

Investor Relations

Diodes Incorporated (DIOD)

Plano, TX

August 4, 2022



Safe Harbor Statement

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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 third quarter of 2022, we expect revenue to be approximately \$521 million plus or minus 3 percent; we expect GAAP gross margin to be 41.5 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 20.5 percent of revenue, plus or minus 1 percent; we expect non-GAAP net interest expense to be approximately \$3.0 million; we expect our income tax rate to be 18.5 percent, plus or minus 3 percent; shares used to calculate diluted EPS for the third quarter are anticipated to be approximately 46.2 million. Potential risks and uncertainties include, but are not limited to, such factors as: the risk that the COVID-19 pandemic may continue and have a material adverse effect on customer demand and staffing of our production, sales and administration facilities; 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 the cost, expense, and diversion of management attention associated with the LSC acquisition may be greater than we currently expect; 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 that the coronavirus outbreak or other similar epidemics may harm our domestic or international business operations to a greater extent than we currently anticipate; 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 August 4, 2022 titled, "Diodes Incorporated Reports Record Second Quarter Fiscal 2022 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.



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Dr. Keh-Shew Lu

Chairman, President and CEO

Experience:

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

Education:

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



Gurmeet Dhaliwal

Company spokesperson
Director, Investor Relations

Experience:

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

Education:

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



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About Diodes Incorporated

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Diodes delivers high-quality semiconductor products to the world's leading companies in the consumer electronics, computing, communications, industrial, and automotive markets



Vision: Profitability Growth to Maximize Shareholder Value

Our Core Values: Integrity, Commitment, Innovation



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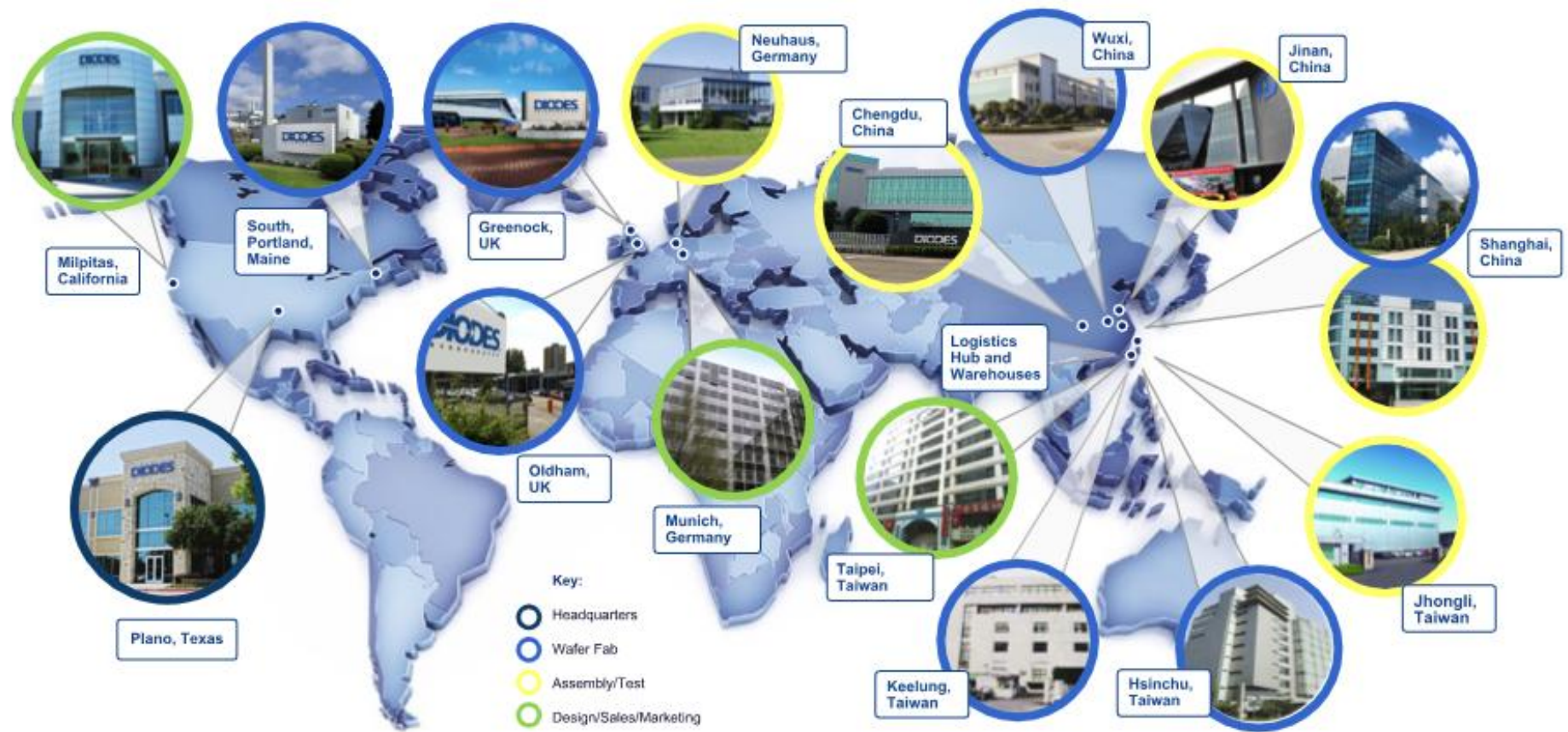
Global Operations and World-class Manufacturing & Packaging

- NASDAQ: DIOD; Founded in 1959
- Headquartered in Plano, TX; 32 locations globally
- Manufacturing in US, UK, Germany, China, and Taiwan
- ISO 9001:2015 Certified / IATF 16949:2016 Certified
- ISO 14001:2015 Certified
- Key acquisitions:
 - onsemi SPFAB – June 2022
 - Lite-On Semiconductor – Nov. 2020
 - TI Greenock fab - April 2019
 - Pericom Semiconductor – Nov. 2015
 - BCD Semiconductor - March 2013
 - Power Analog Microelectronics (PAM) - Oct. 2012
 - Zetex - June 2008
 - Advanced Power Devices - Nov. 2006
 - Anachip Corporation Taiwan - Jan. 2006
- 30 consecutive years of profitability



Global Organization

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Our Sustainability Commitment

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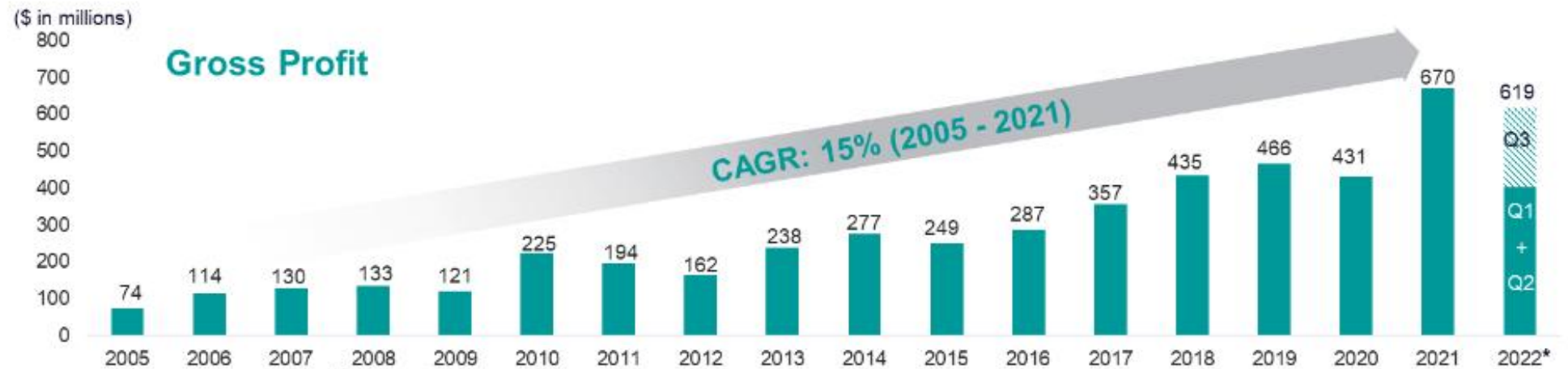
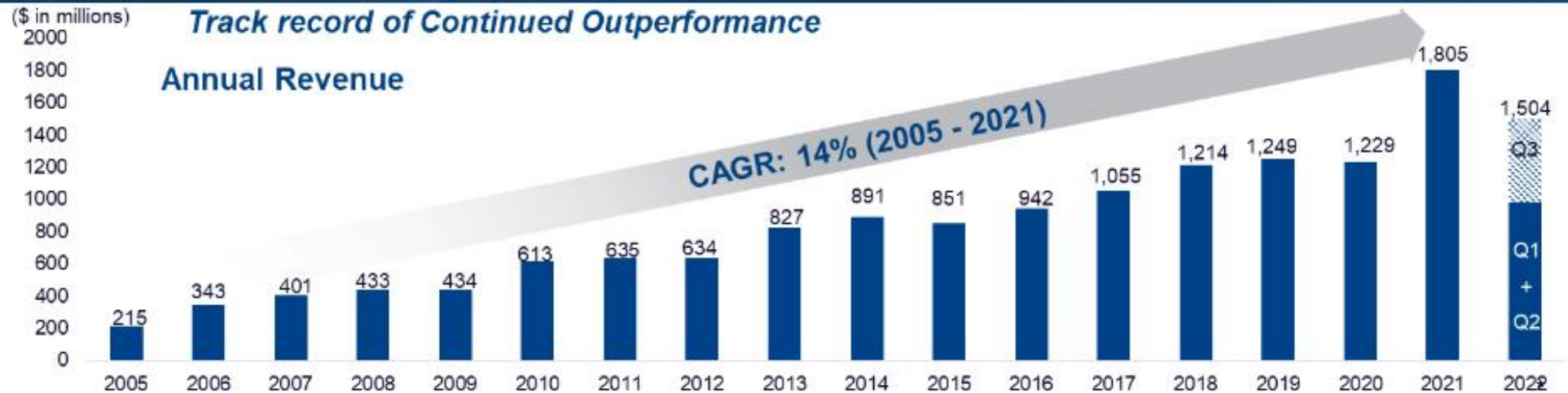
We view sustainability as a competitive advantage and have adopted a sustainability-oriented approach to assess and address related risks that may influence our operational activities, business results, and financial performance.



- Key focus areas regularly reviewed by our Board of Directors
- Instituted a cross-functional Sustainability Steering Team to address the sustainability related risks and opportunities
- The Sustainability Steering Team provides periodic updates to the Board of Directors

Expanding Profitability Growth

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* Revenue/Gross Margin for 2022 are based on first half results and Q3 guidance provided on August 4, 2022

Vision: Create Shareholder Value

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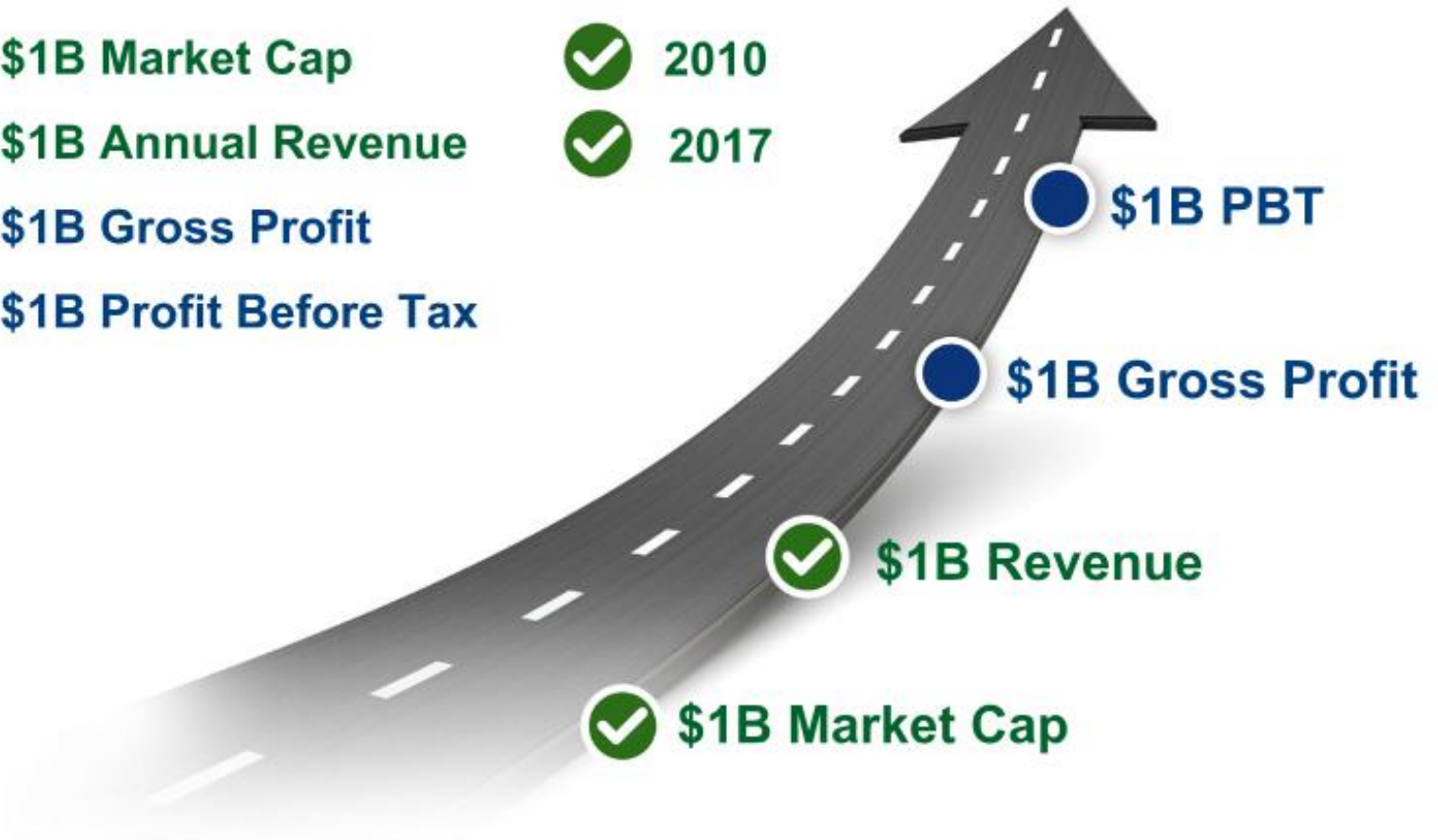
- Goal 1: \$1B Market Cap
- Goal 2: \$1B Annual Revenue
- Goal 3: \$1B Gross Profit
- Goal 4: \$1B Profit Before Tax



2010



2017



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Mission:

Profitability growth to
expand shareholder value

Strategy:

Grow Revenue to \$2.5B
at 40% Gross Margin

Goal:

\$1B Gross Profit by 2025



Targeted Market Segment Distribution Goal

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**~40% of
revenue**
(41% for 1Q2022)

Automotive

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

Industrial

- Embedded systems and precision controls, and IIoT

**~60% of
revenue**
(59% for 2Q2022)

Consumer

- IoT: wearables, home automation, smart infrastructure

Communications

- Smart phones, 5G networks, advanced protocols, and charging solutions

Computing

- Cloud computing: server, storage, data centers



Example: Industrial, Embedded Applications

Focus Applications:

Connected Driving

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

Comfort, Style, and Safety

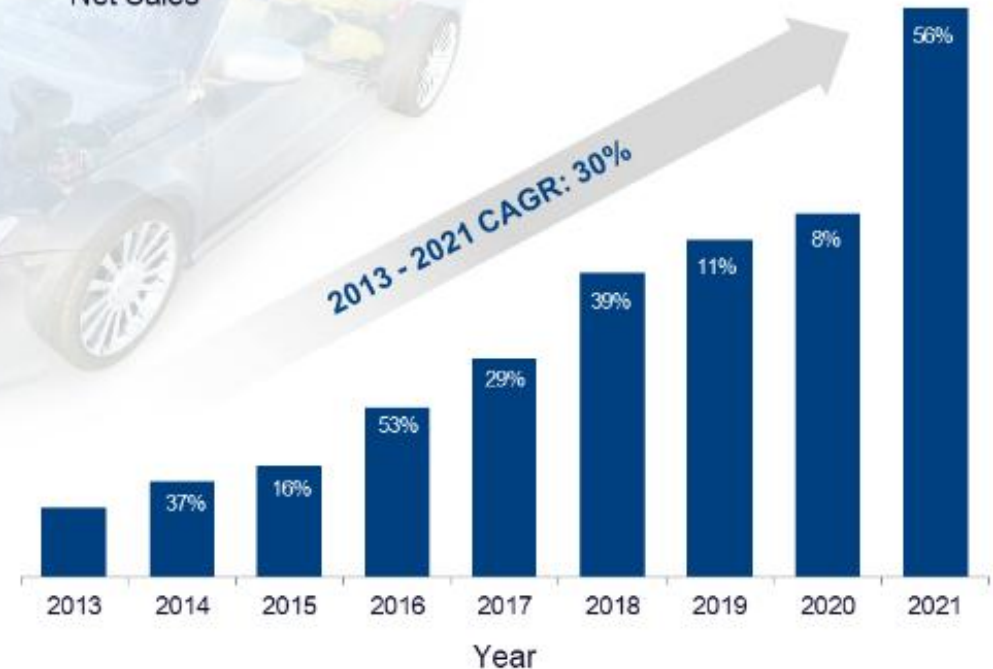
- **Lighting**
 - Migration to LED and intelligent illumination
- **BLDC motor control**
 - Migration from Brushed to Brushless DC Motors

Electrification/Powertrain

- **Conventional Powertrain → Hybrid → Electrification**
- **Power Module Inverter for EV motor**
- **Battery management**
 - Move to 48V battery

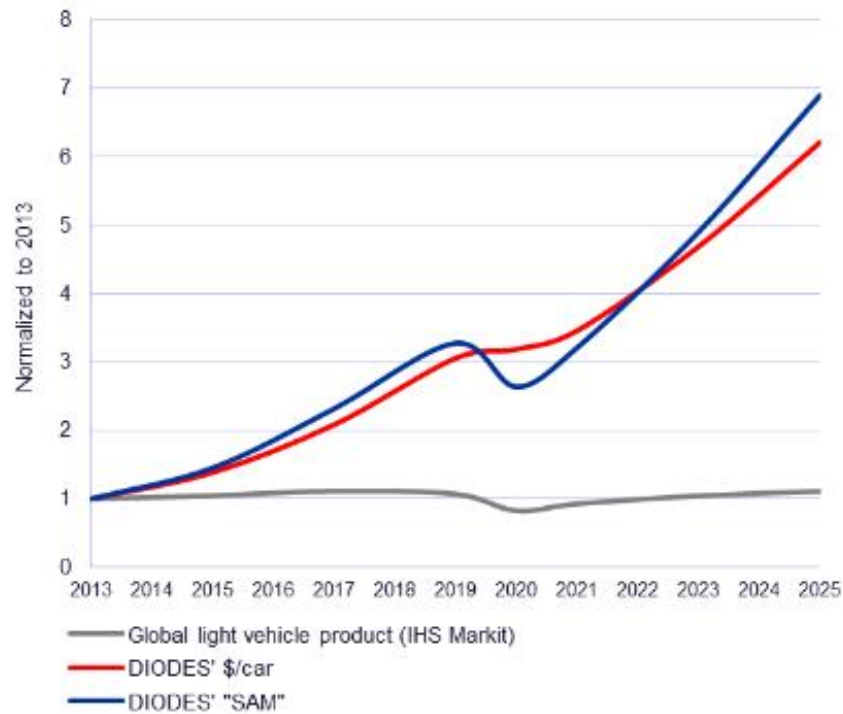
Automotive Revenue

Net Sales



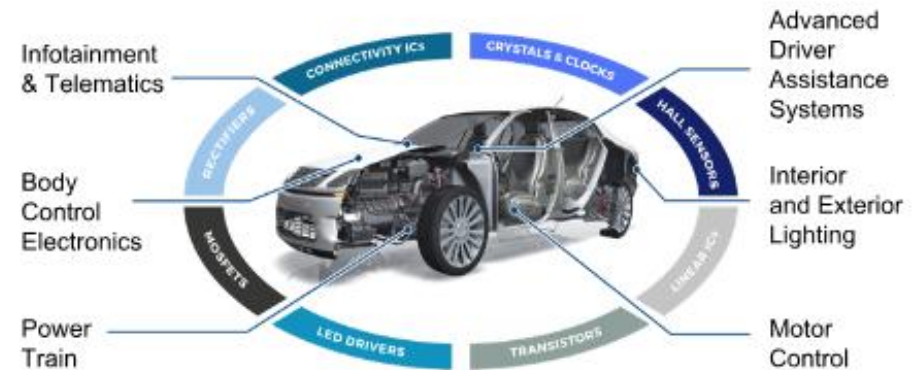
Automotive Opportunity

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Car & LV Volumes – IHS Markit 2020

Diodes' SAM = volume * \$/car



| 2022 Automotive Potential Revenue | \$ / Car |
|--|--------------|
| Automotive Motor Control | \$41 |
| Connected Driving (Infotainment, Telematics & ADAS) | \$36 |
| Powertrain, Electrification & Body Control Electronics | \$17 |
| Lighting – Moving to LED | \$13 |
| Total | \$107 |

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Automotive Surround-View SuperCAM Platform

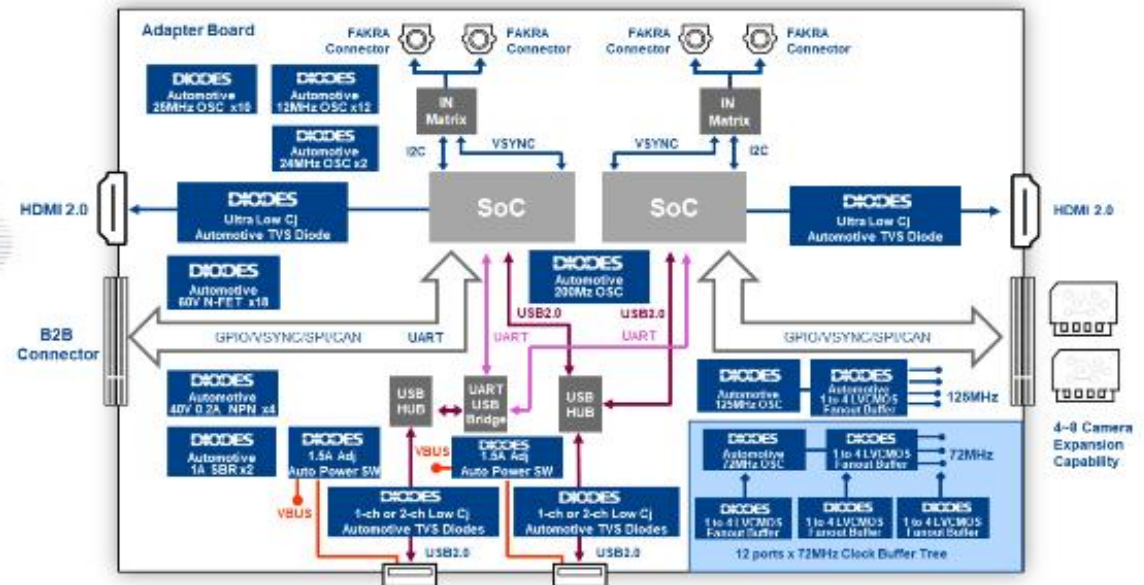
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| Diodes' Key Products | \$ / Box |
|-------------------------|----------------|
| Analog | >\$1.20 |
| Power Management | >\$0.70 |
| MOS/BJT | >\$3.50 |
| Diodes and Rectifiers | >\$5.00 |
| Timing and Connectivity | \$14.00 |
| Total | \$24.40 |

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- Advanced Clock Gen, Clock Buffers, USB Power Switch and Protection solutions for mission-critical need
- Automotive Compliant* Products

- Increasing IC content in embedded systems
- Switching and signal path for networked systems and automation
- Signal conditioning and timing for precision controls
- Motor controls, sensors, and power management for smart meters



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Industrial Revenue

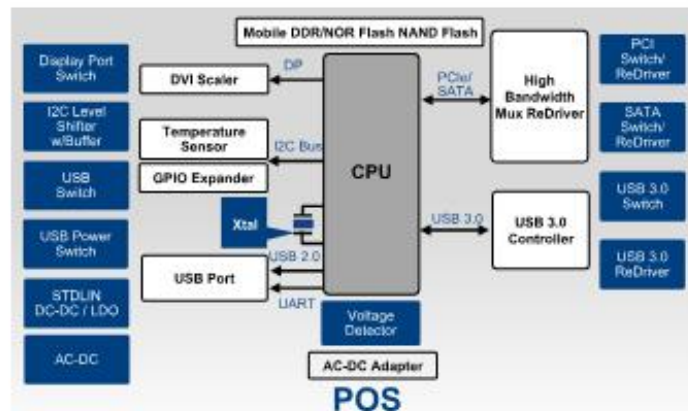
Net Sales



- **M2M – Dominated by short range technology**
 - 73% are short range, mostly Wi-Fi
- **2017: connections @ 750 million**
- **2023: connections @ 2600 million**

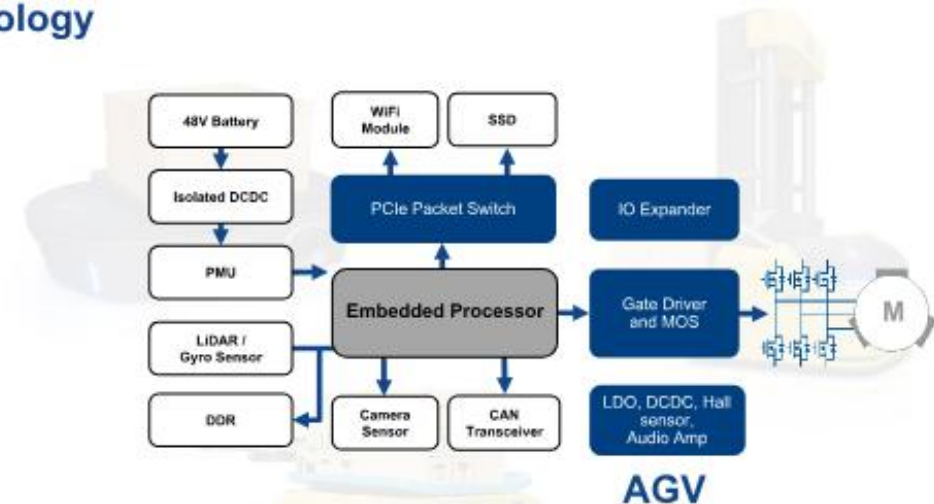
M2M – By Application

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



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Growth Opportunities:

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

| Diodes' Key Products | \$ / AGV |
|-------------------------|----------------|
| Discrete | \$3.5 |
| Analog & Power Mgmt. | \$1.6 |
| Timing and Connectivity | \$18.0 |
| Total | \$23.10 |

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



Computing Revenue

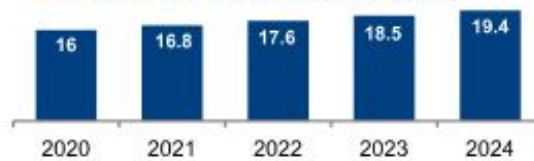
Net Sales



Server Platform Solution

- Almost all of Server vendors are Diodes' existing customers
- Diodes' products are well positioned in this segment
 - Connectivity, Signal Integrity, Timing, Standard Linear, Power Management, Power Switches, Protection or HV MOSFET / SBR devices

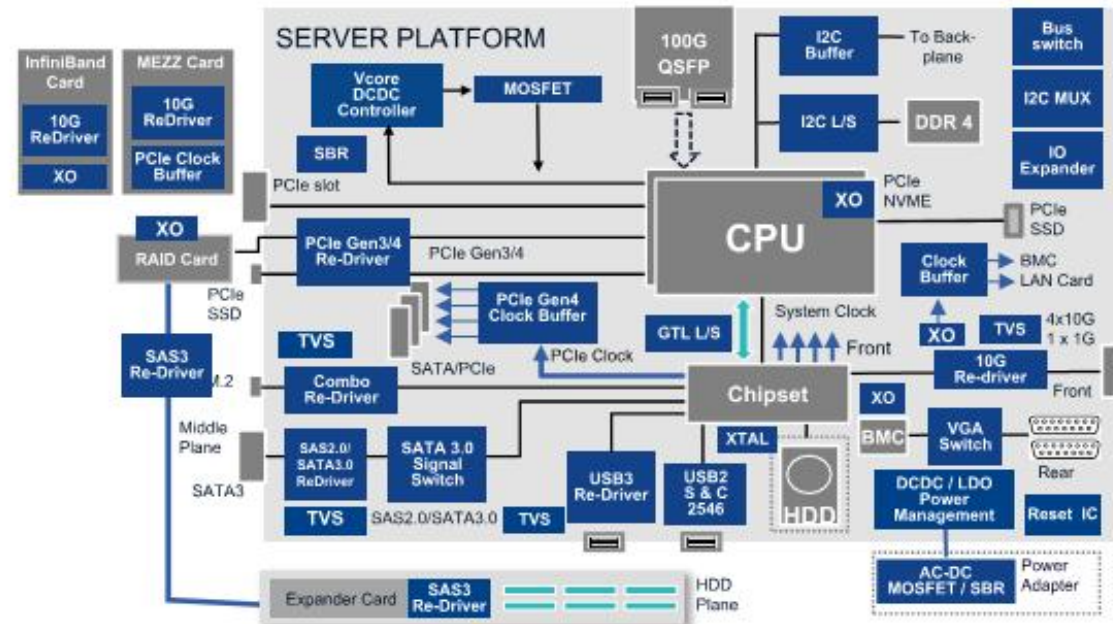
WW Server total shipments (Mu)



| Diodes' Key Products | \$ / Server |
|-------------------------|----------------|
| Analog | 2.31 |
| Discrete | 3.41 |
| Timing and Connectivity | 23.34 |
| Total | \$29.06 |



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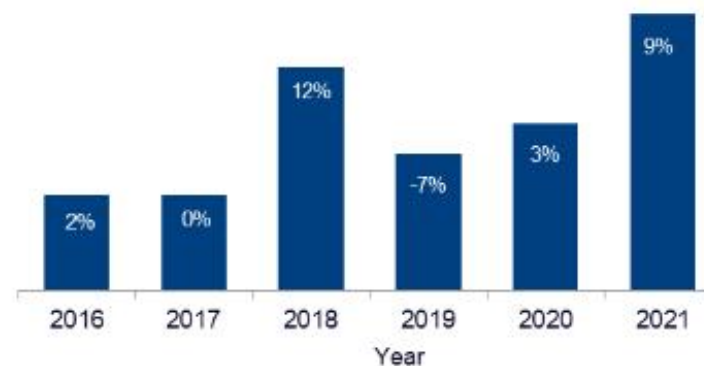
Consumer: IoT Driving Power & Connectivity Requirements

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Consumer Revenue

Net Sales



| 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 |
| Total | \$20.00 |

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Focus Applications:

Cloud Computing

- Data Center Server

Gateway

- Internet Gateway
- Fiber network

Core Network, Cell Stations

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

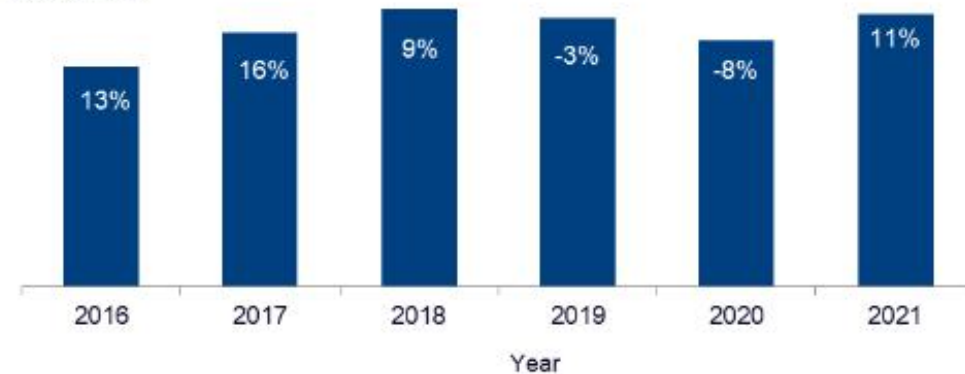
End Products

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



Communications Revenue

Net Sales



Smartphone: Efficiency, Functionality, and Control

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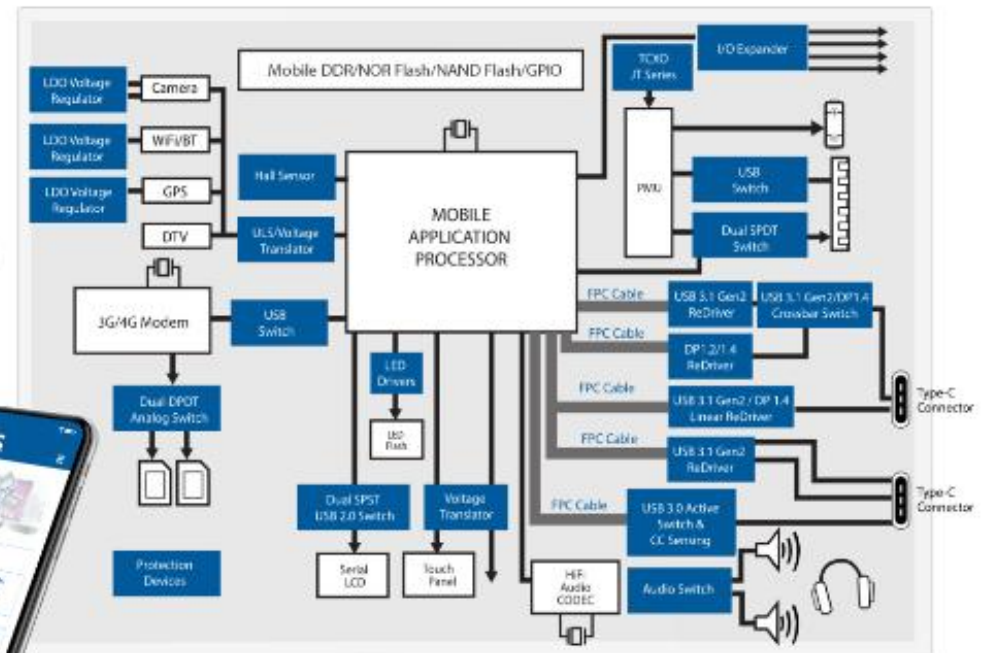
Driving Smartphone Growth

- Smart speaker/IoT rising
- AR / VR
- Foldable screens
- 5G
- Smartwatches

Growth Opportunities

- USB Type-C
- MUX
- MOSFET
- LDO, OVP, LDSW, Audio, DCDC, LED/OLED Driver, ACDC

| Diodes' Key Products | \$ / Phone |
|-------------------------|---------------|
| Analog | \$0.55 |
| Power Management | \$1.50 |
| MOS/BJT | \$0.33 |
| Diodes and Rectifiers | \$0.42 |
| Timing and Connectivity | \$3.00 |
| Total | \$5.80 |



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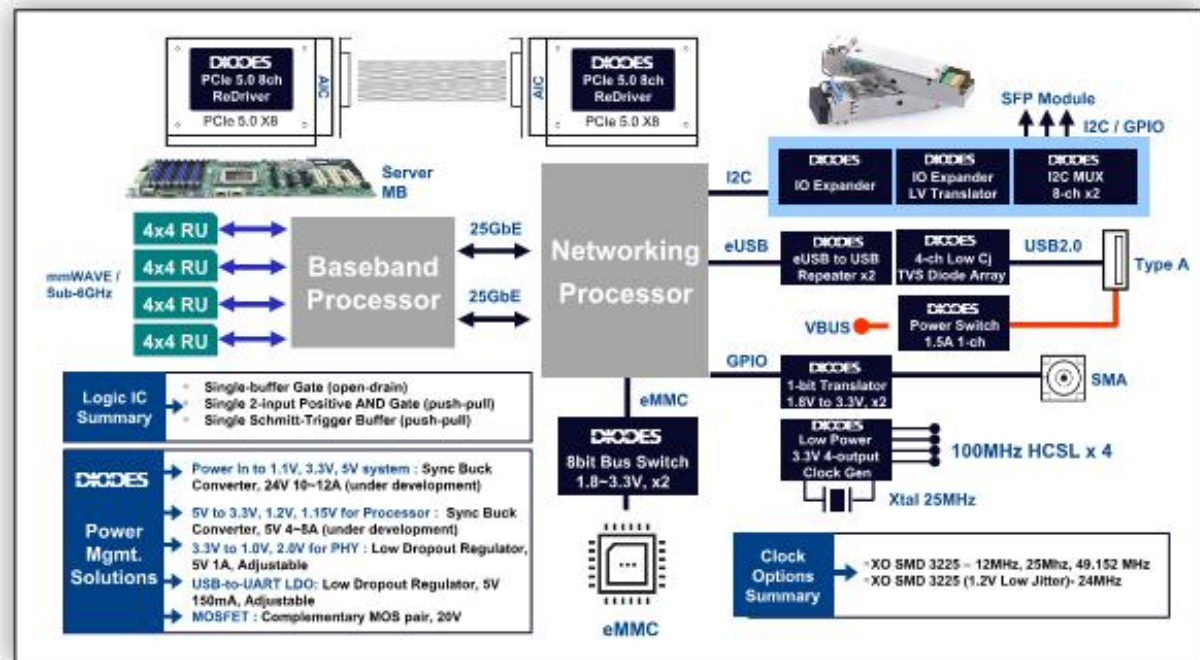
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5G Macro Cell Platform

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- Advanced Solution in Signal Integrity, Signal/Bus/Power Switches and IO Expanders for diversified networking applications
- Global Logistics provide cost-competitive solution with industry standard pin-outs and flexible package options

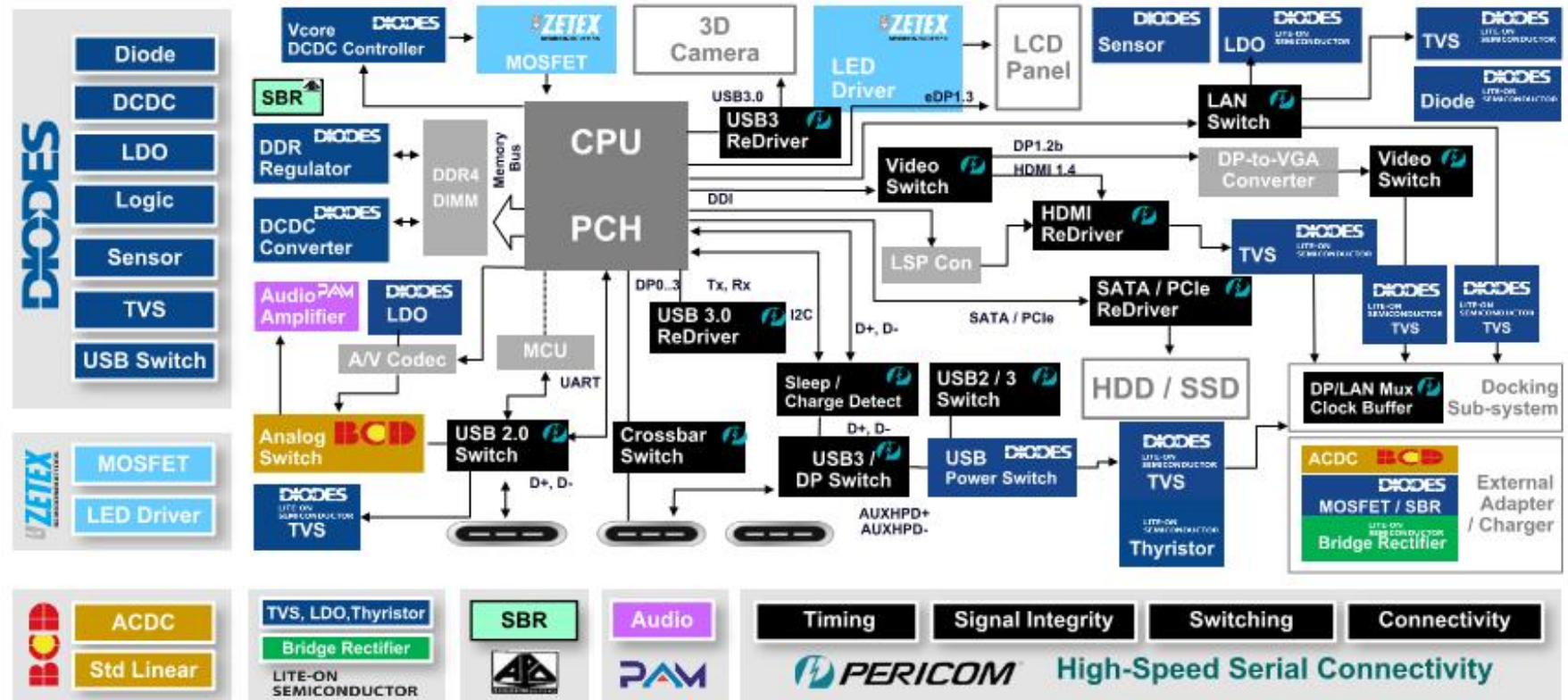
| Diodes' Key Products | \$ / Box |
|-------------------------|----------------|
| Analog | >\$0.60 |
| Power Management | \$0.90 |
| MOS/BJT | >\$0.50 |
| Timing and Connectivity | \$11.00 |
| Total | \$13.00 |



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Complete Platform Solutions: Notebooks

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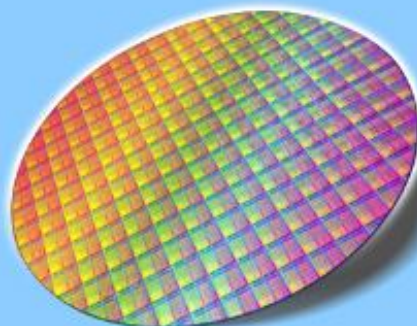
Products



- 32 Gbps ReDrivers and Switches
- Automotive Packet Switch for Telematics / ADAS
- Complete USB Type-C Solution
- Low jitter timing solution for cloud computing
- Ultra low power and low noise LDOs for IoT
- Low Cj TVS for signal integrity
- Lowest $R_{DS(ON)}$ LDMOS for battery efficiency

Wafer Fab

- High performance 8" MOSFET trench technology
- Advanced Epi bipolar transistor processes
- Proprietary rectifier technology
- Rugged automotive grade NMOS and PMOS



Assembly/Test

- Compact QFN and DFN
- Power density PowerDI
- Chip scale packaging and plating capability
- Extensive multi-chip package technology



Wafer Fabs

- US Fab: South Portland, Maine
- China fabs: Shanghai and Wuxi
- Taiwan fabs: Hsinchu and Keelung
- UK fabs: Greenock and Oldham
- Bipolar, BiCMOS, CMOS and BCD process
- Strong engineering capabilities



Packaging

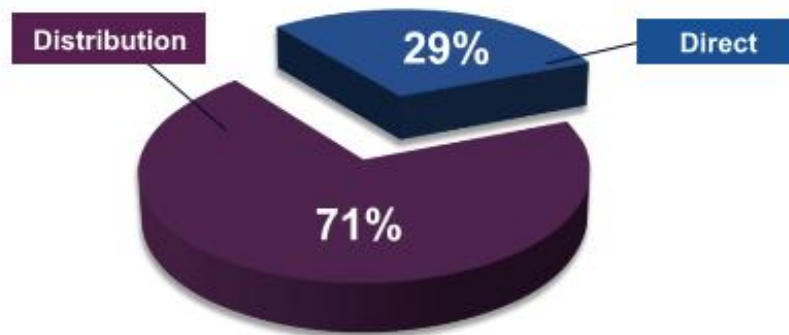
- Shanghai-based packaging with capacity over 34 billion units
- Chengdu facility has potential capacity 3X of Shanghai
- Additional facilities in Neuhaus, Germany and Wuxi, China



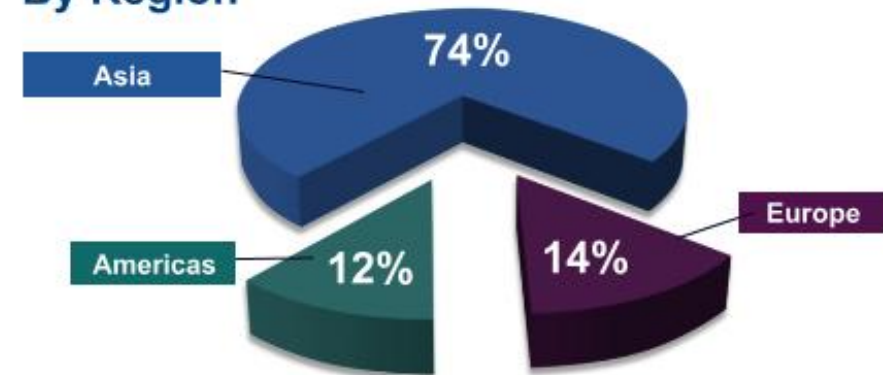
Revenue Profile for Second Quarter 2022

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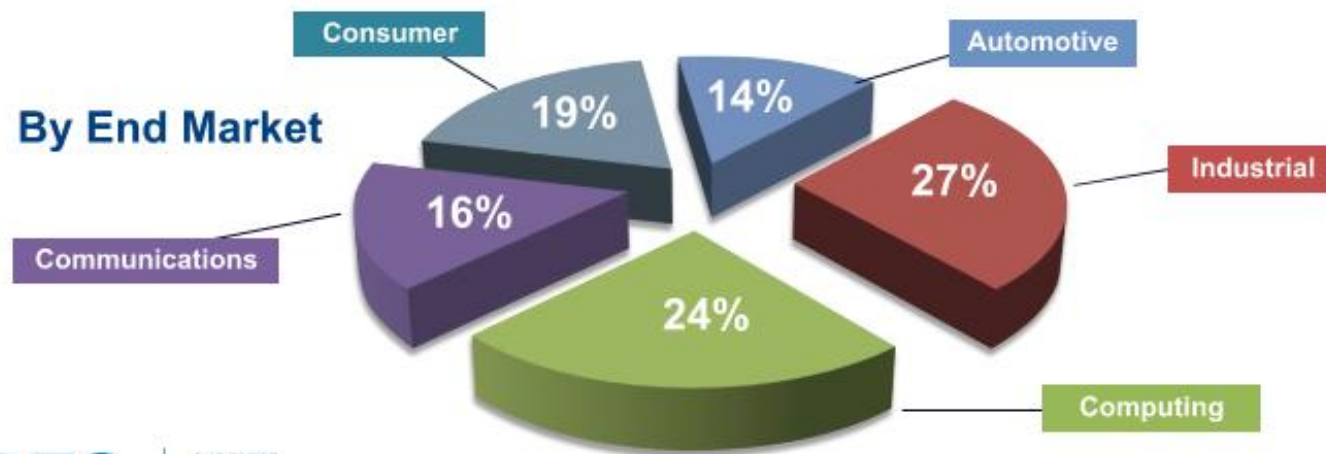
By Channel



By Region



By End Market



Income Statement – Second Quarter 2022 Record Performance

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| (\$ in millions, except per share amounts) | 2Q21 | 1Q22 | 2Q22 |
|--|-------|-------|-------|
| Net sales | 440.4 | 482.1 | 501.0 |
| Gross profit (GAAP) | 159.8 | 196.7 | 206.5 |
| Gross profit margin % (GAAP) | 36.3% | 40.8% | 41.2% |
| Net income (GAAP) | 55.4 | 72.7 | 80.2 |
| Net income (non-GAAP) | 54.6 | 80.3 | 86.9 |
| Diluted EPS (non-GAAP) | 1.20 | 1.75 | 1.90 |
| Cash flow from operations | 93.9 | 72.3 | 85.0 |
| EBITDA (non-GAAP) | 99.4 | 118.2 | 130.4 |



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Balance Sheet

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| (\$ in millions) | Dec 31, 2020 | Dec 31, 2021 | June 30, 2022 |
|---------------------------------------|--------------|--------------|---------------|
| Cash plus short-term investments | 327 | 373 | 316 |
| Inventory | 307 | 349 | 371 |
| Current Assets | 1,024 | 1,188 | 1,215 |
| Total Assets | 1,980 | 2,194 | 2,285 |
| Total Debt (L/T, S/T, Line of Credit) | 451 | 301 | 265 |
| Total Liabilities | 963 | 892 | 868 |
| Total Equity | 1,016 | 1,303 | 1,417 |

Third Quarter 2022 Business Outlook

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- **Revenue to be ~\$521 million, +/- 3.0%**
Order demand and backlog remains very strong going into the third quarter
- **GAAP gross margin of 41.5%, +/- 1%**
on a consolidated basis
- **Non-GAAP operating expenses 20.5% of revenue, +/- 1%**, which are GAAP operating expenses adjusted for amortization of acquisition-related intangible assets
- **Net Interest expense of ~\$3.0 million**
- **Income tax rate to be 18.5%, +/- 3%**
- Shares used to calculate diluted EPS approximately **46.2 million**
- Purchase accounting adjustments related to amortization of acquisitions-related intangible assets of \$3.2 million, after tax, for previous acquisitions is not included in these non-GAAP estimates



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**Guidance as provided on May 4, 2022*

- **Vision: Expand shareholder value**
- **Mission: Profitability growth to drive 20% operating profit**
- **Next Strategic Goal: \$1B gross profit**
- **Tactics:**
 - Increased focus on high-margin automotive, industrial, and Pericom products
 - Investment for technology leadership in target products, fab processes, and advanced packaging
 - System solutions to drive business expansion



Thank you

www.diodes.com