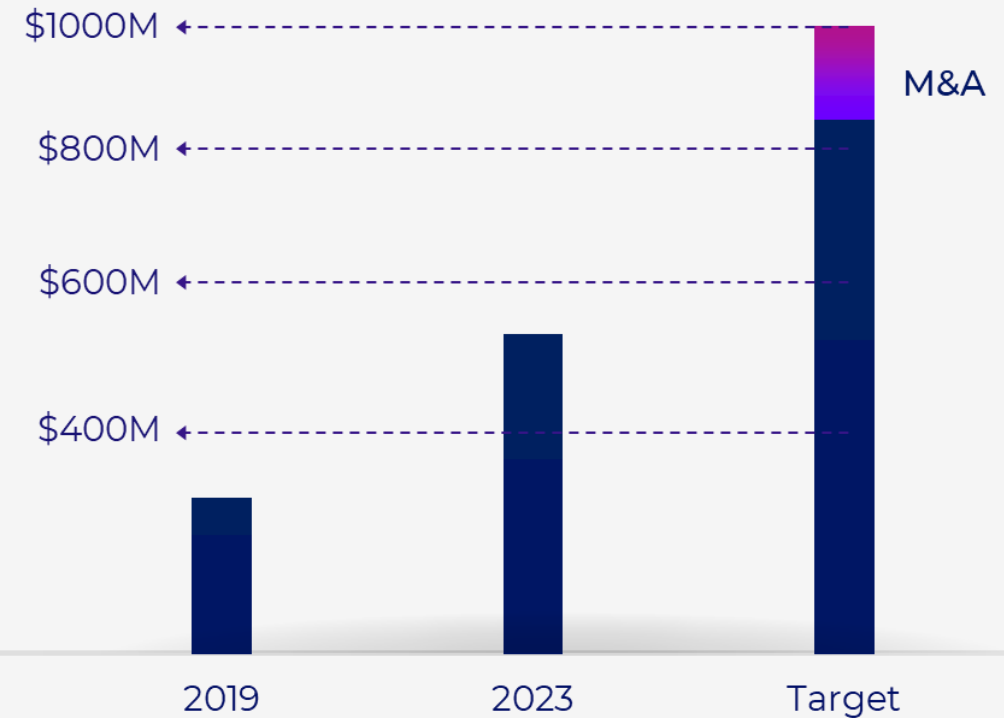
32M

Operating Margin

27%-31%

Earnings

>7\$



Non-GAAP Financials

Organic Growth Engines



Innovative Metrology

Raman, SIMS, SI



Advanced Packaging

Hybrid Bonding, CMP, Composition
Dimensional, Chemical, Materials



Service Revenue

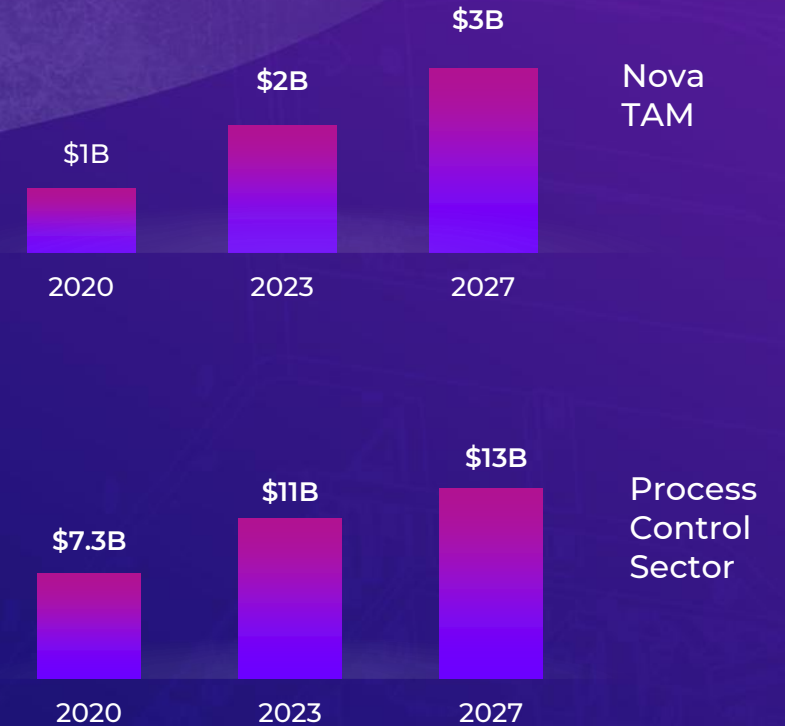
Extendibility & Enhancement
Value Added Services



Lab to Fab

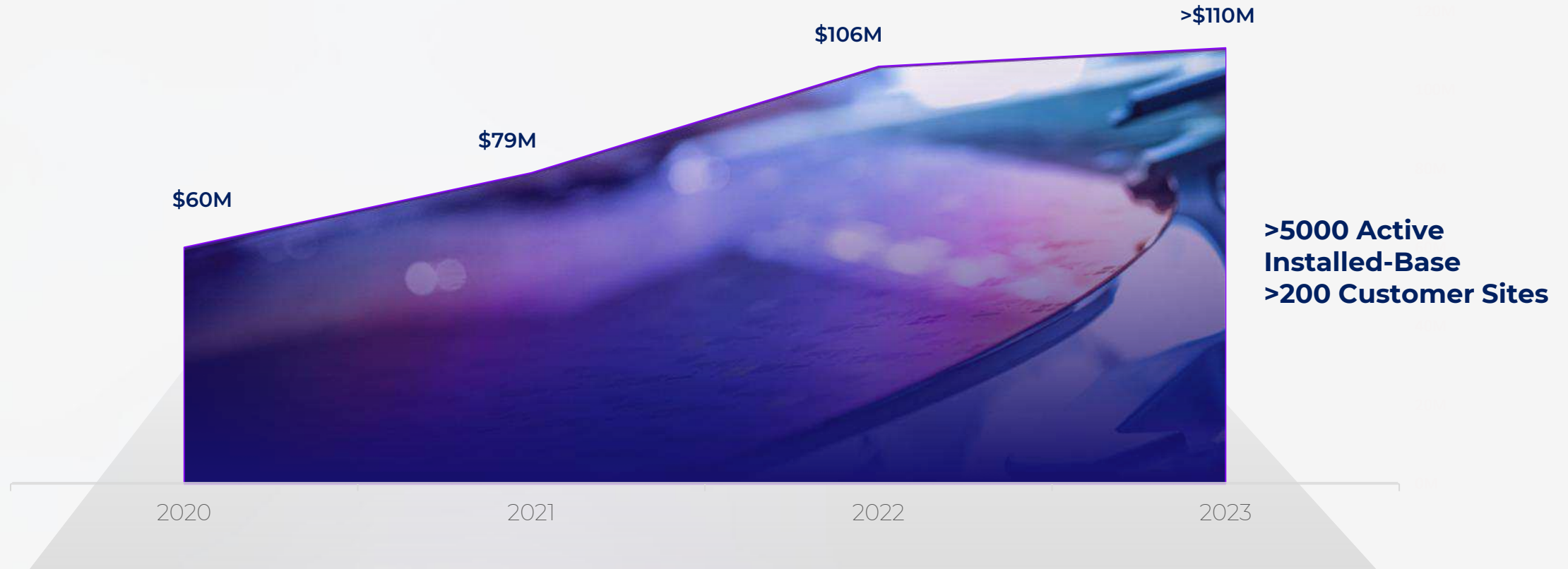
Innovative Research Technologies

TAM Growth +50% by 2027



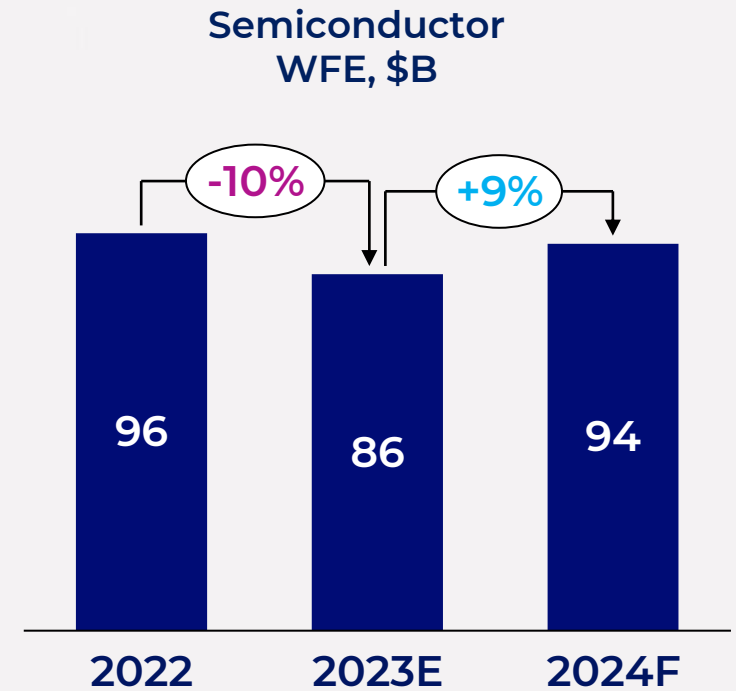
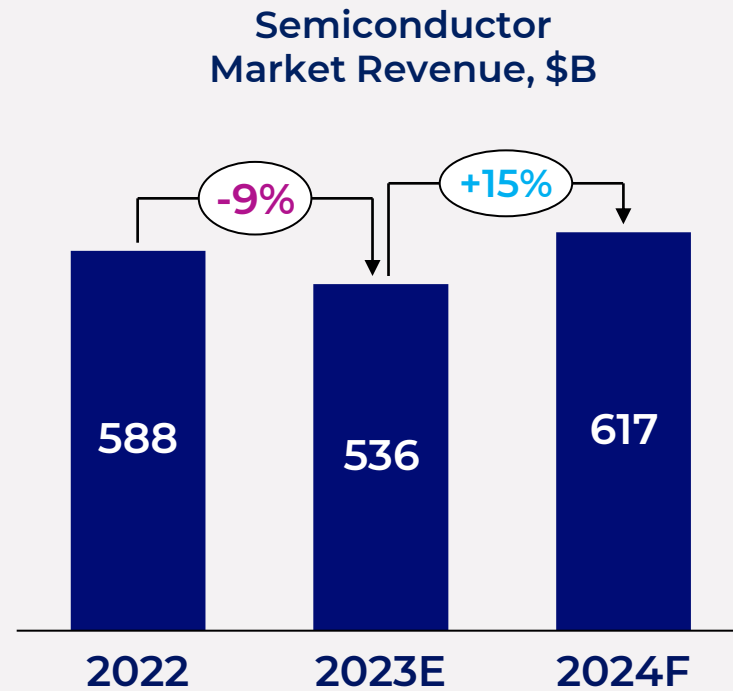
Service Revenue Engine

Targeting 10% average annual growth



Non-GAAP Financials

Market Correction Towards Future Growth

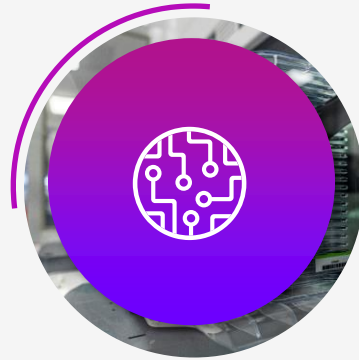


Source: Average market revenue forecast by Gartner, Evercore, Needham, IC Insight
Average WFE by Gartner, Evercore, Needham, SEMI org. Aug-Oct 2023

Preparing For Next Cycle Opportunities



**Expanding
Opportunities**



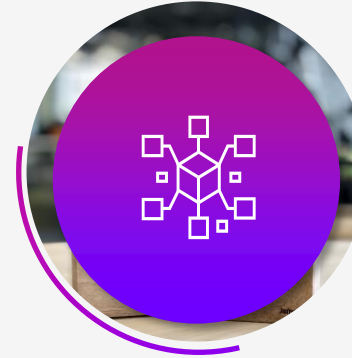
**Tech
Evaluations
at Customer
Sites**



**R&D Plans
On Track**



**Agile
Operational
Model**



**Increasing
Manufacturing
Capacity**

Inorganic Approach

Search Guidelines



Early Access

Lab to Fab Technology



Materials

Leadership



Software Offering

Enhancement



Adjacent

Process Control Markets

Screening Elements

Top Line
Synergy

Complementary
Technology

Operational
Leverage (Accretion)

Diversification Within
Core Capabilities

Transformational

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



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 consciousness

Financial Long-Term Target Model

Sales

1B\$

Gross Margin

57%-59%

Operating Margin

27%-31%

Non-GAAP Financials



Thank You
