soitec

INVESTOR CONFERENCE

AUTOMOTIVE & INDUSTRIAL

December 2022

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

AUTOMOTIVE & INDUSTRIAL

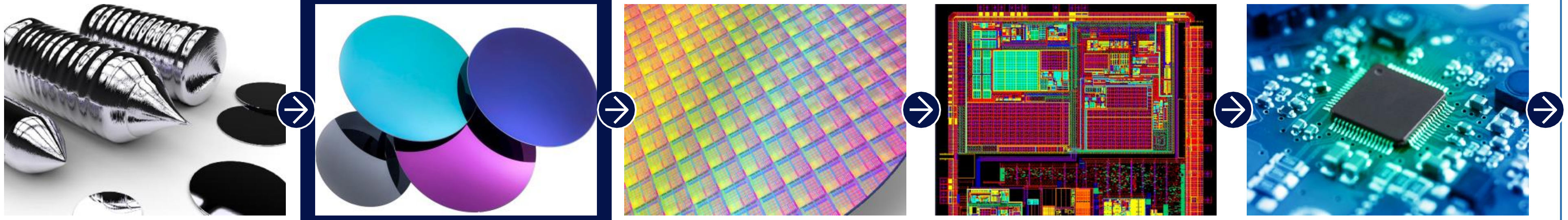
SOITEC AT A GLANCE 01
AUTOMOTIVE & INDUSTRIAL 02
SMARTSiC™ ADOPTION 03

SECTION 01

SOITEC
AT A GLANCE

SOITEC HAS BUILT A UNIQUE POSITION IN THE SEMICONDUCTOR INDUSTRY

LEVERAGING STRATEGIC PARTNERSHIPS IN THE ENTIRE SEMICONDUCTOR ECOSYSTEM



LEADING SUPPLIER

BULK MATERIALS → **ENGINEERED SUBSTRATES** → **FOUNDRIES** | **DESIGN** | **FABLESS** →

END MARKETS

MOBILE COMMUNICATIONS

AUTOMOTIVE & INDUSTRIAL

SMART DEVICES

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

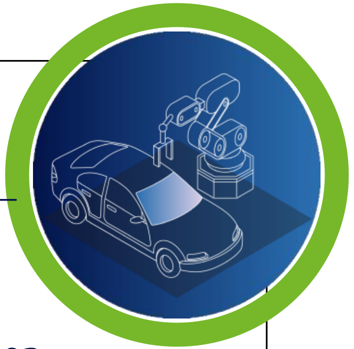
MOBILE COMMUNICATIONS

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

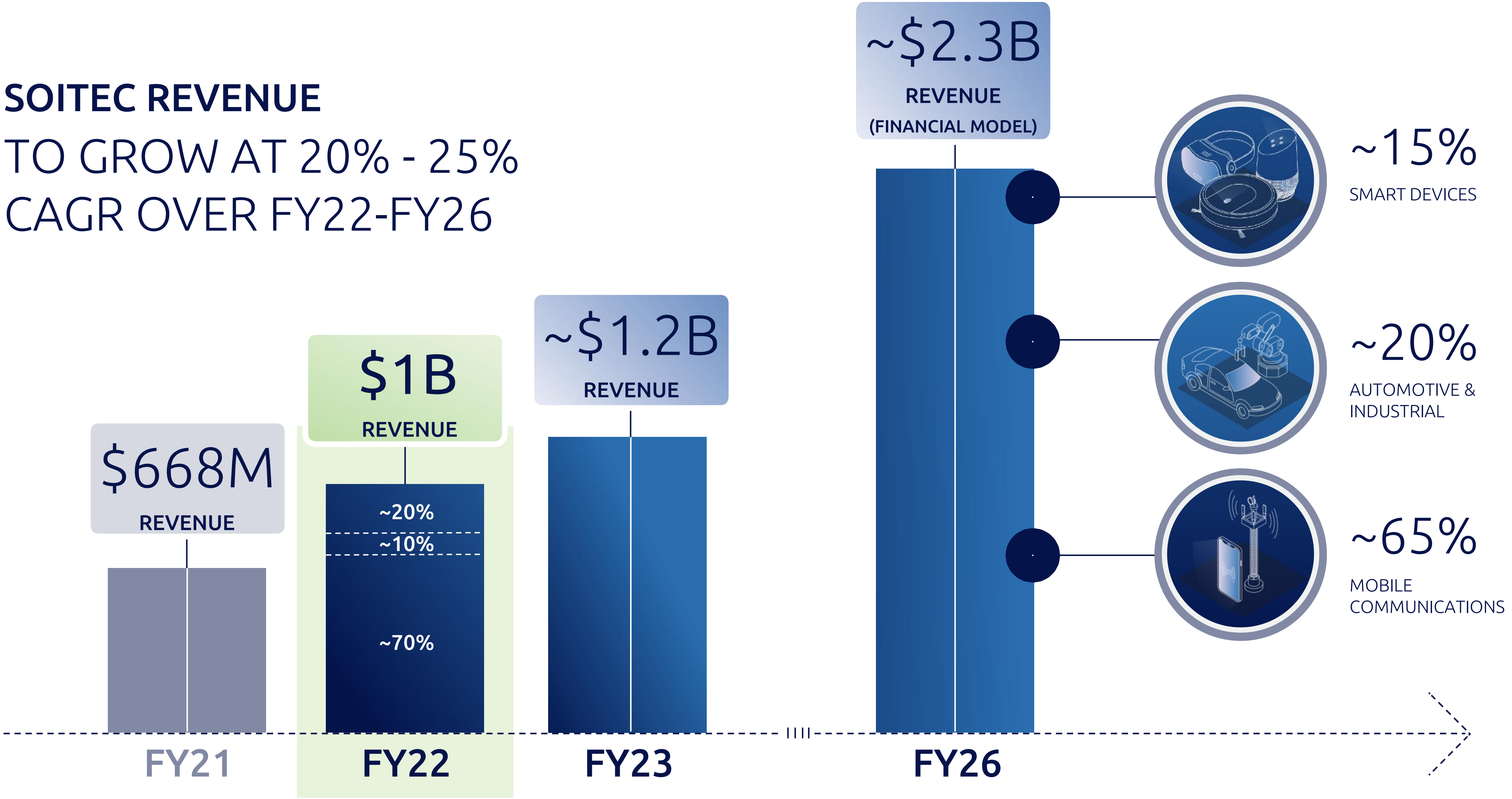
- Edge computing
- 3D sensing
- Smart home & Smart cities
- Data centers

SOITEC PRODUCTS

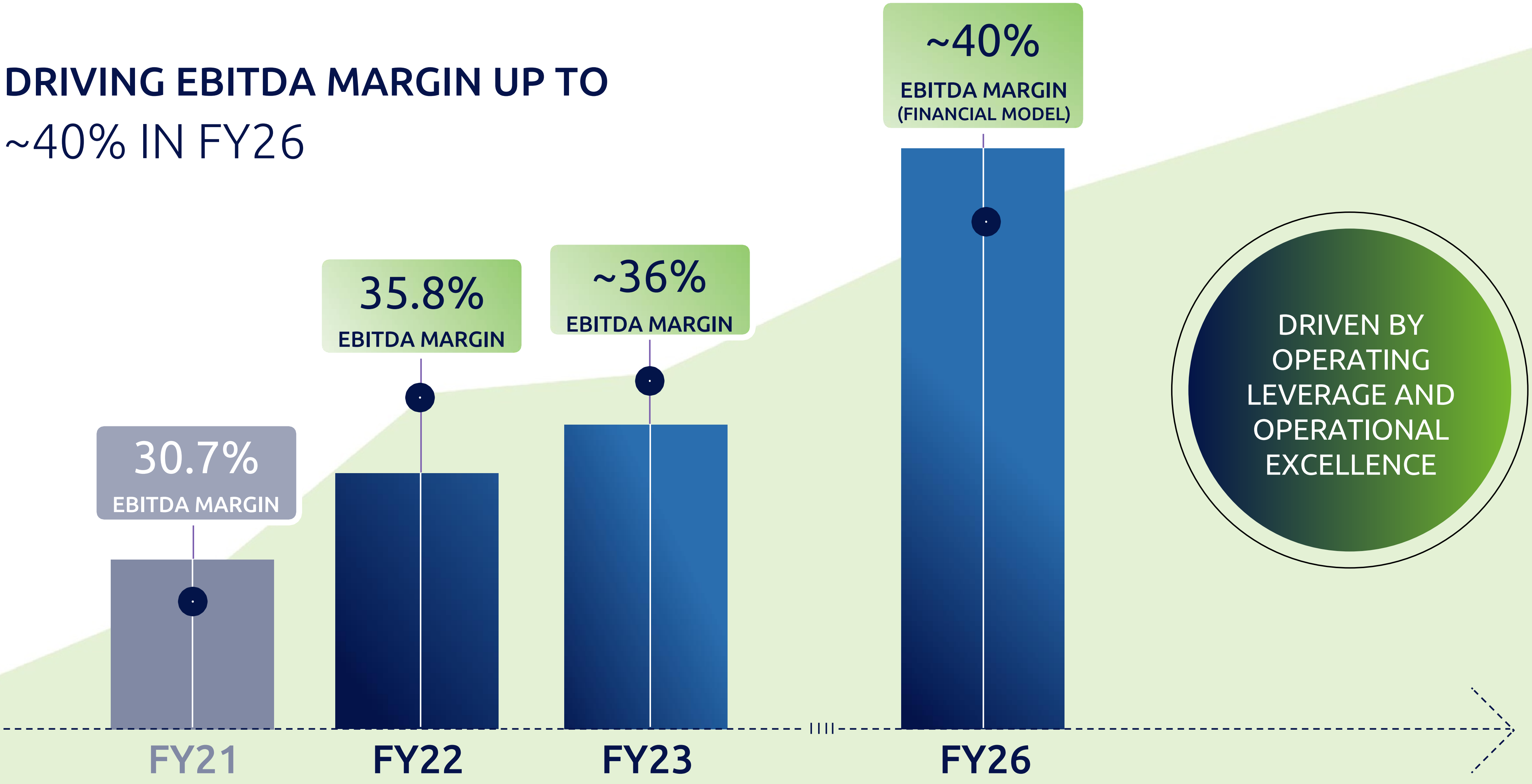
- Smart FD-SOI
- Smart Imager-SOI
- Smart Photonics-SOI
- Smart PD-SOI

SOITEC REVENUE

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



DRIVING EBITDA MARGIN UP TO ~40% IN FY26



DRIVEN BY OPERATING LEVERAGE AND OPERATIONAL EXCELLENCE

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

SECTION 02

AUTOMOTIVE & INDUSTRIAL

GROWTH DRIVERS
AUTOMOTIVE & INDUSTRIAL

INFOTAINMENT

Car is increasingly becoming a connected hub

- In-vehicle Networking
- In-vehicle Sensors
- PMIC
- Multimedia application processor
- Class D audio amplifier

ADAS / FUNCTIONAL SAFETY

Improving automation features to improve functional safety

- MCU / MPU
- Vision / Data Fusion Processor
- Camera
- Front, Rear, Edge radars
- Lidar sensors
- Zonal / Central Computing
- Airbag / Braking system

ELECTRIC

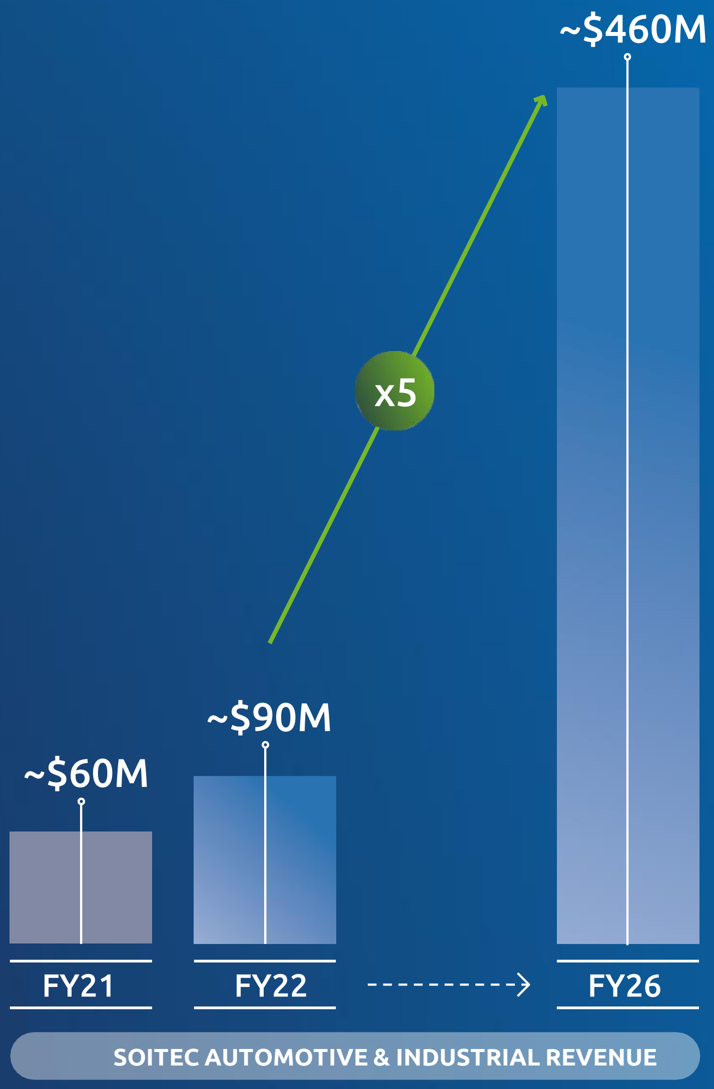
Accelerating Electric Vehicle adoption

- Powertrain / Traction inverter
- On-board charger
- Battery Management System
- DC-DC converter

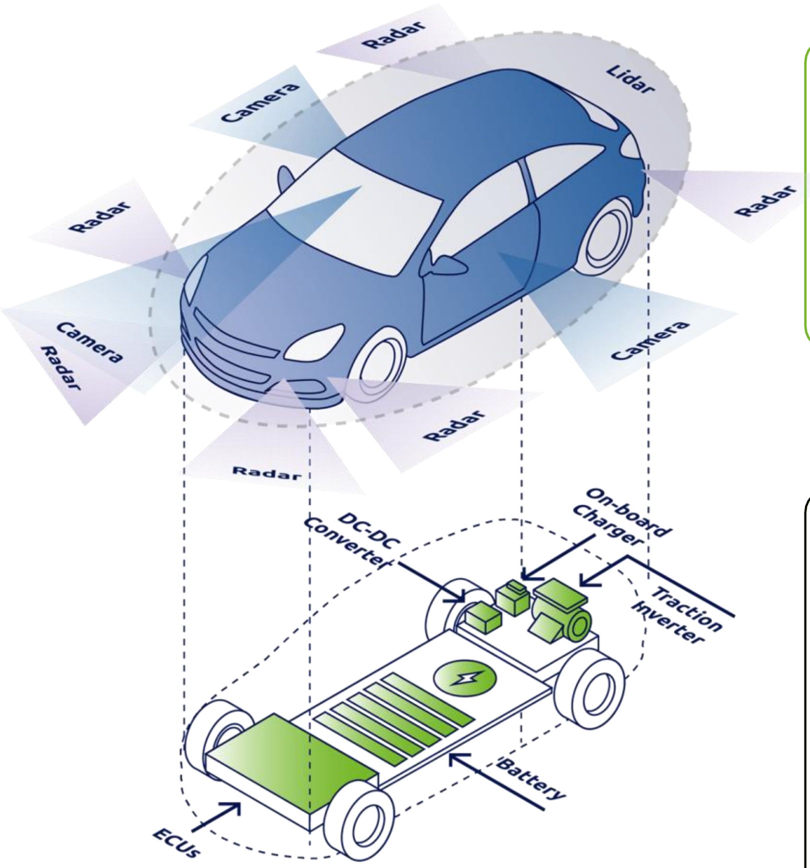
INDUSTRY 4.0

Enabling factories of the future with more safety, automation and efficiency

- Motor drive & gate driver
- Power converter & power management ICs
- Low CO_2 footprint power devices
- System Basis Chip (SBC)



AUTOMOTIVE MEGATRENDS
DRIVE INNOVATION FROM SYSTEMS TO SUBSTRATES



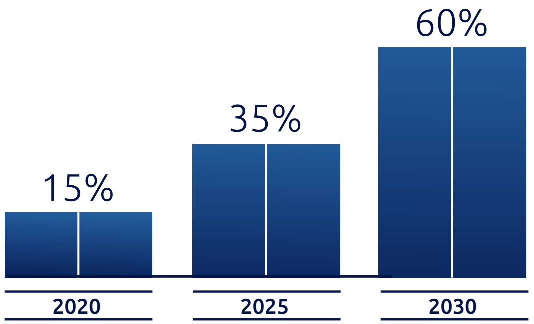
DIGITALISATION

Fusion processor

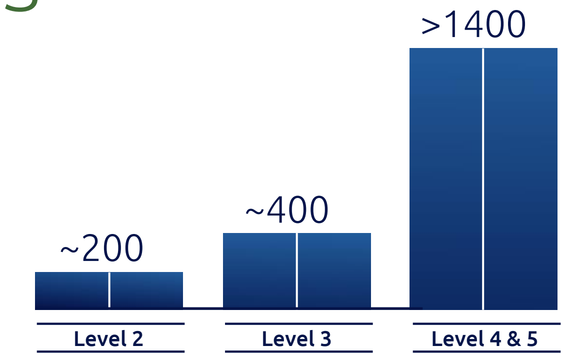
Radar processor

Image sensor

Domain controller



Autonomous cars level 2 & above (%)



ADAS semiconductor content ($)

ELECTRIFICATION

SiC Diode

SiC MOSFET

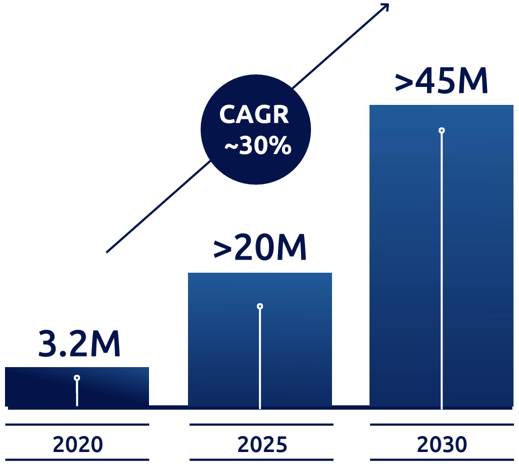
GaN MOSFET

PMIC

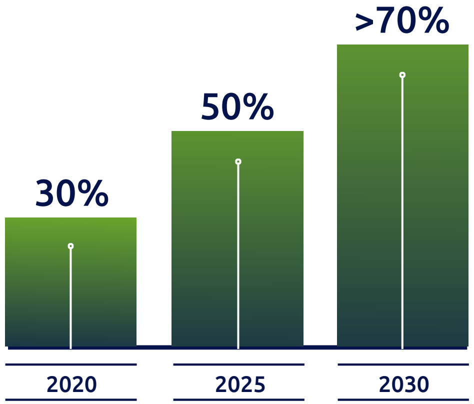
BMS

Gate drivers

Smart actuator



Global EV sales (units)

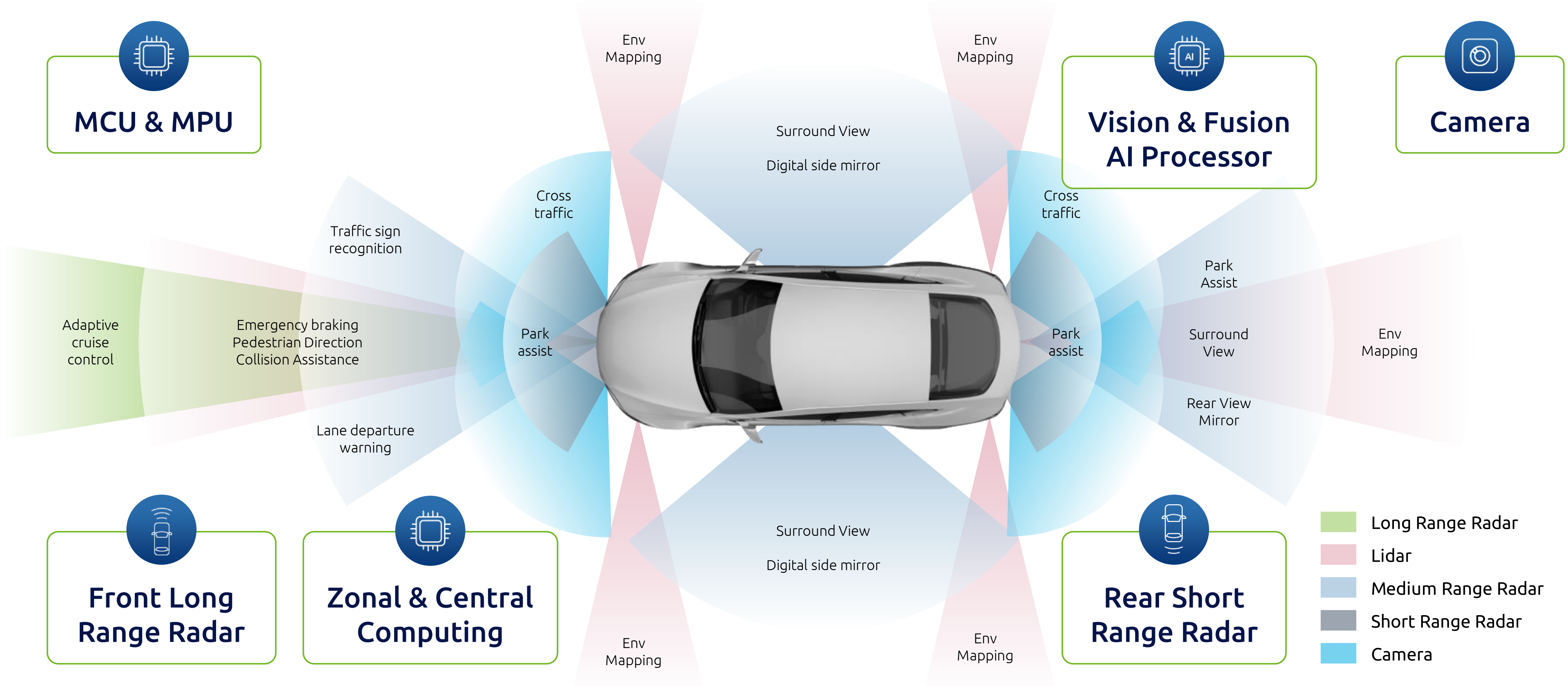


SiC BASED EV POWERTRAIN (%)

Source: Soitec estimates, Infineon, NXP, IHS, The International Council on Clean Transportation (ICCT) 2020, LMC, IEA 2021, Exawatt, Yol

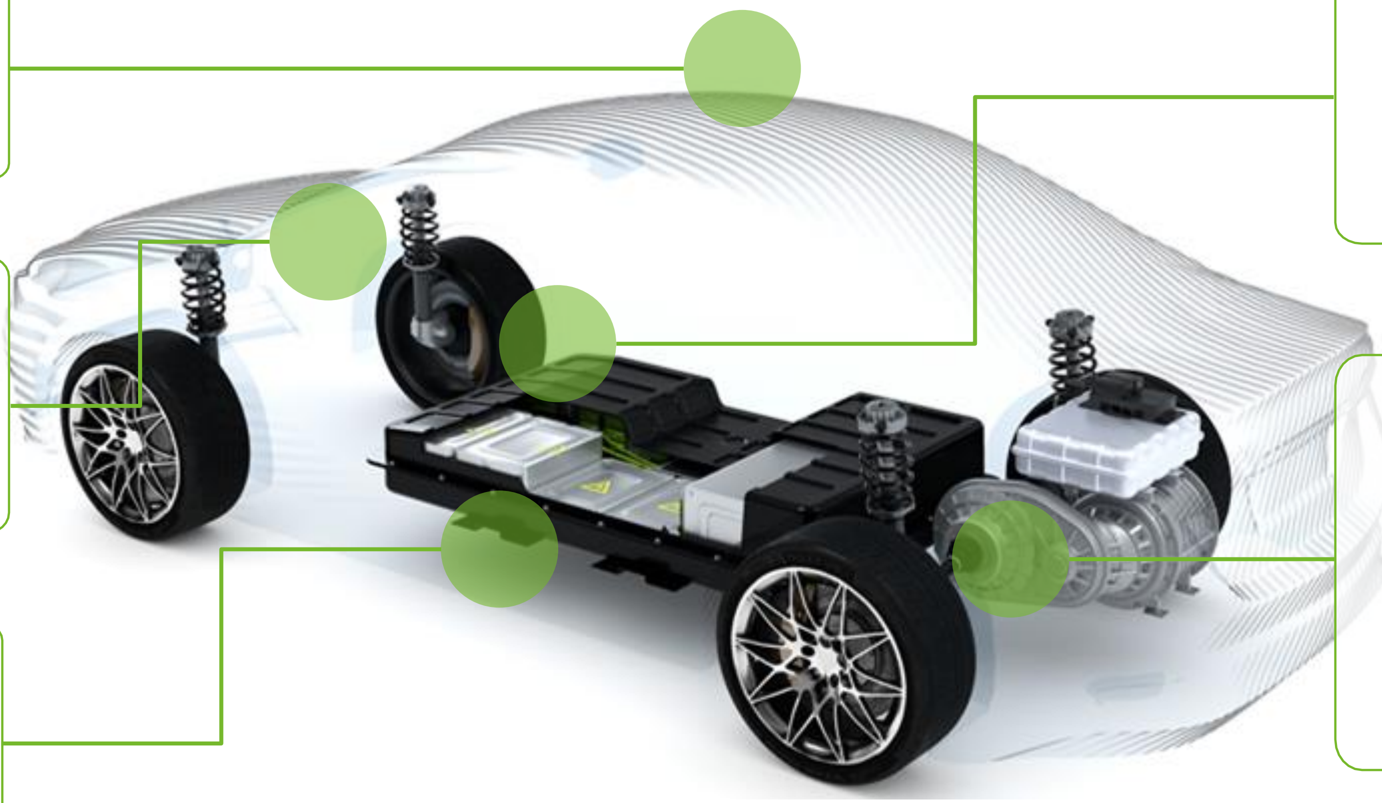
AUTO FD-SOI FIELDS OF USE

ACCELERATING VEHICLE AUTONOMY, DIGITISATION AND CONNECTIVITY



AUTO POWER-SOI FIELDS OF USE

DELIVERING PERFORMANCE TO THE AUTOMOTIVE INDUSTRY FOR MORE THAN 20 YEARS



ADAS SYSTEM

PMIC, SBC
IVN

INFOTAINMENT SYSTEM

PMIC, SBC
IVN, Class-D amplifier

CONNECTIVITY

PMIC, SBC
IVN

BODY & CHASSIS

PMIC, SBC, IVN
Smart motor, Gate driver IC
Matrix LED driver IC

POWERTRAIN

PMIC, SBC, IVN
Smart motor, Gate driver IC
Battery cell AFE IC for BMS
Output switch IC
Engine control unit IC

POWERTRAIN – A CRITICAL COMPONENT OF THE EV MARKET
SiC ADDS VALUE AT SYSTEM LEVEL AND ENABLES COST REDUCTION

POWERTRAIN COST: ~10,000$

ELECTRIC MOTOR

- Electric motors
- e-transmission

~1,100$

BATTERY PACK & MODULES

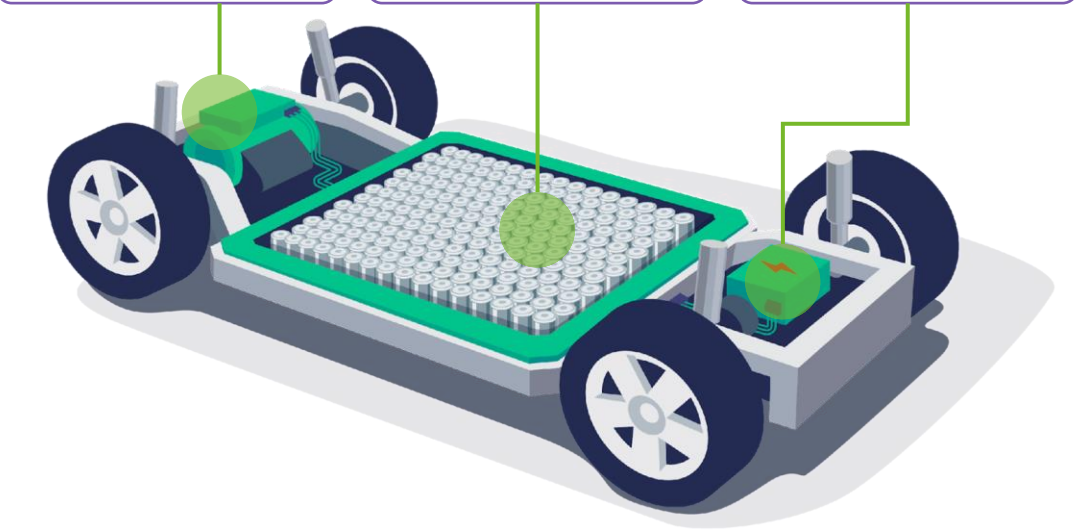
- Battery pack
- Modules and cells
- BMS

~8,000$

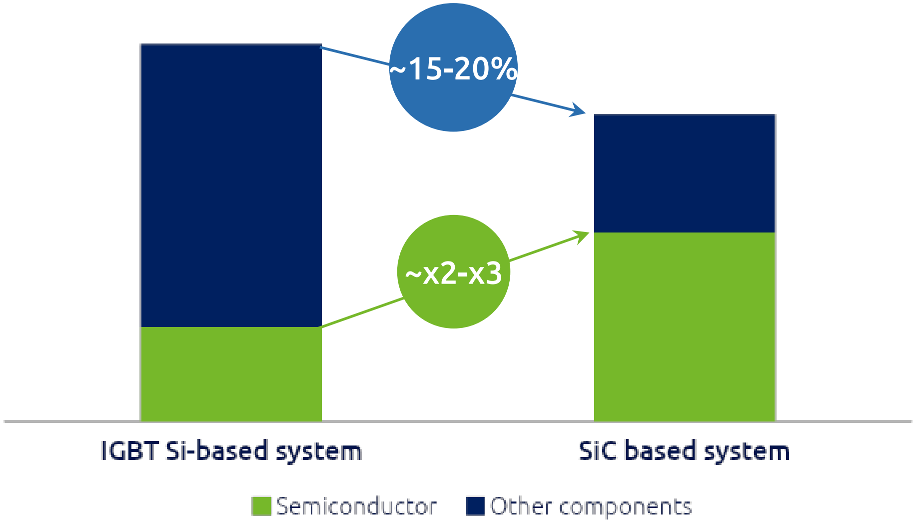
POWER ELECTRONICS

- E-drive / inverter (DC/AC)
- DC/DC Converter
- On-board charger (AC/DC)

~1,500$



TOTAL SYSTEM COST – 15-20% REDUCTION

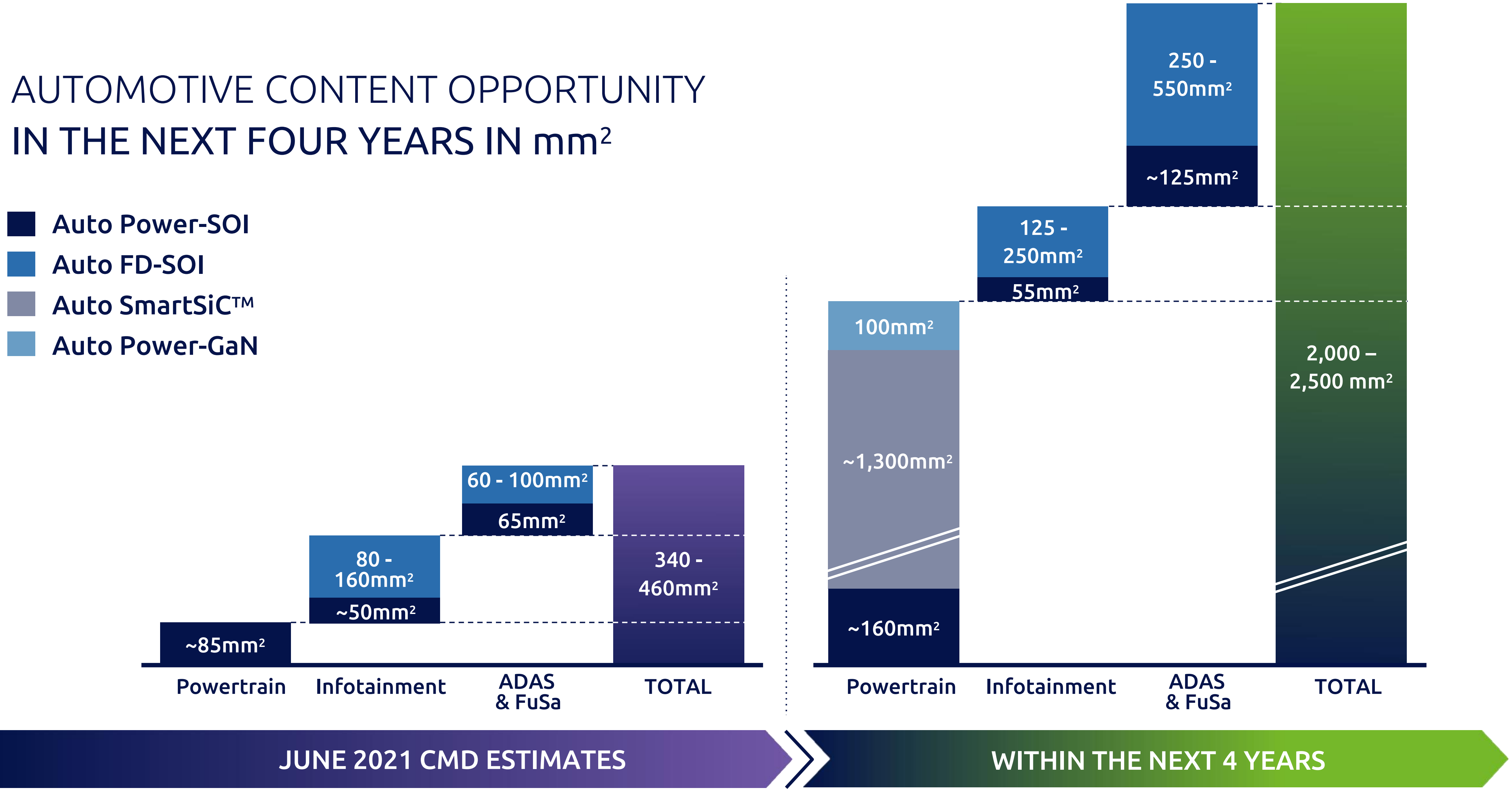


Shorter charge time 800V	~50% FASTER
Increased battery range	~5-10% LONGER
Reduced system / battery costs	~$500-$1,000

STANDARDISATION OF 800V IN BATTERY ACCELERATES SiC ADOPTION

Source: AlixPartners, Bernstein, Infineon, Soitec estimates

AUTOMOTIVE CONTENT OPPORTUNITY
IN THE NEXT FOUR YEARS IN mm²

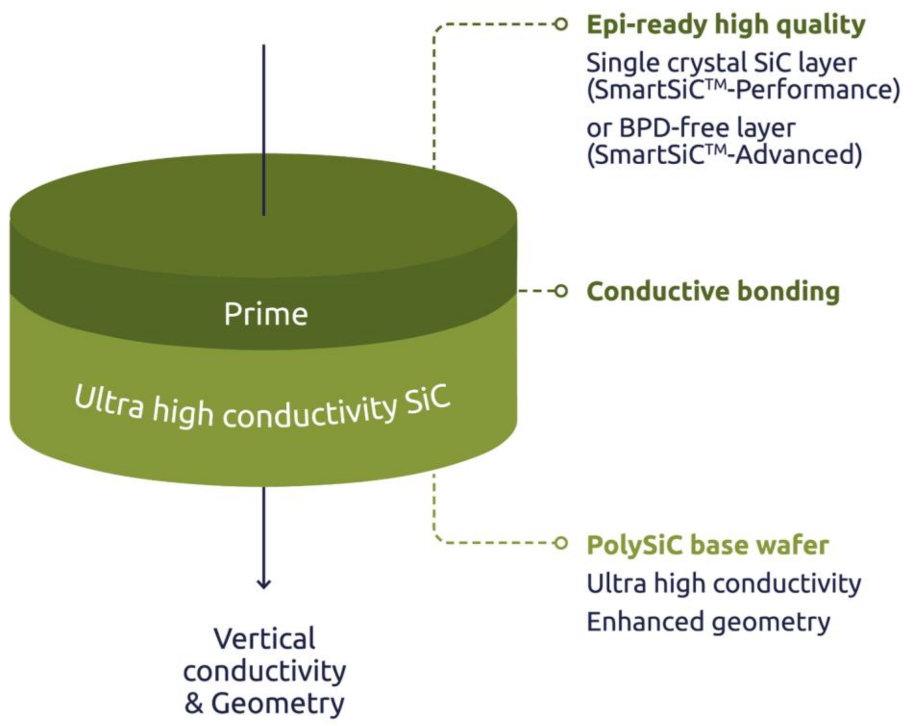


SECTION 03

SmartSiC™ ADOPTION

GREENABLER

SmartSiC^{TM} ENGINEERED SUBSTRATE
UNRIVALED VALUE PROPOSITION TO ENABLE EV ADOPTION



Epi-ready high quality
Single crystal SiC layer (SmartSiC™-Performance)
or BPD-free layer (SmartSiC™-Advanced)

Conductive bonding

PolySiC base wafer
Ultra high conductivity
Enhanced geometry

UNPARALLELLED VALUE PROPOSITION

SmartSiC™ vs. SiC: Greener, Faster and Better:

- 40,000 Tons of CO_2 reduction for each 1 million wafers vs. SiC
- 200mm scalability to accelerate SiC adoption through 10x re-usability
- Enabling new generations of SiC devices thanks to an improvement of RDS_{ON} of up to 20%
- Reducing Capex & Opex for device manufacturers

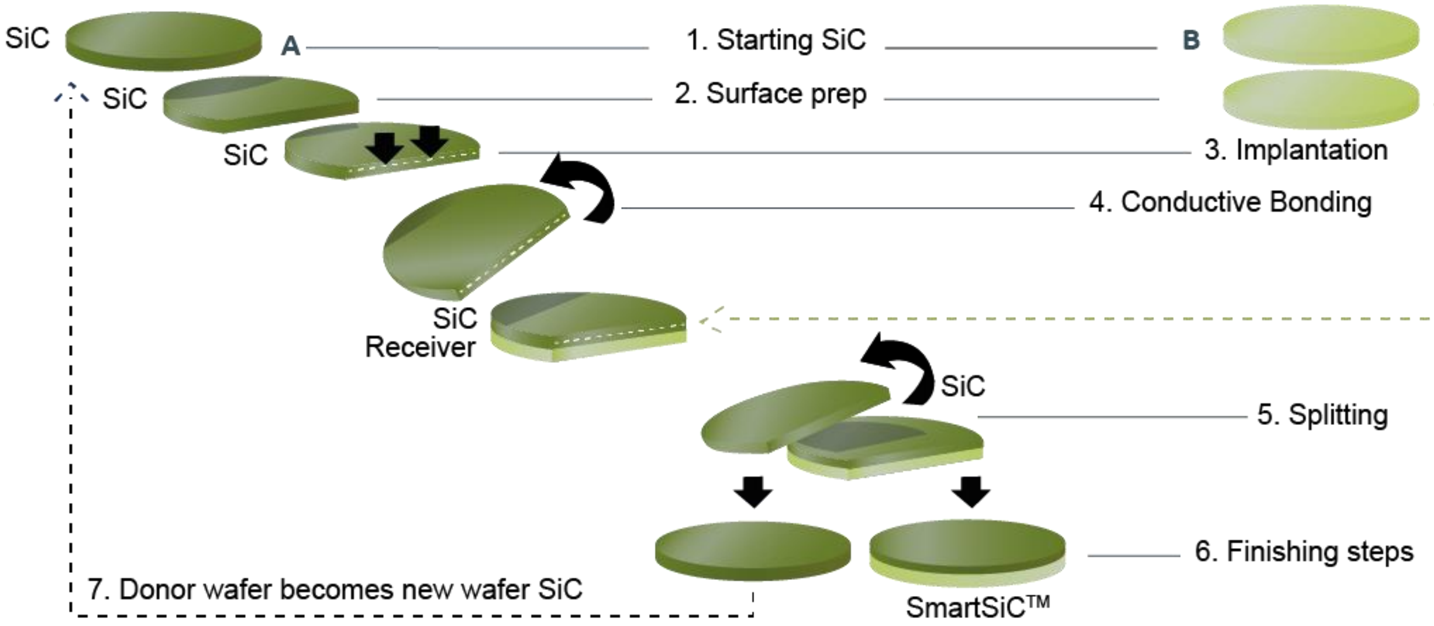
>10x
mono-SiC wafer re-usability

~5x
poly-SiC wafer better conductivity

SMART CUT^{TM} PROCESS ADAPTED TO SiC
LEVERAGING HIGH VOLUME MANUFACTURING EXPERIENCE: >2M WAFERS PER YEAR

Donor monoSiC wafer
(Prime single crystal SiC)

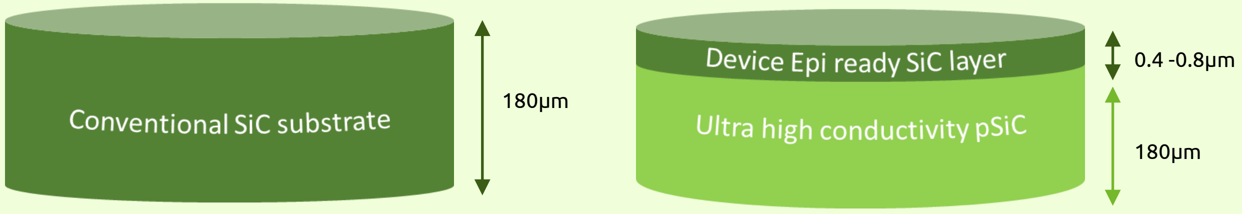
Handle polySiC wafer
(Ultra high conductivity polycrystalline SiC)



SmartSiC^{TM} IS A DEVICE PERFORMANCE ENABLER

SmartSiC^{TM} TAILORED RESISTIVITY ENABLES SMALLER SIZE AND/OR HIGHER CURRENT

Lower R_{ON} A



Current industry solution

SmartSiC^{TM} substrate

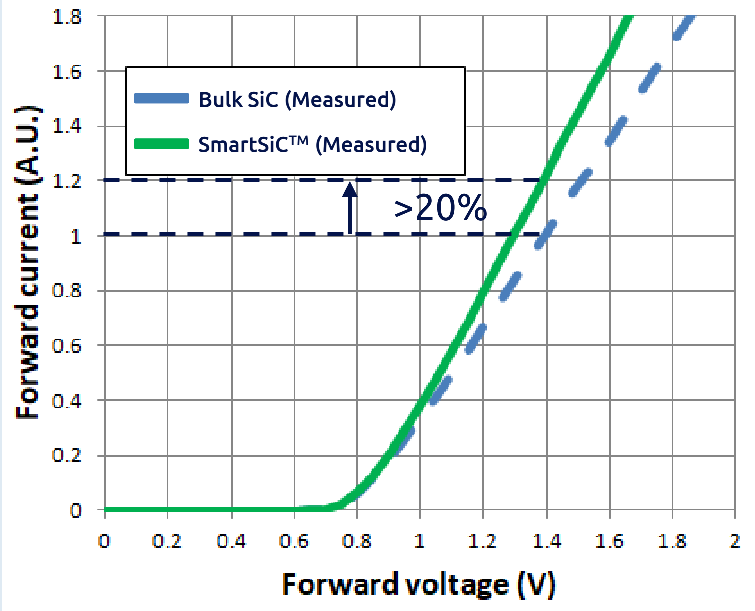
Material resistivity:
~20mΩ.cm → **<~5mΩ.cm**
Bonding <~0.05mΩ.cm²

Total specific resistance*:
~0.36mOhm.cm² → **<~0.10mOhm.cm²**

SmartSiC^{TM} allows smaller size or higher current rating devices

ALL DEVICE MAKERS FIGHTING FOR BEST R_{ON}

Proven higher current density



Enabling new designs for die optimization

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* 180µm

SmartSiC^{TM}
200mm DISRUPTIVE ACCELERATION FACTOR

SmartSiC^{TM} 200mm demonstrated

SMARTSiC^{TM} ENABLES DEVICE MULTIPLICATION

~20%

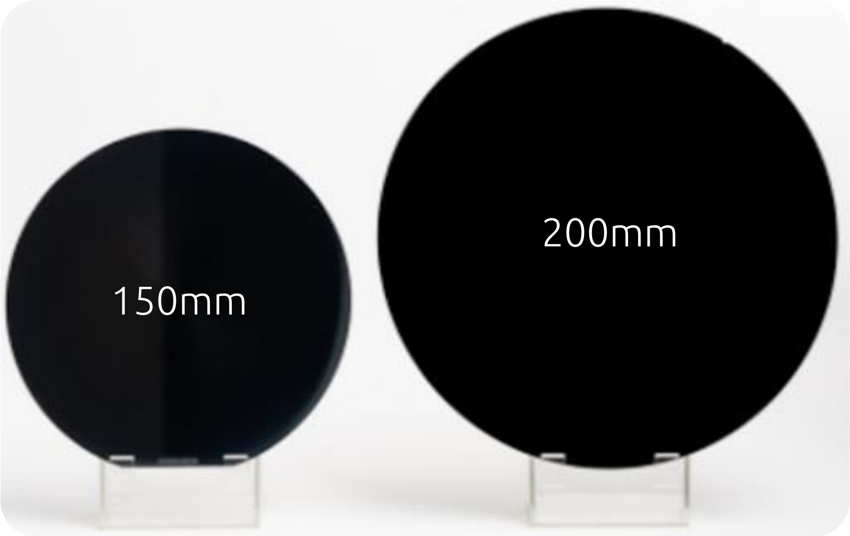
Lower Die size

SmartSiC^{TM} enabling
more products per wafer

x1.78

Higher surface area

200mm allowing
device multiplication



200mm SMARTSiC^{TM} FURTHER DIFFERENTIATION

200mm further adds to 150mm SmartSiC^{TM} performance improvements

Higher **yield** through **repeatability**

Better **efficiency** of Smart Cut^{TM} bonding

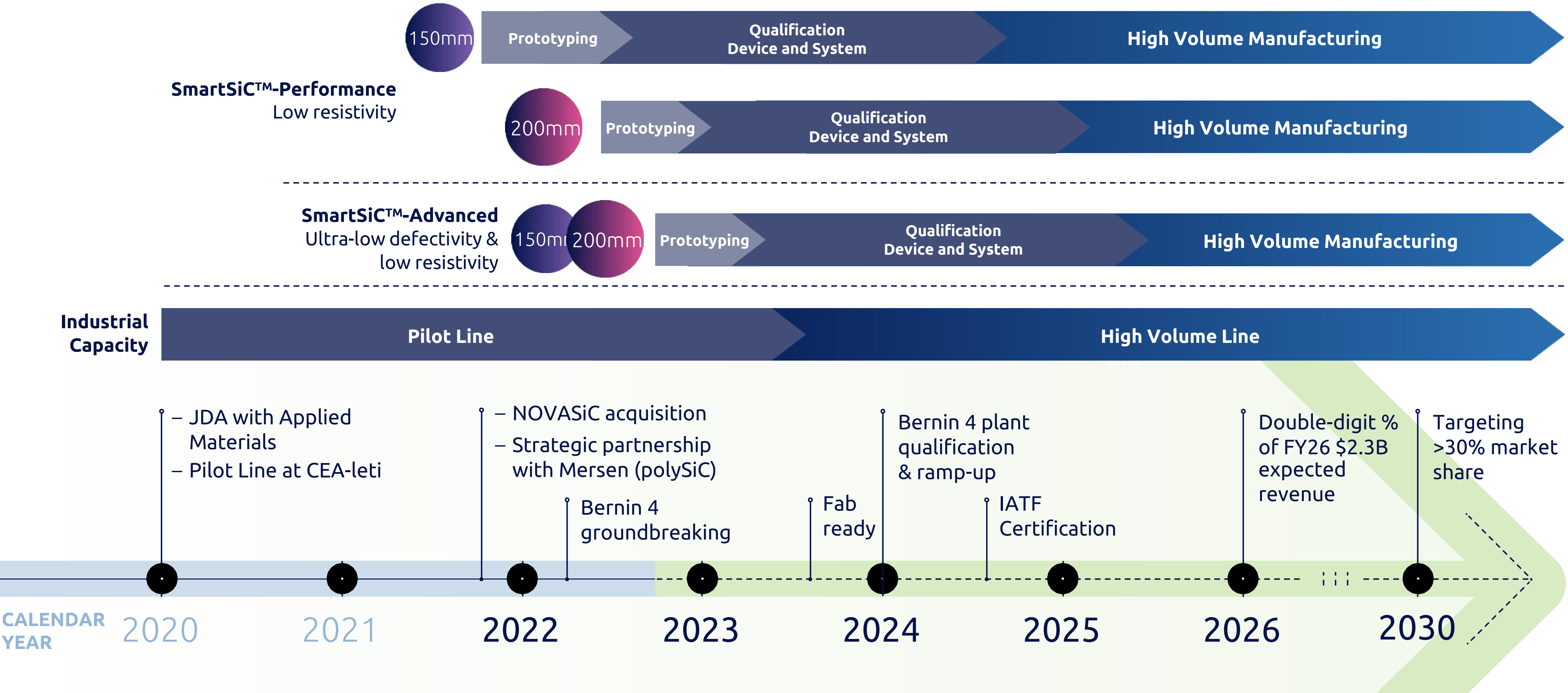
Fast **scalability** in 200mm

Lower **cost of ownership**

STMICROELECTRONICS AND SOITEC COOPERATE ON SIC SUBSTRATE MANUFACTURING TECHNOLOGY

- Partnering with a pioneer and leader of SiC Power Devices in the Automotive Industry
- Main goal: Qualifying 200mm product
- SmartSiC is a game-changer for automotive chip manufacturing

SmartSiC^{TM} ROADMAP



SmartSiC™-Performance
Low resistivity

150mm: Prototyping → Qualification Device and System → High Volume Manufacturing

200mm: Prototyping → Qualification Device and System → High Volume Manufacturing

SmartSiC™-Advanced
Ultra-low defectivity &
low resistivity

150m 200mm: Prototyping → Qualification Device and System → High Volume Manufacturing

Industrial Capacity: Pilot Line → High Volume Line

CALENDAR YEAR

2020
- JDA with Applied Materials
- Pilot Line at CEA-leti

2021

2022
- NOVASiC acquisition
- Strategic partnership with Mersen (polySiC)

Bernin 4 groundbreaking

2023

Fab ready

2024

Bernin 4 plant qualification & ramp-up

IATF Certification

2025

2026

Double-digit % of FY26 $2.3B expected revenue

2030

Targeting >30% market share

BERNIN 4 PROGRESSING TOWARDS PLANT QUALIFICATION

KEY MESSAGES

AUTO IS THE FASTEST GROWING SEGMENT AMONG SOITEC'S END MARKETS

- Soitec is targeting a 20-25% CAGR, towards ~$2.3B FY26 revenue, from ~$1B in FY22
- Automotive & Industrial revenue expected to x5 between FY22 and FY26
- Growth supported by strong drivers, Digitalization and Electrification

TRANSITION TO SiC IS UNDERWAY, A KEY ENABLER FOR EV ADOPTION

- SiC devices cheaper at a system level: 15%-20% savings vs IGBT, and unique for 800V new standards
- SiC offers better performance for EVs: shortening charging time by 50% and increasing EV mileage range by +5%-10%
- Enabling EV adoption towards 40-50M units/year by 2030, with >70% SiC penetration

SMARTSiC^{TM} IS GREENER, FASTER & BETTER THAN TRADITIONAL SiC

- SmartSiC^{TM} enables 40,000t CO_2 emissions reduction for every 1M wafers produced
- SmartSiC^{TM} will accelerate 200mm adoption through ~x10 re-usability of a SiC donor wafer
- SmartSiCTM offers a better performance for device RDSon, yield manufacturing and Capex optimization

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