

# L2X|labs

L2X harnesses Extreme UV light, enabling next generation technologies for decades to come

April, 2026

## **EUV is the present and future of chipmaking**

**EUV-based chips are the enablers of all advanced computation**

### **Big market drivers for advanced chips**

- 73 % of TSMC revenue today is from EUV-based chips
- Miniaturization: EUV enables sub-7 nm features that older tech can't
- Data-intensive computation requires EUV: AI, 5G, IoT, EV: >\$120B/ year market (2025)

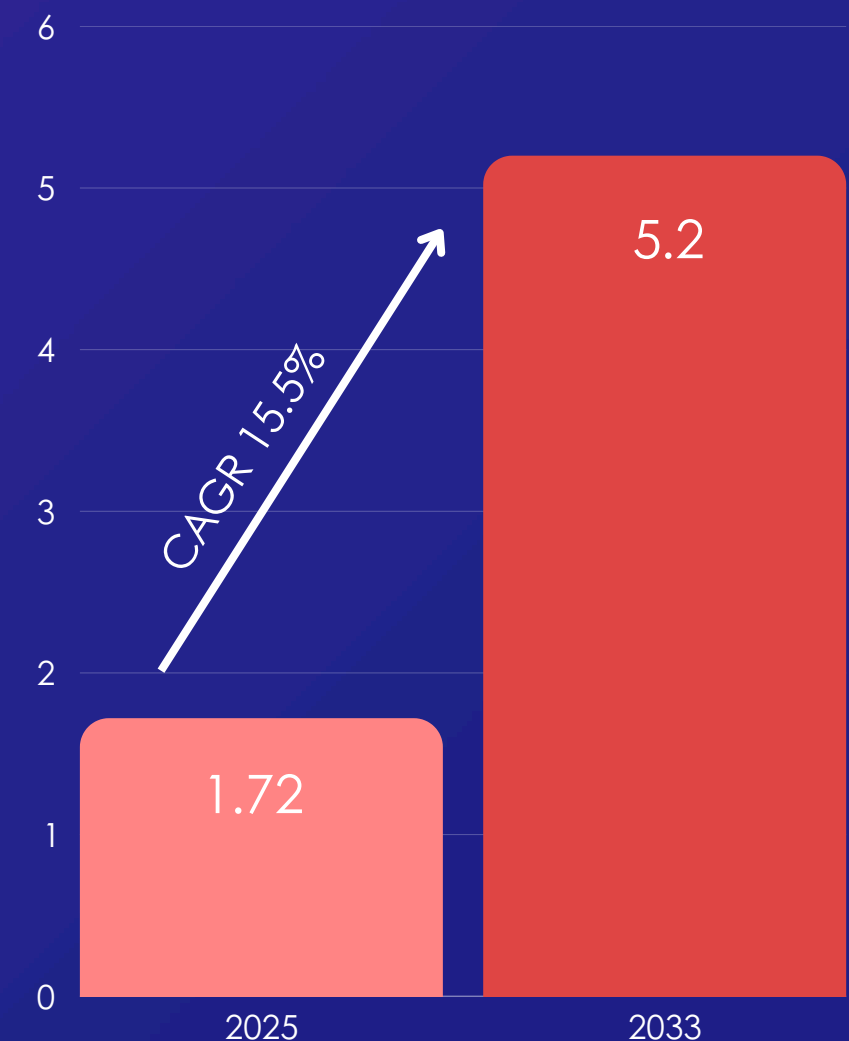
**EUV is the only known technology that can create nanometer-architecture chips**

### **EUV light source is the 'beating heart' of a chipmaking machine**

- Every ~\$300M ASML machine – cost of its EUV source is~ \$40M.

**EUV technology is rare, defense-critical, and central to a nation's strategic edge**

EUV source market (\$B)



\*verifiedmarketreports.com

## But... progress is stalled

Bottlenecks in EUV power sources are holding the industry back

### ⊛ Inspection and Measurement (I&M) tools can't keep up

- I&M equipment is a ~11\$B per year market
- I&M tools are essential components of chip manufacturing
- Currently, tools are using "old" DUV light to measure EUV class components
- Defects <20nm remain invisible without EUV, allowing for critical flaws and reducing yield
- Emerging needs can only be solved by EUV technologies (Pellicle & EUV masks, wafers)
- I&M companies are actively searching for EUV source solutions

⊛ Without EUV light sources – L2X's domain – chipmaking innovation hits a hard stop

### ⊛ Lithography: ASML as a single-source, monopolistic provider of EUV causes global concern

I&M companies

| Company   | Market Cap [\$B] | MC last year [\$B] |
|---|------------------|--------------------|
|  Lasertec                          | 20               | 17                 |
|  NOVA <sup>®</sup> PROCESS INSIGHT | 14               | 9.8                |
|  KLA                               | 194              | 168                |
|  APPLIED MATERIALS <sup>™</sup>    | 284              | 208                |

## The “Source” of the problem

Existing solutions fail to resolve EUV bottleneck

### Current EUV sources lack the specs required for Inspection and Metrology

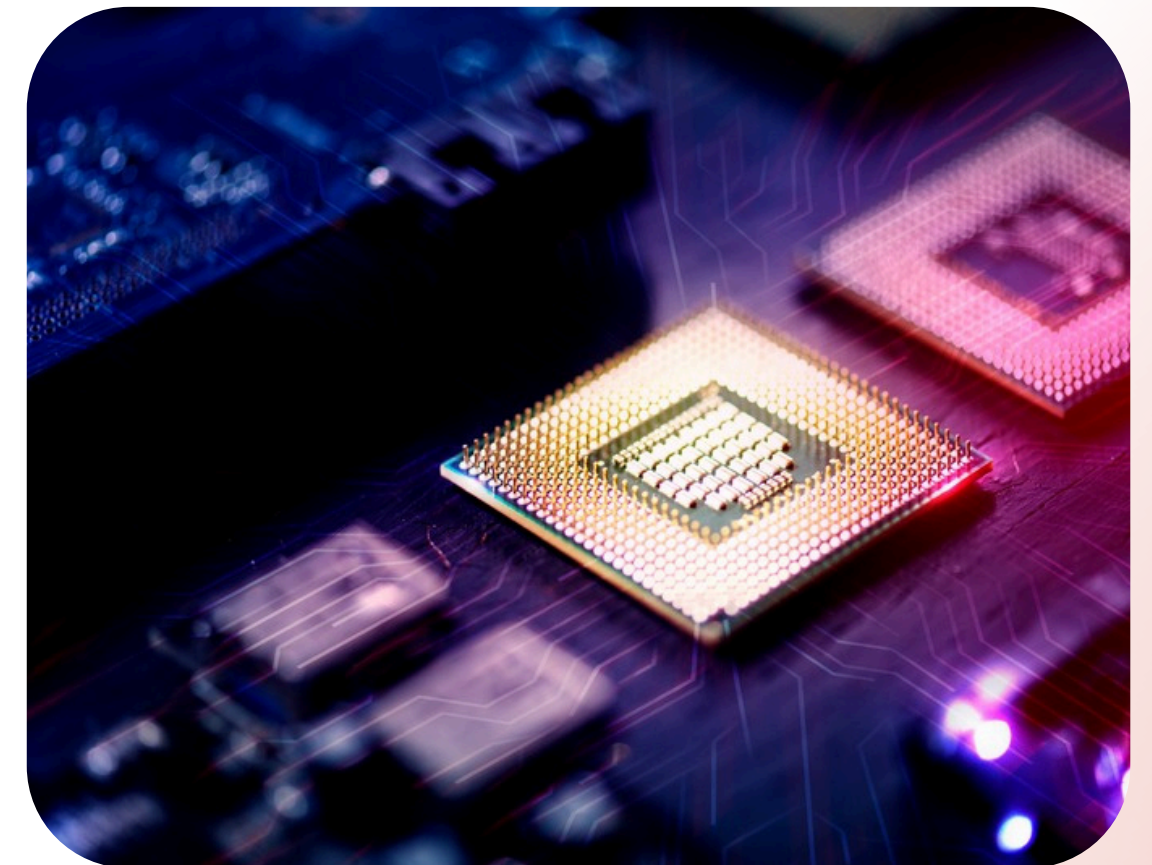
- » Insufficient source brightness
  - » High level of contamination by debris
- » I&M tools do not meet current and emerging fab needs

### No available commercial sources besides 13.5 nm

- » Different wavelengths are essential for novel applications in inspection, metrology and potentially lithography

### Lack of flexible EUV source technology to meet emerging semiconductor ecosystem needs

- » Pellicle handling – new pellicle technologies demand tailored light sources
- » Outside-of-fab players need EUV sources for internal R&D – no flexible and tailored solution

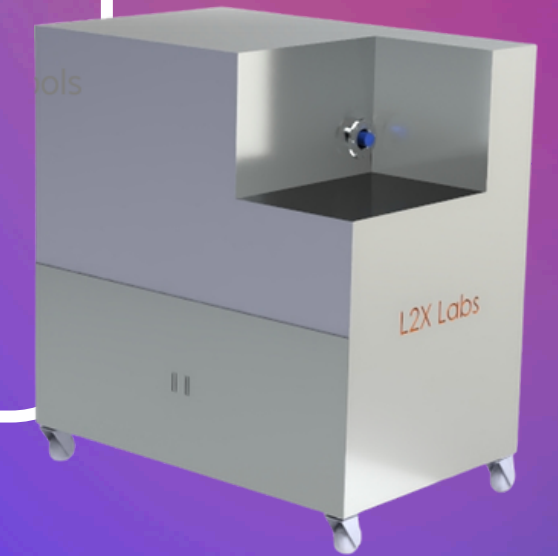


# L2X - Unlocking EUV's full potential

Proprietary EUV source platform  
addressing the emerging industry's needs

The **first ever** system to allow nanometer  
scale inspection and metrology of  
semiconductors

## Developed according to the specific needs of global customers



### Meets all specifications needed for next leap in EUV

- ✓ High Brightness (100-500 W/Ωmm<sup>2</sup>)
- ✓ Extremely clean



Enables actinic mask inspection and Enables development of wafer inspection and metrology tools



### One Flexible EUV platform to serve all unresolved needs

- ✓ Enables tailored solutions that can be easily scaled to every need (e.g. pellicle treatment, R&D)



### First & Only platform with multi-wavelength, 1-25 nm available

- ✓ Pioneering many emerging needs, such as wafer metrology and wafer inspection



### First to offer multiple beamlines



Unlocks flexibility in tool design and reduction of cost

## L2X Proprietary EUV source technology

Unprecedented flexibility in specifications for tailored applications

### Proprietary Debris mitigation system

Uniquely allowing

- Clean EUV
- Multiple beamlines (not shown)
- Large variety of target geometries and materials

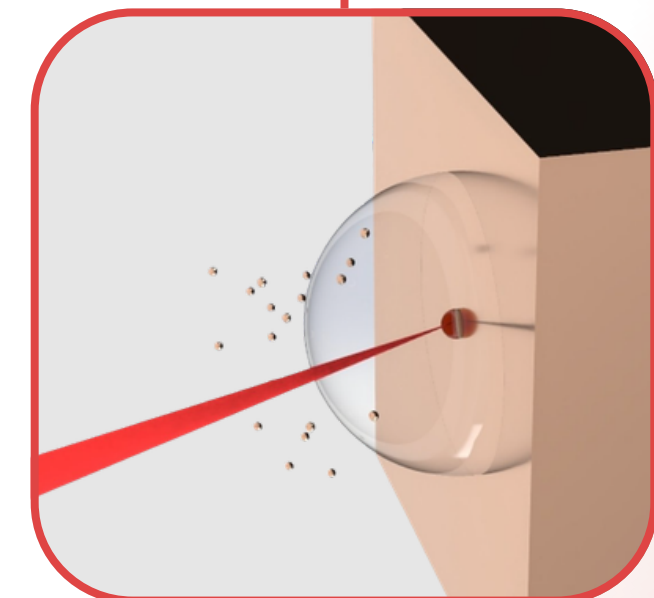
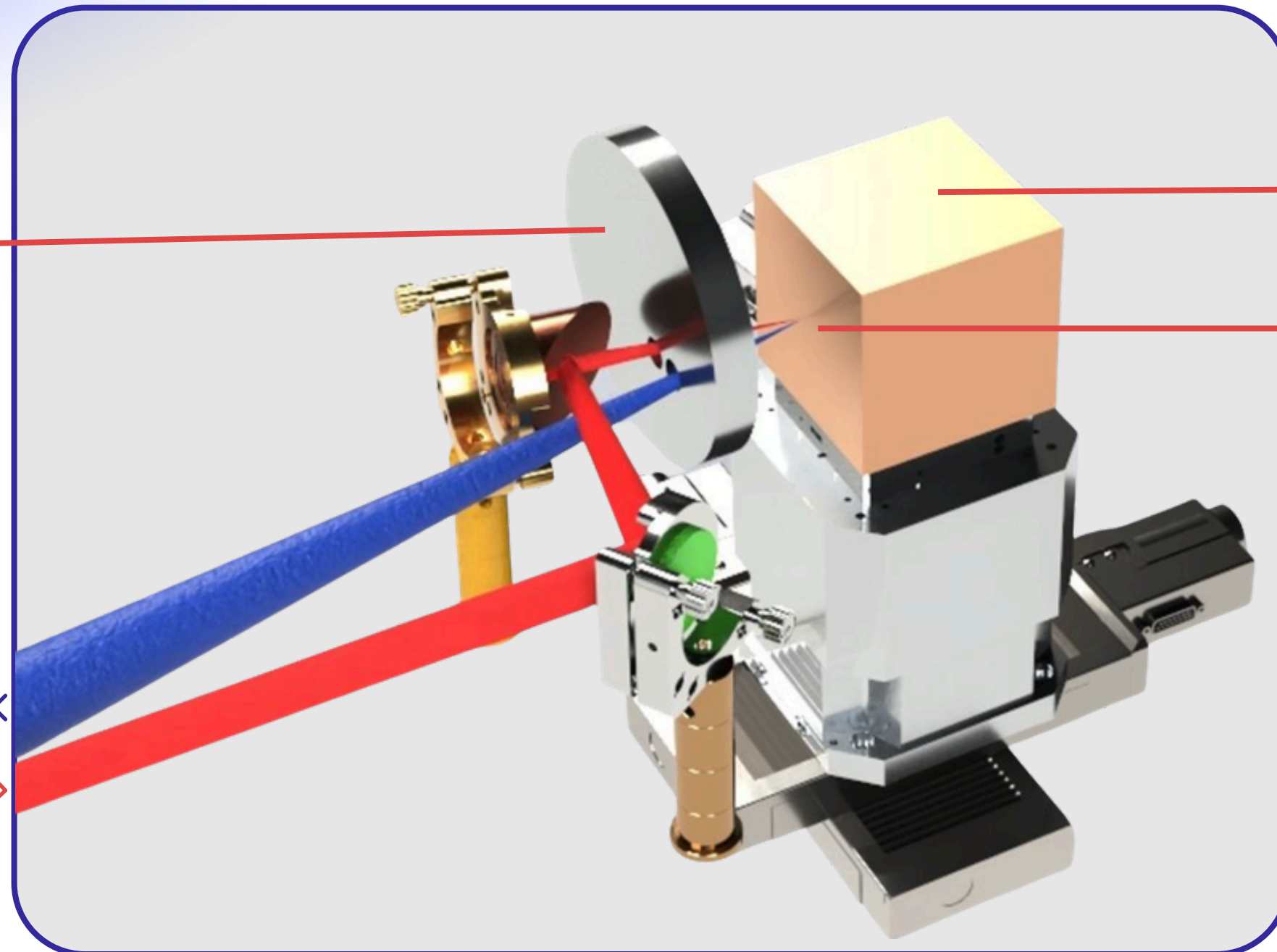
### Proprietary target system

Uniquely allowing

- Tailored wavelength between 1-25nm
- Flexible and scalable design

High brightness, clean EUV out <<

Driving Laser in >>



# Founders with proven deep tech expertise

WINNING TEAM – turning science  
into commercial applications



## Jenya Papeer

PhD - CEO

- » Experimental Laser-Plasma physics expert
- » Former: Applied Materials, HIL Medical
- » 13Y of industrial R&D leadership
- » 6Y Directed R&D in HIL: an early-stage startup.
- » 15 scientific publications | 20+ patents



## Hilik Frank

PhD – CTO

- » Theory and Computation: Atomic physics and radiation hydrodynamics expert
- » Former: Lawrence Livermore National Lab, Soreq NRC
- » 15Y of Applied R&D in plasma physics
- » 20+ Publications & Patents

**5 Physicists (MSc and PhD) | Mechanical Engineer | Patent Attorney**

## L2X Core IP and publications

Multi-patent deep tech innovation unlocks the future of EUV



### 13 Patents

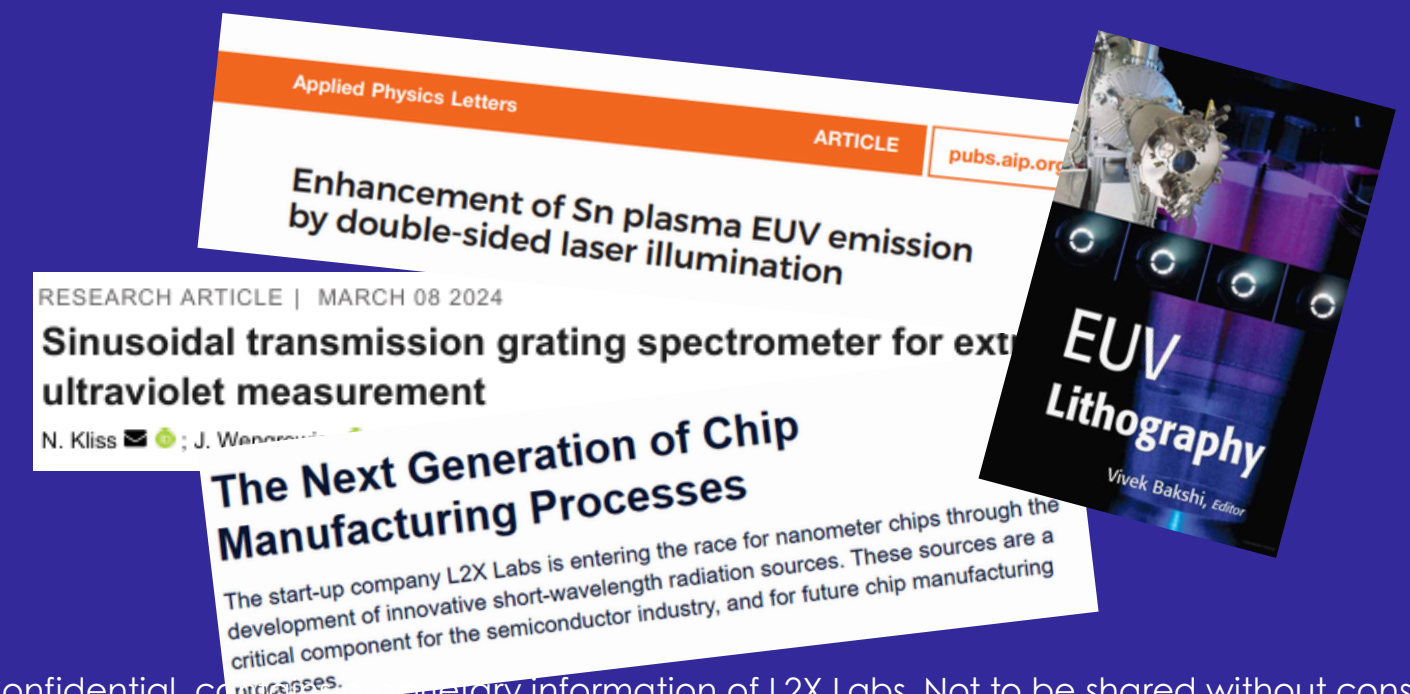
- 6 proprietary applications: 2 issued and 4 pending.
- Global and exclusive license from Lawrence Livermore National Lab: (2 granted & 5 pending)

**Deep IP portfolio and complex technology** → High entry barrier for competitors



### Scientific publications:

- Two published papers (2023, peer-reviewed), multiple conference presentations
- Authored book chapter on EUV theory.



# Business Model – Scalable & Sticky

Sell EUV sources  
Service  
Locked-in value for decades

**Sell tailored EUV sources across all industry segments**

(starting with inspection, metrology, and sources for R&D)

**Recurring revenue from service & consumables**

(typically 10-20%/year for 10 years)

**EUV source is a core component of a tool**

(securing repeated purchases over decades – platform's lifetime)

**Go to Market**



✓ 3 signed LOIs with global I&M tool vendors

✓ 4 inspection and metrology vendors evaluating L2x for next-gen tools

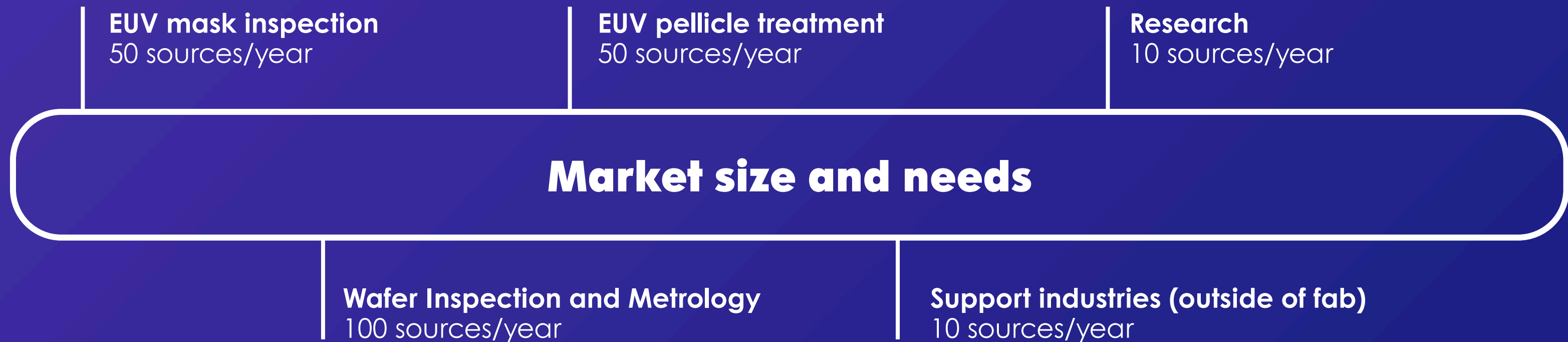
| **First sales + Business agreement for embedding L2X source in customers tools**

| **Alpha tool in a fab with L2X source inside, aiming for 2029**

| **Scaling to mass production**

# **EUV I&M sources market** **estimated at \$1B and growing**

Each source for I&M ~\$2M,  
similar revenue in service over the product lifetime



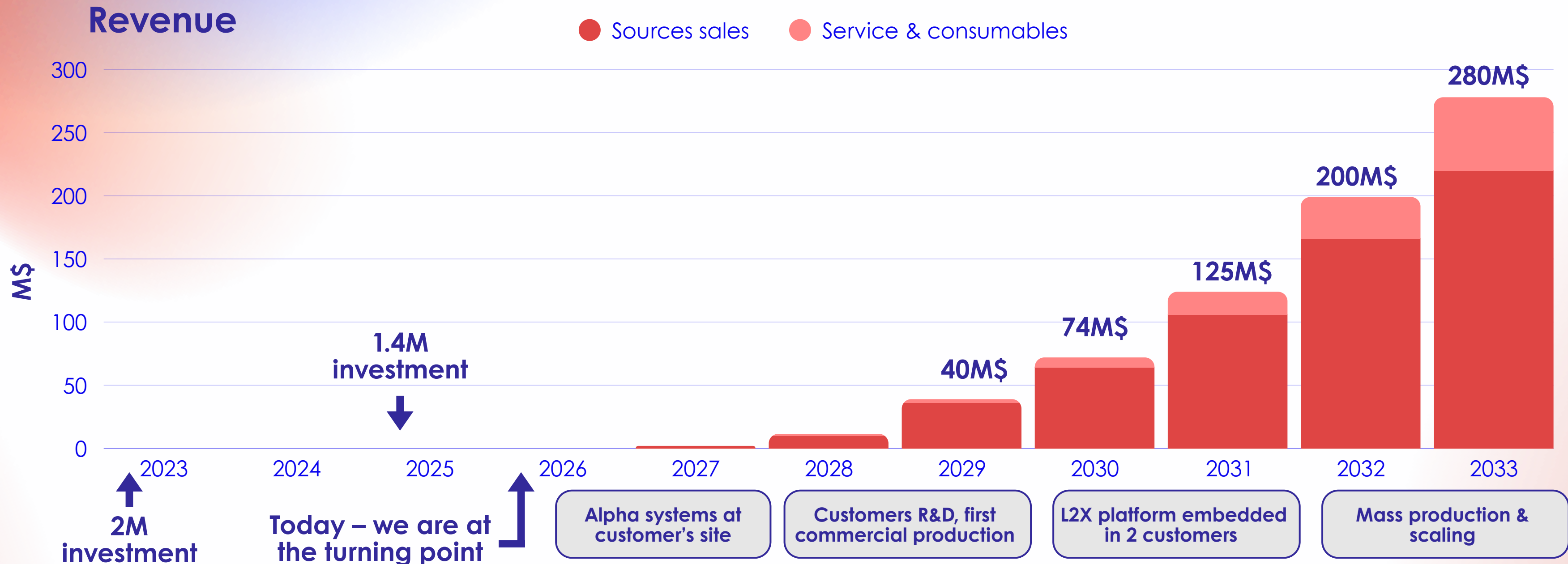


Light Source is the most lucrative equipment segment registering the fastest growth during the forecast period

[\\*verifiedmarketreports.com](https://www.verifiedmarketreports.com)

# Financial projection, EUV sources

Clear path to \$50M+ revenue by 2030



**L2X**labs

Our BHAG Vision...

# **L2X** - Unlocking EUV's full potential

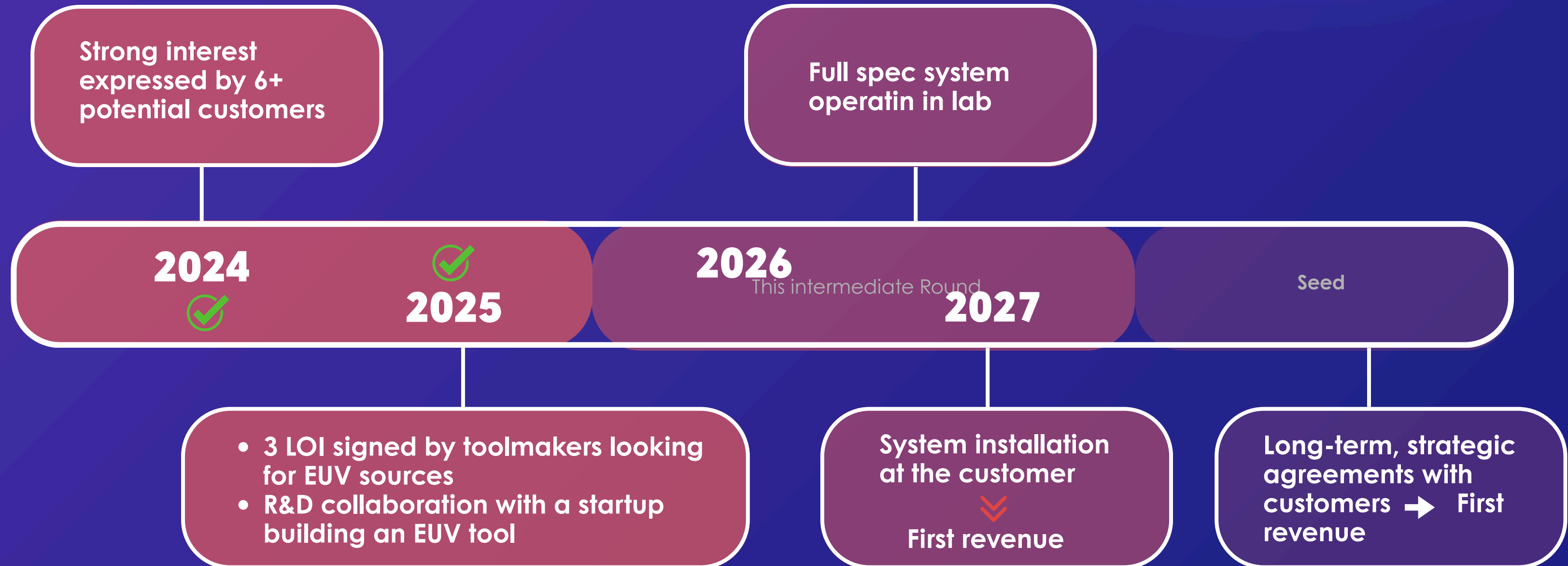
**Start - first product:** A tailored EUV source platform for inspection & metrology

**Expand:** Build deeper into the EUV I&M value chain

**End game:** full EUV-enabled inspection systems & next-generation sources for lithography

# Business Roadmap, milestones

Winning technology » market adoption  
for years to come



# R&D Roadmap, milestones

Winning technology » market adoption  
for years to come

## R&D



# We are raising \$1.5M bridge round for:

**A | First sales – build a full scale source in lab + first Alpha system sales**

**B | Strategic long-term commercial agreement with our first customers**

**C | Develop optical assembly: the next “most critical” component towards an entire inspection system**

Raised \$4.1M to date  
(50% grants and 50% VC)

\$1.8M IIA Grant approved  
(+EIC grant, stage 1 passed)

Seeking matching \$1.5M  
to trigger \$1.8M grant and  
secure \$ 4.3 M funding

# L2Xlabs

**Join us** in leading the EUV  
revolution - delivering the light that  
will drive advanced chipmaking  
for decades to come

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