



ENABLING ARTIFICIAL INTELLIGENCE WITH ENGINEERED SUBSTRATES

January 2026

DISCLAIMER

This document is provided by Soitec (the “**Company**”) for information purposes only. The Company’s business operations and financial position are described in the Company’s 2024-2025 Universal Registration Document (which notably includes the Annual Financial Report) and the Company’s 2025-2026 Half-Year Report.

The 2024-2025 Universal Registration Document was filed with the French stock market authority (Autorité des Marchés Financiers, or AMF) on June 11, 2025 and the 2025-2026 Half-Year Report on November 29, 2025. The French version of the 2024-2025 Universal Registration Document and the 2025-2026 Half-Year Report, together with English courtesy translation for information purposes, is available for consultation on the Company’s website (www.soitec.com), in the section Investors - Regulated Information - Financial reports and results & other regulated releases. Your attention is drawn to the risk factors described in Chapter 2.1 (Risk factors and controls mechanism) of the 2024-2025 Company’s Universal Registration Document.

This document contains summary information and should be read in conjunction with the 2024-2025 Universal Registration Document and the 2025-2026 Half-Year Report.

This document contains certain forward-looking statements. These forward-looking statements relate to the Company’s future prospects, developments and strategy and are based on analyses of earnings forecasts and estimates of amounts not yet determinable. By their nature, forward-looking statements are subject to a variety of risks and uncertainties as they relate to future events and are dependent on circumstances that may or may not materialize in the future. Forward- looking statements are not a guarantee of the Company’s future performance. The occurrence of any of the risks described in Chapter 2.1 (Risk factors and controls mechanism) of the 2024-2025 Universal Registration Document may have an impact on these forward- looking statements. In particular, ongoing geopolitical tensions as well as persistent inflationary pressures, monetary policy and exchange rates uncertainty, and supply chain disruptions, may have consequences that are more significant or longer-lasting than currently anticipated in these forward- looking statements.

Any market shares presented herein are based on internal estimates and relate to that share of the market segment served and addressed by Soitec which may exclude broader segments of the market and competing technologies.

The Company’s actual financial position, results and cash flows, as well as the trends in the sector in which the Company operates may differ materially from those contained in this document. Furthermore, even if the Company’s financial position, results, cash-flows and the developments in the sector in which the Company operates were to conform to the forward- looking statements contained in this document, such elements cannot be construed as a reliable indication of the Company’s future results or developments.

The Company does not undertake any obligation to update or make any correction to any forward-looking statement in order to reflect an event or circumstance that may occur after the date of this document.

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AGENDA

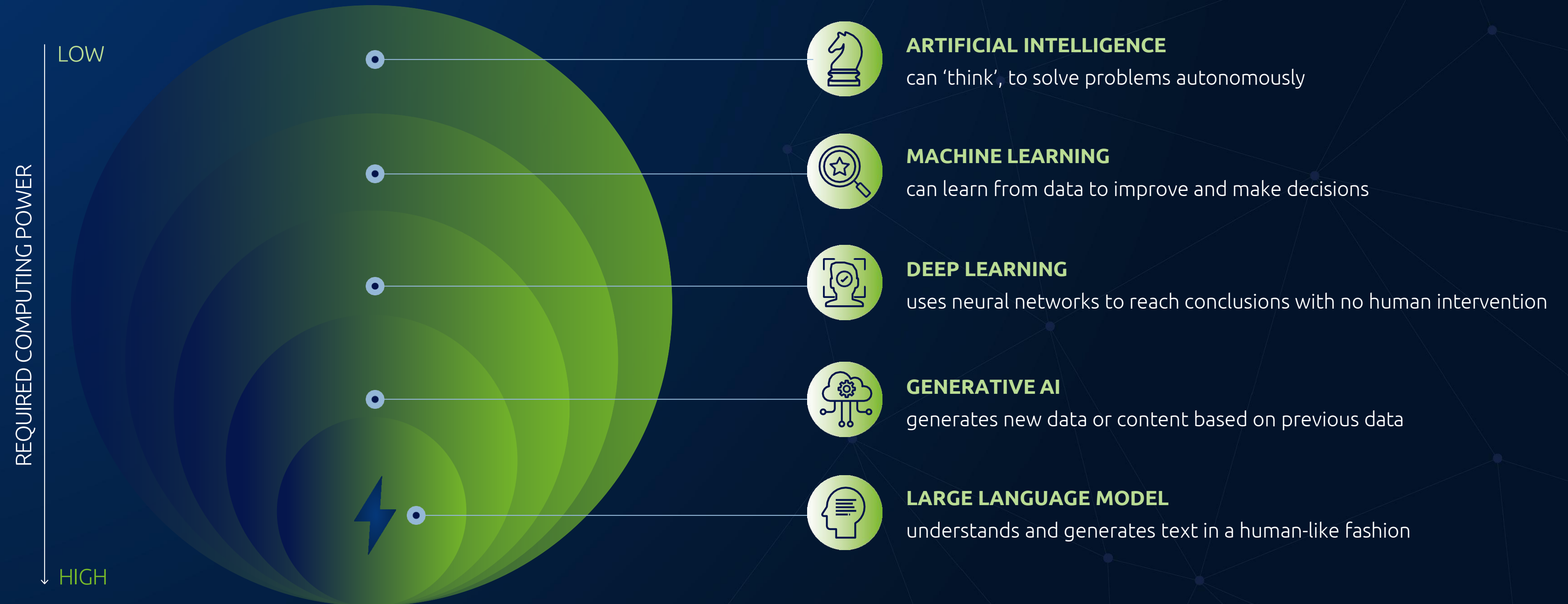
#01
AI FUNDAMENTALS

#02
ENGINEERED SUBSTRATES
FOR CLOUD AI

#03
ENGINEERED SUBSTRATES
FOR EDGE AI

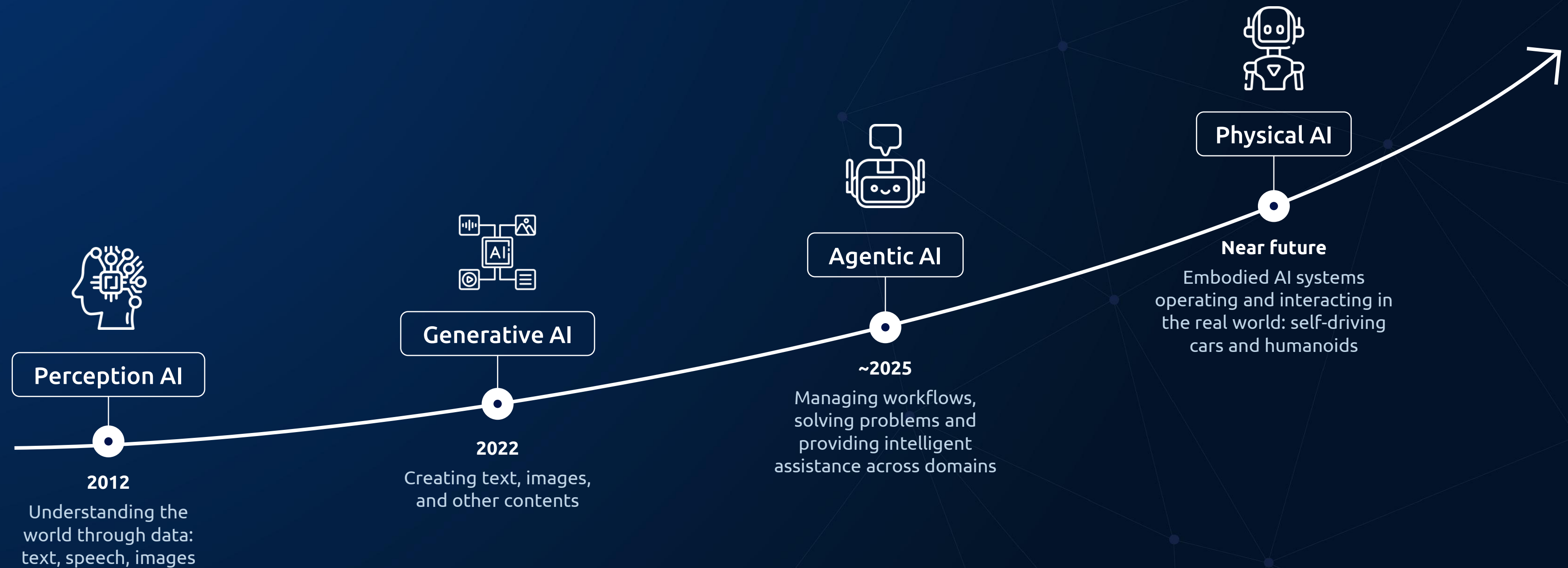
AI FUNDAMENTALS

WHAT IS ARTIFICIAL INTELLIGENCE?



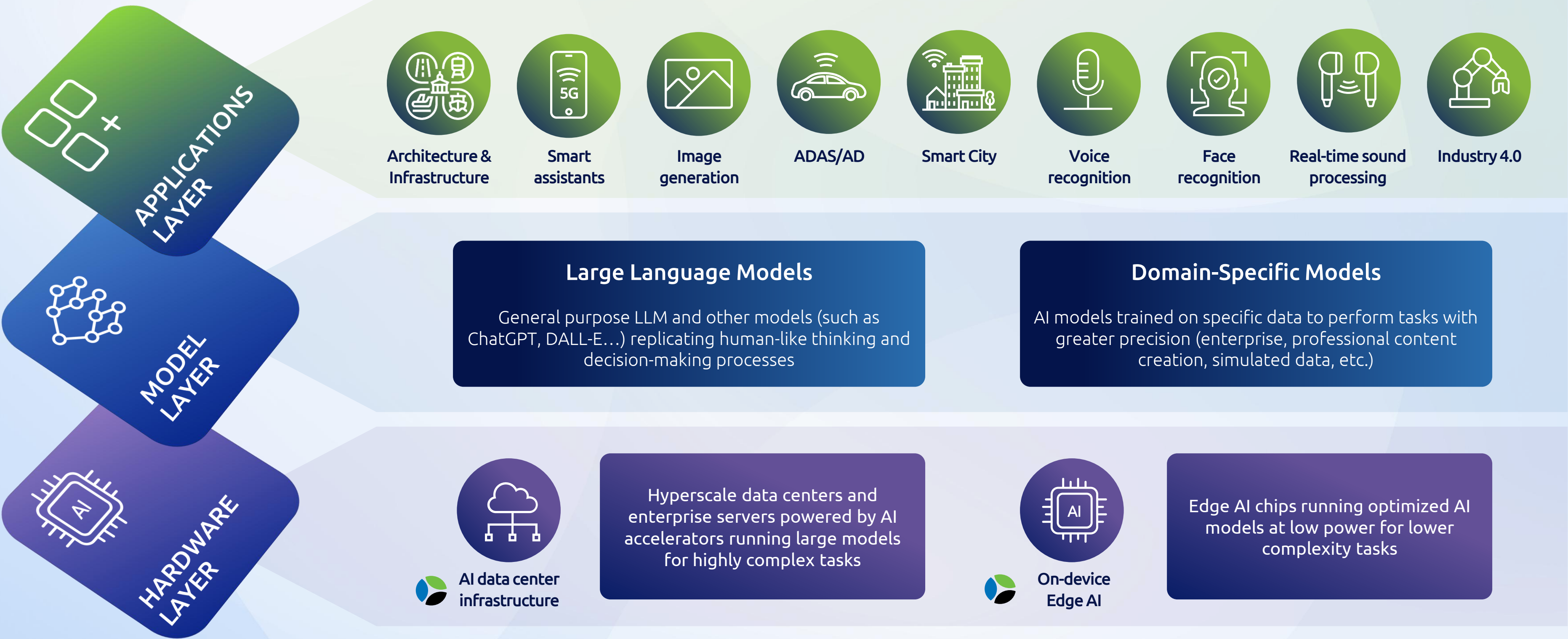
Source: Accenture, SCS

ADVANCING TOWARD PHYSICAL AI: THE NEXT FRONTIER OF AI



CHALLENGES FROM THE APPLICATIONS TO THE HARDWARE LAYERS

SOITEC TECHNOLOGY TO LEVERAGE CLOUD AI & EDGE AI NEW CHALLENGES

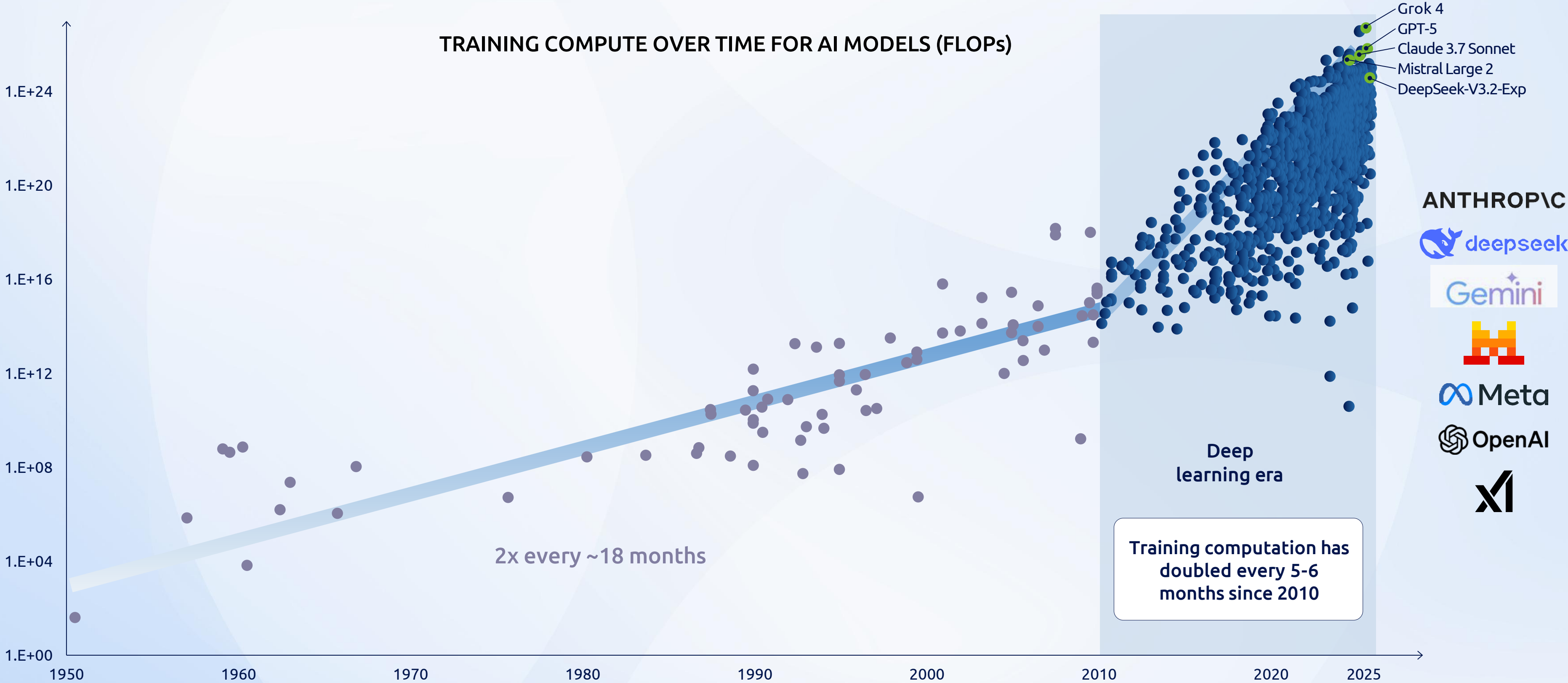


Source: Qualcomm, Red Hat



AI MODEL COMPLEXITY GROWING EXPONENTIALLY

DRIVING AN UNPRECEDENTED SURGE IN COMPUTING POWER DEMAND



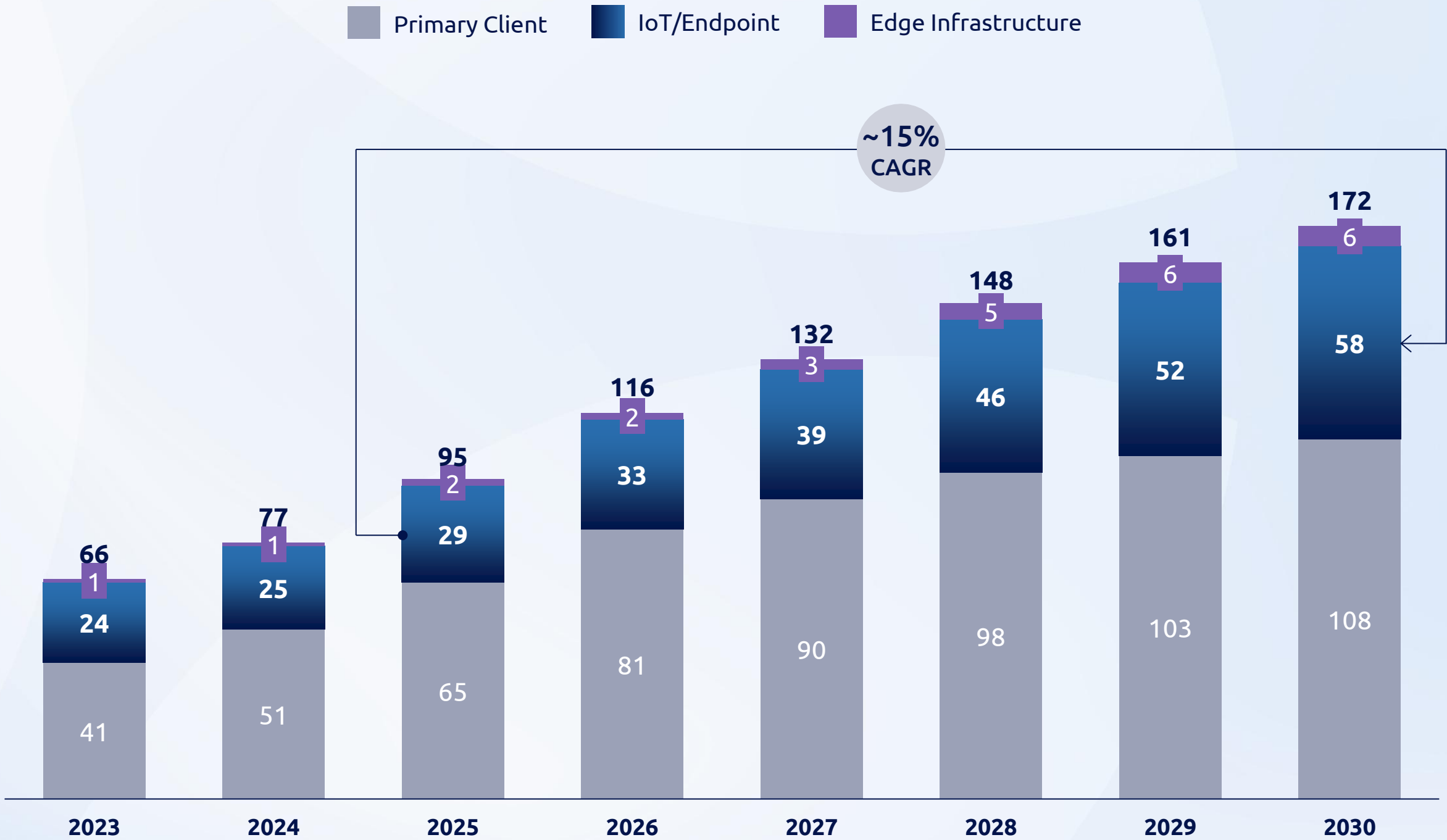
Source: Epoch AI

FROM CLOUD AI TO EDGE AI

LOWER LATENCY, HIGHER ENERGY EFFICIENCY, AND PRIVACY BY DESIGN



EDGE AI SILICON REVENUE FORECAST BY MARKET SEGMENT (\$B)



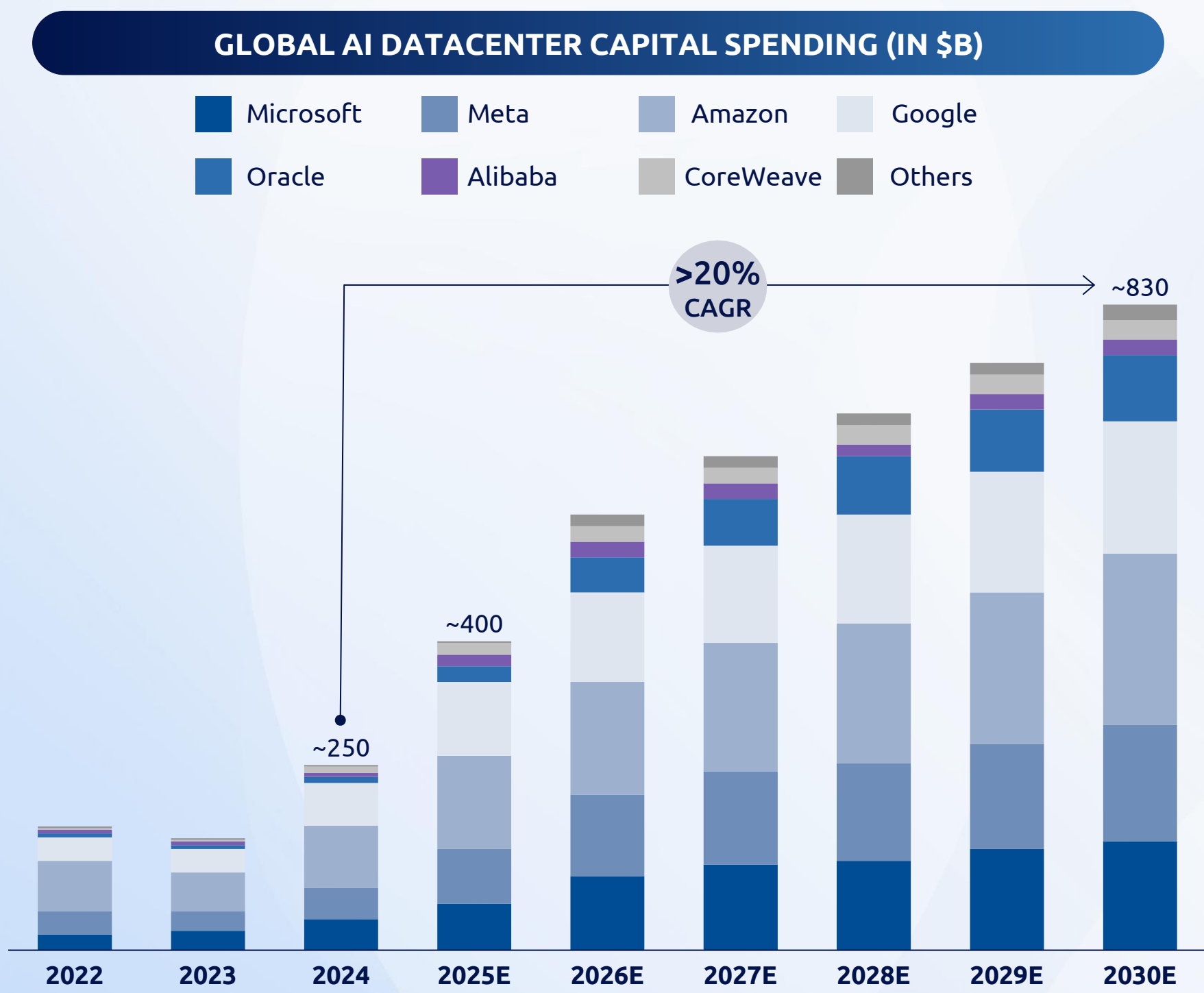
Source: IDC Embedded and Intelligent Systems, Semi AI Module 2025



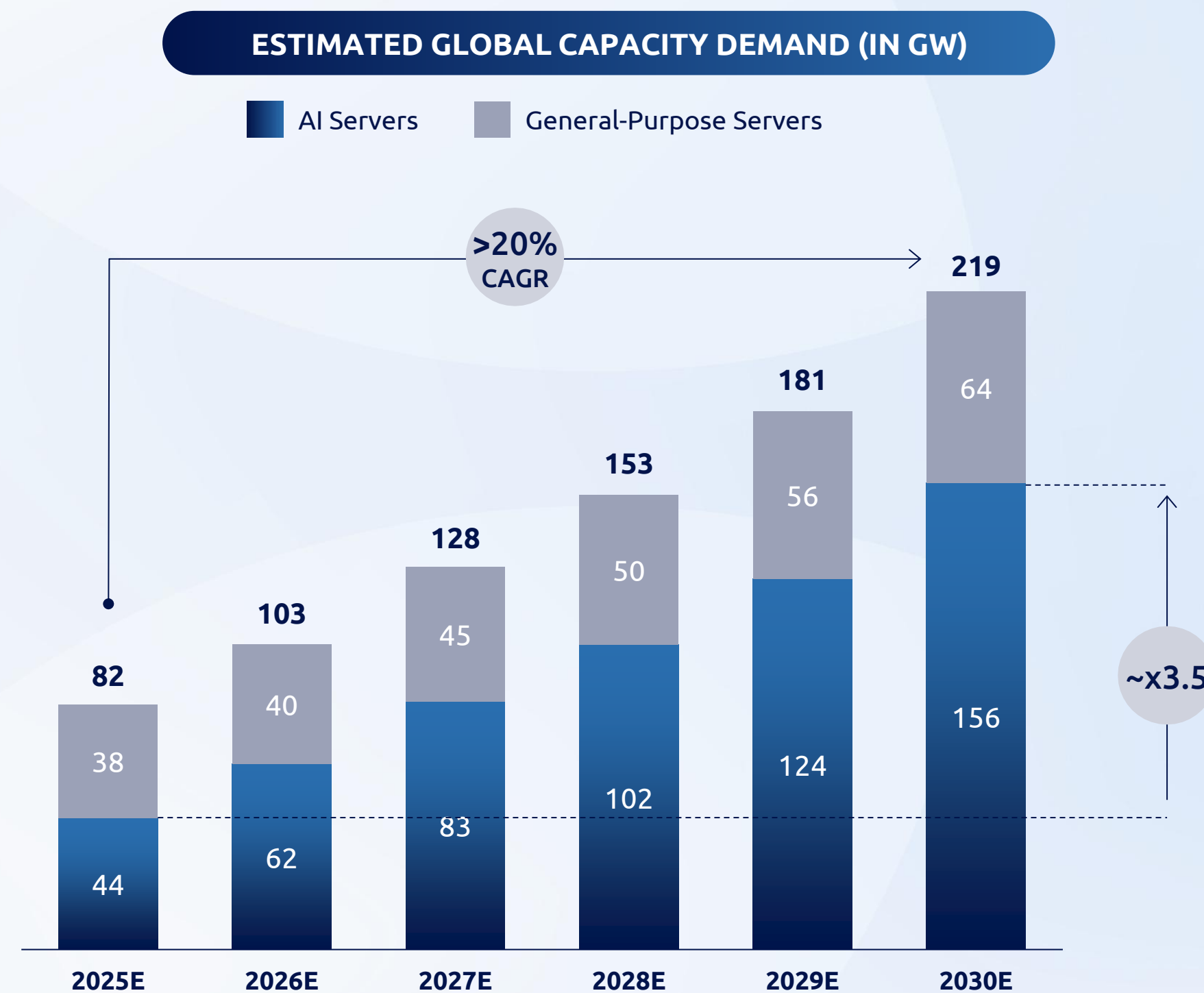
ENGINEERED SUBSTRATES FOR CLOUD AI

AI-LED SURGE IN DATA CENTER CAPACITY DEMAND THROUGH 2030

PLACING INCREASING STRAIN ON INFRASTRUCTURE: BANDWIDTH, POWER, AND ENERGY EFFICIENCY



Source: BNP Paribas Research, Soitec estimates

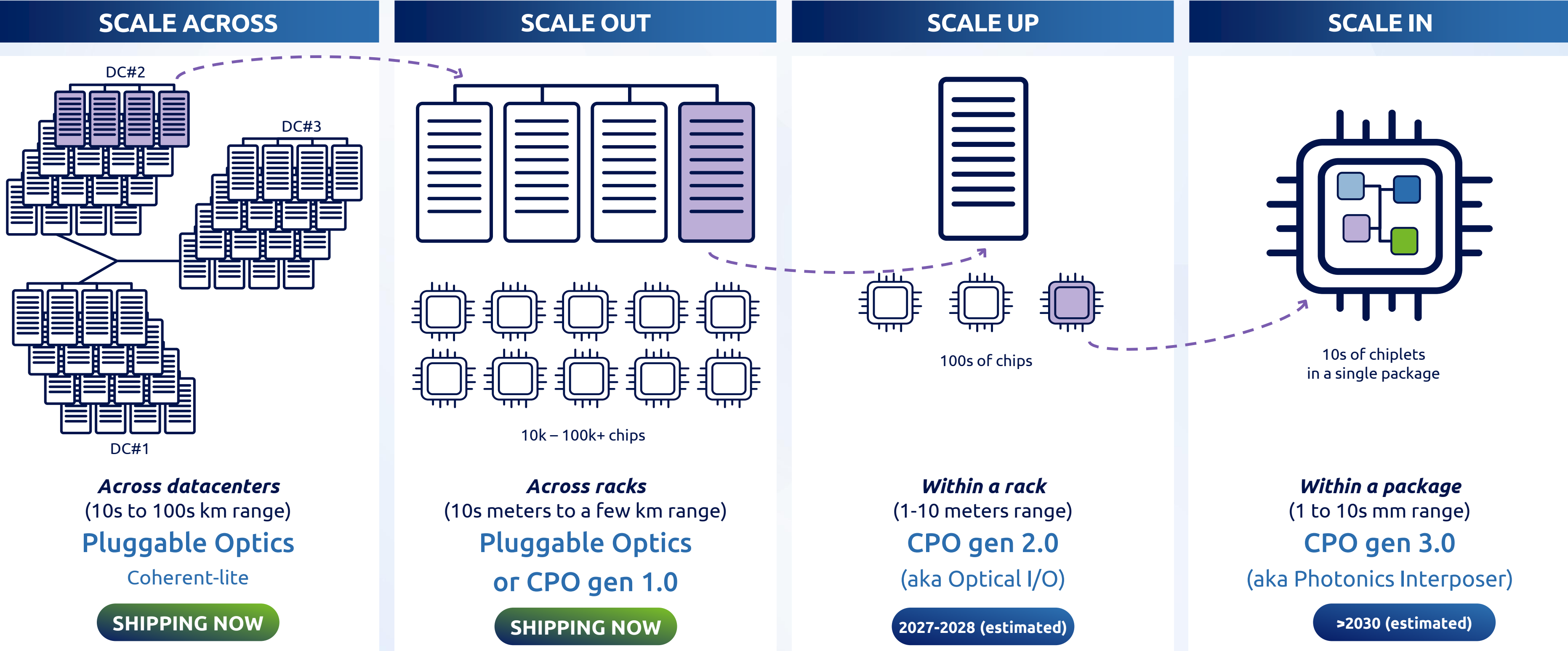


Source: McKinsey, August 2025



AI DATA CENTERS ARE SCALING ACROSS, OUT, UP, AND IN

PERVASIVE OPTICAL INTERCONNECTS ARE ESSENTIAL TO OVERCOME THE BANDWIDTH BOTTLENECK



Optical connectivity

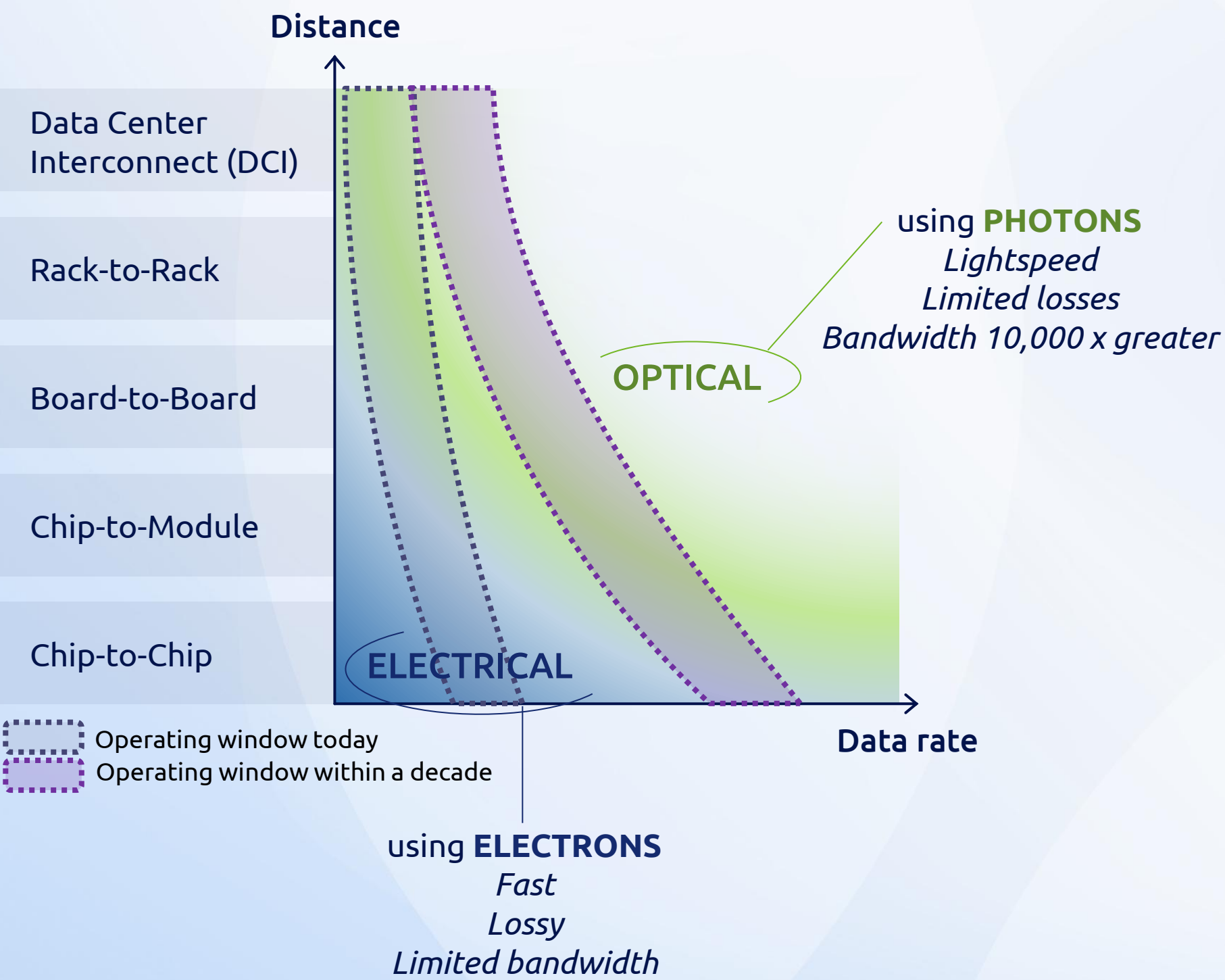
Copper connectivity



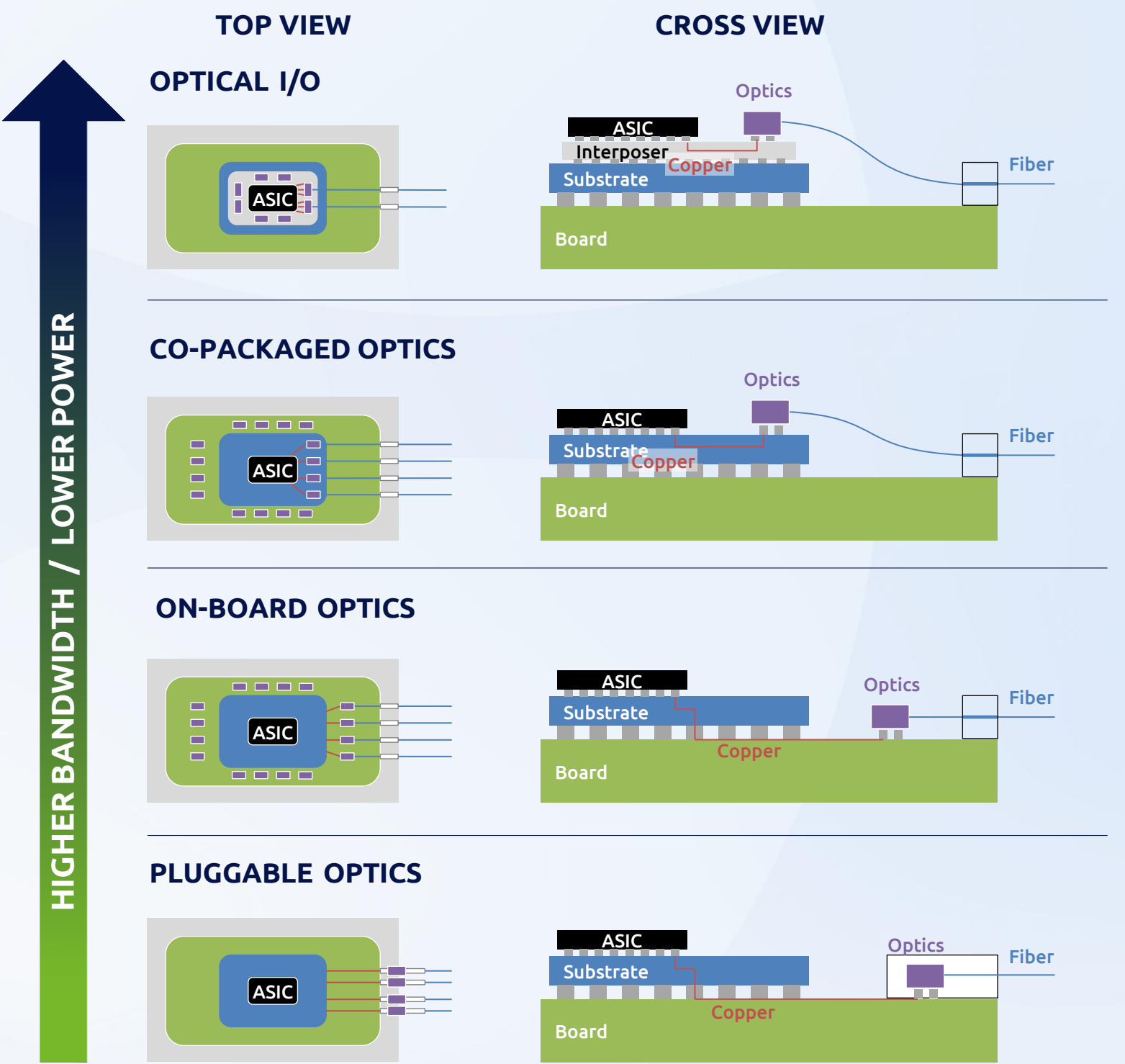
OPTICAL INTERCONNECTS TO SUPPORT THE NEXT SCALE OF AI DATA CENTERS

FROM PLUGGABLE INTERCONNECTS TO CO-PACKAGED OPTICS

FROM ELECTRONS TO PHOTONS – THE SHIFT POWERING THE AI ERA



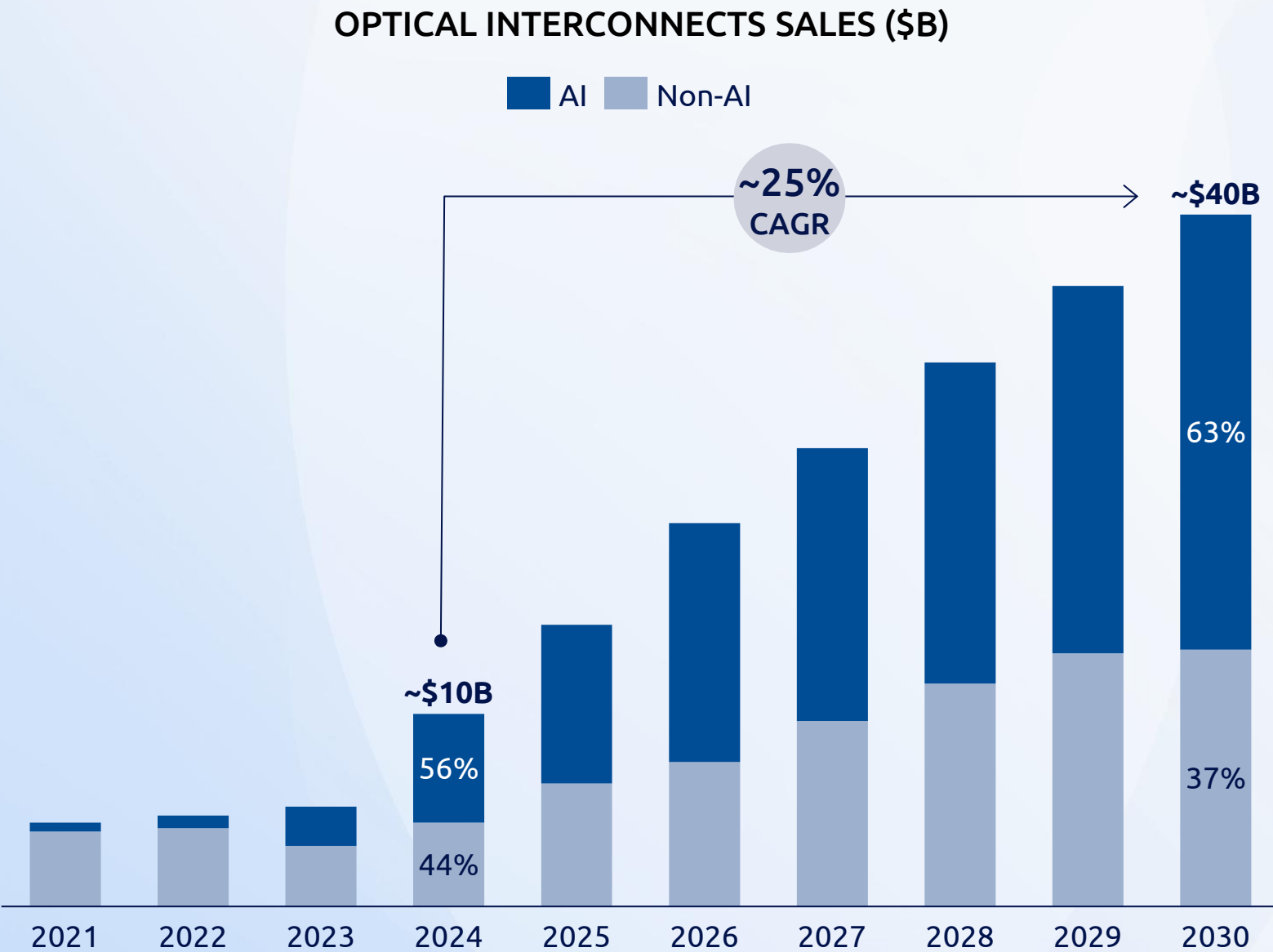
OPTICAL INTERCONNECTS – FROM PLUGGABLES TO CPOs



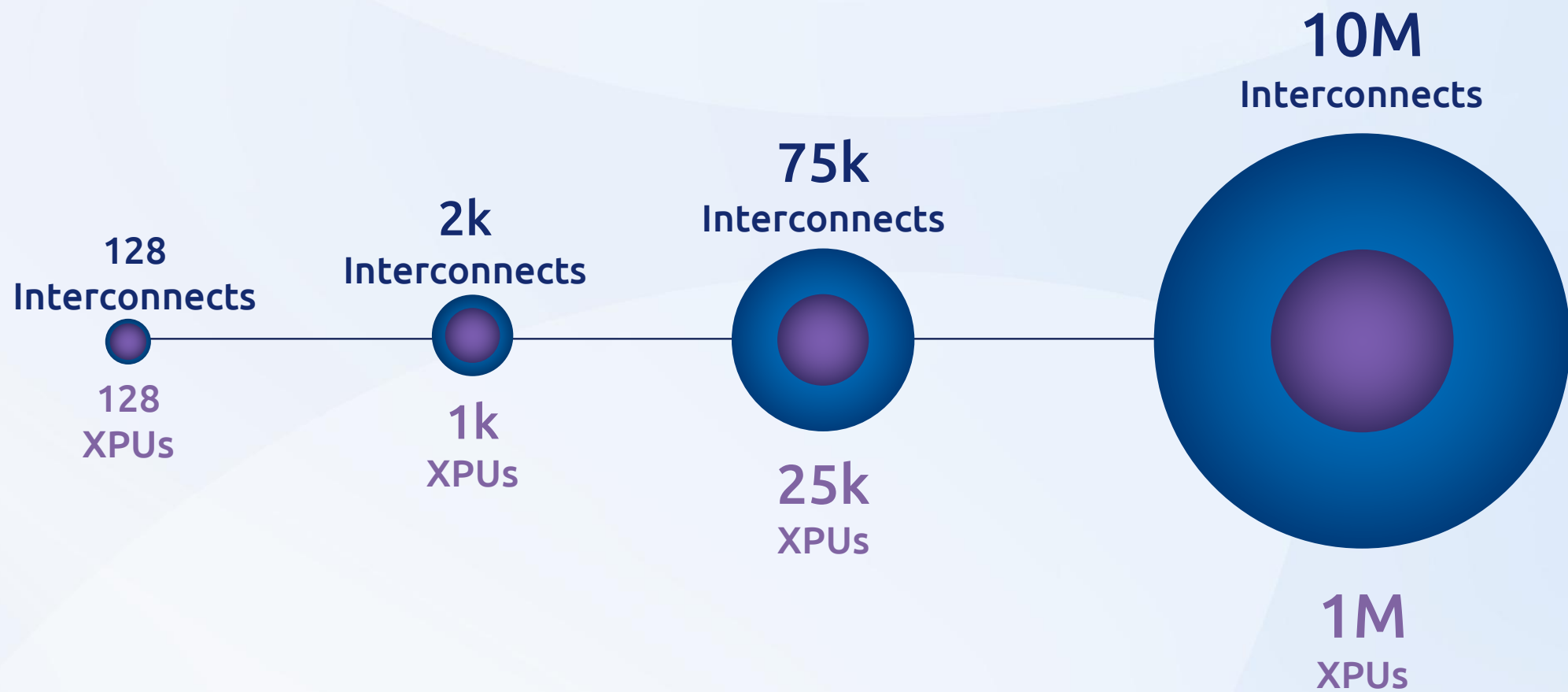
OPTICAL INTERCONNECTS DEMAND SOARS

INCREASING HIGH BANDWIDTH CONNECTIVITY IN DATA CENTERS DRIVING HIGHER SEMICONDUCTOR CONTENT GROWTH

OPTICAL INTERCONNECTS SALES SOARS AS AI DEMAND INTENSIFIES



OPTICAL INTERCONNECTS GROWING FASTER THAN XPUs



Source: Marvell investor presentation (2024), LightCounting



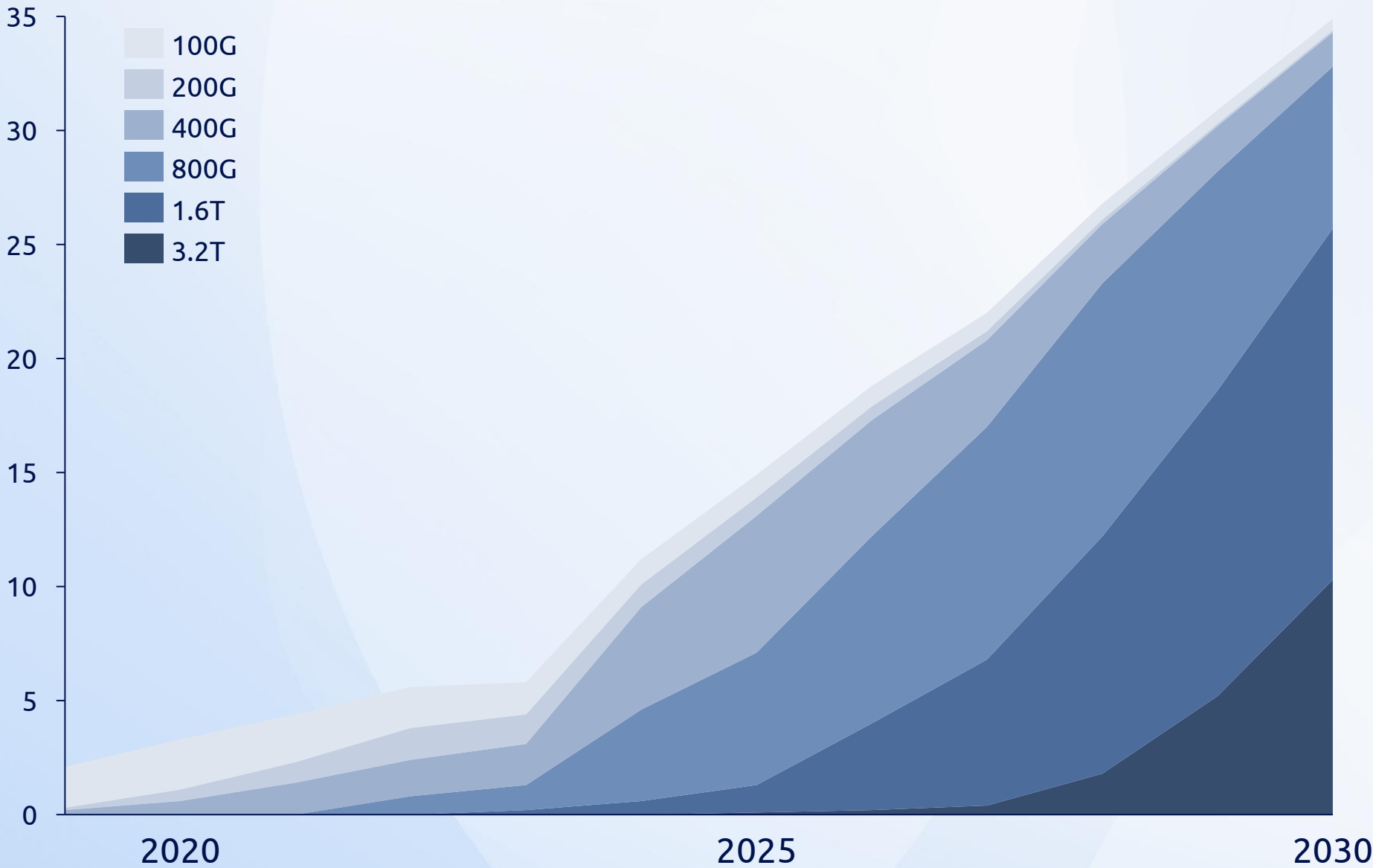
OPTICAL INTERCONNECTS SHIFTING TO HIGHER DATA RATES

SILICON PHOTONICS & LNOI – TWO TECHNOLOGIES ADDRESSING DIFFERENT SEGMENTS

SHIFT TOWARD HIGHER-SPEED TRANSCEIVERS

To accommodate increasing demand in data transmission

ETHERNET TRANSCEIVER MARKET BY DATA RATE (\$B)

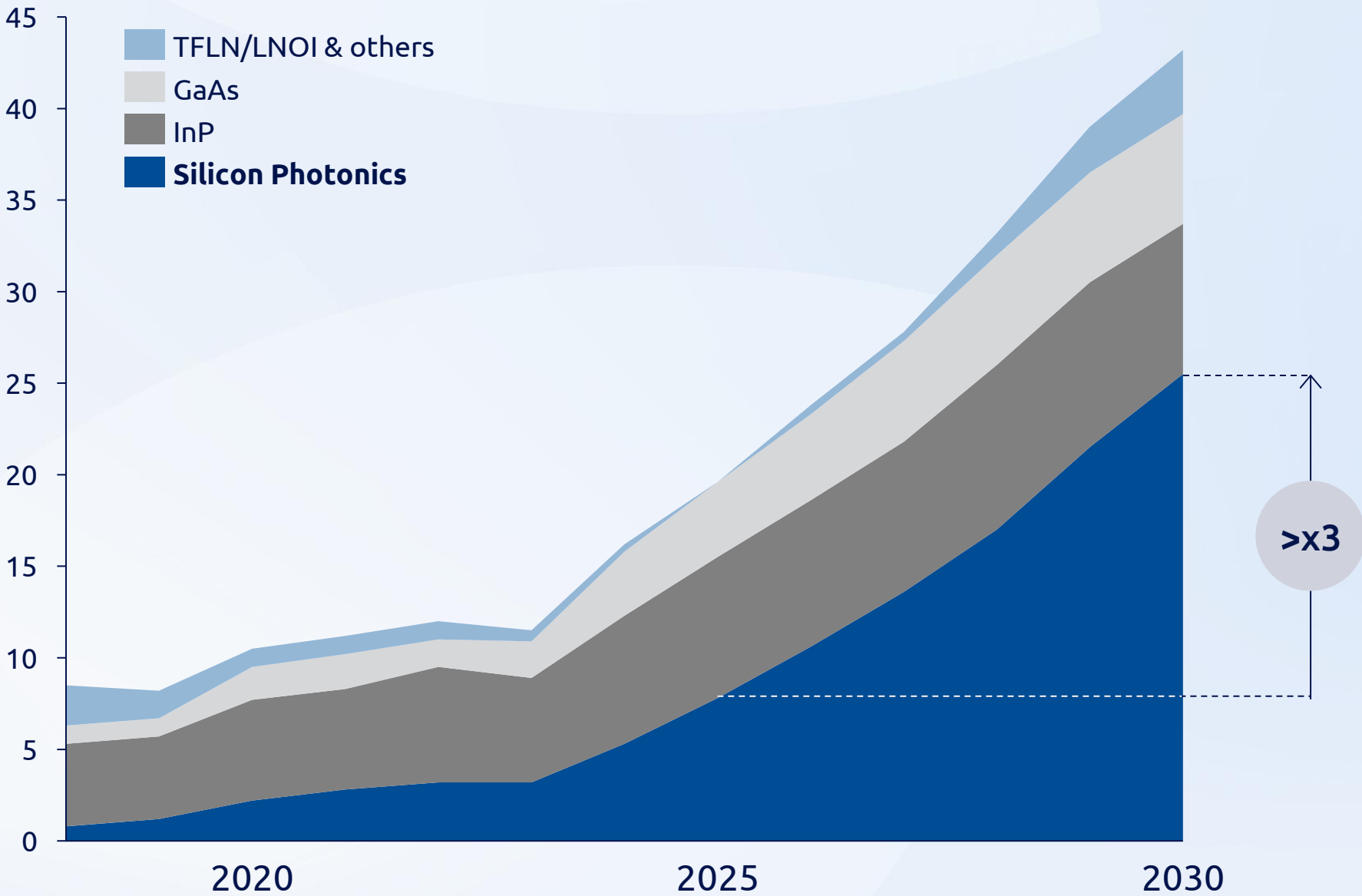


Source: LightCounting

SILICON PHOTONICS EMERGES AS THE DOMINANT MODULATOR PLATFORM

Driven by scalability, cost, and integration advantages
LNOI to complement Silicon Photonics (<1.6T), addressing the 1.6T-3.2T data rate

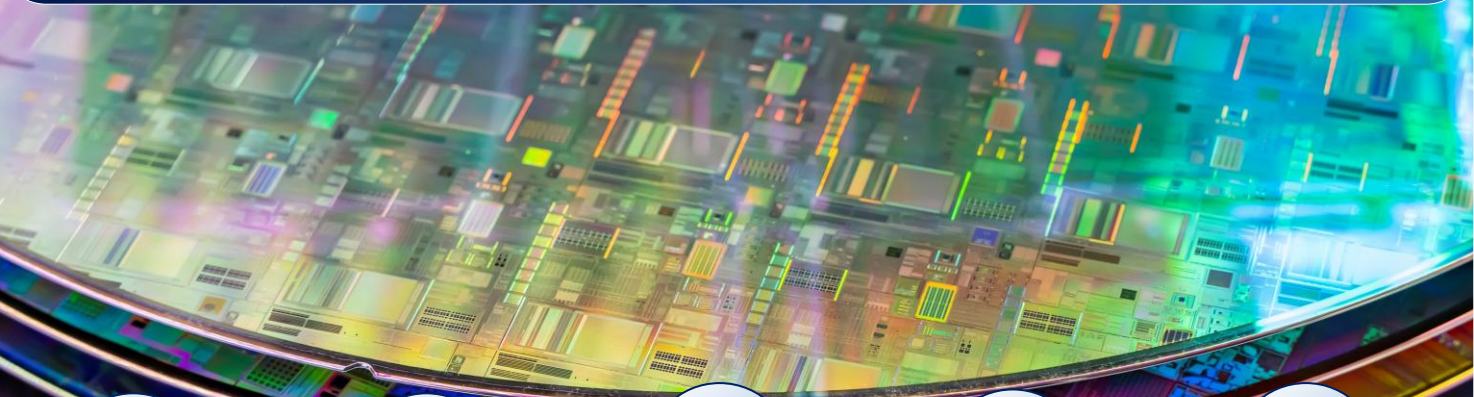
TRANSCEIVER MARKET BY MODULATOR TECHNOLOGY (\$B)




SILICON PHOTONICS IS THE PLATFORM OF CHOICE FOR OPTICAL INTERCONNECTS


SOI IS THE FOUNDATION OF SILICON PHOTONICS

CMOS







High Density




Low Cost



Chip-scale Integration





Logical functions




Mature Ecosystem

OPTICS







Low power dissipation




Scalable bandwidth



Multi-wavelength

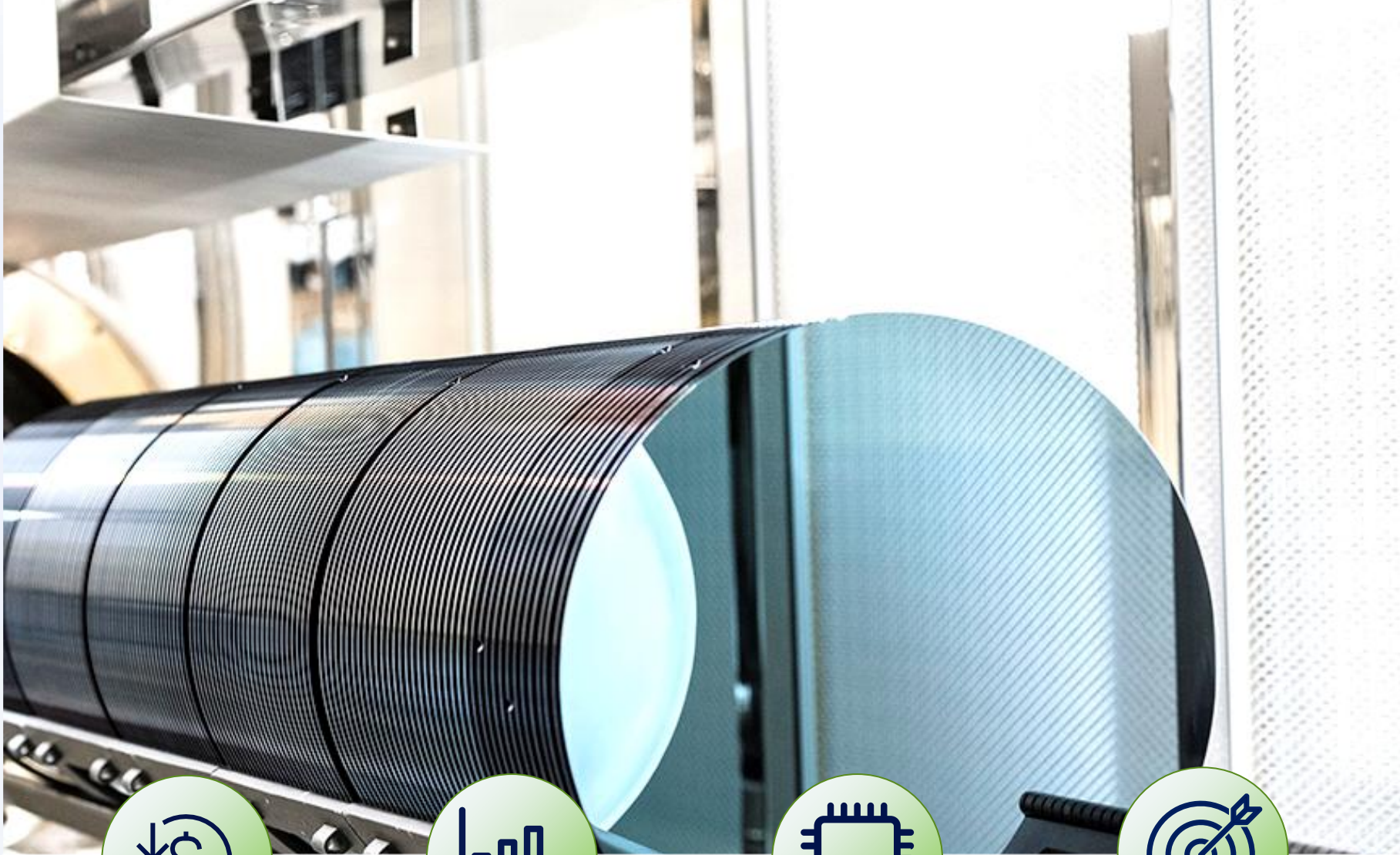



Long reach



Mature infrastructure


PHOTONICS-SOI





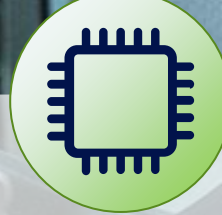
COST

Optimized Si processes




VOLUME

Si CMOS production capabilities



PACKAGING

Si packaging compatibility



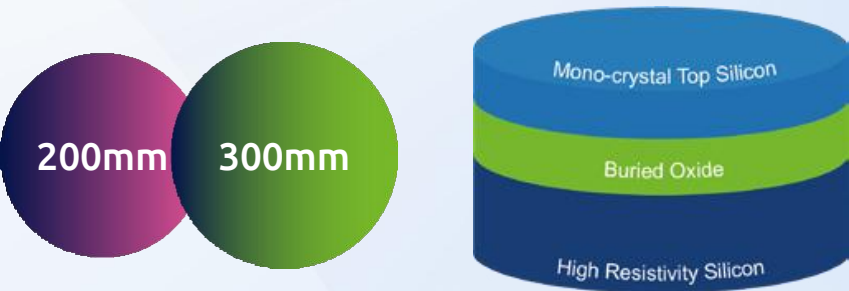
PERFORMANCE

Large bandwidth, power efficiency, high data rate, high density



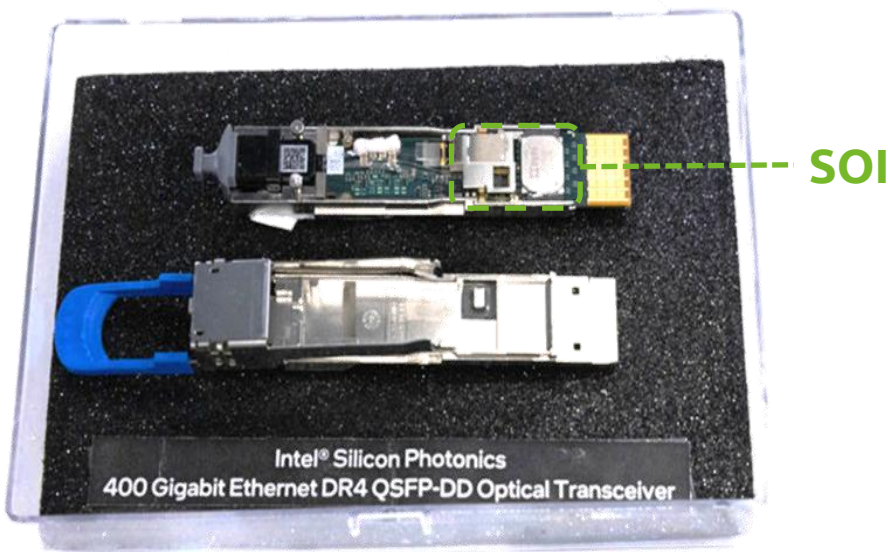
CLOUD AI PRODUCT PORTFOLIO

PHOTONICS-SOI



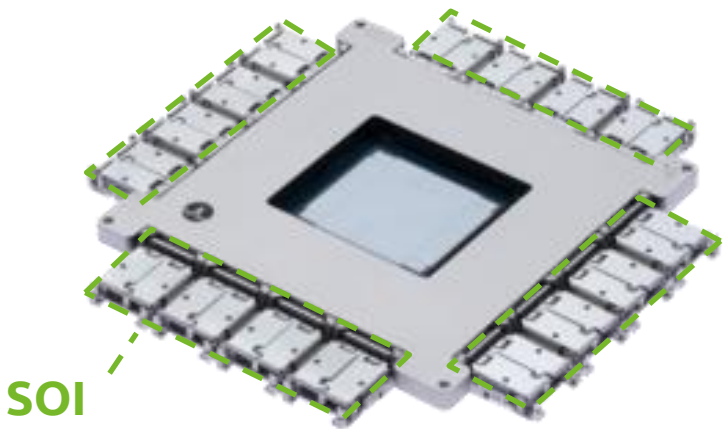
SILICON PHOTONICS INTERCONNECTS

PLUGGABLE TRANSCEIVERS



Silicon Photonics SOI Chipset
(400 Gb/s)

CO-PACKAGED OPTICS (CPO)



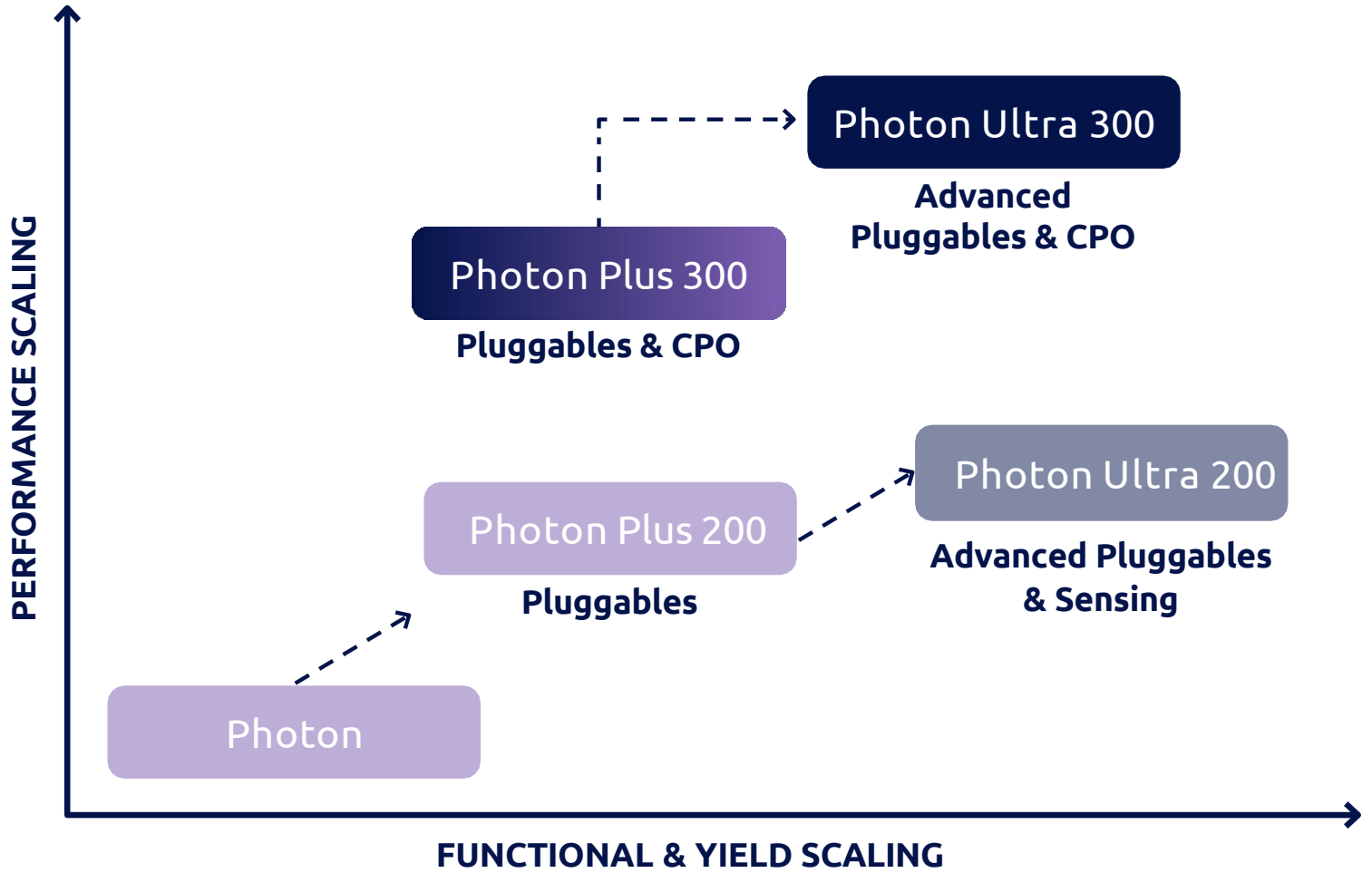
Broadcom Multilayer CPO Switch
Tomahawk® 6 – Davisson (2025)

Silicon Photonics SOI Chipset
(102.4 Tb/s)



High-density optical
interconnects

PHOTONICS-SOI ROADMAP

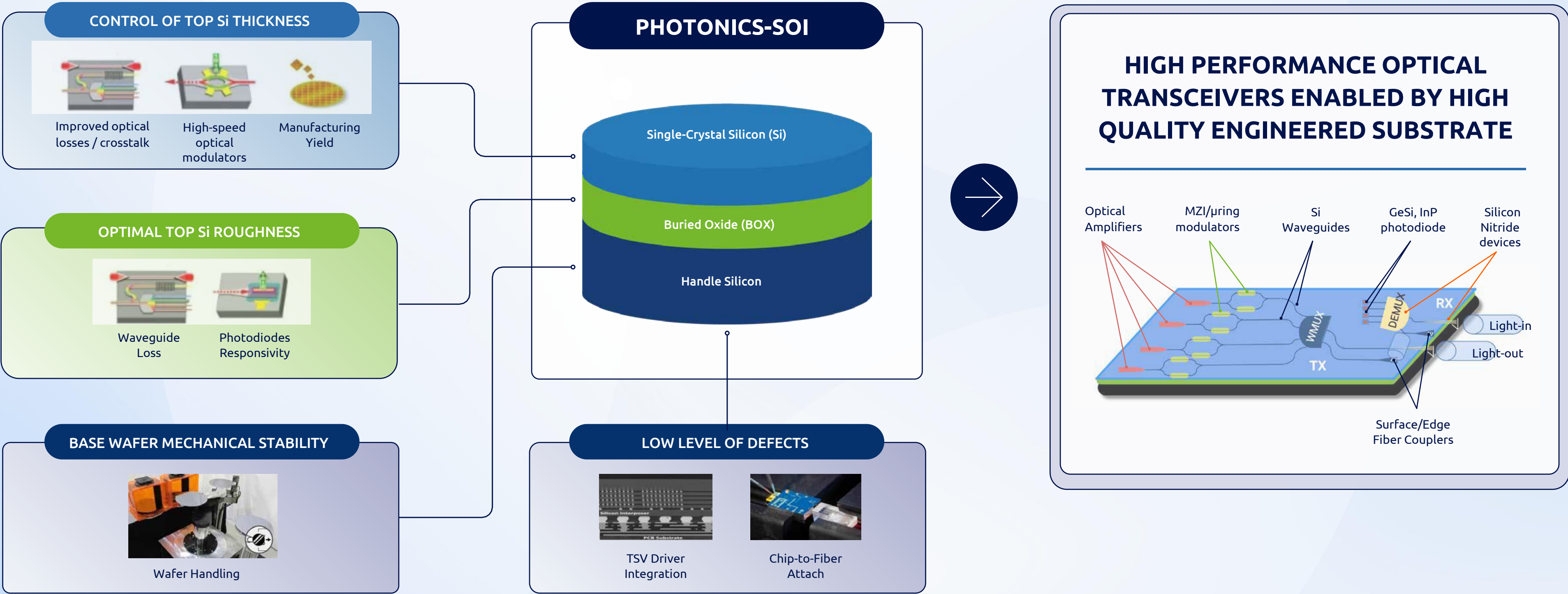


Source: Intel, Broadcom, ServeTheHome



PUSHING DEVICES PERFORMANCE TO THE NEXT LEVEL

PHOTONICS-SOI MINIMIZES OPTICAL LOSSES



BMD: Bulk Micro Defects
TSV: Through-Silicon Vias



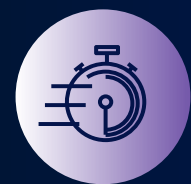
CLOUD AI PRODUCT PORTFOLIO

LNOI (LITHIUM NIOBATE ON INSULATOR *)

LNOI IS TARGETING ENERGY-EFFICIENT FAST DATA TRANSFER



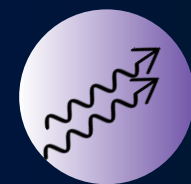
OUR LNOI SUBSTRATE ENABLES



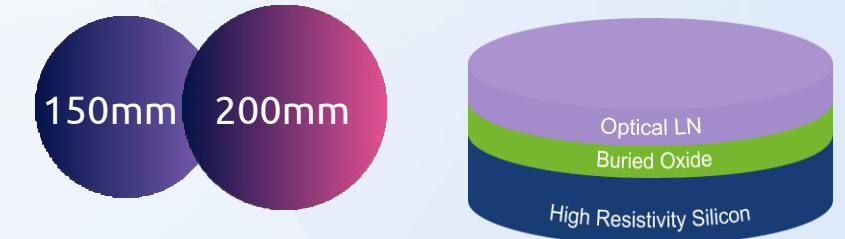
**FASTER DATA
TRANSFER RATE**



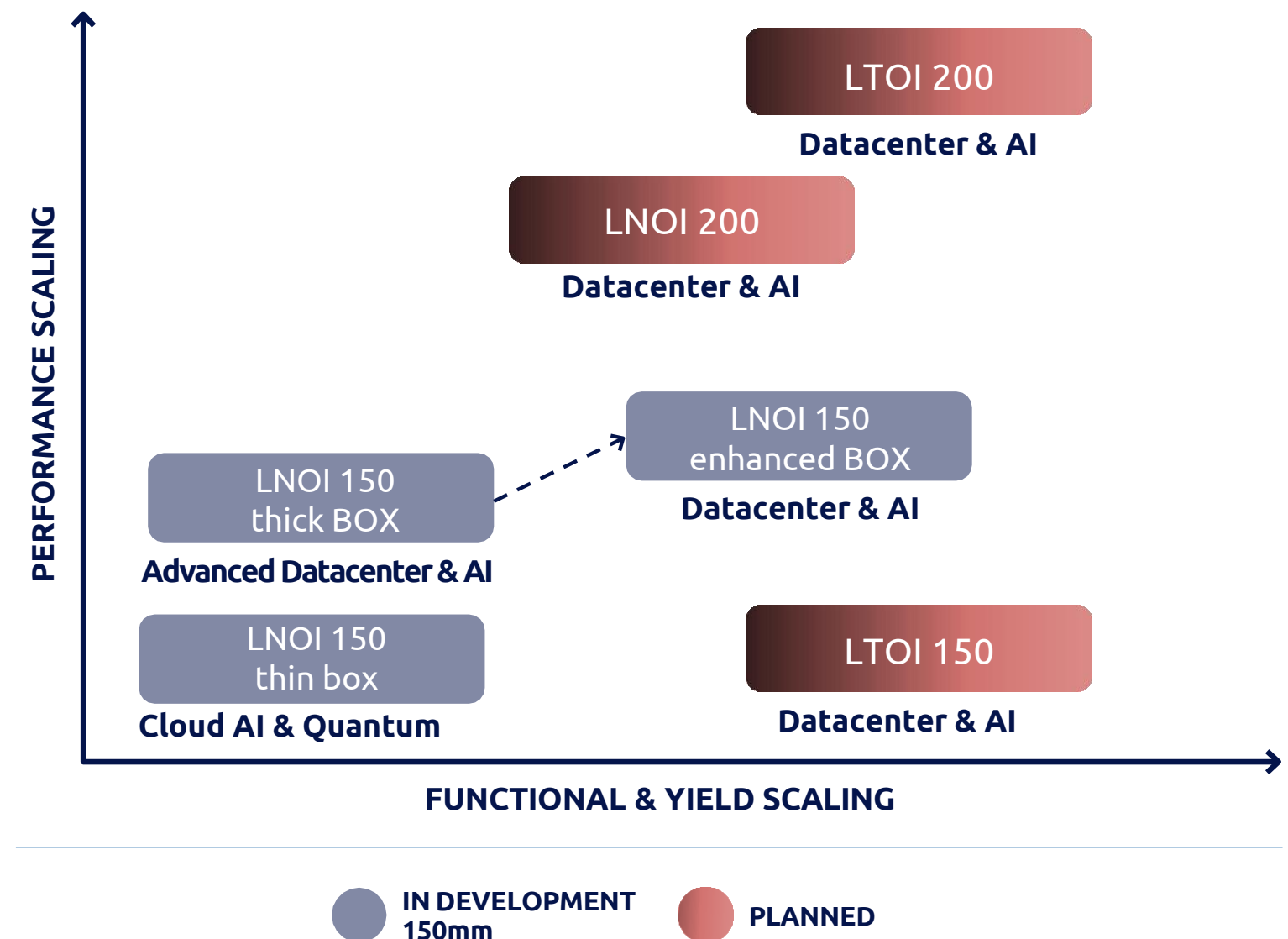
**LOWER POWER
CONSUMPTION**



**LINEARITY
(SIGNAL INTEGRITY)**

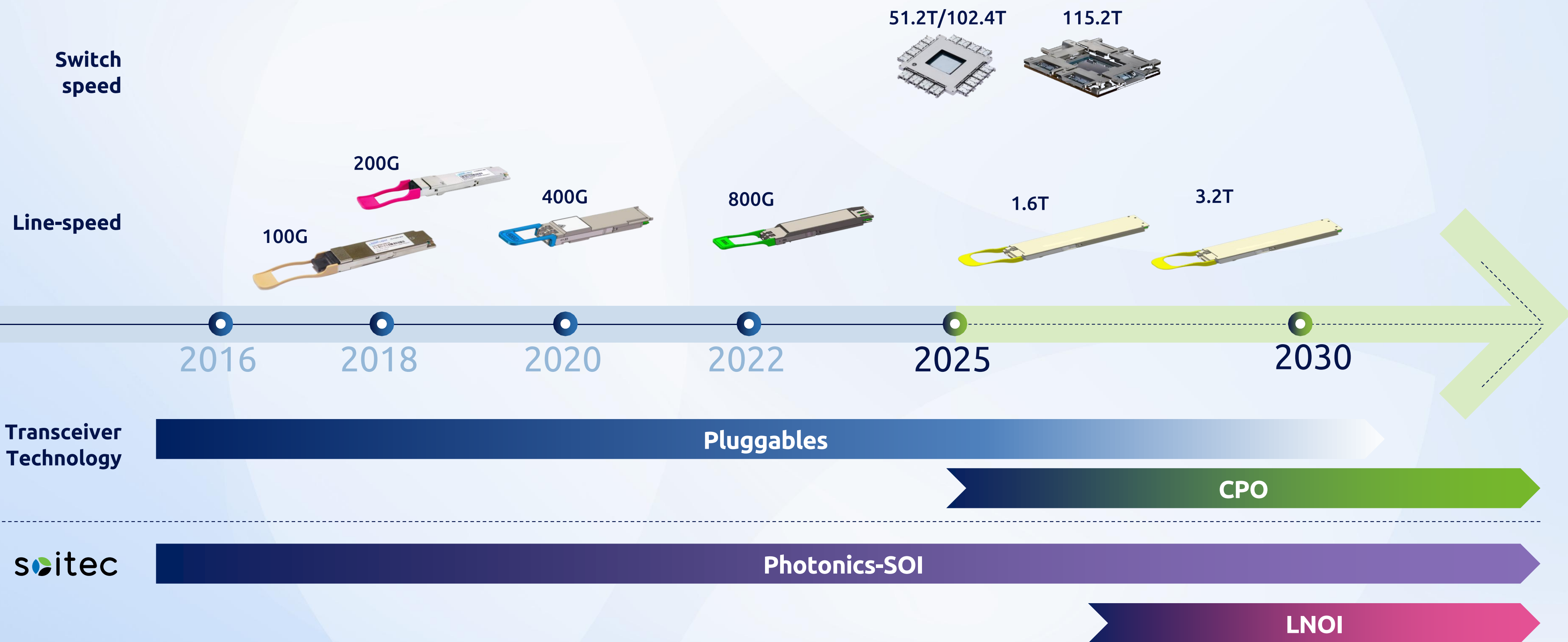


PHOTONICS-Lithium rich materials ROADMAP



(*) LNOI is also referred to as TFLN (Thin Film Lithium Niobate)
 Photo credit: © CSEM

SOITEC ENABLES ALL OPTICAL INTERCONNECTS FROM PLUGGABLES TO CPO



Source: Broadcom, Cisco, Nvidia



QUANTUM COMPUTING, EXPANDING MARKET OPPORTUNITY FOR CLASSICAL COMPUTE

SPIN QUBITS BASED ON FD-SOI: THE SIMPLE PATH TO SCALABLE QUANTUM COMPUTERS

QUANTUM DEDICATED FD-SOI

A GAME CHANGER FOR QUANTUM SPIN QUBITS



SCALABLE

Creates a scalable path toward silicon-based quantum devices



PROVEN FD-SOI PLATFORM

Integrates a proven, low-noise, and CMOS-compatible architecture



INDUSTRIAL MATURITY

Benefits from the maturity and robustness of the semi-industry



INTEGRATION of Quantum & Classical transistors

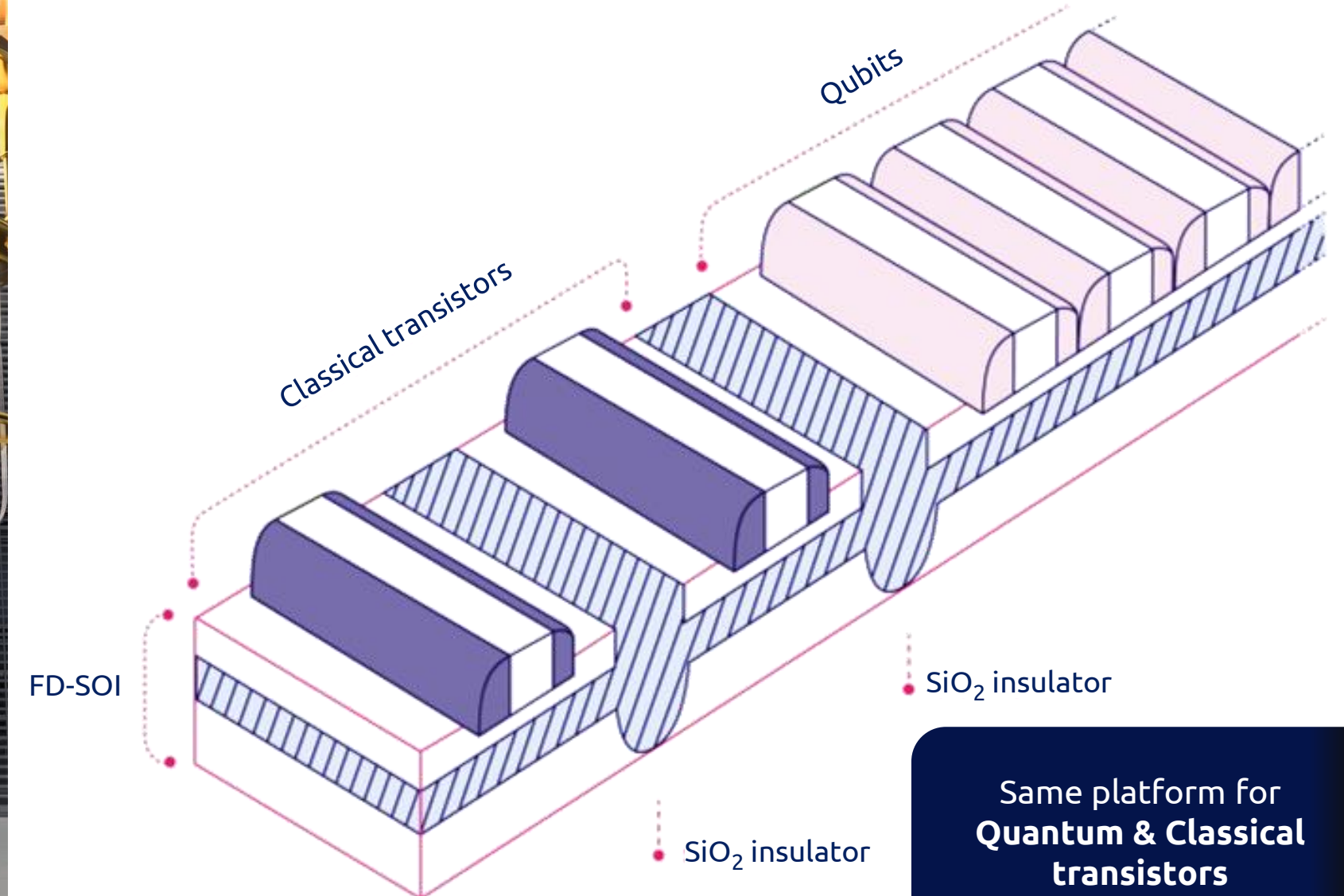
Creates a scalable path toward silicon-based quantum devices

FD-SOI – A STRONG ECOSYSTEM BUILDING UP

Source: Quobly, Soitec



QUOBLY SPIN QUBITS BASED ON SOITEC FD-SOI



Same platform for Quantum & Classical transistors

ENGINEERED SUBSTRATES FOR EDGE AI

EDGE AI: BRINGING INTELLIGENCE CLOSER TO THE USER

CREATING NEW CHALLENGES FOR DEVICES & SUBSTRATES

NEW TECHNICAL REQUIREMENTS



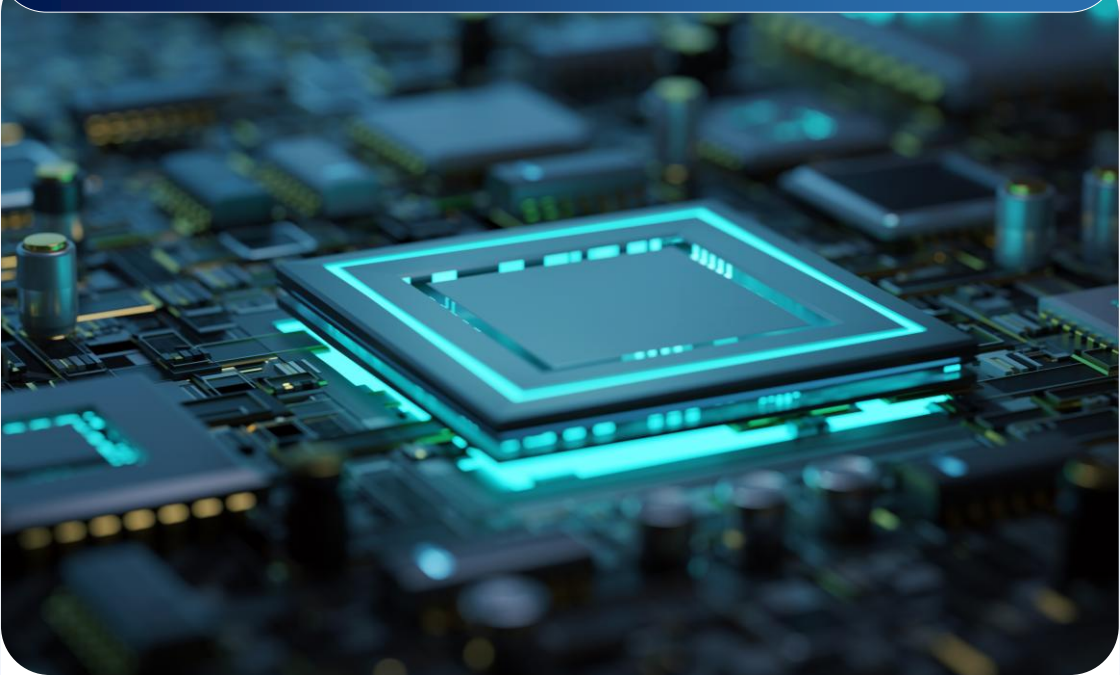
Inference at the edge

High density memory

Increased power autonomy

Reliability and robustness

MICROPROCESSOR REQUIREMENTS



High speed hardware

Optimized AI models & memory capabilities

Ultra-low standby power and Boost mode

Operation in adverse conditions

ENGINEERED SUBSTRATES: AI-NABLERS



Extended planar CMOS technology

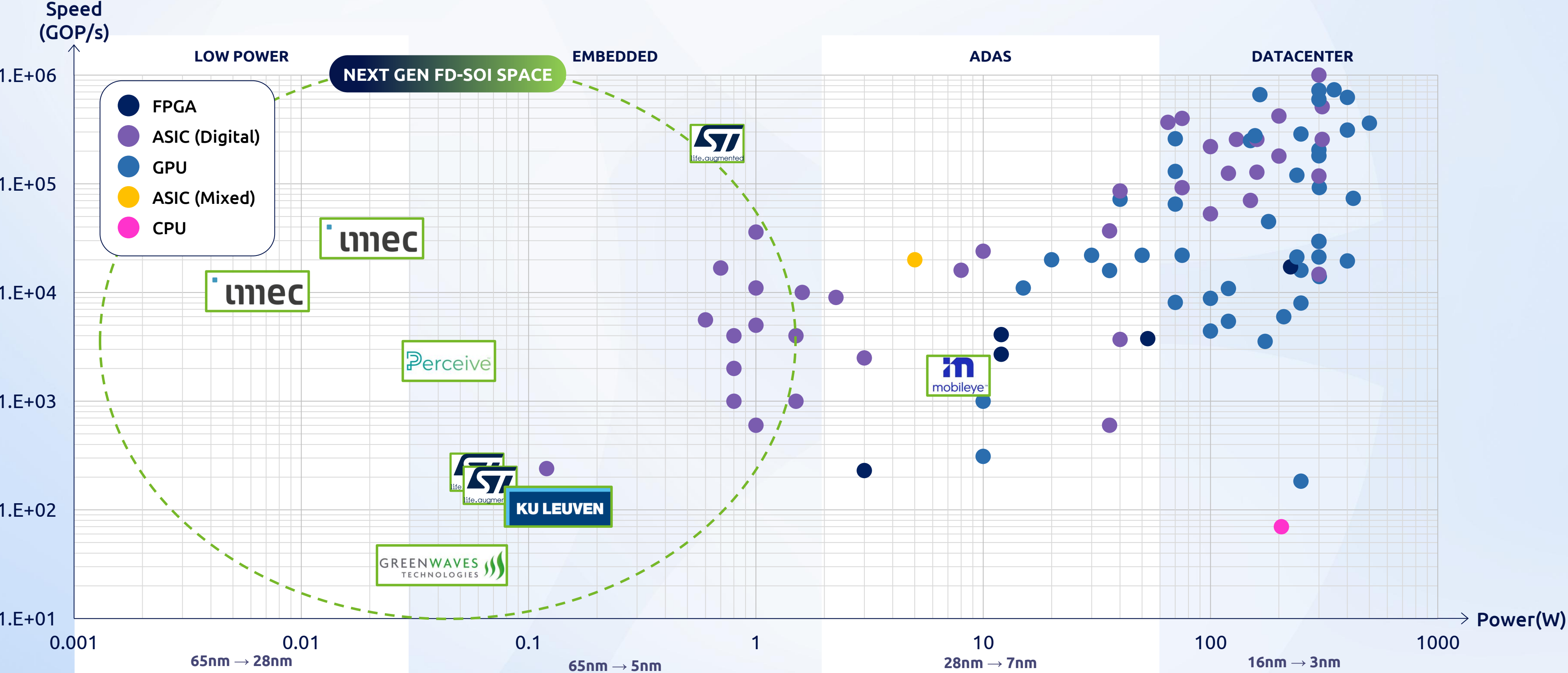
Ultra-low leakage

Low power connectivity

Robustness against cyber attacks

AI DIGITAL LANDSCAPE FROM CLOUD TO EDGE

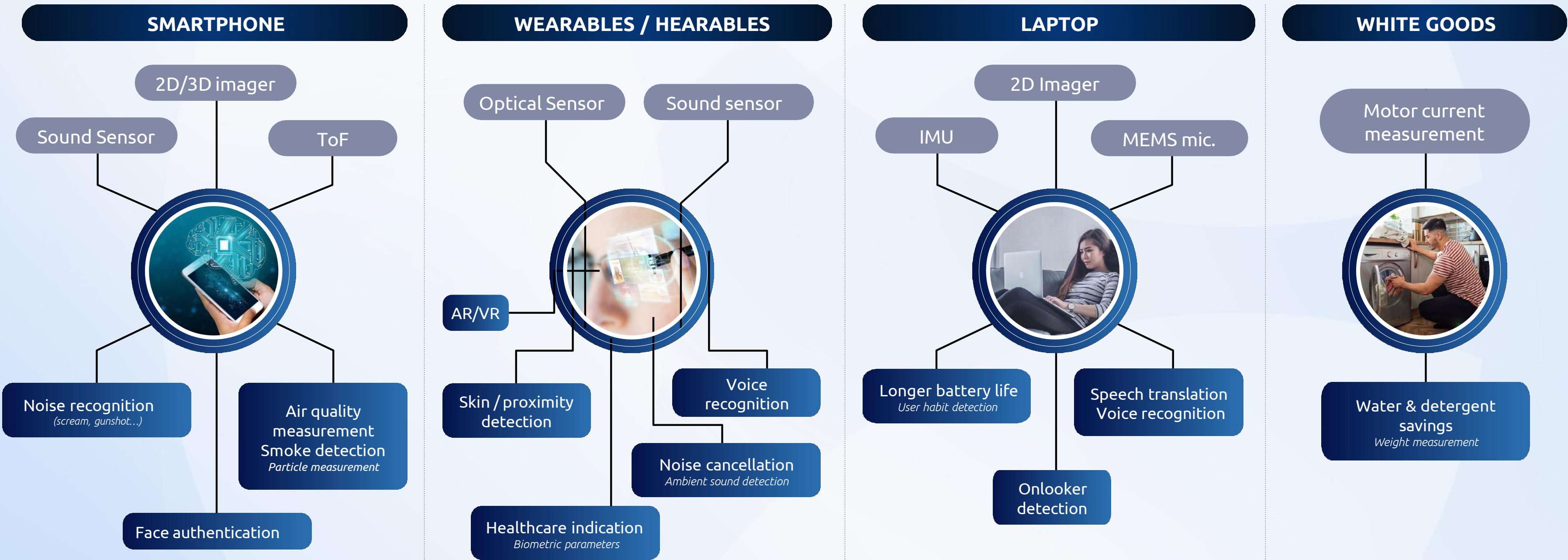
FD-SOI IS THE IDEAL PLATFORM FOR EMBEDDED & LOW POWER EDGE COMPUTING



Source: NICS-EFC Lab of Tsinghua University, Soitec

EDGE AI: OVERVIEW OF CURRENT APPLICATIONS

FROM THE EDGE TO THE ENDPOINT, AI ENHANCING MULTIPLE USE CASES



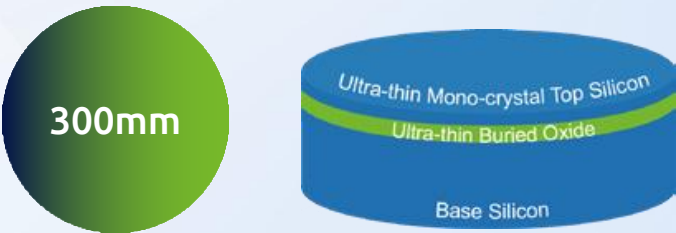
**AI AT THE EDGE
ENABLES**

- Lower latency
- Power saving
- Enhanced user experience
- Cybersecurity
- Greater privacy



EDGE AI: FOCUS ON WEARABLES

MCU FOR SMARTWATCH TO MAXIMIZE BATTERY LIFE



EDGE AI PRODUCT

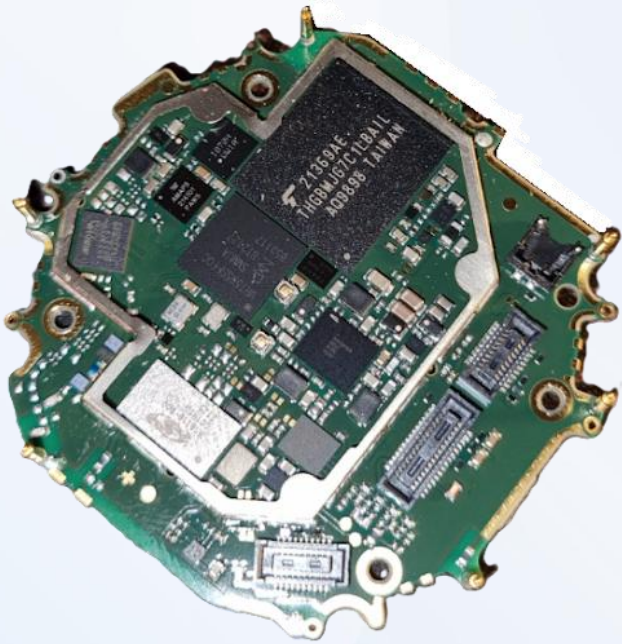
PCB BOARD

MICROCONTROLLER

ENGINEERED SUBSTRATE



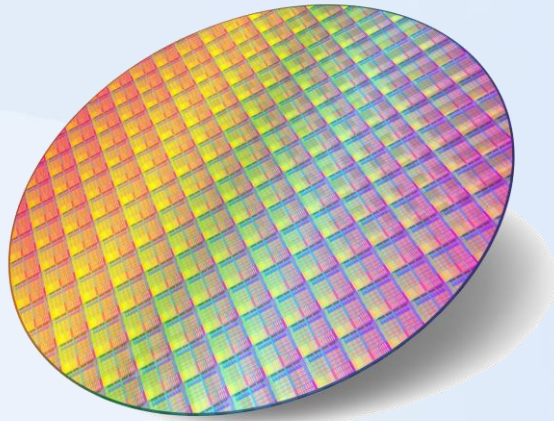
Garmin fēnix® 8
smartwatch



Edge board



Packaged MCU
~50mm²



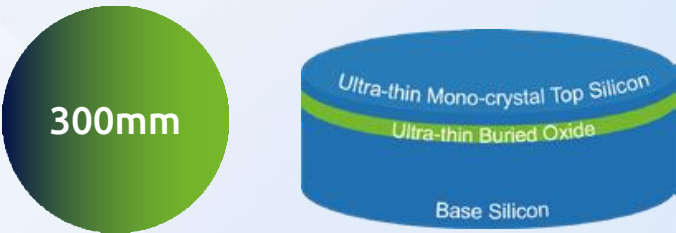
FD-SOI
Die size >20mm²

Source: Garmin, NXP, Soitec estimate



EDGE AI: FOCUS ON ADVANCED WEARABLES

MCU COPROCESSOR IN AI SMART GLASSES TO MAXIMIZE BATTERY LIFE



AI SMART GLASSES



Meta Ray-Ban Display

AI SMART GLASSES REQUIREMENTS

Compact form factor / Light
Processing capability
Long battery life

HETEROGENEOUS COMPUTE ARCHITECTURE

HIGH-PERFORMANCE AR PROCESSOR



Qualcomm
Snapdragon
AR2 Gen 1

High-performance
application processor
supporting high-resolution
video, neural network
processing, and wireless
connectivity



ULTRA-LOW POWER CROSSOVER MCU

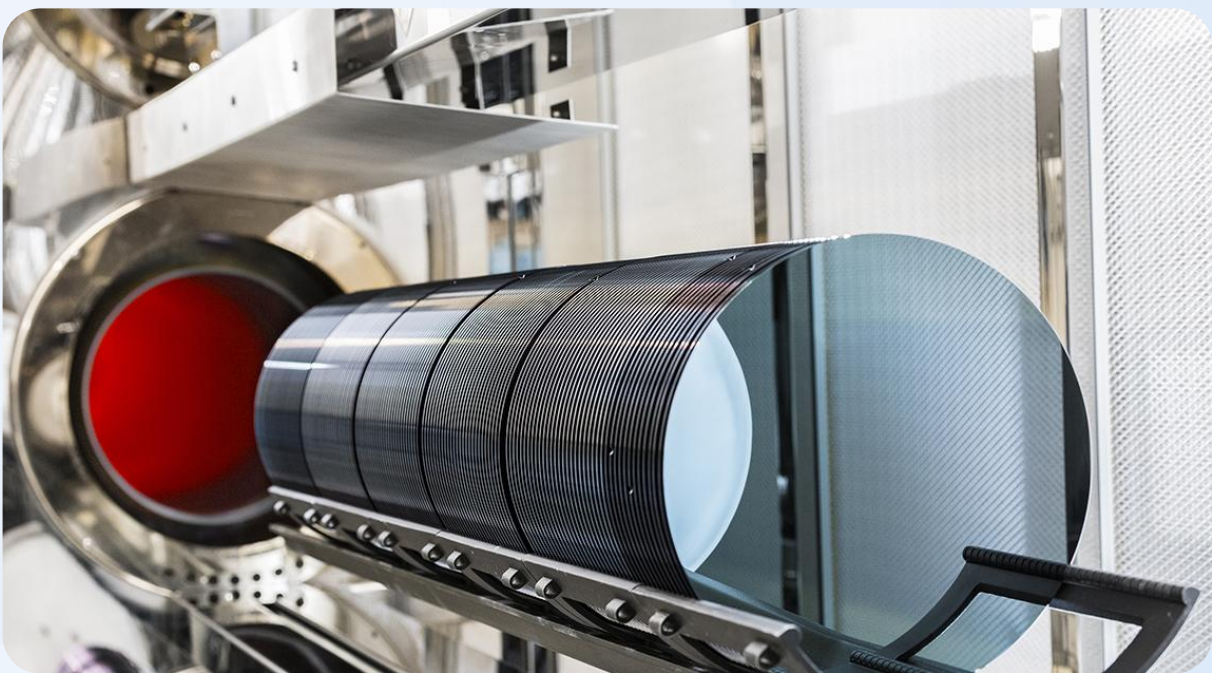


NXP i.MX
RT700 MCU

Lower active and standby
power coprocessor to
enable always-on features
such as voice wake-up,
music playback, and calls

built on **28nm FD-SOI**

ENGINEERED SUBSTRATE



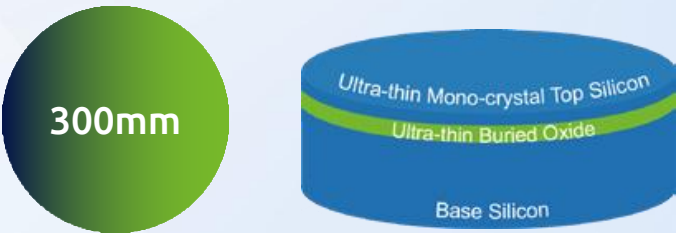
FD-SOI BENEFITS FOR AI SMART GLASSES

Energy efficiency / low-leakage
Always-on / on-demand performance
Low power consumption
Greater integration / compacity

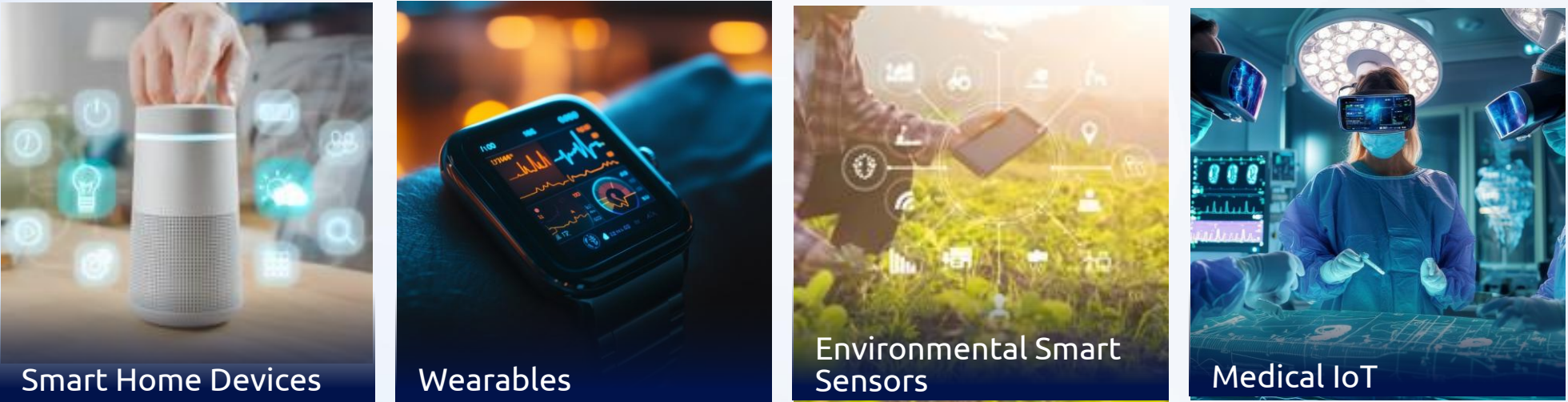
Source: Meta, NXP, Qualcomm

FD-SOI FOR EDGE COMPUTING

INDUSTRY WIDE ADOPTION DOWN TO 18nm



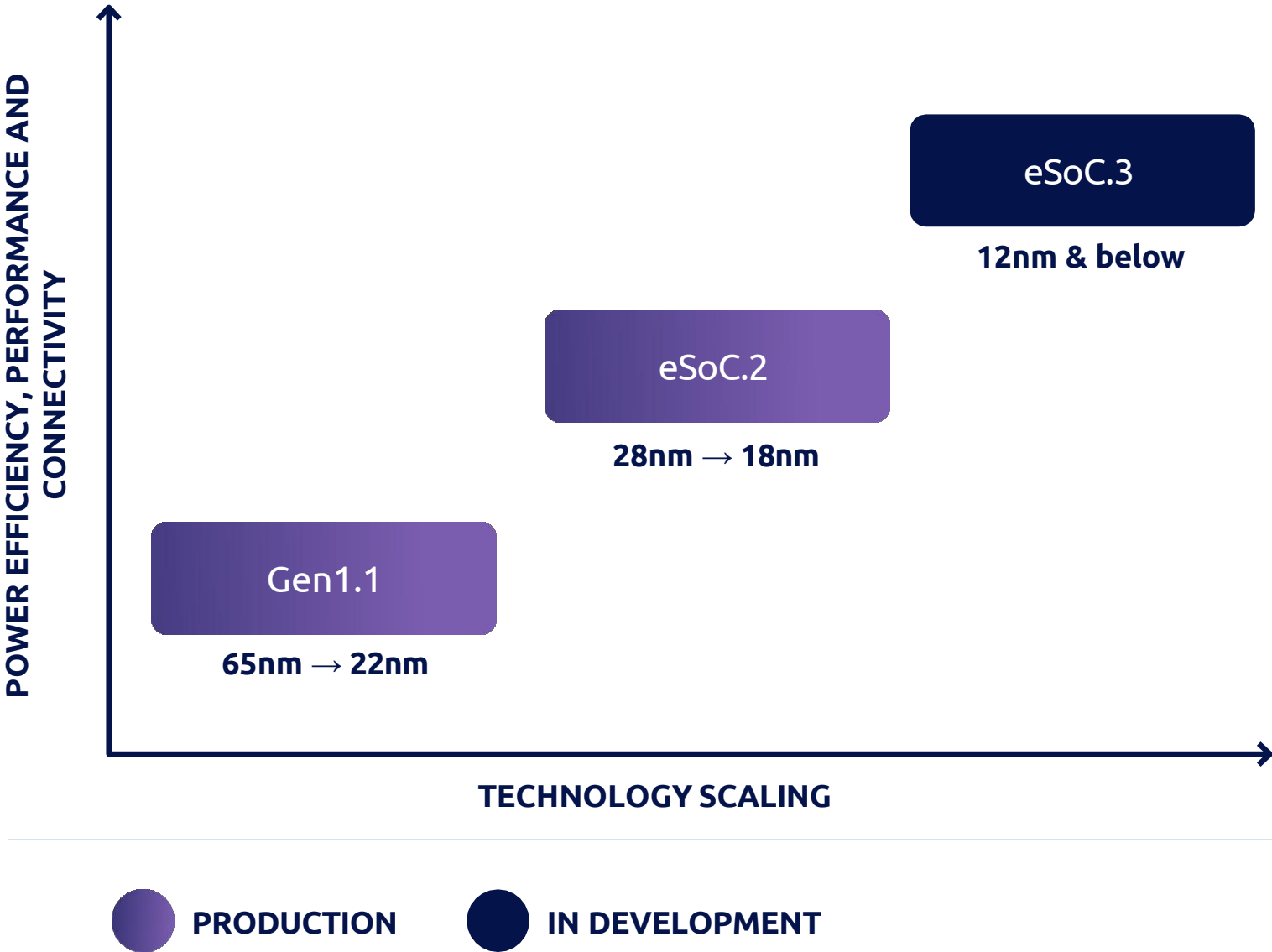
FD-SOI BENEFITS ALL WEARABLE APPLICATIONS WITH BETTER PERFORMANCES



OUR FD-SOI SUBSTRATE ENABLES

- **LOWER ACTIVE POWER CONSUMPTION - ALWAYS ON**
- **PERFORMANCE ON DEMAND**
- **ROBUST ENERGY HARVESTING 'ZERO POWER' CAPABILITIES**
- **LOWEST-COST PROCESSING (INFERENCES-PER-WATT-PER-€)**
- **ROBUSTNESS TO CYBER ATTACKS**

FD-SOI ROADMAP



AI-NABLERS

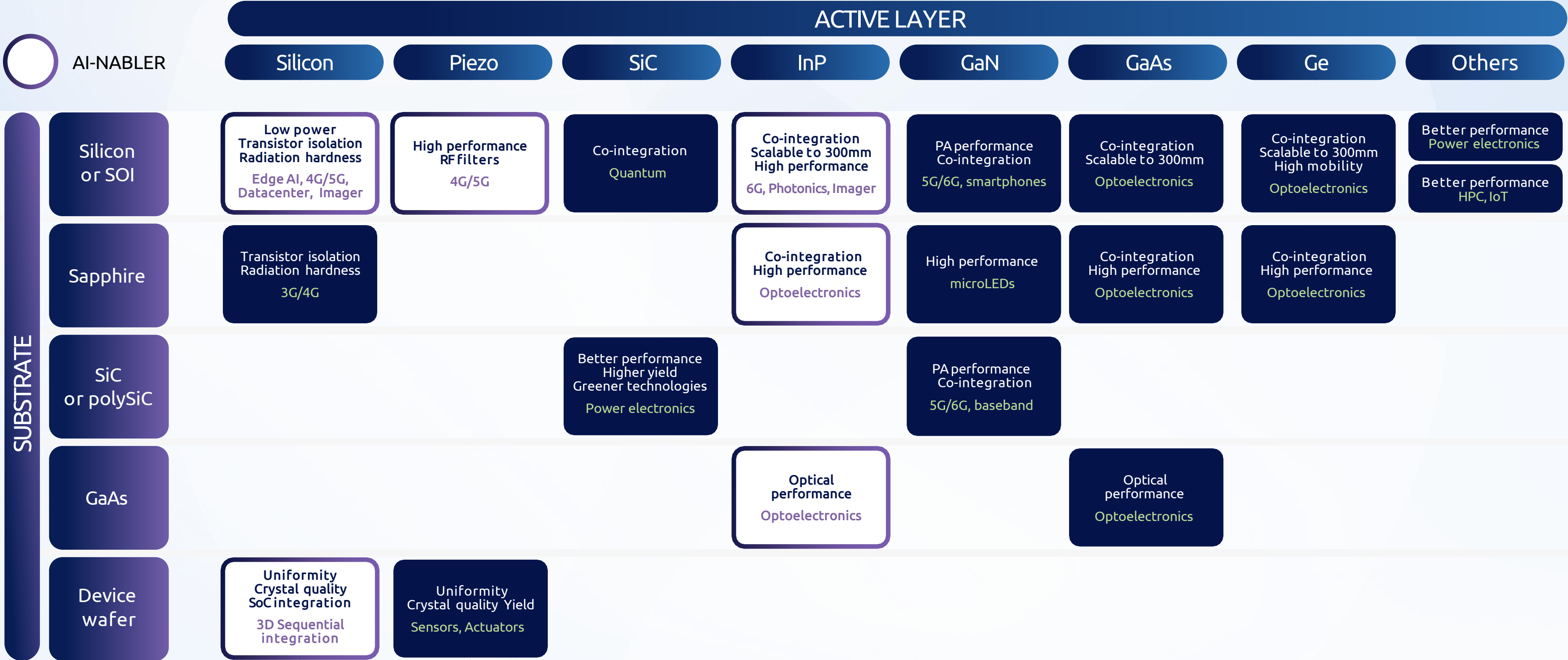
EXPANDING PRODUCT PORTFOLIO TO ENABLE FUTURE AI DEVELOPMENTS

		ACTIVE LAYER							
AI-NABLER		Silicon	Piezo	SiC	InP	GaN	GaAs	Ge	Others
SUBSTRATE	Silicon or SOI								<div>Diamond</div> <div>GaOx</div> <div>2D materials</div>
	Sapphire								
	SiC or polySiC								
	GaAs								
	Device wafer								



AI-NABLERS

EXPANDING PRODUCT PORTFOLIO TO ENABLE FUTURE AI DEVELOPMENTS



THANK YOU



GLOSSARY

ASIC (Application-Specific Integrated Circuit): A custom-designed chip optimized for a specific function or application.

ADAS (Advanced Driver Assistance System): A suite of technologies that enhance vehicle safety and driving through automation and alerts.

AR/VR (Augmented Reality / Virtual Reality): Technologies that overlay digital content on the real world (AR) or immerse users in a virtual environment (VR).

CPO (Co-Packaged Optics): Integration of optical components and silicon in the same package to reduce power and increase bandwidth.

CPU (Central Processing Unit): The primary processor that executes instructions and manages tasks in a computing system.

DRAM (Dynamic Random Access Memory): A type of volatile memory used for high-speed data access in computing systems.

GPU (Graphics Processing Unit): A processor optimized for parallel data tasks, widely used in graphics rendering and AI.

IoT (Internet of Things): A network of connected devices that collect, exchange, and act on data via the internet.

MCU (Microcontroller): A compact integrated circuit used to control specific functions in embedded systems.

ML (Machine Learning): A subset of AI that enables systems to learn and improve from data without explicit programming.

xPU: A general term for processing units, covering a range of specialized and general-purpose chips.