

Focuslight Corporate Overview

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2026-09

Focuslight Overview

- Founded in 2007 by Dr. Victor X. Liu, headquartered in Xi'an, China.
- A fast-growing company that develops and manufactures:
 - **Laser sources and materials** (Photon Generation)
 - **Optical components** (Photon Control)
 - **Photonics module and system solutions** (Application Solutions) focusing on **optical communication, consumer electronics, and pan-semiconductor applications**.
- A **global photonics foundry** offering process development and manufacturing services to the global photonics community.
- Publicly listed in the Shanghai Stock Exchange (Ticker Symbol: 688167).



Milestones



2007

Founding of Focuslight



2018

Dongguan delivery and high-volume manufacturing center officially in operation

IPO

2021

Successful IPO at Shanghai Stock Market



HEPTAGON

2024

Acquisition of ams OSRAM's optical component assets;
Relaunch of Heptagon brand



2025

Hefei Base officially in operation



LIMO

Lissotschenko Mikrooptik

2017

Acquisition of LIMO;
Started providing photon control and photonics application solutions

FOCUSLIGHT
Never stop exploring

2019

Global branding identity upgrade



2024

Acquisition of SUSS MicroOptics

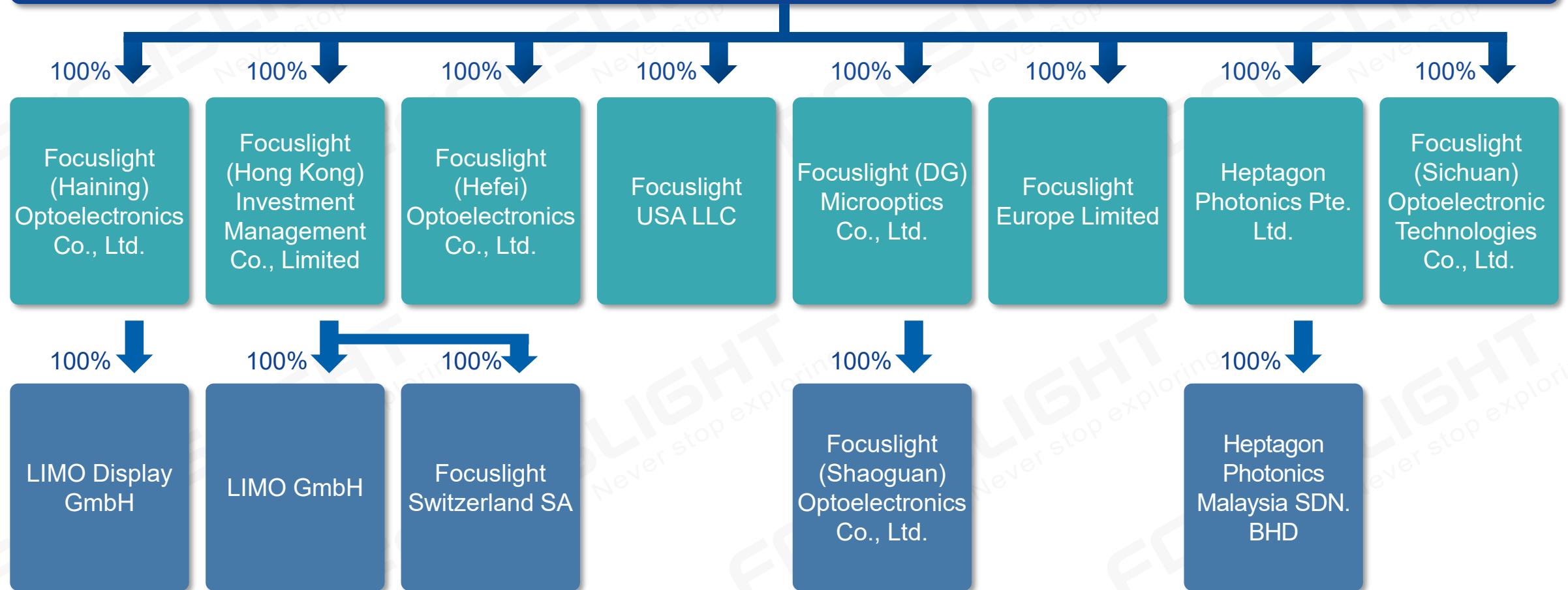


2024

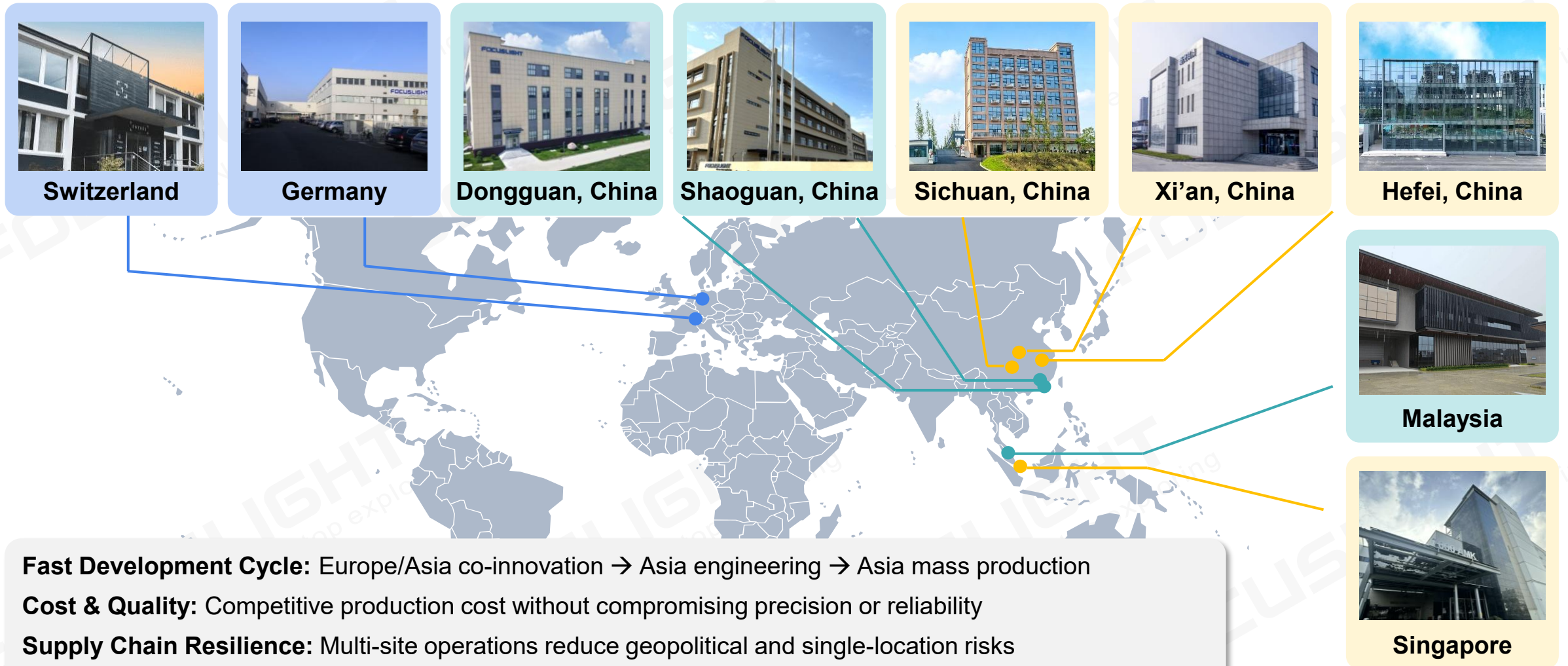
Shaoguan Base officially in operation

Focuslight Corporate and Subsidiaries

Focuslight Technologies Inc.



Focuslight Global Operations System



Key Facts & Figures



Employees

>1,000



Revenue Proportion Invested
into R&D (2026 H1)

~20%



Yearly Revenue
(2025)

880M RMB



Patents Valid
Worldwide

>420



Facility Worldwide

>60,000m²

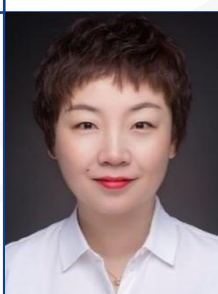
Clean Room Worldwide

>19,000m²



ISO 9001
ISO 14001
ISO 45001
IATF 16949
Certified

Corporate Management Team

 Dr. Xingsheng Liu (Victor) Chairman, CEO Research and management experience in the US, with 100+ publications, 300+ patents, 30+ invited papers internationally Committee Member of SPIE and IEEE CORNING COHERENT nLIGHT	 Dr. Chung-En Zah CTO 30+ years of research experience in the US, with 300+ publications, 50+ patents in optoelectronics and telecommunication IEEE Fellow, OSA Fellow, 2x R&D 100 award winner THORLABS CORNING Belcore at Bell Communications Research	 Mr. Sinclair Vass Corporate SVP of International Sales & Business Development 35+ years experience in international photonics markets, having held technical, commercial and general management leadership roles at major multinational companies Velodyne JDSU Lucent Technologies Bell Labs Innovations 
 Mr. Tan Chee Huo (Michael) Corporate SVP of Business Process and IT 25+ years in IT leadership, specializes in digital business transformation, global project management, multicultural team leadership in fast-paced international industries, and strategic decision-making NOKIA ThermoFisher SCIENTIFIC Tupperware EVIDENT	 Mr. Guowei Zhu (Gavin) Vice President of Global Operations 20+ years in international automotive companies, rich experience in IATF QMS and plant operations management by World Class Manufacturing (WCM) & Lean manufacturing MAGNETI MARELLI BorgWarner CST SEITON AUTOLEATHER	 Mr. Lucas Zhang Vice President of Global Operations 20 years of global supply chain management experience at multiple Fortune 500 companies, with strong expertise in supply chain planning and management within the consumer electronics industry  HUAWEI LCFC 
 Mr. Ye Dai (Robert) Corporate VP of Global Sales Excellent track record in worldwide sales, product line and business unit management leadership roles 20+ patents granted IVO APPLIED MATERIALS	 Ms. Yiping Ye (Alison) Board Director, CFO Over 20 years management experience and multi-field business practices In-depth understanding in LTC, IPD, intercultural cooperation and rich operational experience in market development, project operation and business management  HUAWEI Hanergy 汉能	 Mr. Qichuan Yu Chief Product/Process Officer Over 25 years of experience in wafer-level optics, optical sensor and camera packaging, SAW/BAW filter R&D, and NPD execution, with a strong focus on mastering, tooling, and wafer-level processes amun OSRAM HEPTAGON 

Corporate Management Team



Ms. Xuefeng Zhang (Jennifer)

Board Director, Board Secretary, Marketing Director

Over 15 years photonics industry international business experience, in-depth understanding and rich experience in sales, marketing and business development



Mr. Hong Wang

Corporate R&D Director

PhD in physics and Master in computer science. 20+ years in quantitative analytics, capital market risk modeling and architecting. Expert in building analytic infrastructure and system. Rich experience in multinational team management.



Mr. Dirk Walter Bogs

Corporate VP, President of Laser Optics BU

Over 25 years' experience in ultra-precision tooling, optic manufacturing, engineering & project management, and operational management
Very deep knowledge of technology development and optimization



Mr. Yong Tian (York)

Corporate VP, VP of Laser Optics BU

20+ years of operation & R&D management, very deep knowledge with organic optical materials and optical coating technology, published SCI articles and owns patented technologies. Experienced in Lean Manufacturing & Industry 4.0



Mr. Weiyi Gu

President of Laser Source and Applications BU

13 years experience in photonics R&D and product management, with rich track records of leaderships in developing and delivering system solutions for pan-semiconductor and industrial applications



Mr. Vicknes Ratha Krishnan

VP of Laser Source and Applications BU

Proven business leader, 16+ years in program and product management within optoelectronics and semiconductors, working with multinational companies and top-tier customers.



Mr. Hongyuan Liu (Tom)

President of Global Photonics Foundry BU

20+ years in R&D and operations management, specializing in optical imaging and non-imaging system design, WLO process & integration, and optical component manufacturing. Proven track record in new product development and scaling high-volume production



Dr. Tobias Senn

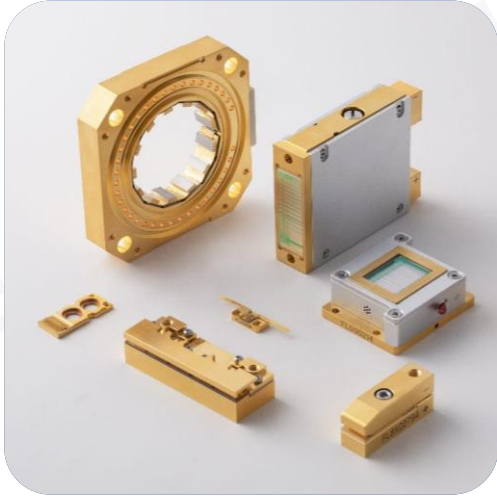
Head of Strategic Growth R&D

15+ years of experience in micro-optical component development for the consumer market. Expert in design for manufacturing and process development, with a strong focus on high-volume production and yield improvement



Business and Branding

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Photon
Generation



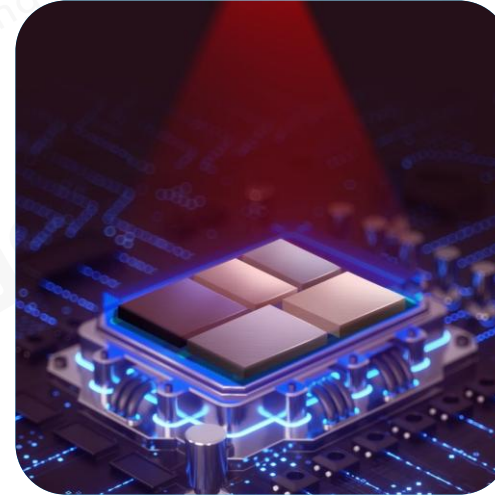
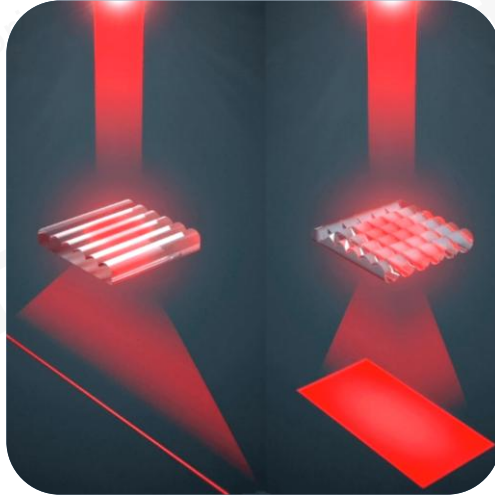
Photon
Control



Photonics
Application
Solutions



Global
Photonics
Foundry

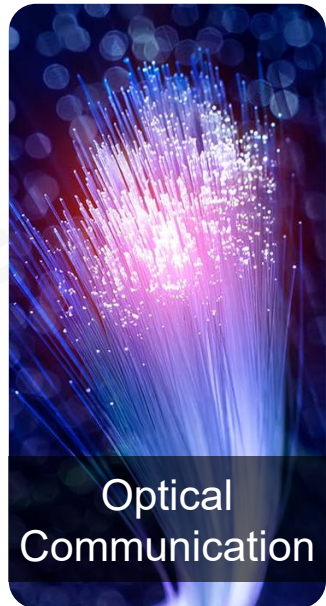


FOCUSLIGHT
Never stop exploring



 **HEPTAGON**

Markets



16%
revenue



7%
revenue



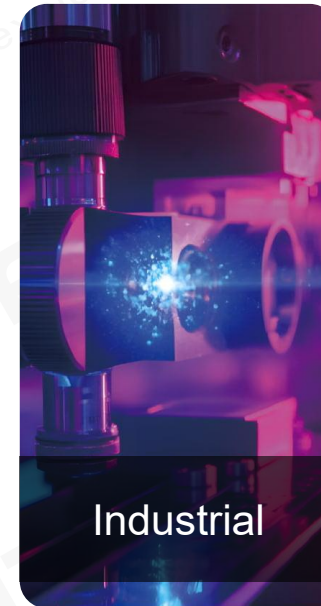
27%
revenue



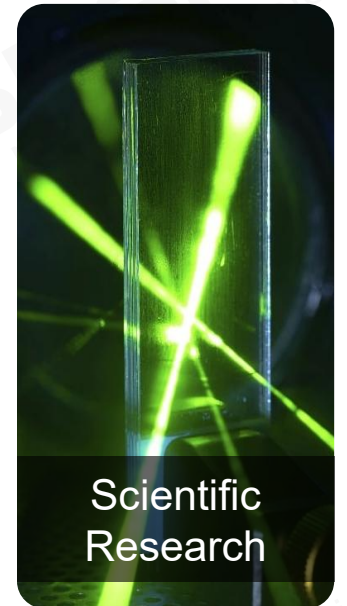
13%
revenue



11%
revenue



25%
revenue



1%
revenue

** Based on accumulated revenue data from 2026 H1 with rounded figures*

Value Proposition

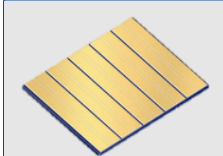
Total Solution and Service in Full Value Chain

Raw
Materials

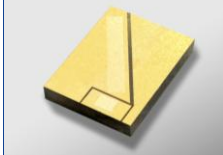
Components,
Devices

Modules,
Subsystems,
Application
Systems

Solution,
Support,
Service



Chips (Strategic
collaboration
with Suppliers)



Submounts



**Optics
Substrate**



Light Sources



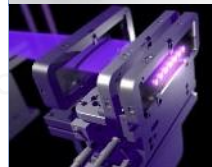
**Optical
Components**



**Pumped
Modules**



**Laser
Subsystems**



**Optical
Subsystems**



**Integrated
Modules**



**Application
Centers**



**Technical
Support**



**Field Service
Centers**

Industry Leader + Strong Financial Backing + Healthy Stable Company + Invest in the Future



Do what we do best

Offer the best value

Optimize to the extreme

Achieve the best
performance / quality-to-
price ratio

Commitment to Customers

- Lowest cost manufacturing for high volume products
- Willing to take technical risk, but request customer commit market share in return
- Willing to take investment risk in R&D and capital including M&A for customer but request customer commit market share in return
- Collaboration transparency, fast response, IP protection and long-term partnership



What we don't do

Take high market risk

Be greedy

Be too aggressive

Compete against our
customers

Vision

To unlock the potential of photonics
to enhance and enrich people's life



Mission

*Be the global trusted photonics solution provider
through innovation, operational excellence
and fast response*

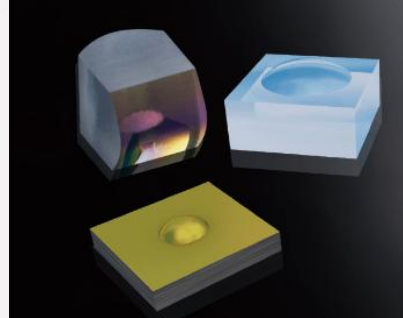
Products and Services

Optical Components

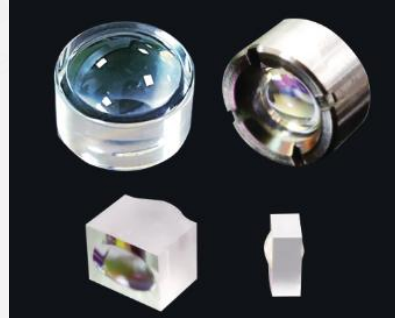
Single Lenses



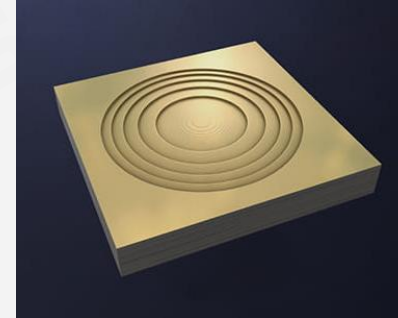
FACs



Fiber Couplers and Collimators



Focusing Lenses and
Biconic Lenses



Collimating DOEs



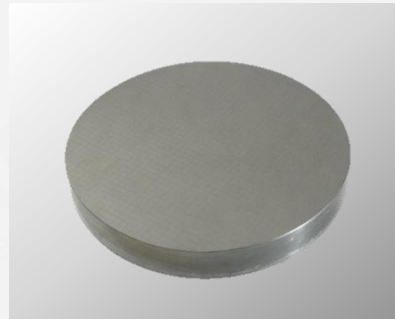
Concave/Convex
Conical Lenses



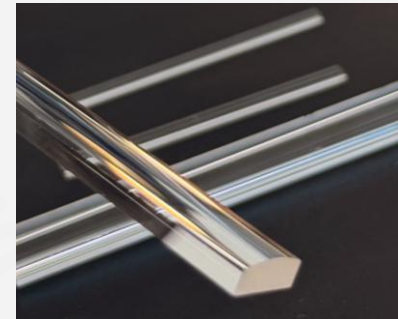
Waveplates



Beam Splitting Prisms and
Corner Cube Prisms



Large Plano Optics



Large Cylindrical Lenses



Large Spherical Lenses

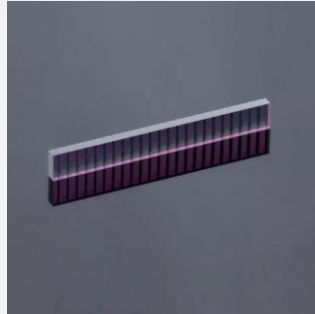
Products and Services

Optical Components

Linear Lens Arrays



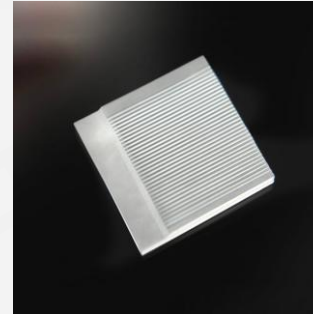
Fiber Coupling and
Collimating Arrays



SAC Arrays



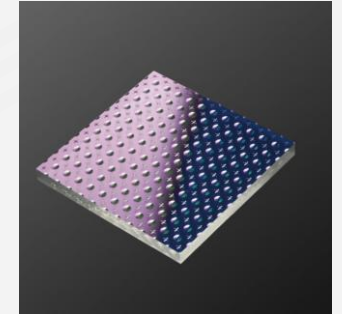
BTS



Engineered V-groove Arrays

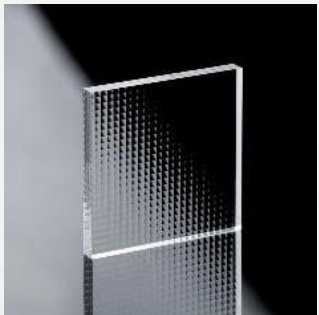


Microprism Lens Arrays



N x N Large Lens Arrays

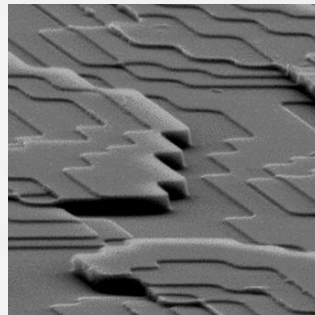
Area Lens Arrays



Homogenizers



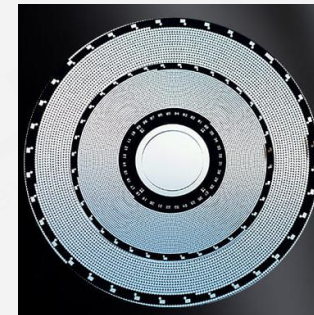
Diffusers



DOE Beam Splitters,
Dot or Line Generators

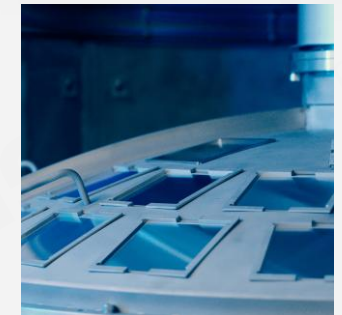


Shack-Hartmann
Arrays



Pinhole Arrays

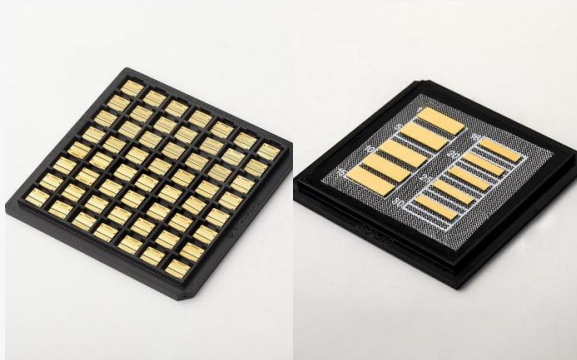
Technical Services



Optical Coating

Products and Services

Laser Sources and Materials



Advanced Materials

- AuSn Pre-Deposited AlN Submounts
- AuSn Pre-Deposited CuW Submounts



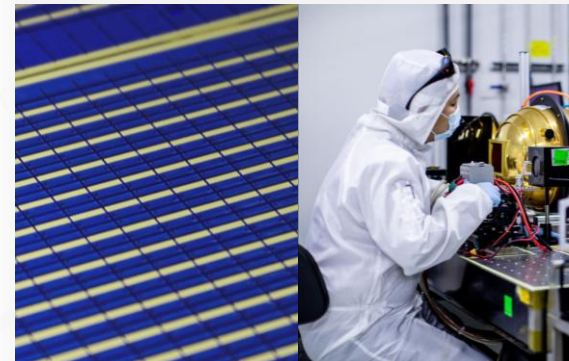
Open-Package Diode Lasers

- Single Emitter Components
- Single Bar Components
- Micro-Channel Cooled Stacks
- Conduction Cooled Stacks
- Pumped Modules



Fiber-Coupled Diode Lasers

- Emitter-Based Modules
- Bar-Based Modules



Technical Services

- Thin Film Metallization Service
- Diode Laser Manufacturing Service

Products and Services

Medical and Health Application Solutions

Laser Hair Removal Engines and Laser Treatment Modules



Laser Skin Rejuvenation Modules



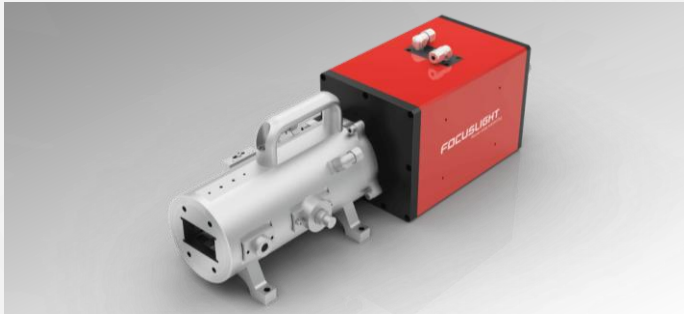
Diode Laser Drivers



Products and Services

Pan-Semiconductor Application Solutions

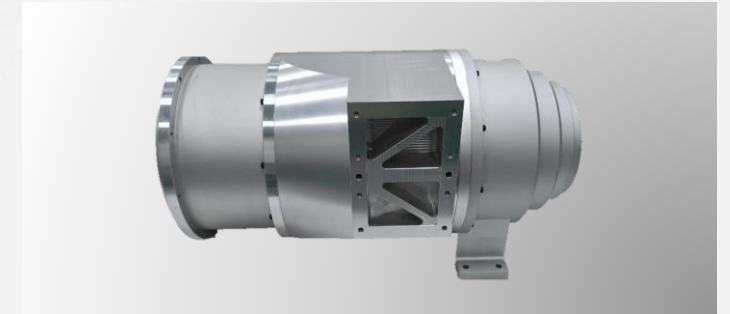
Advanced Display Manufacturing



IC Wafer Annealing System



Variable Beam Laser System
(Advanced Chip Packaging)



Precision Optics Modules

IC Manufacturing



Laser Lift-Off (LLO) /
Laser Annealing (LA) System



Variable Beam Laser System
(Mini and Micro LED Processing)

Technical Service



Precision Optical
Assembly Service

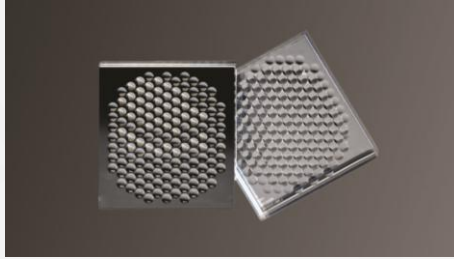


End-to-end Technical
Service

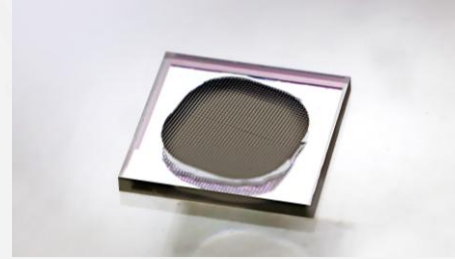
Products and Services

Consumer Electronics Solutions

Beam Shaping and Pattern Generating



Pattern-Generating MLA

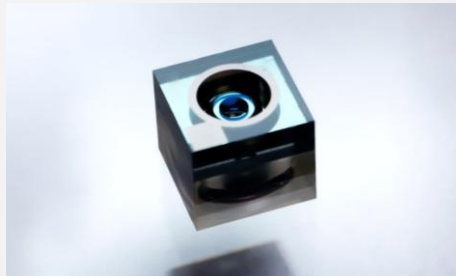


Engineered PoG Diffusers



Diffractive Optical Element (DOE)

Imaging and Projection

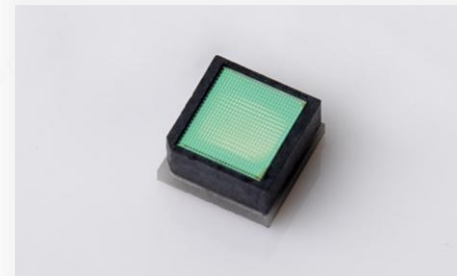


Imaging Lens Modules



Projection Lens Modules

3D Sensing



Sensing Modules

Semicon Foundry

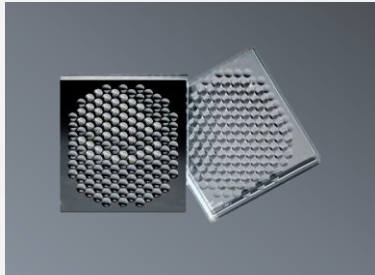


Optical Component and Module
Imprinting Service on Si Wafers

Products and Services

Automotive Application Solutions

Projected Lighting

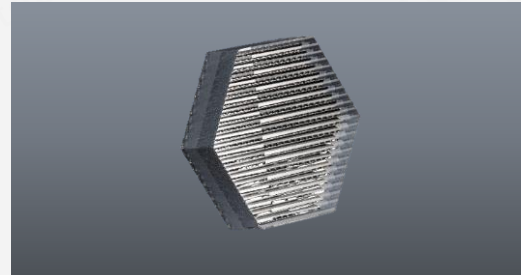


MicroLens Arrays for
Projection



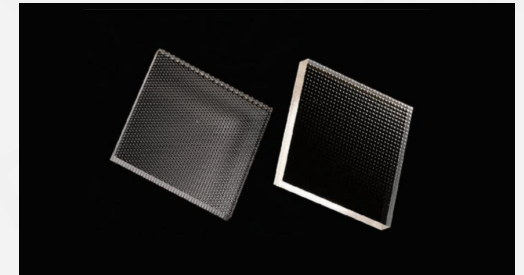
MLA-Based
Dot Projectors

Smart Headlights



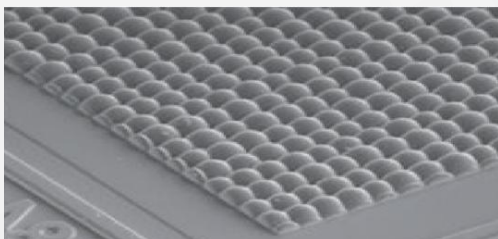
MicroLens Arrays

Driver Monitoring System



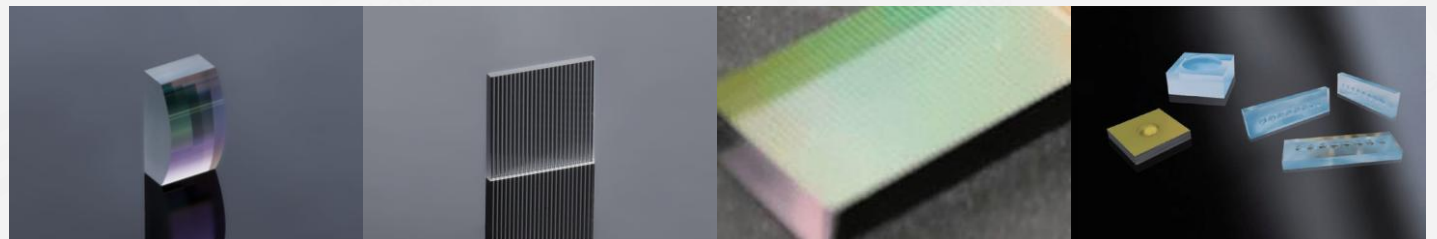
Homogenizers / Diffusers for
Illuminators

AR HUD)



Homogenizers / Diffusers

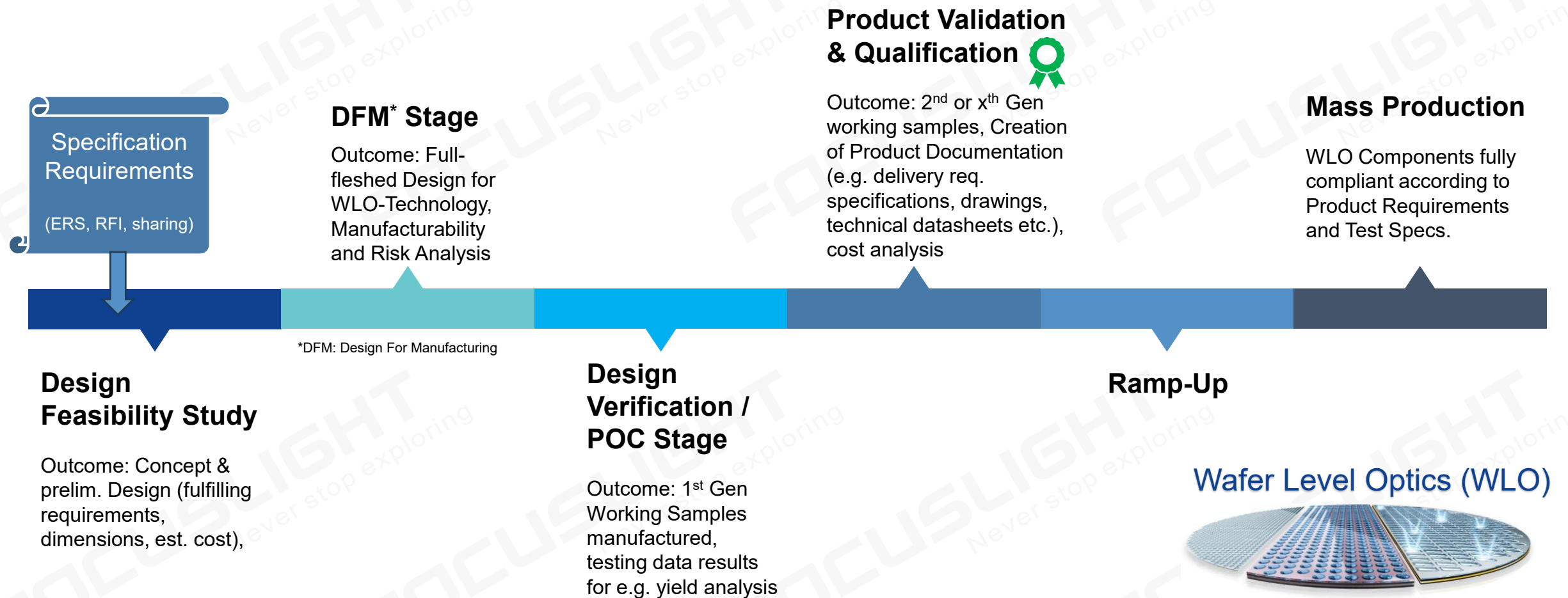
LiDAR



Beam Shaping Optics: Fast Axis Collimators, Diffusers, Homogenizers, Collimators and Arrays

Global Photonics Foundry Services

From Concept to Mass Production

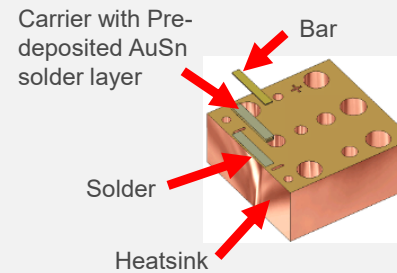


Core Competence

Diode Laser

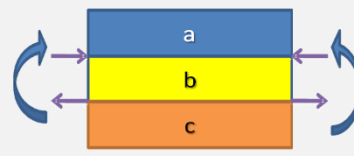
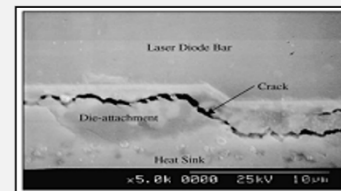


Eutectic Bonding



Significantly enhances thermal conductivity, reducing thermal stress, and thus improving the products' performance and lifetime

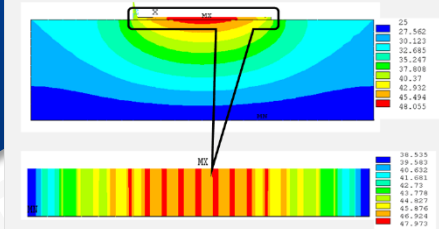
Thermal Stress Control



Lowers and homogenizes the thermal stress, and improve the device performance

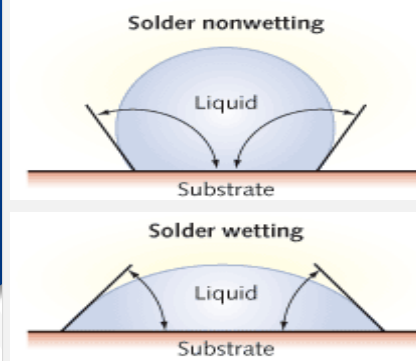
Thermal Management

Finite Element Thermal Analysis and Design



Effectively improves the ability of heat dissipation to ensure a higher output power

Interface Materials and Surface Engineering

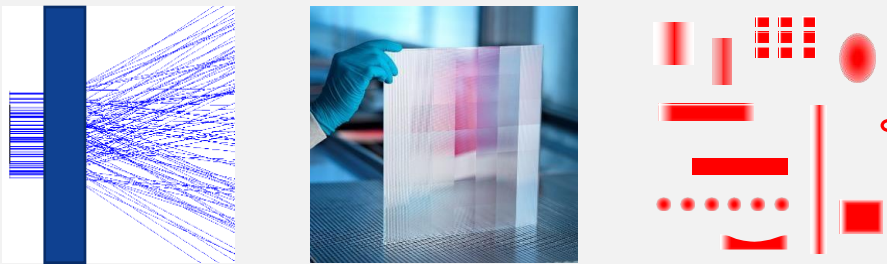


Greatly improves wettability and bonding strength of packaging materials, enhancing long-term reliability

Core Competence

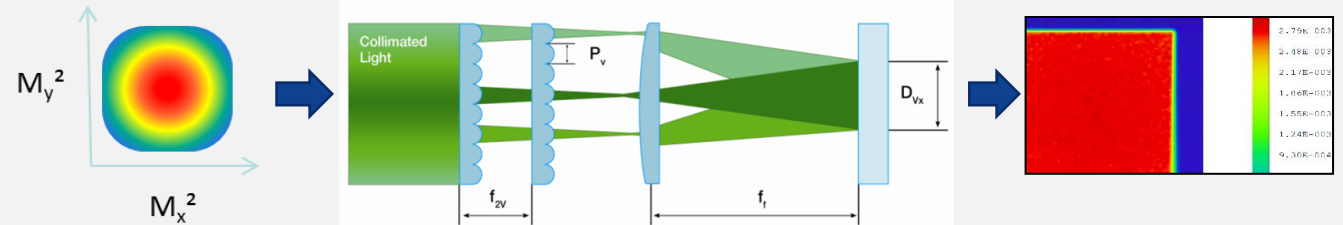
Beam Shaping – *The Right Photon at the Right Place and Time!*

Micro Optics Design and Simulation



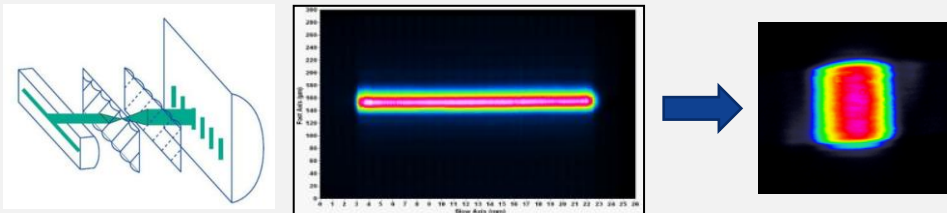
Acyindrical free-form micro-optics / arrays / diffusers /
DOE splitters / beam shaping systems

Homogenization

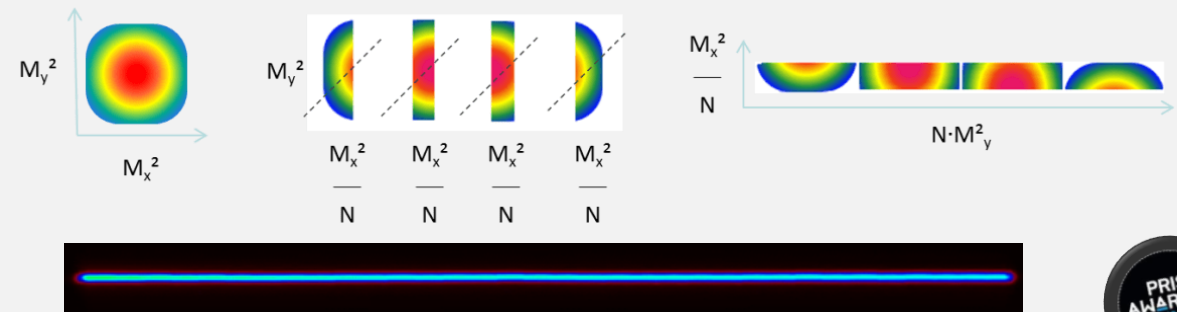


Uniform and homogeneous illumination in any desired shape

Beam Transformation



Asymmetrical → Symmetrical beam

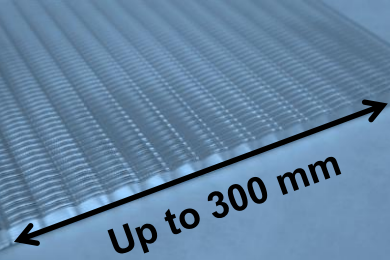
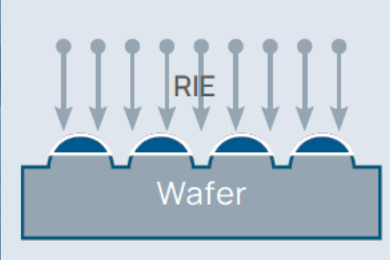
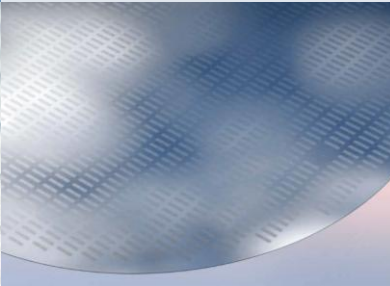
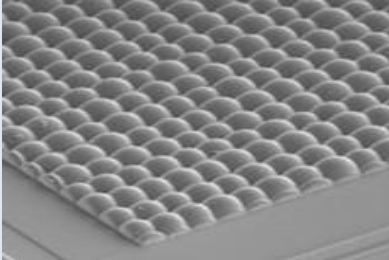
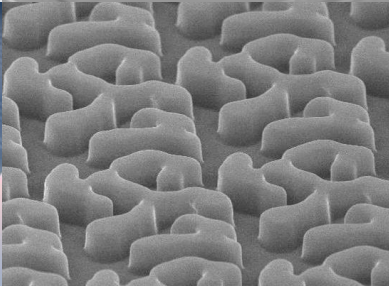
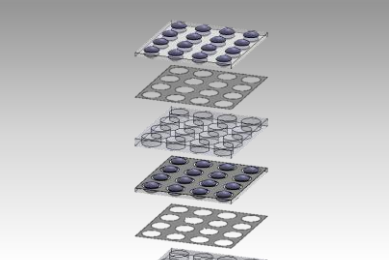
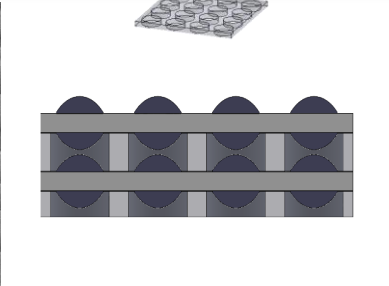
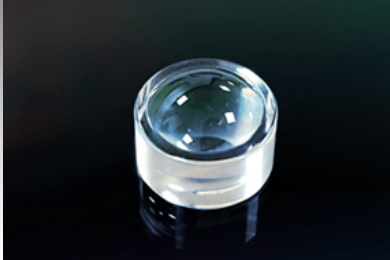
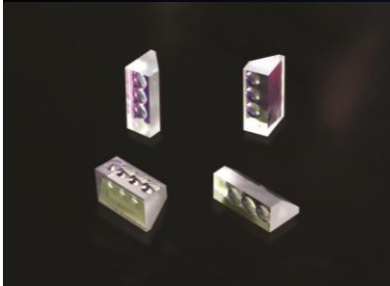


Symmetrical beam → High density line beam

Our UV-L750 System for Laser Lift-Off (LLO) was Prism Awards winner in 2018

Core Competence

Optics Manufacturing

Wafer Level Simultaneous Structuring	Wafer Level Photolithography-RIE (reactive ion etching)	Wafer-Level Optics (WLO) Precision Imprinting	Wafer-Level Stacking (WLS)	Precision Glass Molding	Optical Grinding and Polishing
 	 	 	 	 	 
With inorganic materials: glass, fused silica, silicon, CaF_2		With polymer on glass		With moldable glass	With inorganic materials
High LIDT Optical Coating: Anti-reflection, high-reflection, beam splitter, band filter, and various customization (UV, VIS, IR)					

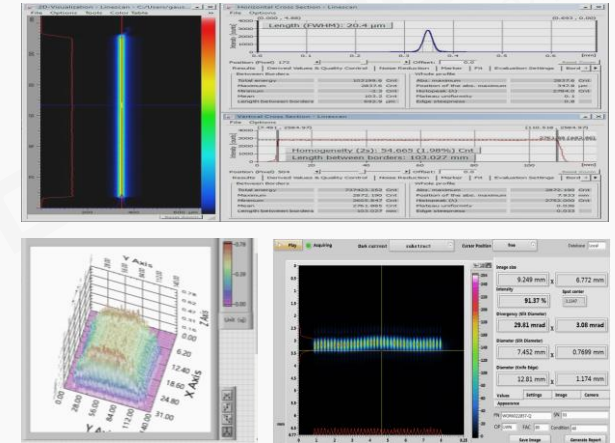
Core Competence

Test, Analysis and Diagnosis

Test and Characterization of High-Power Diode Laser

A comprehensive physical diagnostic model allows full characterization of a set of key parameters, such as:

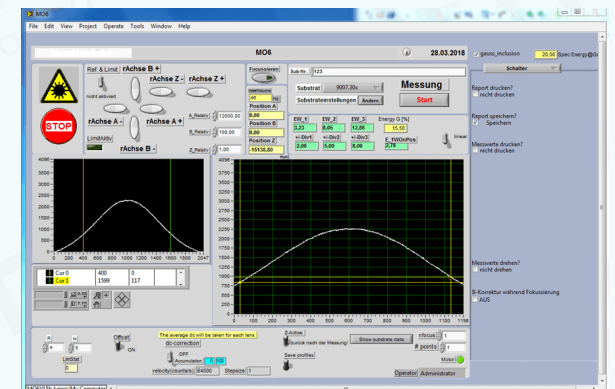
- LIV
- Spectrum
- Polarization
- Far-field / Near-field
- Spatial spectrum
- Spatial polarization
- Spatial beam profile
- Smile effect
- Lifetime



Metrology and Analysis of Optical Components

Wave optics models are used in conjunction with tactile surface measurements for precise analysis of optical functions such as:

- Focusing
- Collimation quality
- Beam uniformity



A Unified Quality Management System

Governance Framework That Drives Enterprise-Wide Quality Excellence

ISO9001 Certified Quality Management System (QMS)

ISO14001 Certified Environmental Management System (EMS)

IATF16949 Certified Automotive Quality Management System

ISO45001 Certified Occupational Health and Safety Management System

Failure Mode and Effect Analysis (FMEA)

Statistical Process Control (SPC)

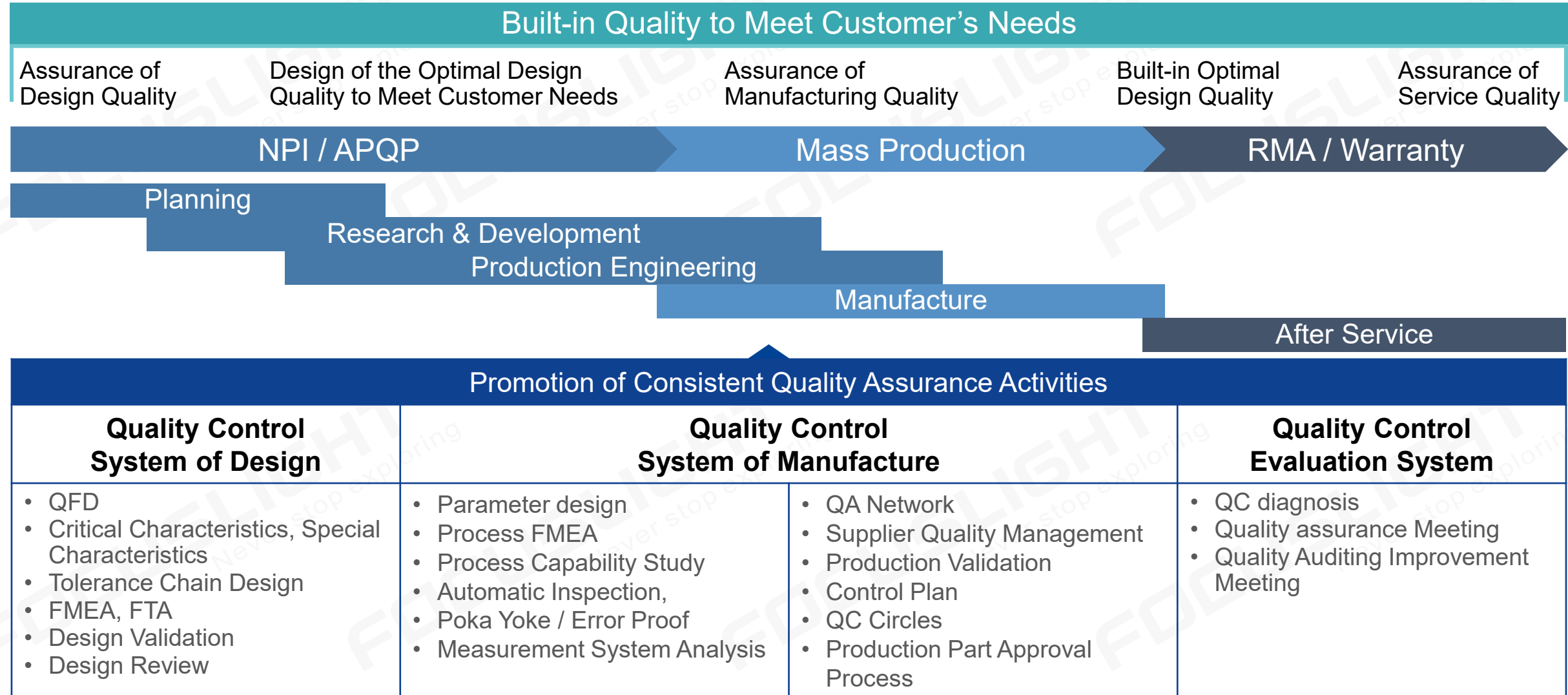
Production Traceability Database

Control Plan (CP)



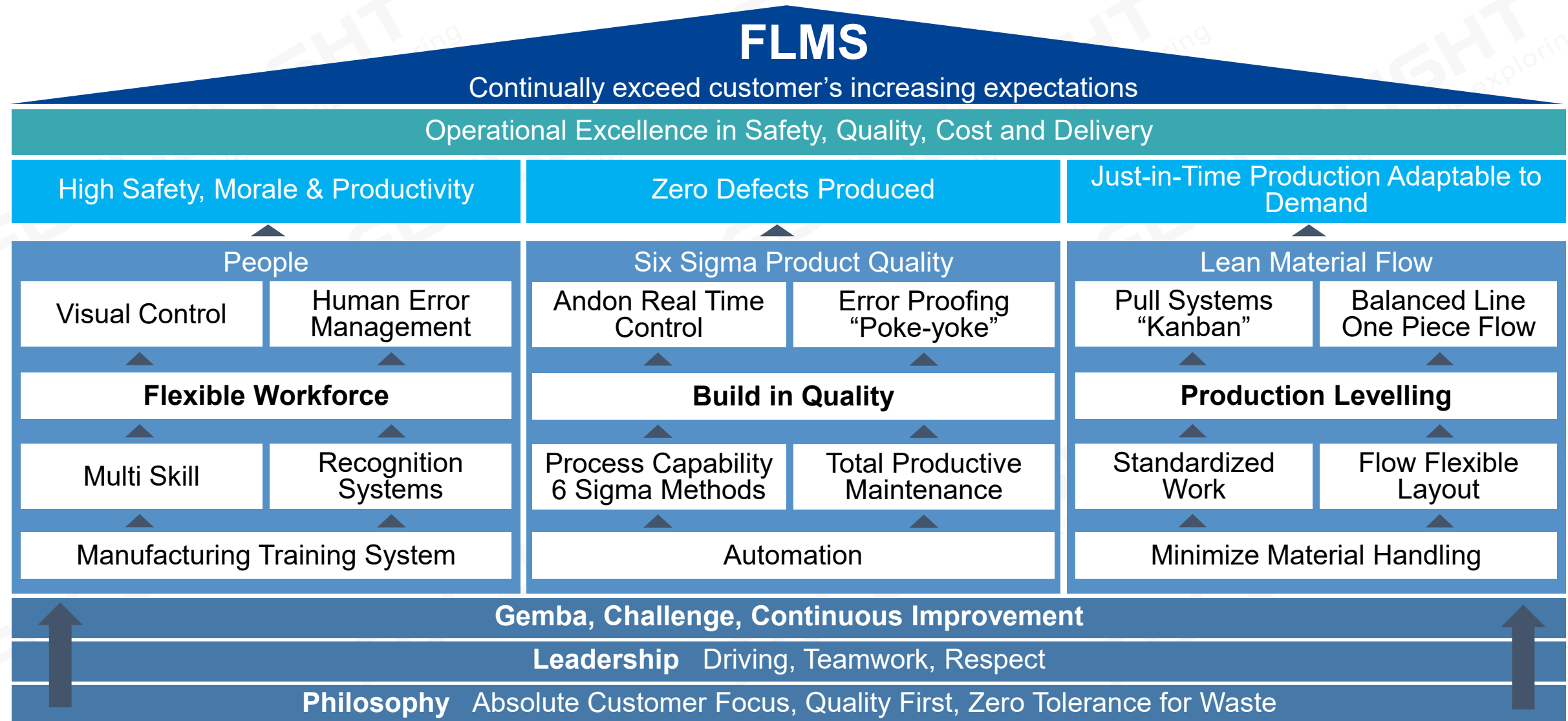
Quality Assurance System

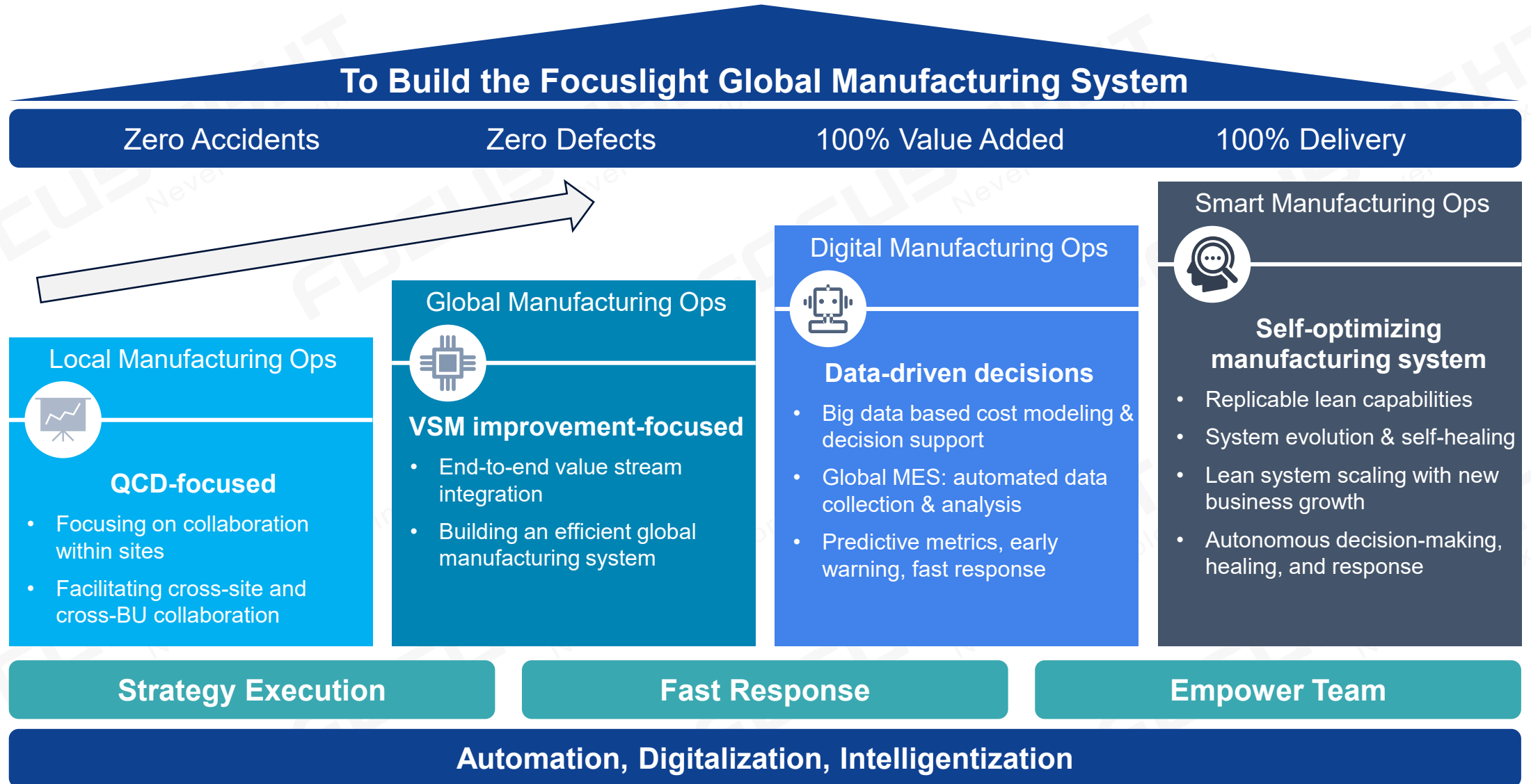
Ensuring Product Reliability Through Rigorous Controls and Verification



Focuslight Manufacturing System (FLMS)

Building Stable, Efficient, and Scalable Production Capabilities





Automation & Smart Manufacturing

FOCUSLIGHT
Never stop exploring

Built on In-House Innovation. Driven by Data. Powered by Execution.



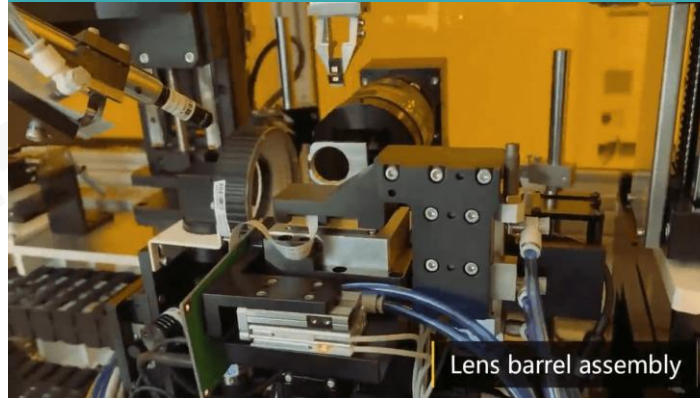
» Driving productivity, quality and flexibility through in-house innovation and continuous improvement.

Automation & Smart Manufacturing

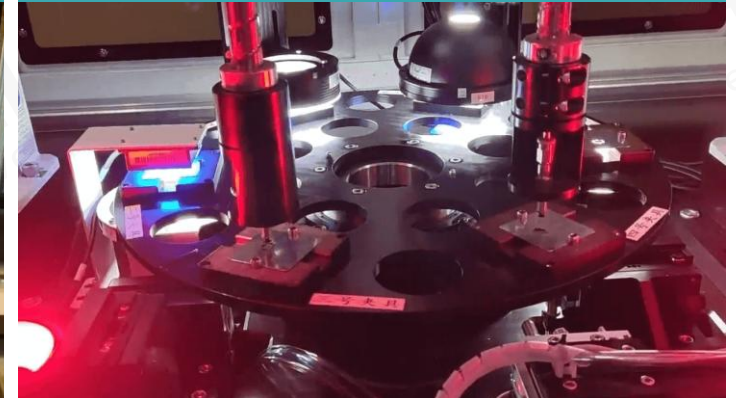
Automatic Optical Alignment



Automatic Assembly



Automated Optical Inspection



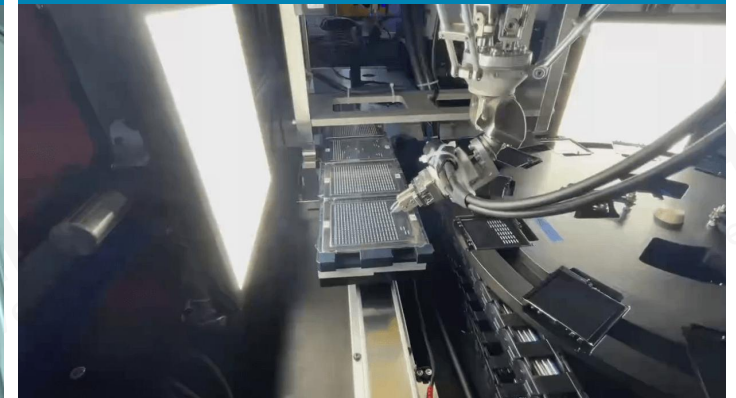
Laser Optics Production Line



Laser Module Production Line



Big Data Powered Production



>60% equipment used in manufacturing are developed in-house by Focuslight

Video Link: <https://www.focuslight.com/news-events/newslist/focuslight-autonotation-powered-manufacturing-excellence/>

Manufacturing Capabilities

Advanced Materials

10+ years high-volume manufacturing experiences + self-owned core technologies

DPC production



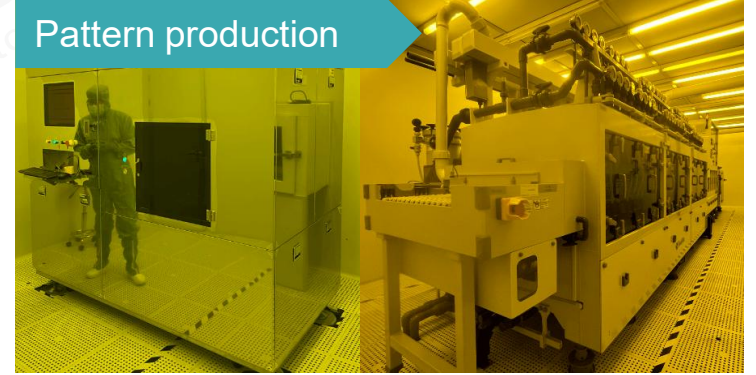
Etching production



Au plating



Pattern production



Cleaning



AuSn deposition



Laser marking



Dicing



AOI inspection



Annual Manufacturing Capacity: 24M ~ 72M submounts (related with product sizes)

Manufacturing Capabilities

Laser Sources

Packaging & Assembling



Optical Assembling



Testing & Measurement



Quality Inspection



Burn-in & Lifetime Test

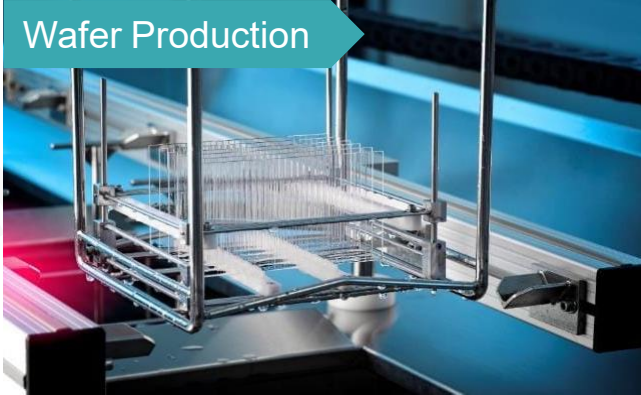


Annual Manufacturing Capacity: > 500K diode lasers
Annual Burn-in Capacity: > 600K diode lasers

Manufacturing Capabilities

Optical Components: Wafer-Level Simultaneous Structuring Processing

Wafer Production



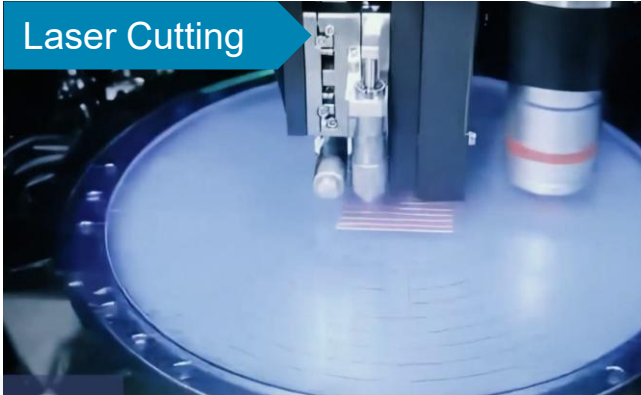
Quality Mapping



Coating



Laser Cutting



Auto Loading



Auto Packing

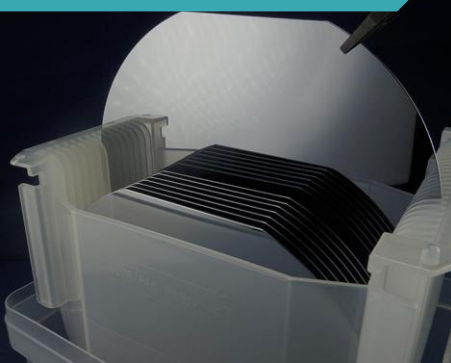


Annual Manufacturing Capacity: > 60M optical lenses (in typical product mix)

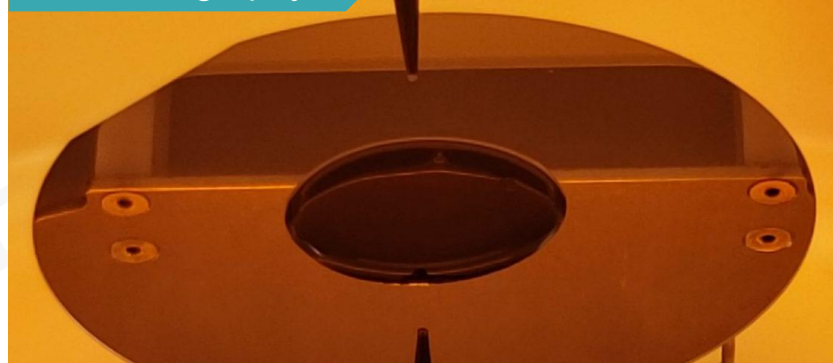
Manufacturing Capabilities

Optical Components: Photolithography-Reactive-Ion-Etching Processing

Wafer Raw Materials



Photolithography



Dry Etching



Thin Film Deposition



Blade Dicing



Pick & Place

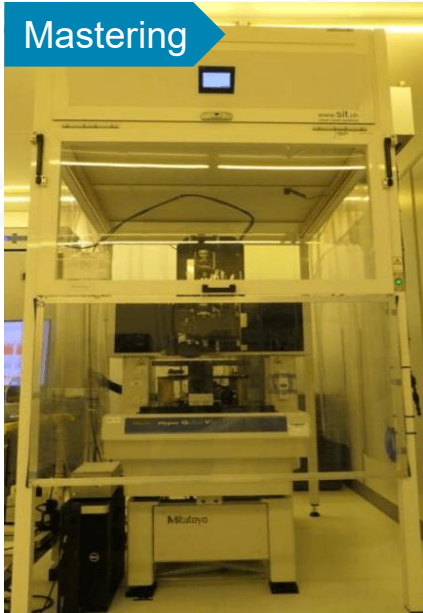


Annual Manufacturing Capacity: > 50M optical lenses (in typical product mix)

Manufacturing Capabilities

Optical Components: Imprinting Processing

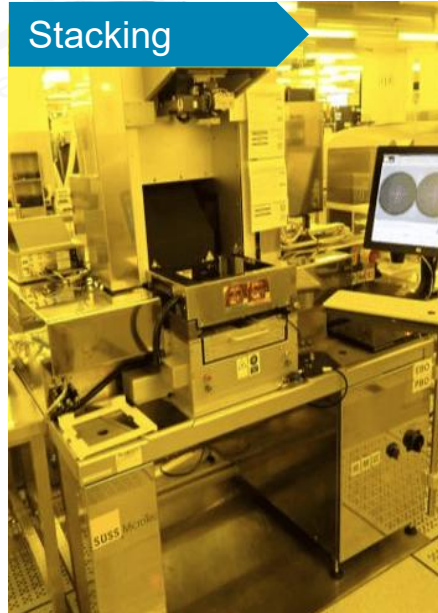
Mastering



Replication



Stacking



Testing



Singulation



Annual Manufacturing Capacity: > 100M optical lenses (in typical product mix)

Manufacturing Capabilities

Optical Components: Precision Molding

Ultra-precision In-house Mold Making



Pressing / Molding



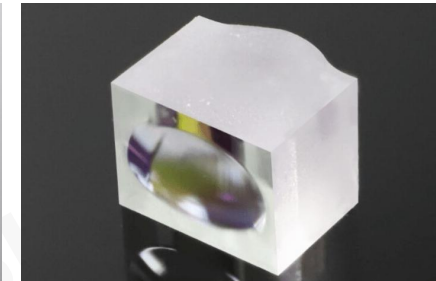
Coating



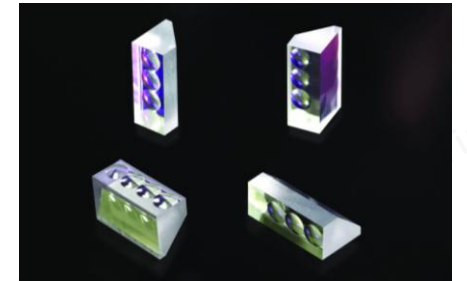
End Products



Barrel lens



Bi-conic lens



Microprism lens array

Annual Manufacturing Capacity: > 240M optical lenses (in typical product mix)

Manufacturing Capabilities

Optical Components: Large Optics Grinding and Polishing

CNC Machining



Ring Polishing for Flat Surfaces



Robotic Polishing



Ion Beam Polishing



Ultrasonic Cleaning



Module Assembly

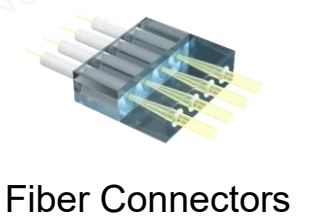
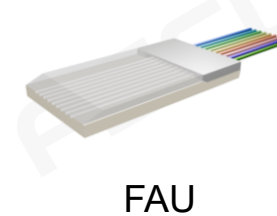
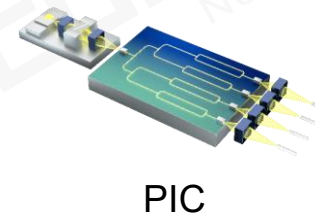
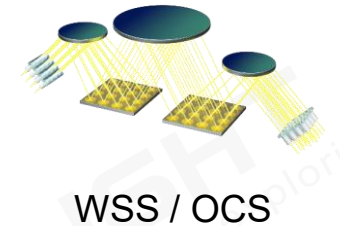
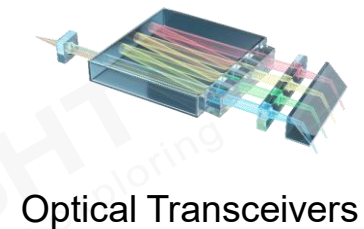
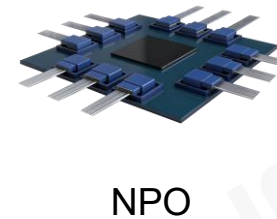
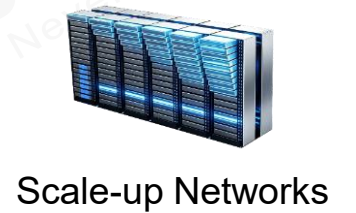
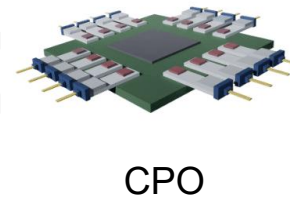
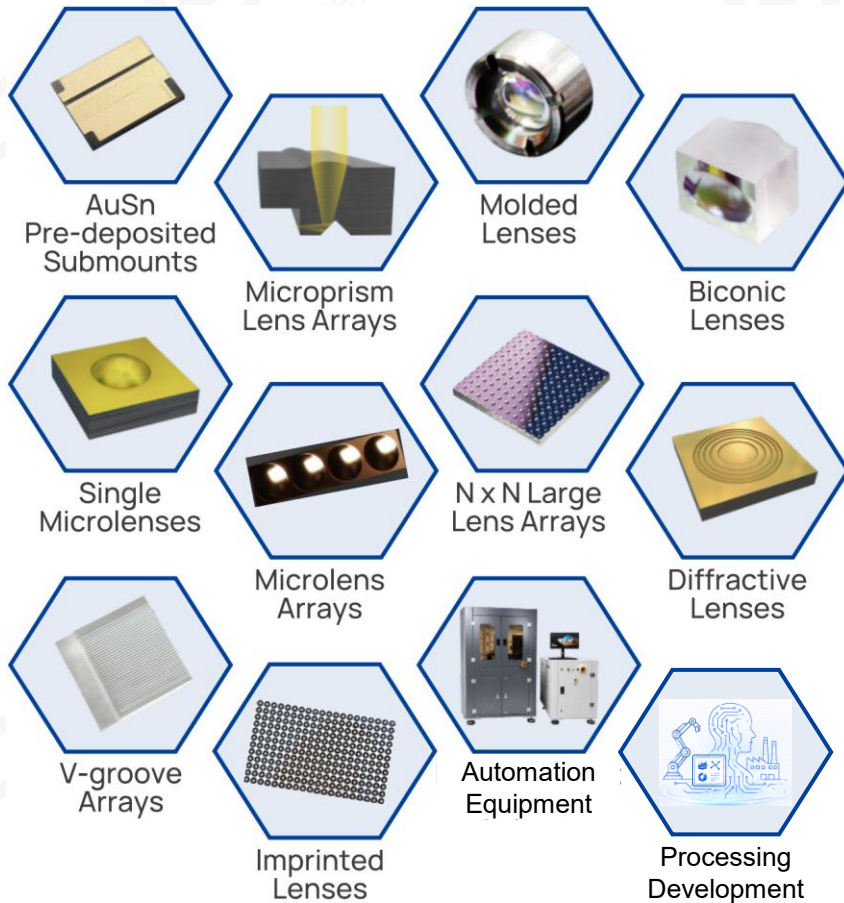


Annual Manufacturing Capacity: > 20K large optical components over $\Phi 100\text{mm}$

Typical Applications

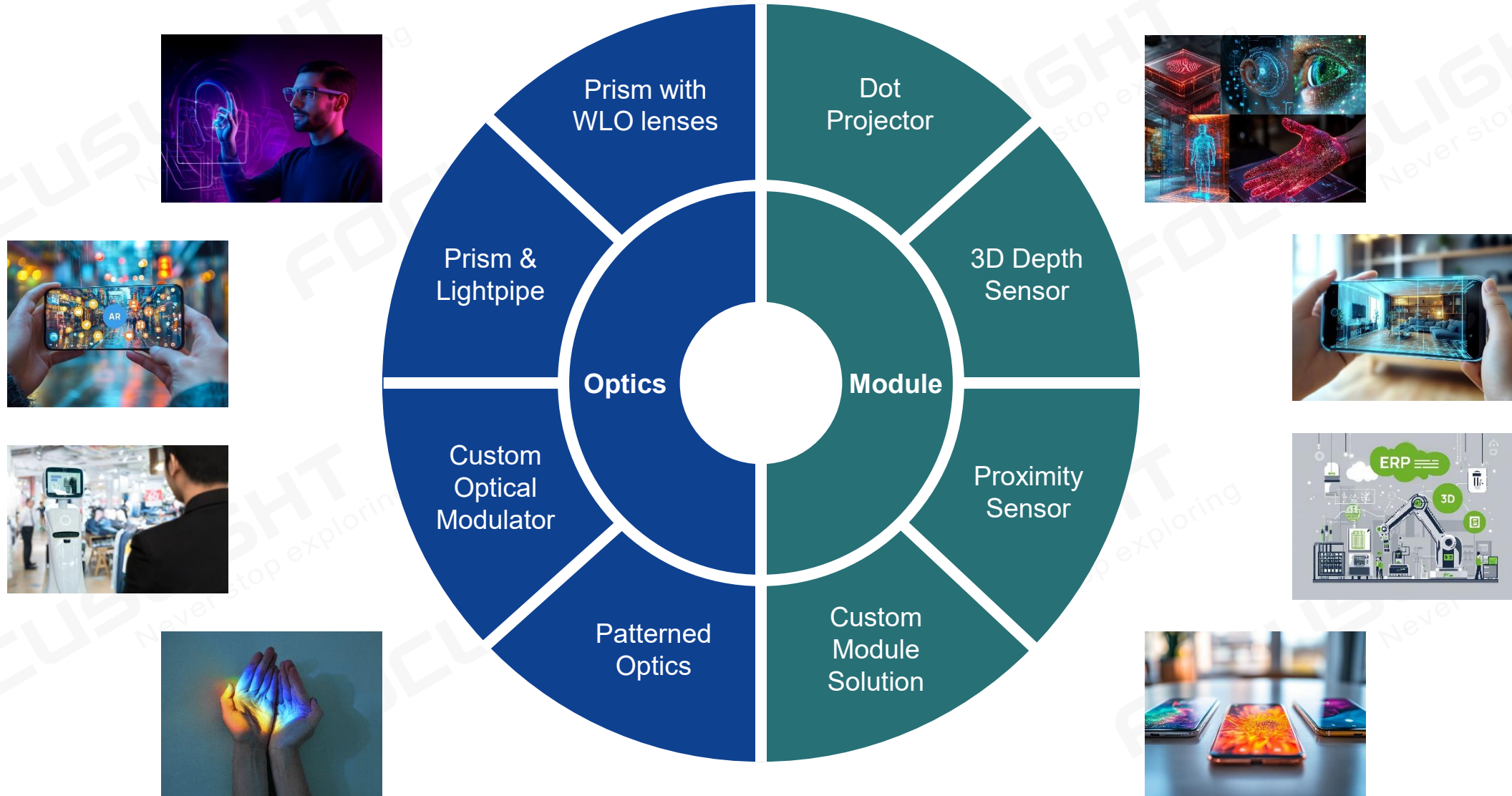
Optical Communication

- High precision micro-optics are at the heart of optical communication systems.
- They support efficient data transfer between key optical components.



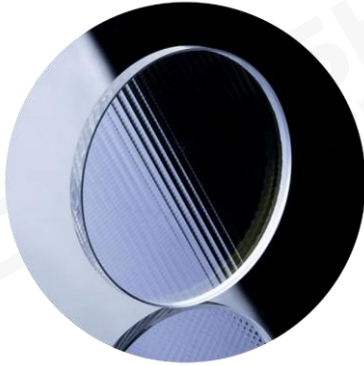
Typical Applications

Consumer Electronics

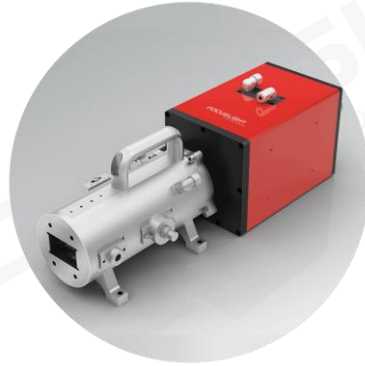


Typical Applications

Semiconductor



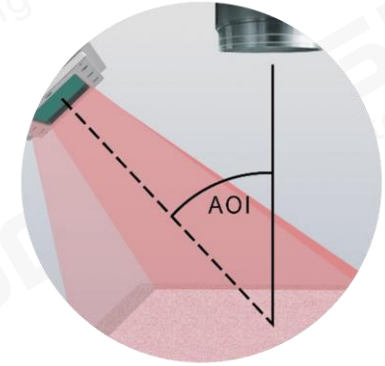
- Beam homogenization technology powers the illumination system – key optical component in **pan-semiconductor systems**
- > 15 years supply to the major manufacturer of semiconductor lithography tools



- Laser system solutions with high power density and different beam profiles, designed for various **laser-based wafer annealing processes** including IGBT backside annealing and SiC annealing



- Based on 976nm diode laser with adjustable beam output and >95% homogenization in energy distribution
- Ideal for **advanced chip packaging processes**, e.g. laser-assisted bonding



- Off-axis beam shaping technology powers laser surface treatment as well as surface inspection
- Typically used in **solar cell industry**

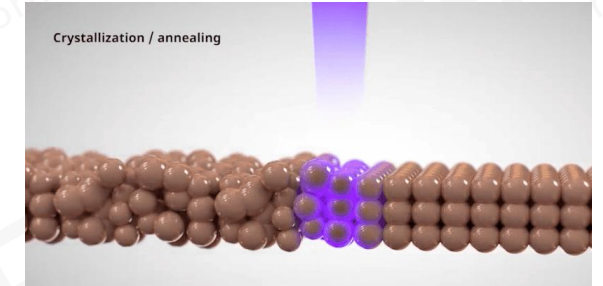
Typical Applications

Display Manufacturing

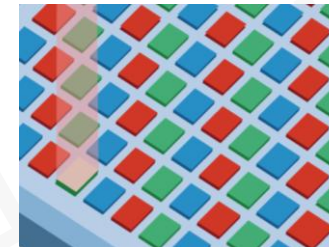
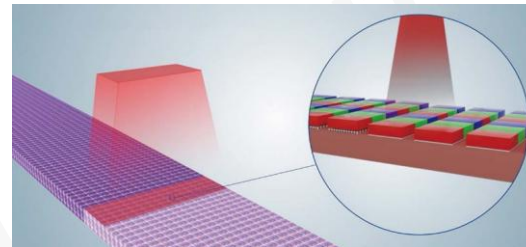


Solid-State Laser Lift-Off (LLO) for Flexible Displays

- Several tens of beam shapers (plasma display pixel structuring)
- Several green 100 mm line beam systems (laser lift-off)
- > 600 mm UV line beam production system (laser lift-off)



Next-gen LTPS Solid-state Laser Annealing Process

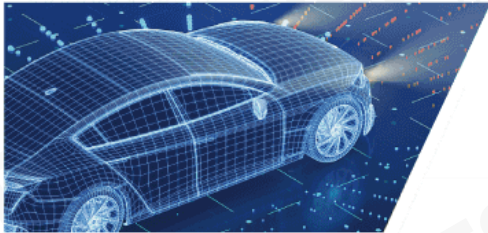


Mini and Micro LED Processing

- Laser Mass Transfer and Laser Mass Soldering
- Laser Chip Repair

Typical Applications

Automotive



LiDAR



Driver Monitoring System



Smart Headlight



Projected Lighting



AR HUD



Optical Components
and Assemblies



Laser Modules



*Focuslight does not
produce LiDAR /
Lighting full system*

Typical Applications

Medical and Health



Hair Removal



Body Sculpting



Skin Rejuvenation



Ophthalmology



3D Interoral
Scanning



Optical Components;
Laser Components



Optical Solutions;
Laser+Optics Assembly;
Application Handpiece



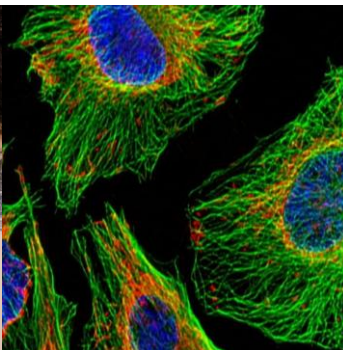
Manufacturing Services



*Focuslight does not
produce medical or
health equipment*



Dermatology



Confocal
Microscopy



Endoscopy



Sensing

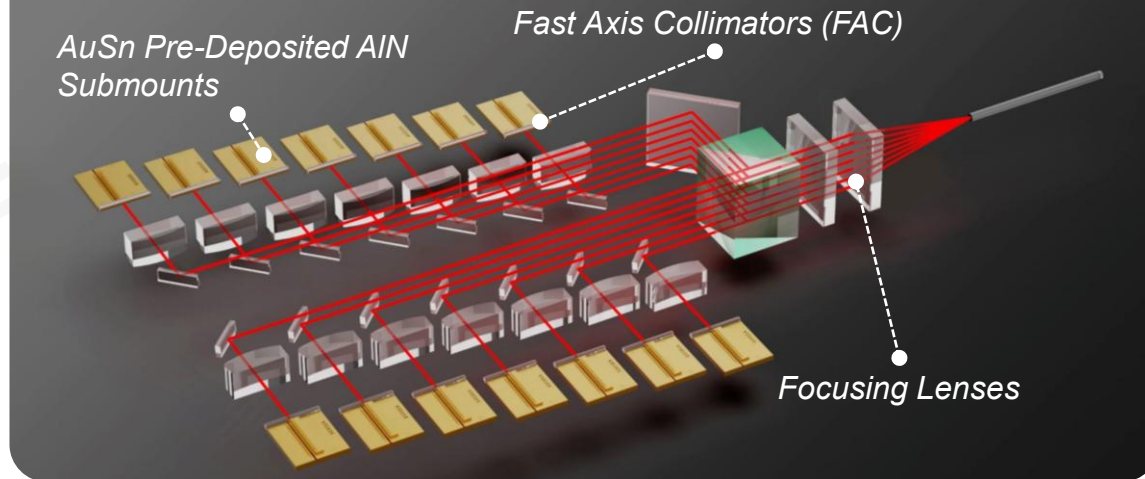


Laser Surgery

Typical Applications

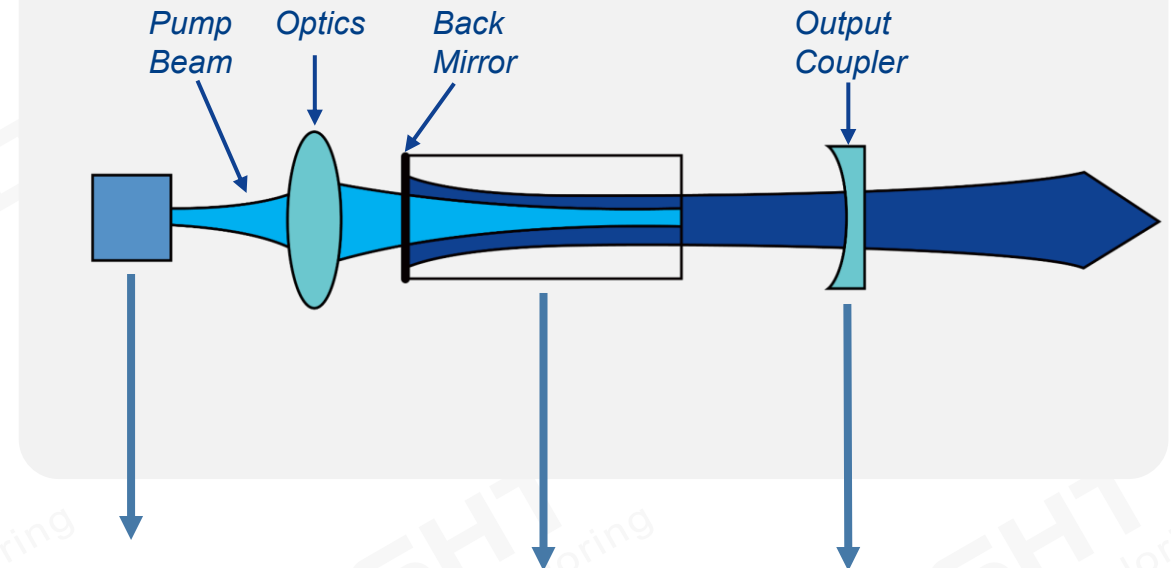
Industrial

Fiber Laser Pumping



- **AuSn pre-deposited submounts** – stable and reliable thanks to the high thermal conductivity and suitable thermal expansion coefficient;
- **Fast axis collimators (FAC)** – fundamental and efficient solutions for shaping the beam emitted by the pumping sources;
- **Focusing lenses** – coupling the collimated laser beam precisely into the output fiber;

Solid State Laser Pumping



Diode Laser
as Pumping
Source

+

Gain Medium

+

Optical System

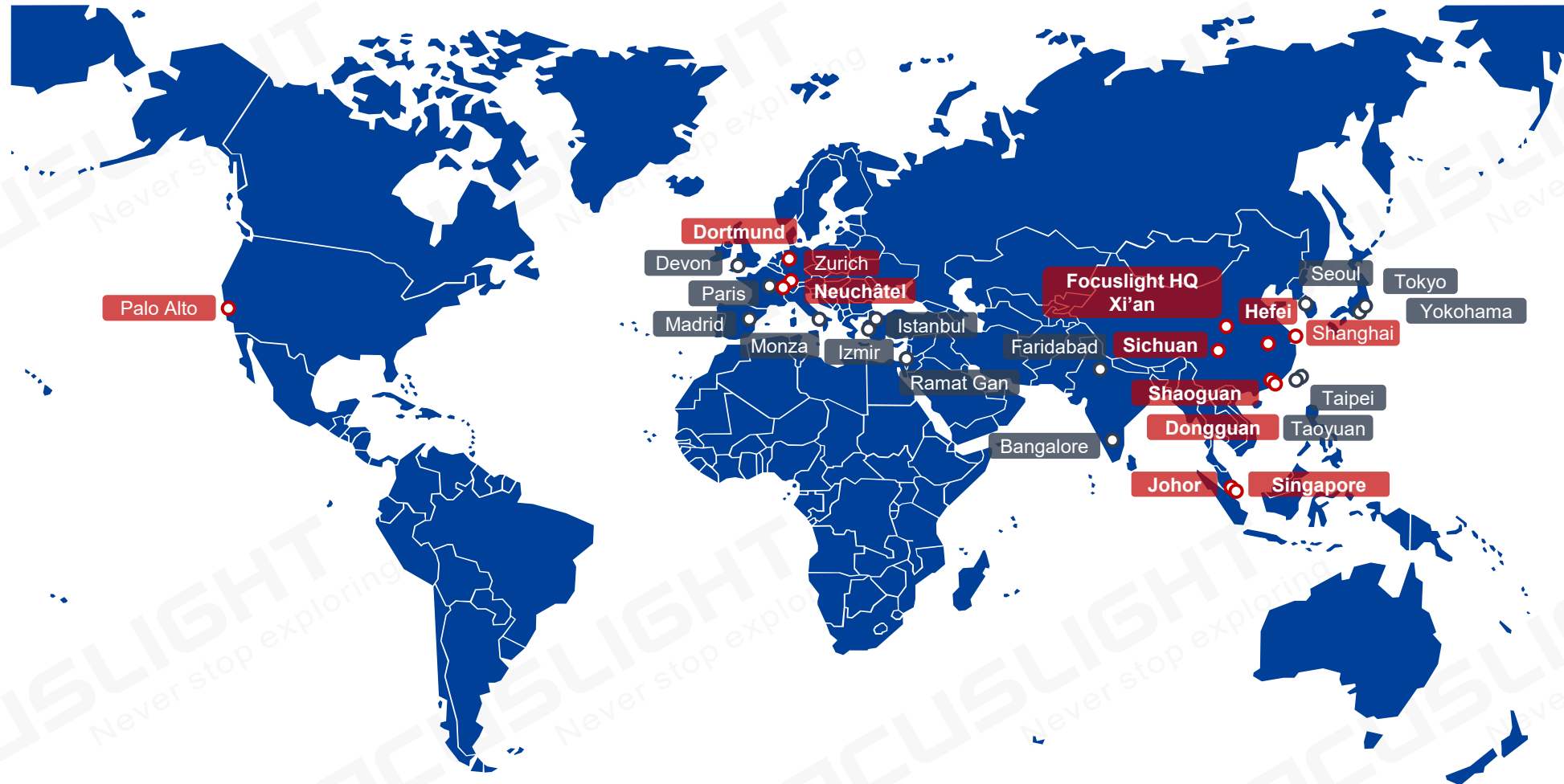
Footprint ↓

Reliability ↑

Efficiency ↑

Cost ↓

Sales Network



- Worldwide established distributors
- Direct sales offices in China, Switzerland and US
- R&D and operation centers in China, Germany, Switzerland, Singapore; Malaysia operation center being constructed

Six Pillars of Global Supply Chain Resilience

01

Global Manufacturing Network



- Global manufacturing footprint across Asia and Europe
- Regional capacity flexibility & load balancing
- Cross-site production transfer capability
- Local customer support & rapid response
- In-house manufacturing across key technologies

02

Multi-Source Strategy



- Multi-qualified suppliers for critical materials
- Global supplier sourcing & qualification
- Supply risk diversification across regions
- Qualified alternate supplier readiness
- Strategic supplier partnerships

03

Supplier Excellence Management



- Supplier Quality Management System
- Risk-based supplier audits
- Supplier performance management
- Supplier capability development
- Continuous improvement program

04

Strategic Inventory & Demand Planning



- Integrated demand & supply planning
- Strategic inventory for critical materials
- Long lead-time material management
- Customer forecast collaboration
- Inventory optimization

05

Digital Supply Chain



- End-to-end planning visibility
- Global inventory visibility & tracking
- Real-time demand-supply synchronization
- Digital collaboration platform with suppliers
- Predictive analytics & risk early warning

06

Business Continuity Management



- Enterprise supply chain risk management
- Business continuity & contingency planning
- Critical product recovery strategy
- Global crisis response coordination
- Supply disruption simulation & preparedness

Building a resilient, flexible and sustainable global supply network

Your committed and reliable long-term partner in photonics components and solutions



Diode laser light source leader and beam shaping expert with strong IP position



One-stop-shop of optical components choosing from multiple process technologies best matching customer needs



Global photonics foundry that convert customers' ideas and designs into their own products and solutions



Total solution, versatile customization service and field service provider



Strong RDE capability, high volume production capacity and low-cost manufacturing



Financially healthy and strong financial backing from investors for long term growth

THANK YOU



www.focuslight.com
www.hptg.com

