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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.
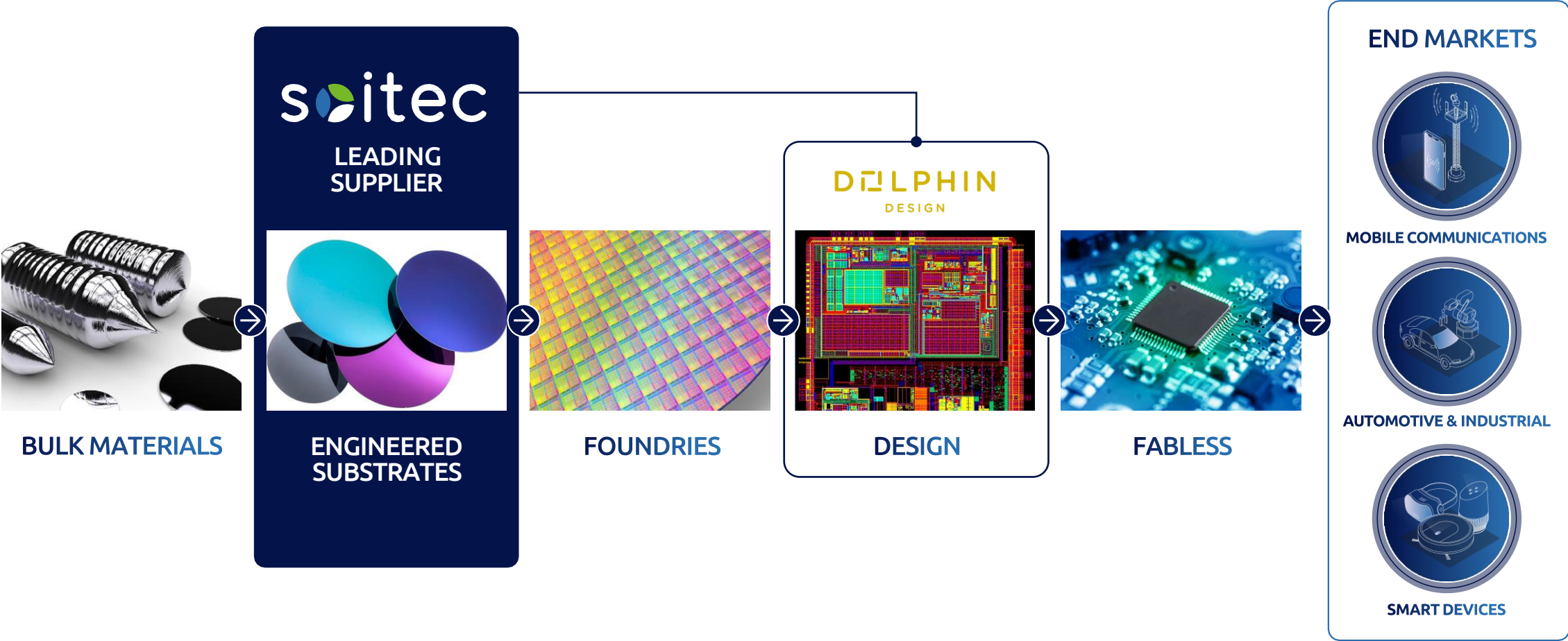
AGENDA
SMART DEVICES

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01

SOITEC AT A GLANCE

SOITEC HAS BUILT A UNIQUE POSITION IN THE VALUE CHAIN
LEVERAGING STRATEGIC PARTNERSHIPS IN THE ENTIRE SEMICONDUCTOR ECOSYSTEM

BULK MATERIALS

LEADING SUPPLIER

ENGINEERED SUBSTRATES

FOUNDRIES

DOLPHIN DESIGN

DESIGN

FABLESS

END MARKETS

MOBILE COMMUNICATIONS

AUTOMOTIVE & INDUSTRIAL

SMART DEVICES

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

MOBILE COMMUNICATIONS

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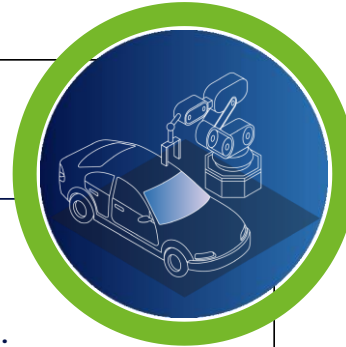- Mobile infrastructure & SatCom
- Wi-Fi 6, 6E & 7

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

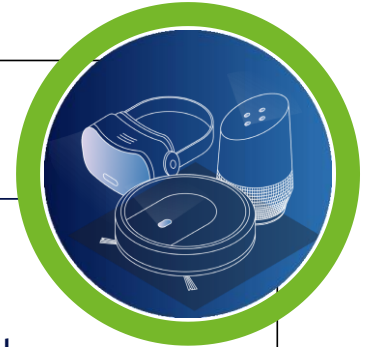**SOITEC PRODUCTS**

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

$668M
REVENUE

$1B
REVENUE

~20%
~10%
~70%

~$1.2B
REVENUE

~$2.3B
REVENUE
(FINANCIAL MODEL)

FY21   FY22   FY23   FY26

~15%
SMART DEVICES

~20%
AUTOMOTIVE & INDUSTRIAL

~65%
MOBILE COMMUNICATIONS
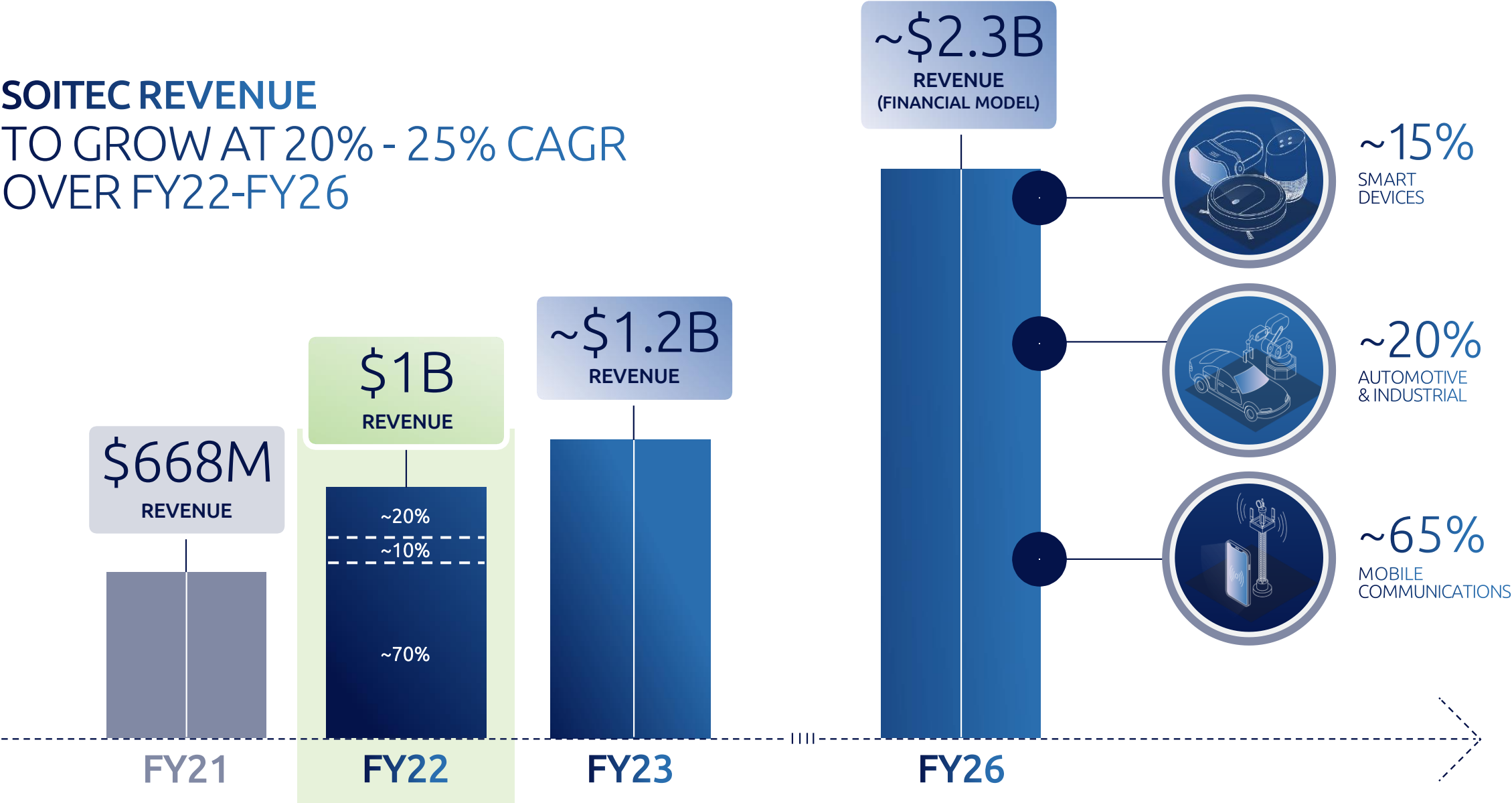
DRIVING EBITDA MARGIN UP TO
~40% IN FY26

~40%
EBITDA MARGIN
(FINANCIAL MODEL)

35.8%
EBITDA MARGIN

~36%
EBITDA MARGIN

30.7%
EBITDA MARGIN

FY21

FY22

FY23

FY26

DRIVING OPERATING LEVERAGE AND OPERATIONAL EXCELLENCE
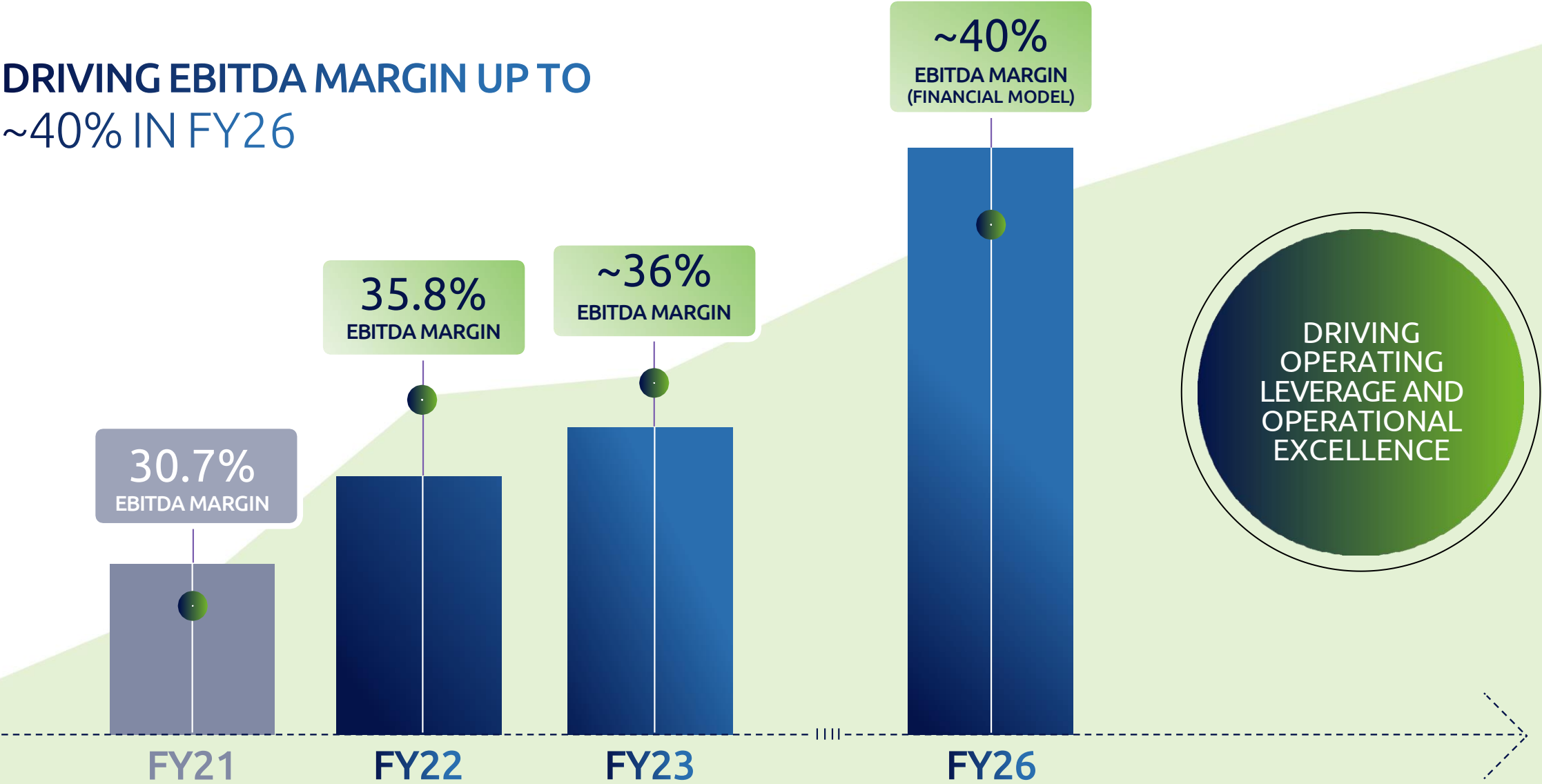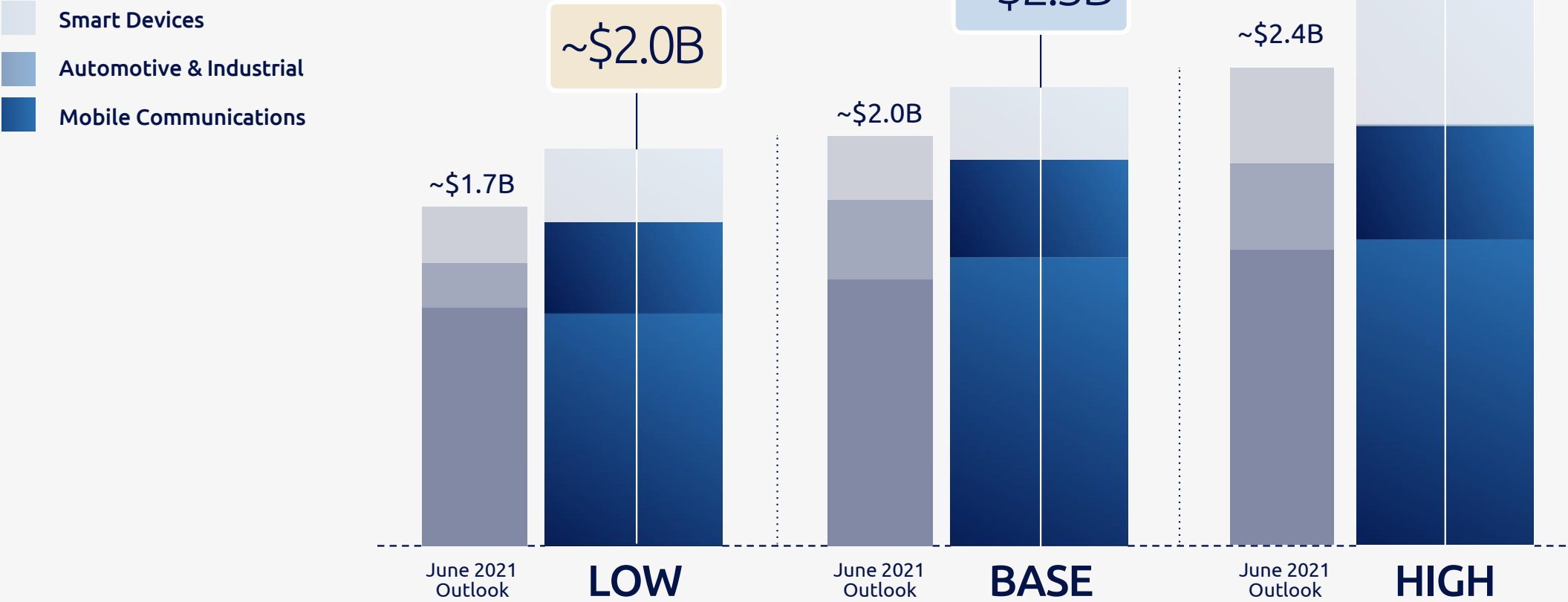
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GLOBAL INDUSTRIAL FOOTPRINT
CAPACITY EXPANSION ACROSS ALL PRODUCT LINES

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

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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)

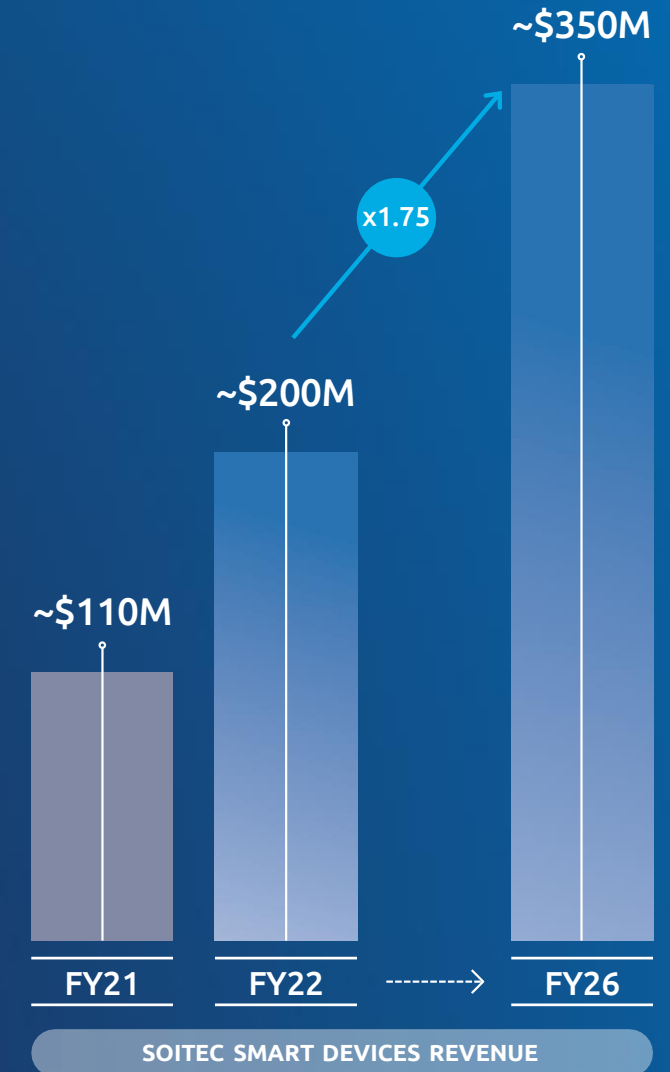### DATACENTERS

Modular computing at higher-speeds

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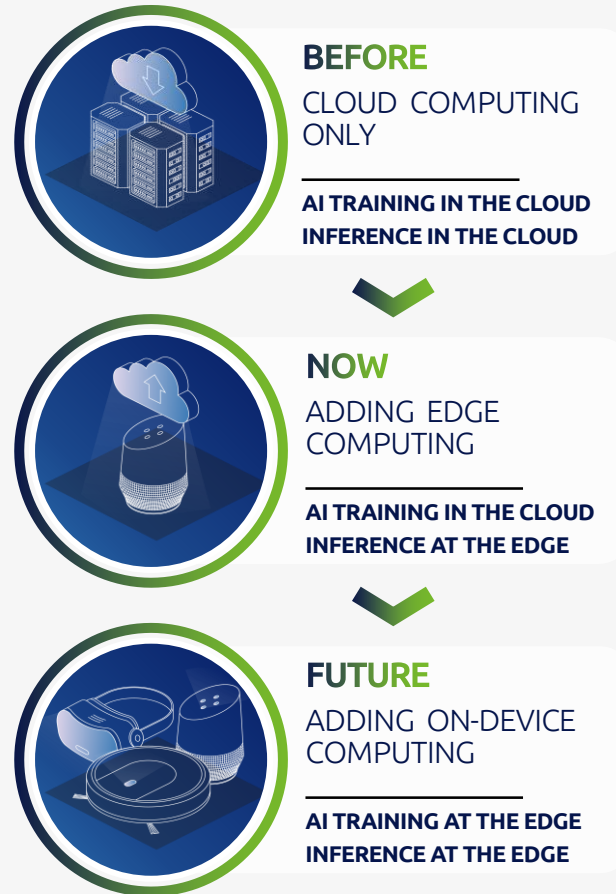- Co-packaged optical interconnects

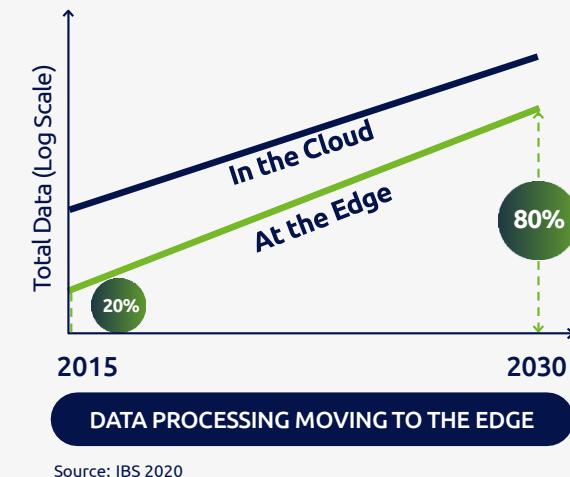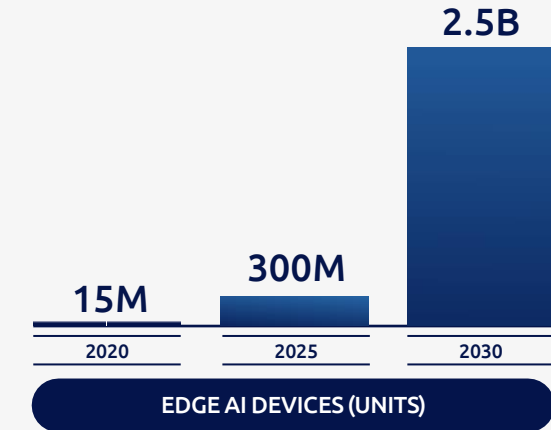### ENHANCED REALITY

Connecting virtual and physical worlds

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

x1.75

~$350M

~$200M

~$110M

FY21   FY22   ------>   FY26

SOITEC SMART DEVICES REVENUE

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EDGE COMPUTING – AI FROM CLOUD TO DEVICE

INTELLIGENCE AT THE EDGE

BEFORE
CLOUD COMPUTING ONLY

AI TRAINING IN THE CLOUD
INFERENCE IN THE CLOUD

NOW
ADDING EDGE COMPUTING

AI TRAINING IN THE CLOUD
INFERENCE AT THE EDGE

FUTURE
ADDING ON-DEVICE COMPUTING

AI TRAINING AT THE EDGE
INFERENCE 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**

2.5B

15M
2020

300M
2025

2030

EDGE AI DEVICES (UNITS)

Source: ABI research 2021

Total Data (Log Scale)

In the Cloud

At the Edge

20%

80%

2015 .... **2030**

DATA PROCESSING MOVING TO THE EDGE

Source: IBS 2020

ENHANCED REALITY

3 LAYERS POWER THE EXTENDED REALITY ECOSYSTEM

Platform

Content providers

Human-Machine Interaction

VR / AR glasses are the gateway to the metaverse, converging the physical and digital worlds

Technology Infrastructure

Stronger computing power for persistence, synchronicity & interoperability
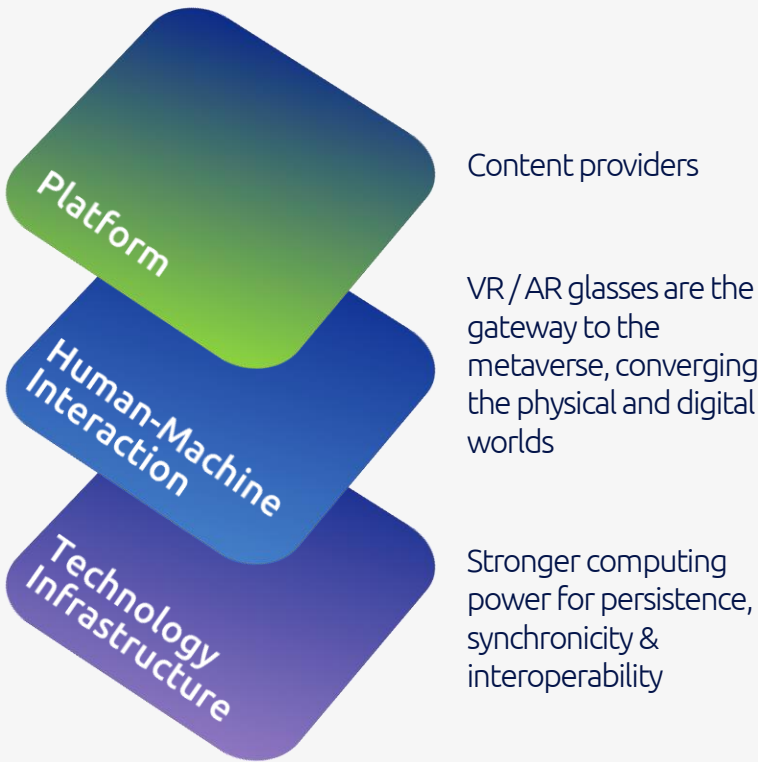
## OPPORTUNITIES FOR ENGINEERED SUBSTRATES

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

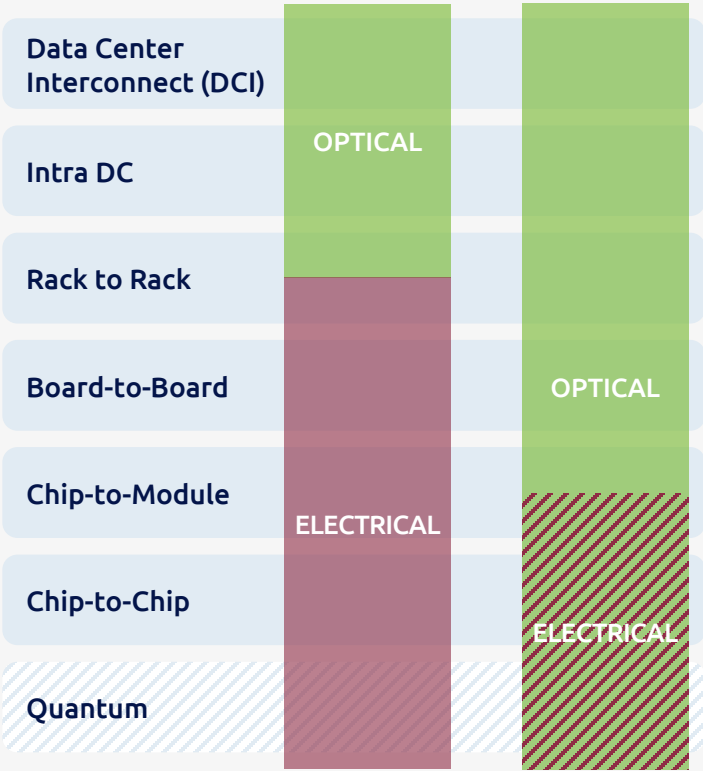## THE METAVERSE IS EXPECTED TO GENERATE $4-5 TRILLION VALUE BY 2030

$4-5 trillion

$0.2-0.3 trillion

2022   2030
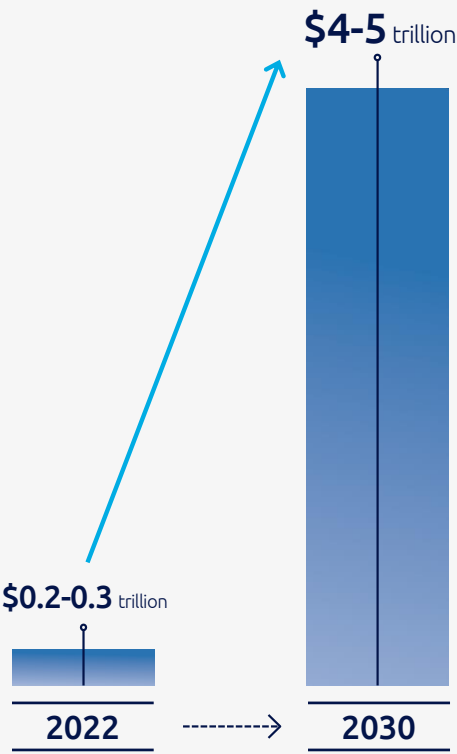
Source: McKinsey

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PHOTONICS FOR DATACENTERS

OPTICAL INTERCONNECTS EXPECTED TO PENETRATE DEEPER INTO THE DATACENTER ARCHITECTURE

TODAY – – → >2023

	TODAY	>2023
Data Center Interconnect (DCI)	OPTICAL	OPTICAL
Intra DC	OPTICAL	OPTICAL
Rack to Rack	OPTICAL	OPTICAL
Board-to-Board	ELECTRICAL	OPTICAL
Chip-to-Module	ELECTRICAL	ELECTRICAL
Chip-to-Chip	ELECTRICAL	ELECTRICAL
Quantum		

Source: Yole, Soitec estimates

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

OPTICAL AND ELECTRONIC COMPONENTS IN DIFFERENT IC PACKAGES

Electrical Interface — Electrical PHY — TIA / LD — Optical Interface

Electrical Component   Optical Component

ELECTRICAL AND PHOTONIC DIES INTEGRATED IN A SINGLE PACKAGE

Electrical Interface — Electrical Component on Electrical die / Optical Component on a Silicon Photonics die — Optical Interface
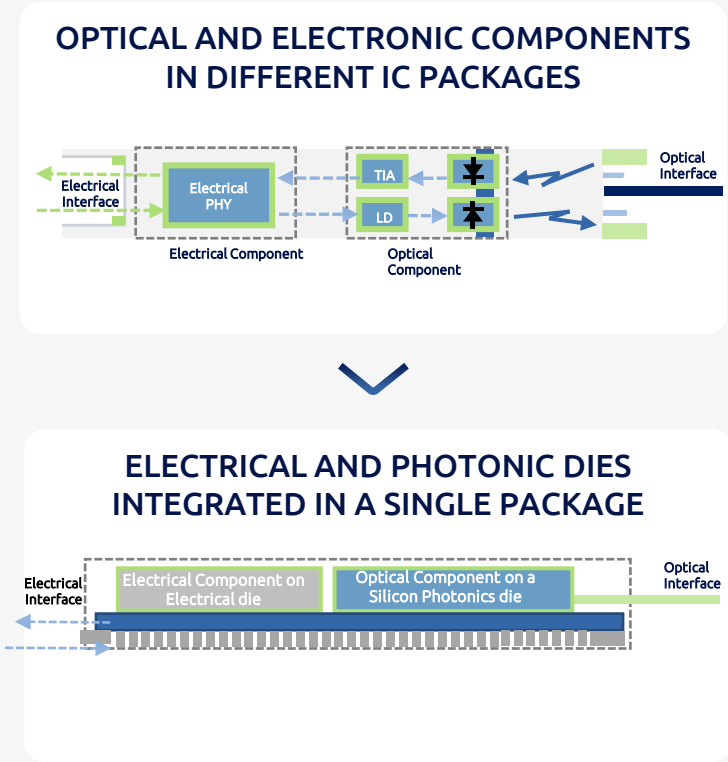
Source: Broadcom, Synopsys

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

$16.8B

$5.8B

2021 – – – – – – → 2027
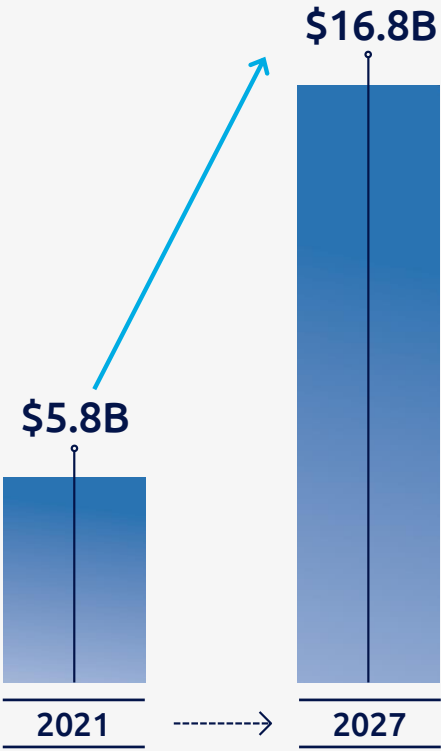
Source: Yole

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SOITEC PRODUCTS & SERVICES

SMART DEVICES PRODUCT PORTFOLIO

ADDRESSES THE SMART DEVICES CYCLE

Smart FD-SOI
Crossover MCU, connected MCUs, scalable FPGAs

- Ultra-thin Mono-crystal Top Silicon
- Ultra-thin Buried Oxide
- Base Silicon

Smart Imager-SOI
For improved imager performance in NIR

- Mono-crystal Top Silicon
- Thin Buried Oxide
- Base Silicon

Smart Photonics-SOI
Optical transceivers

- Mono-crystal Top Silicon
- Buried Oxide
- High Resistivity Silicon

Smart PD-SOI
High performance computing

- Mono-crystal Top Silicon
- Buried Oxide
- Base Silicon (HR option)

SENSE
Sensors to capture information

CONNECT
Send collected data to device

COMPUTE
Analyze data and convert into actionable information

DISPLAY
Make information accessible to user, quickly and easily

ULTRA LOW POWER
Optimize energy efficiency for lower environmental impact and longer autonomy

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SMART DEVICES
FD-SOI

300mm

Ultra-thin Mono-crystal Top Silicon
Ultra-thin Buried Oxide
Base Silicon

VALUE PROPOSITION

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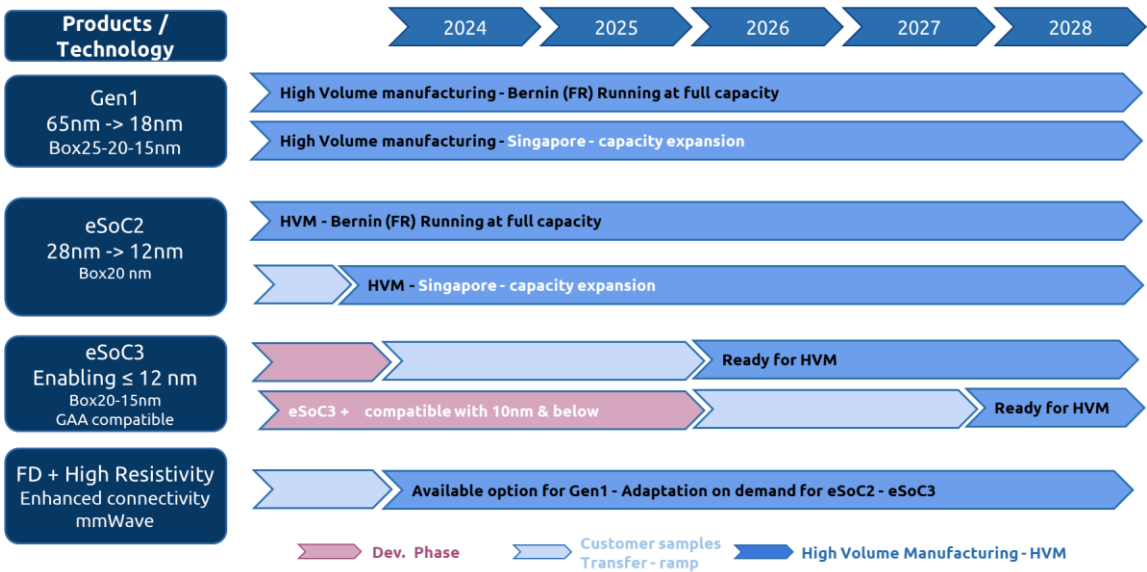- Robust energy harvesting 'zero power' capabilities
- Lowest-cost processing (inferences-per-Watt-per-$)

EXISTING AND FUTURE APPLICATIONS

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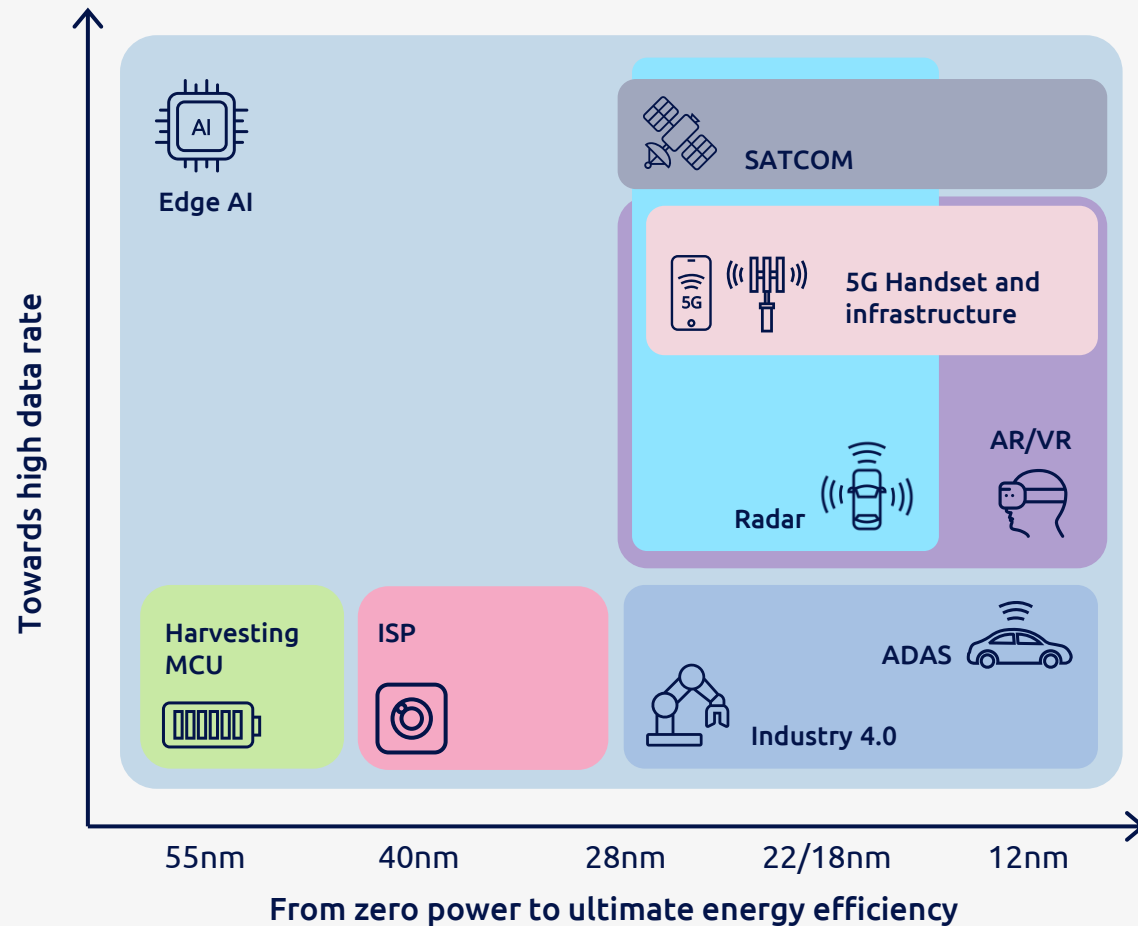- Smart sensors for agriculture
- Wearables

FD-SOI PRODUCTS AND ROADMAP

Products / Technology	2024	2025	2026	2027	2028
Gen1 65nm -> 18nm Box25-20-15nm	High Volume manufacturing - Bernin (FR) Running at full capacity				
	High Volume manufacturing - Singapore - capacity expansion				
eSoC2 28nm -> 12nm Box20 nm	HVM - Bernin (FR) Running at full capacity				
		HVM - Singapore - capacity expansion			
eSoC3 Enabling ≤ 12 nm Box20-15nm GAA compatible			Ready for HVM		
	eSoC3 + compatible with 10nm & below			Ready for HVM	
FD + High Resistivity Enhanced connectivity mmWave	Available option for Gen1 - Adaptation on demand for eSoC2 - eSoC3				

Dev. Phase   Customer samples Transfer - ramp   High Volume Manufacturing - HVM

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OVERALL FD-SOI MARKET SEGMENTATION

Towards high data rate (vertical axis)

- Edge AI
- SATCOM
- 5G Handset and infrastructure
- AR/VR
- Radar
- Harvesting MCU
- ISP
- Industry 4.0
- ADAS

From zero power to ultimate energy efficiency (horizontal axis)

55nm   40nm   28nm   22/18nm   12nm

FD-SOI IS THE ANSWER
FOR APPLICATIONS REQUIRING
- Performance-on-demand
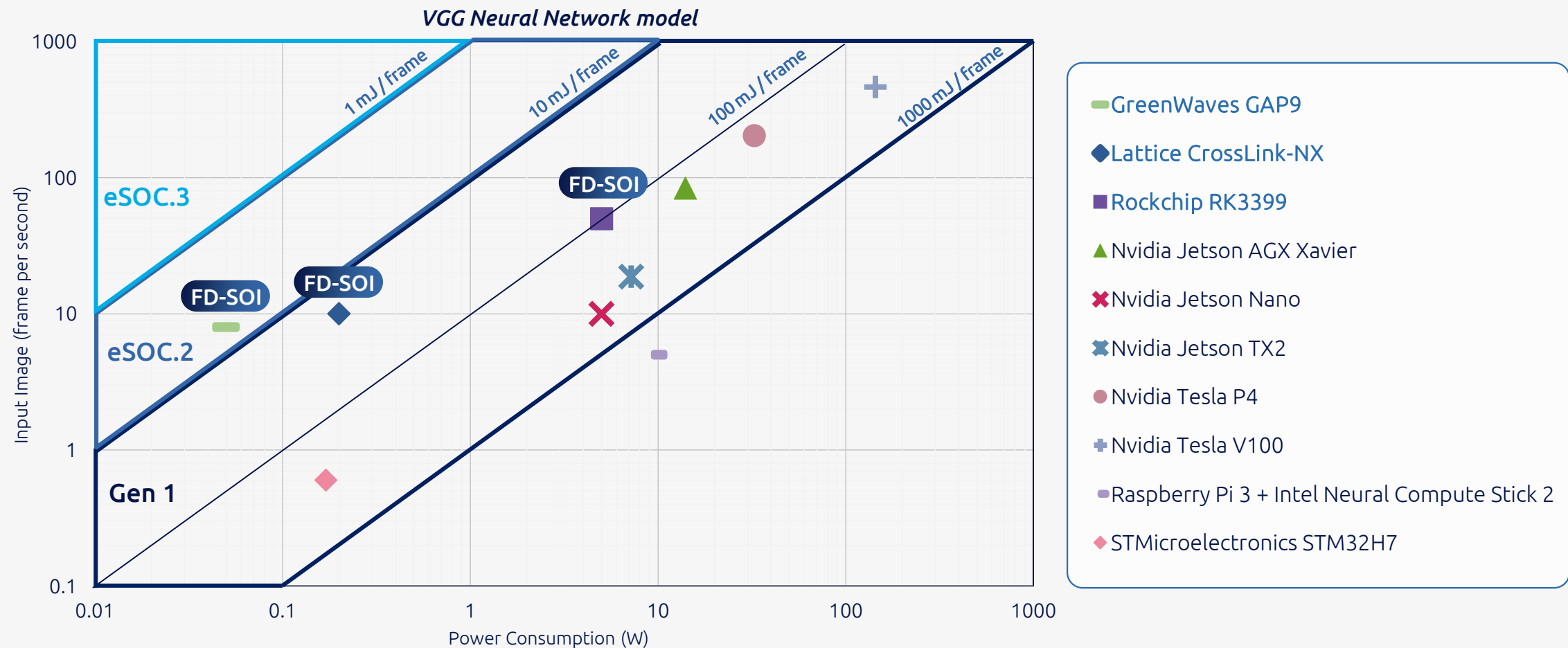- Battery-powered
- Integrated RF
- Embedded NVM memories

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

VGG Neural Network model

SENSING AT THE EDGE

TRANSFORMING RICH SENSOR DATA ON BATTERY POWERED DEVICES...

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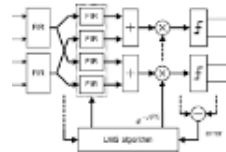› Noise removal / reduction
› Spoken language **understanding**

Visible image   **Sound**

IR image   **Radar**

...AT ULTRA-LOW POWER

› Interpretation and analysis
› Application control: Neural Network and Digital Signal Processor tasks
› Low power communications
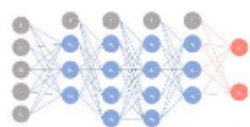
NN Tasks   **DSP Tasks**

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
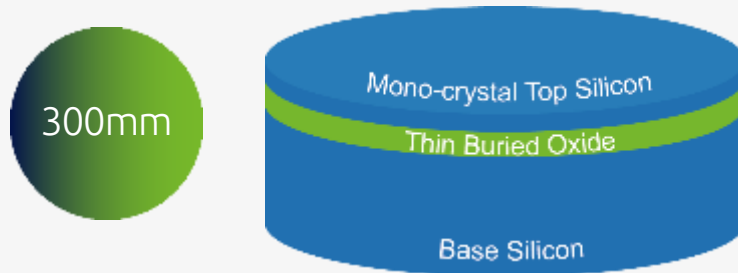› NN based Noise Reduction, reduces background noise, and performs source separation to extract unwanted voice & sound

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

>300m units

~120m units

2022 ----------> 2025
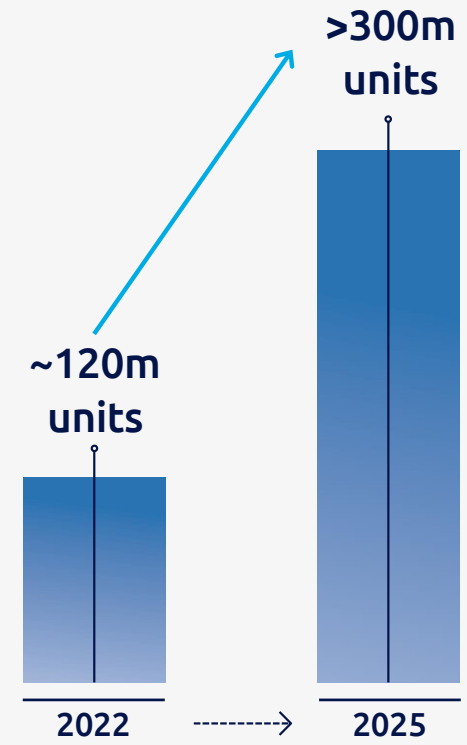
Source: Soitec, Strategy Analytics

SMART DEVICES
Imager-SOI

300mm

Mono-crystal Top Silicon

Thin Buried Oxide

Base Silicon

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
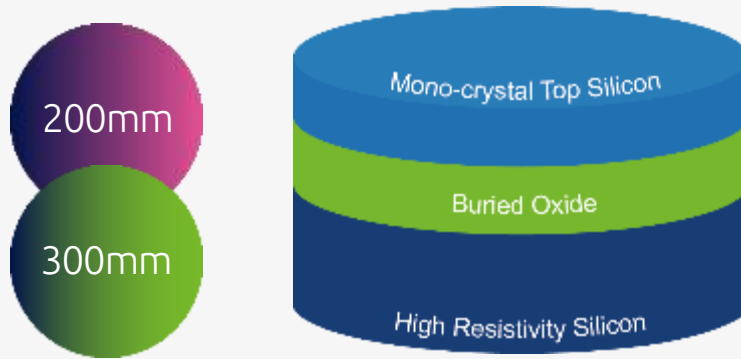 - Optimized performances per functional block

EXISTING AND FUTURE APPLICATIONS

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

NIR IMAGER (NEAR INFRA-RED)

Front side NIR imager

~20mm²

NIR / colored Imager

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SMART DEVICES

Photonics-SOI

200mm

300mm

Mono-crystal Top Silicon

Buried Oxide

High Resistivity Silicon

VALUE PROPOSITION

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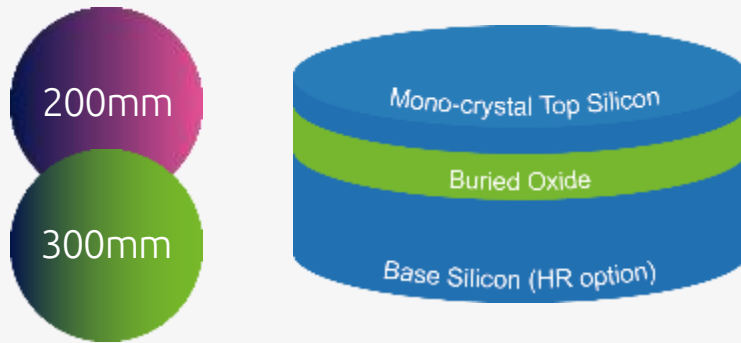- High speed modulation compliant and low-loss waveguide

EXISTING AND FUTURE APPLICATIONS

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

TYPICAL DIE SIZE PER APPLICATION IN mm^2

Datacom transceivers
~60mm²

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SMART DEVICES

PD-SOI

200mm

300mm

Mono-crystal Top Silicon

Buried Oxide

Base Silicon (HR option)

VALUE PROPOSITION

- Improved device performances
- Reduced device energy
- Smaller leakage

EXISTING AND FUTURE APPLICATIONS

- Servers
- High performance computing

TYPICAL DIE SIZE PER APPLICATION IN mm^2

Servers and high-performance computing ~700mm^2

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DOLPHIN DESIGN

THE ENABLER OF
ENERGY-EFFICIENT SOCs

DOLPHIN DESIGN

SOLARIMPULSE
EFFICIENT SOLUTION
OCTOBER 2020

arm
APPROVED
DESIGN
PARTNER

VALUE PROPOSITION

Streamlining the cost-effective design of energy-efficient SoCs

- State-of-the-art, user-configurable or user-configured, IPs (full subsystem+SDK)

- Adaptative 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/SoCs designers

Custom-made ASIC/SoCs
empowered by in-house & third-party IPs

END APPLICATIONS

Wearables

Smart home

Medical

Smart city

Industrial

Connected car

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 bharger	**IPs** XBAR interleaved interconnect – Autonomous peripheral management subsystem – Peripherals	**IPs** CNN-based scalable NN accelerator (32 to 128 MACs/cycle)	**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	**+ SDK**	**+ SDK** **+ Model zoo**		**+ SDK**

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