INDUSTRIAL MARKET OVERVIEW

Markets Day

December 14, 2023

Paul Silverstein
Vice President, Investor Relations & Corporate Communications

COHERENT

HOST

Paul Silverstein
Vice President,
Investor Relations &
Corporate Communications

FORWARD-LOOKING STATEMENTS

This presentation contains forward-looking statements relating to future events and expectations, including our expectations (i) for our future financial and operational results (including expectations for future growth); (ii) regarding capital expenditures and the results of investments in research and design; (iii) regarding the health and growth in the markets we serve including industrial, communications, electronics and instrumentation; (iv) regarding market drivers, market sizing and dynamics in precision manufacturing; (v) regarding the growth and opportunities in the semiconductor industry and semiconductor capital equipment markets; in the display market; and the precision manufacturing market; (vii) growth driven by our excimer laser business and the drivers of that growth, each of which, is based on certain assumptions and contingencies. The forward-looking statements are made pursuant to the safe harbor provisions of the U.S. Private Securities Litigation Reform Act of 1995 and relate to the Company's performance on a going-forward basis. The forward-looking statements in this investor presentation involve risks and uncertainties, which could cause actual results, performance or trends to differ materially from those expressed in the forward-looking statements herein or in previous disclosures.

The Company believes that all forward-looking statements made by it in this presentation have a reasonable basis, but there can be no assurance that management's expectations, beliefs, or projections as expressed in the forward-looking statements will actually occur or prove to be correct. In addition to general industry and global economic conditions, factors that could cause actual results to differ materially from those discussed in the forward-looking statements in this presentation include but are not limited to: (i) the failure of any one or more of the assumptions stated herein to prove to be correct; (ii) the risks relating to forward-looking statements and other "Risk Factors" discussed in (x) the Company's Quarterly Report on Form 10-Q for the fiscal quarter ended September 30, 2023 related to the silicon carbide investment transaction and (y) in the Company's Annual Report on Form 10-K for the fiscal year ended June 30, 2023 and additional risk factors that may be identified from time to time in filings of the Company; (iii) the substantial indebtedness the Company incurred in connection with its acquisition of Coherent, Inc. (the "Transaction"), the need to generate sufficient cash flows to service and repay such debt and the Company's ability to generate sufficient funds to meet its anticipated debt reduction goals; (iv) the possibility that the Company may not be able to continue its integration progress on and/or take other restructuring actions, or otherwise be able to achieve expected synergies, operating efficiencies, including greater scale, focus, resiliency, and lower operating costs, and other benefits within the expected time-frames or at all and ultimately to successfully fully integrate the operations of Coherent, Inc. ("Coherent") with those of the Company; (v) the possibility that such integration and/or the restructuring actions may be more difficult, time-consuming or costly than expected or that operating costs and business disruption (including, without limitation, disruptions in relationships with employees, customers or suppliers) may be greater than expected in connection with the Transaction and/or the restructuring actions; (vi) any unexpected costs, charges or expenses resulting from the Transaction and/or the restructuring actions; (vii) the risk that disruption from the Transaction and/or the restructuring actions materially and adversely affects the respective businesses and operations of the Company and Coherent; (viii) potential adverse reactions or changes to business relationships resulting from the completion of the Transaction and/or the restructuring actions; (ix) the ability of the Company to retain and hire key employees; (x) the purchasing patterns of customers and end users; (xi) the timely release of new products, and acceptance of such new products by the market; (xii) the introduction of new products by competitors and other competitive responses; (xiii) the Company's ability to assimilate other recently acquired businesses, and realize synergies, cost savings, and opportunities for growth in connection therewith, together with the risks, costs, and uncertainties associated with such acquisitions; (xiv) the Company's ability to devise and execute strategies to respond to market conditions; (xv) the risks to realizing the benefits of investments in R&D and commercialization of innovations; (xvi) the risks that the Company's stock price will not trade in line with industrial technology leaders; (xvii) the risks of business and economic disruption related to worldwide health epidemics or outbreaks that may arise and/or (xviii) the risk that the investments by DENSO and Mitsubishi in our Silicon Carbide business are not completed. The Company disclaims any obligation to update information contained in these forward-looking statements, whether as a result of new information, future events or developments, or otherwise. Unless otherwise indicated in this presentation, all information in this presentation is as of December 14, 2023

SPEAKERS

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Lasers Business

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General Manager
Excimer Lasers Business
Unit

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INDUSTRIAL MARKET OVERVIEW

Dr. Sanjai Parthasarathi – Chief Marketing Officer

ALL OUR MARKETS ARE HEALTHY AND GROWING OVER THE LONG TERM

Aggregate CY23 TAM of **$64B** growing at **14% CAGR** to **$124B** within five years

Industrial

TAM: **$22B**
CAGR: 9%

Sources: Optech Consulting, TechInsight, Strategies Unlimited, SEMI, Internal Estimates, DSCC

Communications

TAM: $**23B**
CAGR: 16%

Sources: LightCounting, Omdia, Cignal AI, Yole, Dell'Oro Internal Estimates

Electronics

TAM: **$13B**
CAGR: 20%

Sources: IDC, Morgan Stanley, Research & Markets, Forbes, Yole, Strategy Analytics, IdTechEx, Internal Estimates

Instrumentation

TAM: **$5B**
CAGR: 8%

Sources: Strategies Unlimited, Markets & Markets, SDI (Strategic Directions), Internal Estimates

All CAGRs: Calendar 2023 to 2028

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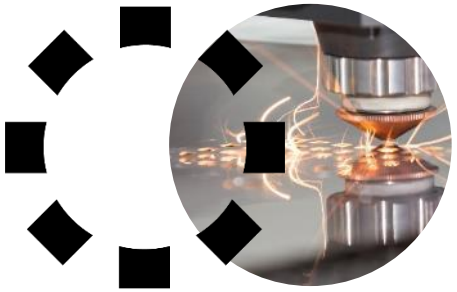
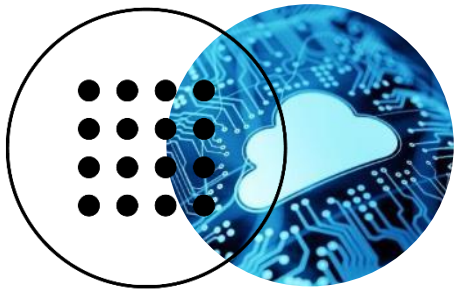
OUR MARKETS AND VERTICALS

Industrial Market



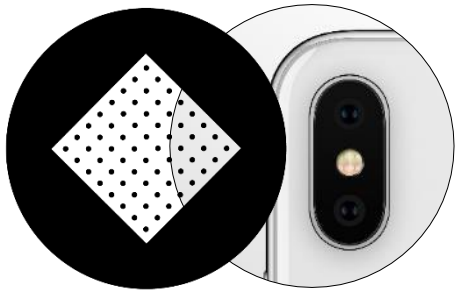
- Precision Manufacturing
- Semiconductor Capital Equipment
- Display Capital Equipment
- Aerospace & Defense

Communications Market



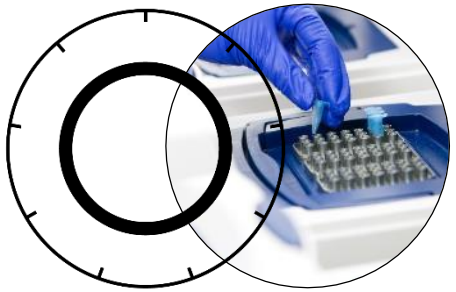
- Datacom
- Telecom

Electronics Market



- Consumer Electronics
- Automotive

Instrumentation Market



- Life Sciences
- Scientific Instrumentation

REVENUE TRENDS BY MARKET

Revenue by Market ($M)	FY22 (1)	FY23 Q1	FY23 Q2	FY23 Q3	FY23 Q4	FY23	FY24 Q1	FY22/23 Growth	% of FY24 Q1
Industrial	$1,893	$461	$450	$438	$412	$1,763	$404	-7%	38%
Communications	$2,155	$585	$600	$538	$570	$2,293	$460	6%	44%
Electronics	$310	$180	$200	$139	$106	$626	$90	102%	9%
Instrumentation	$479	$118	$120	$125	$117	$479	$99	0%	9%
Total	**$4,893**	**$1,345**	**$1,370**	**$1,240**	**$1,205**	**$5,160**	**$1,053**	**7%**	**100%**

(1) Proforma non-GAAP revenue combines II-VI FY22 revenue (as of FYE 6/30/22) and Coherent 6/30/22 TTM. Not calculated in accordance with Article 11 of SEC regulation S-X..

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TOTAL AVAILABLE MARKET

	CY2023	CY2028	5 YR CAGR
Industrial Total ($B)	**$ 22.3**	**$ 34.2**	**9%**
Precision Manufacturing	$ 9.3	$ 13.8	8%
Semi Cap Equipment	$ 4.2	$ 5.8	7%
Display Cap Equipment	$ 1.2	$ 1.7	7%

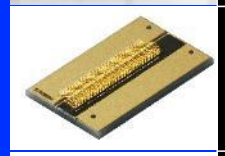
Sources: Optech Consulting, Laser Focus World, TechInsights, Omdia, DSCC, Internal estimates

PRECISION MANUFACTURING VERTICAL

VERTICALITY SUPPORTS EVERY LEVEL OF THE VALUE CHAIN


Systems


Lasers


Components


Optics


Materials

$9B

CY23 TAM (1)

PRECISION MANUFACTURING APPLICATIONS

Wherever lasers are used for industrial manufacturing

Intersection with many diverse markets

(1) Source: Optech Consulting, Internal estimates

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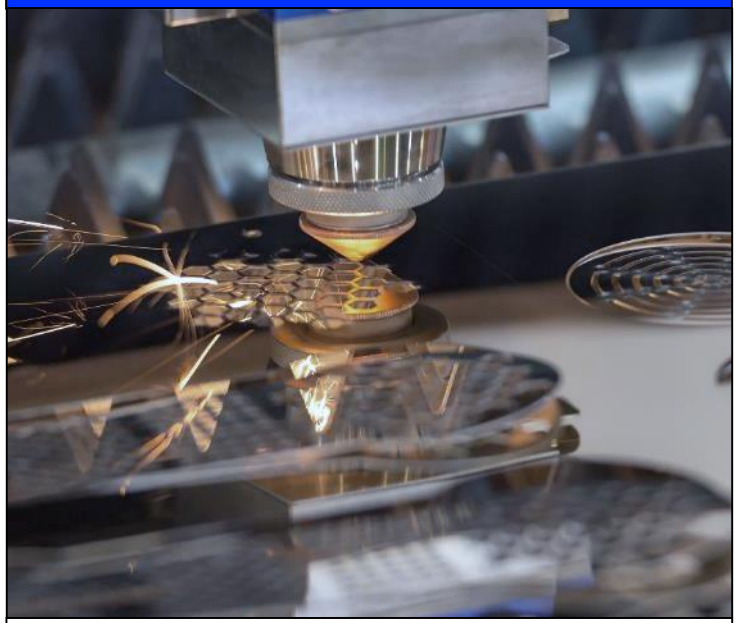
PRECISION MANUFACTURING MARKET DRIVERS

EV Battery Manufacturing

Rapid gigafactory expansion for EV battery production

Fiber Lasers for Manufacturing



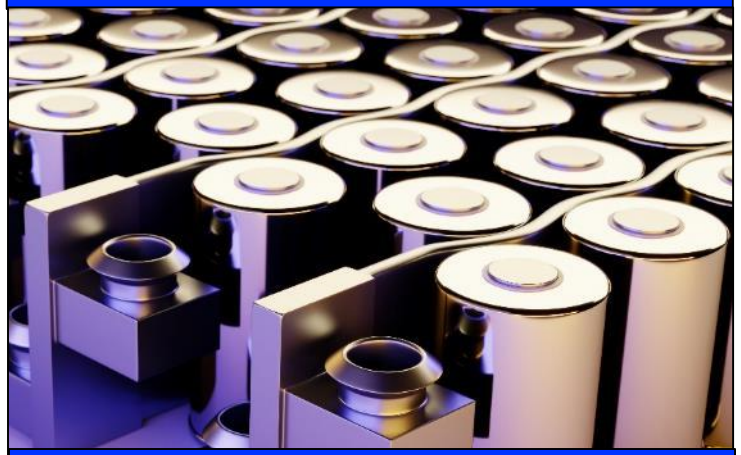
Innovative next-generation platform to address this large market

Medical Device Manufacturing

Aging population, telehealth, wearables and monitors

PRECISION MANUFACTURING MARKET SIZING & DYNAMICS

EV Battery Manufacturing



>11% CAGR
$300M TAM

- Rapid expansion in N. America and Europe
- Opportunities beyond welding for drying and foil cutting

Source: Benchmark Minerals, Internal Estimates

Fiber Lasers for Manufacturing

>8% CAGR
$1,700M TAM

- EV welding driving growth
- Handheld lasers drive component opportunities

Source: Optech Consultants

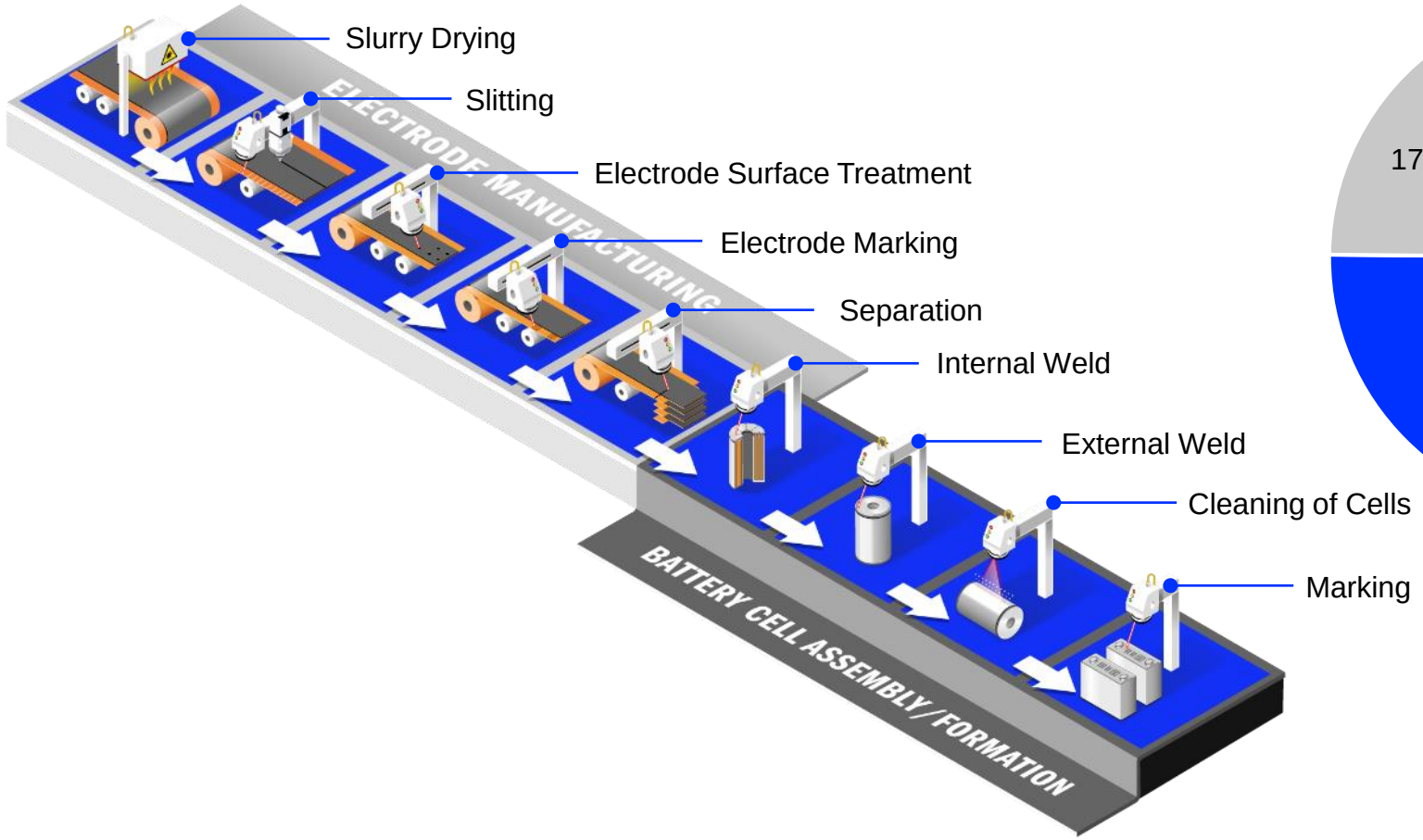
Medical Device Manufacturing

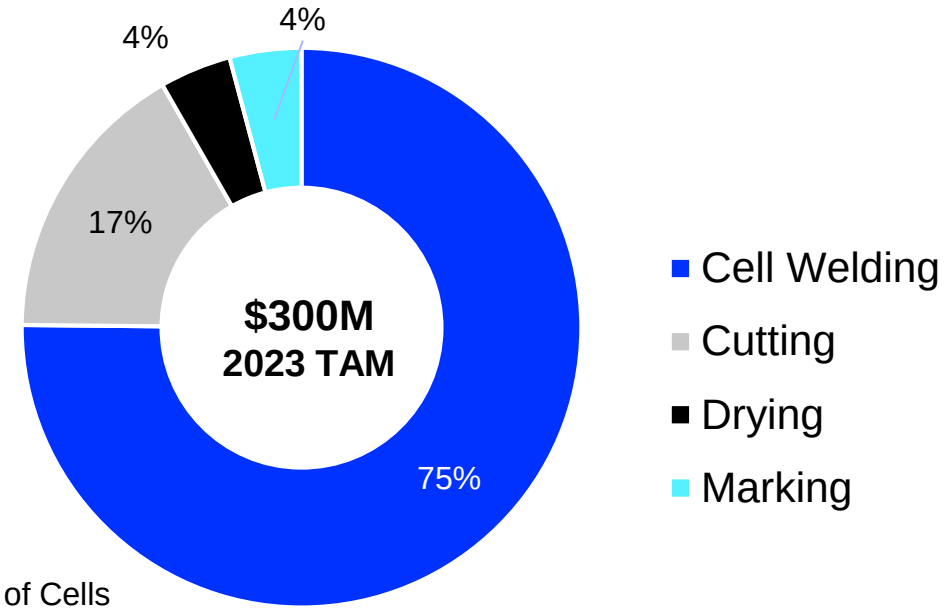
>5% CAGR
$300M TAM

- Aging population driving market growth
- Emerging high growth regions of China and India

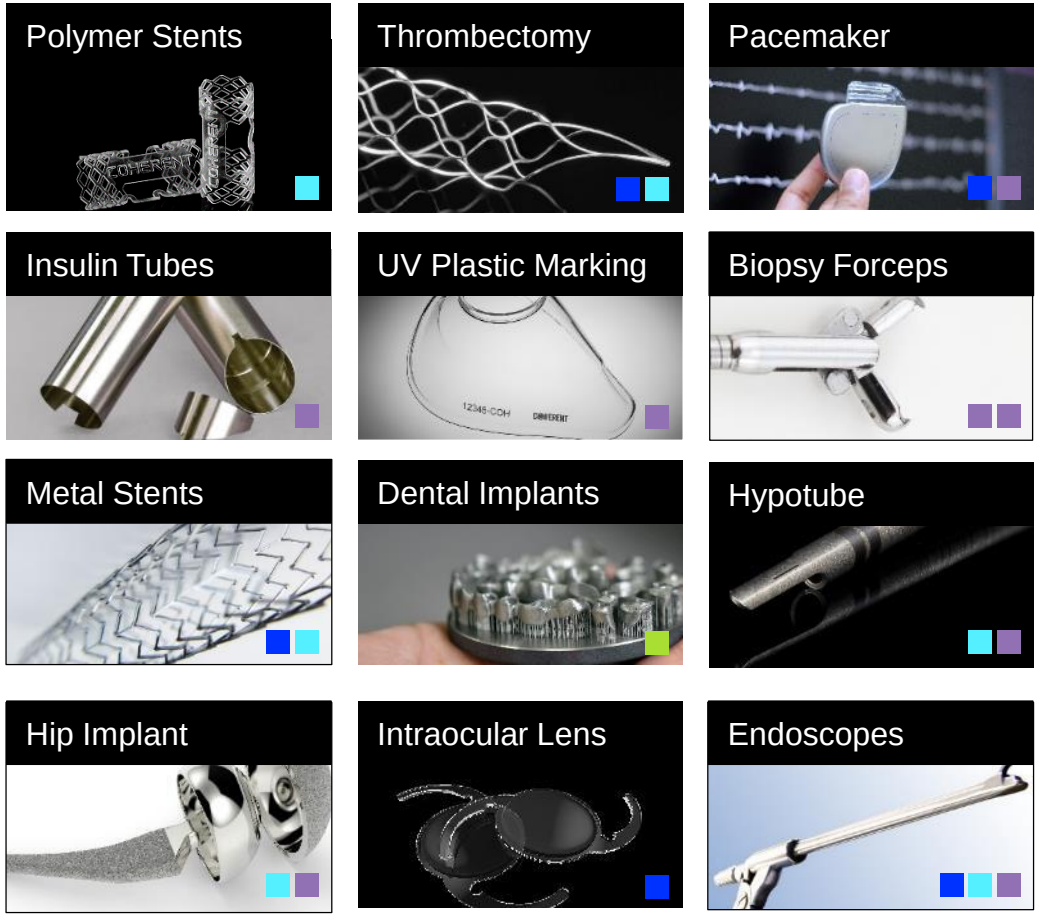
Source: KPMG, Internal Estimates

EV LITHIUM BATTERY PRODUCTION – LASER APPLICATIONS





ENABLING MEDICAL DEVICE MANUFACTURING WITH LASER TECHNOLOGY



Stent Cutting System

Manual Welding System

- Laser Welding
- Laser Cutting
- Laser Marking
- Additive Manufacturing

Marking System

SEMICONDUCTOR CAPITAL EQUIPMENT VERTICAL

THE SEMICONDUCTOR INDUSTRY ON ITS WAY TO $1T MARKET BY 2030

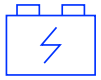
2010s
75% of semiconductor growth from mobile and compute

2020s
AI, IoT and Smart Mobility

PATH TO $1T

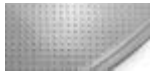
Smart phones

Data centers

			
AI	**AI/ML**		
			
IoT	**Industry 4.0**	**AR/VR**	**Intelligent Wearables**
			
Smart Mobility	**Electric Vehicles**		

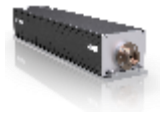
ENABLING SEMICONDUCTOR PROCESSES WITH LASERS, OPTICS, AND CERAMICS

Front End Of Line

Ingot (Silicon, SiC)	Bare Wafer CMP	Mask Writing / Inspection	Wafer Inspection (Yield Mgmt/Metrology)	Lithography EUV/DUV	Etch/ Deposition	Annealing
		Ion lasers	CW solid-state lasers	EUV/IR optics, windows	Excimer lasers	Nanosecond & CO_2 lasers
 SiC substrates	 CMP plates	 Gantry beams	 Pin-plates	 Sensor frame	 Mirror Blank for EUV	 Shower heads	 Wafer chucks

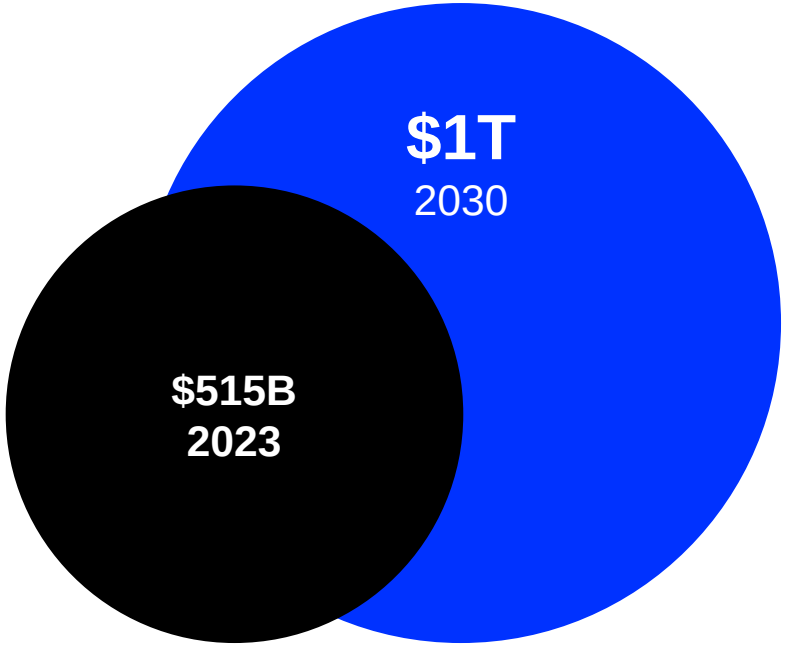
Repeat

Back End Of Line

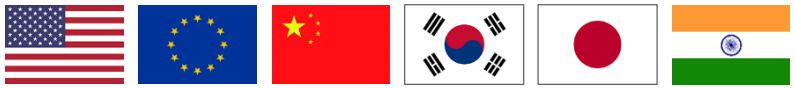
Marking	System in Package cutting	Laser Assisted Bonding	PCB/Substrate Drilling	Optical Debonding	Laser Direct Imaging	Wafer Dicing
 Marking subsystems	 Pulsed lasers	 Diode lasers	 CO / CO_2 lasers	 Nanosecond lasers	 Quasi-CW lasers	 Ultrafast lasers

SEMICONDUCTOR MARKET SIZING & DYNAMICS

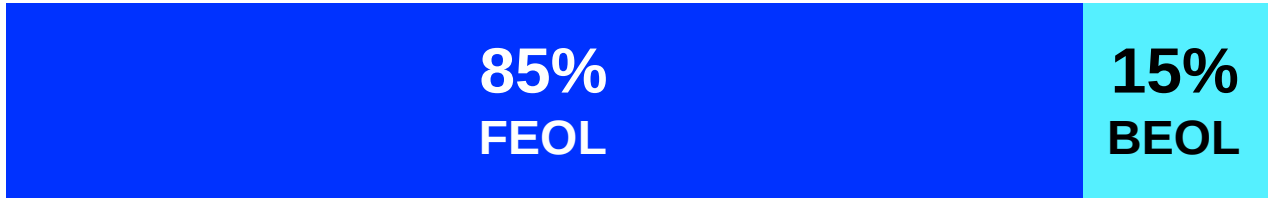
Global Semiconductor Market



Hundreds of billions of policy-based government commitments



Semiconductor CapEx Spending



- FY23 a record year with 11% year-over-year revenue growth, despite a downturn in the semiconductor market
- FY24 revenue expected to grow by double digits year-over-year driven by growth in Semicap market and share gains
- Our strength is in front-end-of-line: lithography, inspection, annealing
- High performance computing drives demand for most advanced nodes

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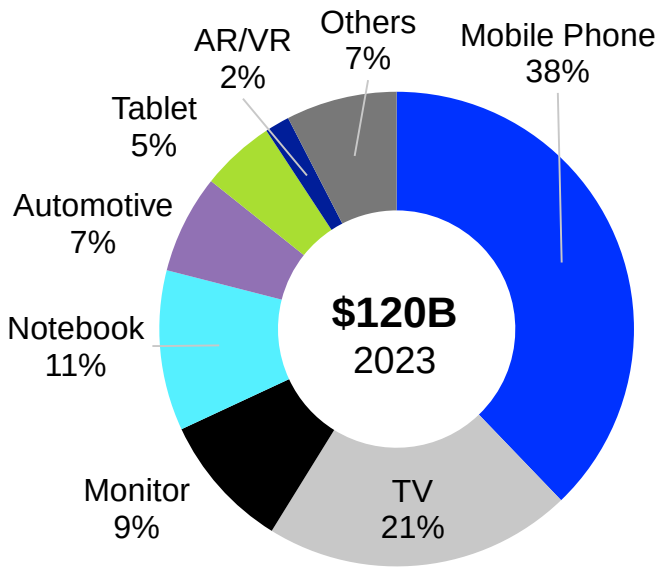
DISPLAY CAPITAL EQUIPMENT VERTICAL

DISPLAY CAPITAL EQUIPMENT VERTICAL

Overall Display Demand

Display Demand by Segments



Display market expected to grow at 3.6% CAGR to **$143B** in 2028

Source: DSCC and internal estimates

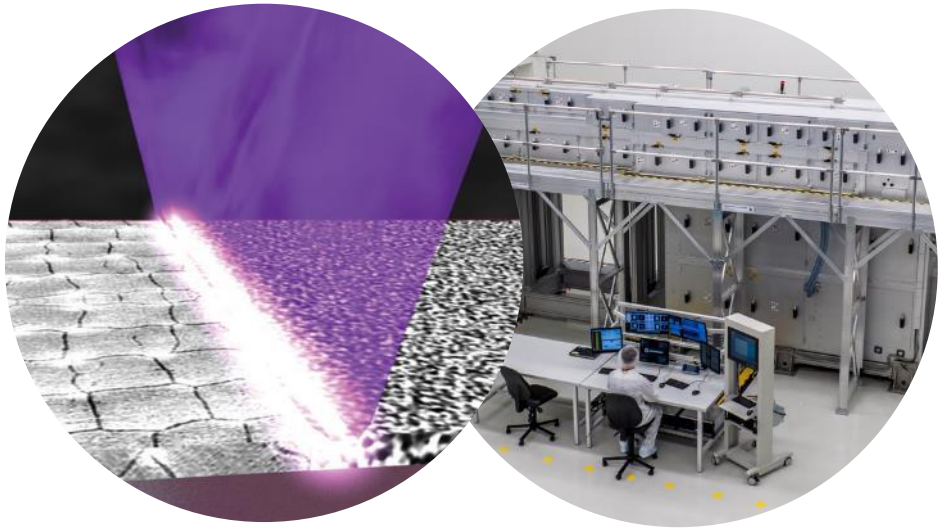
Vertical Defined

Display Capital Equipment represents all optics, lasers and systems used to produce displays

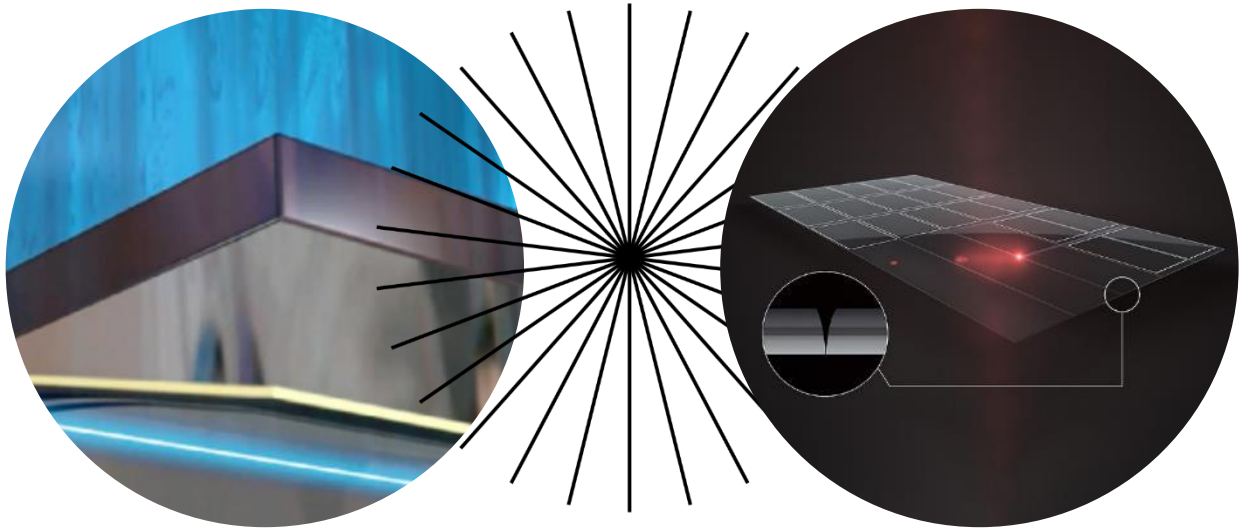
Macro Drivers

- Moving from a physical into a virtual world requires new display technologies 3D and better 2D quality displays
- Mobility and immersive user experience
- Transformation of the Automotive Industry
- Hyper-connected world, more data transfer and data availability

OLED MANUFACTURING PROCESS – COHERENT OFFERS ALL LASER PROCESSES

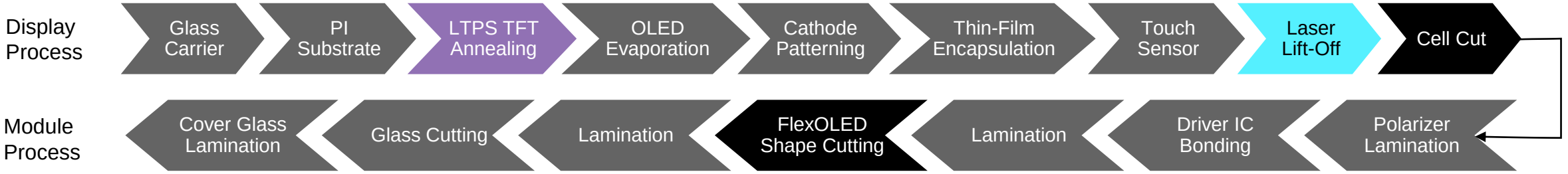


Laser Annealing



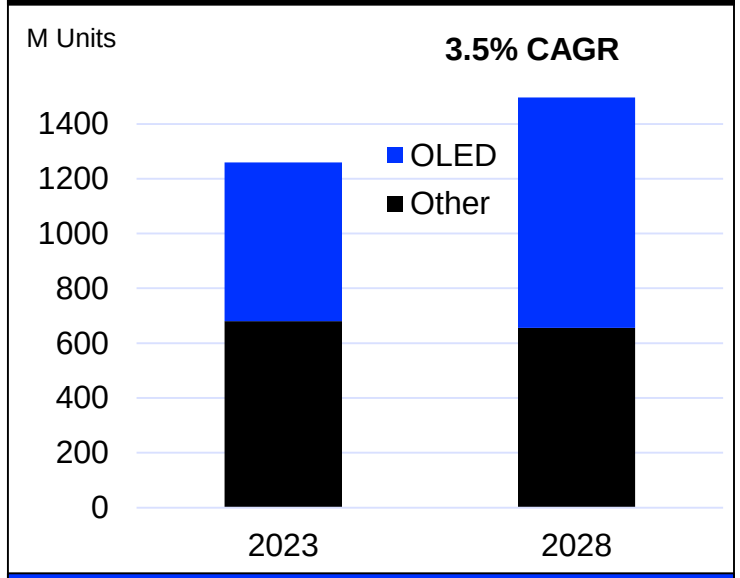
Laser Lift-Off

Laser Cell Cutting and Laser Shape Cutting



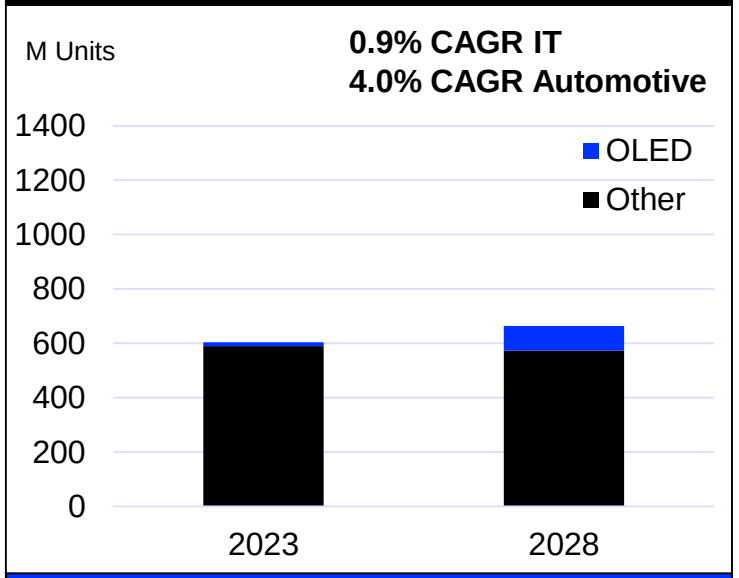
DISPLAY END MARKET DYNAMICS

Smartphone



OLED CAGR 8%

IT/ Automotive

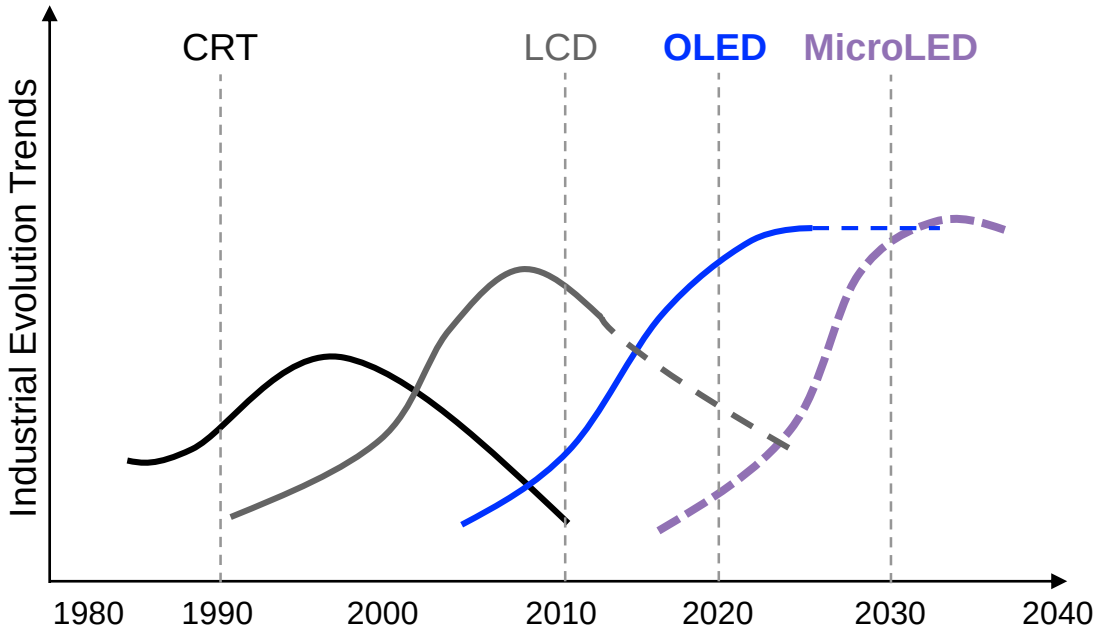


OLED CAGR
IT 46%; Auto 34%

OLED segment is growing

Source: OMDIA, DSCC and internal estimates

DISPLAY MARKET DYNAMICS



- Smartphones remain largest display market by units; OLED share growth leads to higher CAGR
- Increasing demand for OLED display equipment for tablets and automotive
- MicroLED market: strong growth forecasted over the next few years with production ramp-ups expected in 2024

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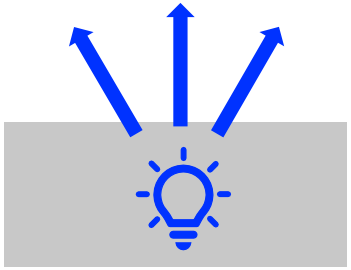
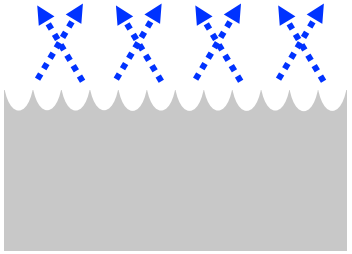
MicroLED ADVANTAGES, MORE THAN BRIGHTNESS…

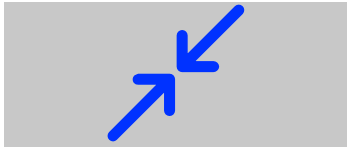


High Brightness

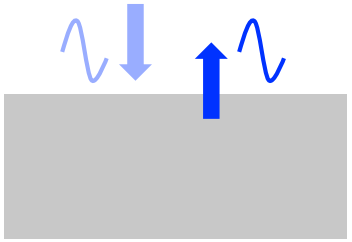


Integrated Micro Lens Array - Brightness

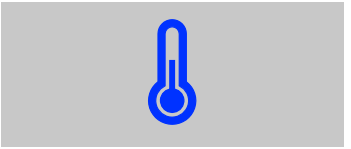
Long Lifetime



Smallest Pixel Size



Emitting & Sensing In-Display Plane Sensors



Robustness

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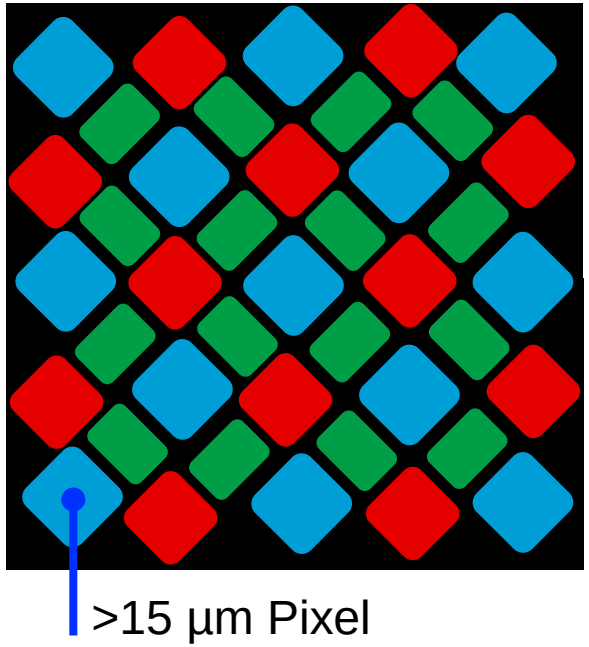
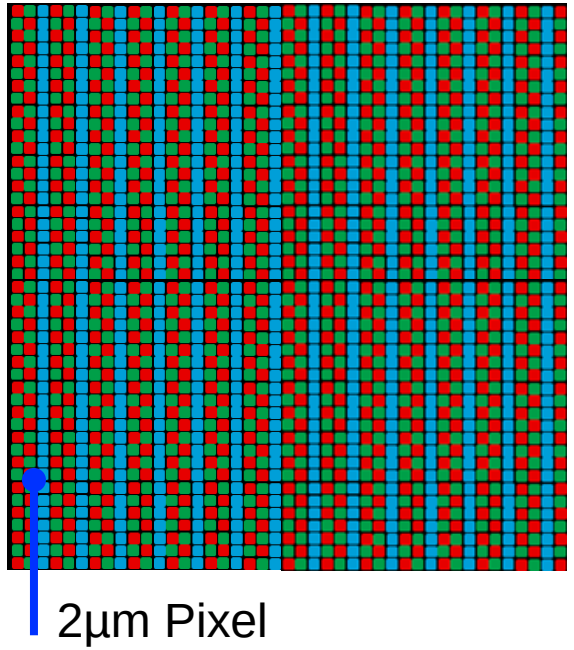
MicroLED ADVANTAGES, MORE THAN BRIGHTNESS…

OLED-Display (Smartphone)



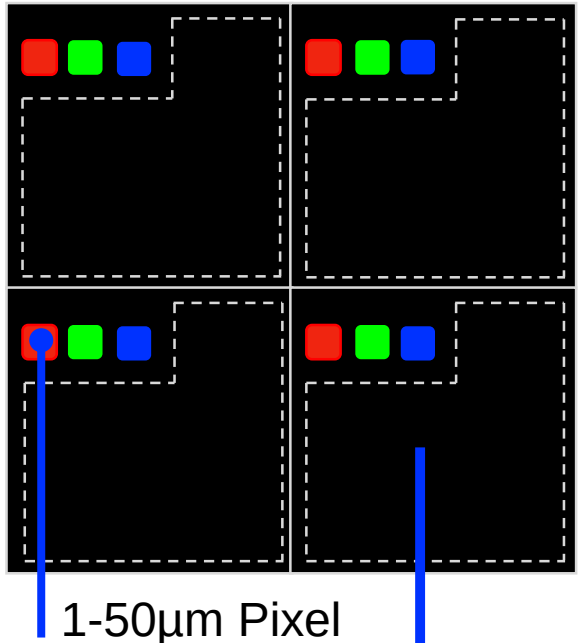
>15 µm Pixel

MicroOLED-Display (VR)



2µm Pixel

MicroLED-Display



1-50µm Pixel

- Perfect Black = Brilliance
- Space for integrated Sensors/Cameras!

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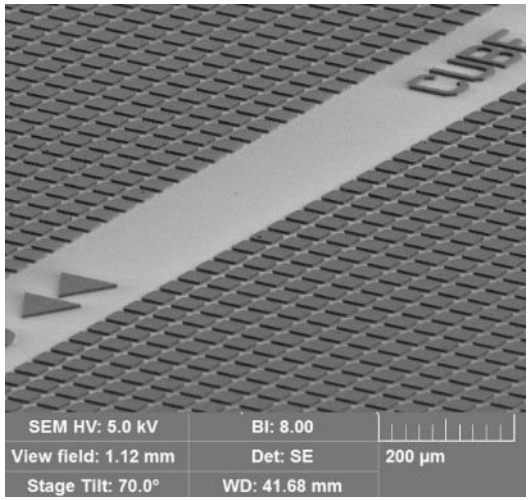
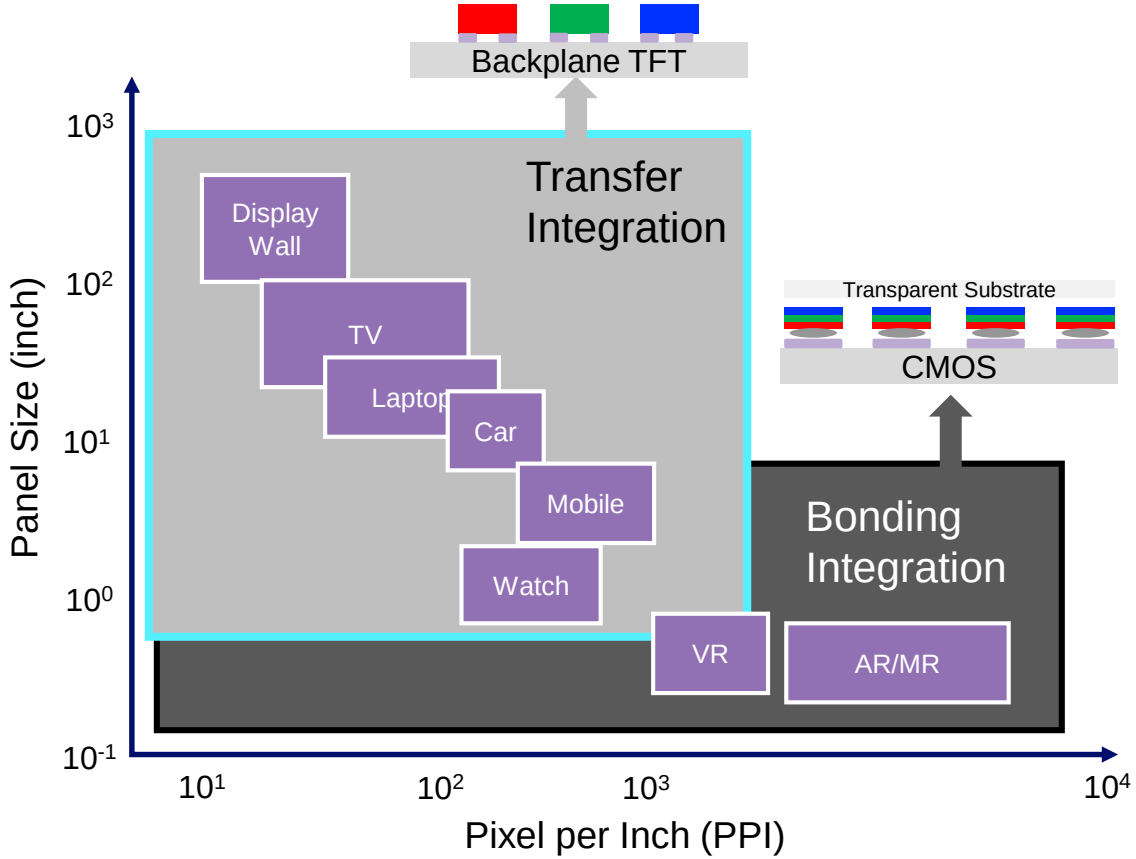
MASS TRANSFER IS THE MOST CRITICAL PROCESS FOR MicroLED MANUFACTURING

All MicroLEDs are grown on EPI wafer

- For small displays (e.g., AR/VR), it is its just chips/cut/and assemble
- For everything larger, mass transfer is mandatory





MicroLED MANUFACTURING PROCESS – COHERENT OFFERS ALL LASER PROCESSES

Laser Lift-Off

Laser Annealing

Mass Transfer

Repair

Annealing
LED Wafer Fab could be separated from Display Fab

LTPS Backplane Annealing

Processed in LED Fab

Ingot (Sapphire/Silicon) → Epi wafer growth → Epi chip → Chip Singulation / Laser LIFT-Off → Probing/ sorting → Arranging on carrier substrate

Processed in Display Fab

Transfer on TFT (dual-bond) → Laser Repair (remounting) → Laser Assisted Bonding driver IC → Optional Color conversion filter → Cover treatment → MicroLED Display

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LASER PROCESSES FOR SMARTPHONE MASS PRODUCTION

Camera Module/Sensor
- Sapphire Lens Cutting
- Welding / Soldering

Display Module OLED
- LTPS Annealing
- Laser Lift-Off
- Glass / Sapphire Cutting
- Flex OLED Cutting and Drilling
- Film/Polarizer Cutting
- Glass Welding

Battery
- Foil cutting
- Marking / Coding
- Welding
- Structuring

Case
- Cutting / Engraving
- Laser Marking / Coding
- 3D Molded Interconnects

Main PCB
- Micro Via Drilling
- Laser Direct Imaging
- Laser Singulation / Depaneling

IC Logic/Memory/Modem
- Photolithography
- Bare & Patterned Wafer Inspection
- Wafer Dicing / Low-k-Scribe
- SiP Package Machining

Precision Manufacturing
Display Cap Equipment
Semi Cap Equipment

Sustainability: Clean processing eliminates use of chemicals

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PRECISION MANUFACTURING WITH HIGH POWER FIBER LASERS

Martin Seifert – Vice President, High Power Fiber Laser Business Unit

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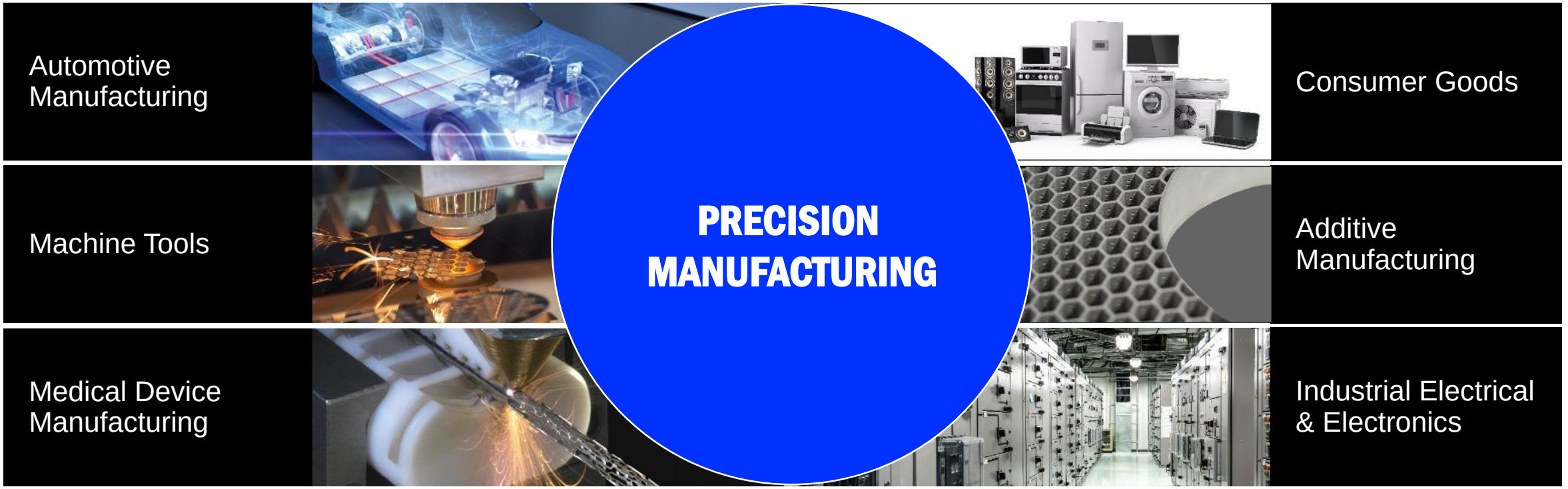
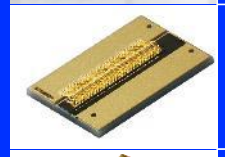
PRECISION MANUFACTURING APPLICATIONS



FIBER LASER INTEGRATED MACHINE MARKET: $11 BILLION*

Systems

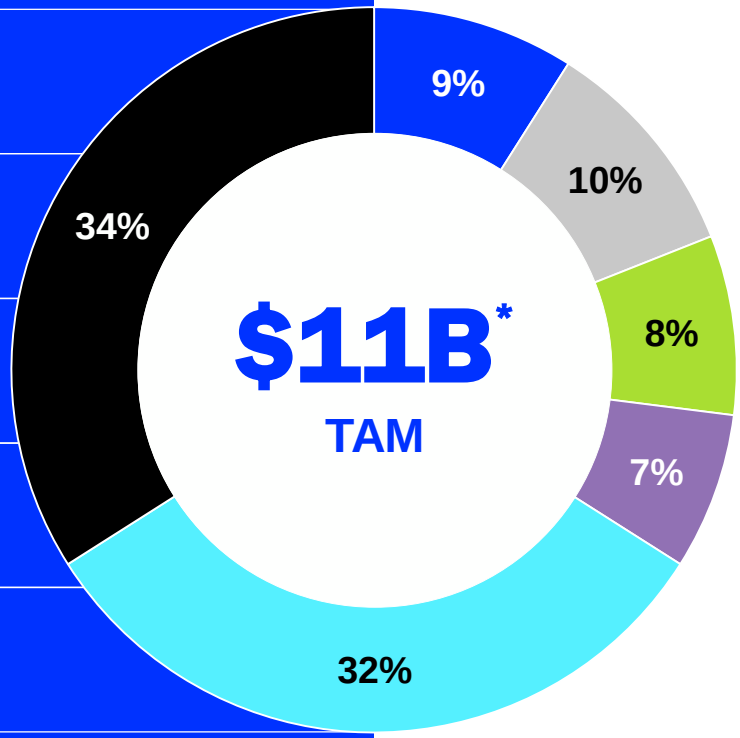
Lasers



Components

Optics

Materials

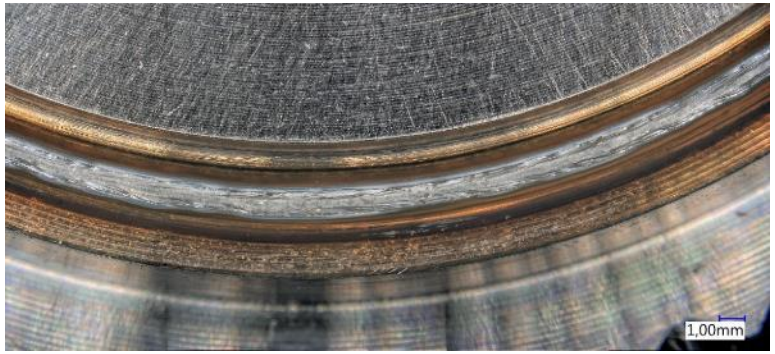


- Welding - General Purpose
- Welding - Automotive
- Welding - Copper
- Cutting - 3D
- Cutting - Low Cost
- Cutting - High Power

* Source: Optech, Internal estimates; 2023 TAM: $11B; CAGR: 9%, 2023-2028

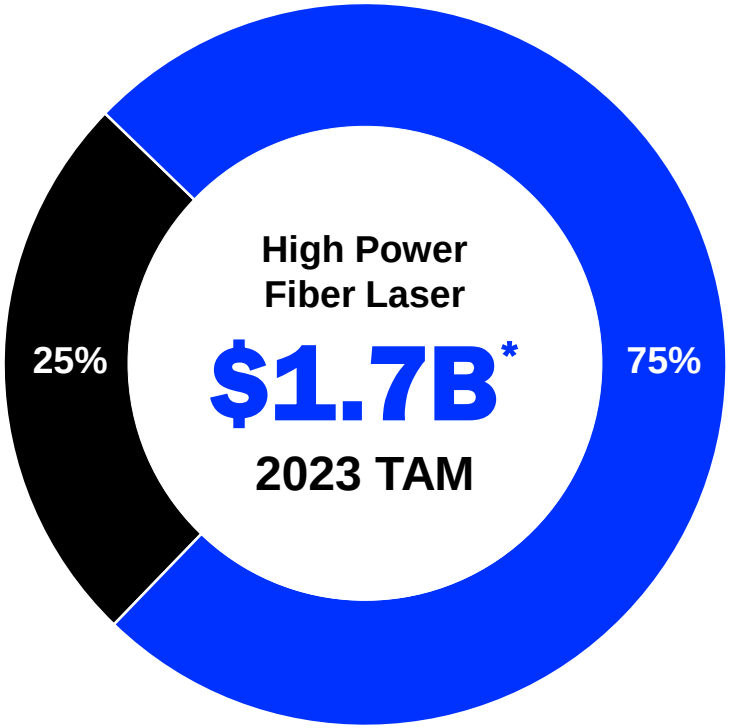
COHERENT

GLOBAL HIGH POWER FIBER LASER MARKET A $1.7 BILLION MARKET IN 2023



Welding

- Production lines typically include 2 to 20 identical fiber laser systems
- Rigorous qualification required



Cutting

- A new opportunity for Coherent

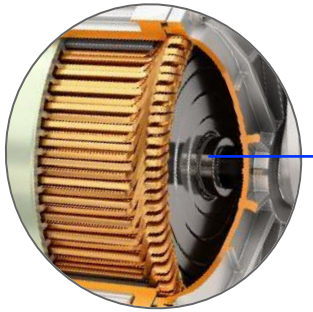
* Source: Optech Consultants, Internal Estimates

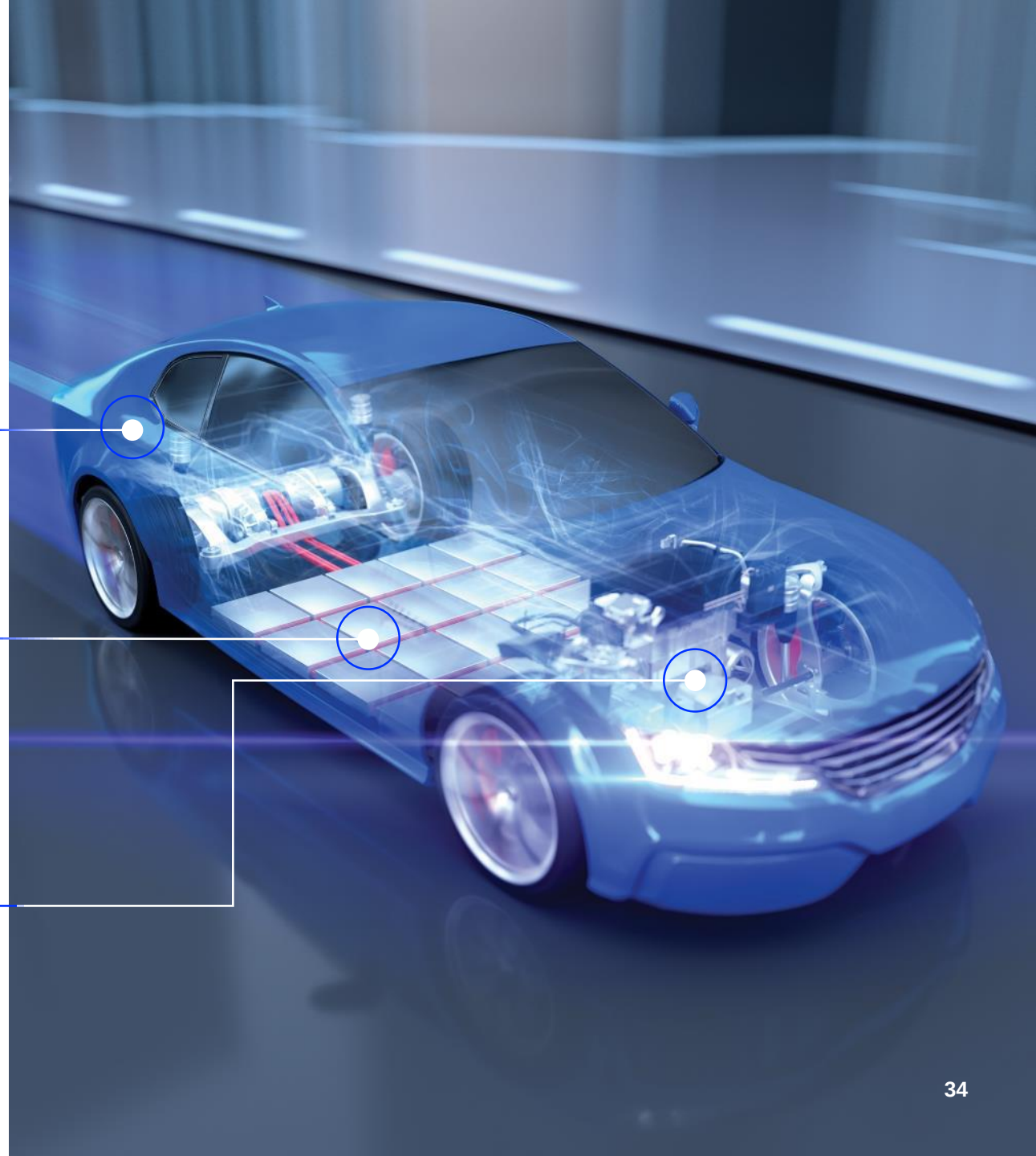
E-MOBILITY MANUFACTURING USE CASES DRIVE THE LASER MARKET

- Car body
- Aluminum hang-on parts

- Battery module
- Battery cell
- Battery pack

- Inverter
- E-Motor
- Transmission components





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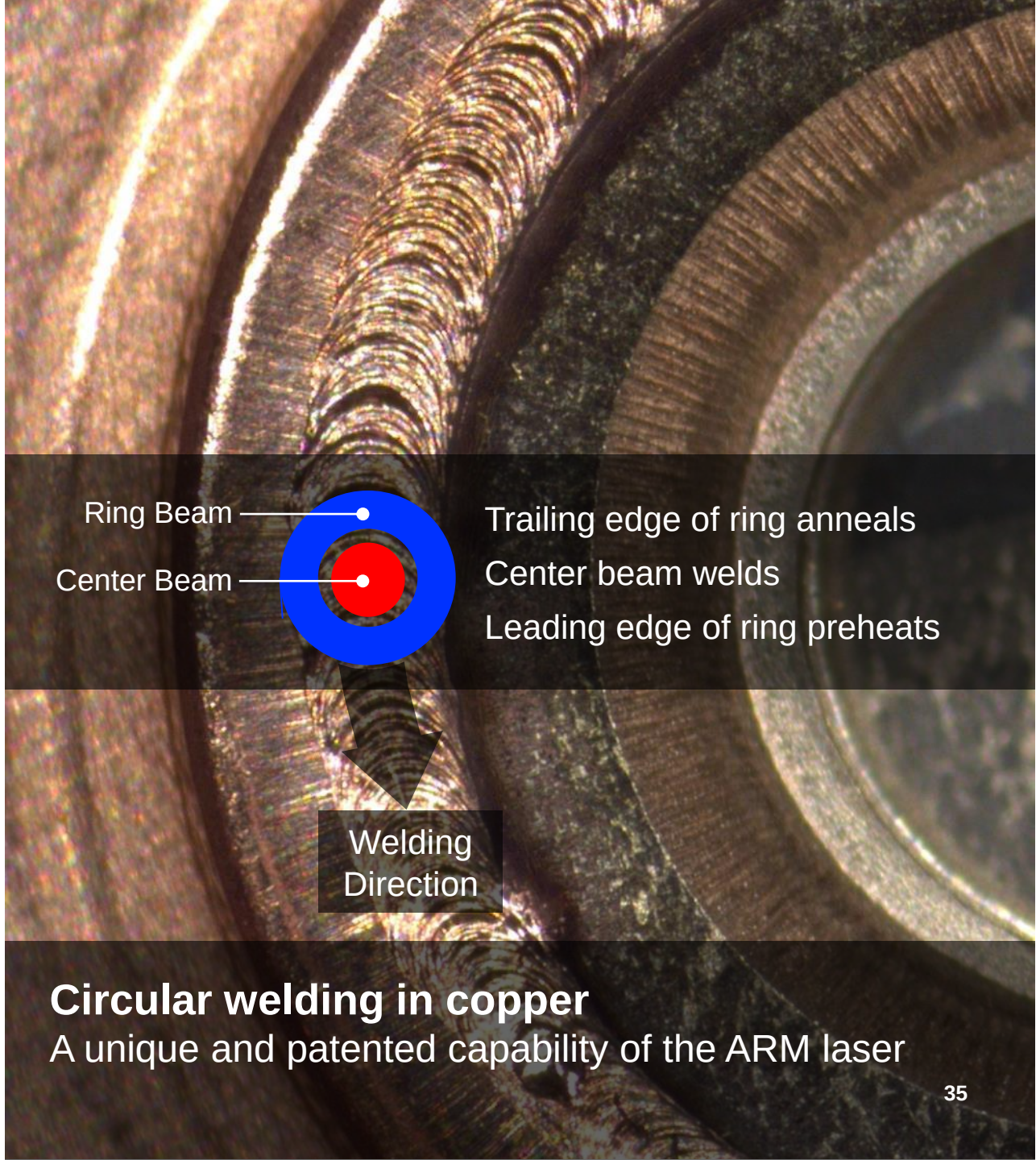
BEST-IN-CLASS ARM LASER FOR EV BATTERY WELDING

Adjustable Ring Mode (ARM) Laser has two key patented features:

- **Independent control of center and ring beams**
  - Center beam performs the weld
  - Ring beam pre-heats before the weld and post-heats for annealing
- **Method for uniform laser intensity distribution around the ring beam**
  - Essential to achieve circular welds in one circular motion



Circular welding in copper
A unique and patented capability of the ARM laser

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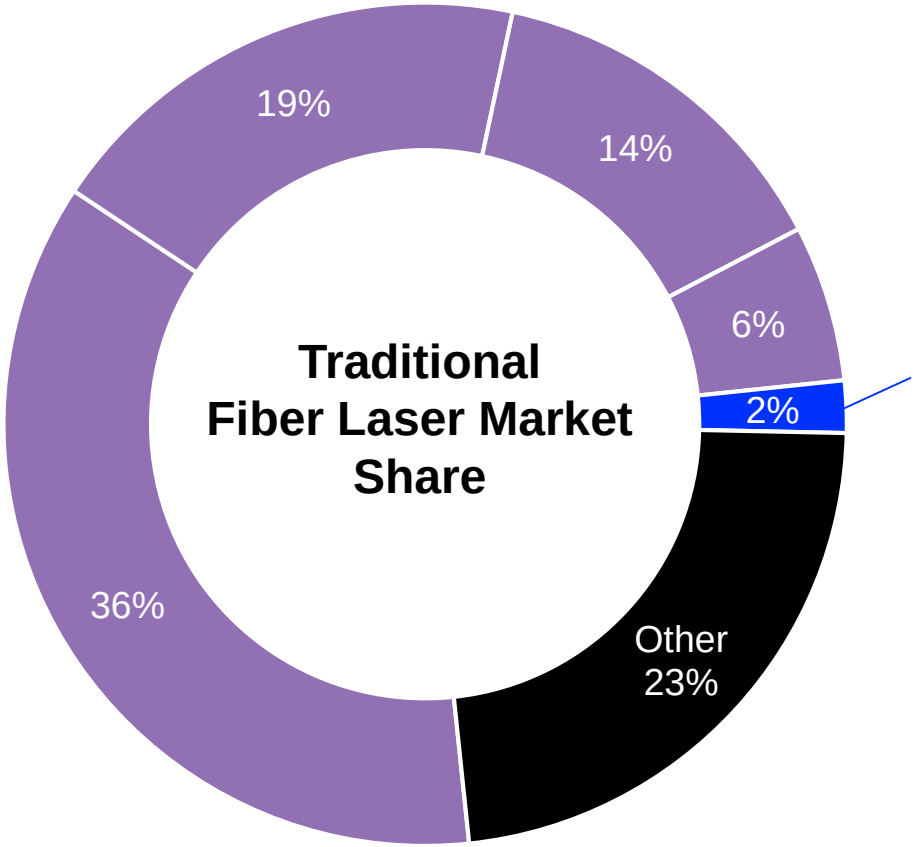
THE FIBER LASER COMPETITIVE LANDSCAPE



Source: Optech & internal estimates

4 suppliers serve 75%

of the traditional fiber laser world market

- Two from China have emerged in the past 5 years
- Two western suppliers holding legacy positions

Coherent market share

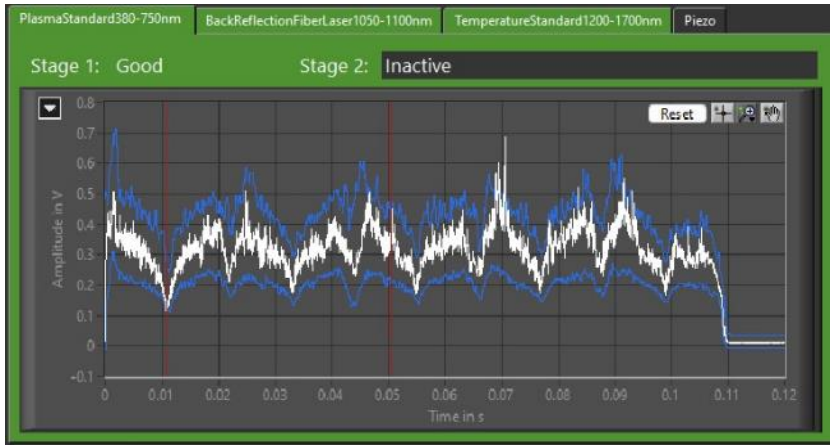
Key competitive trends in the market

- Little if any VC funding is flowing into China fiber lasers today
- Little government subsidy for China internalization of fiber laser technology remains available
- While China is still a very large market, the market outside of China is growing with higher quality revenue
  - Higher quality revenue implies a larger profit pool
  - Must meet global compliance requirements
  - Requires a global service network similar to Coherent's

INTEGRATION OF INDUSTRY LEADING LASER AND PROCESSING HEADS

Benefits of the combined fiber lasers and processing heads:

- Software combines control and functionality for total performance
- Leverages AI
- Integrated system for highest efficacy



NEW FIBER LASER BUSINESS UNIT TO ACCELERATE GROWTH

Our opportunity to grow in the welding market is due to the combination of three key factors

1. Leader in copper welding for prismatic and cylindrical batteries for e-mobility
2. Leader in the market for fine welding of legacy, new, and difficult materials
3. In a great position to enter the laser cutting market due to the merger of II-VI and Coherent, Inc.

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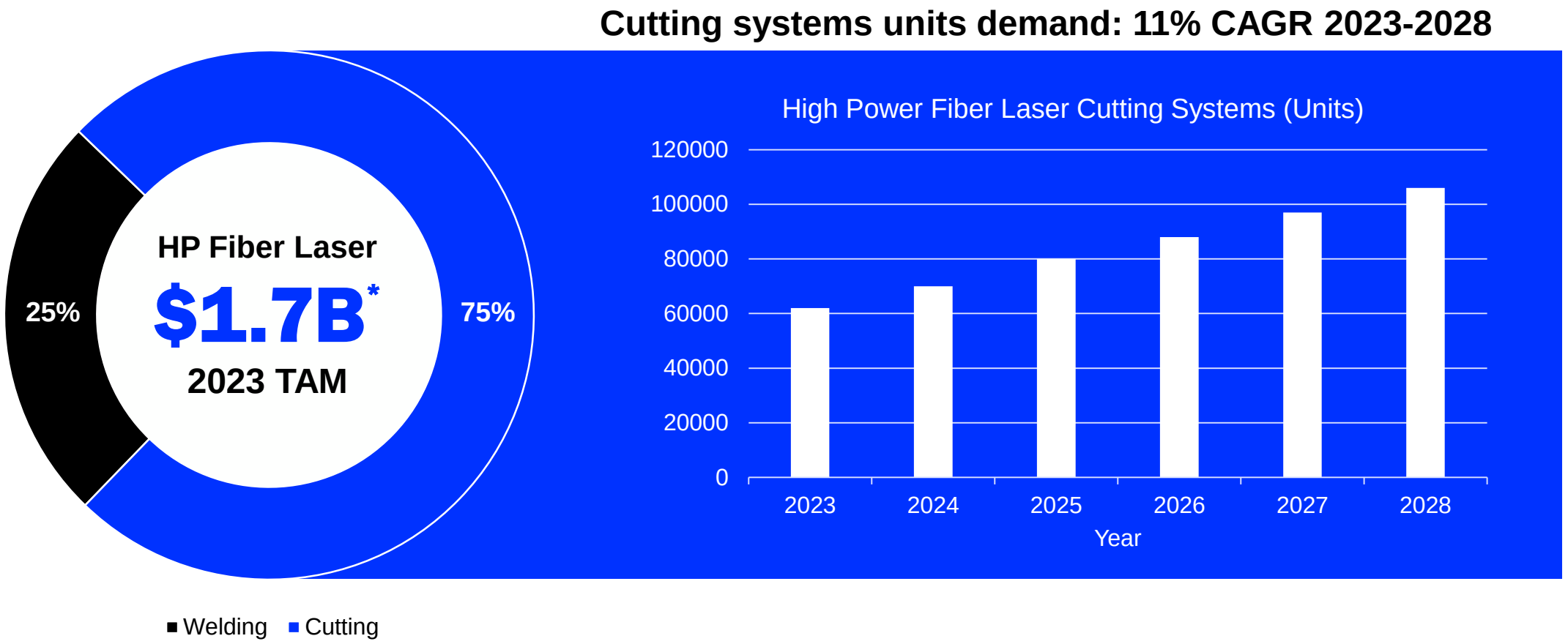
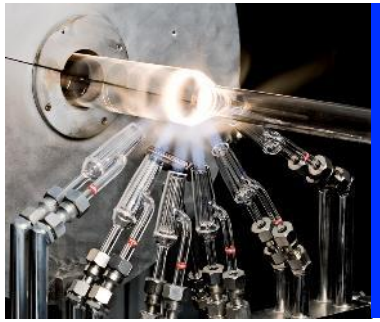
HIGH POWER FIBER LASER CUTTING MARKET OVER $1 BILLION OPPORTUNITY 2023



* Source: Optech Consultants, Internal Estimates

A COMPLETE PORTFOLIO OF FIBER-LASER COMPONENTS MANUFACTURED IN-HOUSE AT SCALE



Specialty Fiber

East Granby
Connecticut

Infrared Optics

Saxonburg
Pennsylvania

Acousto-Optic Modulators

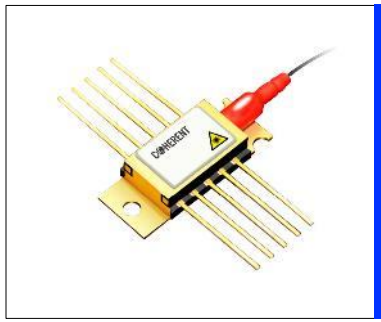
Fuzhou
China

Beam Delivery Systems

Mölndal
Sweden

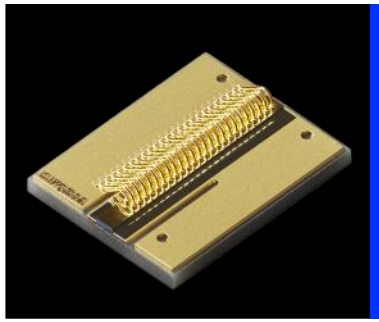
Rotators & Isolators

Traverse City
Michigan



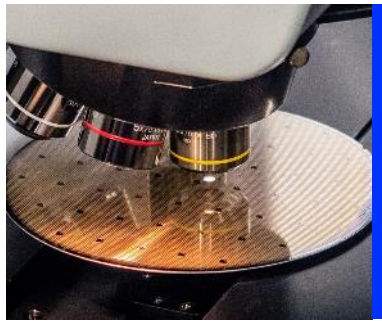
Fiber & Pump Assemblies

Calamba City,
Philippines



Pump Diodes

Mainz
Germany



GaAs EPI 6” Wafers

Zurich
Switzerland

Combiner Components

Tampere
Finland

COHERENT

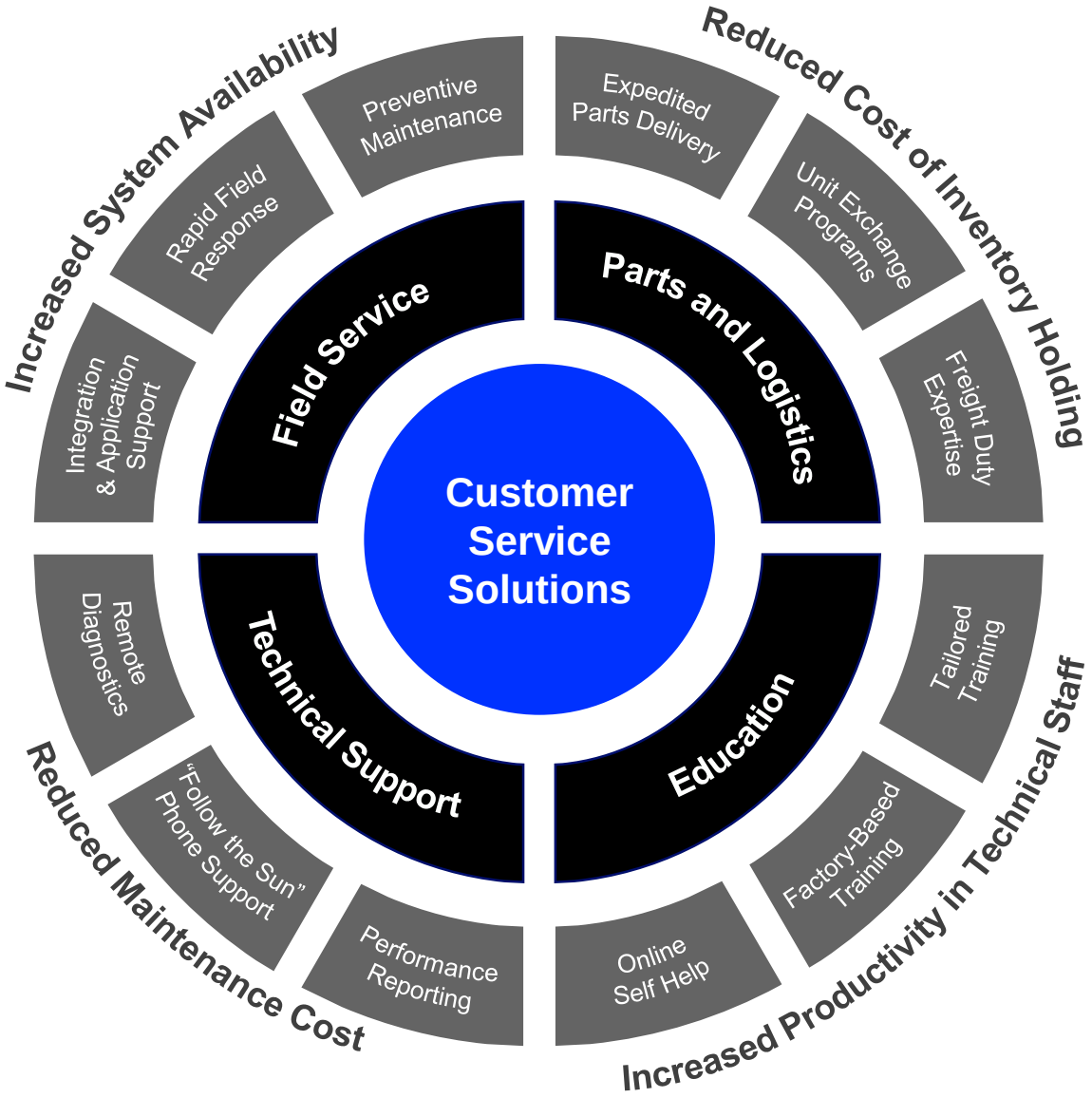
SUPPORTED BY AN GLOBAL SERVICE NETWORK AND STATE-OF-THE-ART EXPERTISE IN APPLICATIONS LABS

50 Service Centers

- 650 service engineers
- Inventory management
- Global logistics team
- Preventive maintenance & repair
- Rapid field response
- 24/7 phone support

22 Applications Labs in 11 Countries

- 70 applications engineers
- 2,500+ application requests per year
- Common application knowledge database



INITIATING A FIBER LASER LINE IN CHINA

- Establishing a fiber laser manufacturing line in Wuxi
- In established high-volume datacom transceiver manufacturing facility
- With mature, trained, and fiber literate workforce, with full support infrastructure
- Leveraging established service & sales organization already in place

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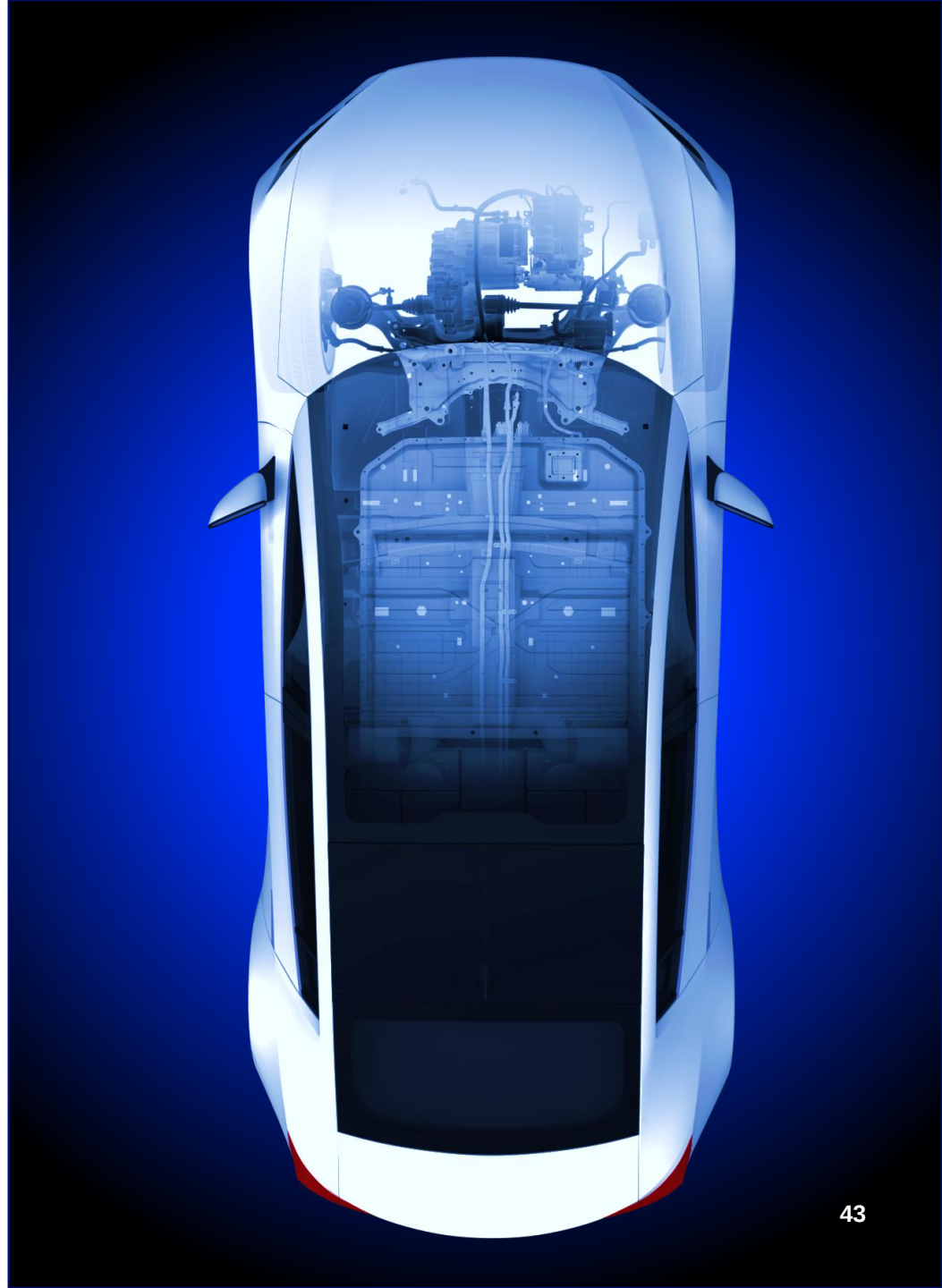
SUMMARY

- Lasers are increasingly used in precision manufacturing
- Coherent is growing and gaining share in welding applications for automotive. EVs are increasing the number of use cases
- We created a dedicated Business Unit to add focus and speed up time to market
- Coherent is planning to enter the laser cutting market; this was in fact one of the sales synergies envisioned from the merger of II-VI and Coherent, Inc.
- We believe that success with a low-cost platform in cutting will help us in welding, creating a virtuous cycle of winning in fiber lasers
- Our improved competitiveness and economies of scale from the larger volumes in cutting will contribute to healthy margins



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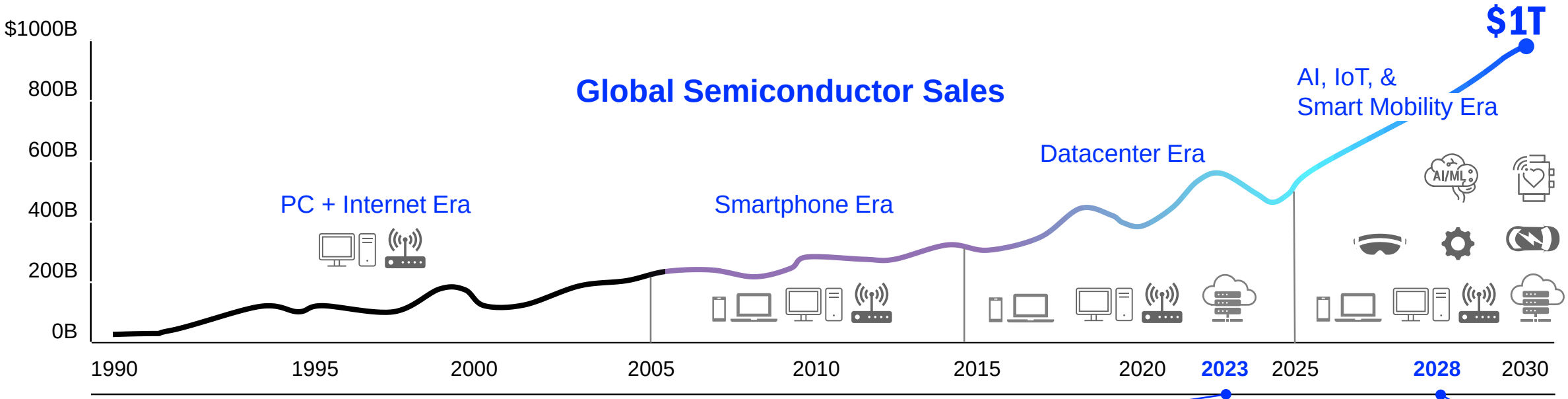
SEMICONDUCTOR CAPITAL EQUIPMENT VERTICAL

Dr. Chris Dorman – Executive Vice President, Lasers Business

THE SEMICONDUCTOR INDUSTRY ON ITS WAY TO $1T MARKET BY 2030*



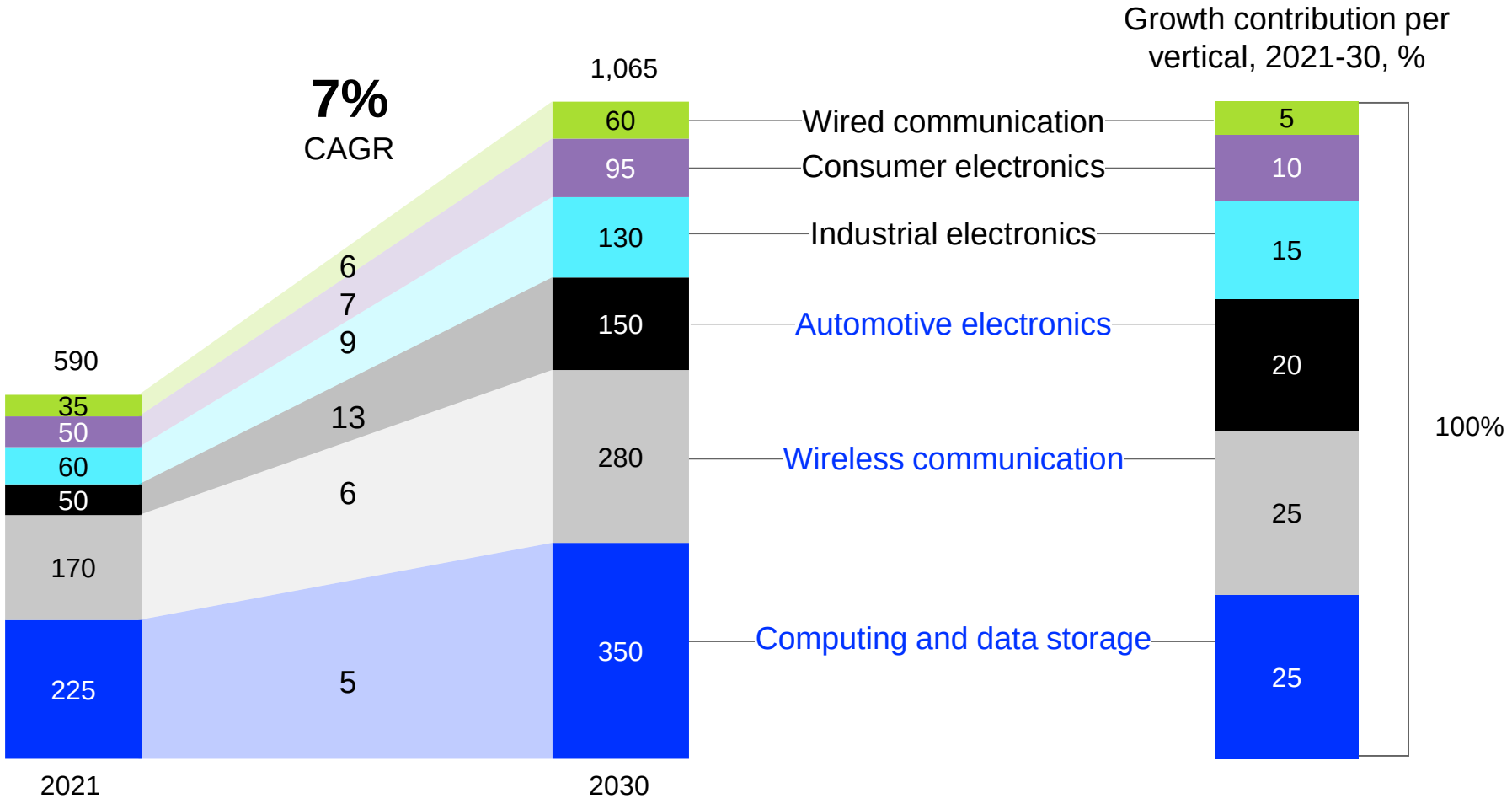
Semi. Cap. Equipment TAM**	
CY2023	CY2028
$4.2B	$5.8B
5YR CAGR** **7%**	

* Source: Semi.org ** Source: TechInsights and internal estimates

COHERENT

KEY DRIVERS AND TRENDS

Global semiconductor market value by vertical, indicative, $ billion



* Source: McKinsey & Company Note. Figures are approximate

GOVERNMENT INCENTIVES DRIVE A SURGE OF INVESTMENTS

K-Belt

Independence (increase local content to 50% by 2030) and technology leadership

$240B

Corporate investments (2022-26) supported e.g., by tax breaks

Made in China 2025

100% self-sufficient Chinese semiconductor industry by 2030

$143B

Support package expected to be announced by Government for disbursement over 5 years

CHIPS For America Act

Independence and technology leadership

$50+B

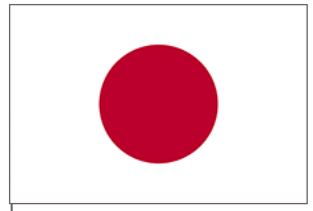
Budget to promote the US semiconductor industry

European Chips Act

Sovereignty and independence of the European chip industry

$42B

Estimated policy driven investment



5G & NEDO^2 Act

Drive growth in the national chip industry

$5B

Budget to support advanced semiconductor manufacturers

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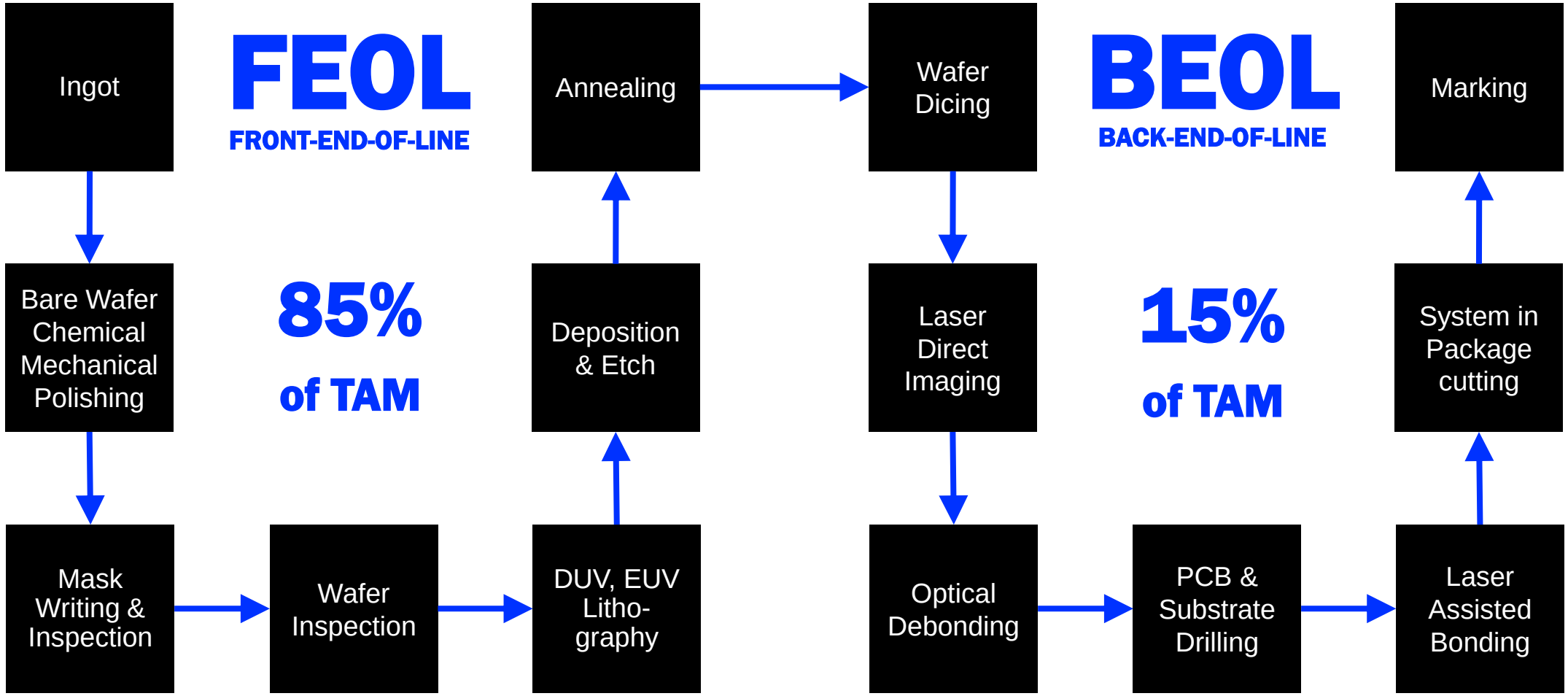
ENABLING SEMICONDUCTOR PROCESSES IN FEOL AND BEOL

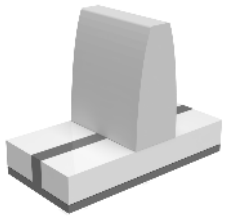


KEY SEMICAP MARKET GROWTH DRIVERS AND COMPETITIVE DIFFERENTIATION

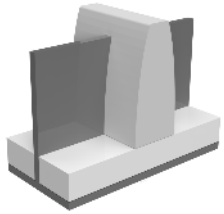
1. **Greater demand for Coherent laser-based inspection in the front-end-of-line**
   - Driven by the increasing chip tape-out cost as nodes become smaller
2. **EUV lithography drives demand for**
   - Advanced CO_2 laser optics
   - High performance ceramic materials
3. **Greater demand for Coherent's new laser technology and materials**
   - For chip-level processes and in packaging
4. **Service**
   - A key element of the customer relationship and our differentiation

SMALLER NODES DRIVE MORE LASER-BASED INSPECTION

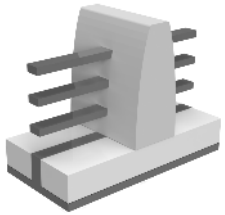
- Number of process steps increases as transistors get smaller
- Design costs increase with every node shrink
- Yield decreases at nodes below 16 nm
- Increased need for semiconductor inspection
- New architecture and new materials drive inspection demand



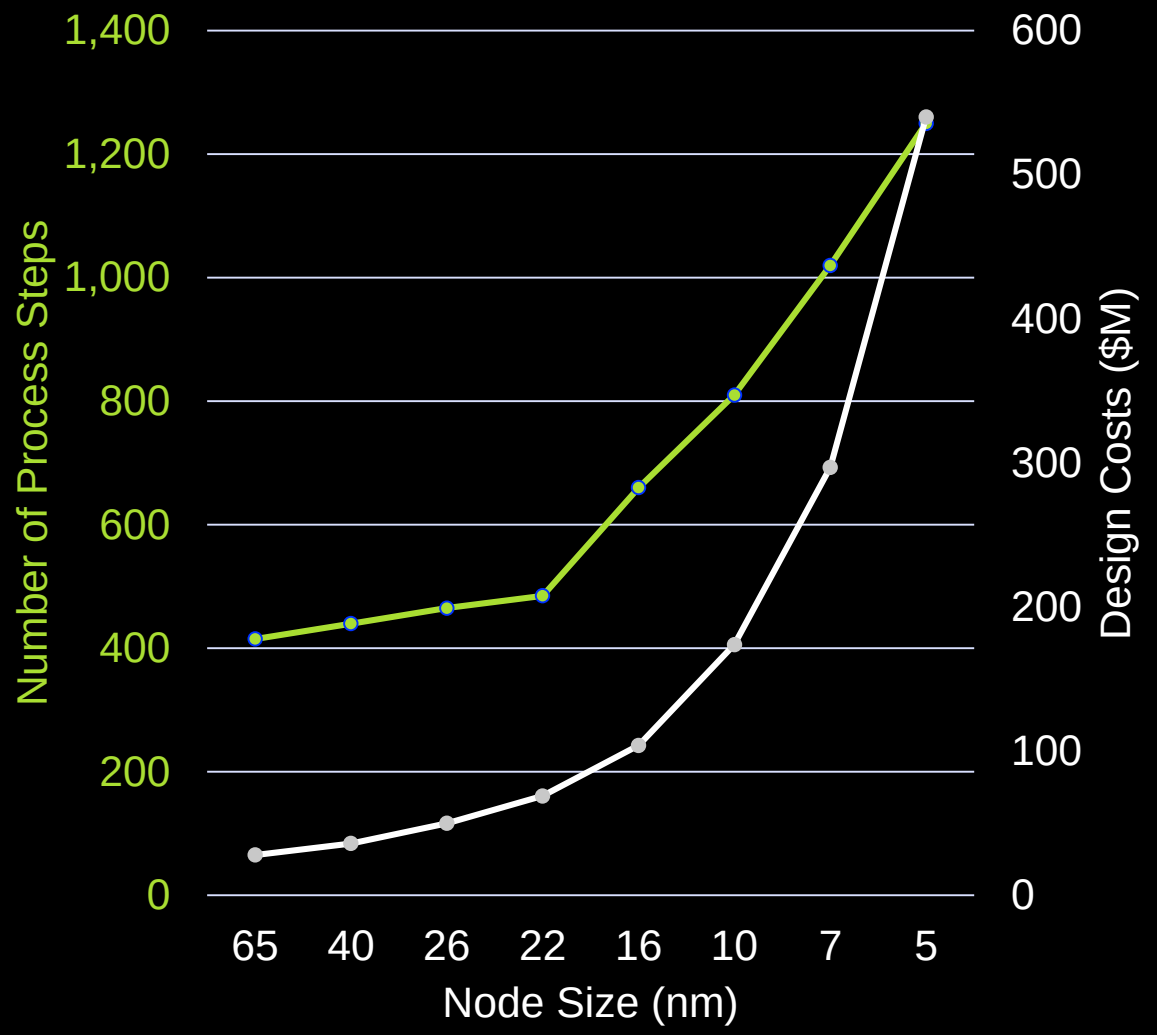
> 22 nm



16 nm



3 nm



* Source: IC Knowledge Strategic Cost Model

COHERENT

SHORTER WAVELENGTH EVOLUTION FOR HIGHER DEGREE SENSITIVITY

Green

Green DPSS
Verdi V series

QCW Green
Paladin

UV

UV Ion Laser
Innova Sabre

CW DPSS:
Genesis CX

OBIS
Laser

Paladin Compact

DUV

Azure NX

Un-patterned wafer inspection schemes by wavelength*

λ (nm)	532	488	488	457	355	325	266	213	193	157
Power (mW)	1000	200	1000	400	300	50	200	400	200	10
Sensitivity (nm)	50	53	47	49	40	48	39	≤20	≤18	≤10

Source: Intel, FCMN

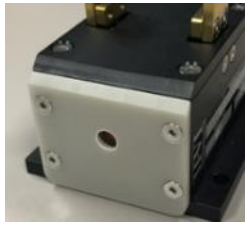
COHERENT

EUV LITHOGRAPHY DRIVES DEMAND FOR CO_2 LASER OPTICS

CO_2 laser subsystems that Coherent enables with hundreds of optical components in each EUV lithography system:

- Seed laser
- Power amplifier
- Beam transport

Output Couplers
Zinc Selenide



Modulator
Cadmium Telluride

Windows
CVD Diamond

Engineered materials enable differentiation

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CERAMICS AND METAL MATRIX COMPOSITES FOR WAFER FAB EQUIPMENT

High performance materials

- Tight flatness tolerances
- High CTE matching of silicon wafers
- High stiffness, high thermal conductivity, low weight

Ceramics produced with additive manufacturing brings next-gen differentiation

- Enables components that are lighter and with entirely new geometries
- Required for next-generation semiconductor capital equipment designs

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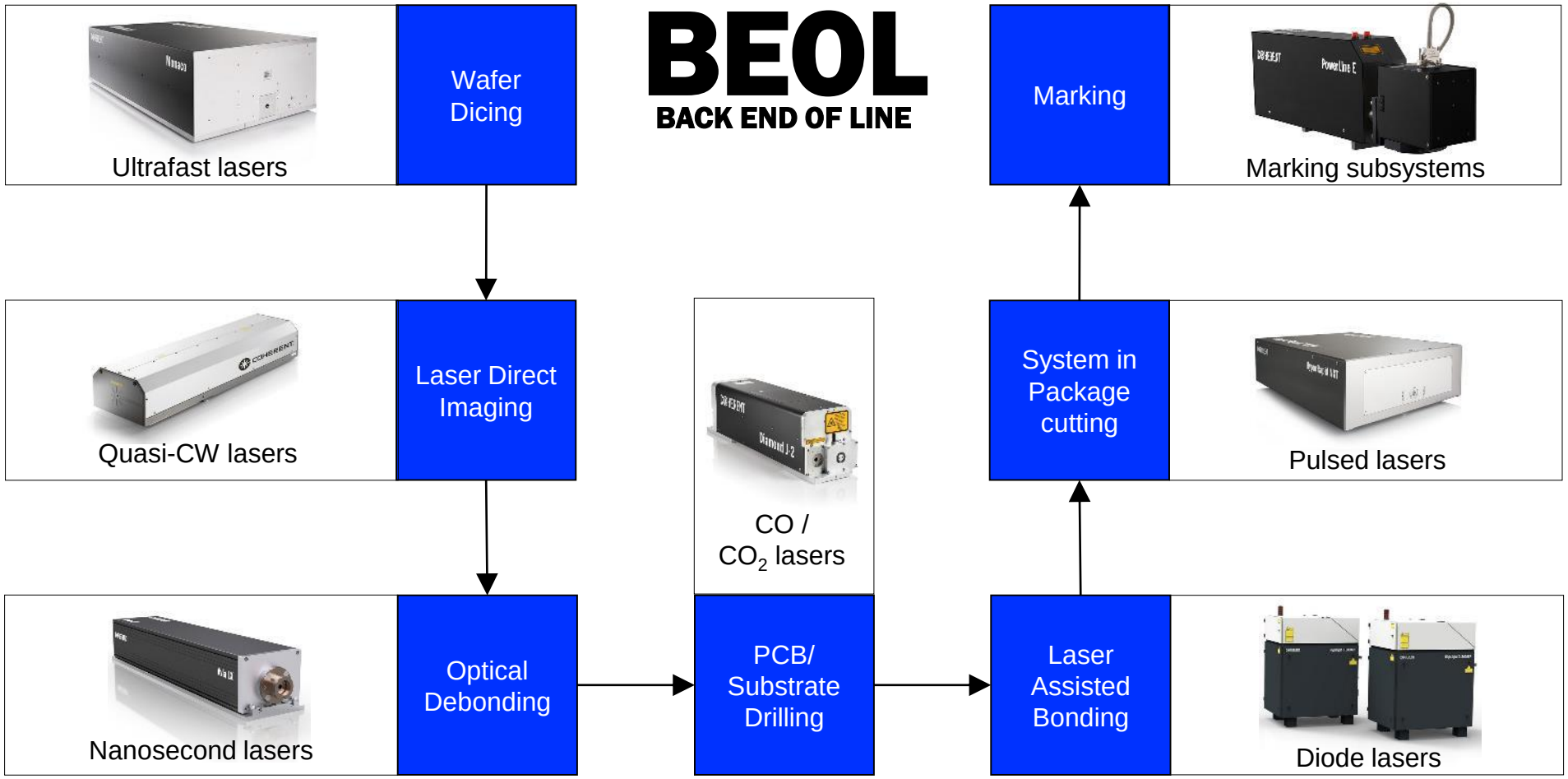
INNOVATION IN LASERS FOR BACK-END-OF-LINE PROCESSES

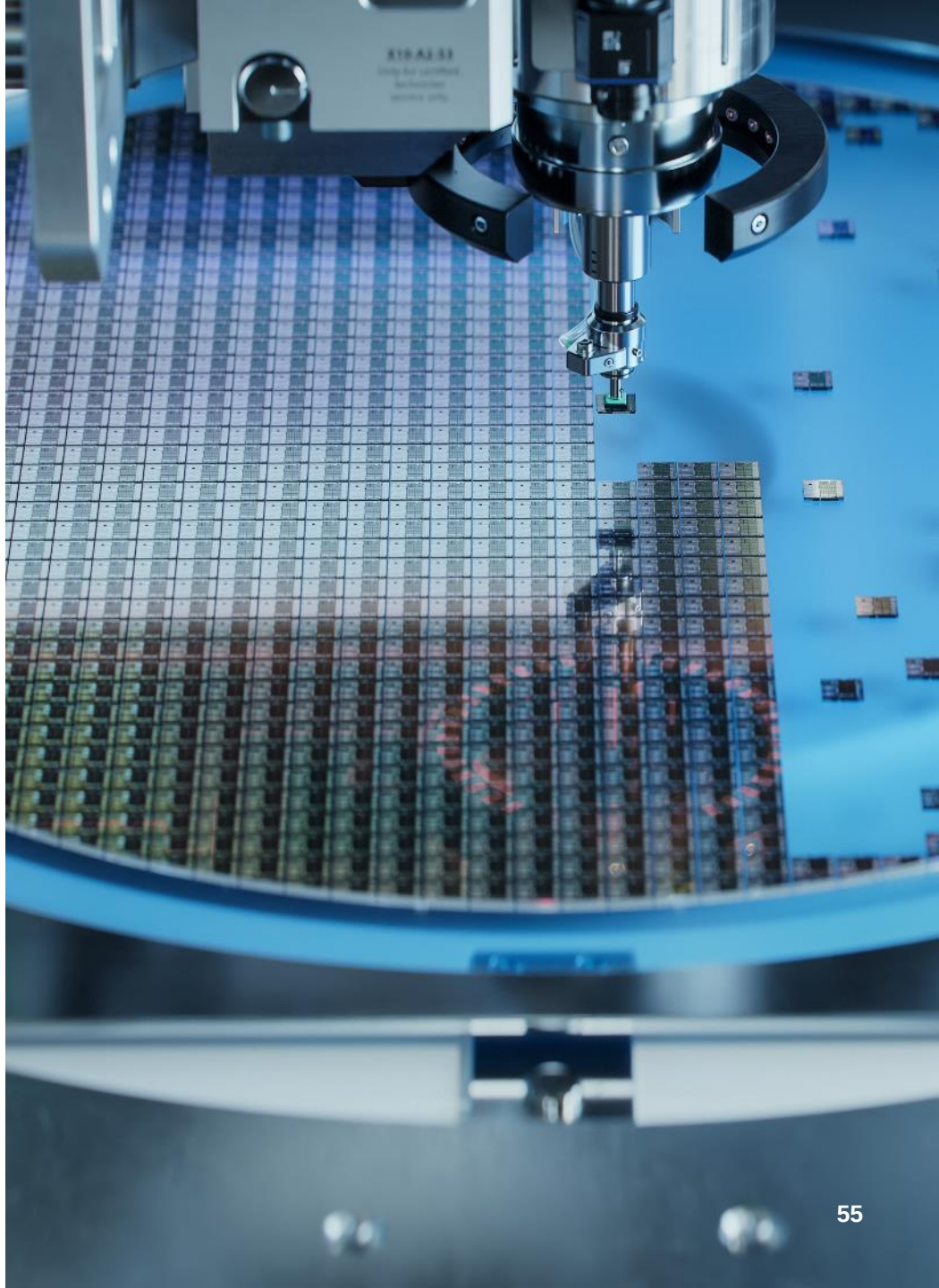


INNOVATION IN CERAMICS FOR BACK-END-OF-LINE EQUIPMENT

- Speed of wafer stage movements is increasing in wafer probing, wafer dicing, chip to wafer bonding and wire bonding
- Requires new materials that reduce the effects of vibration and transient thermal dissipation from motorized assemblies
- Metal matrix composite products feature tight tolerances, high surface flatness, high stiffness, high thermal conductivity and low weight

Metal matrix composite

Reaction-bonded SiC



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SERVICE IS PART OF OUR OVERALL SEMICAP OPPORTUNITY

Service revenue scales with

- Laser installed base
- Laser utilization

Service strengthens customer intimacy

- Customers are assured that their large investments in semicap equipment can be serviced
- Drives long-term partner relationships: on the order of 20 years or more

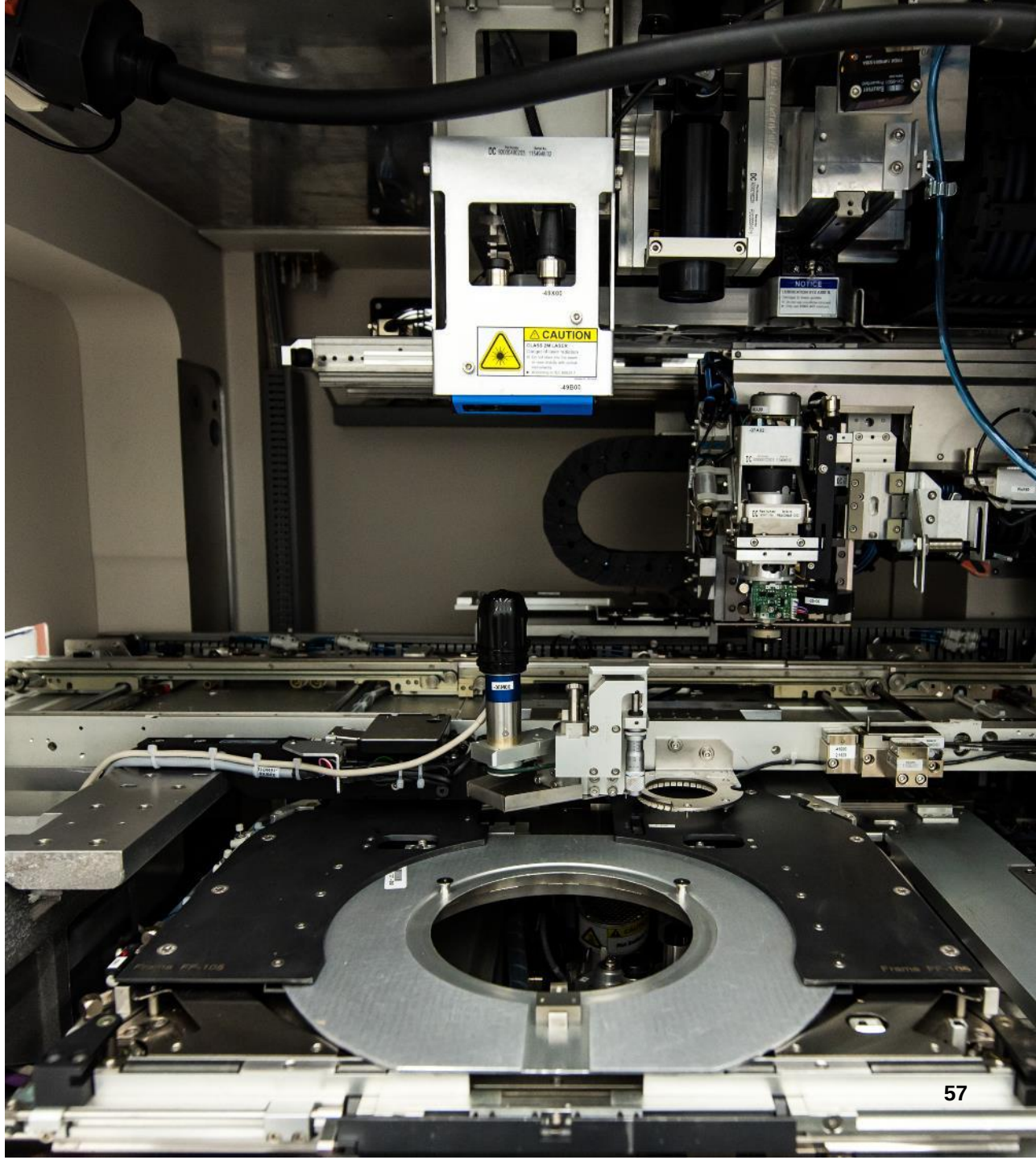
NEAR-TERM AND LONGER-TERM OUTLOOK

Recent performance

- Semicap revenue attained a new record level on the back of 11% year-over-year growth
- Revenue strength in front-end-of-line more than offset softness in back-end-of-line

Outlook

- In FY24 2Q, back-end-of-line business will moderate as production cuts have worked their way through the supply chain
- In FY24, Semicap will reach a new record revenue



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EXCIMER LASERS: VERSATILE PLATFORM ADDRESSING NUMEROUS APPLICATIONS

Dr. Kai Schmidt – Senior Vice President Coherent & General Manager Excimer Business Unit

WHAT HAVE DISPLAYS, CARBON FREE ENERGY GENERATION, SEMICONDUCTOR MANUFACTURING AND OPHTHALMOLOGY IN COMMON?

Displays

Display Market

CAGR 4%
2023-28

Source: DSCC
and internal estimates

Fusion Energy

Fusion Energy Market

CAGR 6%
2023-28

Source: Precedence Research
and internal estimates

EXCIMER LASER

EUV **UV** NIR IR

Semiconductors

Inspection Market

CAGR 7%
2023-28

Source: TechInsights

Ophthalmology

LASIK Market
CAGR 4%
2023-28

Source: BCC Research
and internal estimates

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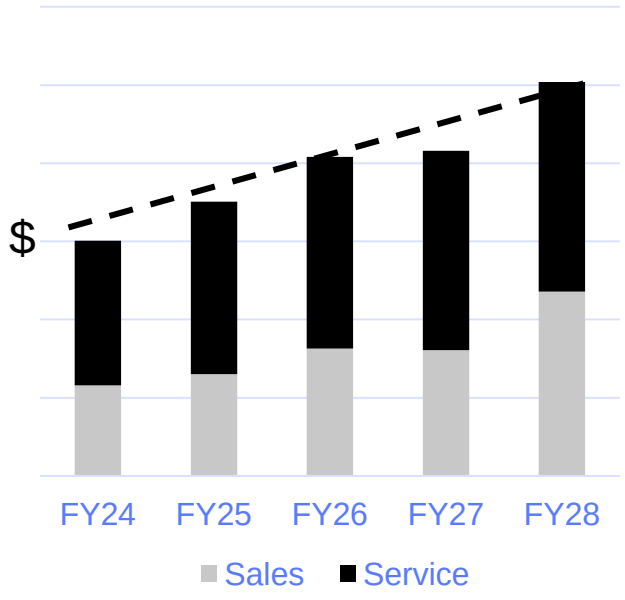
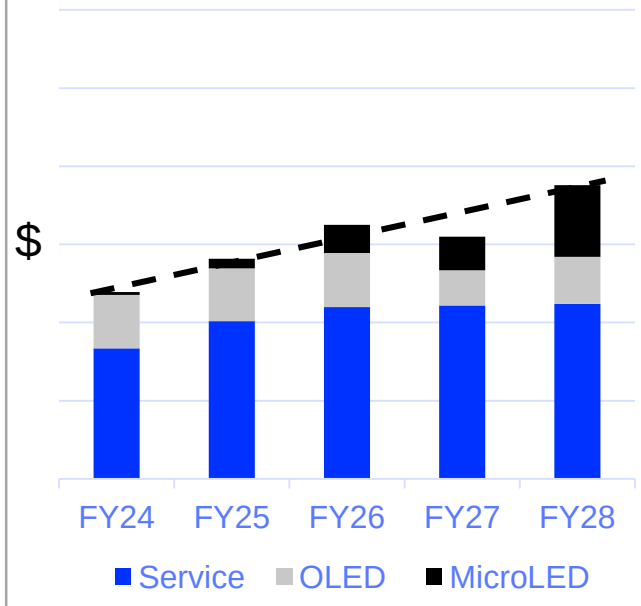
BUSINESS PROJECTIONS – FIVE YEAR REVENUE FORECAST

Total Excimer



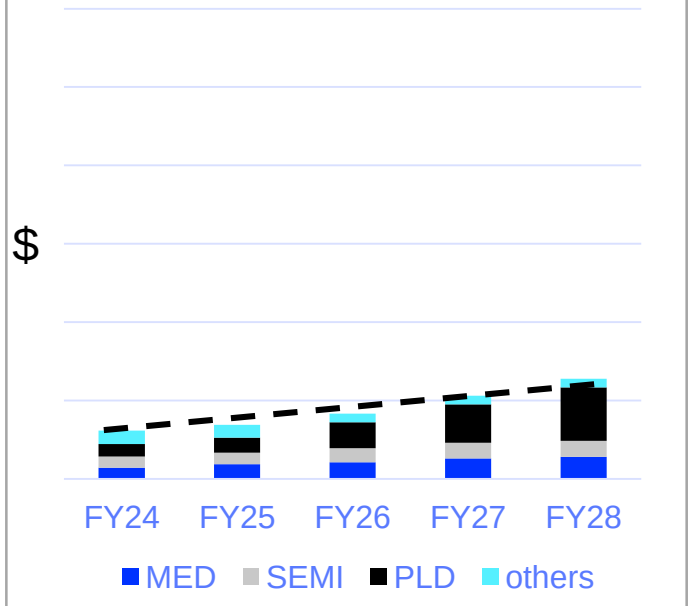
Excimer Revenue **CAGR 10%** (1)

Display Equipment



Excimer Revenue **CAGR 8%** (1)

Medical, Semi, PLD, others



Excimer Revenue **CAGR 20%** (1)

(1) CAGR from FY23 to FY28

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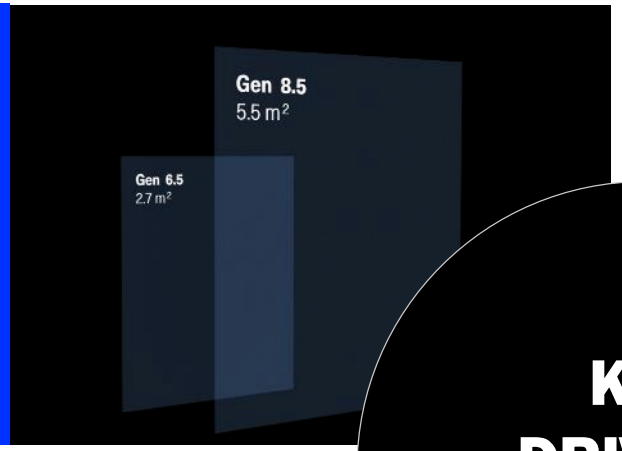
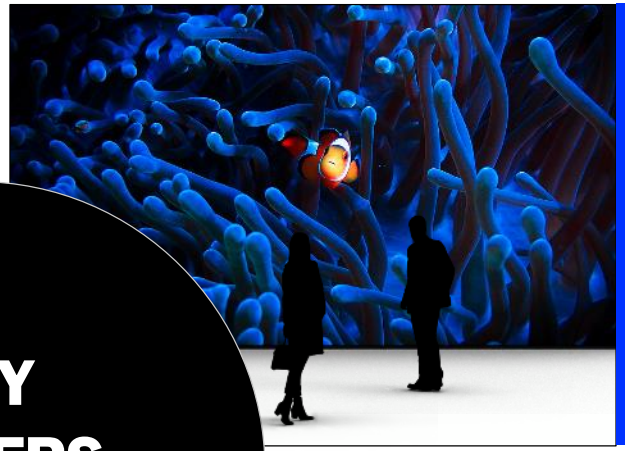
KEY DRIVERS OF TOTAL EXCIMER LASER REVENUE FIVE YEAR CAGR OF 10%

OLED displays for tablets and notebooks





MicroLED display for TV

KEY DRIVERS
of Total Excimer Laser Revenue

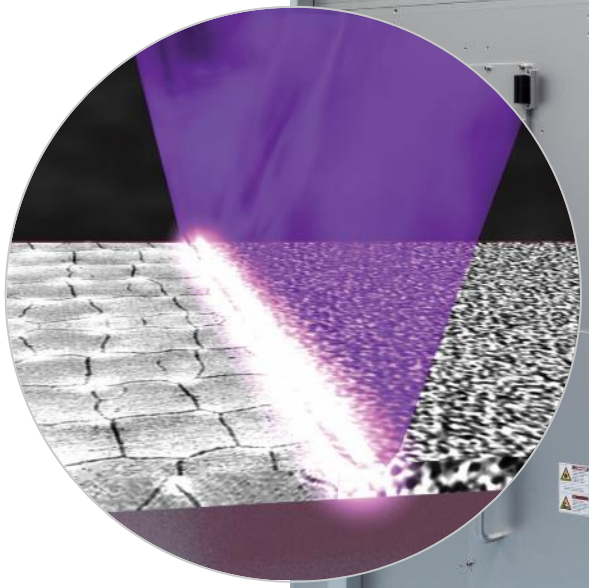
LASIK procedures for vision correction

Superconductors for fusion reactors

COHERENT

EXCIMER LASER ANNEALING

The de-facto standard and process of record for annealing OLED displays worldwide



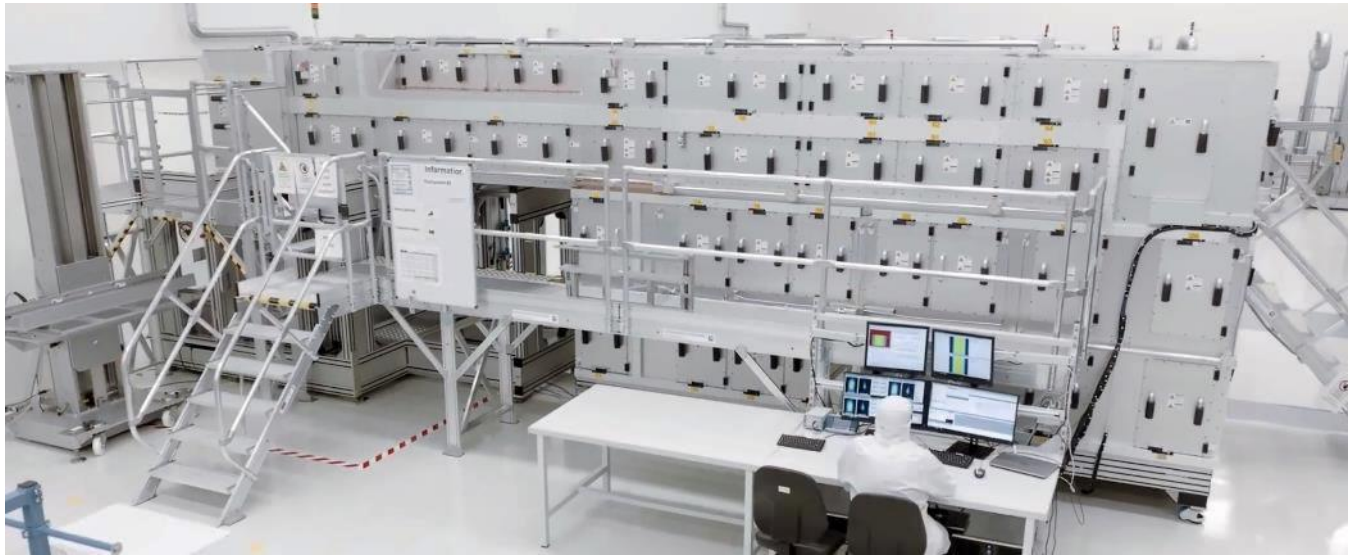
COHERENT

NEXT INVESTMENT CYCLE: MANUFACTURING LARGER DISPLAYS FOR IT DEVICES

The OLED industry is scaling up from Gen-6 to Gen-8 OLED display fabs:

- To achieve economies of scale
- To enable OLEDs in IT devices: tablets and laptops

First Gen-8 fabs expected to come online in late calendar year 2024, both in Korea and China



COHERENT

FROM OLED TO microLED

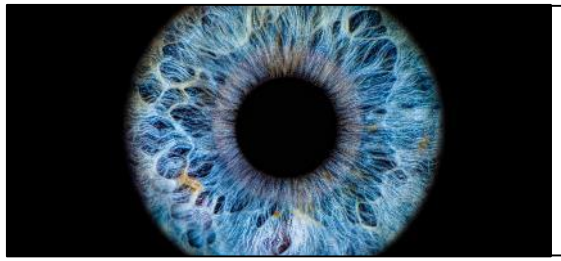
For very large TVs and tiny wearable displays

Potential for $1 billion of incremental revenue over the next ten years assuming:

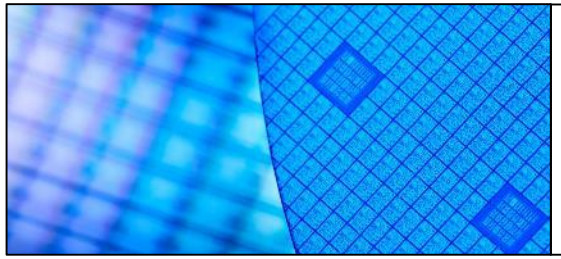
- MicroLED TVs larger than 60-inch will represent 10% of TAM
- Approximately 4M TVs on average annually

COHERENT

LIFE SCIENCES, SEMICAP EQUIPMENT & PRECISION MANUFACTURING VERTICALS



Laser Vision Correction



Inspection

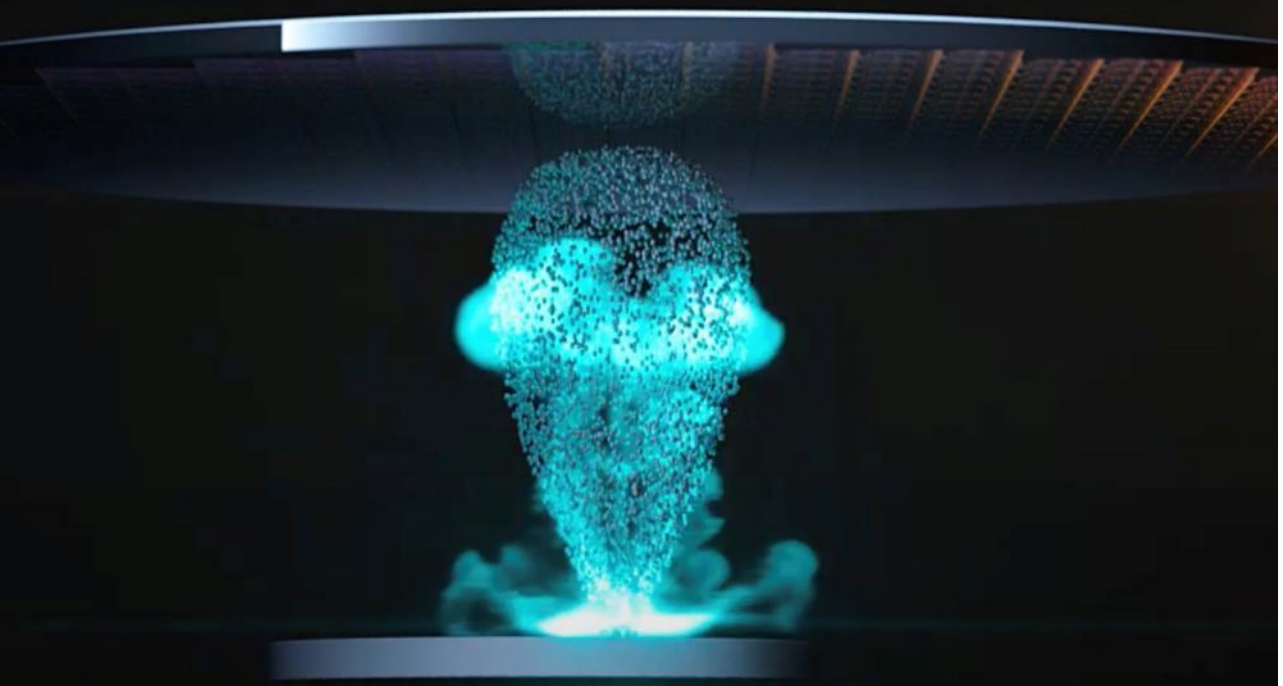
Diamond Marking

Wavelength: 193 nm

COHERENT

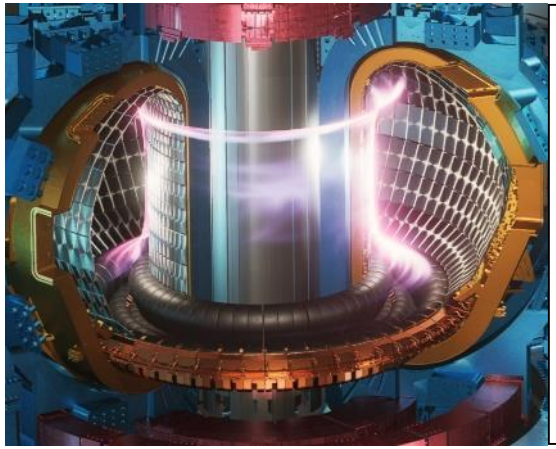
PLD

PULSED LASER DEPOSITION



COHERENT

WIRELESS ELECTRONICS AND ENERGY



Superconducting tapes for fusion reactor

20,000 km tape for every fusion reactor

5G/6G filters for smartphone antenna

50 billion antennas required by 2030

OUR EXCIMER LASER SERVICE BUSINESS

GLOBAL REACH LOCAL FOCUS

- Worldwide 24/7 customer service and support
- Customer-tailored maintenance and service contract
- Technical support
- Global logistics services
- Spare parts, certified accessories, options, and consumables

Greater than

98%

Installed base in Asia

Greater than

200

Annealing systems supported

COHERENT

Q&A

Paul Silverstein
Vice President,
Investor Relations &
Corporate Communications

Dr. Sanjai Parthasarathi
Chief Marketing Officer

Martin Seifert
Vice President,
High-Power Fiber Laser
Business Unit

Dr. Christopher Dorman
Executive Vice President
Lasers Business

Dr. Kai Schmidt
Senior Vice President and
General Manager
Excimer Lasers Business
Unit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