



---

# Welcome Investor Day

---

September 2022

# Agenda

## Insightful Growth



**Eitan Oppenheim**

President & CEO

Long-term  
outperformance  
& strategic planning



**Dror David**

CFO

Financial model &  
profitable growth



**Zohar Gil**

CMO

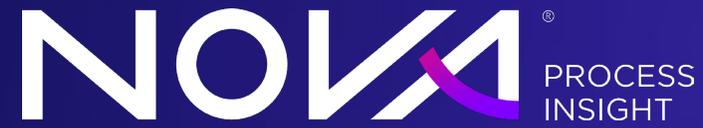
Growth engines &  
market drivers



**Dr. Shay Wolfling**

CTO

Unique technology  
for exponential growth



---

# Long-Term Outperformance & Strategic Planning

---

**Eitan Oppenheim**, President & CEO

September 2022



## TTM Revenues

\$510 Million

### H1 Revenue

>50% product growth YoY

### Cash Reserves

\$500M Gross  
Buy back in place

### R&D Spend

>28% in new organic drivers

### New M&A

ancosys acquisition

## Productivity

50% output growth YoY  
3 more facilities in construction

### 3 Divisions

Metrology Coverage

### Portfolio

3 new materials products

### Global Resiliency

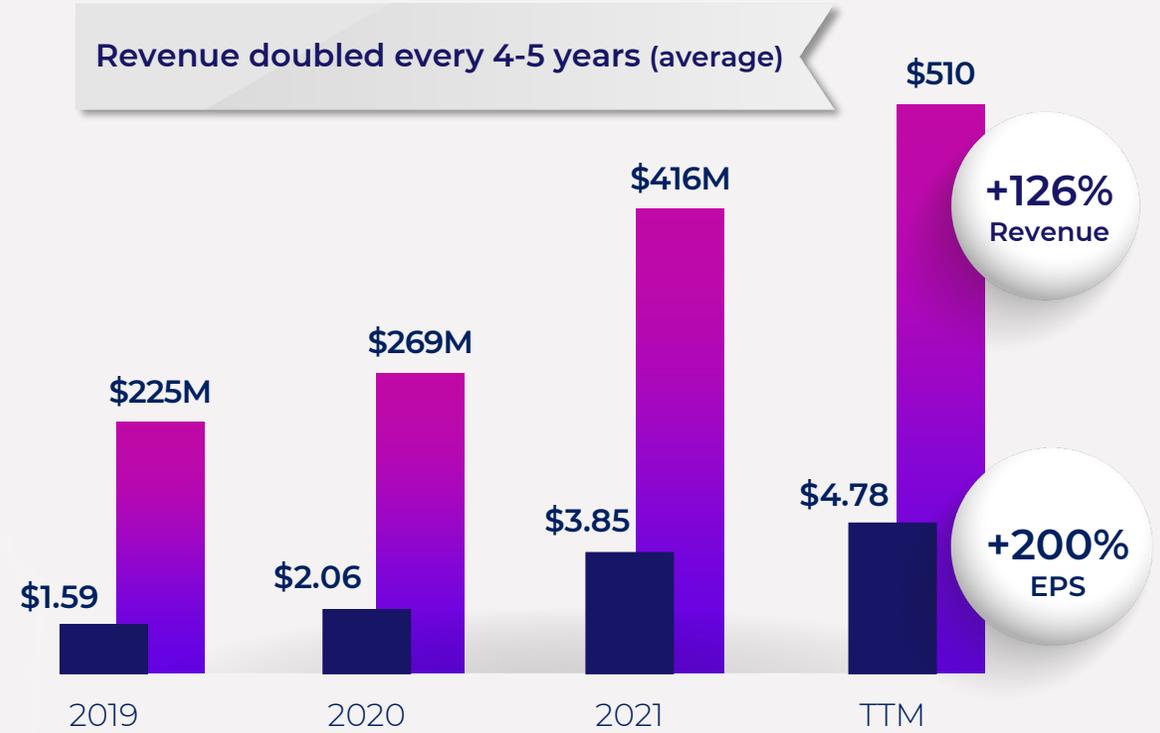
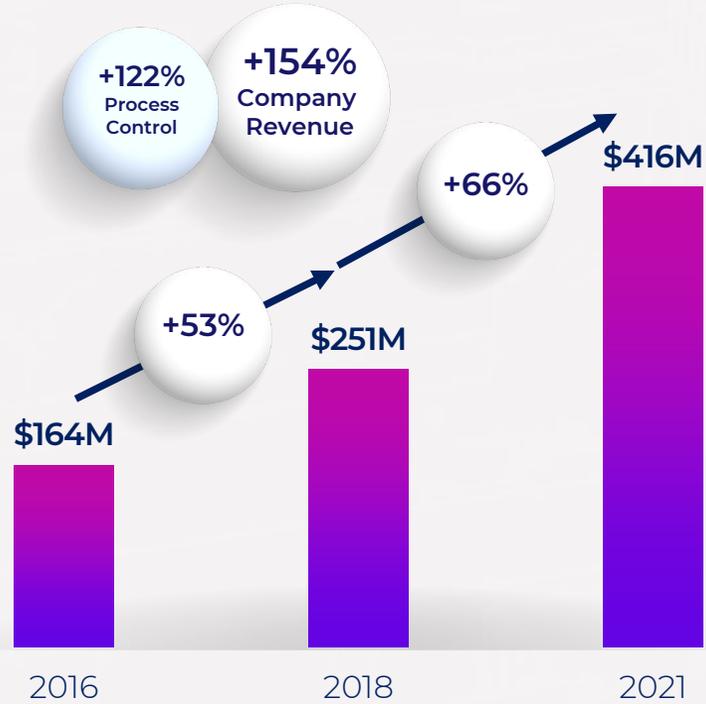
Operations in Israel, USA,  
Germany

### Localization

>1100 global employees

# Solid Track Record

## Outperformance



Metrology coverage

Differentiated portfolio

New organic engines

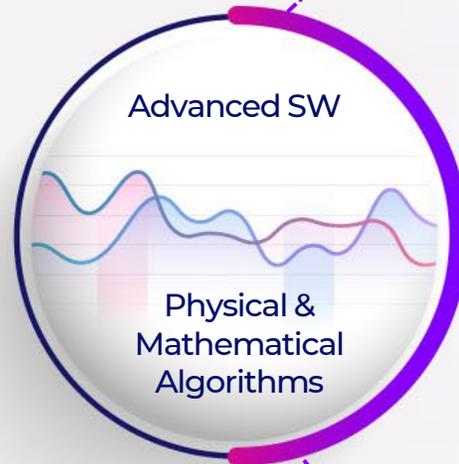
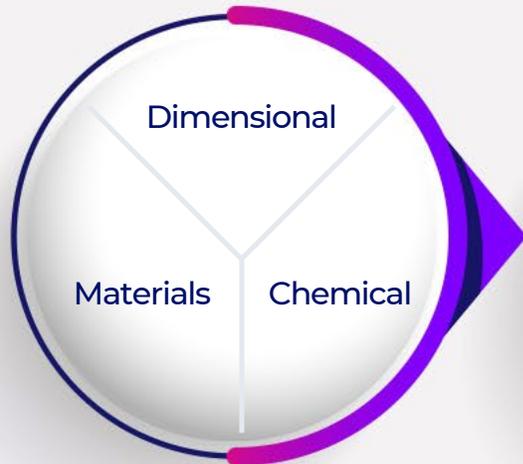
Diverse technology mix

Diverse customer mix

Diverse territory mix

# Revealing the Invisible

Actionable Insight, Critical Foresight



## Memory Device

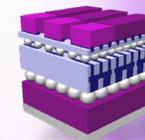


64

X6  
Layers

400

## Packaging Device

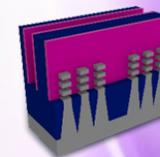


Flip-Chip Bump  
<300µm

X30  
I/O  
Pitch

3D-SOC  
<10µm

## Logic Device



A4  
150M

X100  
Transistors

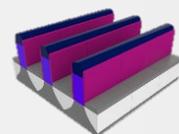
A15  
16B

# Dimensional Metrology Intensity

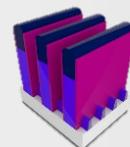
## Scale & Complexity = Growing Demand Growth in Design Steps

Metrology Intensity

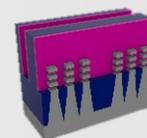
Logic



Planar



FinFET



Nano Sheet

+50-100%

3D NAND



Single Stack



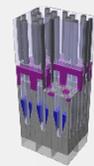
Multi-deck



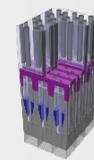
Over Periphery

+30-100%

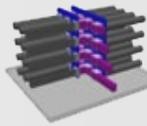
DRAM



1b



1c



3D DRAM

+30-100%

Scale & Complexity

Scaled Devices

3D Profiles

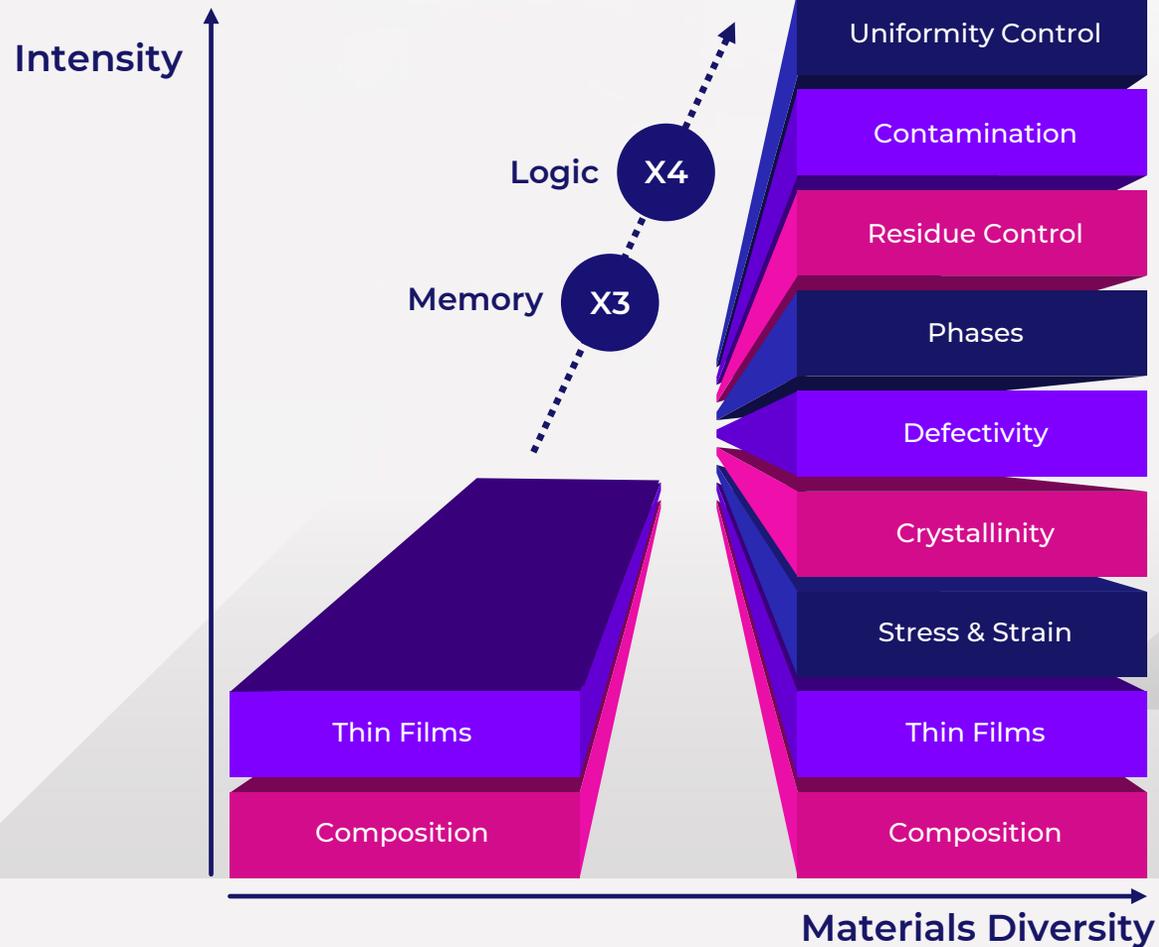
Multiple Design Steps

Films Variety

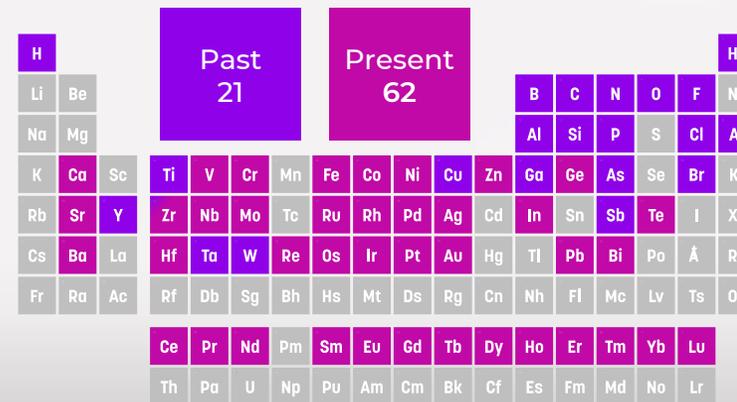
Intricate Architecture

# Materials Metrology Intensity

From 20 to 90 Steps



## Broader Metrology Scope



# Complexity, Scale & New Chemicals

# Chemical Metrology Intensity

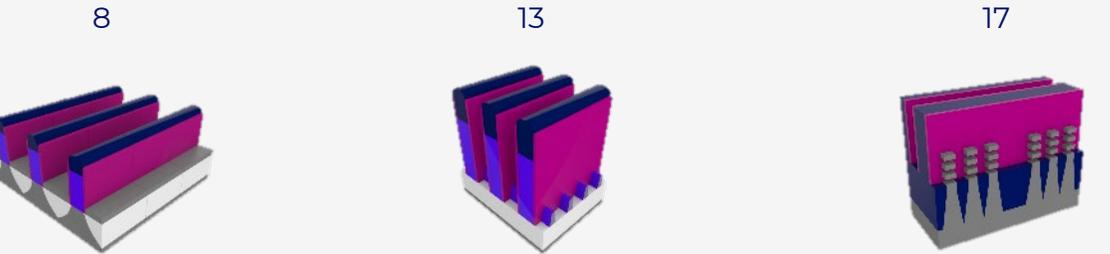
- Complexity ●
- New materials ●
- New chemistries ●
- Stability and purity ●
- Tighter process control ●

Back End:  
Advanced  
Packaging



Flip-Chip      Fan-Out      Hybrid 3D

Front End:  
Interconnect

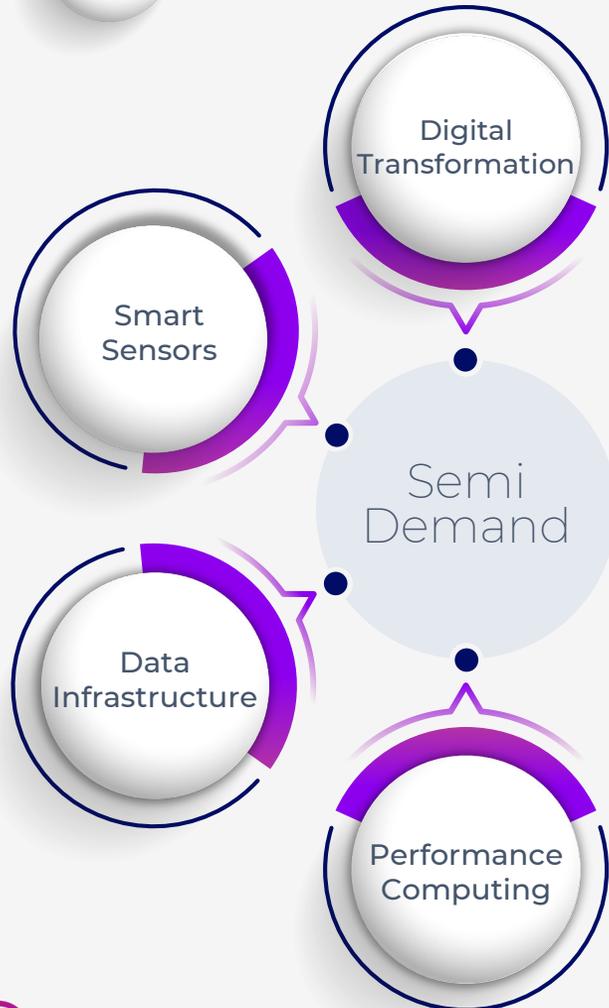


Planar      FinFET      GAA

Complexity

# Resilient Secular Growth in Cyclical Environment

## 1 Multiple Tech Drivers



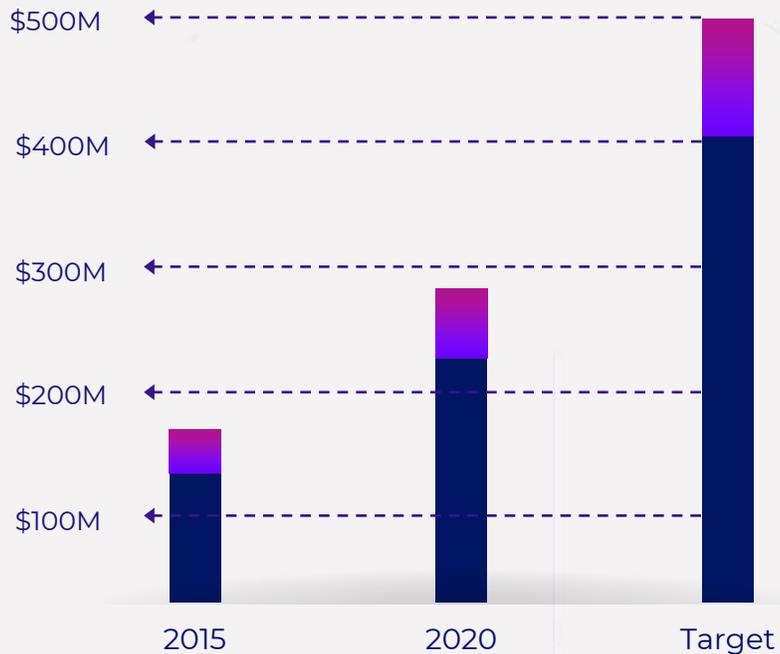
## 2 Disruptive Investment

- 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
- Geo-centric strategy drives diverse geographical investment
- Synergy between industry segments drives need for better process control

## 3 Technology Avenues



# Executing Nova 500



## Foundation for Further Growth

### Growth

>\$500 TTM Revenue

### LT Model

Meeting Financial Model

### Organic Growth

Introduced 3 New Technologies

### Inorganic Growth

Acquired ancossys

### Market Share

Proven Growth

### Diversification

Territories, Customers, Markets

# Nova \$1B Plan (5 Years)

Outperforming the Market

New Technologies Proliferation

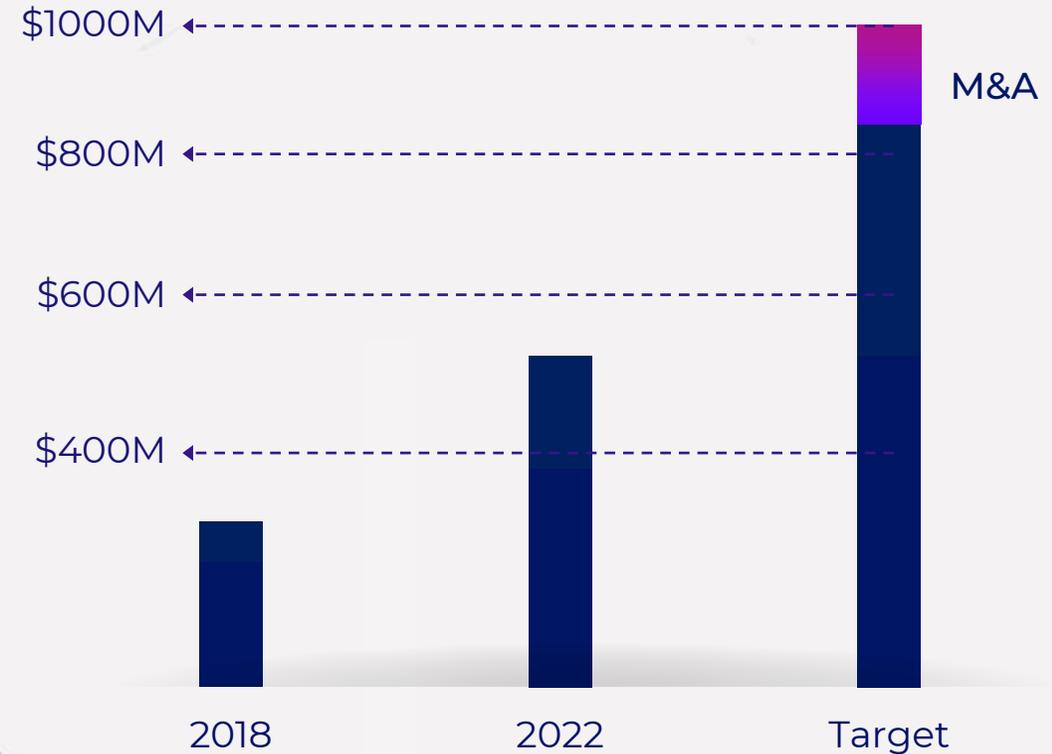
>3 New Technologies

Chemical Analysis Growth

Materials Metrology Leadership

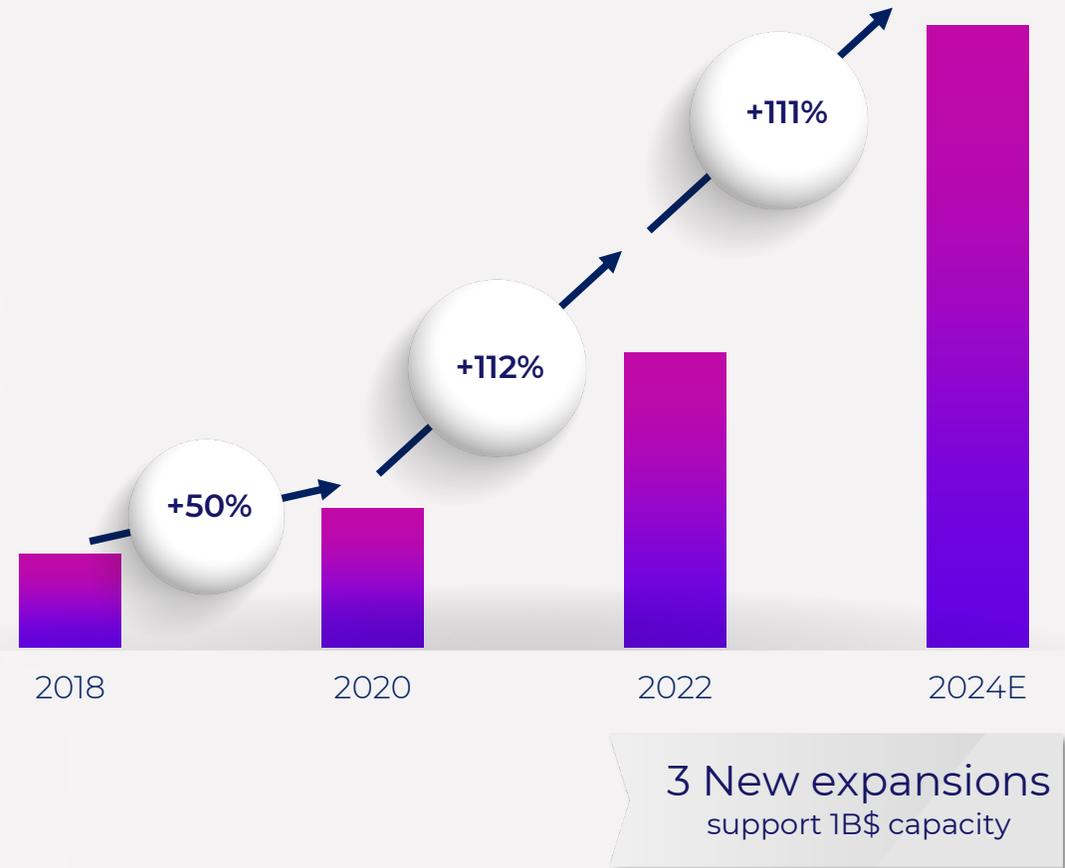
Diversified Markets

Further M&A



# Operational Leverage

- Supporting multiple new and trailing products
- Strengthening the distributed model over 3 major sites



3 distributed sites

3 main production lines

New complex products

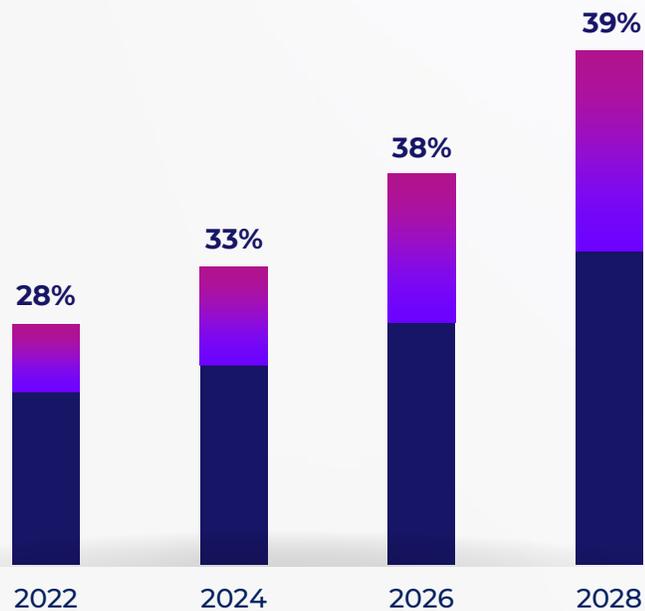
Internal versus outsource

Supply chain resiliency

Labs and home tools

# Organic Growth Engines

Investment in New Technologies  
(of Total R&D, Gross)



**Differentiated technology**  
Innovative metrology

**Physical and ML algorithms**  
Deep tech data-driven solutions

**Service revenue**  
Extendibility & enhancement

**Research technologies**  
LAB to FAB

# 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

Transformational



---

# Thank You

---