舜宇光学科技
SUNNY OPTICAL TECHNOLOGY

2026 Investor Day

24 June 2026

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SUNNY OPTICAL TECHNOLOGY

Handset Business

24 June 2026

Agenda

01 The Trend of Intelligent Imaging

02 The Trend of Product Spec

03 Core Platform Technology

04 Outstanding Intelligent Manufacturing

Product upgrading and ecosystem reshaping in the AI era

Imaging is an important medium for helping AI understand the world

Imaging + AI algorithm

System Ecosystem

Changes in user interaction entry points

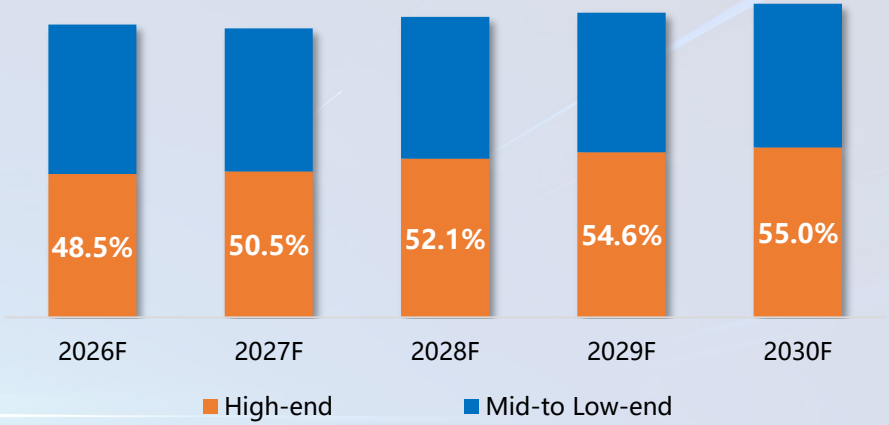
The entry of AI players will reshape the competitive landscape of the industry

The market and industry trends of intelligent imaging

Smartphone imaging: structural differentiation and high-end leadership

- Due to the increase in memory prices, the shipment of smartphone is under temporary pressure, and the industry pattern is showing a stratified trend. The high-end flagship smartphones have continuously increased the market share by relying on the iteration of optical imaging technology, the overall revenue scale of which could maintained positive growth.
  - Periscope: iteration towards a multi-group precision optical path architecture;
  - 1/1.12 inch: the increase in demand for large-image size CMOS adoption;
  - Video shooting: the increase in penetration rate of variable aperture optical solution.

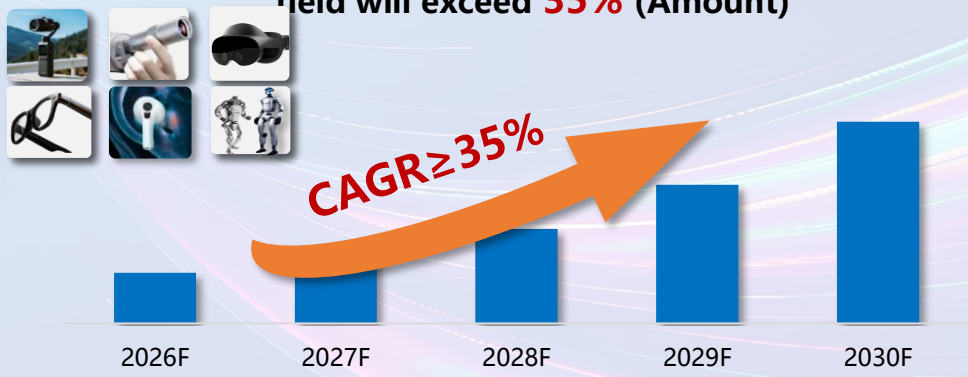
2026-2030 Handset high-end camera proportion will increase from 48.5% to 55.0% (Amount)



All-category expansion: Imaging in new fields becomes a new engine

- Relying on the accumulation of imaging technology, smartphone makers are accelerating their expansion into new fields such as handheld gimbals, extended cameras and smart glasses in the intelligent imaging sectors.

2026-2030 CAGR of intelligent imaging in new field will exceed 35% (Amount)



The trend of intelligent mobile terminals

Extreme miniaturization

- Balanced appearance design of cameras for ultra-thin handset
- Battery capacity & component expansion

Professional imaging

- Professional shooting in multiple scenarios
- Video stabilization
- Wide dynamic range cinematic portrait video

Full focal lengths

- Smooth coverage of both portrait and telephoto focal lengths
- High-performance telephoto portrait
- Professional macro photography effect
- Optical system refinement

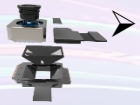
Highly integration

- The module size is miniaturized
- Optical components are highly integrated

Imaging solutions

Comprehensive product solutions

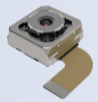
Extreme miniaturization | **Professional imaging** | **full focal lengths** | **highly integration**



➢ Modules/actuators integration multi-fold periscope modules

➢ Ultra-high pixel continuous optical zoom periscope modules

➢ Integrated component product

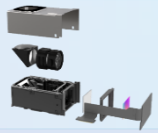


➢ Variable aperture + miniaturized modules with quad cut lens

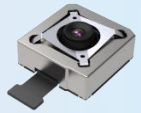
➢ Light-weight extended lens sets with 200mm focal length

➢ IV non-gold wire miniaturized modules

➢ Extended lens sets with ultra-long focal length (400mm)

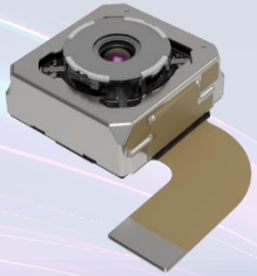


➢ Large image size and large-aperture periscope modules with cemented-prism



➢ Large-Angle Gimbal OIS Module

The upgrade trends of main camera solutions



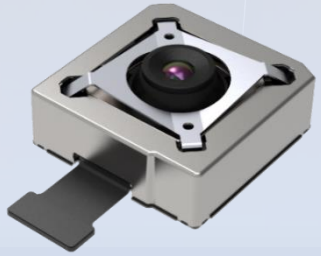
Variable aperture + miniaturized modules with quad cut lens

◆ Advantages

- **Extremely compressed** of XY axis
- High-performance shooting effect with **variable apertures**

◆ Technical Capabilities

- Quad-cut technologies
- Assembly technology for hybrid lens set
- Integration assembly technology for variable aperture lens set



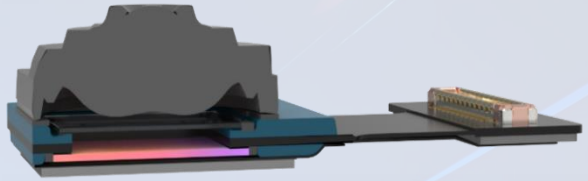
Large-Angle Gimbal OIS Module

◆ Advantages

- **±5° large-angle OIS**, enhances video/capture stability, improves low-light performance, powers professional imaging

◆ Technical Capabilities

- Electromagnetism/ Piezoelectric gimbal stabilization
- Miniaturized gimbal module
- Piezo actuator: industry-leading in ultra-low noise/ power consumption



IV non-gold wire miniaturized modules

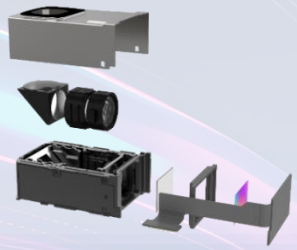
◆ Advantages

- **Non-gold wire bonding**, extreme miniaturization

◆ Technical Capabilities

- Million level mass production experience with self-developed MOB IV miniaturized solution
- High-stability integration molding technology
- Non-gold wire bonding

The upgrade trends of periscope camera solutions



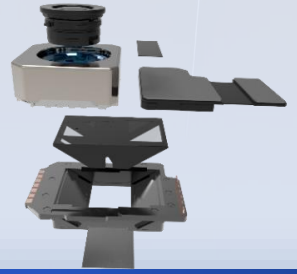
Large image size & large-aperture periscope modules with cemented-prism

◆ Advantages

- cemented prism technology, **large-image size & large-aperture design**, an optimal balance between size and performance. It significantly **boosts light transparency in low-light telephoto scenarios**, meeting **the demand for extreme imaging**

◆ Technical Capabilities

- Lens set + cemented-prism integration solution
- AOA multi-group high-precision assembly



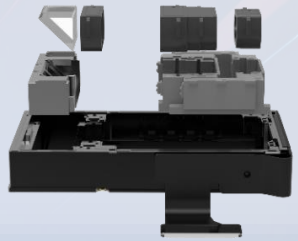
Modules/actuators integration multi-fold periscope modules

◆ Advantages

- **Self-developed actuators-lens sets-prisms-modules integration solution,** multi-fold design can balance the high-time optical zoom and miniaturization

◆ Technical Capabilities

- Modules/ actuators/ lens sets/ prims integration solution
- Self-developed SPIM technology
- Self-developed SEF solution



Ultra-high pixel continuous optical zoom periscope modules

◆ Advantages

- The high-pixel CMOS combined with continuous zoom, **maintains high resolution throughout the full focal length**; **lower requirements for algorithm and power consumption and occupies less space** vs dual periscope solution

◆ Technical Capabilities

- Self-developed AOA multi-group high-precision assembly technology
- Modules/ actuators/ lens sets/ prims integration solution
- Self-developed long-stroke guide periscope solution
- Optical design capabilities of continuous zoom lens sets

The trends of extended products solution

400mm focal length Extended lens sets with ultra-long focal length

◆ Advantages

- **High-time optical zoom (equivalent to 17.4X)**
- **GM+G solution** offers DSLR-level imaging quality

◆ Technical Capabilities

- Optical design capabilities comparable to those of DSLR
- Calibration capabilities in coordination with the native camera of the smartphone

200mm focal length Light-weight extended lens sets

◆ Advantages

- **Extreme light and handy** vs products with same focal length in the industry (length 96mm, weight153g)

◆ Technical Capabilities

- Industrial-leading automatic assembly technology
- Self optical inspection

Integrated component product

◆ Advantages

- **Opto-mechatronic integrated solution,** helping customers to iterate the products rapidly, industrial leading

◆ Technical Capabilities

- AA technology for G+P projects
- Optical design of lens sets with multi-group + variable aperture + large image size main camera
- Technology layout on multi-group + continuous zoom + variable aperture

Core Platform Technology – Materials Capability

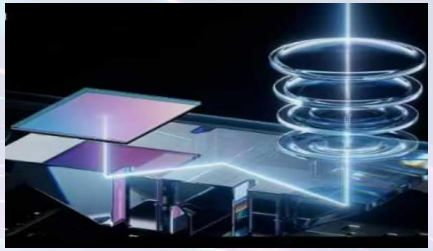
Advanced R&D on High-End Optical Resins and Optical Glass Materials

- By overcoming key technical hurdles—including **low internal stress**, **high refractive index**, **high glass transition temperature**, and **low dispersion**—we comprehensively **enhance the imaging resolution performance of premium lenses, while simultaneously improving production yield**.

Strategic Cooperation with Leading Material Suppliers to Secure Quality Delivery

- Leveraging the expanding business demands of lens and communication products, the company has established a strategic partnership with **Chengdu Guangming Optoelectronics Co., Ltd**. for optical glass raw material supply. This collaboration reinforces the existing material supply system and consolidates the supply chain, while simultaneously empowering the successful commercialization of new material R&D outcomes.

Core Platform Technology – Component Capability (Prisms)



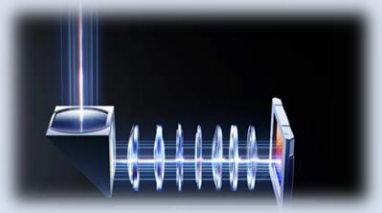
Single/Multi-Slotted Prism Technology

◆ Advantages

- Multiple folded optical paths achieve the same optical path length while **reducing module volume**, enabling an ultra-low shoulder height design and achieving deco miniaturization.
- Lens-lead design: lens-based OIS replaces prism-based OIS, **allowing for a larger aperture**.

◆ Technical Capabilities

- Full in-house development capabilities covering the entire process from manufacturing to inspection, with mass-production experience exceeding 10 million units



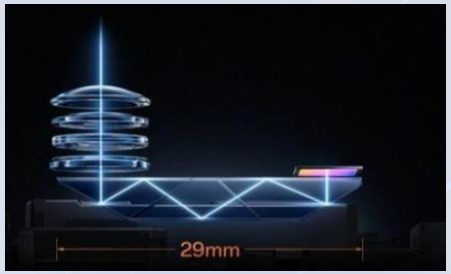
Optical Power Prism Technology

◆ Advantages

- **Self-developed cemented solution integrating prism and lens optical core**, improving OIS stabilization performance and optical performance, and enhancing design flexibility
- Converging the incident light of the periscope, increasing aperture, and improving **low-light imaging performance**

◆ Technical Capabilities

- Industry-leading cemented product yield rate and capabilities



Five-Fold Cemented Prism Technology

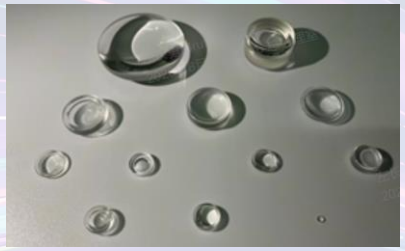
◆ Advantages

- **Industry-first five-fold folded optical path design**, extending optical path length for high resolution
- **Built-in low-reflection, low-transmission aperture stop combined with air-layer aperture stack** for multi-level stray light suppression

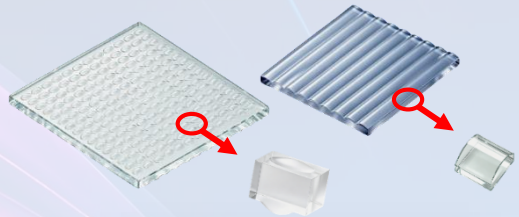
◆ Technical Capabilities

- Industry-leading stray light optimization processes

Core Platform Technology – Component Capability (Molding)



Centering-free Multi-Cavity Molding Technology



Specialized Molding Technology

◆ Technical Advantages

- **Centering-free multi-cavity molding technology**: industry-first one-step molding integrating aspheric surface, platform, outer diameter, and multiple cavities – eliminating outer-diameter centering, reducing processing cost, and improving decent ration accuracy;
- **Specialized optical glass material design + specialized molding process technology:** enables precision molding of special-shaped products;
- **Specialized glass material reshaping technology:** reheats and reshapes glass to resolve issues such as poor gas venting;
- **Full-range mold release film technology for all product types:** addresses appearance yield concerns.

High Integration

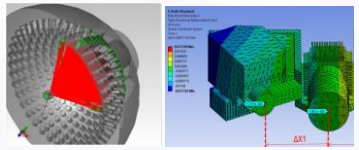
Sub-Micron Precision

System-Level Miniaturization

Core Platform Technology – Equipment Capability

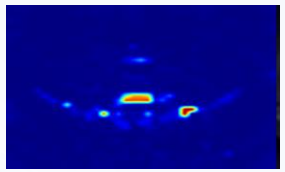
■ **Turnkey solutions – equipment designed to serve product development**

01 Optical imaging and precision mechanical design



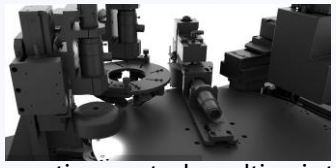
Imaging simulation • multiphysics simulation

02 AI technology platform



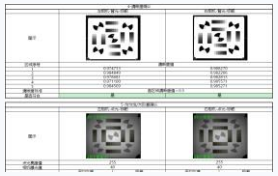
Data augmentation • few-shot training• AI-assisted

03 High-speed, high-precision motion control



Micron motion control• multi-axis trajectory planning• high-speed flying inspection

04 Equipment quality control



Shipment FAT• on-site SAT & MBO

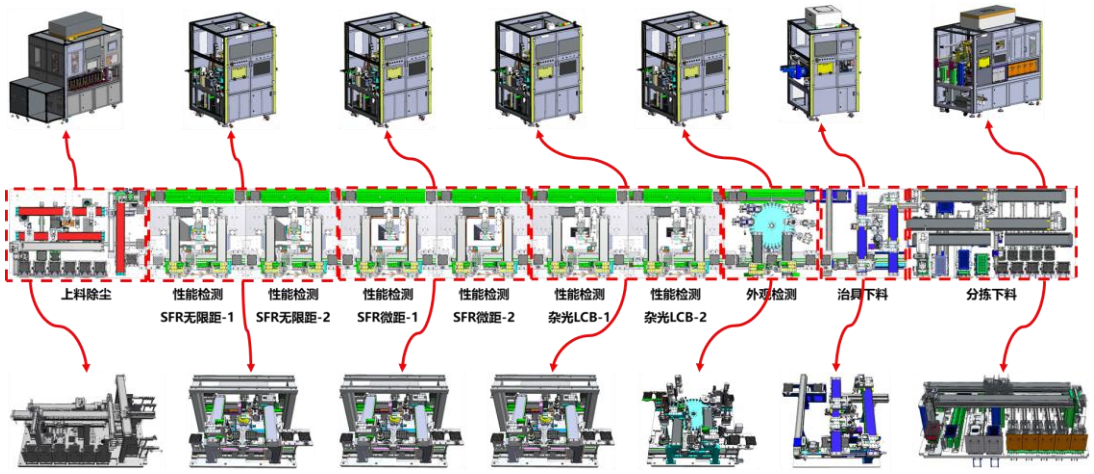
■ **Deep integration of advanced process & smart manufacturing – boosts quality & efficiency across full handset module production**

Data visualization

Modular development

Full-process traceability

Multi-station optimization



Integrated handset lens sets inspection line

Intelligent Manufacturing Drives Excellence, Quality Builds Trust

■ **Powered by AI and digital twins, our leading smart manufacturing system guarantees premium product quality.**

- **Core Capabilities:** AI-driven optimization of optical design, processes, quality control, and equipment management.
- **Key Objectives:** Improve efficiency and yield rate through AI-powered production optimization.

- **Core Capability:** Customized flexible production model tailored for each client.
- **Key Achievements:** Market share of customized products hits 70%, lead time for urgent orders shortened by 40%.

- **Core Capability:** AI traceability system across the full product lifecycle.
- **Key Achievements:** Defect rate reduced to 15%, complaint rate cut by 40%.

Thanks!

舜宇光学科技
SUNNY OPTICAL TECHNOLOGY

Global Leader In Automotive Optics

June 24th, 2026

Vehicles: AI’s Gateway to the Physical World

01

Intelligent Driving (Perception Layer)

AI multi-dimensional environmental perception reshapes travel and decision-making

02

Intelligent Cockpit (Interaction Layer)

AI builds HMI to create an immersive cockpit experience

03

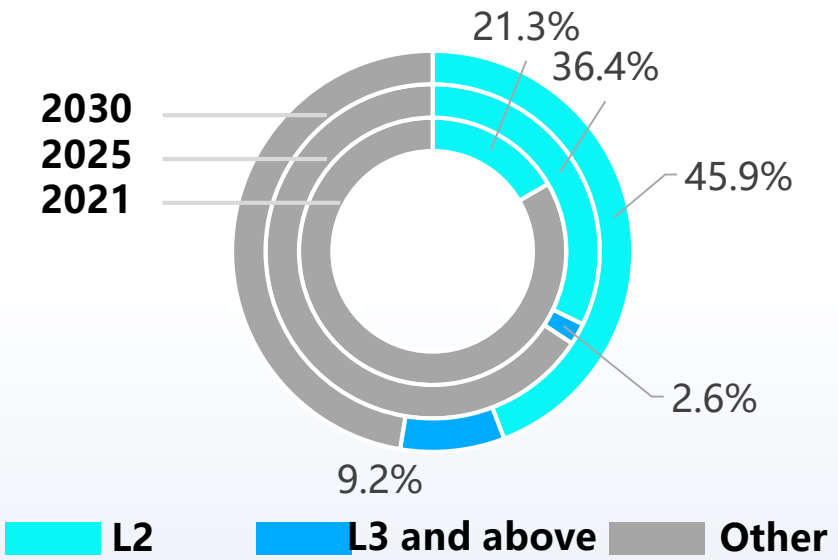
AI Lighting (Integrated Layer)

Closing the perception-interaction loop to enhance safety and ride quality

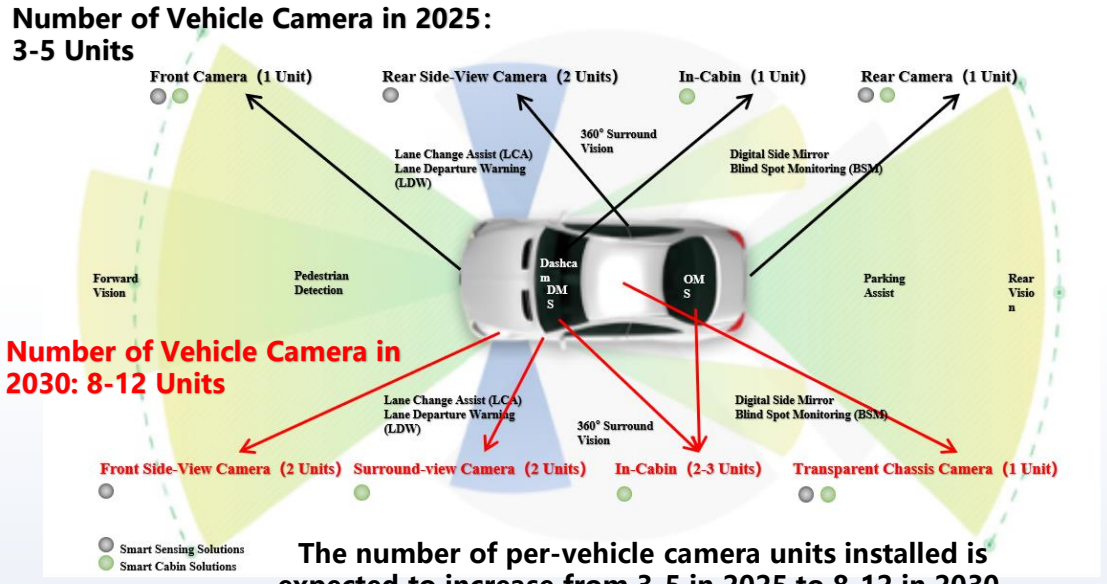
Light-Driven Intelligent Mobility in the AI era

The First Year of L3/L4 Commercialization: Breakthroughs in Computing Power & Upgraded Perception

ADAS/ADS Faster Penetration



Changes in Demand for Perception Hardware



The number of per-vehicle camera units installed is expected to increase from 3-5 in 2025 to 8-12 in 2030.

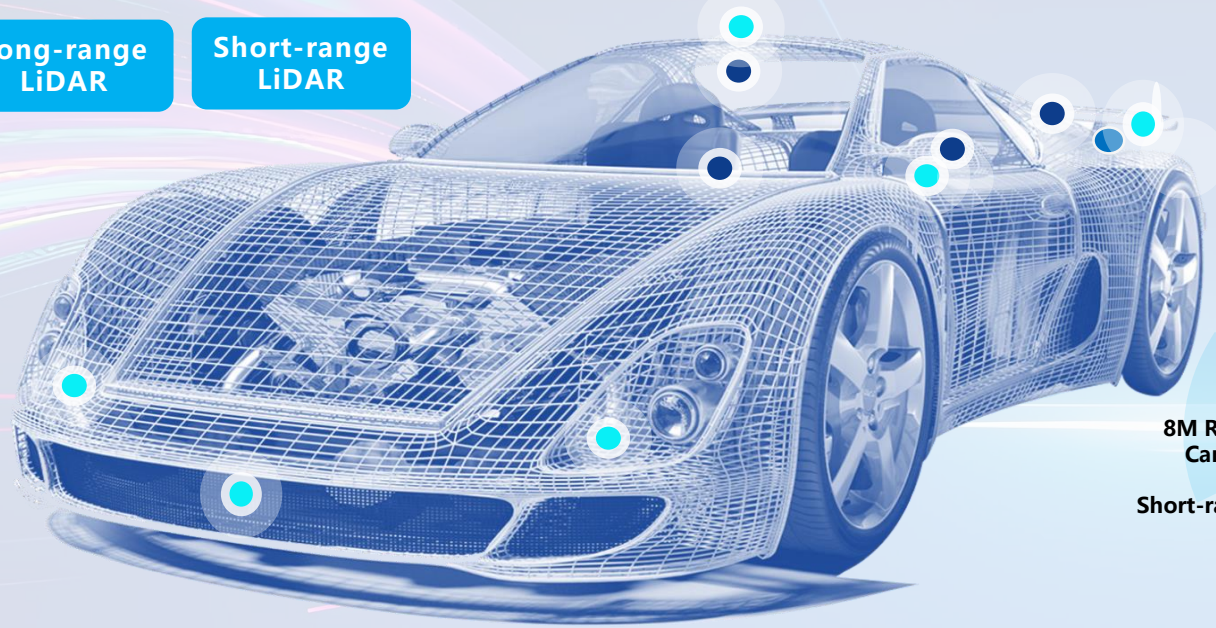
Surce: Frost & Sullivan Report

- **Global L3 Regulatory Frameworks Accelerate Toward Maturity**
- **L4 Robotaxi Commercial Operations in 20+ Cities Globally**
- **Vehicle Computing Platforms Leap from Hundreds to Thousands of TOPS**

The First Year of L3/L4 Commercialization: Value Surge for Cameras and LiDAR

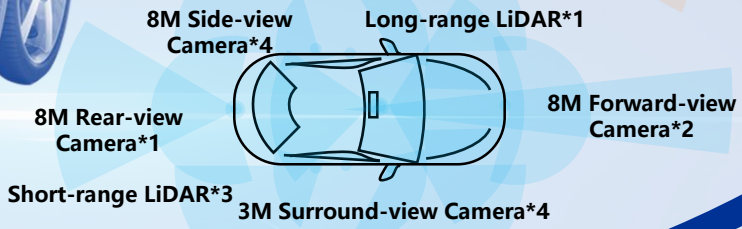
Forward-view Perception Camera | Side-view/Rear-view Perception Camera | DMS/OMS Camera | Streaming Rear-view Camera | Surround-view Camera

Long-range LiDAR | Short-range LiDAR

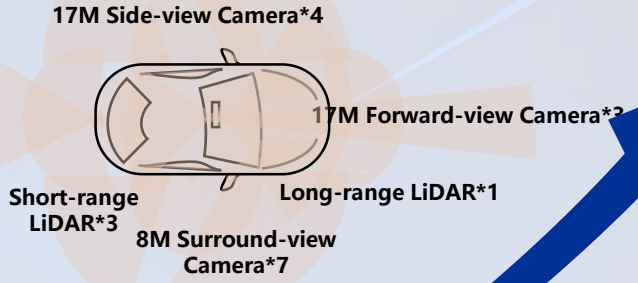


Vehicle LiDAR | Vehicle Camera

L2+/L3 Intelligent Driving Solutions



L4 Intelligent Driving Solution



Vehicle cameras per car rises to 12–15 units

8MP standard→17MP+ emerging

Vehicle LiDAR per vehicle: 1 unit→3–6 units

Lines: 192/256 standard→512/896 introduced→1000+

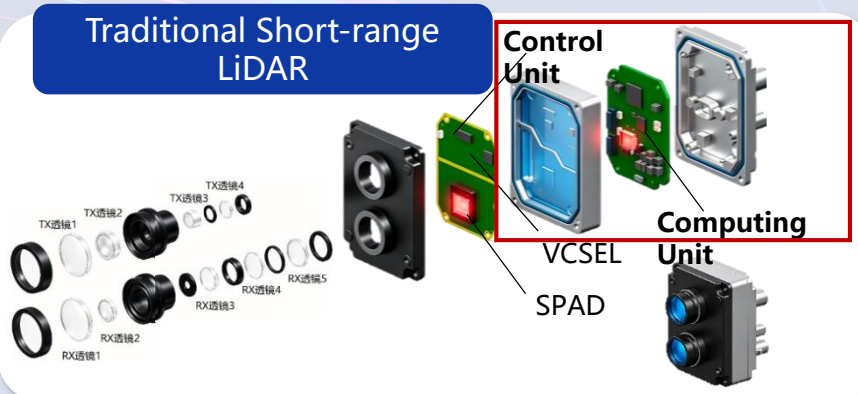
Active Cleaning & Active Heating function become standard

LiDAR: OEM Self-Development Drives LiDAR toward "Satellite Architecture"

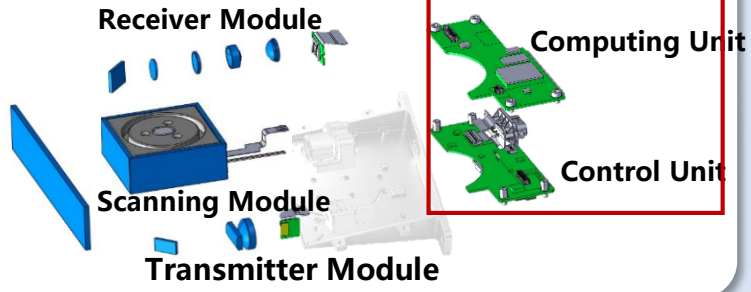
OEM Self-Development Reshapes LiDAR Industry Division

Traditional LiDAR: An integrated sensor that includes main control, and point cloud algorithms

Traditional Short-range LiDAR



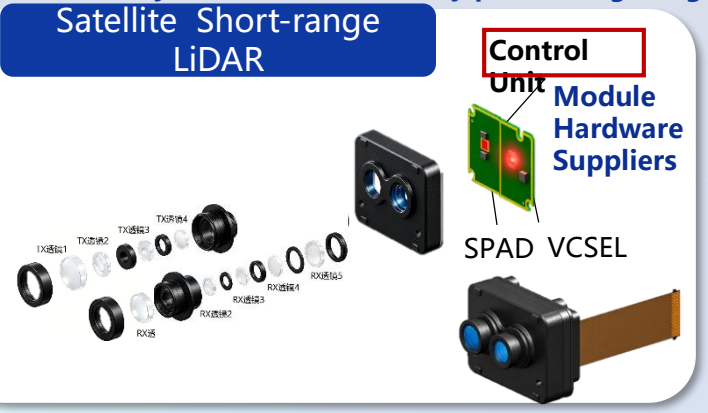
Traditional Long-range LiDAR



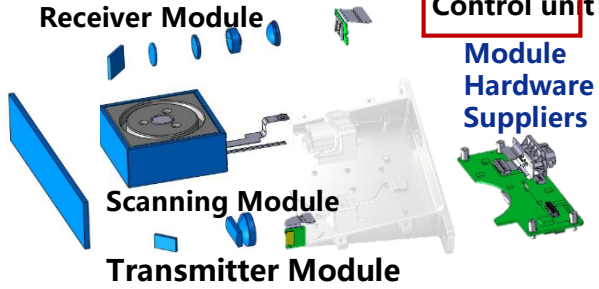
Advanced Intelligent Driving

To reduce latency, advanced intelligent driving is controlled by the vehicle's domain control system, with LiDAR only performing imaging and perception

Satellite Short-range LiDAR



Satellite Long-range LiDAR



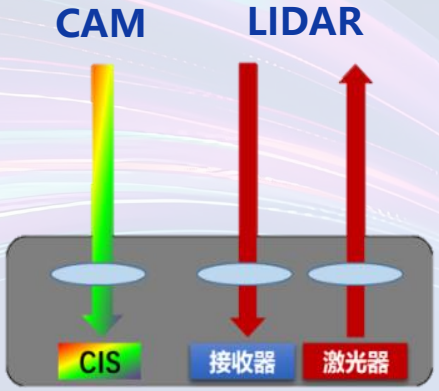
Domain Control ECU Center Computing Unit

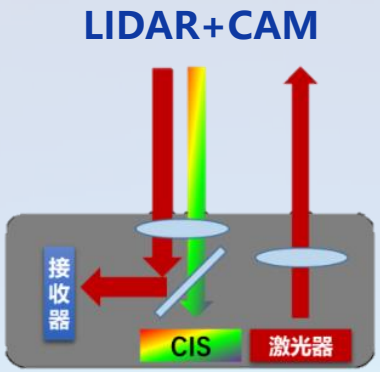
OEM

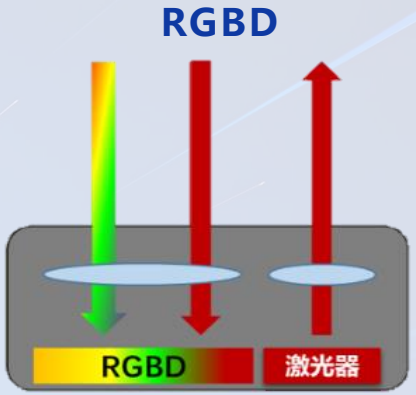
As the demands of autonomous driving control continue to rise, the main control and perception algorithms of LiDAR are progressively shifting to onboard domain controllers. This evolution is transforming LiDAR into a pure sensing device, much like a camera module.

LiDAR: Technology Convergence and Modularized Solutions

"Mechanical fusion" → "Optical path fusion" → "Chip integration"







Past

- LiDAR + Camera: Independent, Calibration-Merged

2026

- LiDAR + Camera: coaxially aligned with shared optics, simplifying extrinsic calibration

2027

- LiDAR + Camera: RGBD integrated on a single chip enables native fusion of point clouds and images

LiDAR point cloud and image fusion are evolving toward chip-level RGBD integration.

Pixel counts rising and system integration is making LiDAR becoming modular.

Cabin Perception: Vision Upgrades and Multimodal Fusion

• In-cabin Camera Upgrade: From "Visible" to "Understandable"

1 Pixel Upgrade: Wider Perception Range, Superior Image Quality

2M DMS → 5M+ IMS

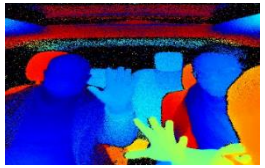
Wider FOV
Higher Pixel
Higher Picture Quality

- Bright Light
- Backlit
- Tunnel Transitio
- Low-Light

2 Deep perception upgrade: From 2D to 3D, Expanding Functionality

2D

Structured Light



TOF

- AR-HUD (Eye Box Tracking)
- Intelligent Airbag (Body Posture Detection)
- User Interaction (Gesture Recognition)

3 Camera Integration: Under Screen, Under Mirror, Unobtrusive

Integrated with the screen

Integrated with the interior rearview mirrors

Integrated with the air conditioning outlet

• Multimodal Fusion: From Behavioral Recognition To Life Perception

Camera + Radar

Camera + Thermal Sensing + Microphones

Camera + Thermal Imaging

Camera + Meta Surface Imaging

Multimodal Fusion Scenarios

1 Safety Inspection

- Fatigue Detection
- Child Abandonment Detection
- Disability Testing

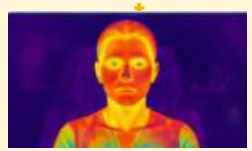
Regulation-driven Growth

2 Intrusion Detection

- Illegal Intrusion Detection
- Low Power Wake-up
- Abnormal Behavior Detection

Overseas Market Demand

3 Health Managemen



- Heart Rate Monitoring
- Blood Pressure Monitoring
- Sentiment Analysis

Health Services

4 Content Recognition

- Autofocus
- Text Recognition
- Palm Print Scan

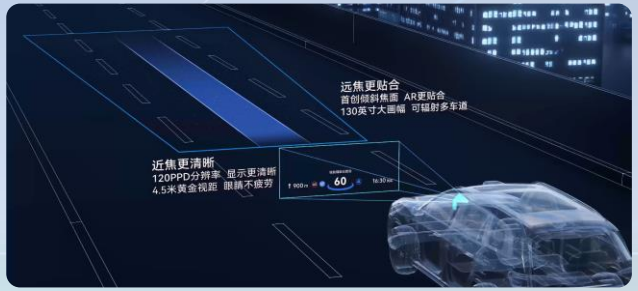
User Experience Services

AR HUD: Defines New Heights of Cabin Interaction

W-HUD → AR-HUD: Rising Optical Value

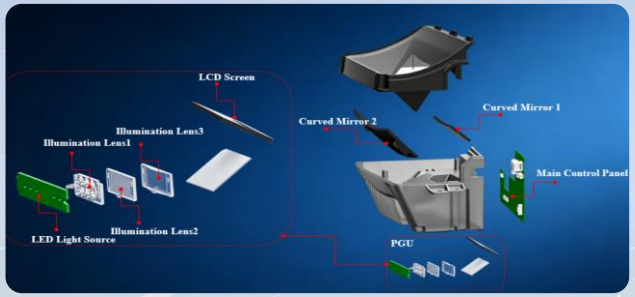
- Traditional W-HUD FOV：5°~10° VID：3m~5m

- AR-HUD FOV：10°~15° VID：7m~10m



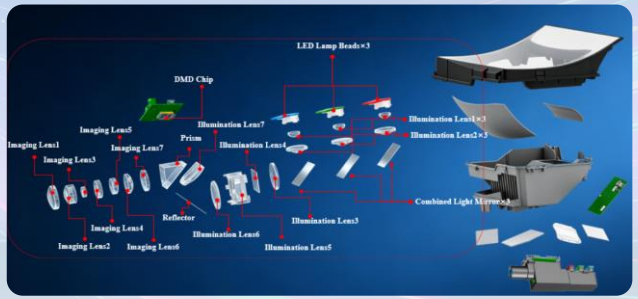
Optical Component Share:

Optics/Total BOM =40%~50%



Optical Component Share:

Optics/Total BOM =60%~70%



Smart Headlight: Defines New Heights of Interaction in the Mobile Space

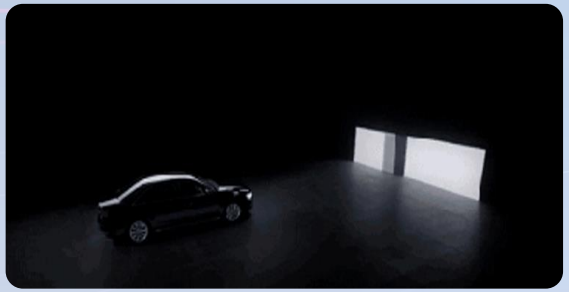
As Automotive lighting from traditional to intelligent, the optical share of total BOM continues to grow.

Product value increases by 3~5 times

Traditional Headlight

Optical Component Share:

Optics/Total BOM =

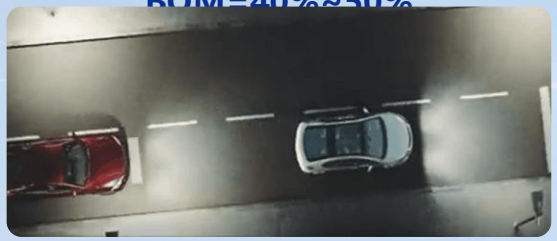


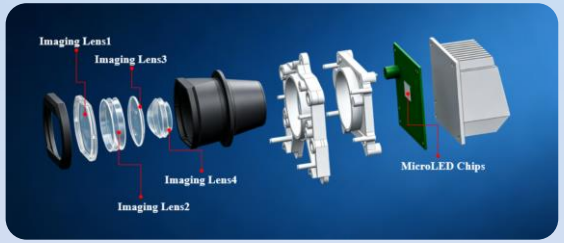
Projection Headlight (Micro LED)

Optical Component Share:

Optics/Total

BOM=40%~50%

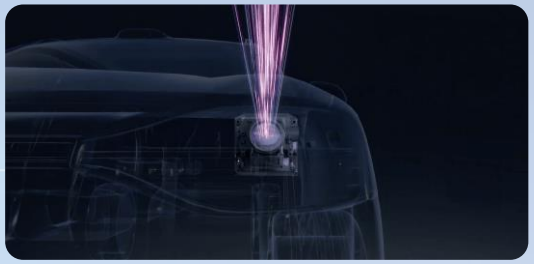


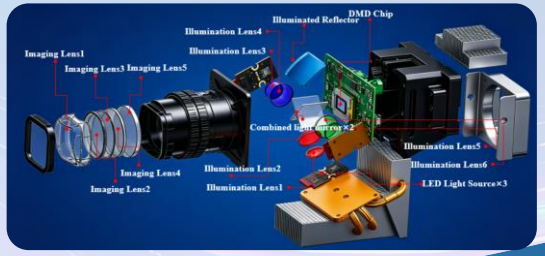


Projection Headlight (DLP)

Optical Component Share:

Optics/Total BOM=60%~70%





AI Lighting：All-Scenario Intelligent Optical Platform

Perception

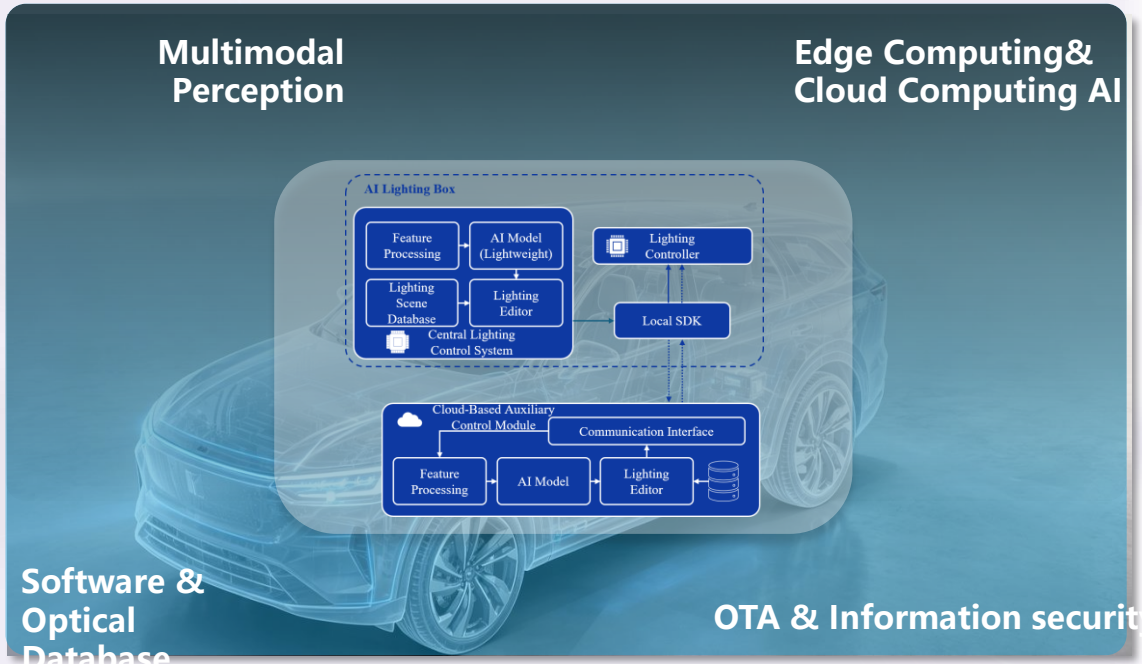
LiDAR

(Long-range LiDAR /Short-range LiDAR)

Camera

(Forward-view/Side-view/Surround-view/Rear-view/In-cabin Camera)

Decision



Execution

HUD

(AR-HUD)

Smart Lighting

(DLP headlight module/ Micro LED module)

Cabin Interaction

(Projection)

Full-area Perception · AI Intelligent Control | Driving Safety Upgrades And Cabin Experience Innovation

Thanks!

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SUNNY OPTICAL TECHNOLOGY

Optics as the Foundation, AI Expanding the Frontier Advancing toward Boundless Opportunities

Unlocking the Boundless Potential of AI + Optics

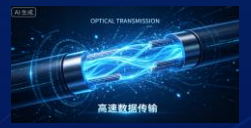
June 24, 2026

Three Bridges in the AI Era

Optical modules bridge AI computing and signal transmission

Optical Computing

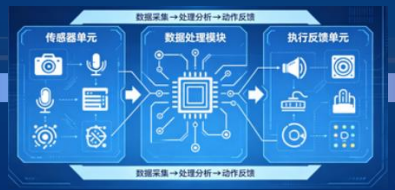
Optical Modules



Signal Transmission

Perception modules bridge AI computing and physical AI

Compute AI (Compute & Model Layer)



Perception & Interaction Modules

Physical AI (Physical Entity Layer)

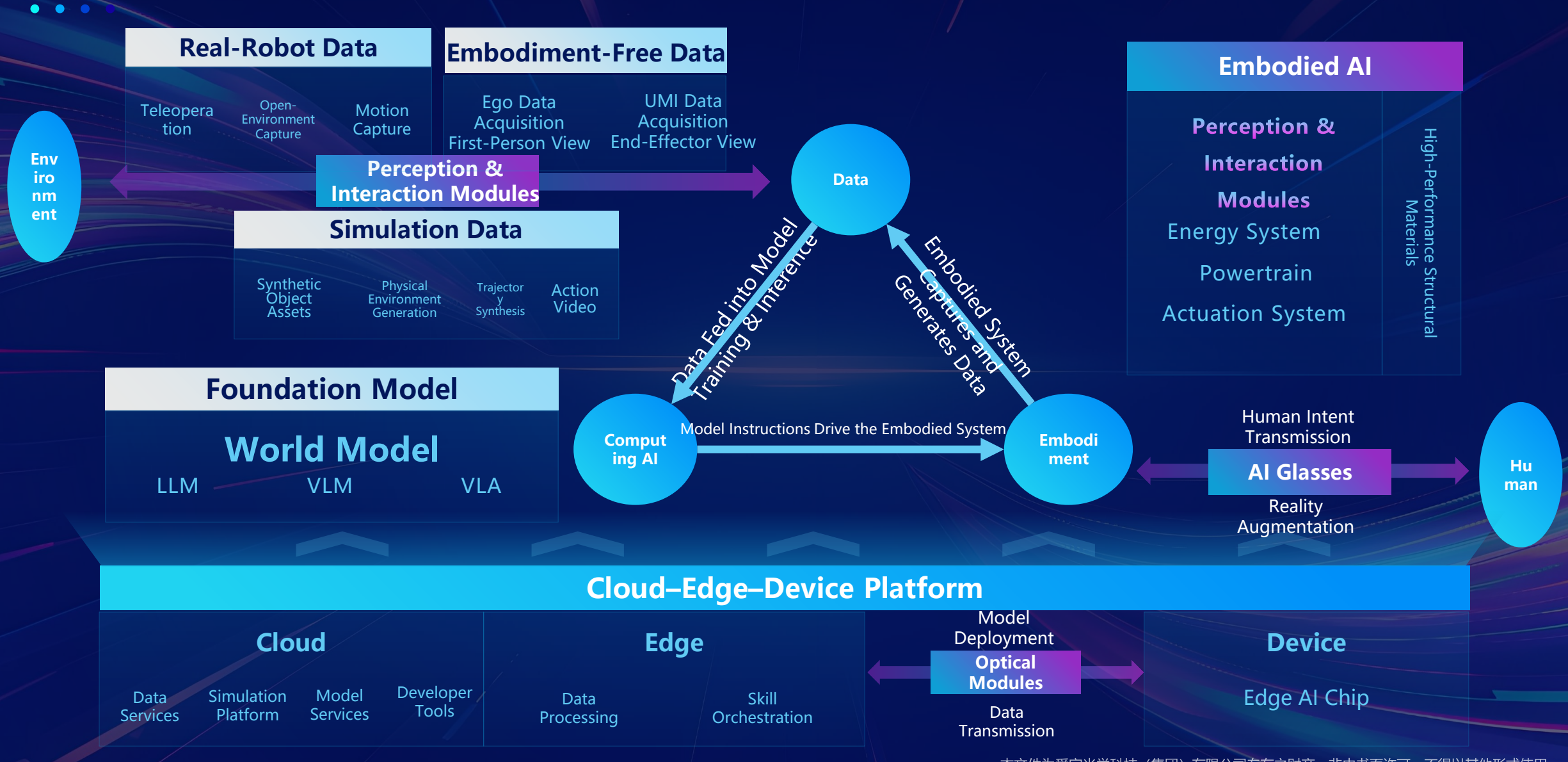
AI glasses bridge human cognition and physical AI

Physical AI

AI Glasses (Multimodal Perception & Interaction)

Human Brain

Embodied AI Technology Framework & Ecosystem Map



Embodied AI Data Supply: Just 1/20,000 of Demand

Evolution of Tesla Autonomy

- **Basic Perception 2014–2018** — Monocular Vision, Lane Keeping
- **Autonomous Decision-Making 2019–2022** — In-House FSD + Multi-Camera, Complex Decisions
- **Continuous Evolution 2023–** — Dojo + End-to-End Learning, Near Full Autonomy

Self-Evolving Engine 'Human + Visual Data'

Automotive

Fully Human-Driven (L0) → Driver Assistance (L1) → Partial Driving Automation (L2) → Conditional Driving Automation (L3) → High Driving Automation (L4) → Full Driving Automation (L5)

Human in Car

VS

Robotics

Fixed Motions → Fixed + Tuned → Fixed Task + Low Autonomy → Task Understanding → Autonomous Task Discovery → Near-General Autonomy

Simple Scenarios · Single Tasks · Low Autonomy

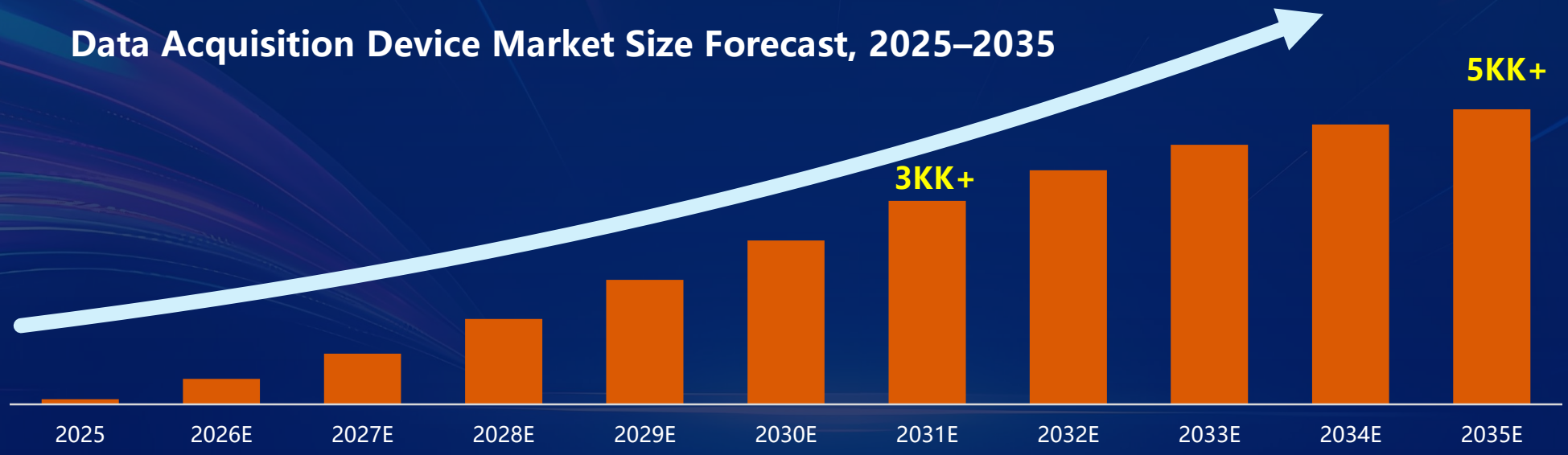
Complex Scenarios • Closed-Loop Autonomy

Human + Robot

Human-Centric Data Enables Practical Humanoids

Data Acquisition Devices: Growth Opportunities as the Data Bridge to the Physical World

- Data Acquisition Device Market Size & Technology Trends



Note: Source: Goldman Sachs Research

Technology Trends in Data Acquisition Devices

2025–2027
Era of Standalone Data Capture Devices

Basic Vision + IMU Modalities Only; No Force/Tactile or Full-Body Motion Data

2028–2031
Rapid Adoption of Integrated UMI + EGO Solutions

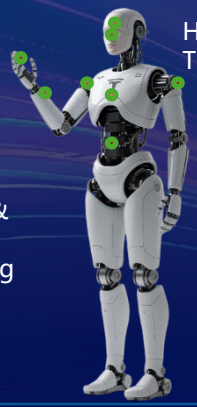
Multimodal Coverage Expanded to Tactile Sensing, Force Feedback, Audio and Full-Body Inertial Motion Capture

2032–2035
Mature Stage of Fully Integrated, Multimodal Data Acquisition

Real-Time On-Device World-Model Preprocessing Generates Training-Ready Datasets During Capture

Data Acquisition: Extending Sunny Optical’ s Robotics & Wearable-Vision Expertise

Robot Vision System Solutions



AI

Integrated XR & Wearables Solutions

EGO

Vertically Integrated Data Acquisition Capabilities

Teleoperated Real-Robot Data Acquisition

VR Headsets

Humanoid Platform /Desktop/Mobile Dual-Arm

Complete-System ODM

Vision System

Wearable Data Acquisition

EGO Device

UMI Device

Vision System	Whole Device Solution	Whole-Device OEM/JDM
Calibration / Synchronization	Multi Sensor Fusion	Depth Computation

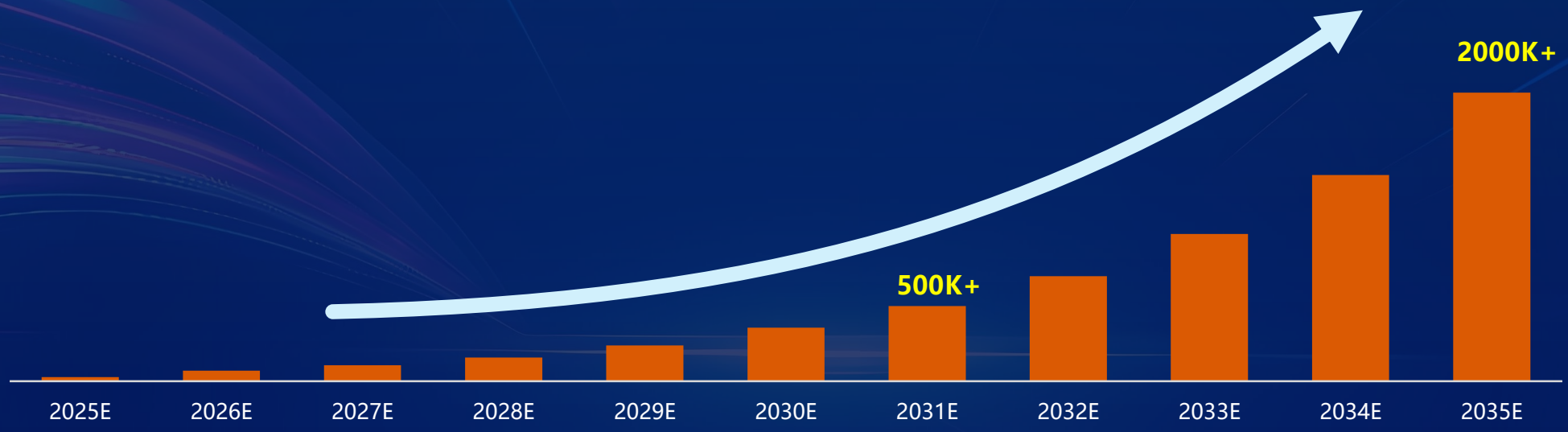
Accuracy • Physical Fidelity • Control Reliability (Essential for Mass Production)

Breadth • Capture Efficiency • Generalization (For Pretraining & Rapid Iteration)

Humanoid Robots: The Ultimate Form of Physical AI

Humanoid Robot Market Size & Technology Trends

Global Humanoid Robot Market Size Forecast, 2025–2035



Note: Sources: Goldman Sachs Research and Yole

Three Stages of Humanoid Robot Commercialization

➢ **Stage I (2024–2027): Basic**

Industrial: Repetitive Tasks

➢ **Stage II (2027–2030): Intermediate**

Commercial: Retail & Service

➢ **Stage III (2030 onward): Advanced**

Home: Flexible Services

Humanoid Robots: Sunny Optical's Full-Stack Presence from Core Optics to Integrated Visual Perception Solutions

Head: Localization & Perception System

Perception & Recognition | Localization & Navigation

Audio-Visual Multi-Sensor Fusion

Chest/Waist: Safety Perception System

Ground Modeling | 360° Surround View

Integrated RGB-D / LiDAR Vision

Hand: Manipulation Perception System

Hand–Eye Coordination | Grasp Guidance

Compact Short-Range RGB-D Camera

Vision–Tactile Sensor

Leg: Obstacle-Avoidance Perception System

Intelligent Obstacle Avoidance | Foot Feedback

ToF RGB-D / dToF Solid-State LiDAR

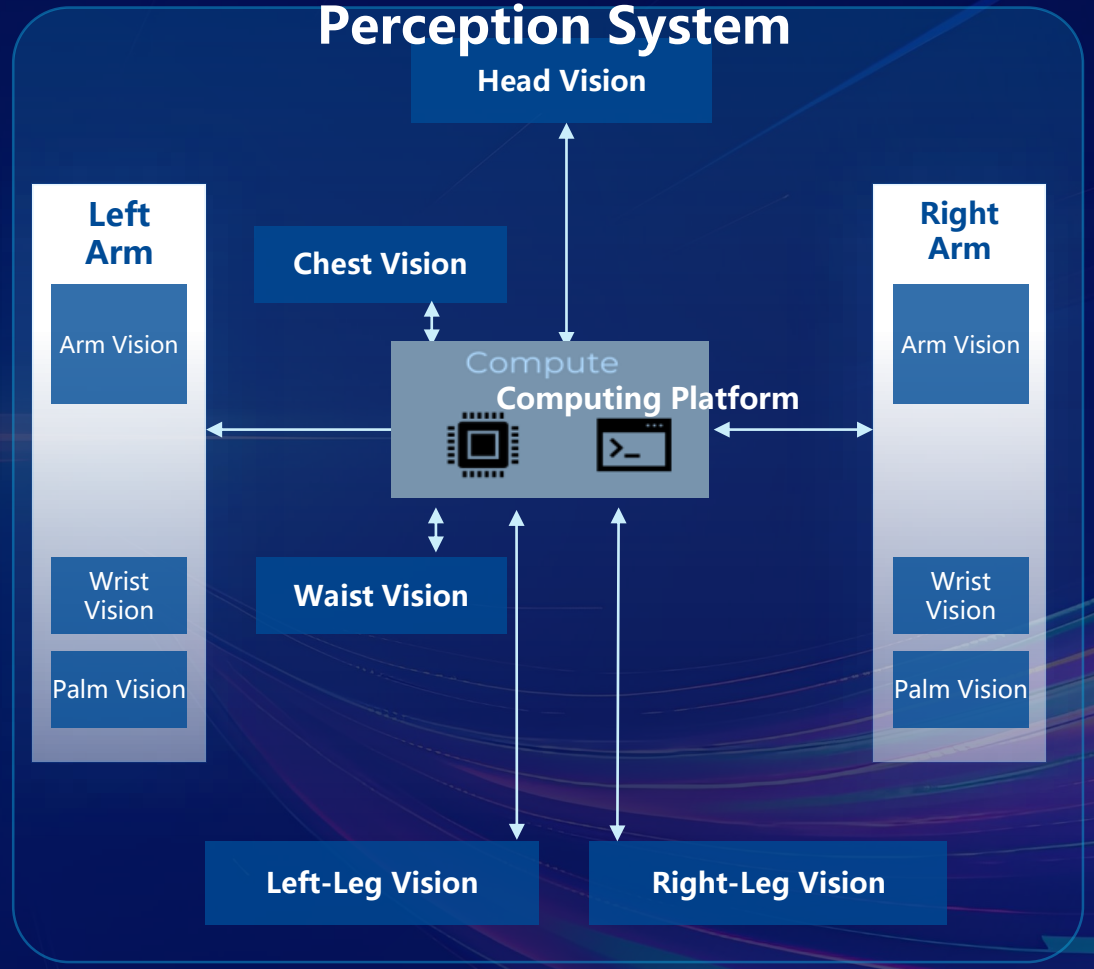
Higher Resolution and Accuracy

More Diverse Perception Modalities

More Stable and Faster Transmission

More Highly Integrated Product Forms

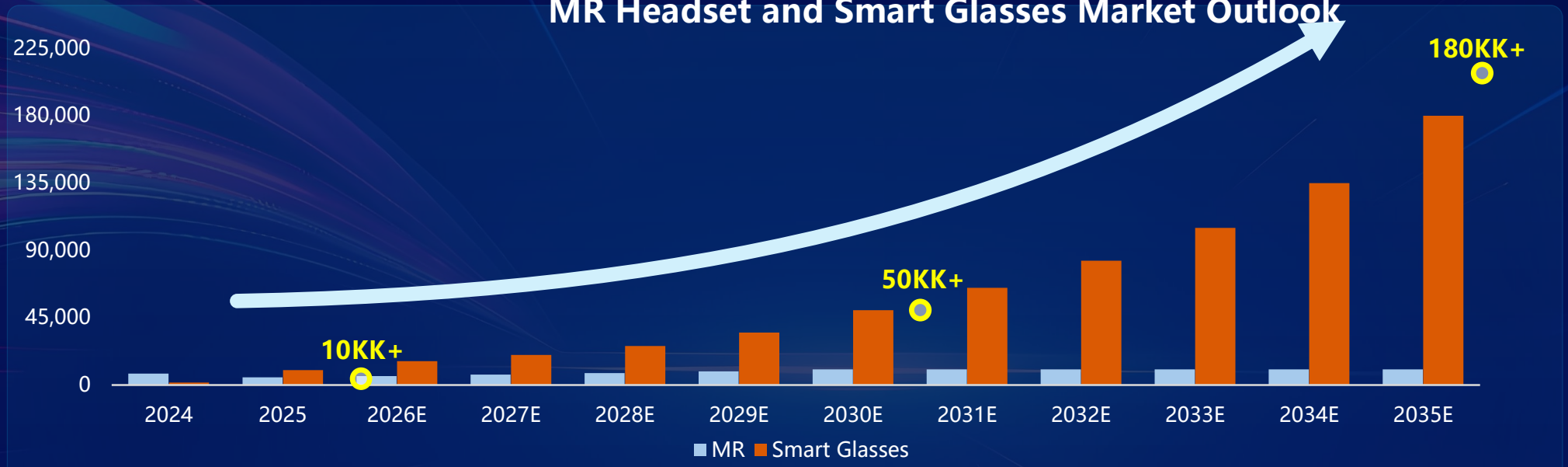
Integrated Robot Vision and Perception System



AI Glasses: A RMB 100 Billion Market Scaling Rapidly and Ushering in a New Consumer Electronics Cycle

XR Market Size & Technology Trends

MR Headset and Smart Glasses Market Outlook



Note: Sources: IDC and Wellsenn XR; chart reconstructed from source data.

MR

Split Architecture with External Compute

Lightweight All-in-One with Integrated Compute

More Natural Interaction (Enabled by Higher Vision Compute)

Broader Applications and Further Weight Reduction

SG

AI Audio Glasses
Basic Voice Assistant

AI Camera Glasses
Cloud-Based Multimodal AI Foundation Model

AI + AR Smart Glasses
Multimodal AI Foundation Model + Display Module

Full-Featured AR Smart Glasses
Display + Eye Tracking + Gesture Control + EEG + Device–Cloud Collaborative AI Foundation Model

Note: SG is the abbreviation for Smart Glasses

AI Glasses: Sunny Optical Builds Component Moats through Full-Stack Vertical Integration

End-to-End Vertical Integration: Core Optical Components → Diversified Optical Modules/Engines → Integrated Hardware–Software Systems

High-Performance Lightweight Prism

Overcoming Material Constraints to Enable Lightweight Prism Solutions

High-Precision MicroLED Packaging

Leading MOC Packaging
Core Micro-LED Packaging

Full-Stack Optics + Vertical Integration

Ultra-Thin VID Lens

Industry's Thinnest Mass-Producible VID Lens

Medium thickness ≤0.8mm

Extreme Miniaturization

Molding Technology + Optimized Design + Scalable High-Precision Assembly

Sunny Optical’s Diversified AI Hardware Portfolio

AI + Optics

AI + Optics Intelligent Imaging

Video Recording Tool

Passive Data Capture and Recording

Creative Partner

Proactive AI Value Auto Capture & Editing

AI + Optics Microscopic Vision Agents

Observation Tool

Visual Inspection · Manual Operation · Expert Judgment

Analytics Tool

Smart Imaging & Analysis Real-Time Alerts

AI + Optics Industrial Vision

Image Acquisition Device

Split Architecture Passive Image Transmission

Integrated Edge AI Terminal

Integrated On-Device AI Defect Inspection + Measurement Barcode Recognition + Robot Guidance

Integrated Vertical Integration

Optical Components → Lenses → Modules → Main Control → Structures → Complete Systems

Hardware–Software Integration

3D Vision

On-Device AI

Secure Data

Sensor Fusion

Optics + Intelligent Manufacturing

Mold Platform

Equipment Platform

Outlook: Capturing AI-Era Growth

Core Growth Curves for the Next Decade

AI Glasses

5-Year High Growth

Near–Mid Term

RMB 1T Market

Optics-Led

Data Acquisition Devices

RMB 100B Opportunity

10M+ Hour Data Gap

Embodied AI Infrastructure

RMB 100B Market

N

Extension of Optics + AI

Intelligent Imaging

Microscopy

Industrial Vision

AI + Optics Empower

Traditional Industries

Unlocking Vast Possibilities

Multiple RMB 100B Markets

Ideal AI Form Factor →

Embodied AI

High Growth over the Next Decade

Mid- to Long-Term Growth Driver

2M+ Units Shipped by 2035

RMB 1T Market

Vision-Intensive

Optics Is the Gateway to Embodied AI Decision

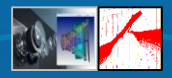
The AI Era
Large-Scale Investment in Hardware R&D and Integrated Delivery Builds Sunny Optical's Enduring Moat

AI Enablement Closes the Software and Algorithm Gap

+

Hardware Strengths Optics + Hardware Integration + Mass Production

Closed-Loop Full-Stack Optics (Core Moat)



Optical Design

Ultra-Precision Processing

Module Integration | System Integration | Solutions + Algorithms

Integrated Hardware (Cost Moat)

Optical Components

Vision Solutions

Perception Modules

Systems

Making High-End Optics Accessible at Scale

Multi-Segment Positioning (Execution Moat)

Next-Generation Devices (AR Glasses)

Data Acquisition Devices Diversified Hardware

Embodied AI (Robotics)

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Optics as the Foundation, AI Expanding the Frontier Advancing toward Boundless Opportunities

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SUNNY OPTICAL TECHNOLOGY

2026 INVESTOR DAY 投资者日

Embrace the era of AI computing power with core optical capabilities

New Strategy, New Track, New Future

Speaker：Gu Bo (CTO, CAE Fellow)

Date：2026.06.24

PART 1

Strategy Review

Why “Optics + AI”

Strategic Direction

01/ strategic direction confirmed in last year

Extended from “Imaging Sensing” to “Optics + AI”

02/ Core logic

The exploded demand for AI computing power
optics is the core entry point for intelligent terminals to perceive the physical world

03/ Mission reaffirmed

"The extension of human eyes in time and space"
- enabling machines to see visible and invisible information

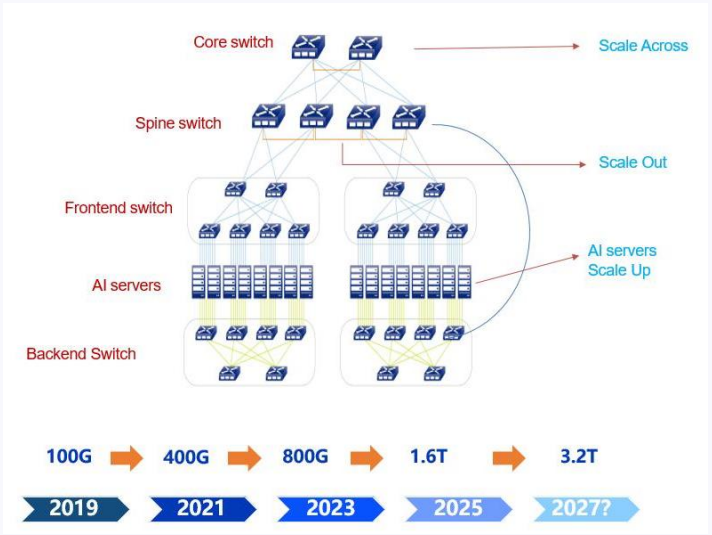
Core logic

The exploded demand for AI computing power

AI computing takes place on **AI servers in data centers** (GPU clusters)

1

When the computing power of a single GPU is insufficient, dozens to tens of thousands of GPUs need to work together, which generates a huge demand for data exchange among GPUs



◆The internal communication network structure of the data center (two schematic cabinets) and the demand for optical interconnection

2

The communication network within the data center has become a new bottleneck, which is specifically manifested in three levels

3

Level	Range	Typical distance	The increased demand for bandwidth	Bottleneck nature
Scale Up	Within the same cabinet Between GPU	< 1m	100G → 1.6T / 3.2T	The most severe issue, the original PCIe copper bus bandwidth/distance is insufficient
Scale Out	Within the different cabinet (Same data center)	2~100m	400G / 800G	Secondly, traditional Ethernet switches and copper cables need to be upgraded
Scale Across	Between different data centers	> 10km	relatively small	At present, it is not the main bottleneck and the TCP/IP protocol can still be used

Core logic

Optics is the core entry point for intelligent terminals to perceive the physical world

Smart wearables

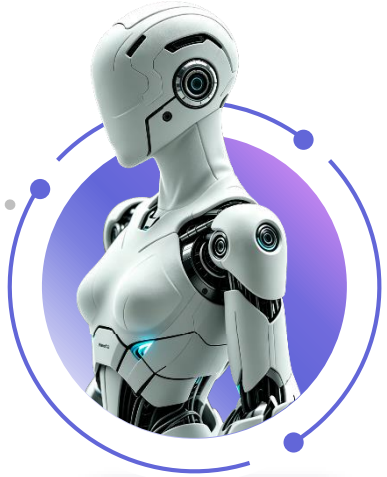
AI Glasses
Next-generation computing platform

Intelligent transportation

eVTOL
The revolution of urban air traffic

Intelligent manufacturing

Industrial robot
A new paradigm of precision manufacturing



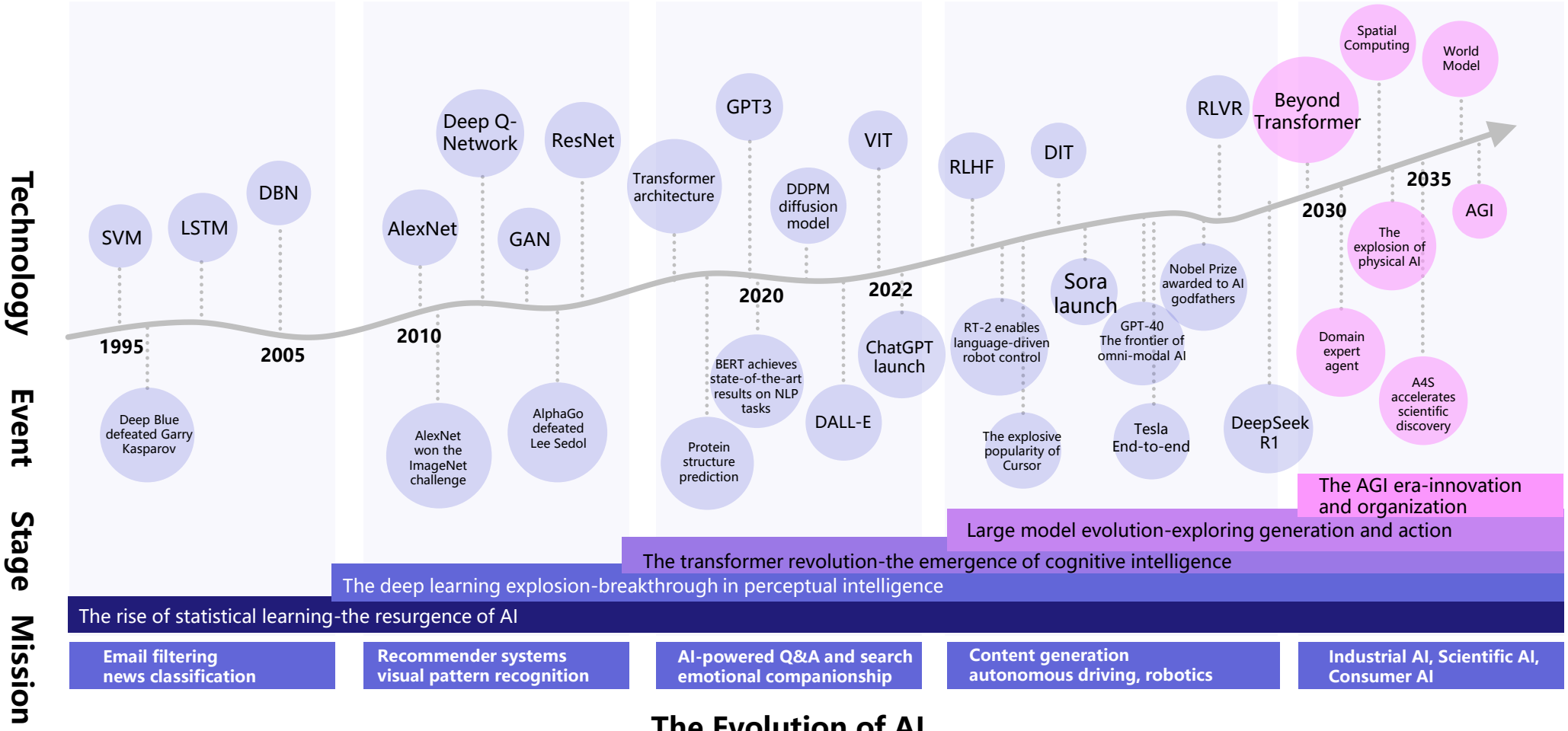
Smart home

Companion robot
From sweeping the floor to doing all-round housework

Mission reaffirmed

The inevitable path to AGI is "towards the physical world"

Over the past decade, the prosperity of AI has been built on the vast amount of text and image data in the digital world. In the next decade, AI will transcend virtual boundaries and interact deeply with the real physical environment in physical forms such as "physical AI".

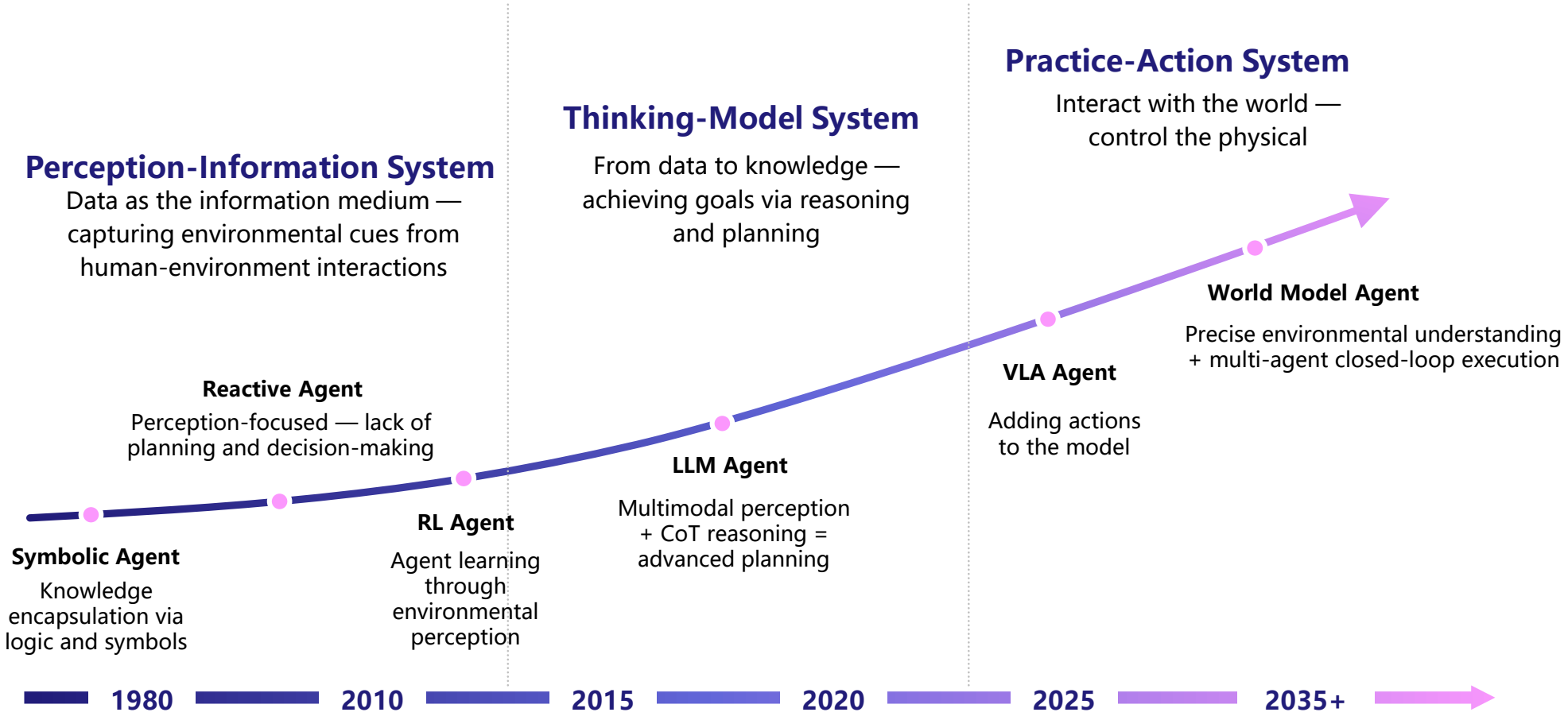


The Evolution of AI

* Huawei - "Intelligent World 2035

Mission reaffirmed

Over the next 10 years, QIS-based CMOS sensors and Edge AI will shift "optics + AI" from image capture to computational perception and spatial intelligence—moving beyond human vision to enable machine-centric reasoning about the 3D world.



The evolutionary path of agents

* Source: Huawei

Mission reaffirmed

"The extension of human eyes in time and space"
- enabling machines to see visible and invisible information

Increase in quantity

1 › 5 › 10+

Multiplication in cameras of each terminal device
360° perception + grasping + obstacle avoidance

Optics + X Multi-modal

See clearly › Understand deeply

Material, deformation & state recognition via spectral/IMU/tactile calibration.

Edge Computing

Passive imaging › Active perception

On-device inference + built-in AI chips

Increase in quantity and value

Personal background and the original intention of joining the Company

nearly **40** years

R&D of technologies and industrial experience in the fields of optics and lasers

why

Core optical perception strength + clear strategic vision

Mission

Lead cutting-edge technology planning and R&D execution to accelerate strategic transformation

PART 2

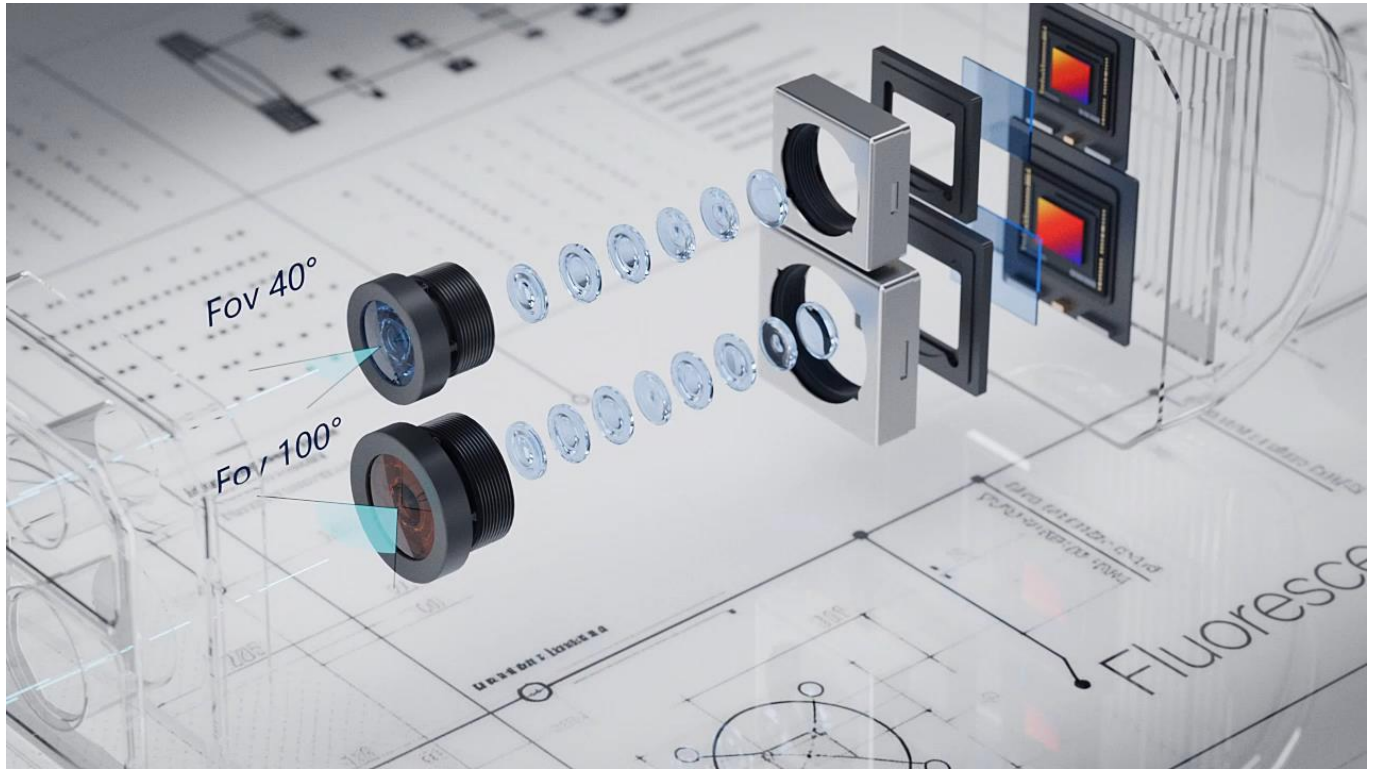
Core Assets

competitive edge

A 40-year "optical capability chain" - an irreplaceable differentiated advantage

Complete end-to-end optical capabilities

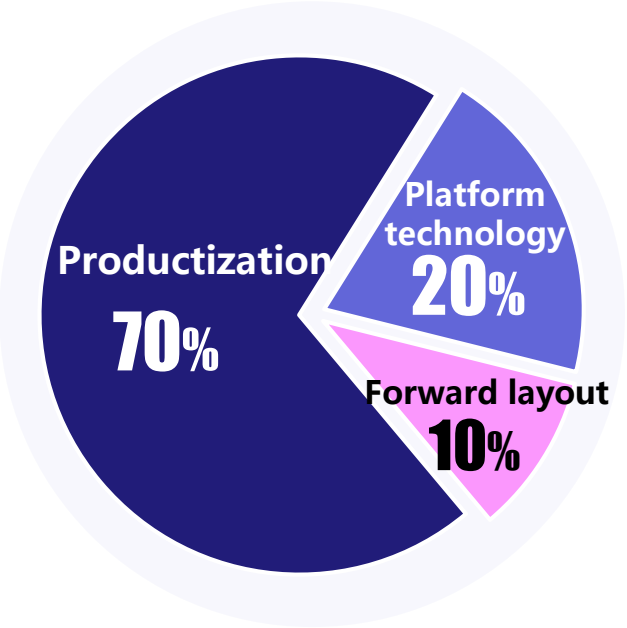
Ultra-precision manufacturing → Lens sets & Modules → Systems & Solutions



2024/ 2025 **~8%**

R&D expenditures/revenue

Accumulated granted patents **8000+**



R&D Mode ” 721 “

Market position

Handset Lens Sets

Global market share

NO.1

Handset Camera Modules

Global market share

NO.1

Vehicle Lens Sets

For 13 consecutive years worldwide

NO.1

2025 Global Market share

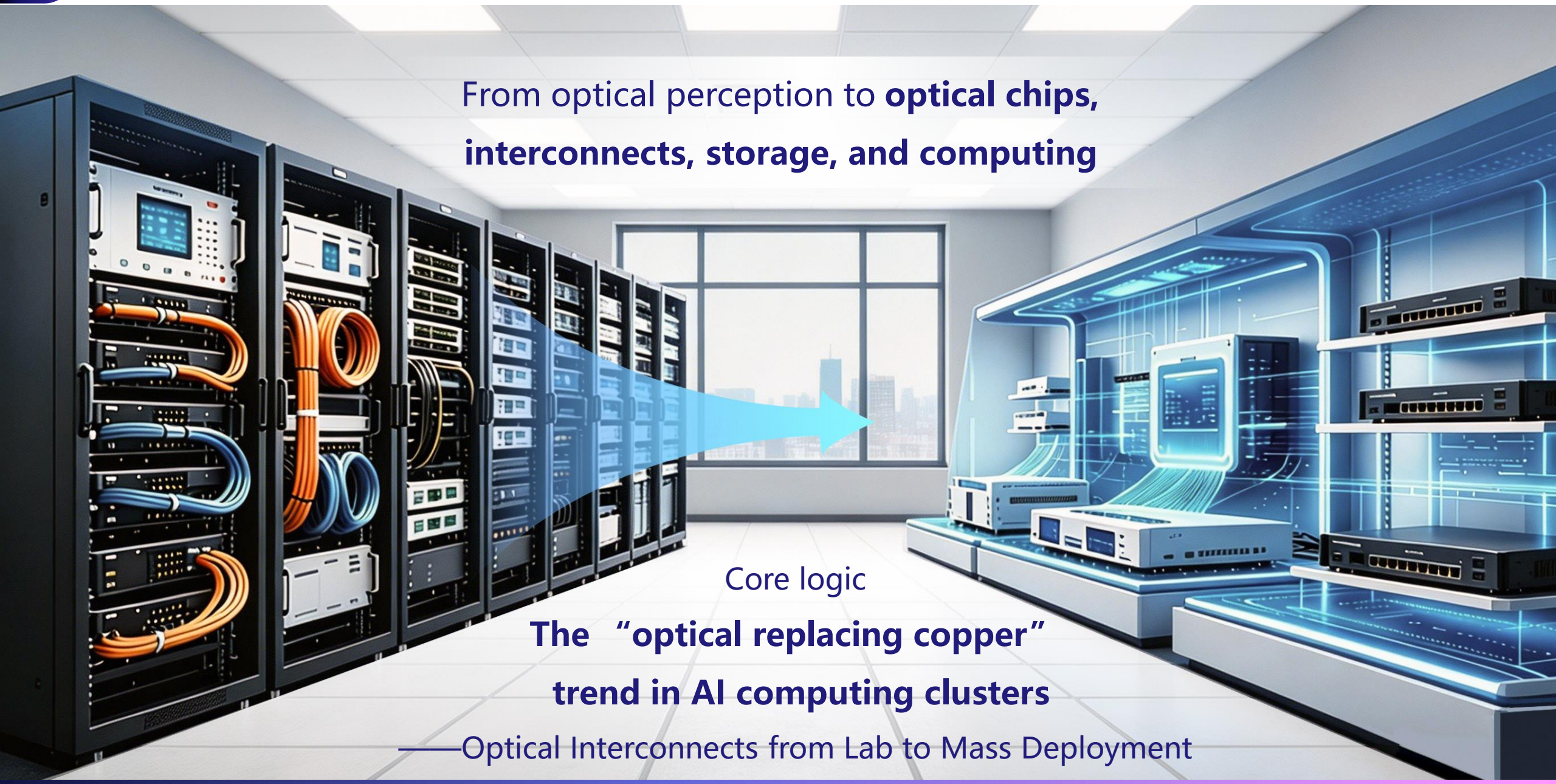
34%

PART 3

Strategic Depth: “Optics+AI”

New Business Scenarios

Strategic Landscape: “Optics+AI” Growth Engine



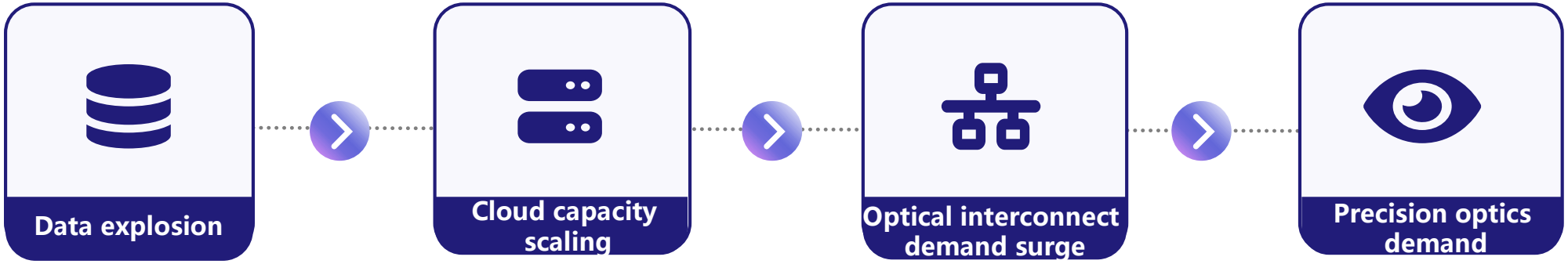
From optical perception to **optical chips, interconnects, storage, and computing**

Core logic

The “optical replacing copper” trend in AI computing clusters

——Optical Interconnects from Lab to Mass Deployment

Application & Model Demand Propagation



Optical Foundation

CPO (Co-packaged Optics)
Chip-level optical interconnects

Silicon photonics technology
Silicon-based photonic integration

High-speed optical modules
800G→1.6T→3.2T

Advanced packaging
Heterogeneous integration of optoelectronic devices

Certain demand amid uncertain routes:

high-precision optics and precision optical coupling.

Scenario 1: Optical Interconnects – CPO Opportunities

Background

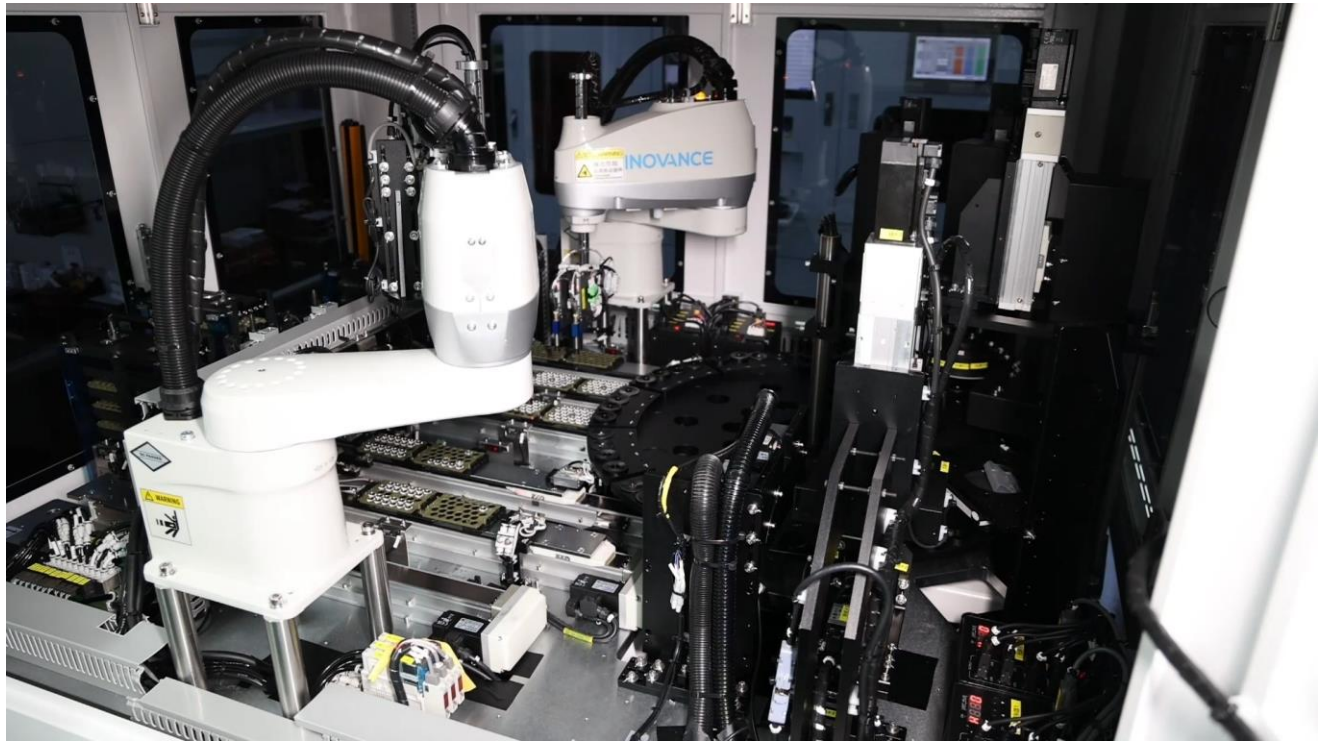
Copper interconnects face growing physical limits in bandwidth, power, reach

Our edge

Micro-nano optics、precision manufacturing
→ transferable to optical transceivers

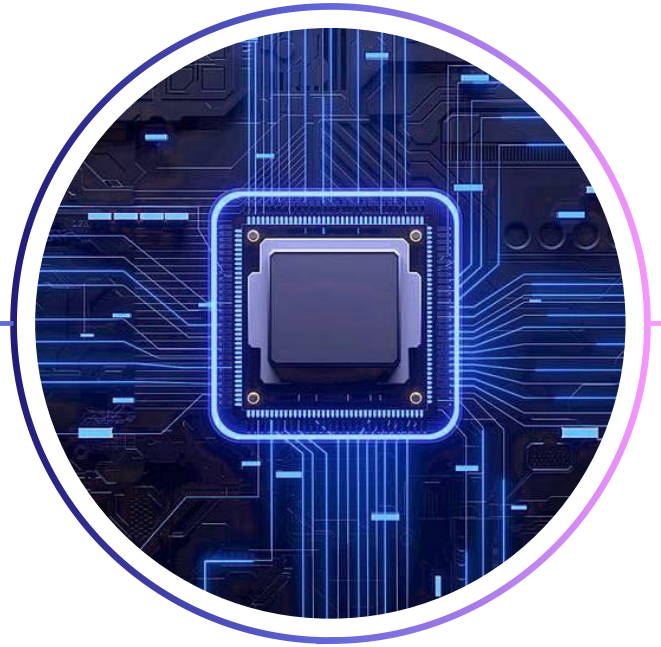
Target scenario

Short-range, high-speed interconnects within AI computing clusters



Scenario 2: Optical Perception

From optical perception to chip-level optical solutions



Vehicle and AI vision: surging demand for dedicated optical chips

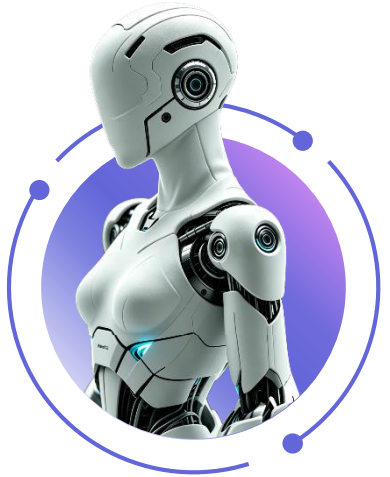
Synergistic Effects Across Emerging Sectors

Vehicle Optics

LiDAR, HUD, smart lighting – continued focus

AI Glasses / XR:

Next super-category – full-chain optics to full-device ODM



Robotics

Spatial AI for vision scenarios

from structured-light/ToF to SLAM,
from arms/hands to hand-eye-brain systems

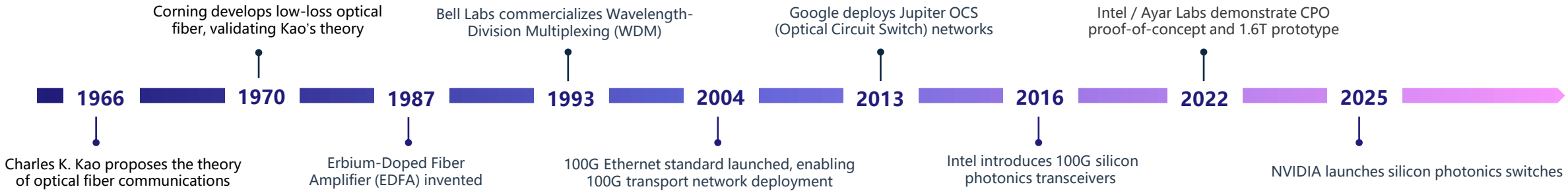
PART 4

Technology & Talent Strategy

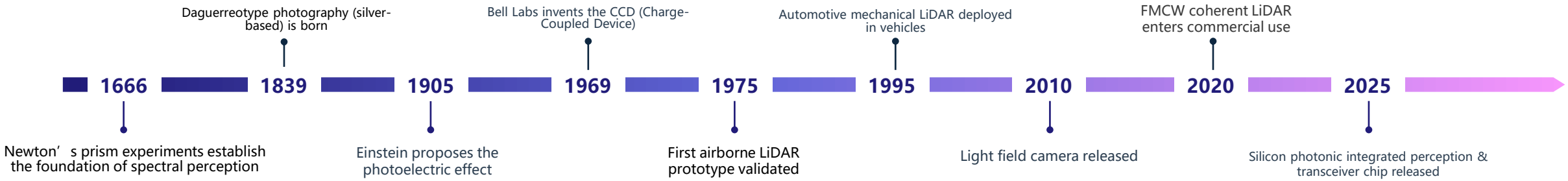
Dual Engines for Strategy Execution

Optical Interconnect & Optical Perception Technology Milestones

Optical Interconnect Technology Milestones



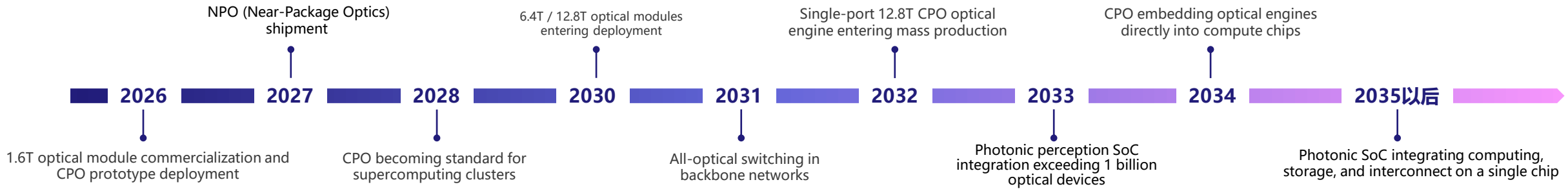
Optical Perception Technology Milestones



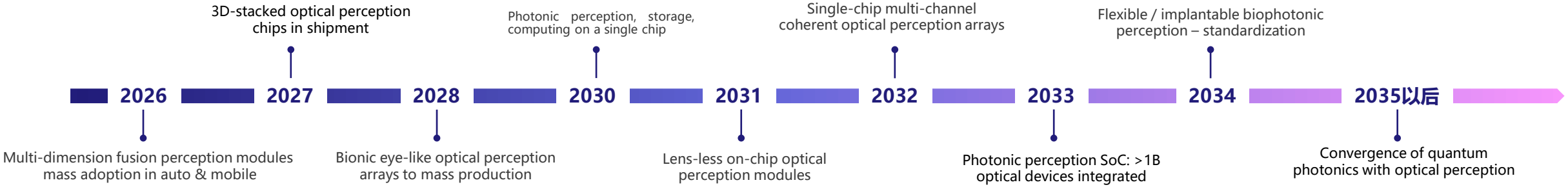
* 图示来源舜宇中央研究院

Future Technology Outlook: Optical Interconnect & Optical Perception

Optical Interconnect Roadmap



Optical Perception Roadmap



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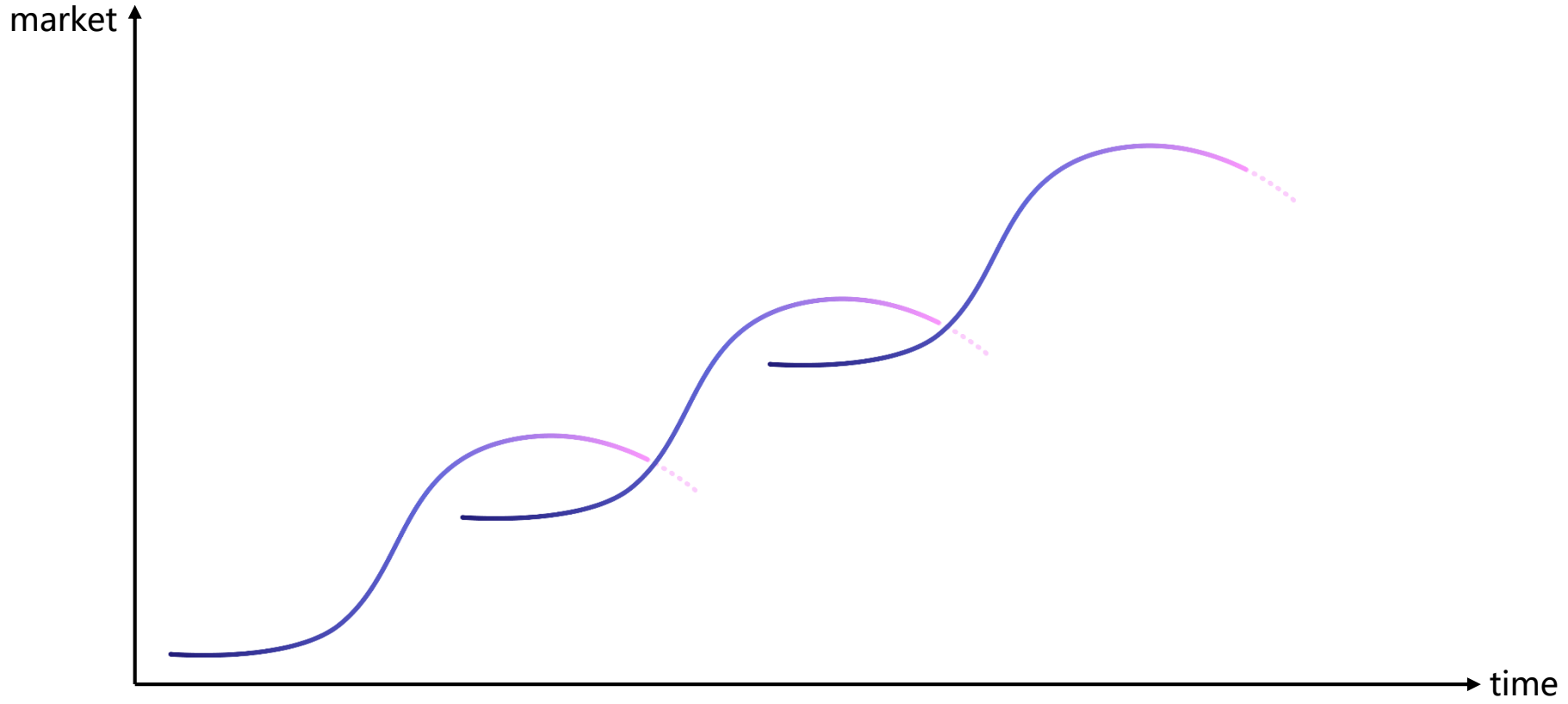
Technology Commercialization Pathway – From Lab to Market

A three-tier roadmap: one generation in production, one in development, one in exploration



Talent as the Primary Engine for Strategy Execution

Our Role

Driving translation of cutting-edge research
into commercial outcomes
Strengthening core technology portfolios

Attracting Global Top-Tier Talent

In areas such as system architecture, optical interconnects, and AI

Industry-Education Integration

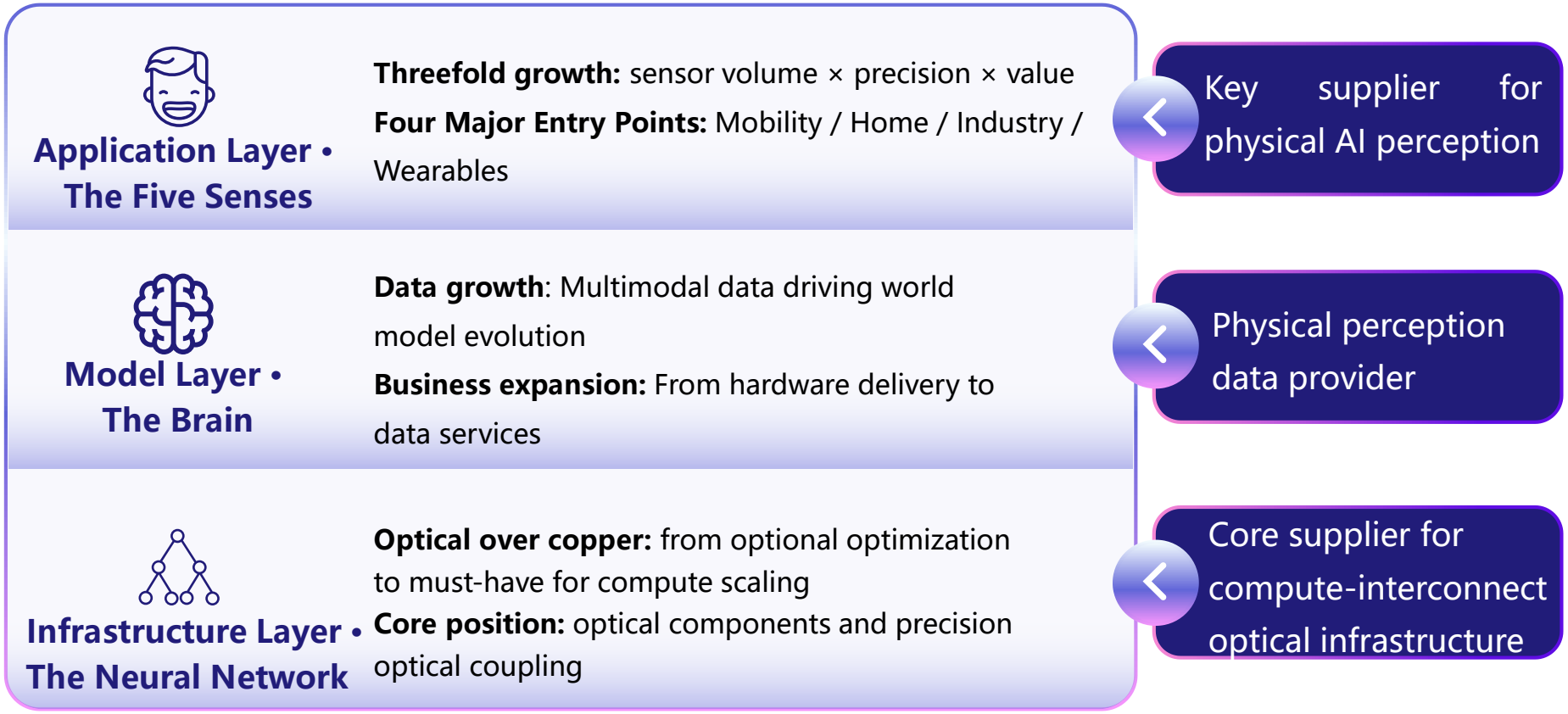
Cultivating interdisciplinary talent through university partnerships

PART 5

Investment Value & Outlook

Strategic Repositioning & Value Reassessment

AI compute demand growth → optical interconnects / perception market expansion



Application-layer volume/value growth → Model-layer data value-add

→ Infrastructure-layer compute scaling → Value closed loop

Why Sunny Optical Will Win

Established Foundation
Highest Certainty

Handset and vehicle lenses sets upgraded by AI capabilities

Growth Catalysts
Fastest Growing

Robotics / AI glasses sensors

Future Options
New Growth Engine

Optical interconnect components/ modules and data services

Triple Growth Drivers

Core Moat

40 years of experience and capabilities

Highly reusable precision optics capabilities

Customer extension

existing Tier-1 customers expanding into new segments

Capital and industrial integration

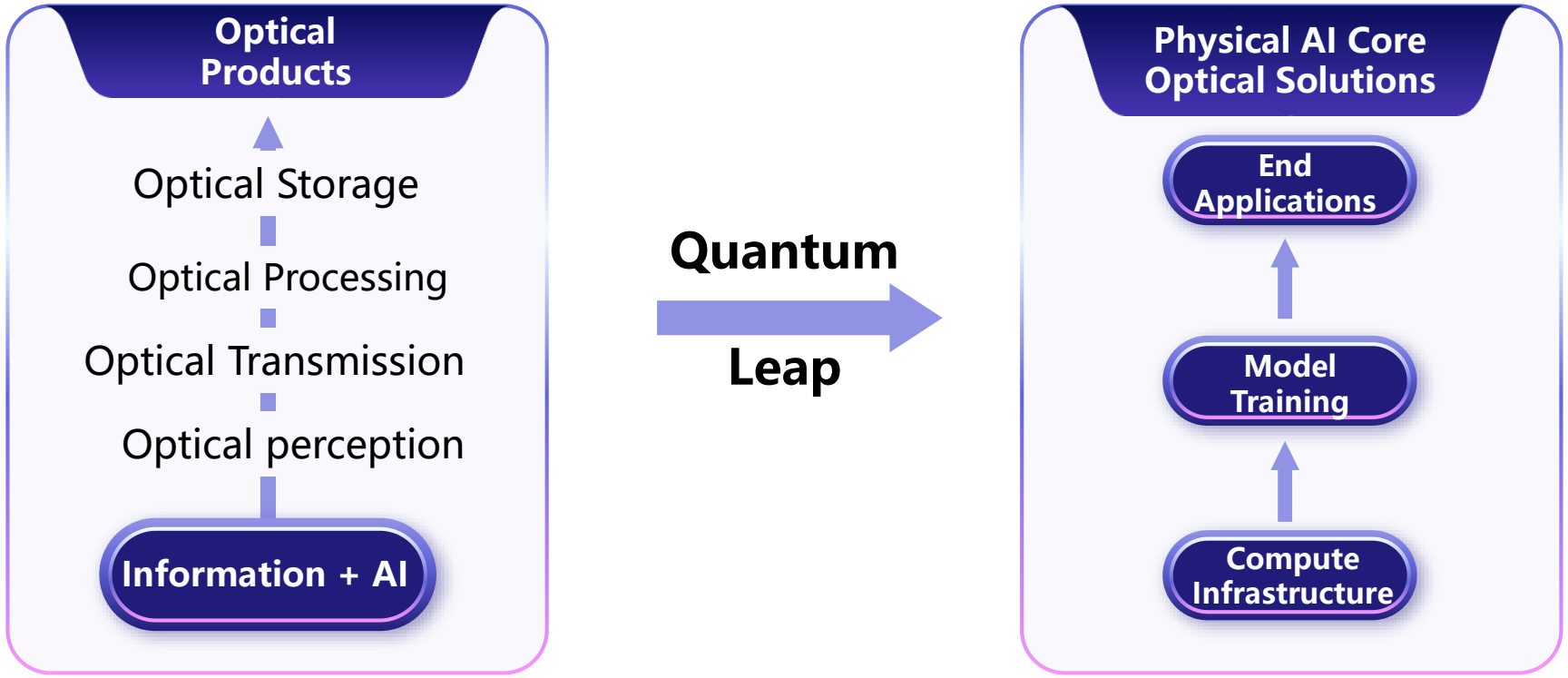
ample cash flow and access to capital tools

Sunny Optical's Moat – Unreplicable Differentiating Advantages

40-year optics track record · Global No.1 · Strategic clarity

Paradigm Shift

Electricity defined information computing for the past six decades
Light will power intelligent interaction for the next six decades



- Great photos for phones
- Clear road views for cars
- A better world for humans

Past → Future

- Gateway to intelligent interaction
- Enabling AI to understand the physical world
- Seamless compute delivery

From “imaging sensing” to “optics + AI”,

this shift is unlocking not only **new tracks**

but also

a fundamentally new valuation logic

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SUNNY OPTICAL TECHNOLOGY

Create Together

· Sunny Optical’ s Core Value: “Co-creation”

· Our Invitation: Continuous communication, transparent disclosure, and shared long-term value

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For the past four decades, we enabled phones and cars to “see” the world.
For the decades ahead, we will empower AI to “see” the world.

THANKS