Accelerating the Journey Towards a Sustainable Ecosystem

May 16, 2023

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onsemi's Transformation has Driven Outperformance

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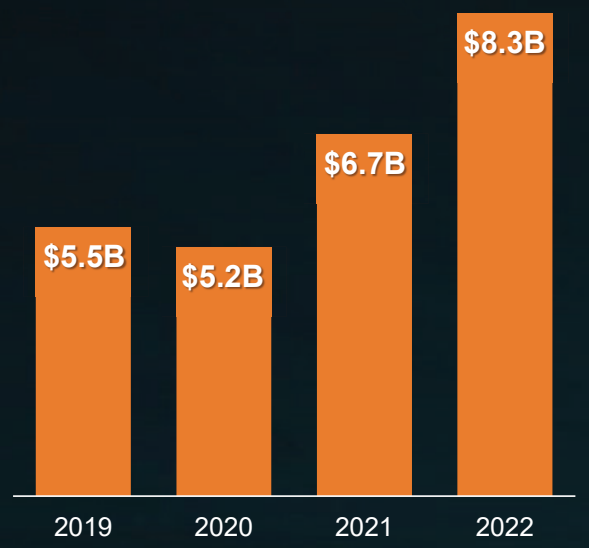
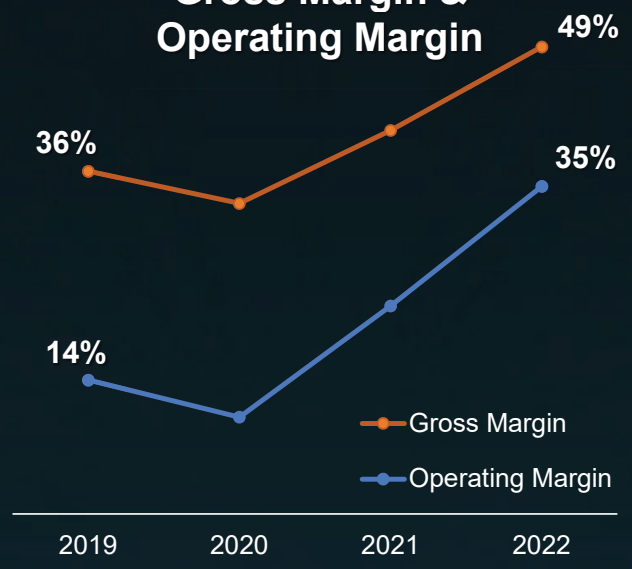
Structural Changes Set the Foundation for Growth

Revenue



- **Revenue** at 26% CAGR 2020-2022
- Focused on high-growth megatrends in Auto and Industrial
- Doubled down on Silicon Carbide

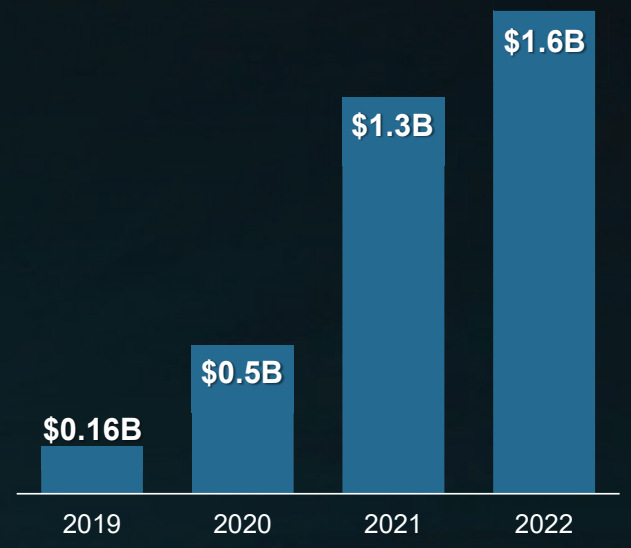
Gross Margin & Operating Margin



- **Gross Margin** improved by 1,310 bps
- Exited non-core low margin businesses
- Executed Fab Liter Strategy
- Eliminated Price to Value Discrepancies

- **Operating Income** increased 5.3x faster than revenue
- Reduced OpEx to <15% of revenue

Free Cash Flow



- **Free Cash flow** increased by 10x
- Invested in Silicon Carbide and 300mm fab
- Initiated share repurchases; $3B repurchase authorization

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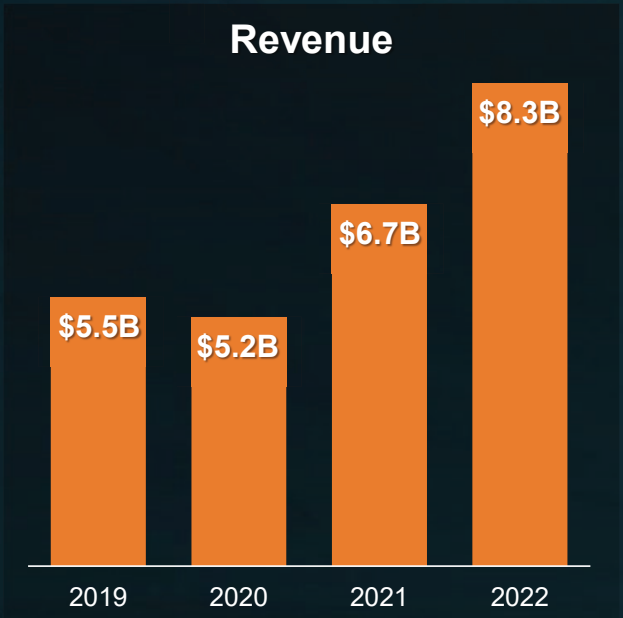
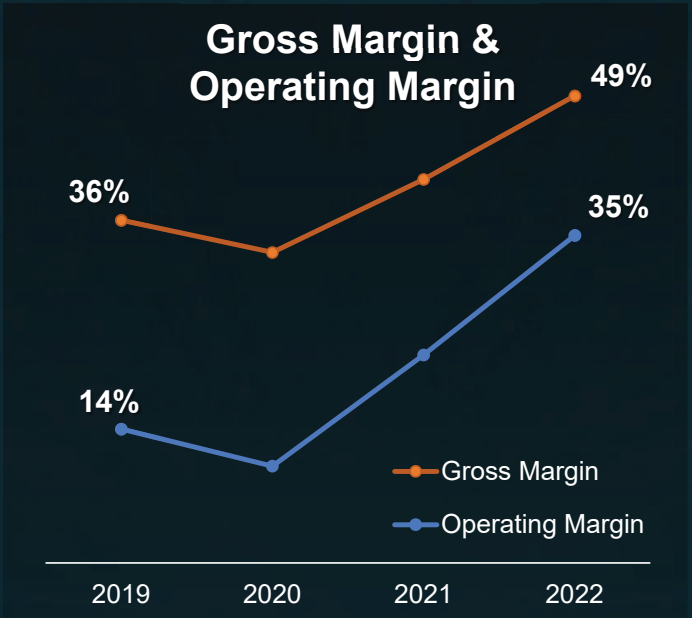
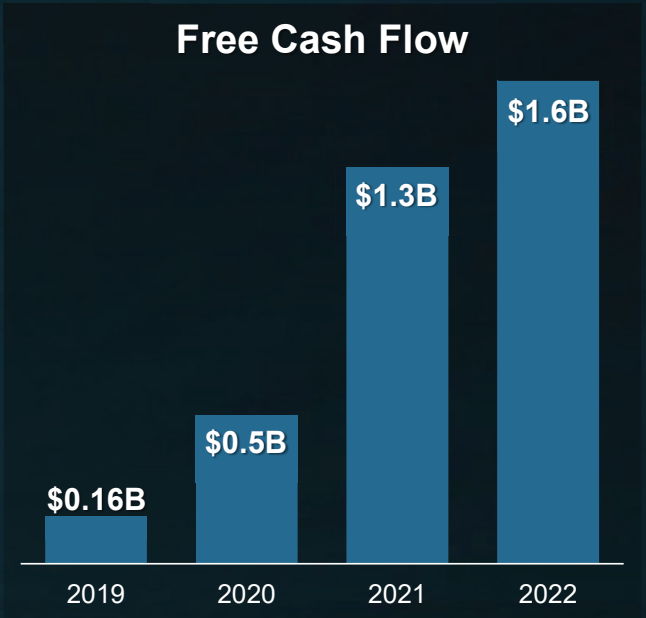
Structural Changes Set the Foundation for Growth







Industry-Leading Results Accelerating Shareholder Value

- Free Cash Flow growth of 10x: #1 among global semis
- ROIC of 38.6%: Top 4 in global semis
- Operating Income growth of 3.7x: Top 3 in global semis

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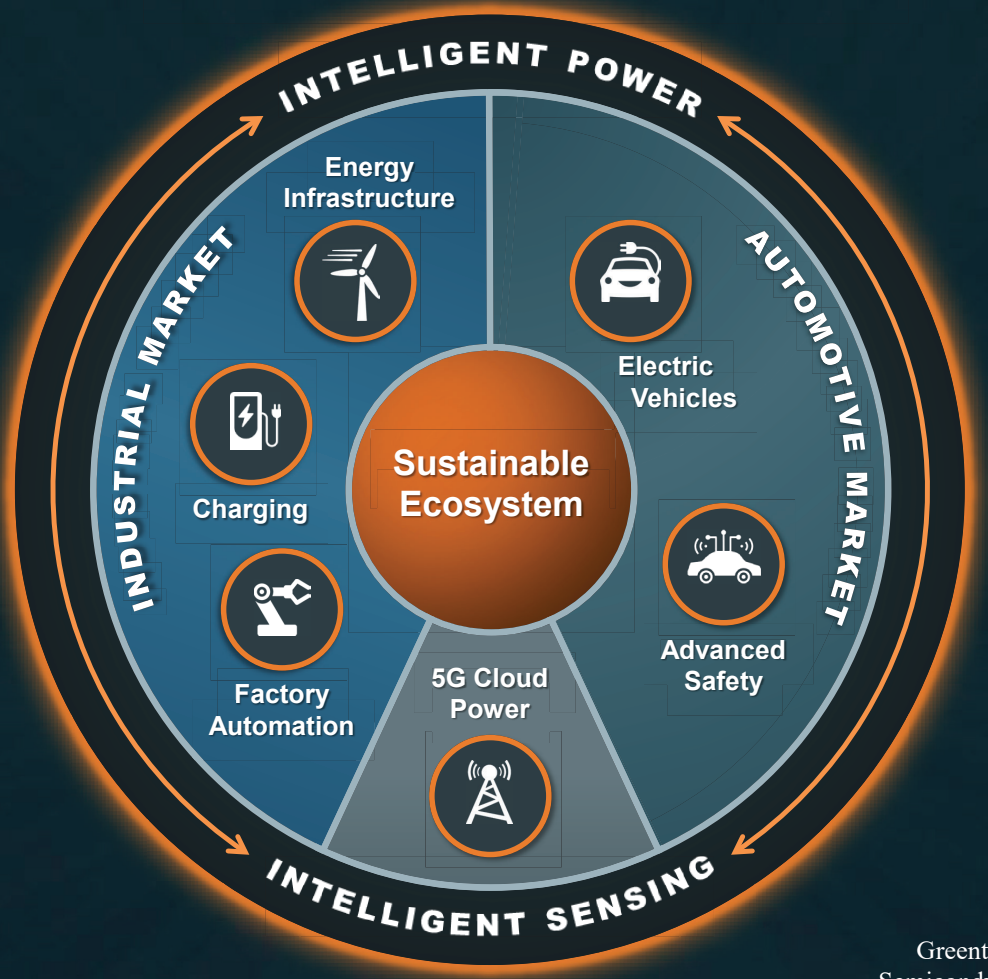
Premium Businesses



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Premium Businesses

Intelligent Power

Silicon Carbide

- Revenue growing >2x market at 70%
- Vertically integrated manufacturing at scale
- Industry-leading efficiency through innovative device and packaging technologies

Silicon Power – IGBT, FET

- #2 position with growing market share
- Expanding BOM coverage with new products
- Exited price sensitive markets

Power ICs

- Double down on $14B TAM with >70% gross margin
- Optimize system cost with gate drivers and controllers
- Expand leadership to full Power Tree solutions

Intelligent Sensing

- #1 position in Auto and Industrial
- Growing in machine vision
- 68% market share in ADAS, 27% market share in industrial
- 8MP ramping with ~2.5x ASP uplift
- #1 in Ultrasonic and Inductive Sensing for Automotive and Industrial
- Delivering high margin and the most profitable sensor business in the industry

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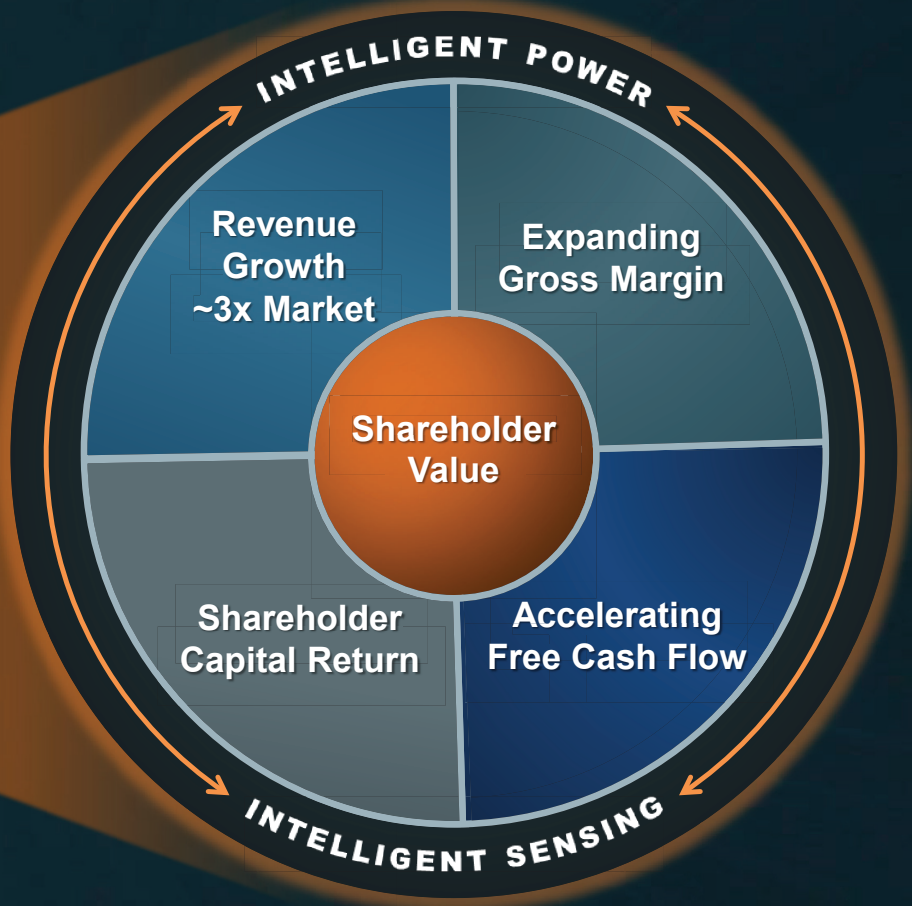
Premium Businesses Driving Premium Results



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Markets that Matter

	Semiconductor	Intelligent Power & Sensing	Sustainable Ecosystem
Industry TAM	$553B	$91B	$43B
Industry CAGR	4%	6%	16%
Revenue CAGR 2022 - 2027	10-12%	14%	21%

Electrification, creating a multi-decade opportunity for onsemi SiC growth >2x market at ~70%

Machine Vision for the future of automation

Power new generation of cloud and 5G infrastructure with onsemi CAGR >20%

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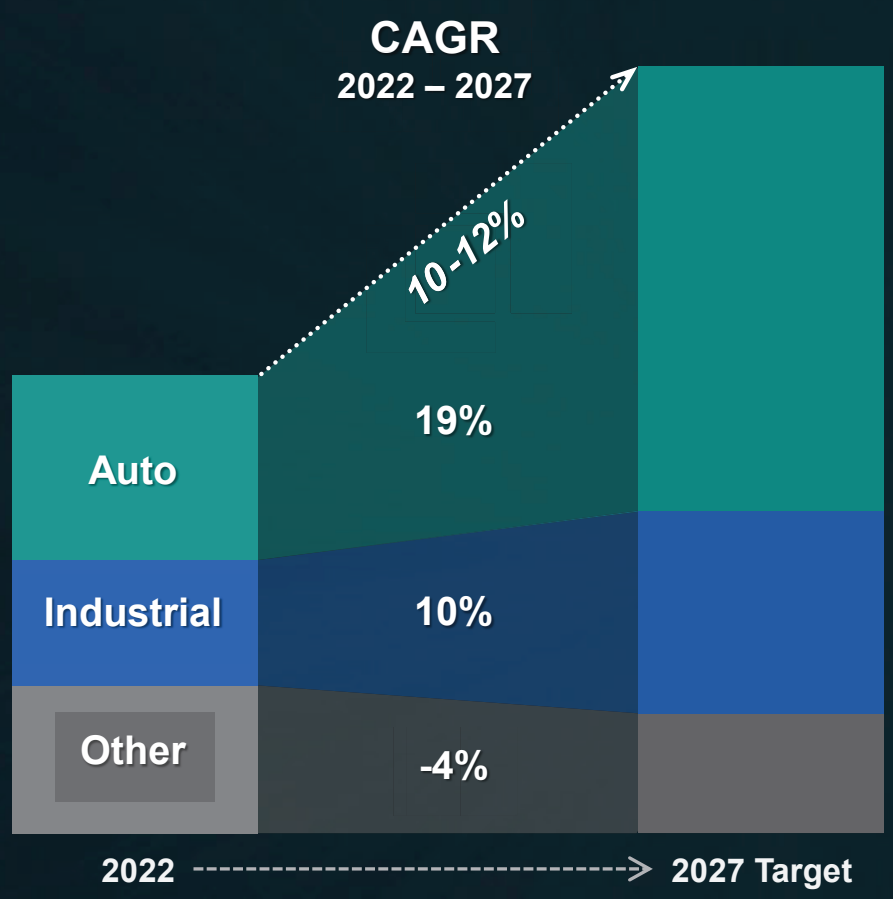
Sustainable Ecosystem to Drive ~3x the Market Growth



Automotive

- Electrification – SiC & IGBT
- Increasing ADAS Adoption
- Power Management for LED and Advanced Safety

Industrial

- Energy Infrastructure
- Factory Automation
- EV Charging

Other

- 5G & Cloud Power growing at 22%
- Engage with Strategic market leaders opportunistically with value driven solutions
- No investment in broad markets

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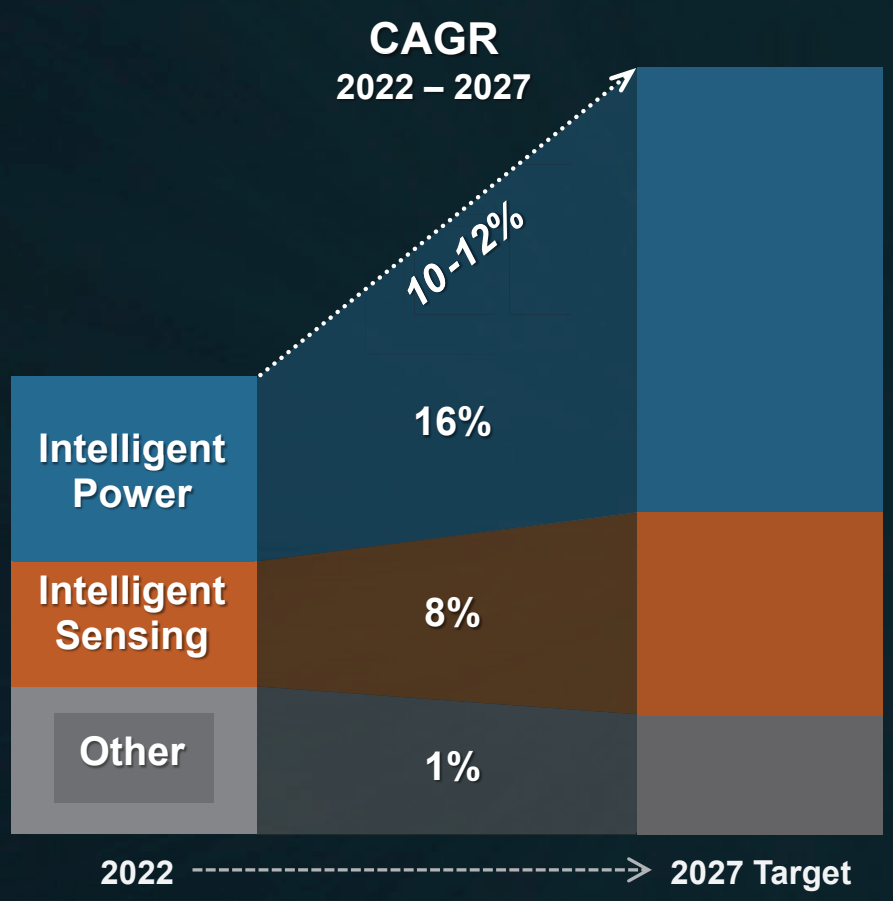
Sustainable Ecosystem to Drive ~3x the Market Growth



Intelligent Power

- SiC growth 2x the industry at 70%; 35-40% market share
- Si Power – IGBT, FET share gain in Auto & Industrial
- Accelerate Power IC growth with controllers and gate drivers

Intelligent Sensing

- Grow in machine vision for auto and industrial
- Advanced safety for ADAS and in-cabin vision
- Factory Automation
- Opportunistic in human vision applications

Other

- Attractive cash flow businesses
- BOM indispensability and complementarity

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Highly Diversified Customer Base

Lenovo, SONY, DELTA, LG Electronics, PHILIPS, DELL, Nidec, GRUNDFOS, MARELLI, HELLA, Panasonic, ASUS, thyssenkrupp, ebmpapst, MAGNA, SAMSUNG, Rochester Electronics, CISCO, GROWATT, Microsoft, Visteon, KEBODA, NVIDIA, Schneider Electric, RegalRexnord, APTIV, SIEMENS, Valeo, ZF, BOSE, CYPRESS EMBEDDED IN TOMORROW, Google, Honeywell, vitesco TECHNOLOGIES, BOSCH Automotive, ABB, BYD, Starkey, ZEBRA, BorgWarner, flex, amazon, HITACHI, DESAY SV, Stanley Black & Decker, MW MEAN WELL, DENSO, KYOCERA, LITEON, veoneer, ERICSSON, HYUNDAI MOBIS, FLIP ELECTRONICS, NOKIA, NIO, Continental, MEGMEET, ZTE中兴, FUJITSU, Midea, TTI, wacom, TESLA, GIGABYTE TECHNOLOGY, logitech, BOSCH, HUAWEI, SUNGROW, HL Klemove, Boston Scientific, MACNICA, ENPHASE

Customer Needs:

- Best-in-Class Performance
- Reliable suppliers at scale
- Tighter supplier base
- Competitive system cost

onsemi Delivers:

- Industry-leading products
- Vertically integrated supply chain
- Broad portfolio of products
- Solution optimization across BOM

Top 20 customers represent ~35% of revenue

Top 20 customers each buy ~800 products on average

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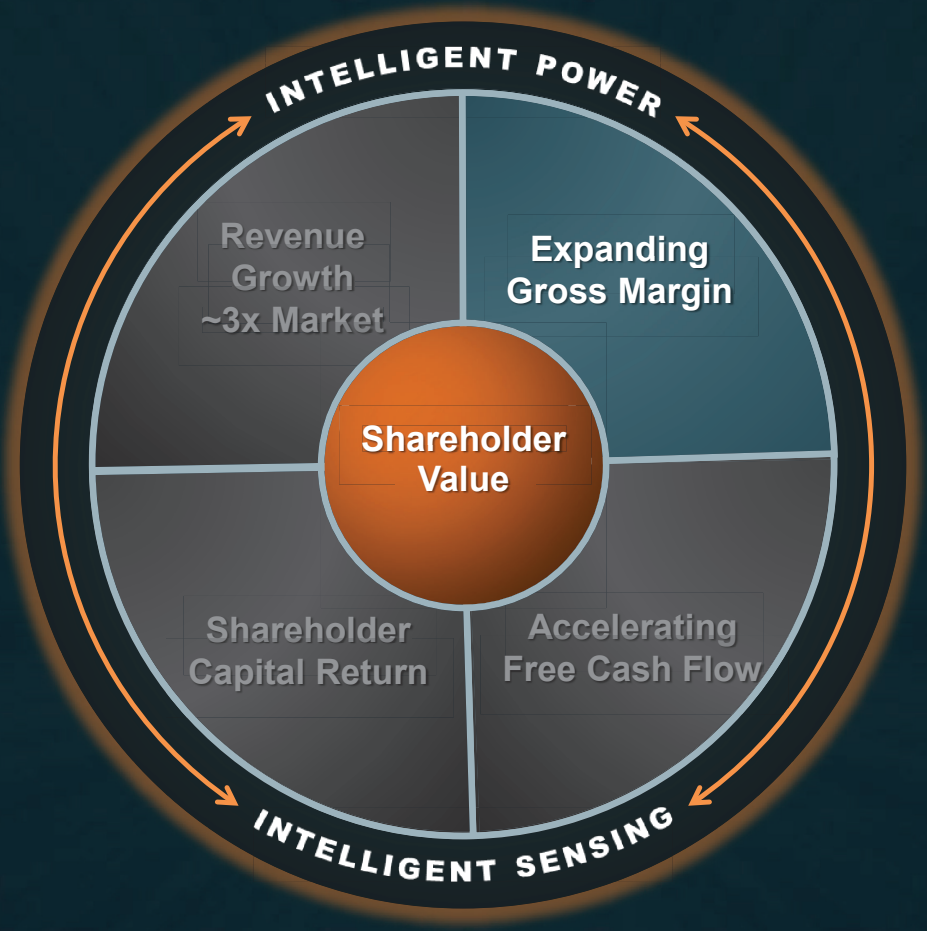

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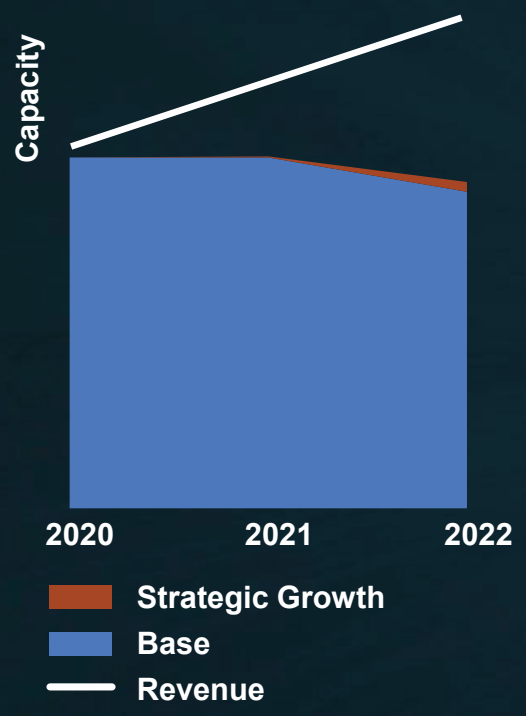
Executed Fab Liter Manufacturing Strategy



Fab Liter

Flexible, Low Fixed-Cost Footprint

- Reduced legacy capacity to minimize fab footprint – Fab Filler strategy is dead
- Captive capacity for differentiated technologies. Leverage external manufacturing for non-proprietary technologies
- Invested in brownfield expansion for capital efficiency and industry-leading ROIC
- Divested four subscale fabs – recognize $160M in annualized savings through 2025
- Reduces gross margin volatility

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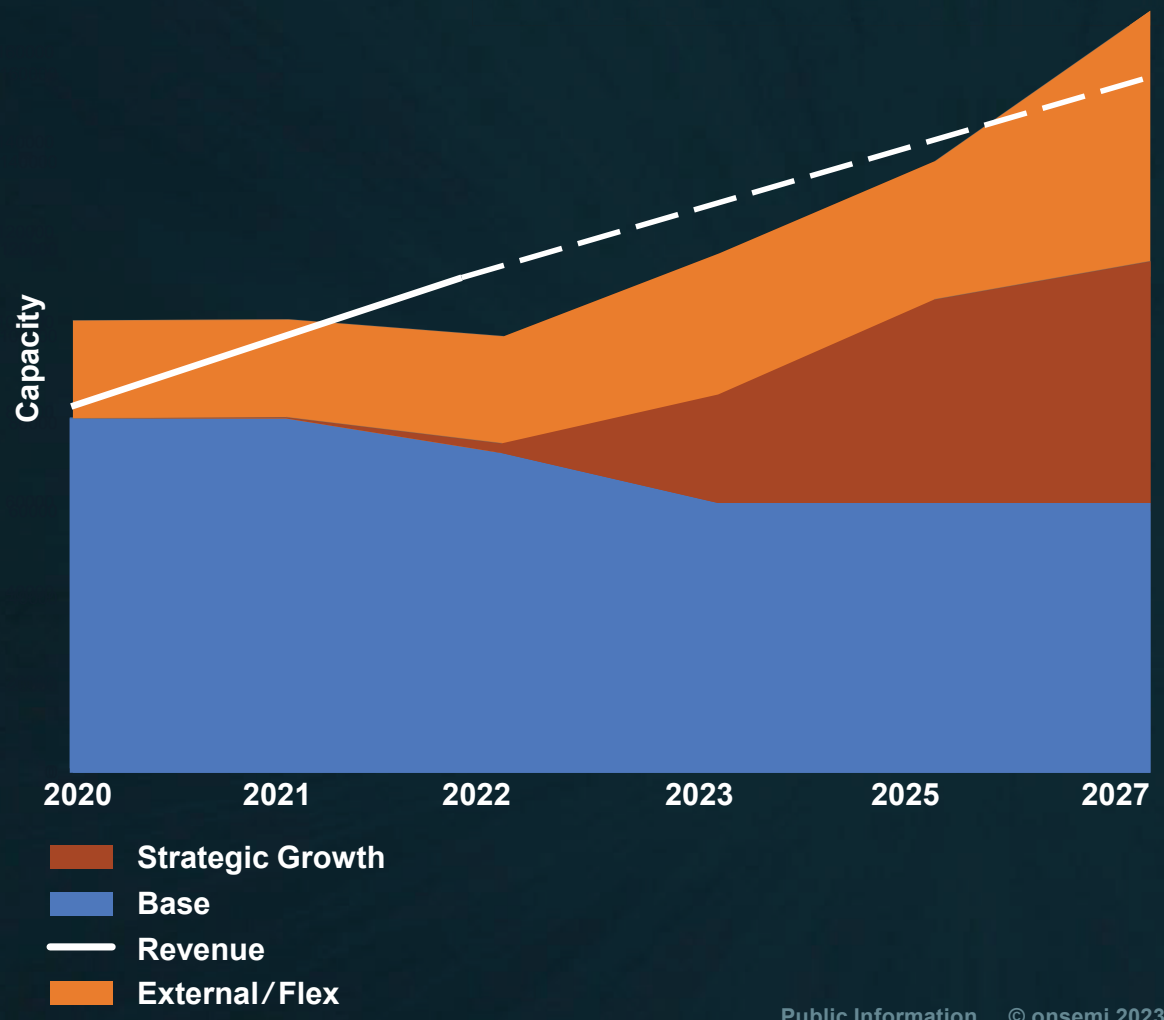
The Next Strategy: Fab Right



Fab Right

Optimize asset footprint for efficiencies and best-in-class ROIC

- Optimize mix across the network for best cost structure
- Ramping 300mm Fab for scale and capacity
- Leverage Base footprint and brownfield investments for Strategic Growth
- Multi-year LTSAs provide visibility for expansion
- Extract savings of $160M from divestiture of four Fabs
- Geographically diverse footprint for supply chain assurance
  - EFK is the only US-based 300mm power semiconductor Fab

External/Flex capacity

- Utilize internal capacity for differentiated products with external partners for flex capacity
- Maximize internal utilization to reduce volatility in margins

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Fab Right: onsemi's Path to Net Zero by 2040

Greenhouse Gas Emissions

Near-term targets to be published in 2024

21% YoY Scope 2 emissions reduction in 2022

Water

42% water recycled in 2022

19% YoY water withdrawal reduction in 2022

SBTi Letter signed December 2022

Waste

70% waste diverted from landfill in 2022

23% YoY waste Reduction in 2022

Energy Saving

Fab Right Energy Savings of 18% in kWh/Wafer by 2027

18% savings by 2027

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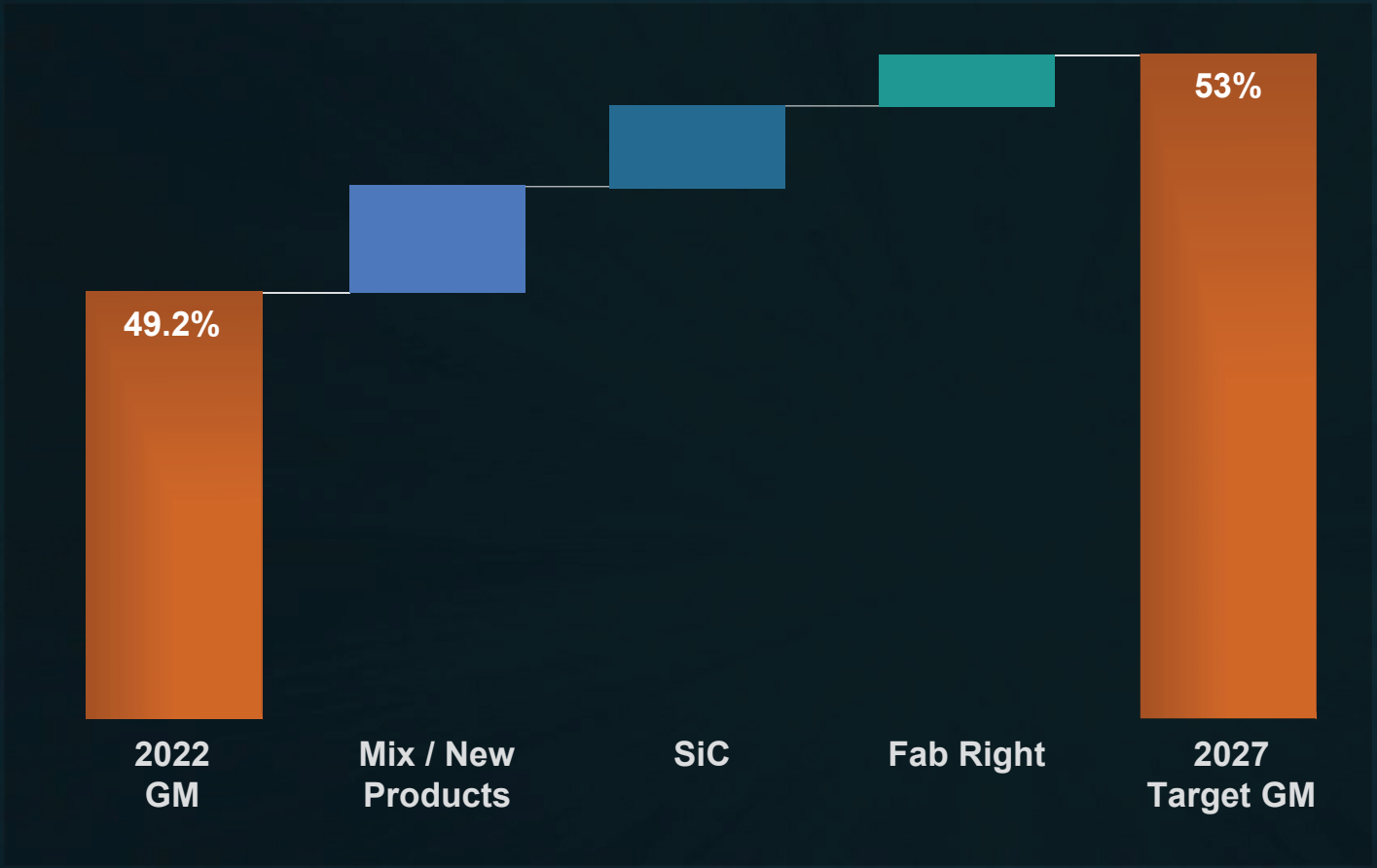
The Next Milestone: Expand Gross Margin to 53%



Mix / New Products

- Continued mix shift to Auto & Industrial
- Ramp new and differentiated products at margins above target

Silicon Carbide (SiC)

- Accretive margins at scale
- Absorption of startup costs
- SiC growing 2x market[1]

Fab Right

- Optimize manufacturing network for cost efficiency
- $160M in fixed-cost savings from four Fab divestitures in 2022
- Maximize utilization across network with flex to external capacity

1. Yole SiC market forecast: 2022-27 CAGR of 33%

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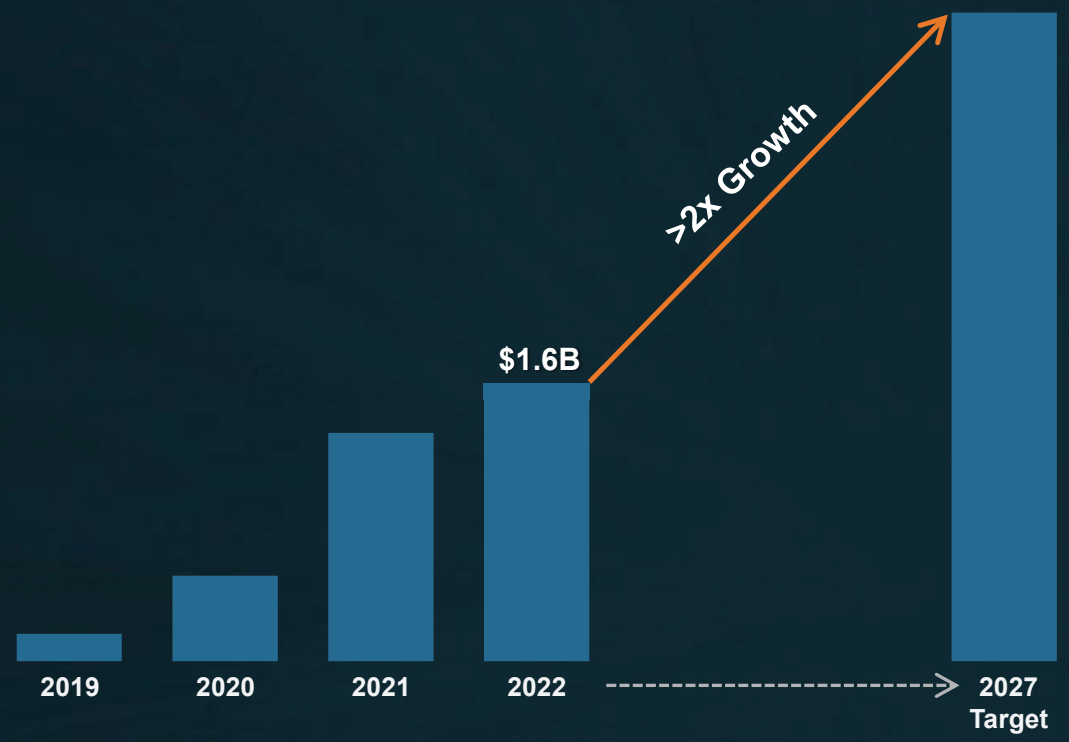
Accelerating Free Cash Flow



Expanding Free Cash Flow Margin to 25-30%

- Grow revenue ~3x semiconductor industry
- Expand Gross Margin
- Targeted Operating Expense deployment
- High ROIC investments
- Working Capital & Inventory management

$3.5-4.0 billion in Free Cash Flow in 2027

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Market Success Driving Investments

Fab Right: Expanding Capacity

- Expand capacity for strategic growth to capture market opportunity
- Ramp 300mm and capacity expansion
- Augment competitive advantage in packaging

Silicon Carbide Expansion

- Invest $2B in next phase of end-to-end SiC capacity
- Evaluate brownfield opportunities in Europe, USA and Korea

Capital Efficiency

- Capital Intensity to be 15-20% through 2024 and decline to 11% by 2027
- Minimize risk through customer co-investments and LTSA visibility
- Government subsidies to offset CapEx investments and enhance ROIC

Investing for growth while maintaining best-in-class ROIC

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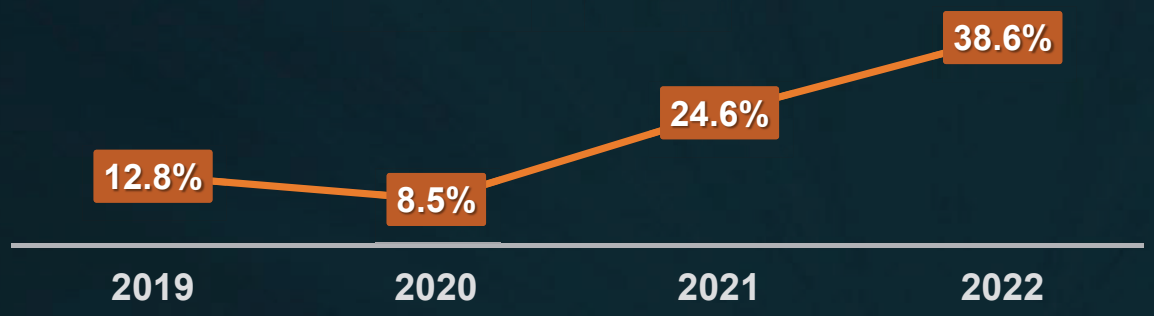
Delivering Best-in-Class ROIC

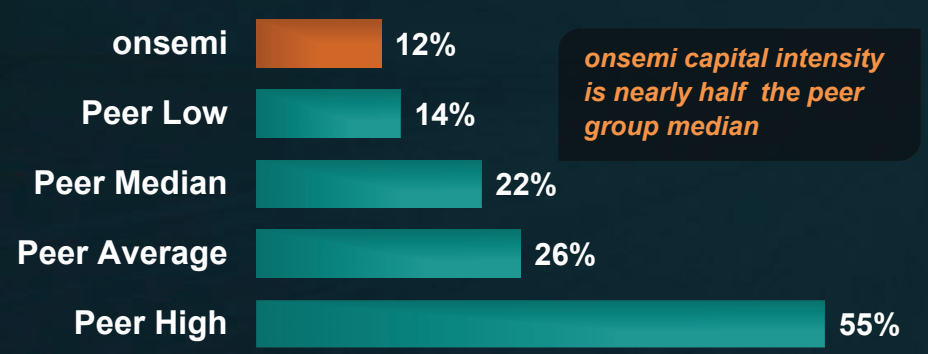
onsemi ROIC

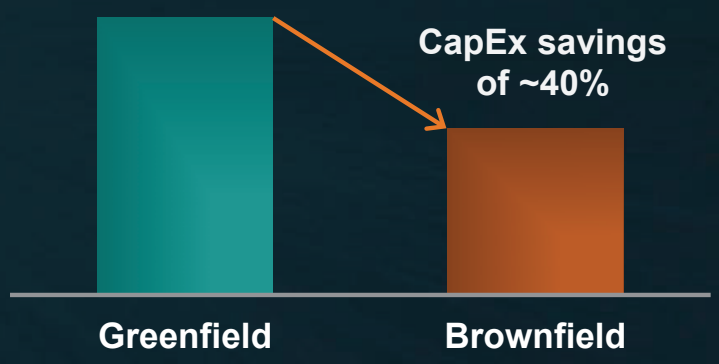


Brownfield Efficiency

- 40% less CapEx compared to Greenfield investment
- Accelerates time to market by 2 years

2022 Capital Intensity





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Investments and Capital Allocation

R&D and CapEx

- Invest in organic initiatives to extend competitive advantage
- Maintain best-in-class ROIC

M&A

- Strategic M&A adjacent and complimentary
- Technology tuck-ins
- Accretive to financial model
- Low leverage provides firepower

Balance Sheet

- Maintain flexibility to pursue organic and inorganic growth
- Maintain existing credit rating of BB+/Ba1

Shareholder Returns

- Return 50% of Free Cash Flow through share repurchases
- $3B repurchase authorization in place

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Accelerating the Financial Model

	2022 Actual	2027 Target	
Revenue	$8.3B	10-12% CAGR	• Grow at ~3x the semiconductor industry
Gross Margin	49.2%	53%	• Mix shift, new products & SiC ramp at accretive margins • Optimize cost through Fab Right
Operating Expenses	14.6%	13%	• Invest in R&D for long-term growth • Digital First - embrace new technologies & data analytics
Operating Margin	34.7%	40%	• Grow Operating Income faster than revenue
CapEx	12%	11%	• Market success drives investments • High ROIC brownfield investments
Free Cash Flow	20%	25-30%	• $3.5-$4.0B of Free Cash Flow in 2027 • Return 50% to shareholders

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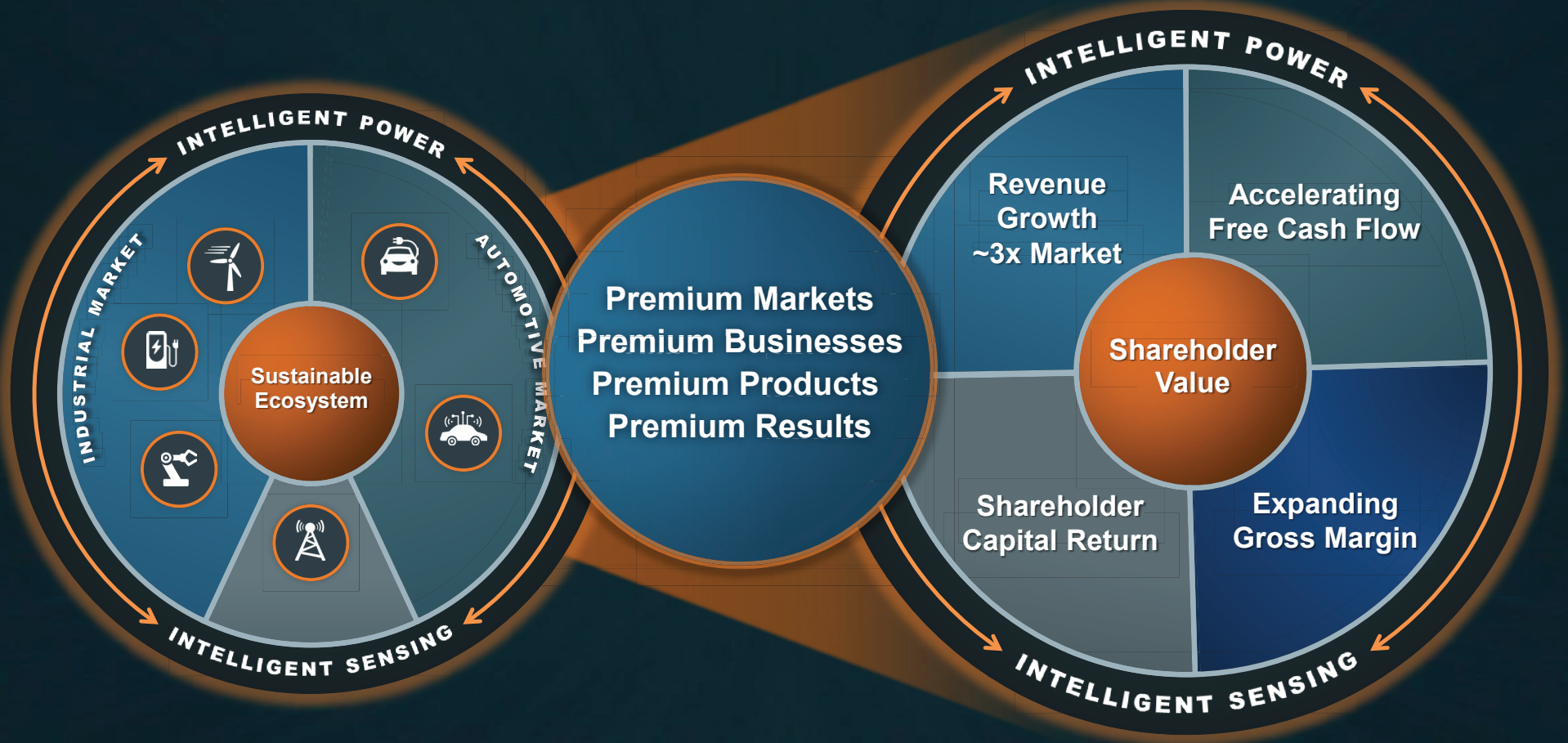
Premium Businesses Driving Premium Results



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Appendix – GAAP to Non GAAP Reconciliation

$ in Millions	FY 2019	FY 2020	FY 2021	FY 2022
Reconciliation of GAAP to Non-GAAP Gross Margin:				
GAAP Gross Margin	35.8%	32.7%	40.3%	49.0%
a) Impact of business wind down	0.0%	0.0%	0.0%	0.2%
b) Amortization of acquisition-related intangible assets	0.0%	0.0%	0.0%	0.1%
c) Non-recurring facility costs	0.0%	0.0%	0.1%	0.0%
d) Amortization of fair market value step-up of inventory	0.4%	0.0%	0.0%	0.0%
Non-GAAP Gross Margin	36.1%	32.7%	40.4%	49.2%

Reconciliation of GAAP to Non-GAAP Operating Margin	FY 2019	FY 2020	FY 2021	FY 2022
GAAP Operating Margin	7.8%	6.6%	19.1%	28.3%
a) Amortization of acquisition-related intangible assets	2.1%	2.3%	1.5%	1.0%
b) Restructuring, asset impairments and other, net	0.5%	1.2%	1.1%	0.2%
c) Goodwill and intangible asset impairment	0.0%	0.0%	0.0%	4.6%
d) Third party acquisition and divestiture-related costs	0.2%	0.0%	0.2%	0.2%
e) Non-recurring facility costs	0.0%	0.0%	0.1%	0.0%
f) Impact of business wind down	0.0%	0.0%	0.0%	0.2%
g) Amortization of fair market value step-up of inventory	0.4%	0.0%	0.0%	0.0%
h) Litigation settlement	3.1%	0.0%	0.0%	0.0%
Non-GAAP Operating Margin	14.1%	10.2%	21.9%	34.5%

Reconciliation of net cash provided by operating activities to free cash flow:	FY 2019	FY 2020	FY 2021	FY 2022
Net cash provided by operating activities	$ 694.7	$ 884.3	$ 1,782.0	$ 2,633.1
Purchase of property, plant and equipment	(534.6)	(383.6)	(444.6)	(1,005.0)
Free Cash Flow	$ 160.1	$ 500.7	$ 1,337.4	$ 1,628.1
Free Cash Flow Margin	2.9%	9.5%	19.8%	19.6%

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Notes and Sources – Foundation Set: Ready to Accelerate

Stock Chart
- Stock Chart represents period from: December 7, 2020 to May 5, 2023; Source: FactSet

Structural Changes Set the Foundation for Growth
- Non-memory semiconductor device companies with market cap. of more than $5B & 100% revenue from semiconductor devices, adjusted for acquisitions; Source: FactSet
- 2019-2022 for Free Cash Flow & Operating Income growth; 2022 for ROIC ; Source: FactSet

Premium Businesses
- onsemi estimates
- Omdia: 1Q23 - Semiconductor Device Data By Application Markets
- Omdia: Industrial Semiconductor Market Tracker – 3Q22 Database, Jan'23
- Yole: Imaging for Automotive 2022
- Omdia: Power Semiconductors in Automotive Report – 2022 Database, 5/26/22
- LMC Automotive: Global Hybrid & Electric Vehicle Forecast - Quarter 4, 2022
- Omdia: Power IC Market Tracker, Sep'22
- Yole: Silicon Carbide Forecast 2023
- Bank of America Research
- Yole: 2022-27 SiC market forecast of 33% CAGR
- TSR: Automotive Camera Market Analysis 2021-2022
- Yole: Status of CMOS Image Sensor Industry 2021 Report

Markets that matter
- onsemi estimates based on current market projections, excludes Memory

Sustainable Ecosystem to Drive ~3x the Market Growth
- onsemi estimates based on current market projections

Fab Right, Revenue by End markets and technology
- onsemi estimates based on current market projections

Onsemi's Path to net Zero
- Scope 2 Emissions normalized by annual revenue (Metric Tons CO2e per $ Million Revenue); 2022 GHG data is in progress for limited assurance
- Total Water Withdrawal normalized by annual revenue (Megaliters per $ Million Revenue)
- Total Waste Generation normalized by annual revenue (Metric Ton Waste per $ Million Revenue)
- Projected. Energy Savings based on internal estimates

The Next Milestone: Expand Gross Margin to 53%
- 2027 Target based on onsemi internal estimates

Market Success Driving Investments
- Capital Efficiency projections based on internal onsemi estimates

Driving Best in Class ROIC
- Factset
- Company reports, onsemi estimates
- Capital Intensity peer group includes TXN, IFX, Rohm, STM & WOLF
- ROIC = (Operating income – Tax)/(Shareholder equity + net debt)

Accelerating the Financial Model
- 2027 Target based on internal onsemi estimates

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