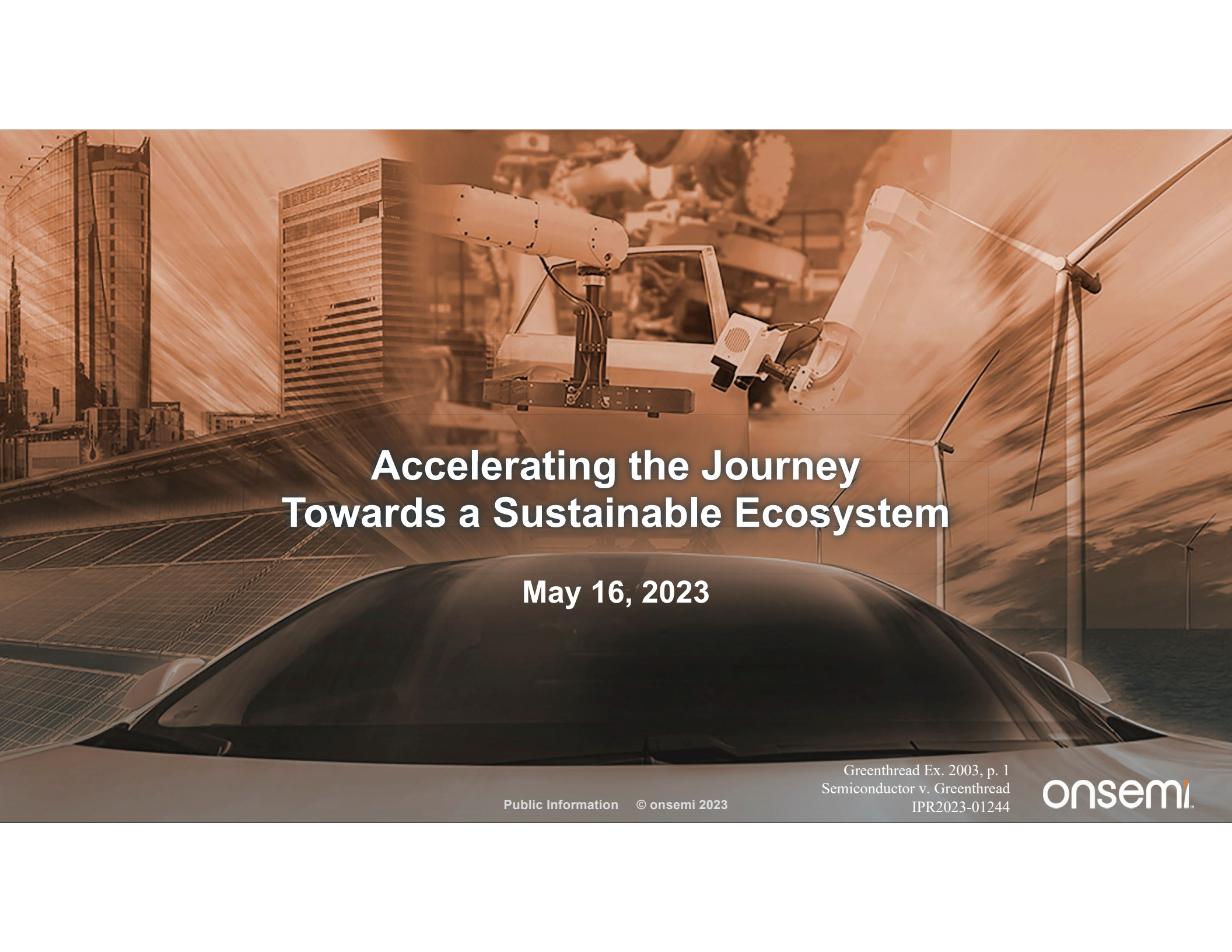




Accelerating the Journey Towards a Sustainable Ecosystem

May 16, 2023

Public Information © onsemi 2023

Greenthread Ex. 2003, p. 1
Semiconductor v. Greenthread
IPR2023-01244

onsemi

onsemi's Transformation has Driven Outperformance

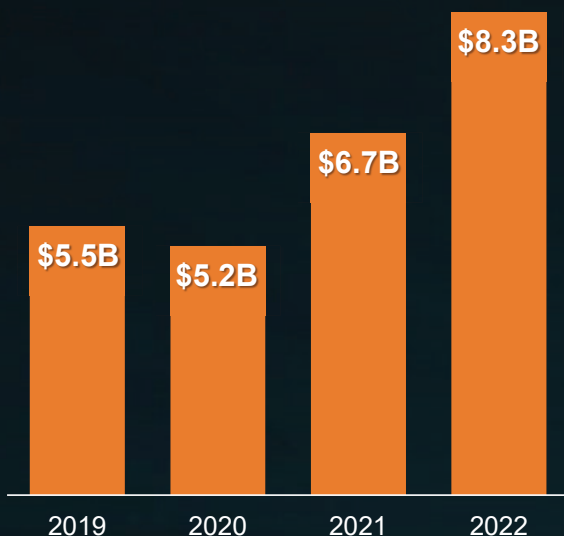


Greenthread Ex. 2003, p. 2
Semiconductor v. Greenthread
IPR2023-01244

onsemi

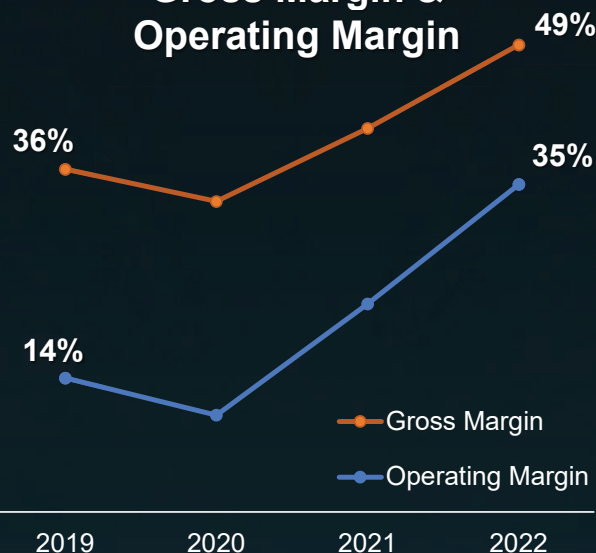
Structural Changes Set the Foundation for Growth

Revenue



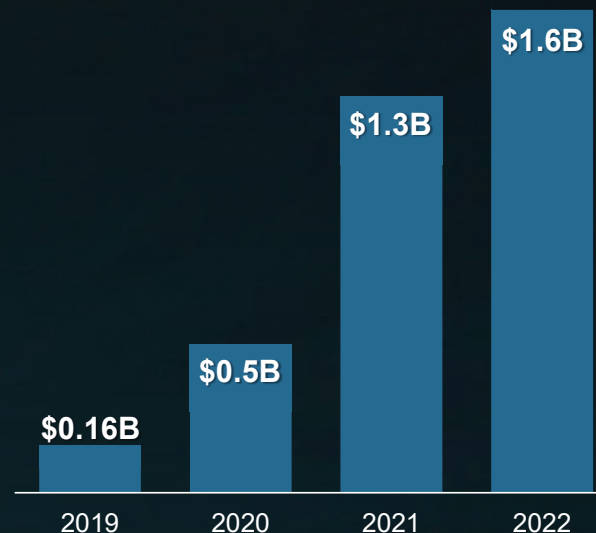
- **Revenue** at 26% CAGR 2020-2022
- Focused on high-growth megatrends in Auto and Industrial
- Doubled down on Silicon Carbide

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



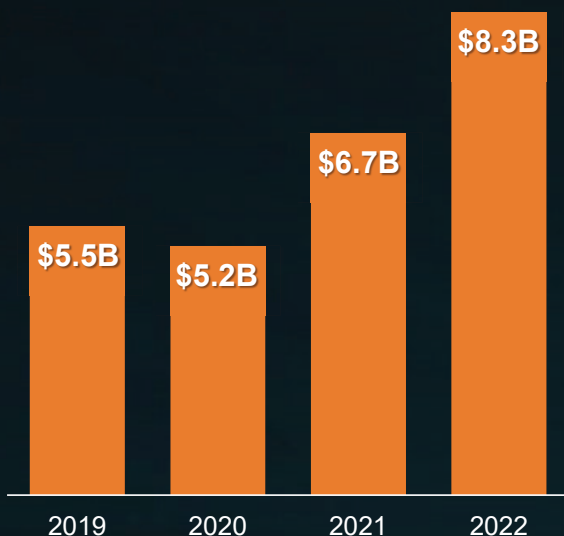
- **Free Cash flow** increased by 10x
- Invested in Silicon Carbide and 300mm fab
- Initiated share repurchases; \$3B repurchase authorization

Greenthread Ex. 2003, p. 3
Semiconductor v. Greenthread
IPR2023-01244

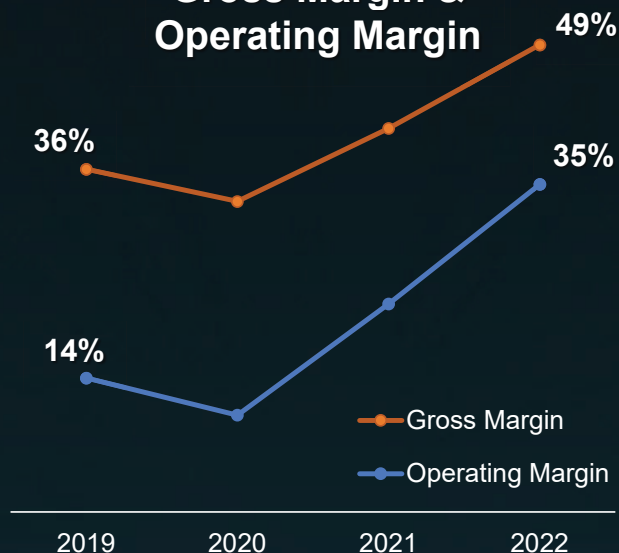
onsemi

Structural Changes Set the Foundation for Growth

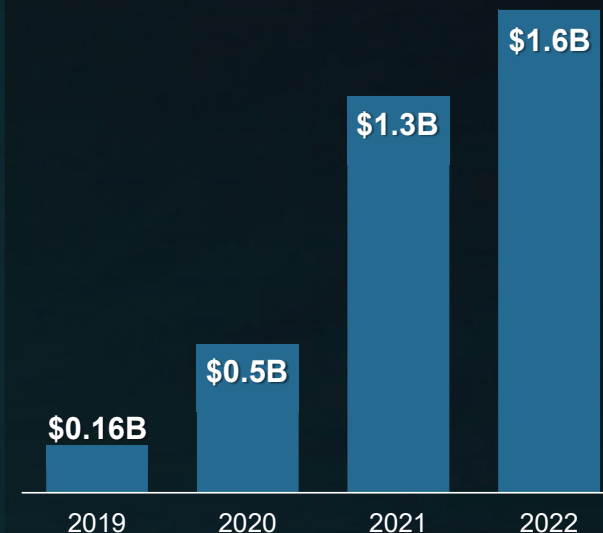
Revenue



Gross Margin & Operating Margin



Free Cash Flow



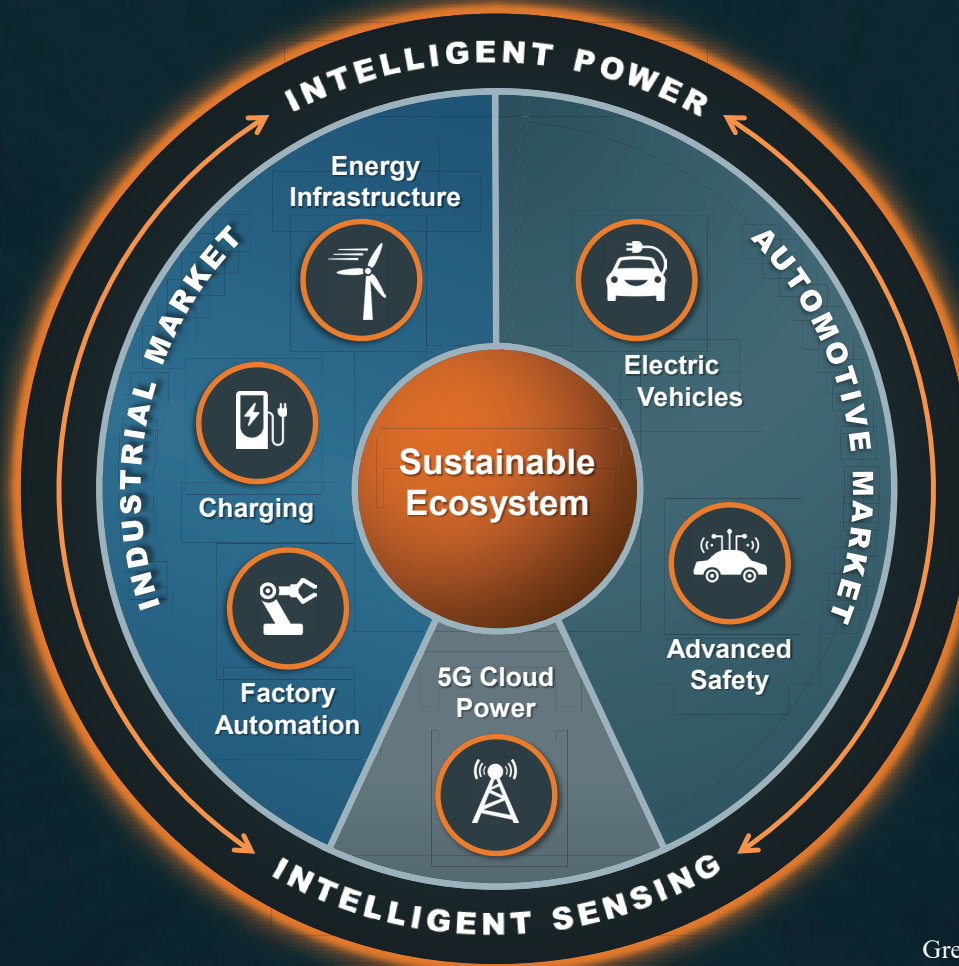
Industry-Leading Results Accelerating Shareholder Value

- 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

Greenthread Ex. 2003, p. 4
Semiconductor v. Greenthread
IPR2023-01244

onsemi

Premium Businesses



Greenthread Ex. 2003, p. 5
Semiconductor v. Greenthread
IPR2023-01244

onsemi

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

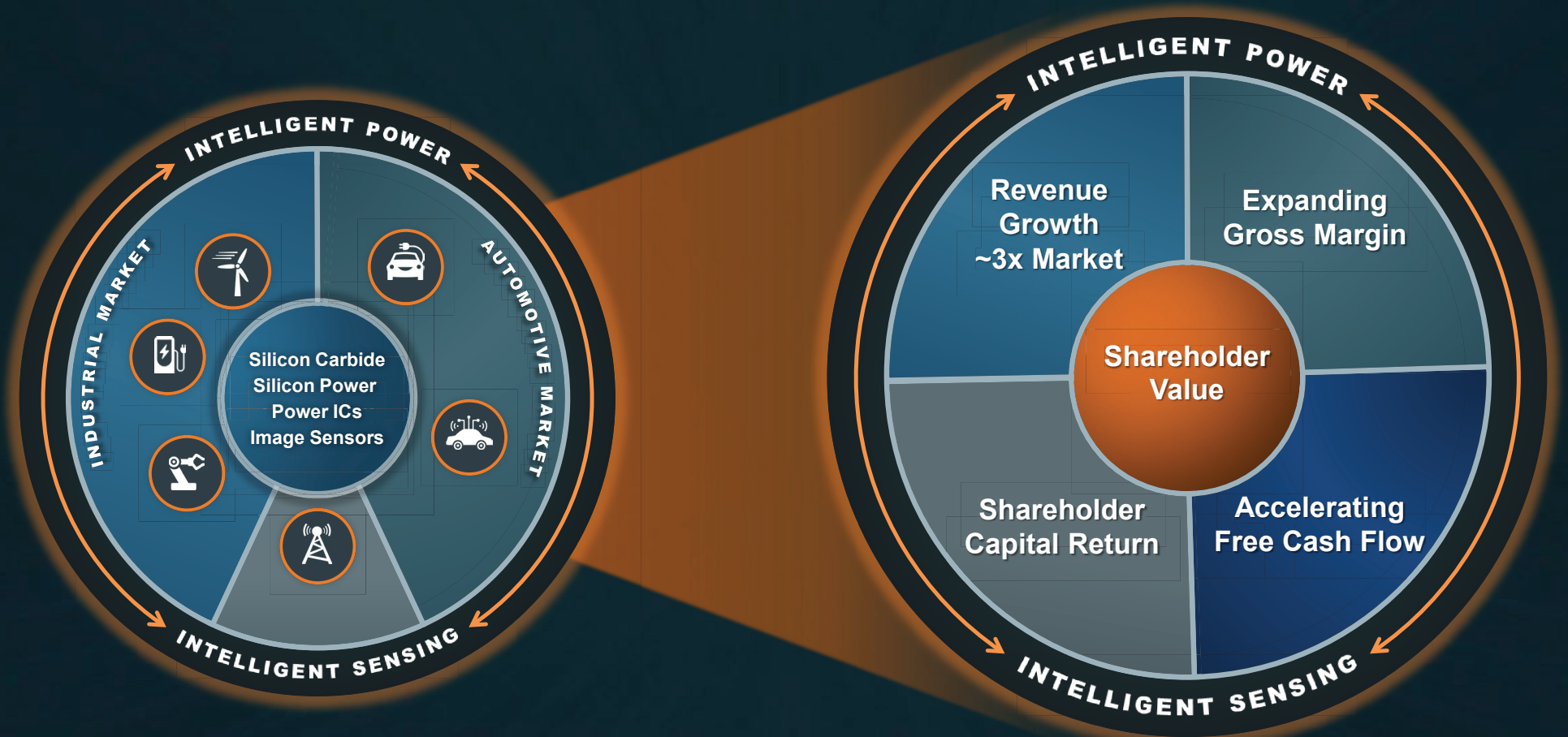
Intelligent Sensing

- #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

Greenthread Ex. 2003, p. 6
Semiconductor v. Greenthread
IPR2023-01244

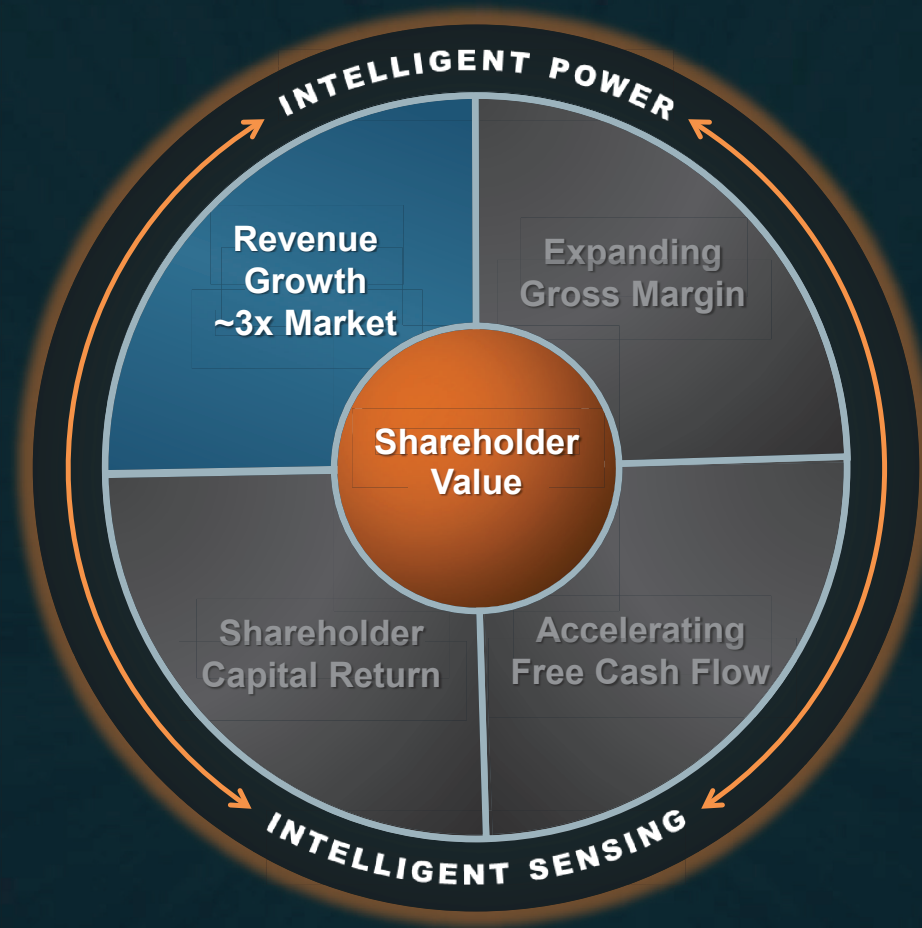
onsemi

Premium Businesses Driving Premium Results



Greenthread Ex. 2003, p. 7
Semiconductor v. Greenthread
IPR2023-01244

onsemi



Greenthread Ex. 2003, p. 8
Semiconductor v. Greenthread
IPR2023-01244

onsemi

Markets that Matter

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

onsemi



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



Machine Vision for the future of automation

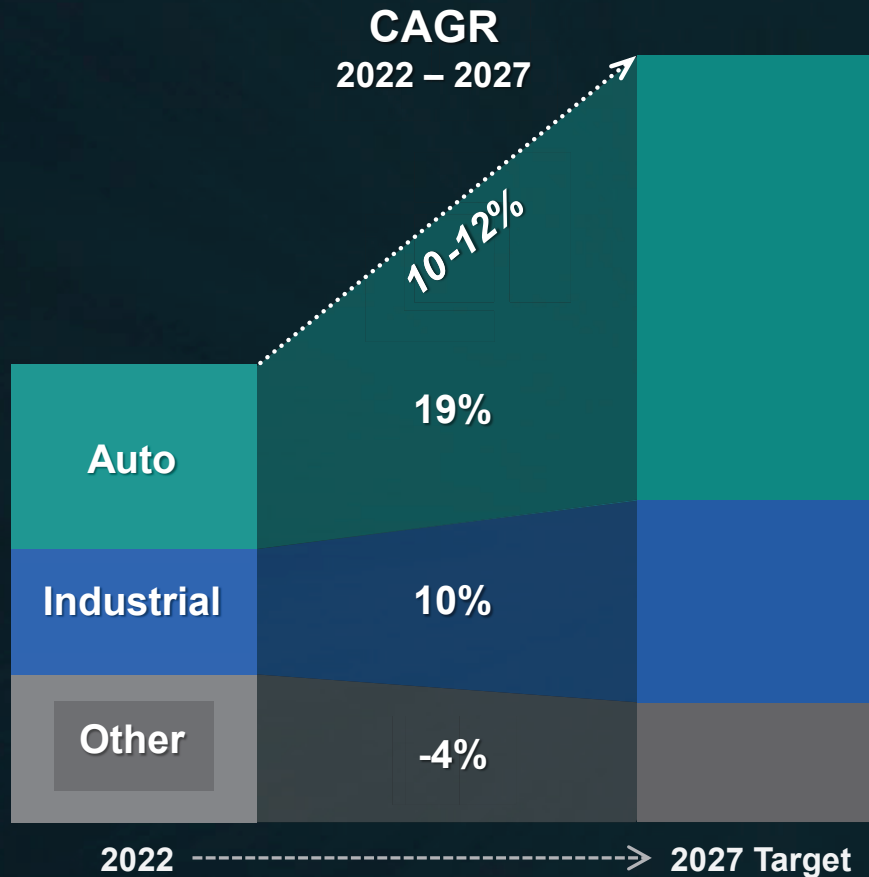


Power new generation of cloud and 5G infrastructure with onsemi CAGR >20%

Greenthread Ex. 2003, p. 9
Semiconductor v. Greenthread
IPR2023-01244

onsemi

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

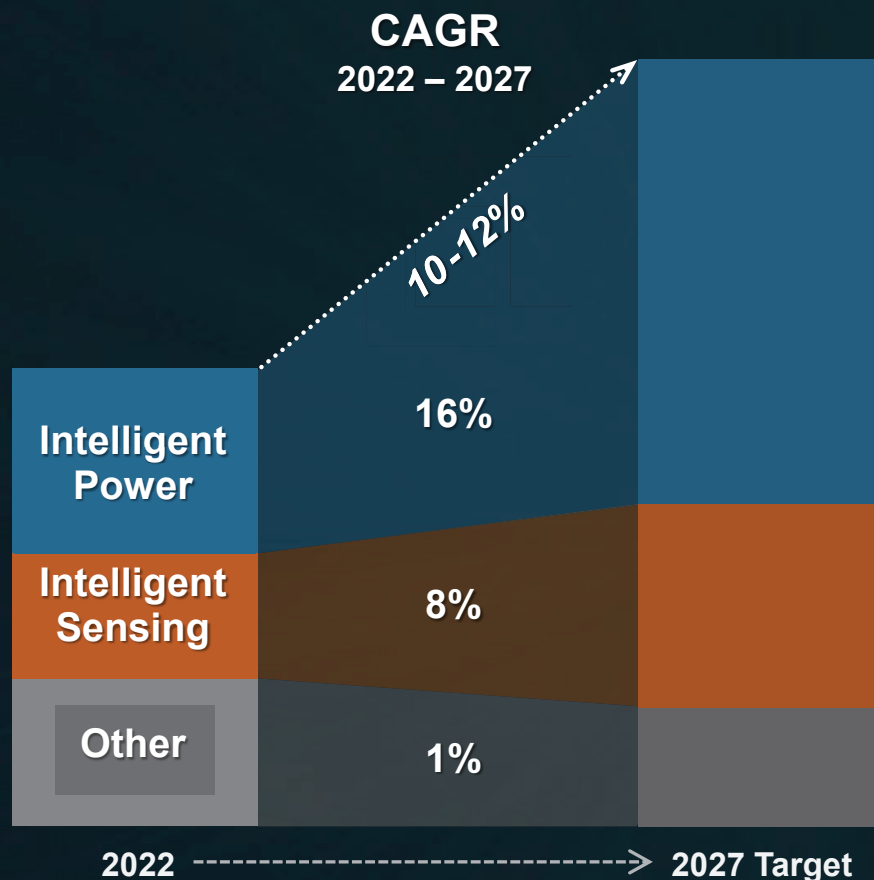
Other

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

Greenthread Ex. 2003, p. 10
Semiconductor v. Greenthread
IPR2023-01244

onsemi

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

Greenthread Ex. 2003, p. 11
Semiconductor v. Greenthread
IPR2023-01244

onsemi

Highly Diversified Customer Base



Customer Needs:

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

onsemi Delivers:

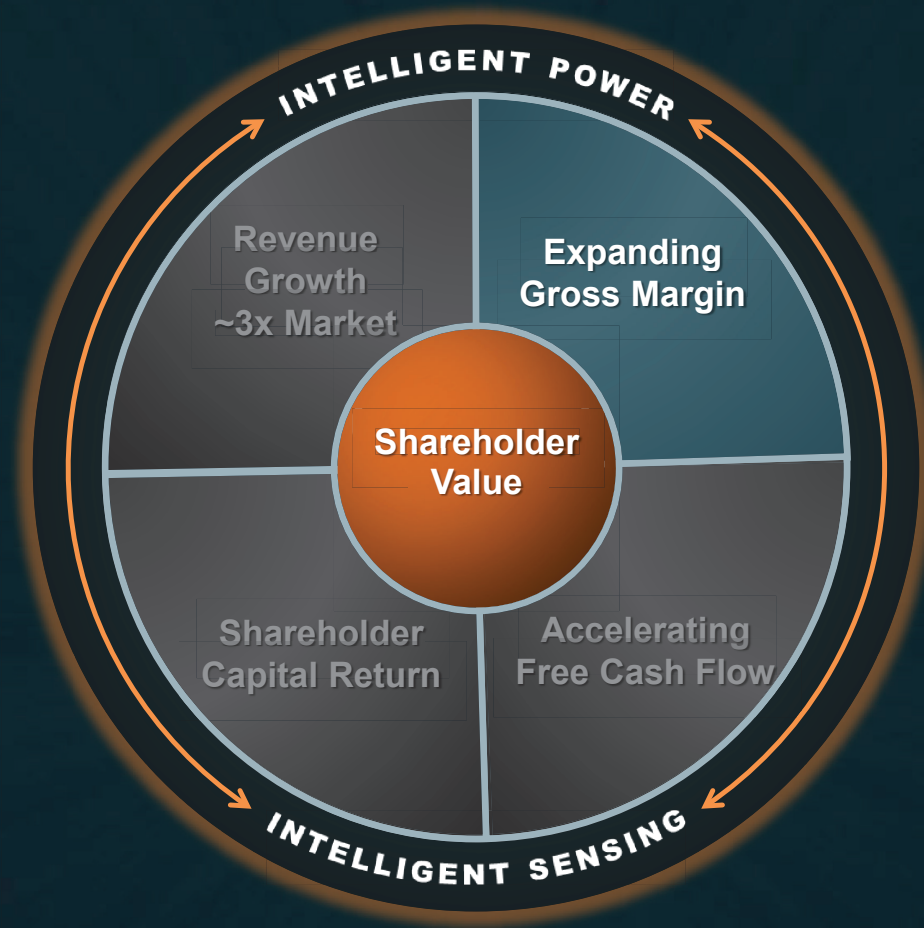
- Industry-leading products
- Vertically integrated supply chain
- Broad portfolio of products
- Solution optimization across BOM

Top 20 customers represent **~35%** of revenue

Top 20 customers each buy **~800** products on average

Greenthread Ex. 2003, p. 12
Semiconductor v. Greenthread
IPR2023-01244

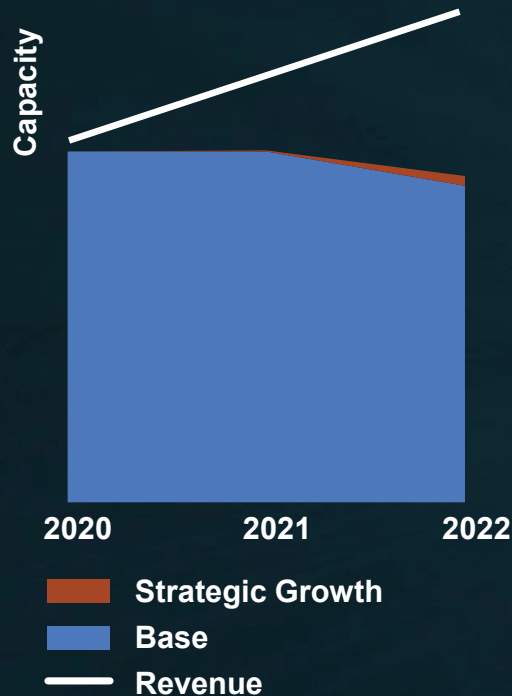
onsemi



Greenthread Ex. 2003, p. 13
Semiconductor v. Greenthread
IPR2023-01244

onsemi

Executed Fab Liter Manufacturing Strategy



Fab Liter

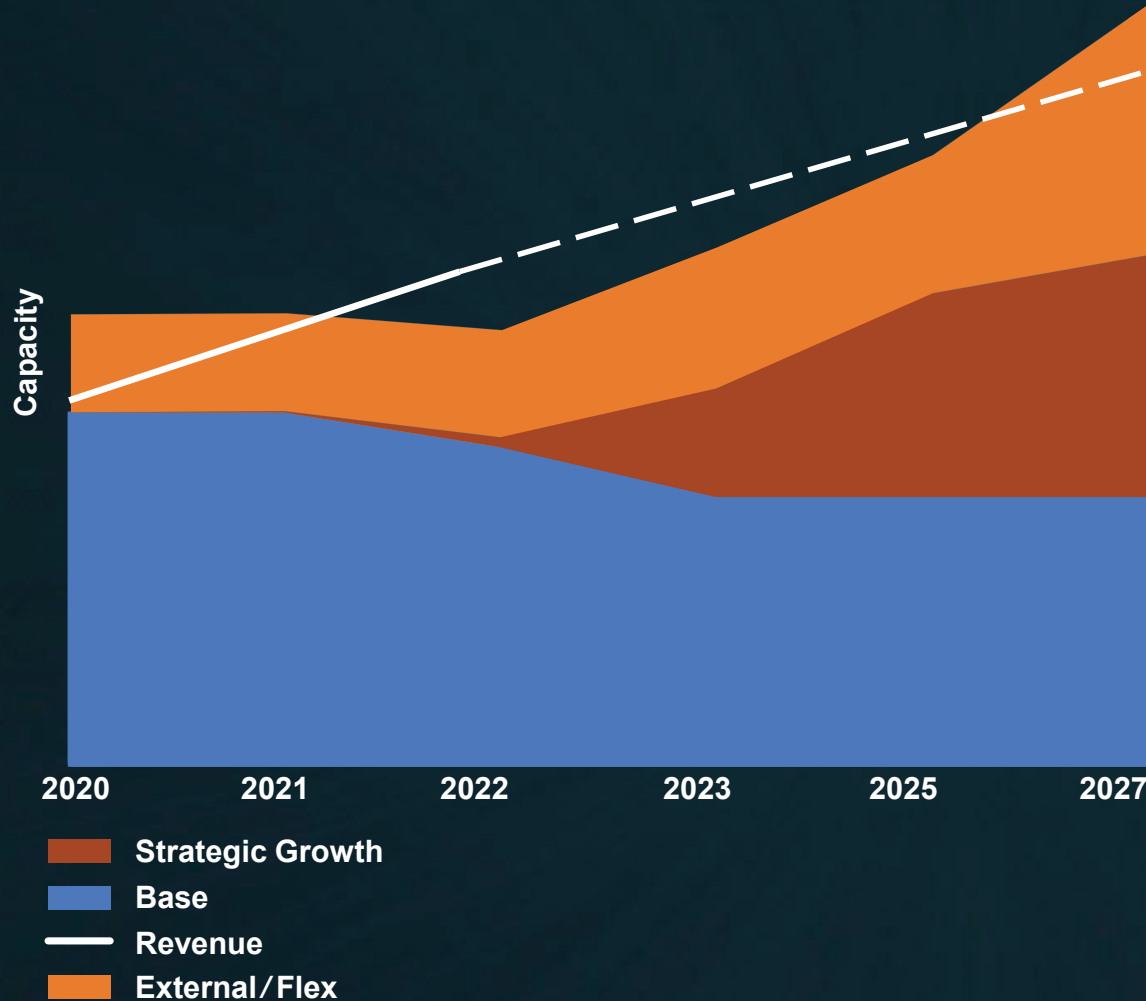
Flexible, Low Fixed-Cost Footprint

- 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

Greenthread Ex. 2003, p. 14
Semiconductor v. Greenthread
IPR2023-01244

onsemi

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

Greenthread Ex. 2003, p. 15
Semiconductor v. Greenthread
IPR2023-01244

onsemi

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

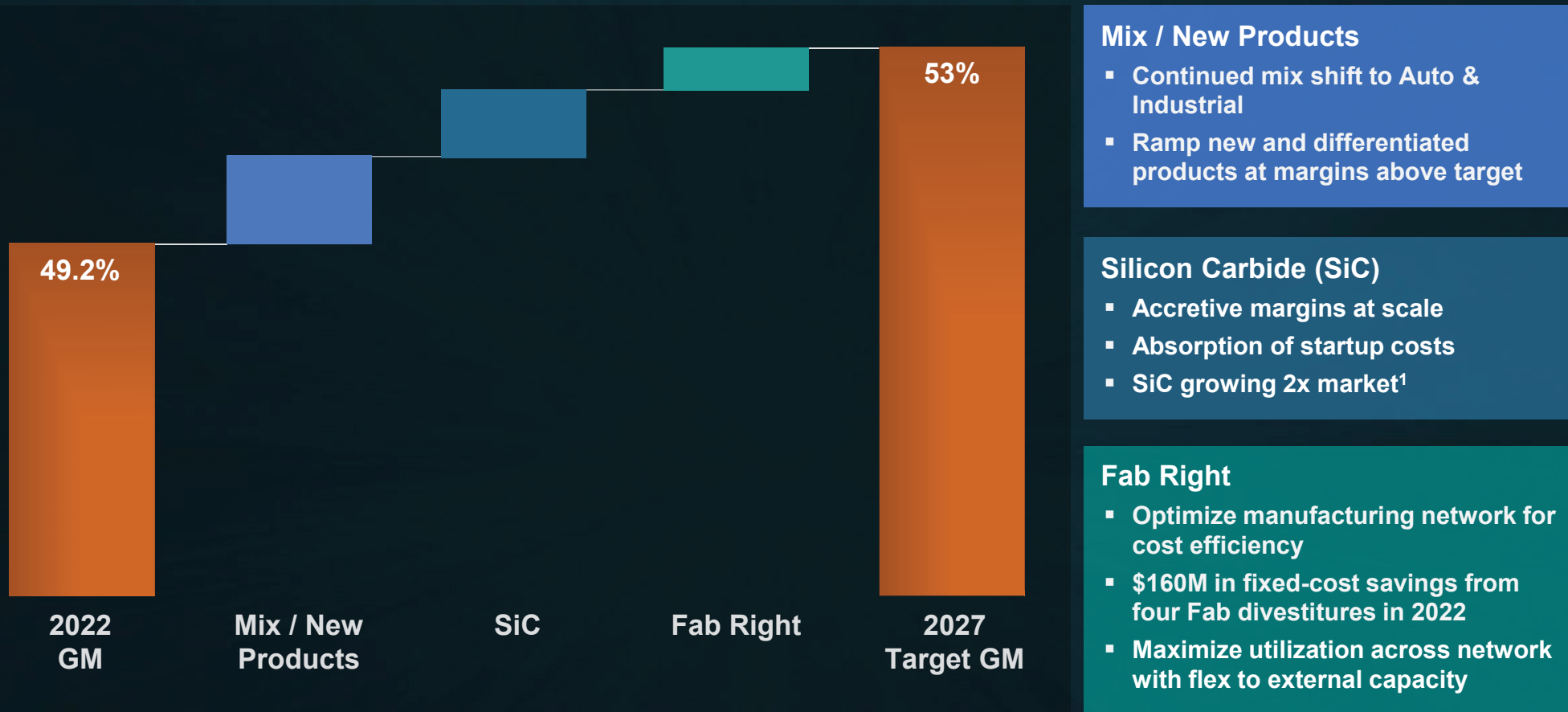
18% savings by 2027



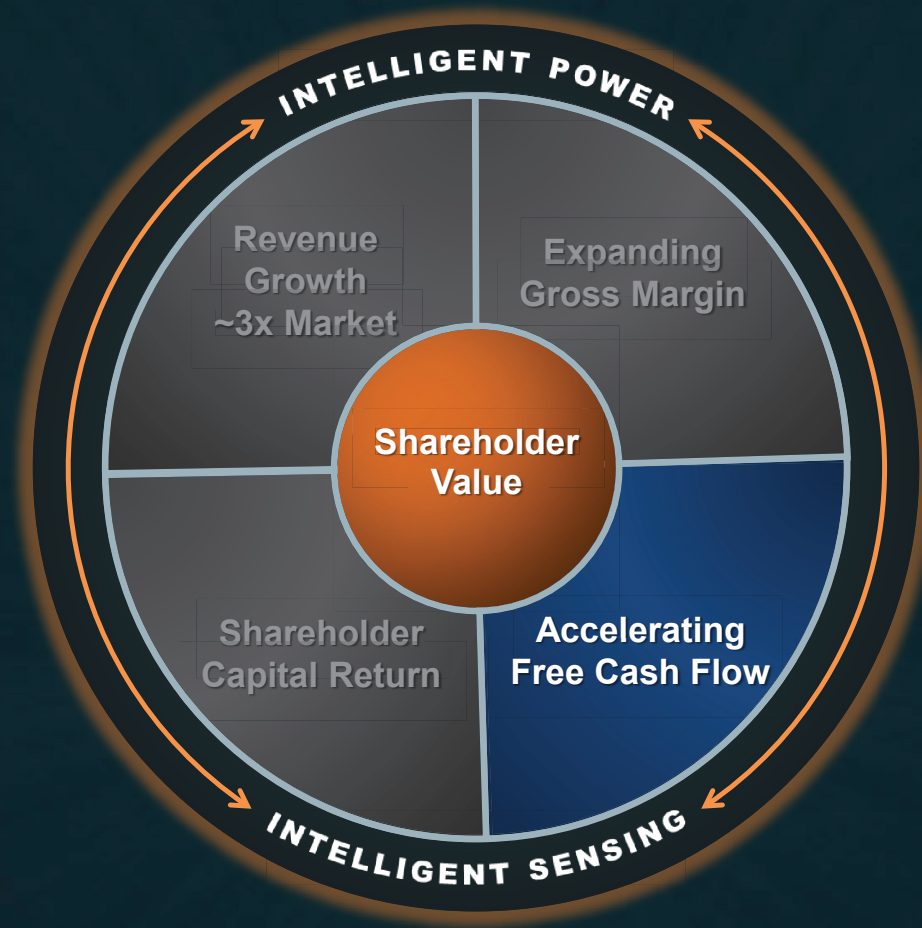
Greenthread Ex. 2003, p. 16
Semiconductor v. Greenthread
IPR2023-01244

onsemi

The Next Milestone: Expand Gross Margin to 53%



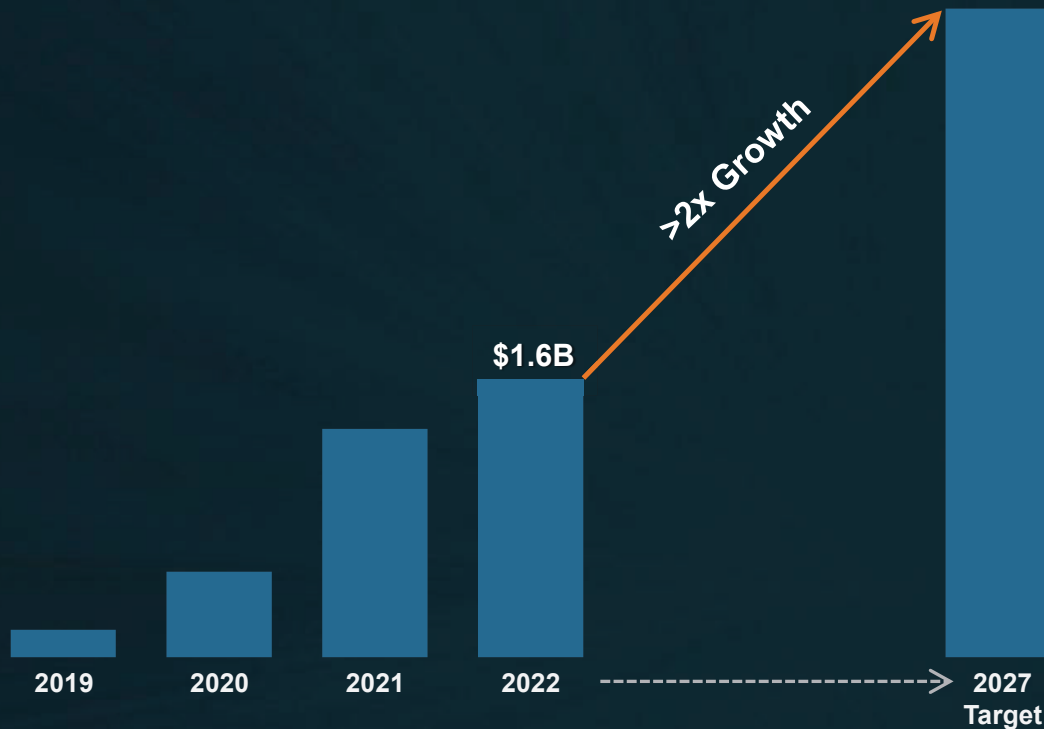
1. Yole SiC market forecast: 2022-27 CAGR of 33%



Greenthread Ex. 2003, p. 18
Semiconductor v. Greenthread
IPR2023-01244

onsemi

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

Greenthread Ex. 2003, p. 19
Semiconductor v. Greenthread
IPR2023-01244

onsemi

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

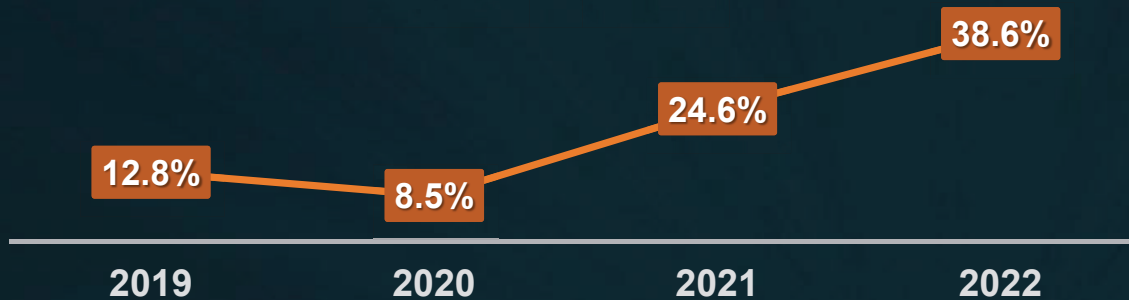
Investing for growth while maintaining best-in-class ROIC

Greenthread Ex. 2003, p. 20
Semiconductor v. Greenthread
IPR2023-01244

onsemi

Delivering Best-in-Class ROIC

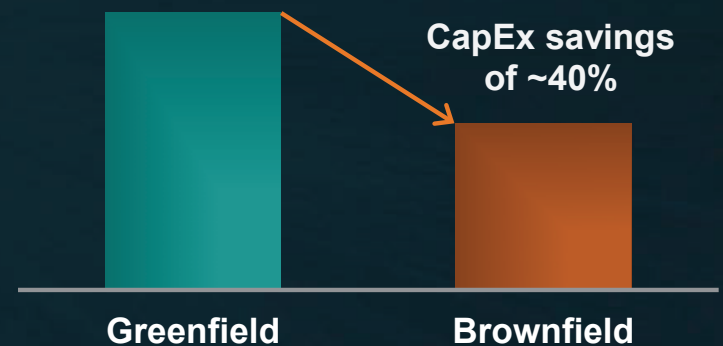
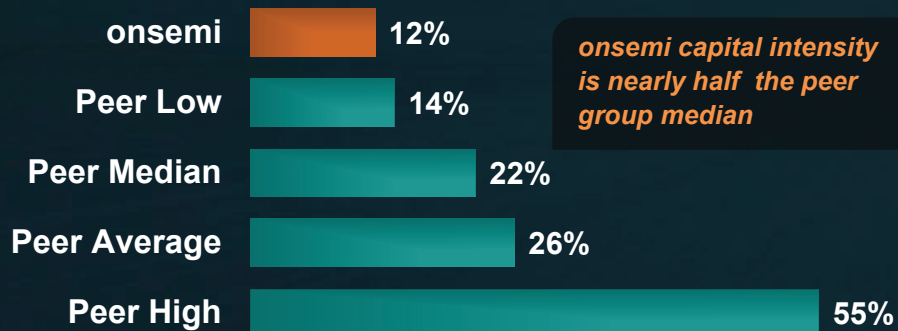
onsemi ROIC



Brownfield Efficiency

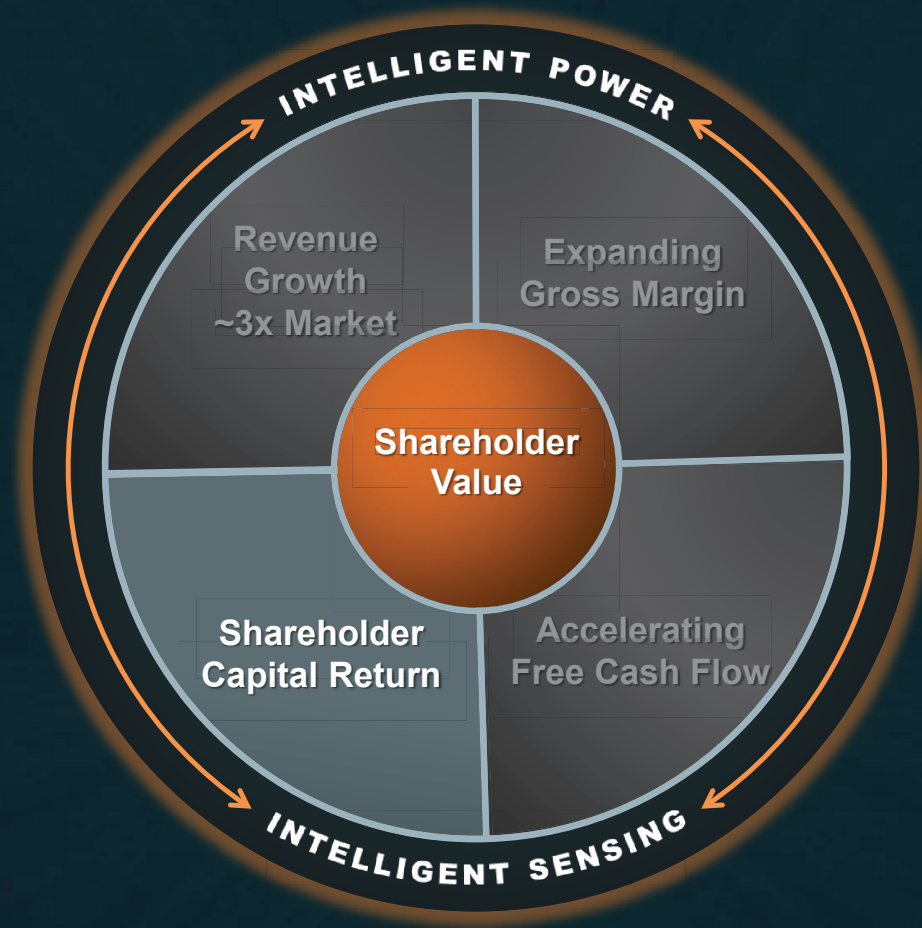
- 40% less CapEx compared to Greenfield investment
- Accelerates time to market by 2 years

2022 Capital Intensity



Greenthread Ex. 2003, p. 21
Semiconductor v. Greenthread
IPR2023-01244

onsemi



Greenthread Ex. 2003, p. 22
Semiconductor v. Greenthread
IPR2023-01244

onsemi

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

Greenthread Ex. 2003, p. 23
Semiconductor v. Greenthread
IPR2023-01244

onsemi

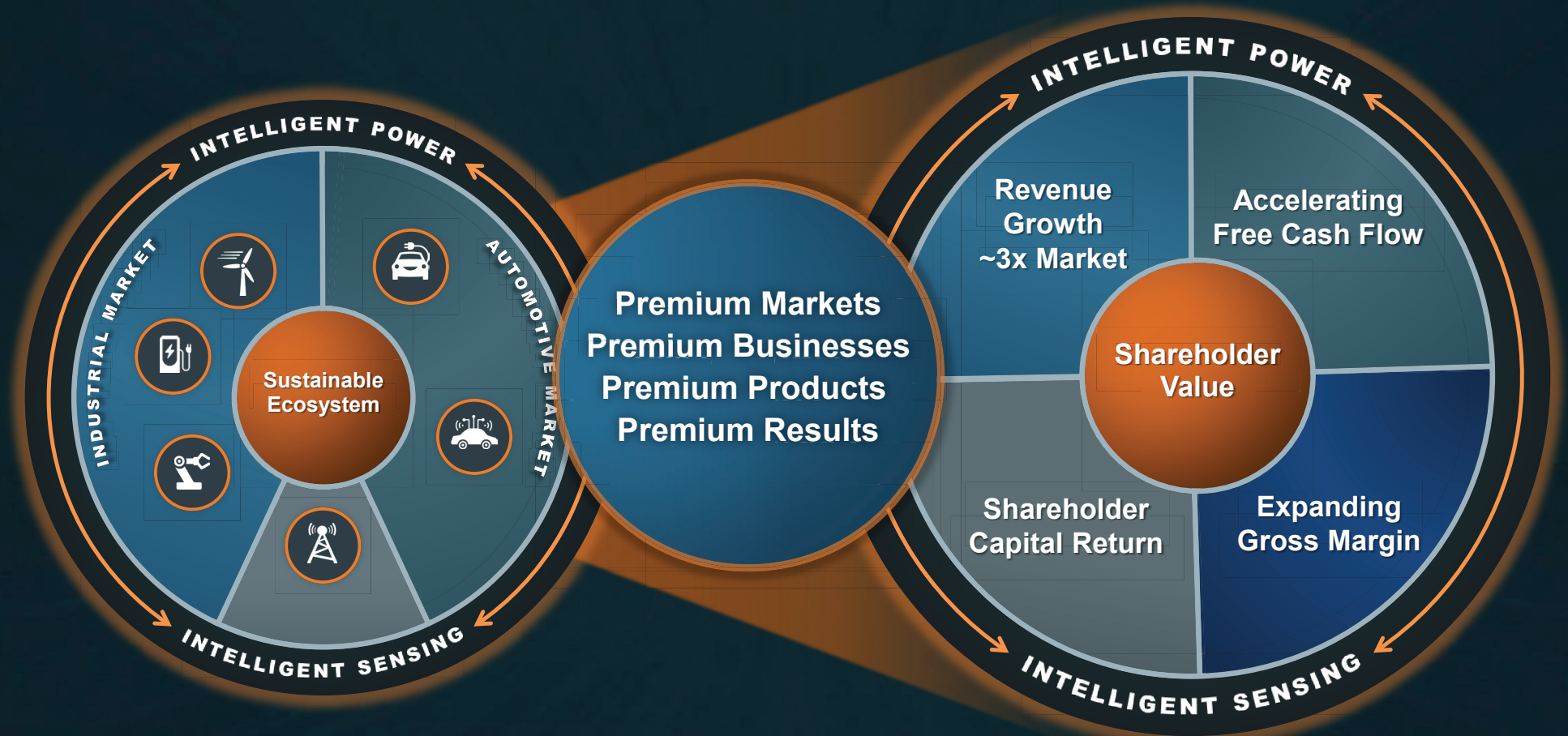
Accelerating the Financial Model

	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

Greenthread Ex. 2003, p. 24
Semiconductor v. Greenthread
IPR2023-01244

onsemi

Premium Businesses Driving Premium Results



Greenthread Ex. 2003, p. 25
Semiconductor v. Greenthread
IPR2023-01244

onsemi

Appendix

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				
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:				
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%

Greenthread Ex. 2003, p. 27
Semiconductor v. Greenthread
IPR2023-01244

onsemi

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
- $ROIC = (\text{Operating income} - \text{Tax}) / (\text{Shareholder equity} + \text{net debt})$

Accelerating the Financial Model

- 2027 Target based on internal onsemi estimates

Greenthread Ex. 2003, p. 28
Semiconductor v. Greenthread
IPR2023-01244

onsemi



Intelligent Technology. Better Future.

Follow Us @onsemi



www.onsemi.com

Greenthread Ex. 2003, p. 29
Semiconductor v. Greenthread
IPR2023-01244