



INVESTOR CONFERENCE

SMART DEVICES

January 2023



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 2021-2022 Universal Registration Document (which notably includes the 2021-2022 Annual Financial Report) which was filed on June 20th, 2022 with the French stock market authority (Autorité des Marchés Financiers, or AMF) under number D.22-0523 as well as in the Company’s FY’23 half-year report released on November 23rd, 2022. The French versions of the 2021-2022 Universal Registration Document and of the half-year report, together with English courtesy translations for information purposes of both documents are available for consultation on the Company’s website (www.soitec.com), in the section

Company - Investors - Financial Reports.

Your attention is drawn to the risk factors described in Chapter 2.1 of the Company’s 2021-2022 Universal Registration Document.

This document contains summary information and should be read in conjunction with the 2021-2022 Universal Registration Document and the FY’23 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 of the Universal Registration Document may have an impact on these forward looking statements. In addition, the future consequences of geopolitical conflicts, in particular the Ukraine / Russia situation, as well as rising inflation, may result in greater impacts than currently anticipated in these forward looking statements.

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. In addition, the occurrence of any of the risks described in Chapter 2.1 of the Universal Registration Document may have an impact on these forward looking statements.

This document does not constitute or form part of an offer or a solicitation to purchase, subscribe for, or sell the Company’s securities in any

country whatsoever. This document, or any part thereof, shall not form the basis of, or be relied upon in connection with, any contract, commitment or investment decision.

Notably, this document does not constitute an offer or solicitation to purchase, subscribe for or to sell securities in the United States. Securities may not be offered or sold in the United States absent registration or an exemption from the registration under the U.S. Securities Act of 1933, as amended (the “Securities Act”). The Company’s shares have not been and will not be registered under the Securities Act. Neither the Company nor any other person intends to conduct a public offering of the Company’s securities in the United States.

AGENDA

SMART DEVICES

SOITEC AT A GLANCE	01
MEGATRENDS & APPLICATIONS	02
PRODUCT & SERVICES PORTFOLIO	03



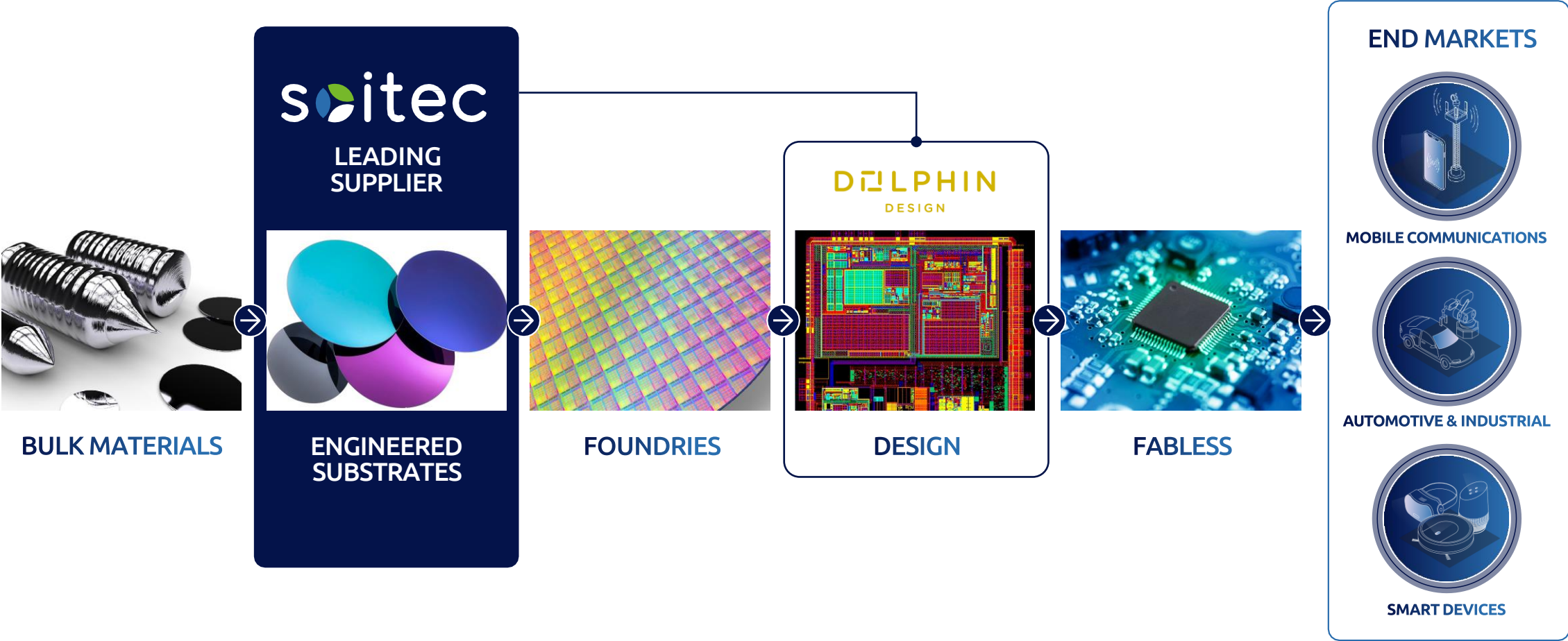
01

SOITEC AT A GLANCE



SOITEC HAS BUILT A UNIQUE POSITION IN THE VALUE CHAIN

LEVERAGING STRATEGIC PARTNERSHIPS IN THE ENTIRE SEMICONDUCTOR ECOSYSTEM



WE HAVE DEVELOPED A COMPREHENSIVE PRODUCT PORTFOLIO FOR OUR 3 STRATEGIC END MARKETS

MOBILE COMMUNICATIONS



MAIN DRIVERS

- 5G Sub-6GHz
- 5G mmWave
- Mobile infrastructure & SatCom
- Wi-Fi 6, 6E & 7

SOITEC PRODUCTS

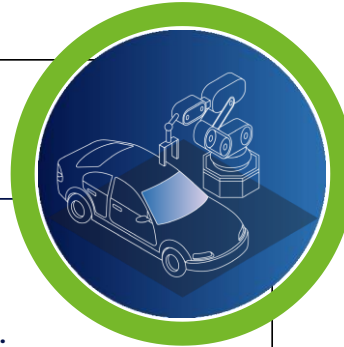
Connect RF-SOI

Connect FD-SOI

Connect POI

Connect RF-GaN

AUTOMOTIVE & INDUSTRIAL



MAIN DRIVERS

- Autonomous cars
- Vehicle electrification
- Infotainment
- Industry 4.0

SOITEC PRODUCTS

Auto Power-SOI

Auto FD-SOI

Auto SmartSiC™

Auto Power-GaN

SMART DEVICES



MAIN DRIVERS

- Edge computing
- 3D sensing & Healthcare
- Smart home & Smart cities
- Data centers

SOITEC PRODUCTS

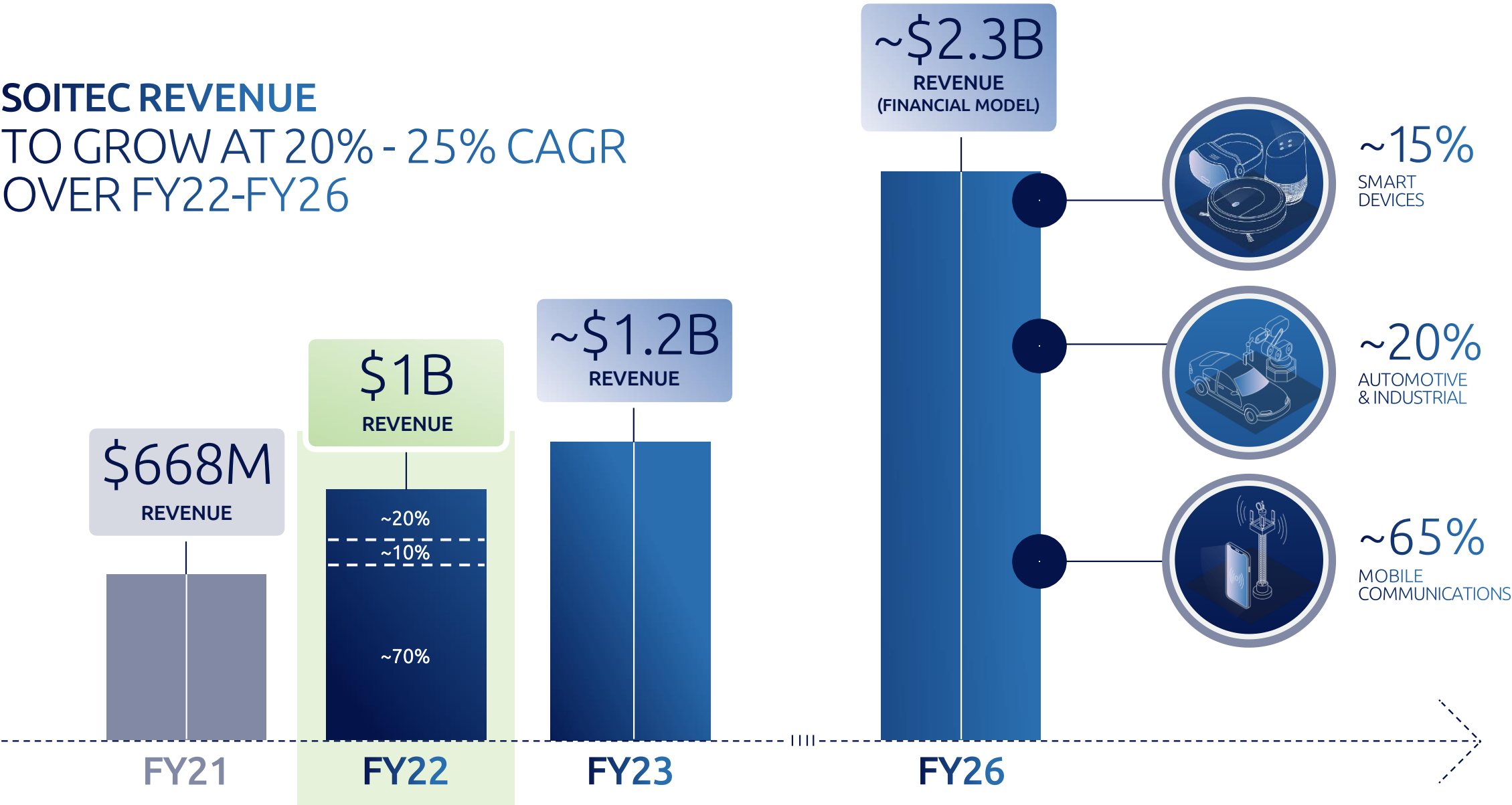
Smart FD-SOI

Smart Imager-SOI

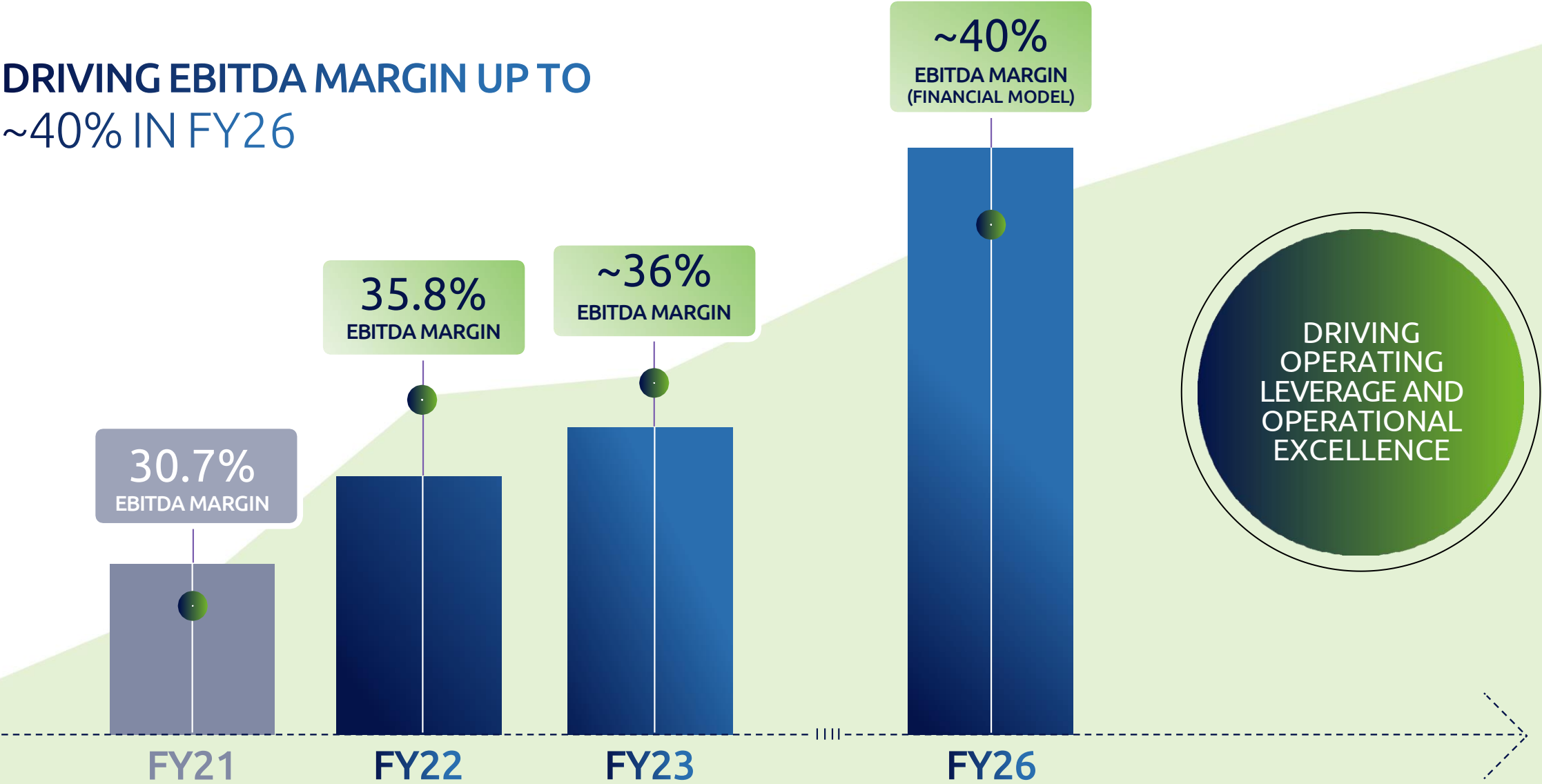
Smart Photonics-SOI

Smart PD-SOI

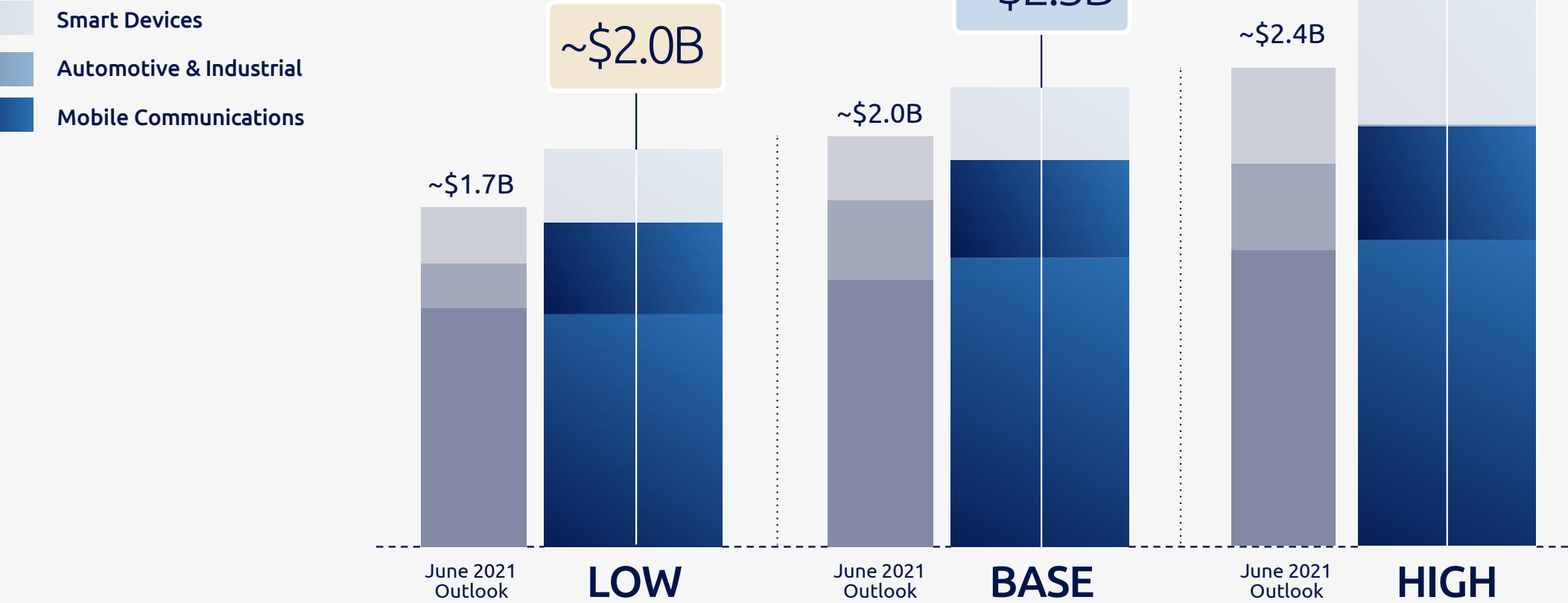
SOITEC REVENUE
TO GROW AT 20% - 25% CAGR
OVER FY22-FY26



DRIVING EBITDA MARGIN UP TO
~40% IN FY26



FY26 REVENUE MODEL



GLOBAL INDUSTRIAL FOOTPRINT

CAPACITY EXPANSION ACROSS ALL PRODUCT LINES

Country	Soitec Fab	Product	Diameter	Max capacity (wafers per year)
FRANCE	BERNIN 1	SOI	200mm	~1Mwpy
	BERNIN 2	SOI	300mm	~700Kwpy
	BERNIN 3	POI	150mm / 200mm	Raising capacity to reach ~750Kwpy
	BERNIN 4 NEW	SiC SOI refresh	150mm / 200mm / 300mm	Building capacity to reach ~500Kwpy in phase 1
SINGAPORE	PASIR RIS	SOI	300mm	Raising capacity to reach ~1Mwpy
	PASIR RIS EXTENSION NEW	SOI	300mm	Expanding capacity to reach ~1Mwpy (production starting by end FY25)
BELGIUM	HASSELT	GaN	150mm / 200mm	Raising capacity to reach ~60Kwpy
CHINA	SIMGUI	SOI	200mm	~450Kwpy



Bernin, France*



Pasir Ris, Singapore*

(*) For illustrative purposes only



02

MEGATRENDS & APPLICATIONS FOR SMART DEVICES





GROWTH DRIVERS SMART DEVICES

EDGE COMPUTING

Bringing AI onto low power device

- Always-on low power devices
- Smart hearables (voice recognition)
- Autonomous drones
- Industry 4.0 sensors and robots

SENSING

Capture data in all environments

- 3D image sensors / Facial recognition
- Lidar (3D sensing for consumer applications)

DATACENTERS

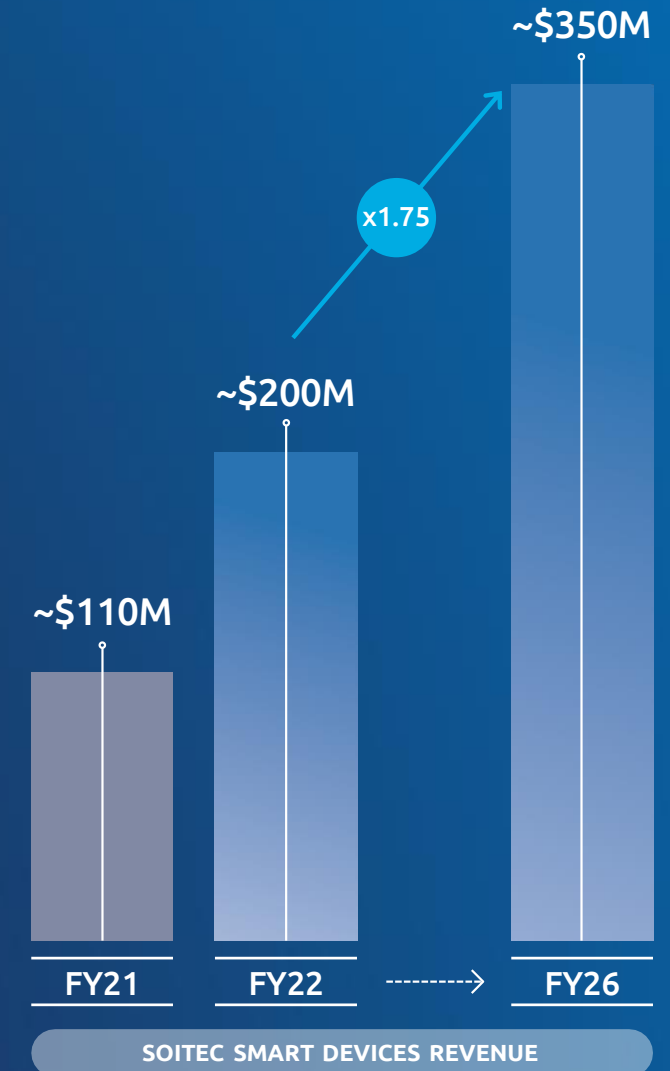
Modular computing at higher-speeds

- Pluggable transceivers
- Network flow processors
- Co-packaged optical interconnects

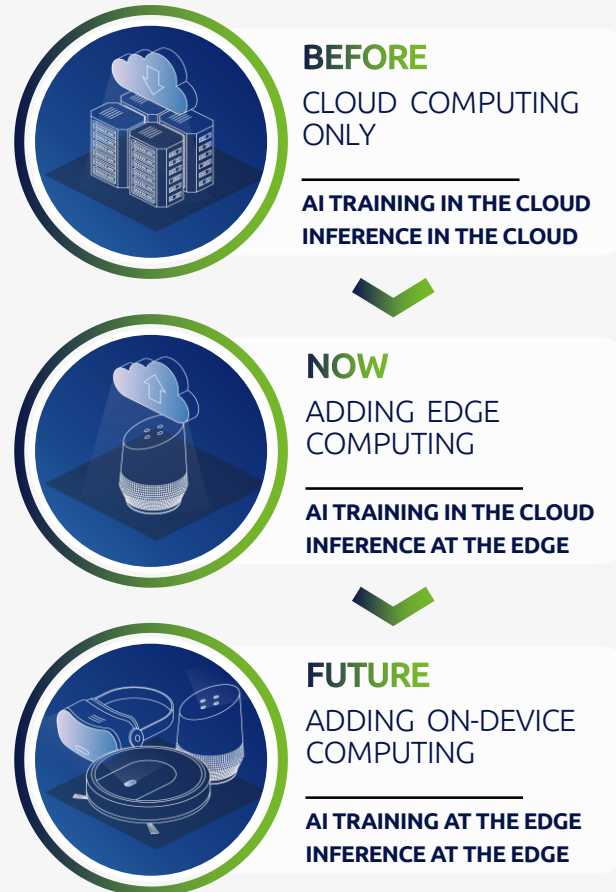
ENHANCED REALITY

Connecting virtual and physical worlds

- AR/VR/XR headsets
- Sensing, connecting and computing data on low power devices



EDGE COMPUTING – AI FROM CLOUD TO DEVICE



INTELLIGENCE AT THE EDGE

Virtualization

- › High brightness/Fast response display
- › High speed connectivity (5G)
- › High power computing (SoC + GPU)
- › 2D/3D sensor

AIoT

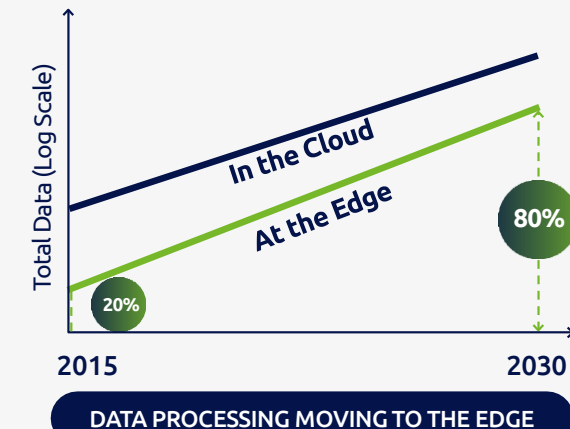
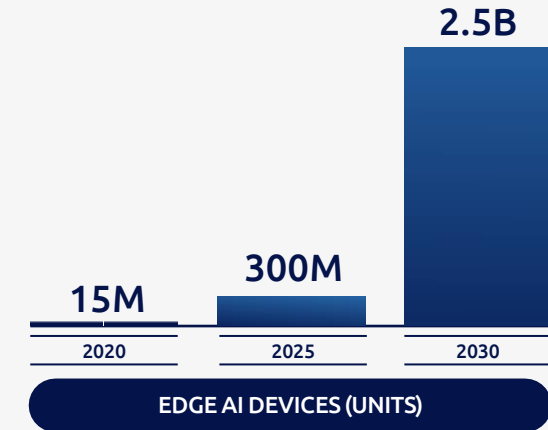
- › New human-machine interface
- › 2D/3D sensor
- › Wide range connectivity (UWB, LPWAN)
- › Mid-power computing (MCU/SoC with AI)

IoT

- › 2D sensor
- › Home range connectivity (Wi-Fi/Bluetooth)
- › Low power computing (MCU)

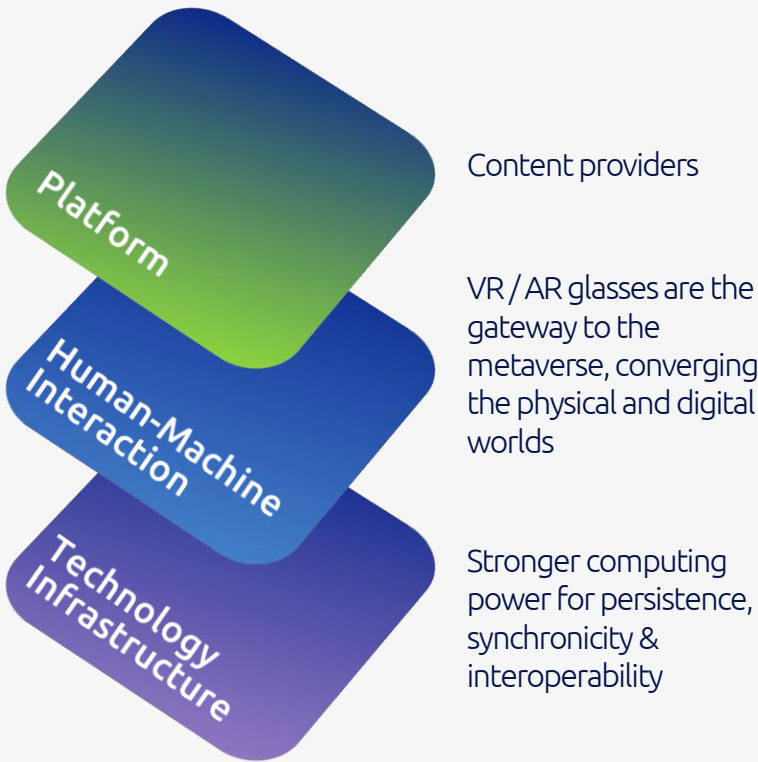
2020

>2025



ENHANCED REALITY

3 LAYERS POWER THE EXTENDED REALITY ECOSYSTEM



OPPORTUNITIES FOR ENGINEERED SUBSTRATES

DRIVERS

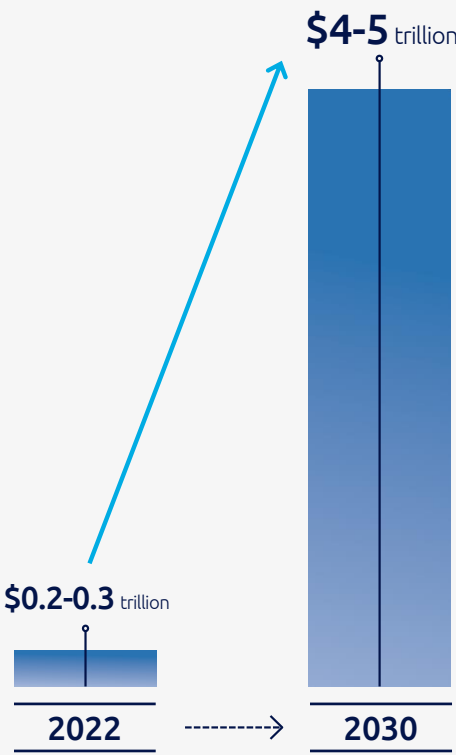
- High performance computing
- Edge AI
- Efficient and powerful data centers
- Device miniaturization and customization
- Energy efficiency



SOITEC PRODUCTS COULD ENABLE

- Wi-Fi 6 and 5G modem
- Sensors, Imagers
- Data Centers
- microLED displays

THE METAVERSE IS EXPECTED TO GENERATE \$4-5 TRILLION VALUE BY 2030

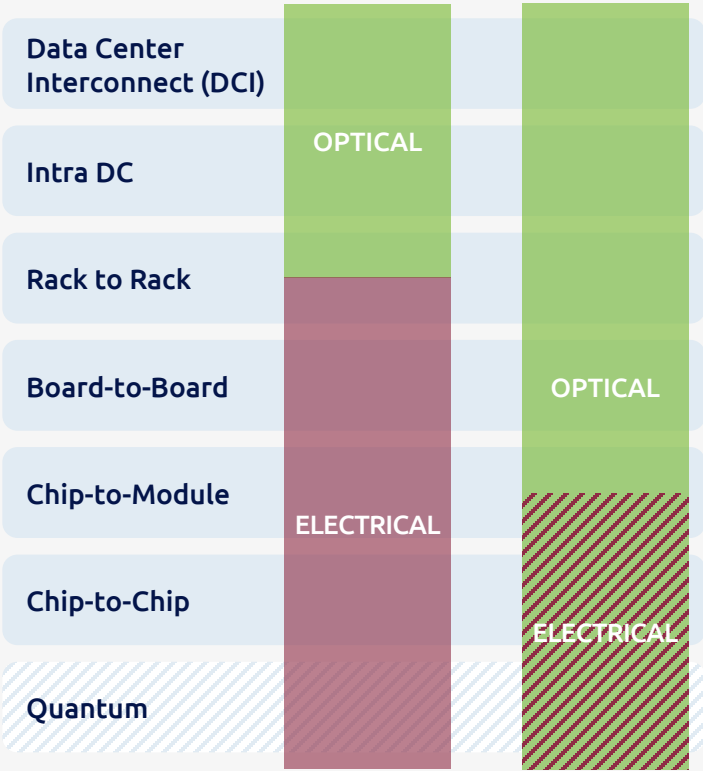


Source: McKinsey

PHOTONICS FOR DATACENTERS

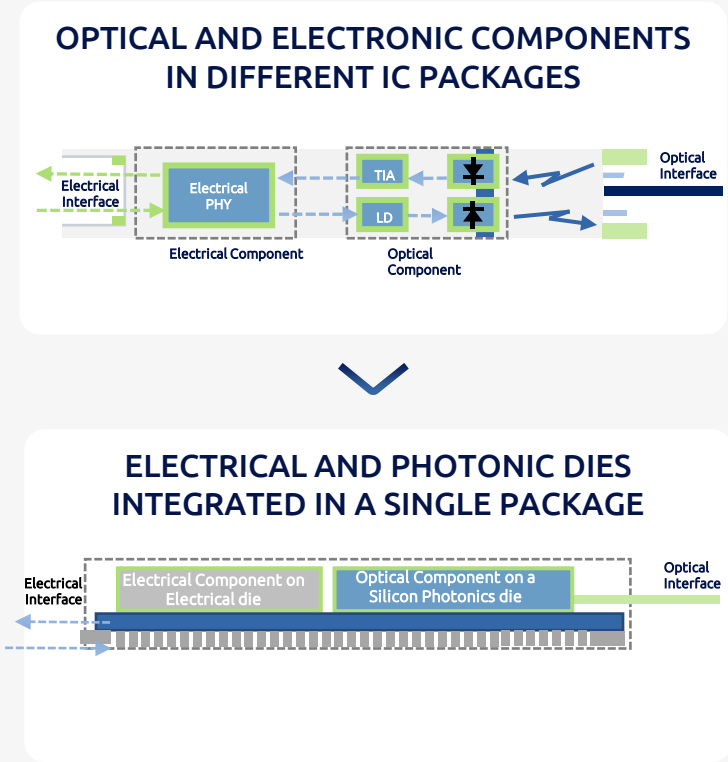
OPTICAL INTERCONNECTS EXPECTED TO PENETRATE DEEPER INTO THE DATACENTER ARCHITECTURE

TODAY --> >2023



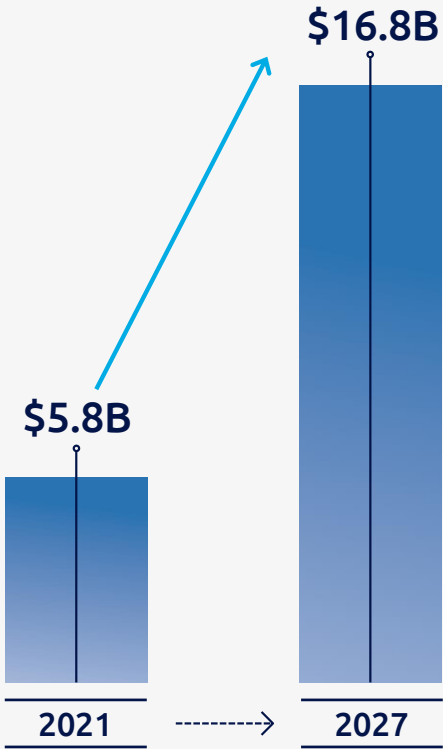
Source: Yole, Soitec estimates

CO-PACKAGED OPTICS (CPO) ADDRESSING NEXT-GENERATION BANDWIDTH AND POWER CHALLENGES



Source: Broadcom, Synopsys

DATACOM MARKET EXPECTED TO GROW ~20% CAGR OVER 2021-2027



Source: Yole

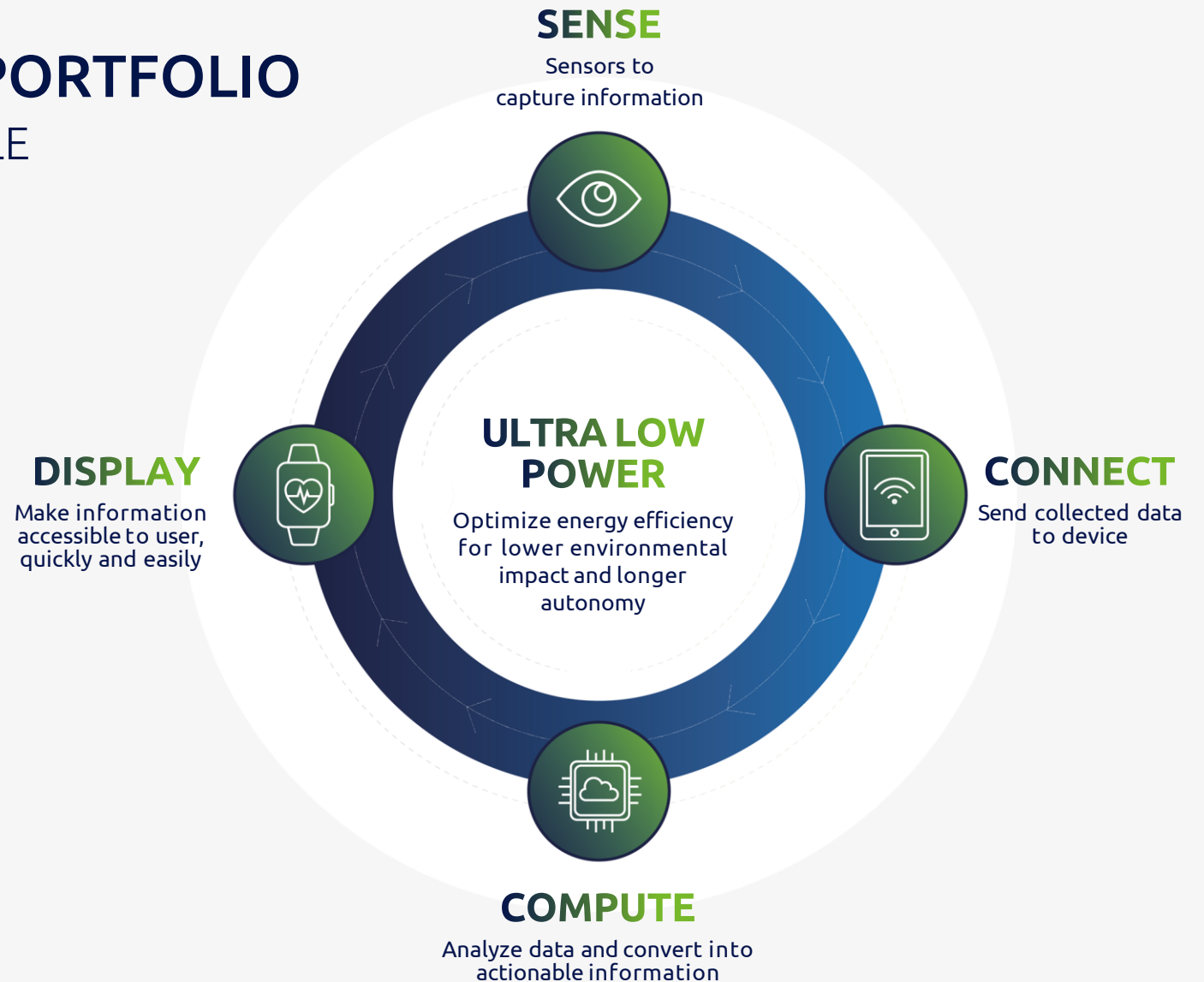
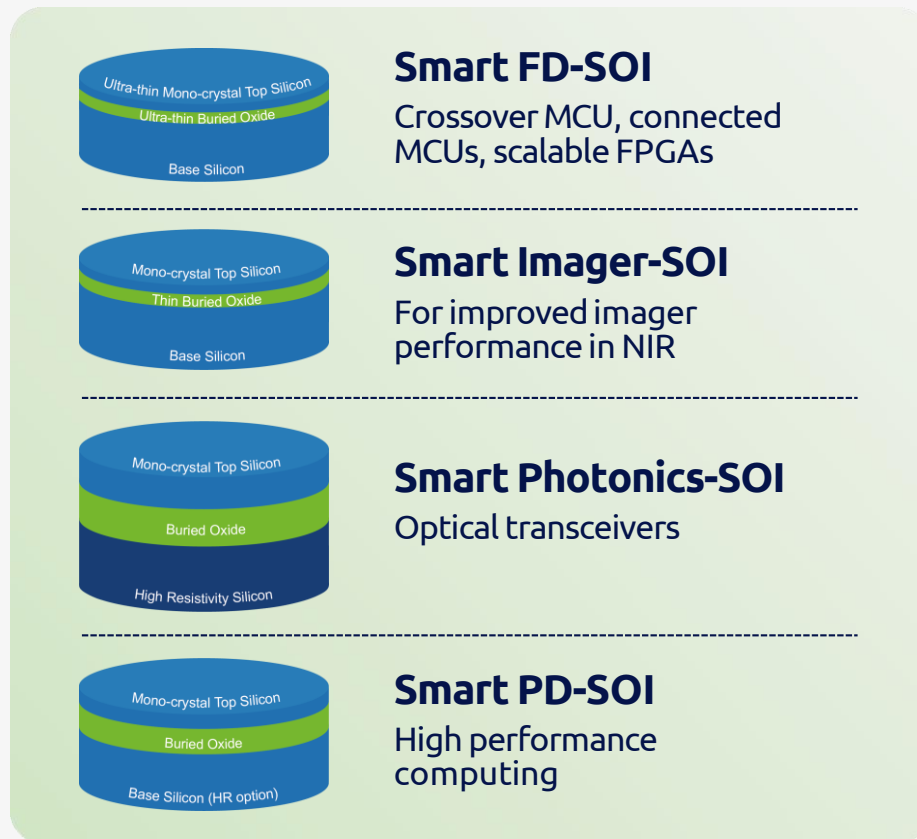
03

SOITEC PRODUCTS & SERVICES



SMART DEVICES PRODUCT PORTFOLIO

ADDRESSES THE SMART DEVICES CYCLE



SMART DEVICES

FD-SOI



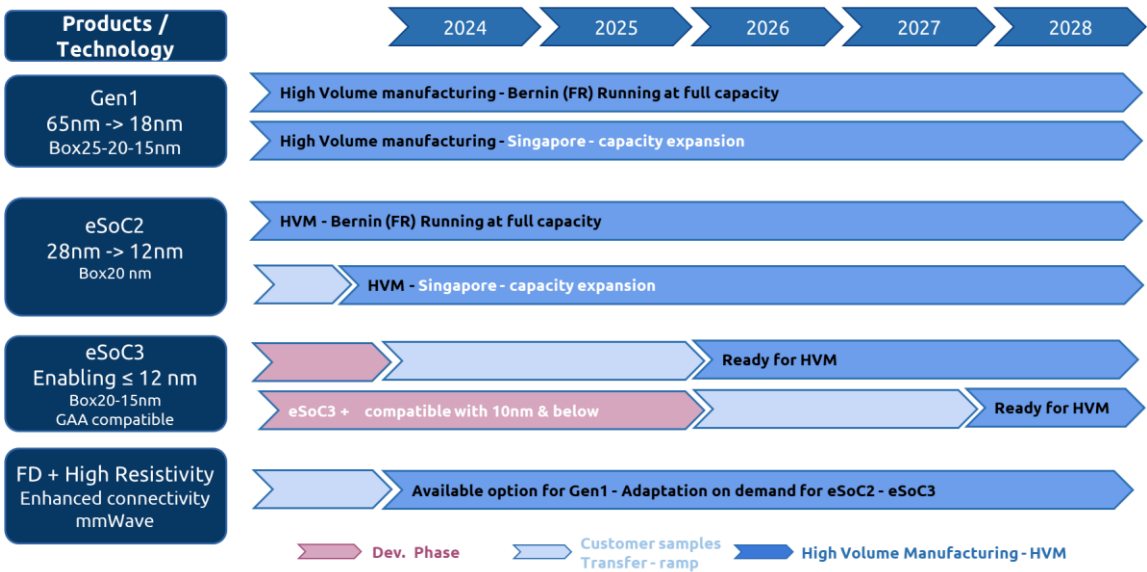
EXISTING AND FUTURE APPLICATIONS

- Smart home devices
- Smart meters / smart grid
- Environmental monitoring
- Medical IoT
- Smart sensors for agriculture
- Wearables

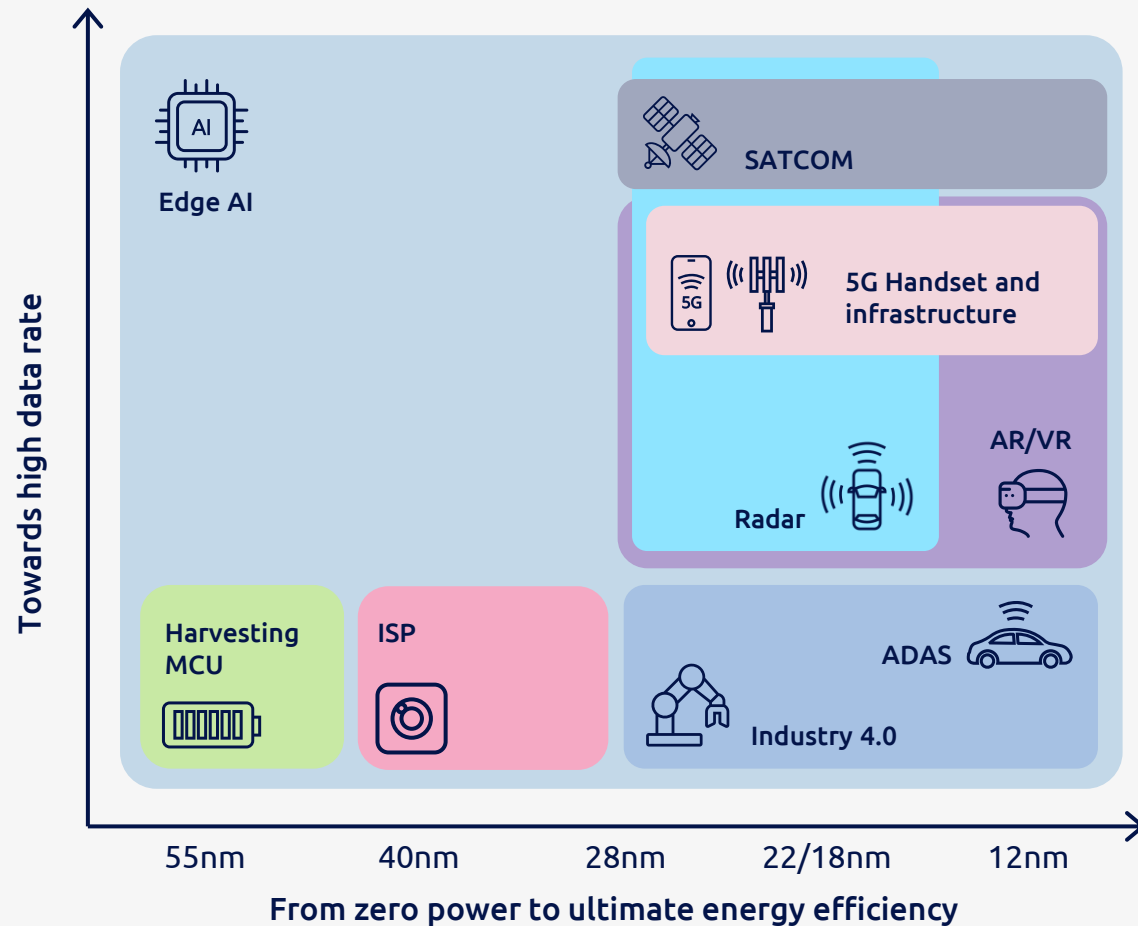
VALUE PROPOSITION

- Lower active power consumption - Always ON
- Performance on demand
- Ultra-low leakage with ultra-low V_{DD}
- Robust energy harvesting 'zero power' capabilities
- Lowest-cost processing (inferences-per-Watt-per-\$)

FD-SOI PRODUCTS AND ROADMAP



OVERALL FD-SOI MARKET SEGMENTATION



FD-SOI IS THE ANSWER

FOR APPLICATIONS REQUIRING

- Performance-on-demand
- Battery-powered
- Integrated RF
- Embedded NVM memories

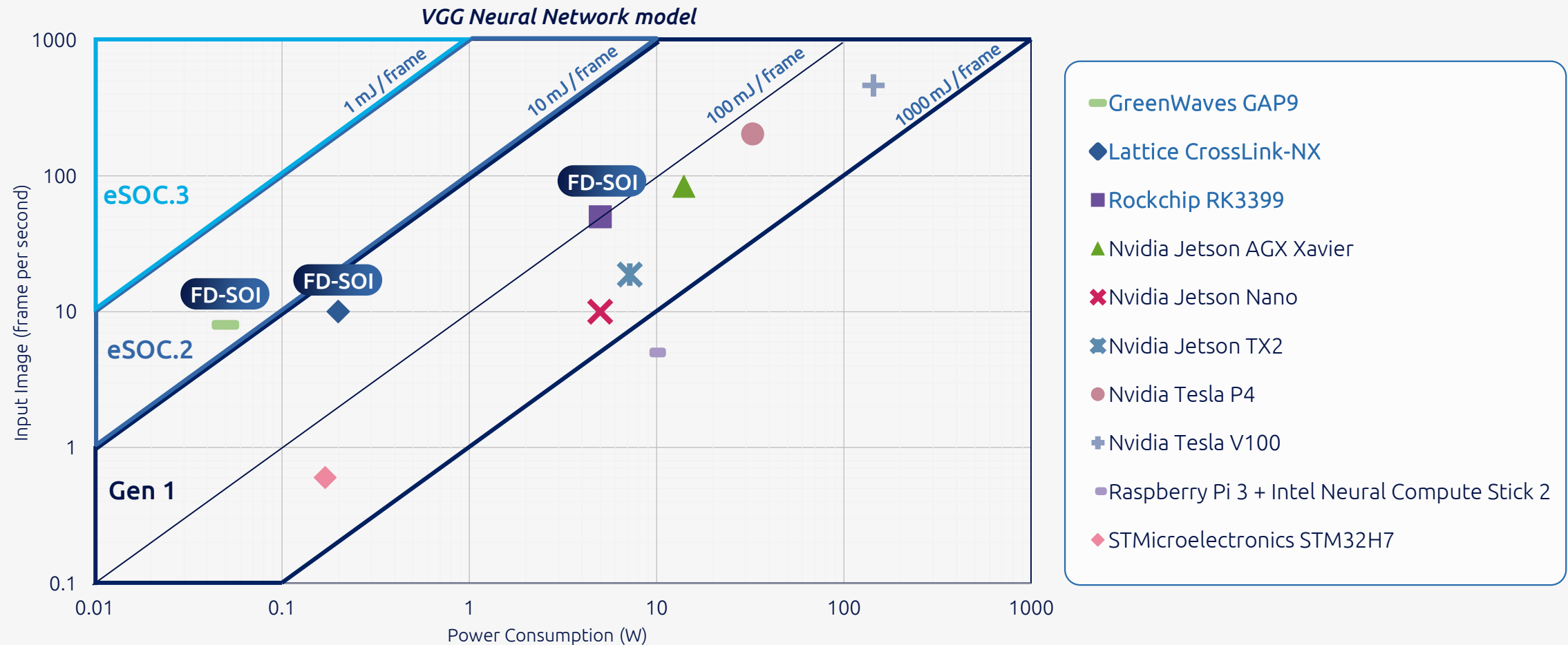
3 MARKET DRIVERS

- AI MCUs
- 5G
- Automotive

FD-SOI Edge AI inference hardware will support all those segments

EDGE COMPUTING

FD-SOI IS THE IDEAL PLATFORM FOR EDGE INFERENCE



SENSING AT THE EDGE

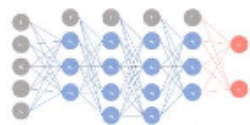
TRANSFORMING RICH SENSOR DATA ON BATTERY POWERED DEVICES...

- › People & Object **detection and identification**
- › Noise removal / reduction
- › Spoken language **understanding**

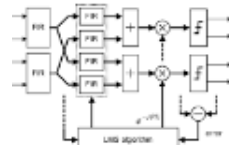


...AT ULTRA-LOW POWER

- › Interpretation and analysis
- › Application control: Neural Network and Digital Signal Processor tasks
- › Low power communications



NN Tasks



DSP Tasks

OCCUPANCY DETECTION

- › Wireless sensor with embedded AI / Neural Networks + IR camera
- › Presence detection, people counting, social distance

HUMAN DETECTION FOR ULTRA LOW POWER VIDEO SURVEILLANCE

- › Image processing + human detection
- › Security surveillance, safety systems, alarm systems
- › Identifying people and their location

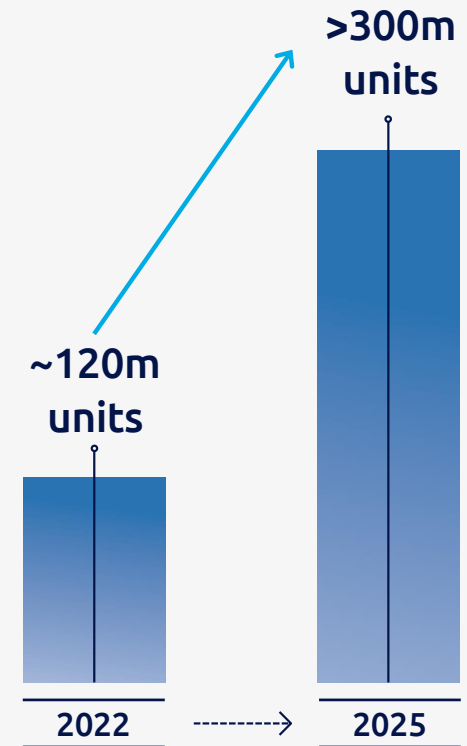
SMART SECURITY CAMERAS AND SMART DOOR LOCK

- › Increase battery life, reduce the cost of false alarms and augment feature set

HEARABLES NEXT GENERATION FEATURES

- › Acoustic Scene Identification, based on Neural Network
- › NN based Noise Reduction, reduces background noise, and performs source separation to extract unwanted voice & sound

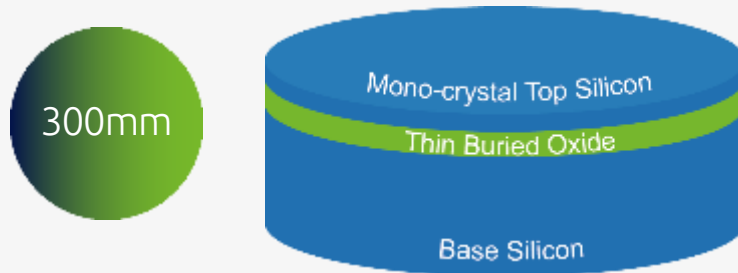
HEARABLES MARKET EXPECTED TO GROW ~35% CAGR OVER 2020-2025



Source: Soitec, Strategy Analytics

SMART DEVICES

Imager-SOI



EXISTING AND FUTURE APPLICATIONS

- 3D image sensing for facial recognition on the edge in smartphones and AR/VR devices

VALUE PROPOSITION

- Reduced cross talks among pixels
- Lower near infrared illuminator power
- Reduced noise, increased signal-to-noise ratio
- Dedicated layer deposition for innovative stacking
 - Better fill factor
 - Optimized performances per functional block

NIR IMAGER (NEAR INFRA-RED)

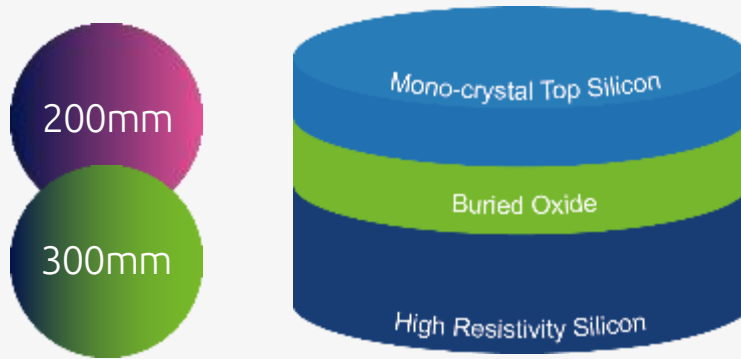
Front side
NIR imager



NIR / colored
Imager

SMART DEVICES

Photonics-SOI



EXISTING AND FUTURE APPLICATIONS

- Optical transceivers for data centers
- Co-packaged optics
- AI ML interconnect

VALUE PROPOSITION

- SOI as standard substrate for waveguides
- Single die integration (simpler packaging)
- Chip scale integration of optical function in CMOS fab
- High speed modulation compliant and low-loss waveguide

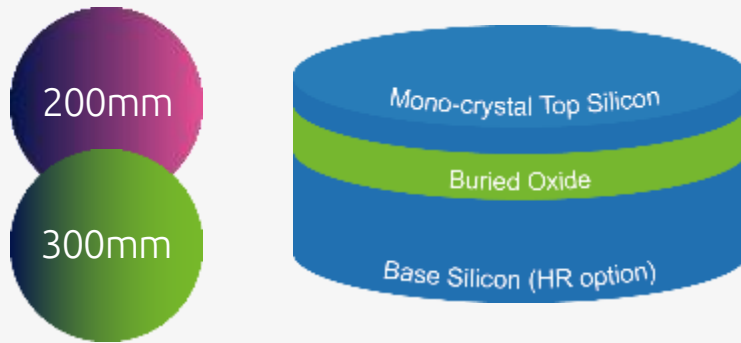
TYPICAL DIE SIZE PER APPLICATION IN mm²



— Datacom transceivers
~60mm²

SMART DEVICES

PD-SOI



EXISTING AND FUTURE APPLICATIONS

- Servers
- High performance computing

VALUE PROPOSITION

- Improved device performances
- Reduced device energy
- Smaller leakage

TYPICAL DIE SIZE PER APPLICATION IN mm²



— Servers and
high-performance
computing
~700mm²

DOLPHIN DESIGN

THE ENABLER OF ENERGY-EFFICIENT SOC_s

DOLPHIN
DESIGN



END APPLICATIONS



Wearables



Smart home



Medical



Smart city



Industrial



Connected car

VALUE PROPOSITION

Streamlining the cost-effective design of energy-efficient SOC_s

- State-of-the-art, user-configurable or user-configured, IPs (full subsystem+SDK)
- Adaptive Body Biasing (ABB) for FD-SOI technologies
- Turnkey ASIC provider for system makers, from IC architecture to supply chain management



**SPEED
PLATFORMS**

IP platforms

to enable ASIC/SOC_s designers

Custom-made ASIC/SOC_s

empowered by
in-house & third-party IPs

SPEED: SYSTEM PLATFORMS FOR ENERGY EFFICIENT DESIGN OFFERING OVERVIEW

SPIDER	CHAMELEON	RAPTOR	BAT	PANTHER
Power Management	SoC Chassis	NPU Accelerator	Audio and metering AFE	DSP/AI Processor
IPs POR/BOR, ABB, AVS, Power control – LDO & DC/DC converters – battery charger + SDK	IPs XBAR interleaved interconnect – Autonomous peripheral management subsystem – Peripherals + SDK	IPs CNN-based scalable NN accelerator (32 to 128 MACs/cycle) + SDK + Model zoo	IPs PowerMeter AFE Voice Activity Detector, KWS unit, audio ADC, audio DAC, audio CODEC, ASRC, audio mixer...	IPs multi-core DSP/AI processor (software programmable), 4, 6 or 16 RISC-V compliant parallel cores. + SDK



SMART DEVICES

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