



Analog and Discrete  
Power Solutions

# Investor Relations

Diodes Incorporated (DIOD

Plano, TX, USA

May 8, 2025



# Safe Harbor Statement

Page 1

Safe Harbor Statement Under the Private Securities Litigation Reform Act of 1995: Any statements set forth above that are not historical facts are forward-looking statements that involve risks and uncertainties that could cause actual results to differ materially from those in the forward-looking statements. Such statements include statements containing forward-looking words such as "expect," "anticipate," "aim," "estimate," and variations thereof, including without limitation statements, whether direct or implied, regarding expectations of that for the second quarter of 2025, we expect revenue to be approximately \$355 million plus or minus 3 percent; we expect GAAP gross margin to be 31.8 percent, plus or minus 1 percent; non-GAAP operating expenses, which are GAAP operating expenses adjusted for amortization of acquisition-related intangible assets, are expected to be approximately 28.0 percent of revenue, plus or minus 1 percent; we expect non-GAAP net interest income to be approximately \$1.5 million; we expect our income tax rate to be 18.0 percent, plus or minus 3 percent; shares used to calculate diluted EPS for the first quarter are anticipated to be approximately 46.4 million. Potential risks and uncertainties include, but are not limited to, such factors as: the risk that such expectations may not be met; the risk that the expected benefits of acquisitions may not be realized or that integration of acquired businesses may not continue as rapidly as we anticipate; the risk that we may not be able to maintain our current growth strategy or continue to maintain our current performance, costs, and loadings in our manufacturing facilities; the risk that we may not be able to increase our automotive, industrial, or other revenue and market share; risks of domestic and foreign operations, including excessive operating costs, labor shortages, higher tax rates, and our joint venture prospects; the risks of cyclical downturns in the semiconductor industry and of changes in end-market demand or product mix that may affect gross margin or render inventory obsolete; the risk of unfavorable currency exchange rates; the risk that our future outlook or guidance may be incorrect; the risks of global economic weakness or instability in global financial markets; the risks of trade restrictions, tariffs, or embargoes; the risk of breaches of our information technology systems; and other information, including the "Risk Factors" detailed from time to time in Diodes' filings with the United States Securities and Exchange Commission.

This presentation also contains non-GAAP measures. See the Company's press release on May 8, 2025 titled, "Diodes Incorporated Reports First Quarter Fiscal 2025 Financial Results" for detailed information related to the Company's non-GAAP measures and a reconciliation of GAAP net income to non-GAAP net income.

## Dr. Keh-Shew Lu

Chairman and CEO

### Experience:

- President & CEO, Diodes Incorporated (2005 – 2023)
- Texas Instruments 27 years
  - Senior Vice President of TI Worldwide Analog and Logic
  - President of Texas Instruments – Asia

### Education

- Honorary Doctorate in Engineering  
National Cheng Kung University
- Doctorate and Master's Degree in Electrical Engineering,  
Texas Tech University
- Bachelor's Degree in Engineering,  
National Cheng Kung University – Taiwan



## Gary Yu

President

### Experience:

- **Diodes Incorporated, since 2008**
  - Chief Operating Officer
  - Senior Vice President, Business Groups
  - President, Asia Pacific Region
  - General Manager, Shanghai Wafer Fabrication and BCD Business Unit
  - Vice President of Asia Pacific Sales
  - Manager, Sensor and Satellite Business Unit
- **Lite-On Semiconductor Corporation**
  - Vice President, Worldwide Sales
- **Texas Instruments**
  - IT, Finance and Capacity Planning

### Education:

- MBA - University of Dallas
- Master's Degree in Telecommunication Engineering, Southern Methodist University
- Bachelor's Degree in MIS, Fu-Jen University, Taiwan



## Gurmeet Dhaliwal

**Head of Corporate Marketing & Investor Relations**

**Experience:**

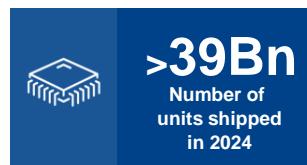
- Head of Corporate Marketing, Diodes Incorporated
- Head of Corporate Marketing, Pericom Semiconductor
- Vice President, Marketing, CA Technologies (Broadcom)
- Director, Global Marketing Strategy, EMC
- Director, Marketing, Zarlink Semiconductor (Microchip)
- Marketing Management positions at Cisco and National Semiconductor (TI)

**Education:**

- MBA, Marketing/Entrepreneurship, Saint Mary's College of California
- BS in Electrical and Computer Engineering, UC Santa Barbara



**Diodes delivers analog and discrete power solutions through its high-quality semiconductor products to the world's leading companies in the automotive, industrial, computing, consumer electronics, and communications markets**



**Vision:**  
Profitability  
Growth to  
Maximize  
Shareholder Value

---

**Our Core Values:**  
Integrity,  
Commitment,  
Innovation

# Investing for the Future

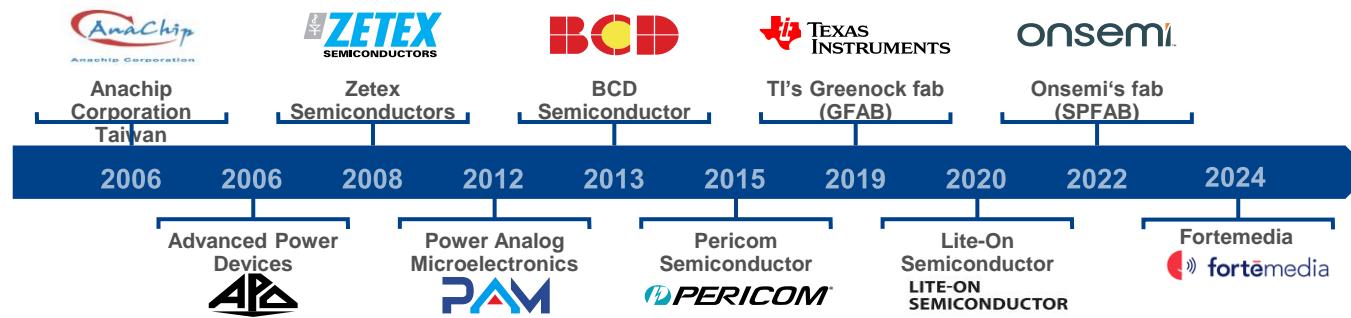
Page 6

## Global Operations and World-class Manufacturing

- Headquartered in Plano, TX
- Manufacturing in US, UK, Germany, China, and Taiwan
- ISO 9001:2015 Certified / IATF 16949:2016 Certified
- ISO 14001:2015 Certified

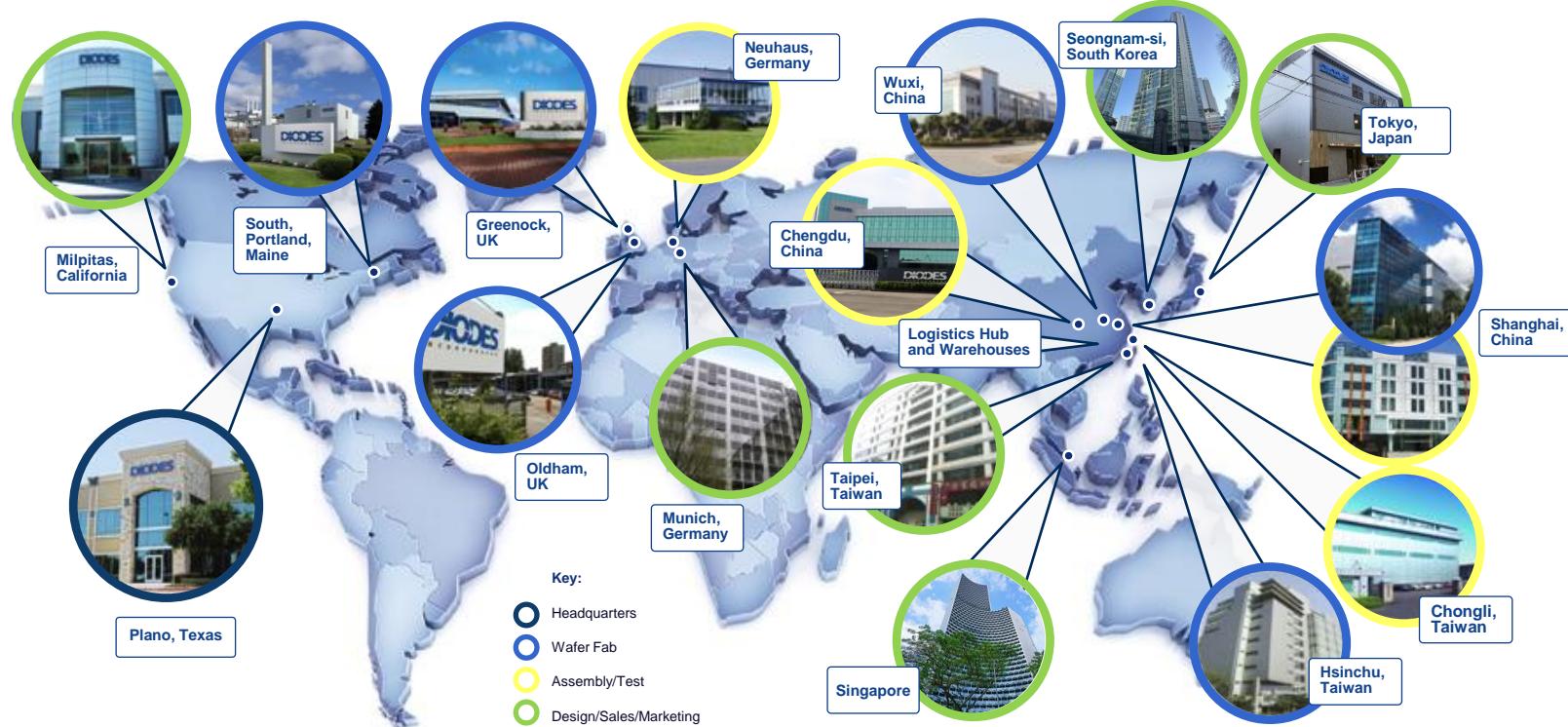


## Key Acquisitions



# Global Organization

Page 7



# Our Sustainability Commitment

Page 8

Our commitment to a sustainable and profitable business is built around ESG



# Longer Term \$B Corporate Objectives

Page 9

- Goal 1: \$1B Market Cap ✓
- Goal 2: \$1B Annual Revenue ✓
- Goal 3: \$1B Gross Profit
- Goal 4: \$1B Profit Before Tax

Next Target:  
**\$1B Gross profit**

Gross Margin: 40%  
Revenue: \$2.5B



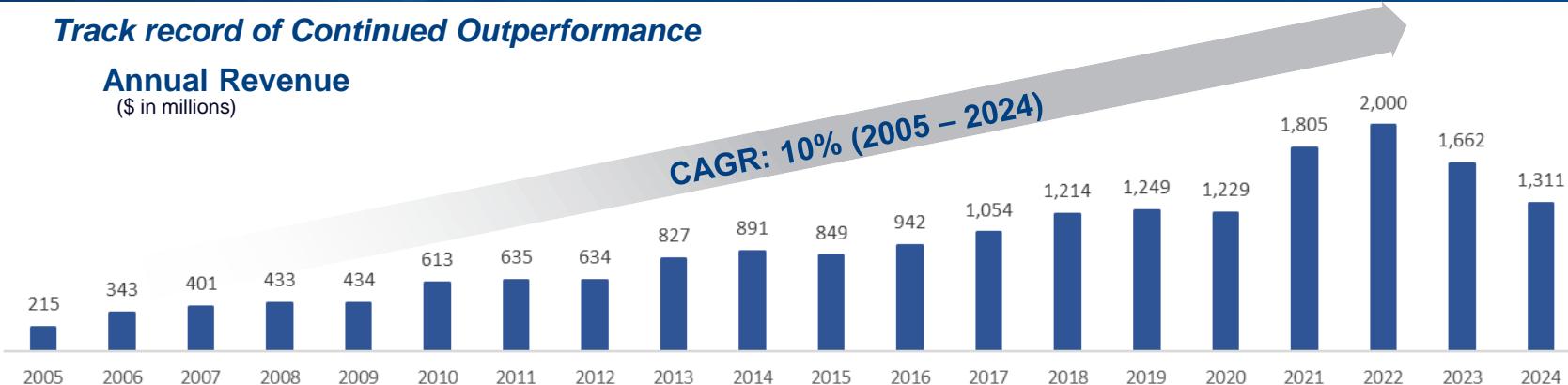
# Profitability Growth

Page 10

*Track record of Continued Outperformance*

## Annual Revenue

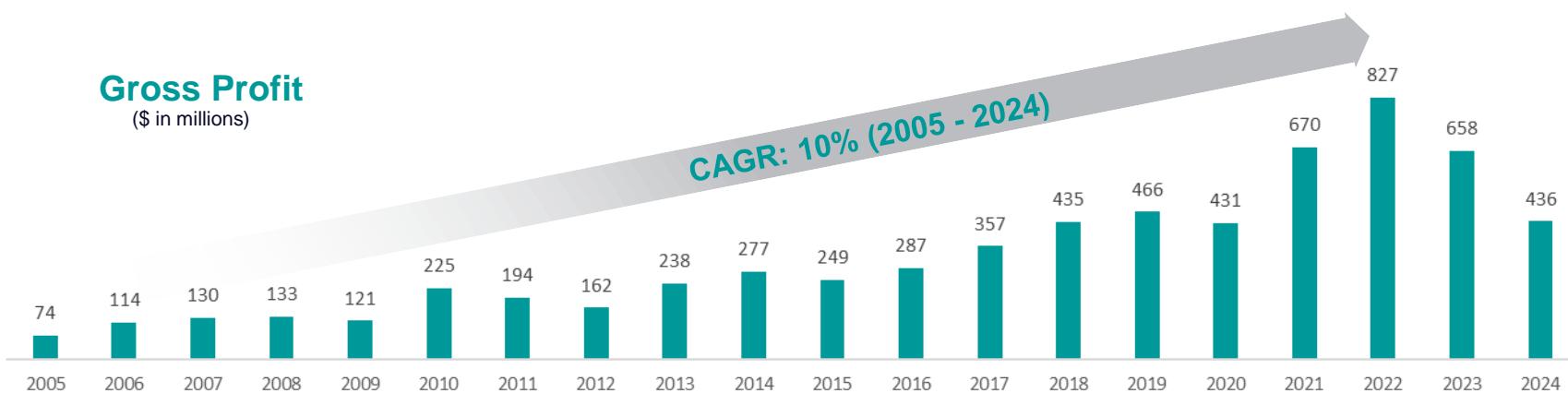
(\$ in millions)



## Gross Profit

(\$ in millions)

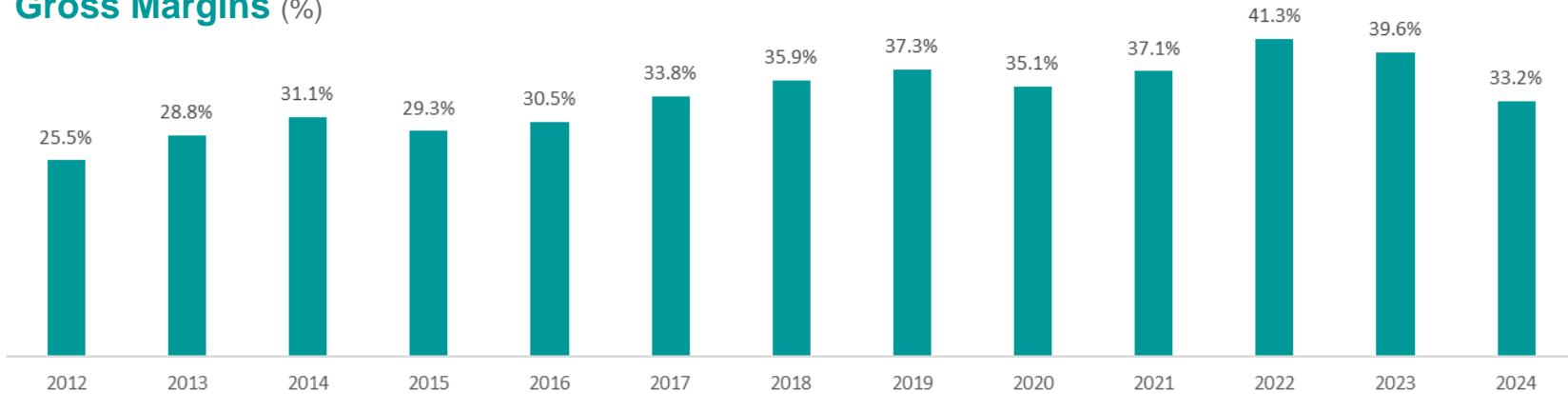
CAGR: 10% (2005 - 2024)



# Gross Margins and EPS

Page 11

## Gross Margins (%)



## Non-GAAP EPS (\$)



**~40% of revenue**  
(42% for Q1 2025)

## Automotive

- Connected driving, comfort/style/safety, electrification/powertrain

## Industrial

- Embedded systems, precision controls, medical, clean energy, machine to machine, robotics, motor control, and AIoT

**~60% of revenue**  
(58% for Q1 2025)

## Consumer

- IoT: wearables, home automation, home appliances, smart infrastructure, and charging solutions

## Communications

- Smart phones, 5G networks, and enterprise networking

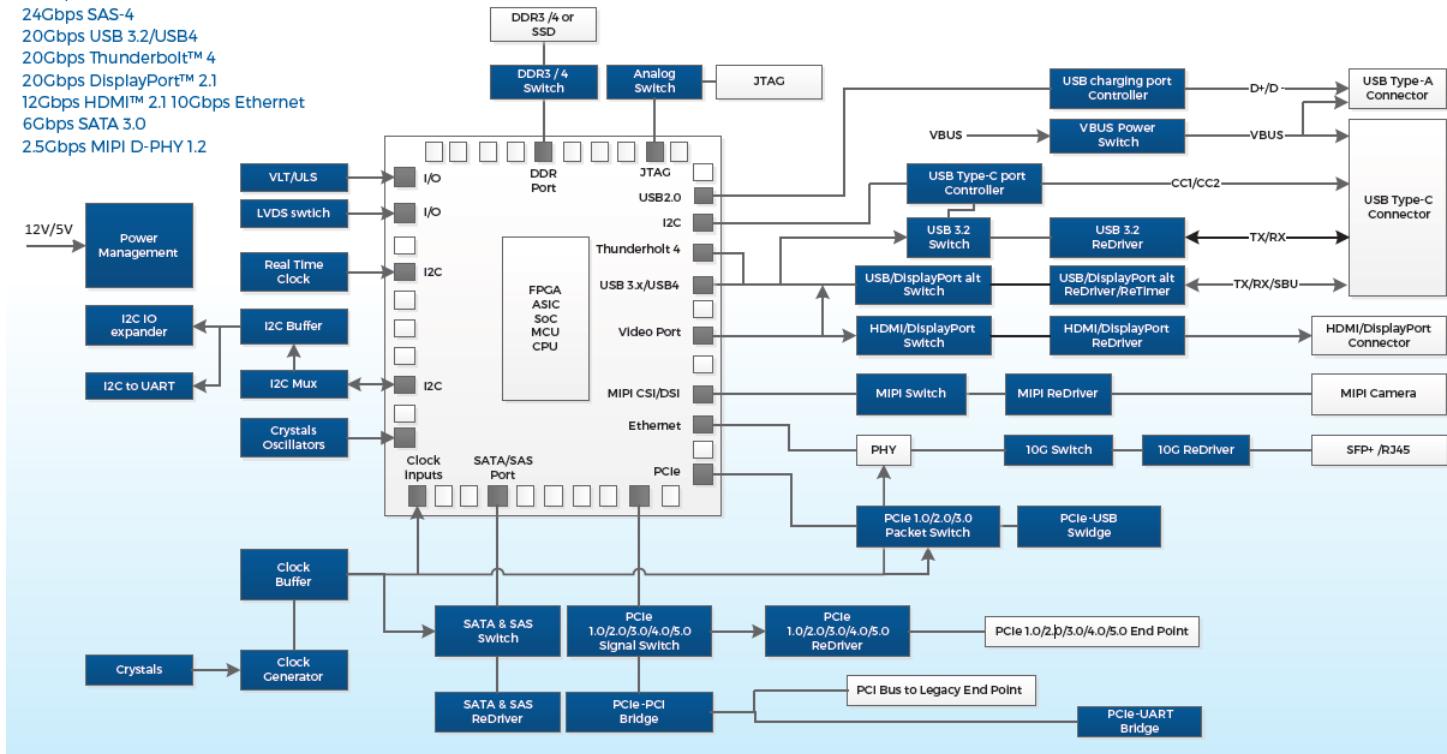
## Computing

- Cloud computing: server, AI server, storage, data centers, and edge AI

# Total Solutions Provider

Page 13

Capability up to:  
32Gbps PCIe® 5.0  
24Gbps SAS-4  
20Gbps USB 3.2/USB4  
20Gbps Thunderbolt™ 4  
20Gbps DisplayPort™ 2.1  
12Gbps HDMI™ 2.1/10Gbps Ethernet  
6Gbps SATA 3.0  
2.5Gbps MIPI D-PHY1.2



# Automotive Applications Driving Growth

Page 14

## Focus Applications:

### Connected Driving

- ADAS (Advanced Driver Assistance Systems)
- Telematics
- Infotainment Systems

### Comfort, Style, and Safety

- Lighting
  - Migration to LED and intelligent illumination
- BLDC motor / fan control
  - Migration from Brushed to Brushless DC Motors

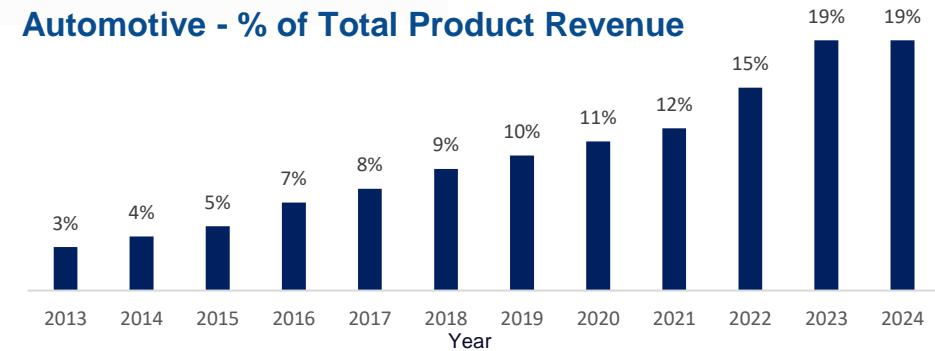
### Electrification/Powertrain

- Conventional Powertrain → Hybrid → Electrification
- Battery management
  - Move to 48V battery

## Automotive Revenue Growth

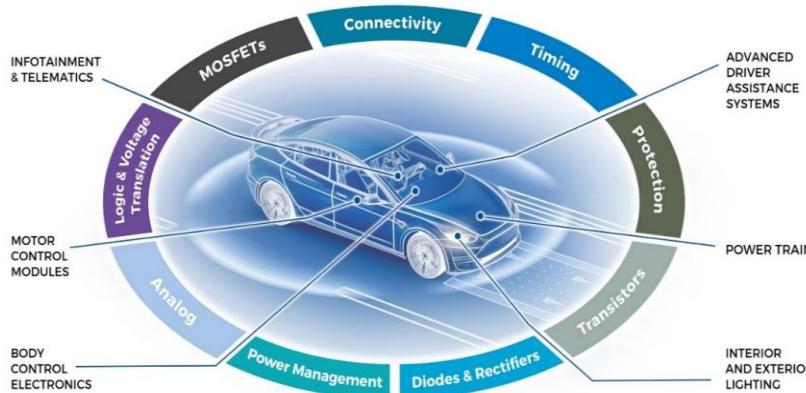


## Automotive - % of Total Product Revenue

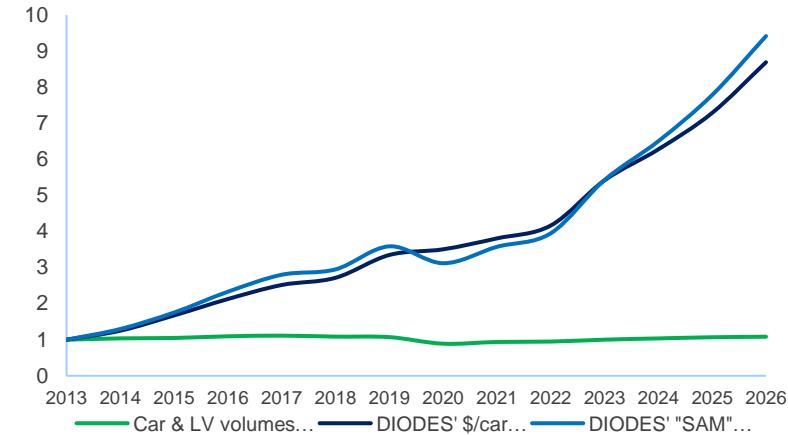


# Automotive Opportunity

Page 15



Automotive Potential Revenue	\$ / Car
Automotive Motor Control	\$53.90
Connected Driving (Infotainment, Telematics & ADAS)	\$90.44
Powertrain, Electrification & Body Control Electronics	\$50.00
Lighting – Moving to LED	\$18.91
<b>Total</b>	<b>\$213.25</b>

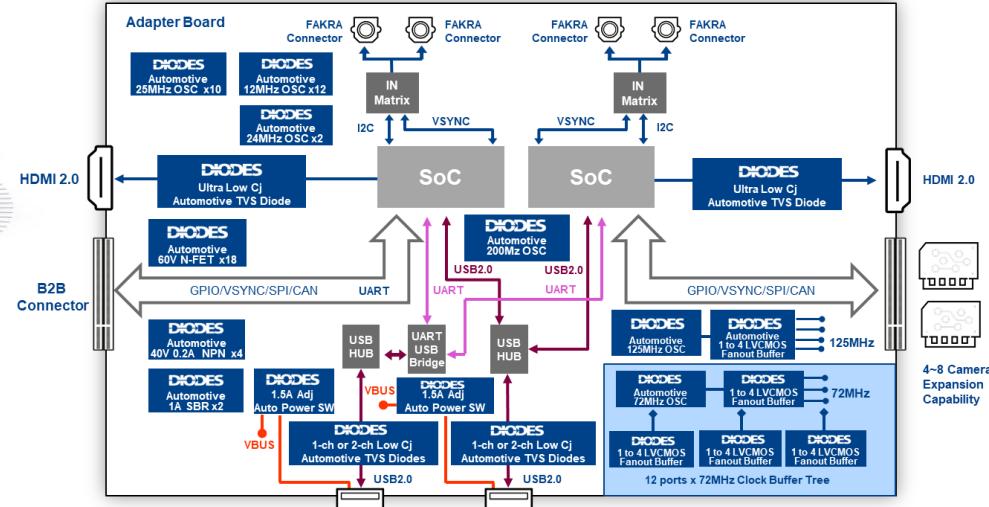


## \$ Content / Car



# Automotive Surround-View SuperCAM Platform

Page 16

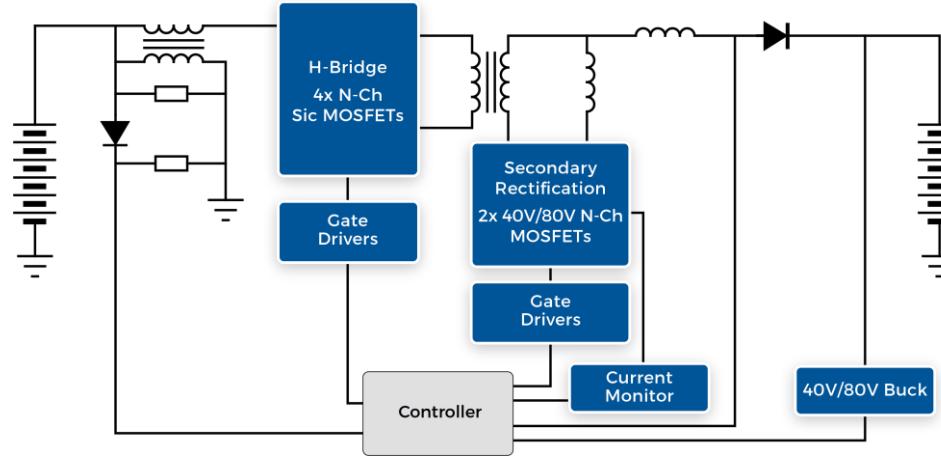


Diodes' Key Products	\$ / Box
Analog	>\$1.20
Power Management	>\$0.70
MOS/BJT	>\$3.50
Diodes and Rectifiers	>\$5.00
Timing and Connectivity	\$14.00
<b>Total</b>	<b>\$24.40</b>

- **Advanced Clock Gen, Clock Buffer, Crystal Oscillator, USB Power Switch, and Protection solutions for mission-critical need**
- **Automotive Compliant\* Products**

# EV Automotive High Voltage DC-DC Converter

Page 17

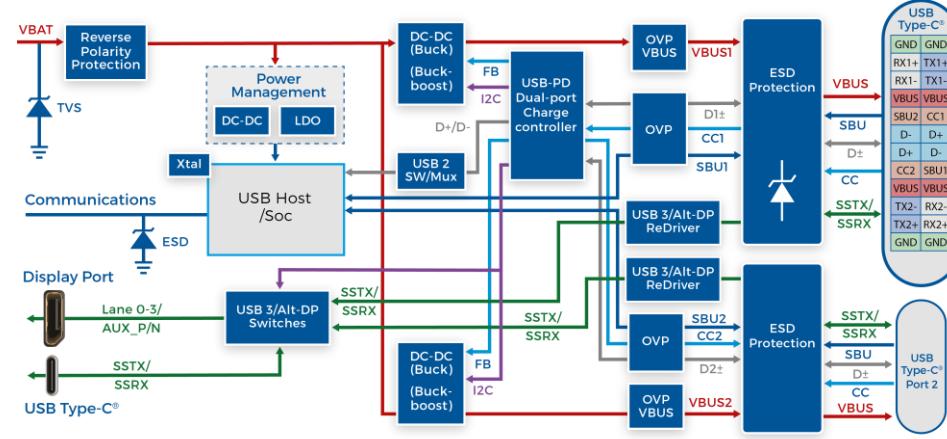


Diodes' Key Products	\$ / per car
Analog	>\$0.20
Power Management	>\$0.60
MOS/BJT	>\$21.00
Diodes and Rectifiers	>\$0.10
<b>Total</b>	<b>\$21.90</b>

- EV create the need for high-efficiency conversion of the high voltage battery to lower safe voltages
  - Converts high voltage DC (300V to 900V) to a galvanically isolated 48V or 12V DC rail
- **Diodes' Automotive Compliant\* products solution contains**
  - Silicon Carbide and Silicon MOSFET, Gate drivers, current monitors and high-performance buck converters

# Automotive Compliant USB Ports - PD Charging and Displays

Page 18



Diodes' Key Products	\$ / per car
Power Management	\$6.20
MOS/BJT	\$2.50
Diodes and Rectifiers	\$1.00
Timing and Connectivity	\$5.00
<b>Total</b>	<b>\$14.70</b>

- **USB charging is a high growth application with approximately 2 to 8 ports per vehicle**
  - USB PD is an important expansion capability → up to 100W/port
  - USB-C supports DP over USB and opens up the opportunity to share portable equipment's screen on an interior display
- **Diodes provides a system solution for USB charging including Port Controller, USB Muxes, Signal Switches, ReDrivers, Xtals, Power Management, and Protection**
- **Automotive Compliant\* product portfolio expansion is expanding the SAM further**

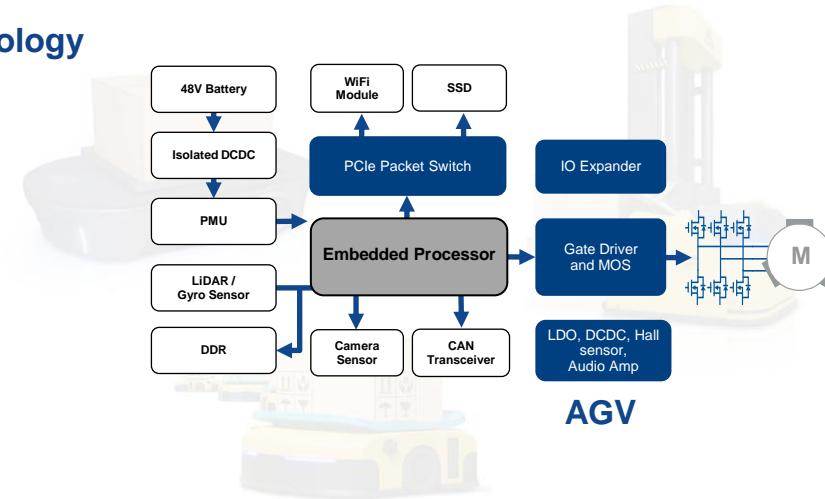
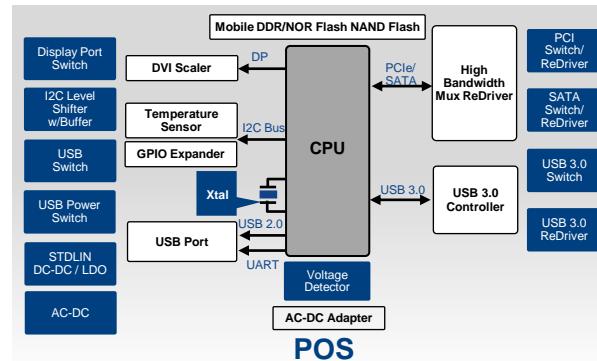
- Increasing IC content in embedded systems
- Switching and signal path for networked systems and automation
- Signal conditioning and timing for precision controls
- Industrial / motor controls, sensors, and power management for smart meters
- Green power, Energy storage
- Robotics
- Medical – home health systems to hospital equipment
- AIoT



- **M2M – Dominated by short range technology**
  - 73% are short range, mostly Wi-Fi
- **2030: connections @ 29,400 million**

## M2M – By Application

- IoT and M2M Modems
- POS, Routers, Edge Server
- On-Premise Edge Gateway
- AGV (Automated Guided Vehicle)
- AMR (Autonomous Mobile Robots)
- UAV (Unmanned Aerial Vehicle)



## Growth Opportunities:

- Power, Sensor, DC-DC
- Gate Driver, BJT, MOSFET
- XTAL and clock
- Packet switch, ReDriver, IO Expander, MIPI, and USB charging

Diodes' Key Products	\$ / AGV
Discrete	\$3.50
Analog & Power Mgmt.	\$2.20
Timing and Connectivity	\$18.00
<b>Total</b>	<b>\$23.70</b>

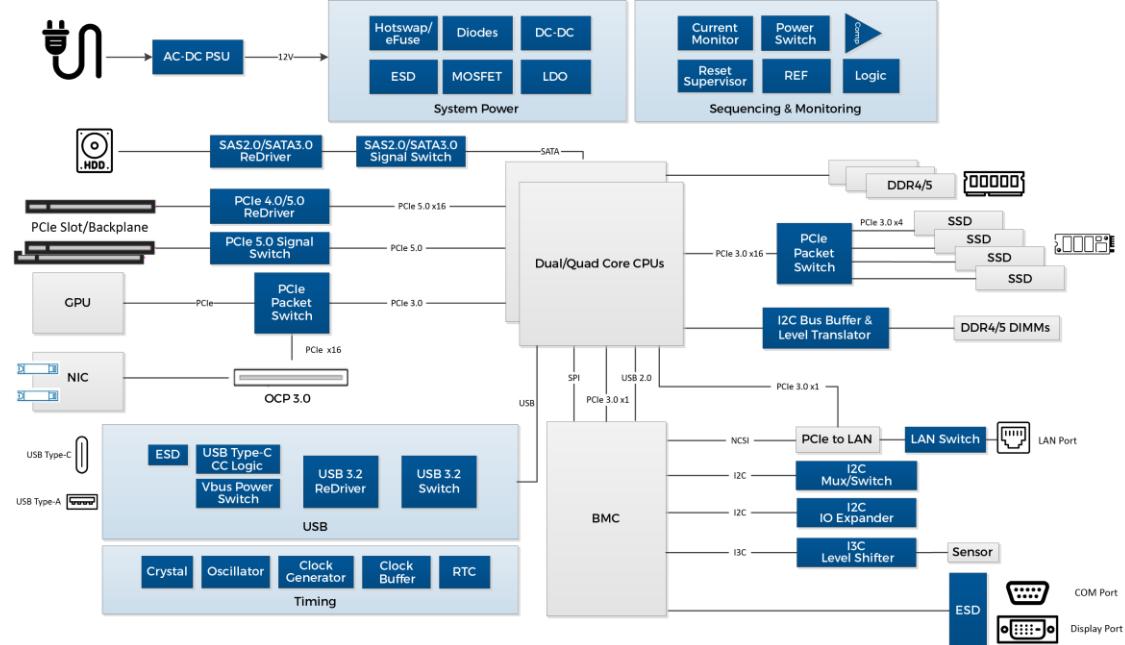
- ReDriver support for PCIe or USB connectivity
- Wide range of signal protocols: PCIe, CXL, SAS, SATA, USB
- MUX switch products for high capacity solid state storage
- Packet switches for accelerating AI computing
- Crystal oscillators for increasing clocking speeds
- LDOs, DCDC, SBR, and TVS for power management and protection



## Server Platform Solution

- Nearly all of server vendors are customers of Diodes
- Diodes' products have a strong position in this segment
  - PCIe® packet switch, PCIe, USB, & SATA ReDrivers™, Clock buffer, oscillator, I3C MUX, level shifter, IO expander, bus switch, QSPI MUX, logic IC, MOSFET, LDO, TVS, DC-DC

Diodes' Key Products	\$ / Box
Analog	\$7.00
Power Management	\$3.00
MOS/BJT	\$13.00
Timing and Connectivity	\$67.00
<b>Total</b>	<b>\$90.00</b>



# Consumer: IoT Driving Power & Connectivity Requirements

Page 23



Diodes' Key Products	\$ / Box
Analog	>\$0.20
Power Management	>\$1.30
MOS/BJT	>\$10.00
Diodes and Rectifiers	>\$5.00
Timing and Connectivity	\$3.50
<b>Total</b>	<b>\$20.00</b>

## Smart Home

- Safety and Security
- Climate Control
- Consumer Electronics
- Lighting control

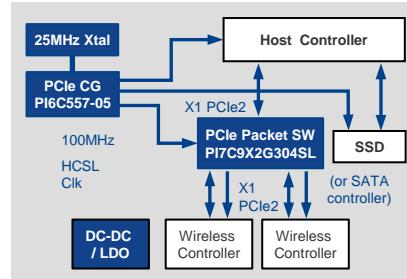
## Growth Opportunities

- Power
- LED driver
- Xtal and clock
- Packet switch

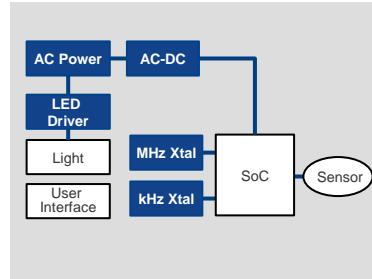


Diodes' Key Products	\$ / Box
Analog	\$0.55 ~ \$0.80
Power Management	\$1.80
MOS/BJT	\$1.10
Diodes and Rectifiers	\$0.50
Timing and Connectivity	\$3.50
<b>Total</b>	<b>\$7.70</b>

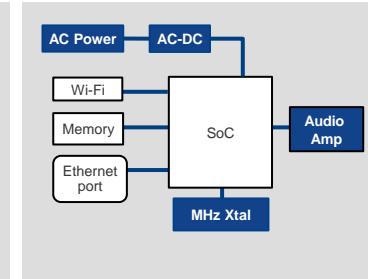
### Smart Home Gateway



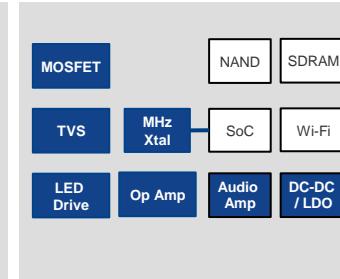
### Smart Lighting



### Smart Speaker



### Digital Assistant



## Focus Applications:

### Cloud Computing

- AI / Data Center Server

### Gateway

- Internet Gateway
- Fiber network

### Core Network, Cell Stations

- Small Cells
- Base Station
- Edge Computing Server
- Smart antenna
- Fiber network

### End Products

- Portables: Smartphone, Tablet
- Smart Car
- Consumer: VR/AR, Drone, IoT
- Telecom: 5G CPEs
- Embedded/Industrial



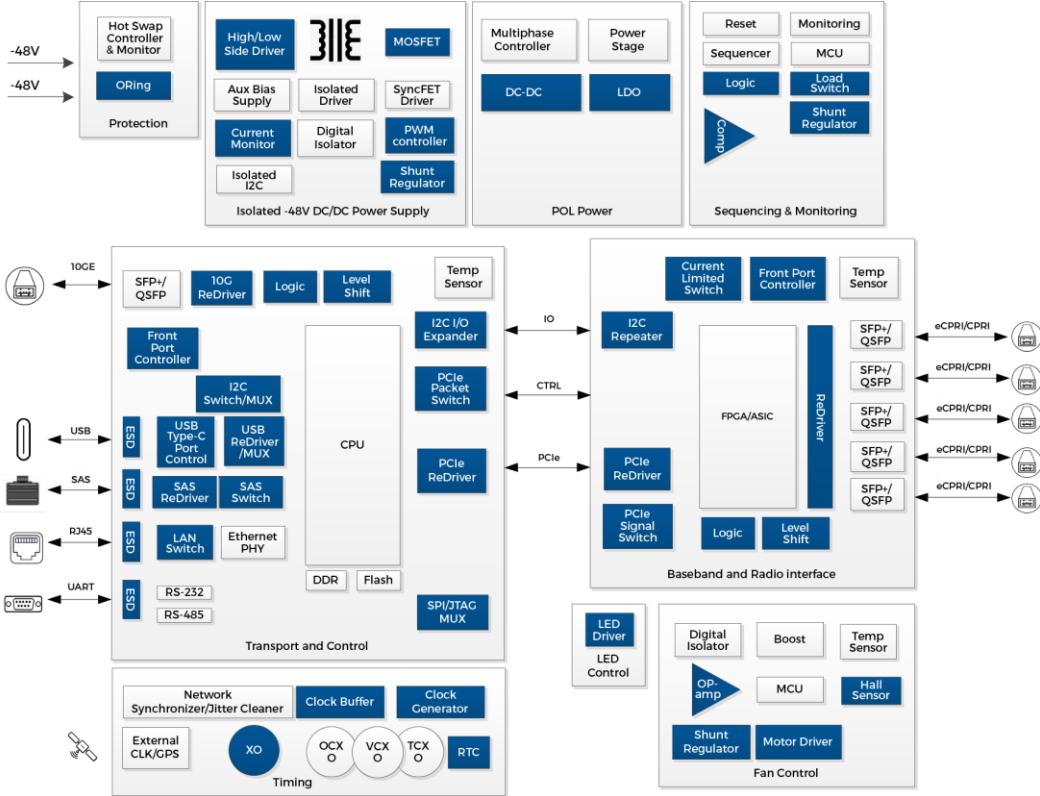
# Communications – 5G Distributed Unit

Page 26

- Advanced Solution in Signal Integrity, Signal/Bus/Power Switches and IO Expanders for diversified networking applications
- Global logistics offer a cost-effective solution with industry standard pin-outs and versatile package options

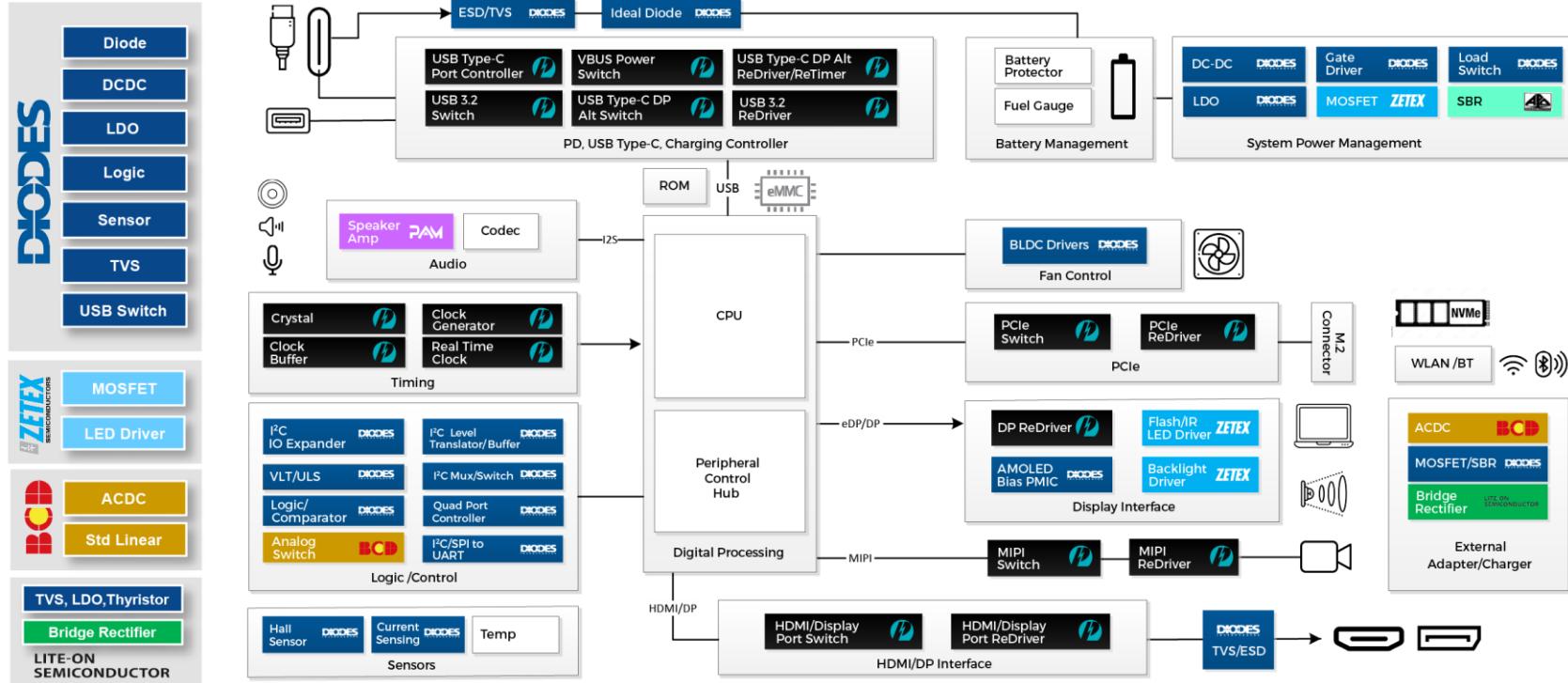


Diodes' Key Products	\$ / Box
Analog	\$12.00
Power Management & Discrete	\$4.00
Timing and Connectivity	\$25.00
<b>Total</b>	<b>\$41.00</b>



# Complete Platform Solution: Notebook

27



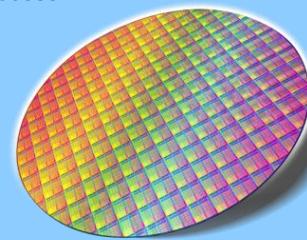
## Products



- eUSB/USB repeater and Ultra Low C<sub>j</sub> TVS for signal integrity
- Automotive Packet Switch for Telematics / ADAS, high voltage LDO and DCDC products
- Complete USB-C / Power Delivery Solutions
- Low jitter timing solution and high- speed PCIe packet switches for AI and cloud server
- High precision high bandwidth standard analog
- Ultra low power and low noise LDOs for IoT
- Lowest RDS(ON) LDMOS for battery efficiency
- IntelliFET - self-protected power switches
- Advanced protection - IO & power lines
- Comprehensive MOSFETs (8V to 800V)
- SiC Schottky Diodes and SiC MOSFET for industrial and automotive applications

## Wafer Fab

- High performance 8" MOSFET trench technology
- Advanced Epi bipolar transistor processes
- Proprietary rectifier technology
- Rugged automotive grade NMOS and PMOS
- Low power low noise SiGe BiCMOS process
- High voltage high power BCD process



## Assembly/Test

- Cu Pillar with flip chip on lead frame
- High pin count BGA, LGA, and AQFN packages
- Chip scale packaging with highest current density
- Compact QFN and DFN
- Power density PowerDI
- Small outline packages – down to 400x200  $\mu\text{m}$



## Wafer Fabs

- US: South Portland, Maine
- China: Shanghai and Wuxi
- Taiwan: Hsinchu
- UK: Greenock and Oldham
- Bipolar, BiCMOS, CMOS and BCD process
- Global footprint with strong engineering capabilities



## Assembly and Test

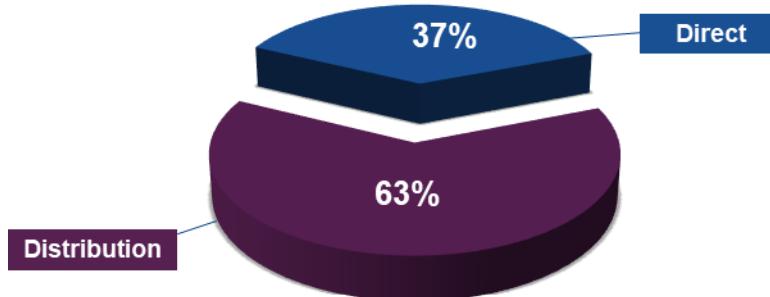
- China: Shanghai, Chengdu, and Wuxi
- Taiwan: Chongli
- Germany: Neuhaus



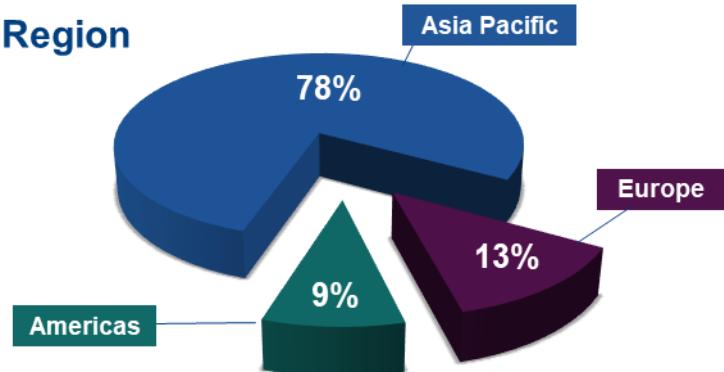
# Revenue Profile for First Quarter 2025

Page 30

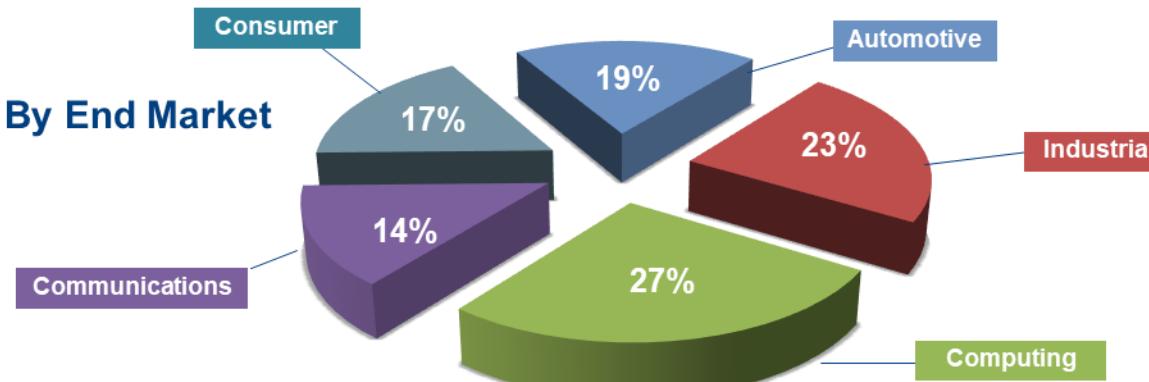
## By Channel



## By Region



## By End Market



# Income Statement – First Quarter 2025

Page 31

(\$ in millions, except EPS)	1Q24	4Q24	1Q25
Net sales	302.0	339.3	332.1
Gross profit (GAAP)	99.6	110.9	104.7
Gross profit margin % (GAAP)	33.0%	32.7%	31.5%
Net income (GAAP)	14.0	8.2	(4.4)
Net income (non-GAAP)	13.0	12.5	8.8
Diluted EPS (non-GAAP)	0.28	0.27	0.19
Cash flow from operations	(31.1)	81.8	56.7
EBITDA (non-GAAP)	48.3	40.7	26.2

# Balance Sheet

Page 32

(\$ in millions)	Dec 31, 2023	Dec 31, 2024	Mar 31, 2025
<b>Cash*</b>	329	322	349
<b>Inventory</b>	390	475	471
<b>Current Assets</b>	1,187	1,224	1,225
<b>Total Assets</b>	2,368	2,386	2,356
<b>Total Debt</b>	62	52	52
<b>Total Liabilities</b>	558	517	485
<b>Total Equity</b>	1,810	1,869	1,872

\* Cash and cash equivalents, restricted cash and short-term investments

# Second Quarter 2025 Business Outlook

Page 33

- Revenue to be ~\$355 million, +/- 3.0%
- GAAP gross margin of 31.8%, +/- 1%
- Non-GAAP operating expenses 28.0% of revenue, +/- 1%, which are GAAP operating expenses adjusted for amortization of acquisition-related intangible assets
- Net Interest income of ~\$1.5 million
- Income tax rate to be 18.0%, +/- 3%
- Shares used to calculate diluted EPS approximately **46.4 million**
- Amortization of **\$4.8 million**, after tax, for previous acquisitions is not included in these non-GAAP estimates

- **Vision: Expand shareholder value**
- **Mission: Profitability growth to drive 20%+ operating profit**
- **Next Strategic Goal: \$1B gross profit**
- **Tactics:**
  - Total system solutions sales approach and content expansion driving growth
  - Focus on key accounts
  - Increased focus on high-margin automotive, industrial, analog and discrete power solutions
  - Investment for technology leadership in target products, fab processes, and advanced packaging
  - Accelerate fab process and product qualifications



Analog and Discrete  
Power Solutions

# Thank you