

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of
the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): January 14, 2020

DIODES INCORPORATED
(Exact name of Registrant as Specified in Its Charter)

Delaware
(State or Other Jurisdiction
of Incorporation)

002-25577
(Commission
File Number)

95-2039518
(IRS Employer
Identification No.)

4949 Hedgcoxe Road, Suite 200, Plano, TX
(Address of Principal Executive Offices)

75024
(Zip Code)

Registrant's Telephone Number, Including Area Code: (972) 987-3900

Not Applicable
(Former Name or Former Address, if Changed Since Last Report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instructions A.2. below):

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, Par Value \$0.66 2/3	DIOD	The NASDAQ Stock Market LLC

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Item 8.01**Other Events.**

From time to time, Diodes Incorporated (the "Company") may give corporate presentations to its customers, suppliers and other related interested parties. Copies of the Company's corporate presentation slides, updated on January 14, 2020, are attached herewith as Exhibit 99.1.

Forward-Looking Statements

The Presentation attached to this Current Report on Form 8-K as Exhibit 99.1 contains forward-looking statements that involve future risks and uncertainties as contemplated by the safe harbor provided by the Private Securities Litigation Reform Act of 1995. All statements, other than statements of historical facts, included in Exhibit 99.1 should be regarded as "forward-looking statements" and Exhibit 99.1 contains a more detailed listing of the risks and uncertainties associated with those forward-looking statements. Diodes undertakes no obligation to update publicly any forward-looking statements, whether as a result of new information, future events or otherwise.

Item 9.01**Financial Statements and Exhibits.****(d) Exhibits.**

<u>Exhibit Number</u>	<u>Description</u>
99.1	Corporate Presentation Slides
104	Cover Page Interactive Data File (embedded within the Inline XBRL document).

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Dated: January 14, 2020

DIODES INCORPORATED

By /s/ Brett R. Whitmire
Brett R. Whitmire
Chief Financial Officer



22nd Annual Needham Growth Conference

New York, NY

January 14th, 2020



www.diodes.com

Any statements set forth herein 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 forward-looking statements include, but are not limited to, statements regarding updates to Diodes Incorporated's fourth quarter 2019 business outlook as of November 4, 2019, which include the following: expect revenue to be approximately \$300 million, plus or minus 2.0 percent, which at the mid-point represents annual growth of 2.8 percent even in the overall weak market environment and continued outperformance of our served market; expect GAAP gross margin to be 36.5 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 22.0 percent of revenue, plus or minus 1 percent; expect net interest expense to be approximately \$2.0 million; expect tax rate to be 21 percent, plus or minus 3 percent; shares used to calculate diluted EPS for the second quarter are anticipated to be approximately 52.5 million; purchase accounting adjustments for Pericom and previous acquisitions of \$3.7 million after tax are not included in these non-GAAP estimates; and other statements identified by words such as "estimates," "expects," "projects," "plans," "will," and similar expressions.

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 operation costs, labor shortages, higher tax rates, and our joint venture prospects; the risk that we may not continue our share repurchase program; 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 November 4, 2019 titled, "Diodes Incorporated Reports Third Quarter 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.



DISCRETE
ANALOG
LOGIC
MIXED-SIGNAL

www.diodes.com

Dr. Keh-Shew Lu

President and CEO

Diodes Incorporated
Texas Instruments

Since 2005
27 years



Experience:

- Senior Vice President of TI Worldwide Analog and Logic
- President of Texas Instruments – Asia

Education:

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



Laura Mehrl (冯蓉媿)

Company spokesperson,
Director of Investor Relations

Since May 2010

Experience:

- Director of Investor Relations, Diodes Incorporated, Plano, Texas
- Senior Business Development Manager, STMicroelectronics, Carrollton, Texas
- Sales Director for Analog Devices Inc., Shanghai, China
- Product Marketing Manager at Texas Instruments (TI), Dallas, Texas
- Senior Engineer at Lattice Semiconductor Inc., Hillsboro, Oregon
- Wafer fab design engineer and product engineer at TI, Lubbock, Texas

Education:

- MBA with concentration in International Marketing, Texas Tech University
- BS in Electrical and Computer Engineering, University of Iowa



A leading global manufacturer and supplier of high-quality **application specific, standard products** within the broad discrete, logic, analog and mixed-signal markets, serving the **Automotive, Industrial, Consumer, Communications, and Computing** segments.



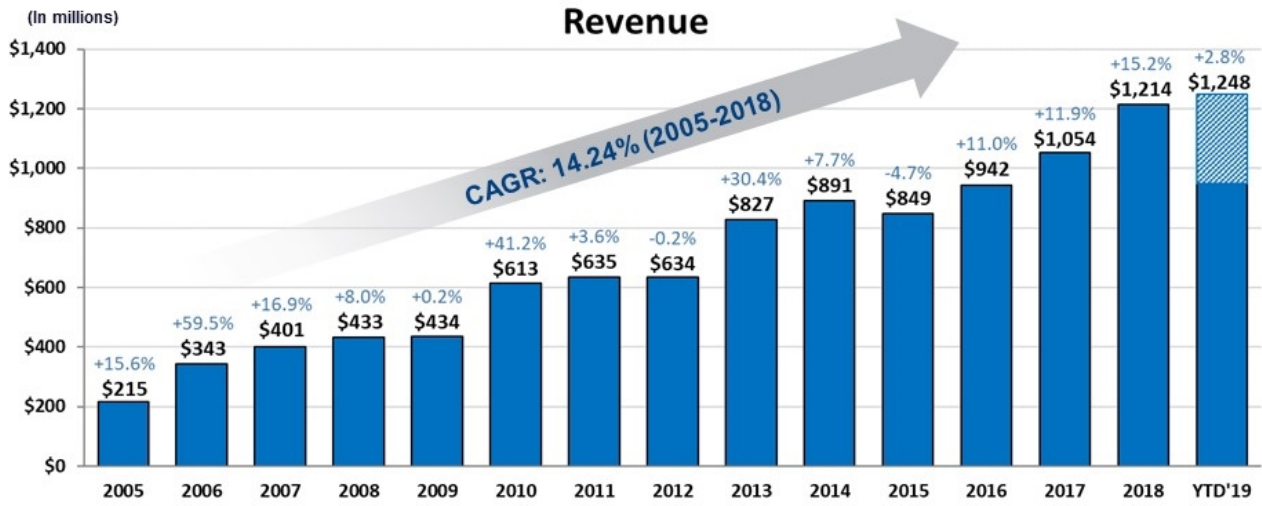
Global Operations and World-class Manufacturing & Packaging

- NASDAQ: DIOD
- Founded in 1959
- Headquartered in Plano, TX; 21 locations globally
- Manufacturing in UK, Germany, China, and Taiwan
- ISO9001:2008 Certified / TS16949:2009 Certified
ISO14001 Certified
- Key acquisitions:
 - Anachip Corporation, Taiwan Jan. 2006
 - Advanced Power Devices Nov. 2006
 - Zetex June 2008
 - Power Analog Microelectronics (PAM) Oct. 2012
 - BCD Semiconductor Mar. 2013
 - Pericom Semiconductor Nov. 2015
 - TI Greenock fab April 2019
- Over 7320 employees worldwide
- 27 consecutive years of profitability





Record Annual Revenue in 2018; Projected to Achieve New Record in 2019



*YTD'19 based on mid-point of 4Q19 guidance as provided on November 4, 2019



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

✓ 2010

✓ 2017

● \$1B PBT

● \$1B Gross Profit

✓ \$1B Revenue

✓ \$1B Market Cap



Mission:

Profitability growth to
expand shareholder value

Strategy:

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

Goal:

\$1B Gross Profit by 2025



	2018		2025	Implied CAGR
Revenue	\$1.2B	→	2.5B	10.9%
Gross Margin	35%	→	40%	
Gross Profit	\$435M	→	\$1B	12.6%
R&D%	5%	→	7%	
SG&A%	15%	→	13%	
Op. Profit	15%	→	20%	

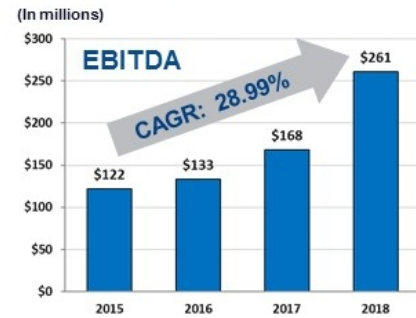


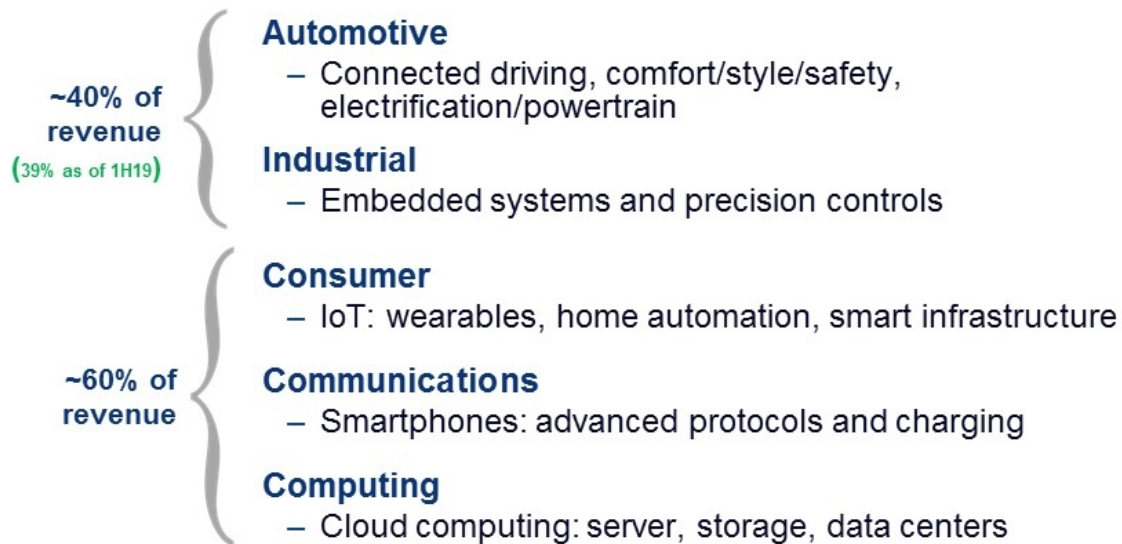
Gross Profit Target of \$1B in 2025



Solid Operating Leverage:

- Managing OpEx to target model of 20% of revenue
- CapEx remains within target model of 5-9% of revenue
- Generating record earnings and cash flow





Focus Applications:

Connected Driving

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

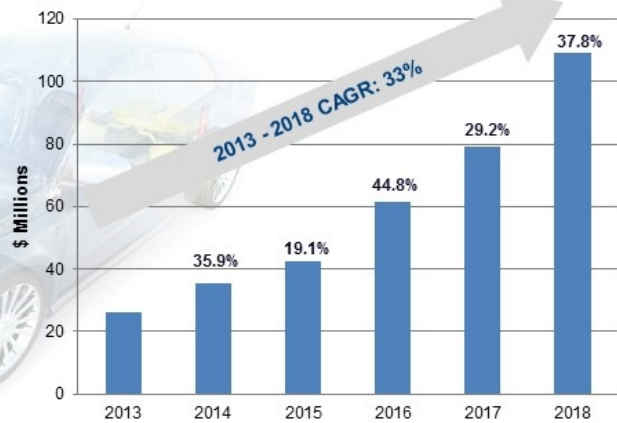
Comfort, Style and Safety

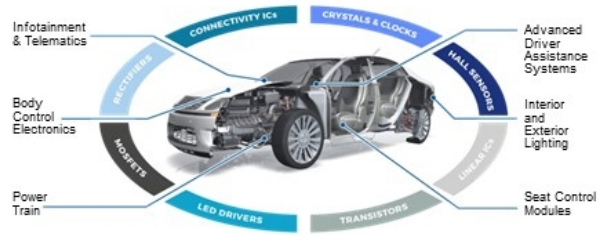
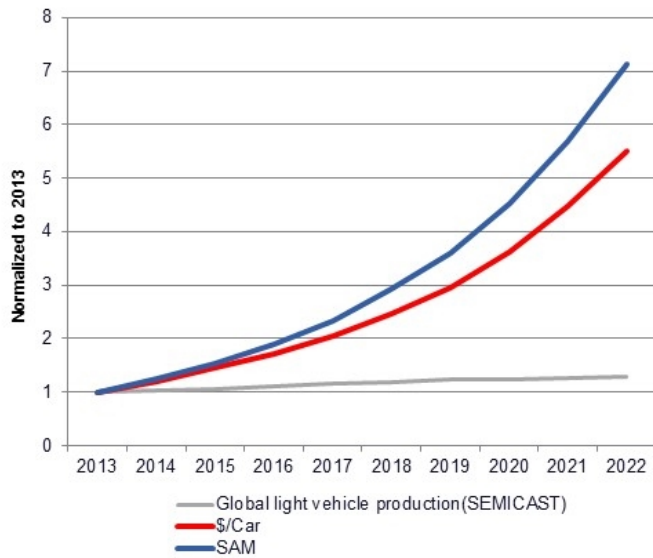
- Lighting
 - Migration to LED and intelligent illumination
- BLDC motor control
 - Migration from Brushed to Brushless DC Motors

Electrification/Powertrain

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

Diodes Automotive Revenue





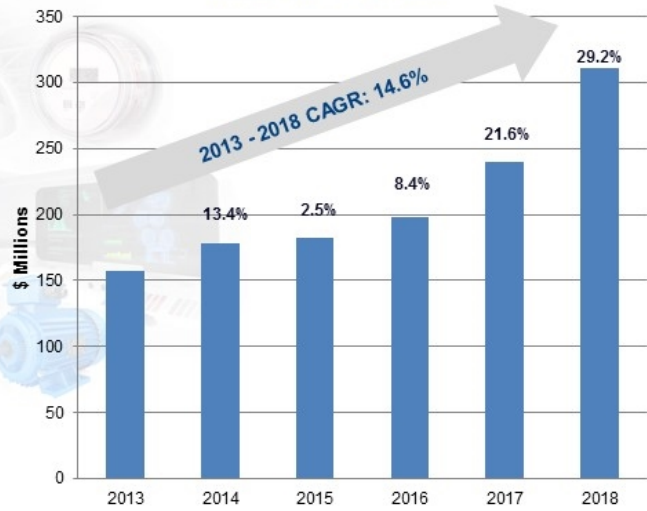
Potential Revenue in Automotive	\$/ Car
Brushless DC (BLDC) Motors	\$37.25
Connected Driving	\$25.82
Powertrain and Battery Management	\$14.72
Lighting – Moving to LED	\$7.53
Total	\$85.32



- 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

For the 1H2019, 29% of total revenue is from Industrial market

Industrial Revenue



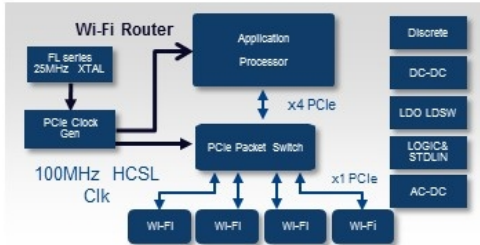
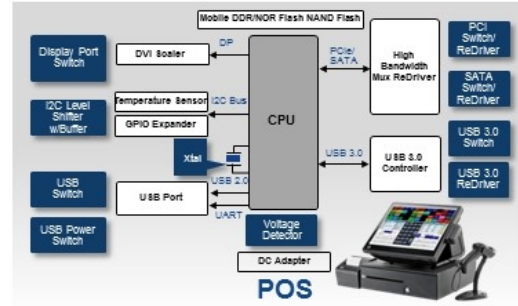
- **M2M – Dominated by short range technology**
 - 73% are short range, mostly Wi-Fi
- **2017: connections @ 750 million**
- **2023: connections @ 2600 million**

M2M – By Product

- IoT and M2M Modems
- Routers
- POS
- Wireless beacons

M2M – By Application

- Smart Infrastructure
- POS
- Manufacturing / Industrial



Growth Opportunities:

- Power
- XTAL and clock
- Packet switch

Diodes Key Products	\$/ Device
Analog	\$0.20
Power Management	\$1.30
MOS/BJT	\$3.39
Diodes and Rectifiers	\$2.99
Timing and Connectivity	\$3.50
Total	\$11.38



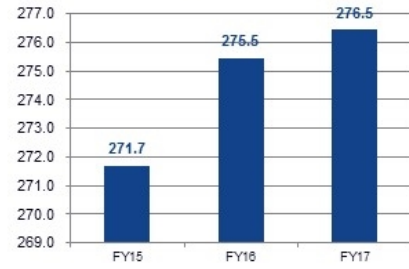


Smart Infrastructure Consumer & Home

Wearables Asset Tracking

Retail Enterprise Security & Surveillance

Consumer (\$M)



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



Smart Home – up to 477Mu

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

Growth Opportunities

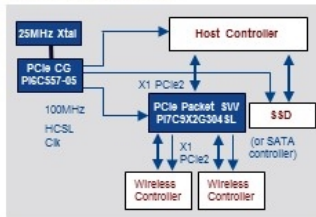
- Power
- LED driver
- Xtal and clock
- Packet switch

Diodes Key Products	\$ / Box
Analog	\$0.25 ~ \$0.40
Power Management	\$1.80
MOS/BJT	\$1.10
Diodes and Rectifiers	\$0.50
Timing and Connectivity	\$3.50
Total	\$7.30

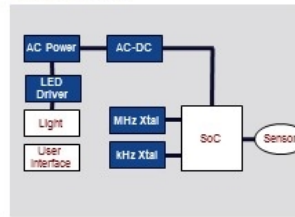
World market for connected home devices (excluding energy and controls) Unit Shipments, 2015 - 2020



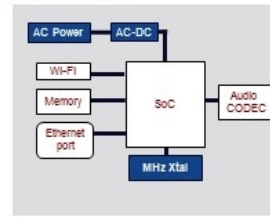
Smart Home Gateway



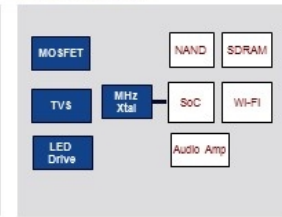
Smart Lighting



Smart Speaker



Digital Assistant



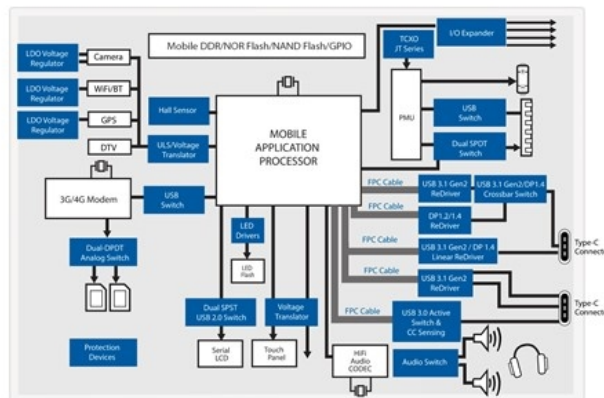
Driving Smartphone Growth

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

Growth Opportunities

- 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



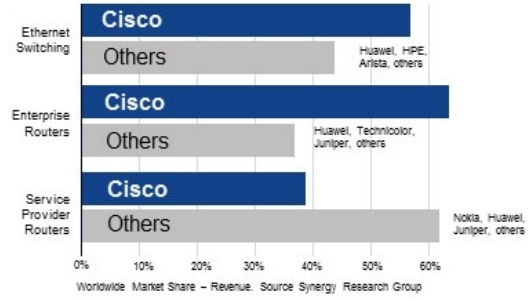
- WW enterprise and service provider router market grew 4% in 2017 to \$12.5B
- Continues to exhibit healthy growth, driven by network refreshes and investments in the fast-growing campus and datacenter segments

Growth Opportunities

- Power
- Xtal XO, and clock
- Packet switch
- ReDriver



Switching & Router Market Leaders



Diodes Key Products	\$ / Router
Analog	\$0.20
Power Management	\$0.30
MOS/BJT	\$3.70
Diodes and Rectifiers	\$2.10
Timing and Connectivity	\$13.00
Total	\$19.30

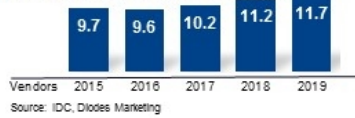
- ReDriver support for USB connectivity
- Wide range of signal protocols: PCIe, SAS, SATA, GbE, USB
- MUX products for high capacity solid state storage
- Crystal oscillators for increasing clocking speeds



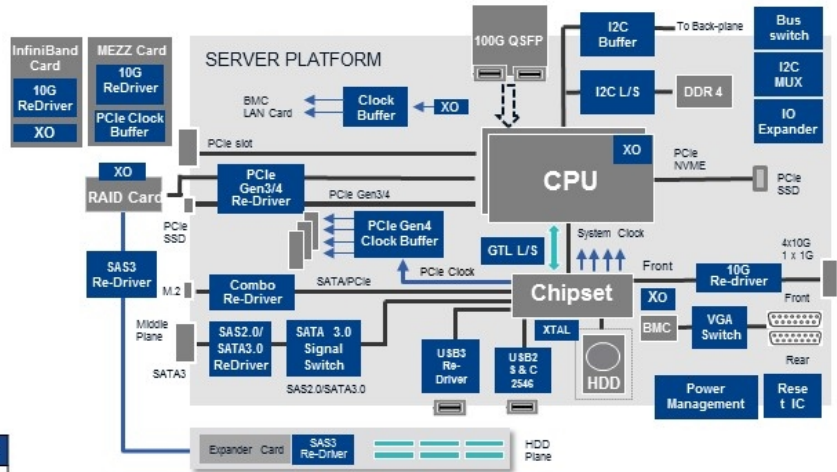
Server Platform Solution

- Total unit shipment Growth (CAGR) = 3.82%
- Almost all of Server vendors are our existing customers
- ODM direct has the highest volume – mainly in TW
- Diodes products are well positioned in this segment
 - Connectivity, Signal Integrity, Timing, Standard Linear, Power Management, Power Switches and Protection devices

WW Server total shipments (Mu)



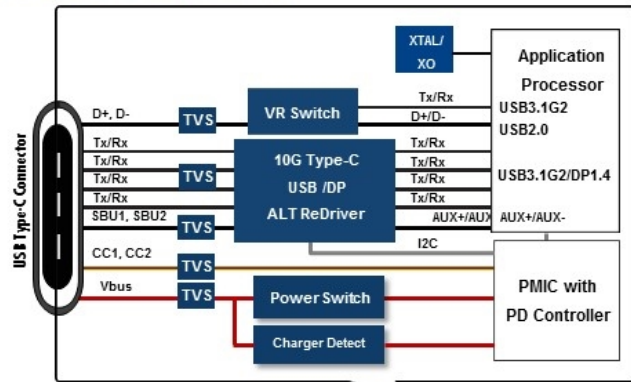
Diodes Key Products	\$ / Server
Analog	\$23.28
Discrete	\$5.71
Total	\$28.97



Data speed, flexibility, and simplicity of use are key drivers

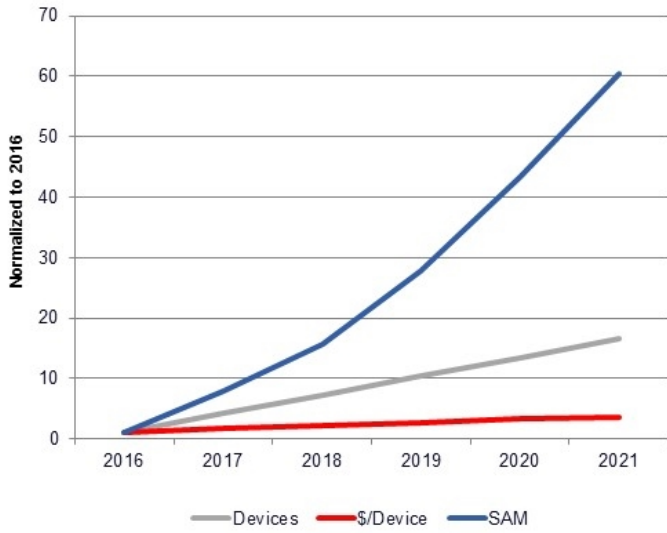
Focus Applications

- Smartphone, Tablet
- NB/DTWS/AIO, PC, Server
- CE Appliance
- PC Peripheral/Monitor
- Inflight Entertainment
- Automotive - Infotainment
- Robotics
- Chargers



Supports data, video, and power





Diodes Key Products	\$ / System
Connectivity, Signal Integrity and Timing	\$3.25
Analog (DCDC, LDO, Sleep Mode Charger etc)	\$0.89
Power Management Switch	\$0.40
MOSFET/BJT	\$0.25
Diodes, Rectifiers and TVS	\$0.50
Total (per USB-C port)	\$5.29

■ **USB-C adoption to grow from 300M (2016) to 5B units (2021)**

- IHS Dec 2017



5G Applications Driving Growth

Focus Applications:

Cloud Computing

- Data Center Server

Gateway

- Internet Gateway
- Fiber network

Core Network, Cell Stations

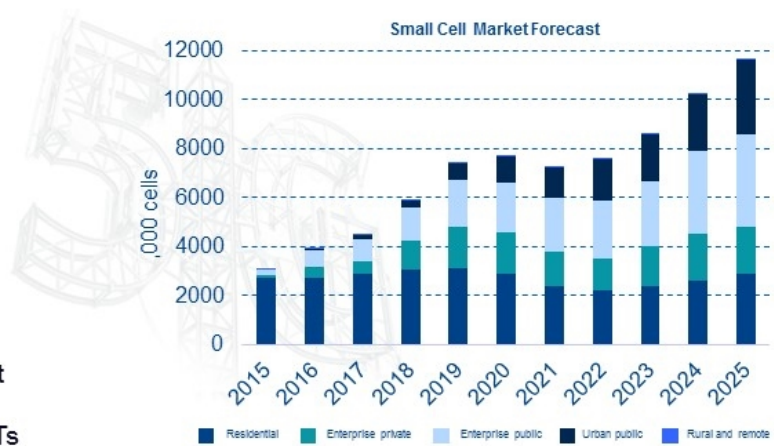
- Small Cells
- Base Station
- Edge Computing Server
- Smart antenna
- Fiber network

End Products

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

5G – Dominated by small cell and data center

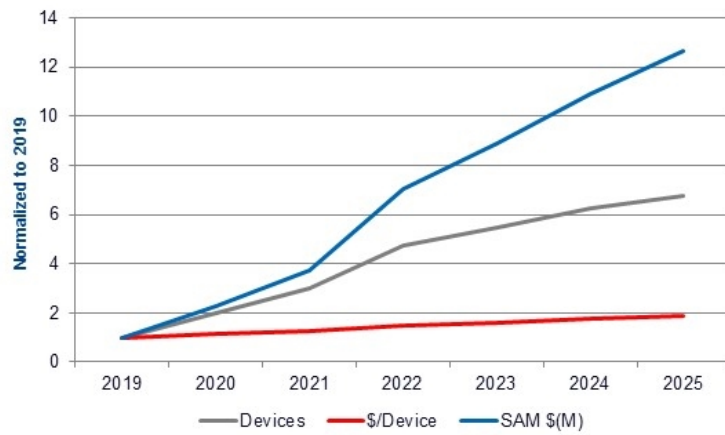
- 50% increase in small cells between 2018 and 2020



<https://www.rovireas.com/2017/12/12/network-infrastructure/report-finds-major-increase-in-small-cell-deployments-1q17>



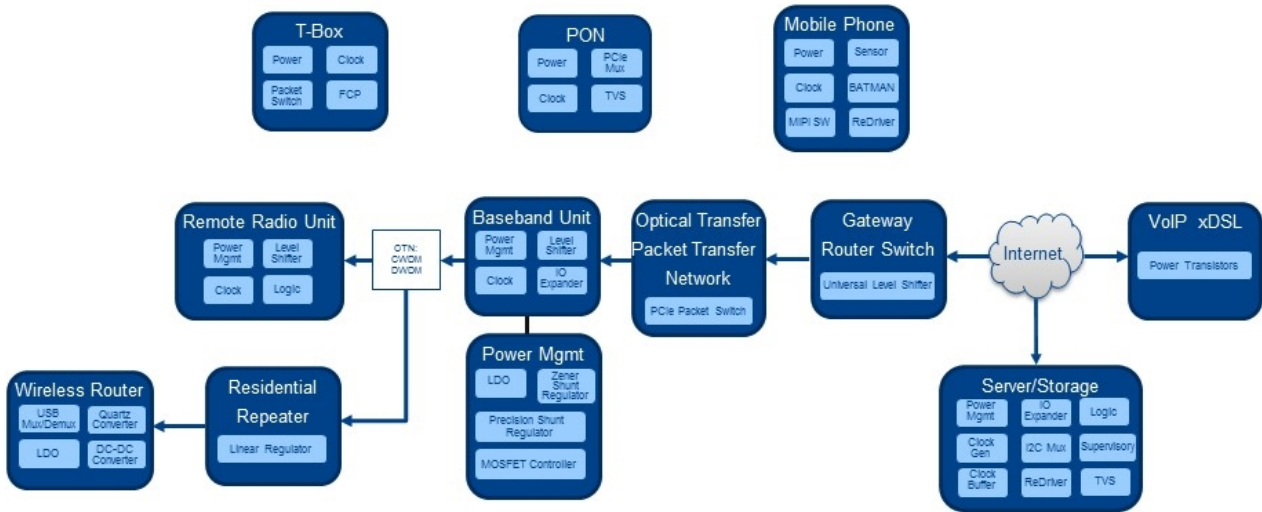
5G Ecosystem Growth Potential



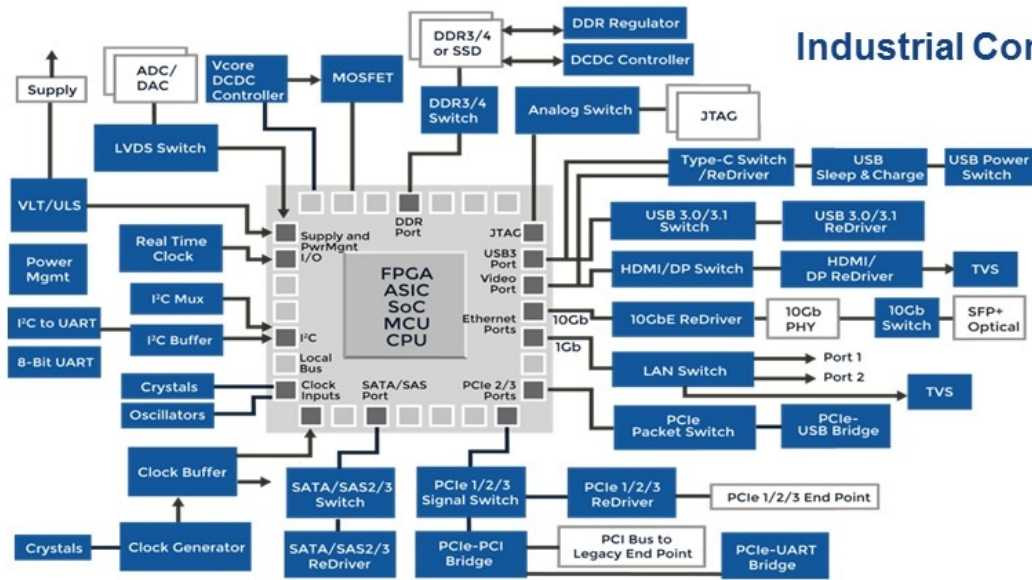
Diodes Key Products	\$ / System
Precision Timing & Connectivity	\$5.00 ~ \$10.00
Discrete	\$2.03 ~ \$2.50
Analog	\$9.00 ~ \$11.28
Total	\$16.03 ~ \$23.78

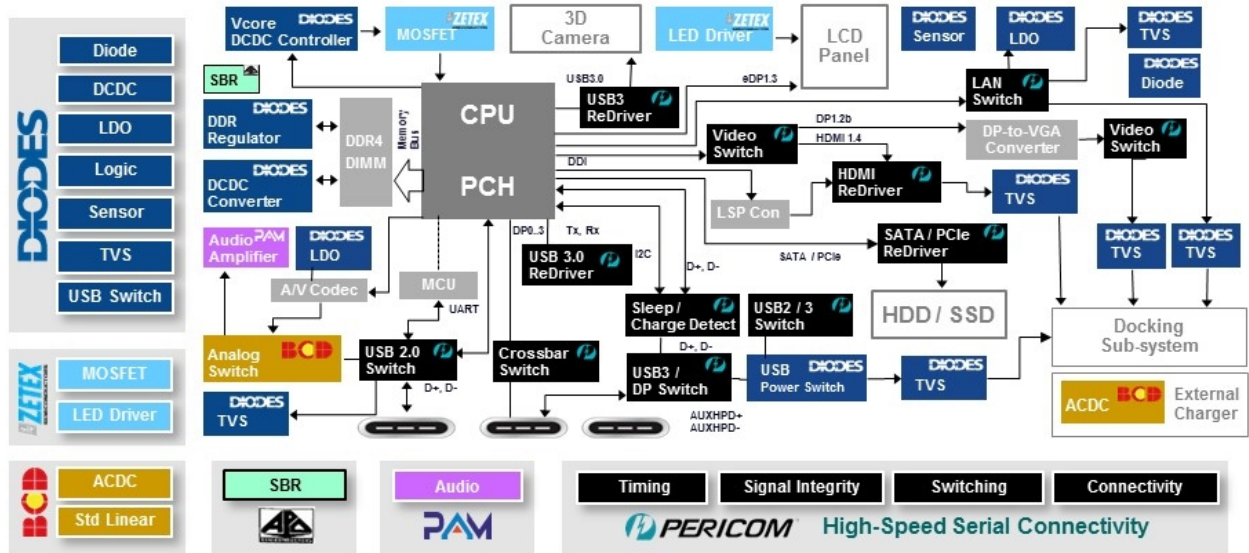


5G System Opportunities



Industrial Controls





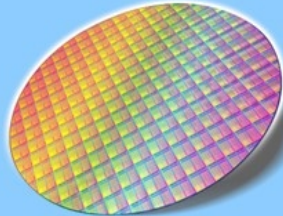
Products



- 20Gbps ReDrivers and Switches
- Automotive Packet Switch for Telematics / ADAS
- Complete USB Type-C™ Signal Switching
- High speed clocking for cloud computing
- Ultra low power and low noise LDOs for IoT
- Low Cj TVS for signal integrity
- Lowest $r_{D(on)}$ LDMOS for battery efficiency

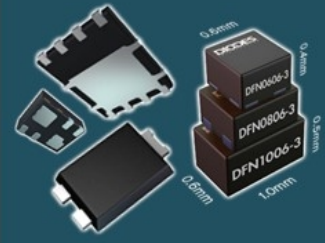
Wafer Fab

- 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



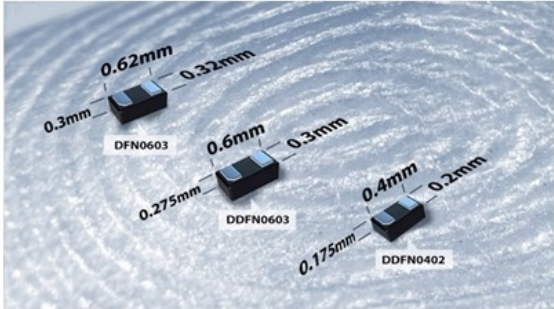
Focus: Miniaturization and Power Efficiency



Miniaturization and Multi-Chip Packaging

Miniaturization

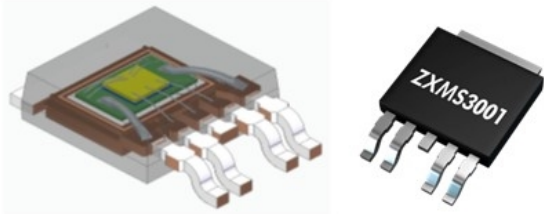
DDFN0402
the smallest discrete
semiconductor package



Multi-Chip Packaging

Dual-Flat No-Lead (DFN) DDFN
(Encapsulated CSP) Chip-Scale
Package (CSP)

HS IntelliFET: ZXMS3001



Packaging

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

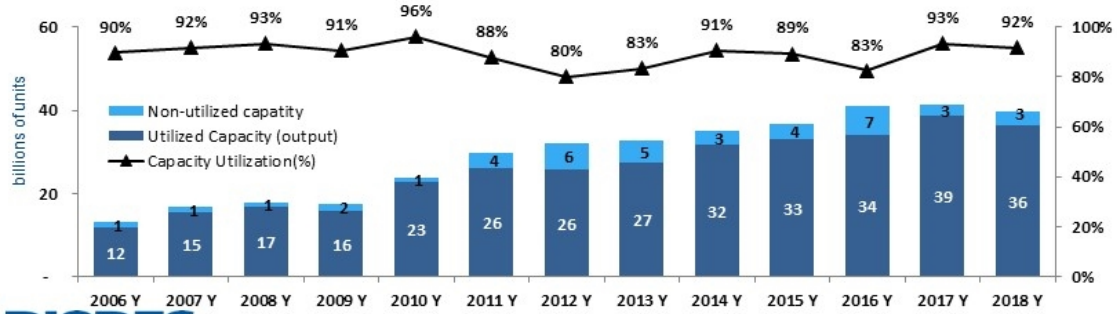


Wafer Fabs

- Two fabs in Shanghai (6" and 8"), one fab in Greenock, UK (8"), one discrete fab in Oldham, UK (6")
- Bipolar, BiCMOS, CMOS and BCD process
- Strong engineering capabilities



Economies of Scale: Package Capacity & Loading Percentage in SAT & CAT *CapEx Model = 5% - 9% of Revenue



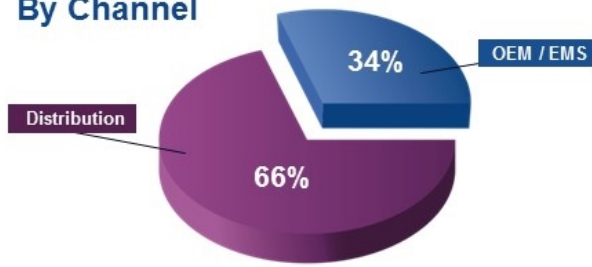
In millions, except per share	3Q18	2Q19	3Q19	YoY
Revenue	\$320.9	\$322.0	\$323.7	0.8%
Gross Profit (GAAP)	\$115.2	\$122.0	\$122.0	5.9%
Gross Profit Margin % (GAAP)	35.9%	37.9%	37.7%	+180bp
Net Income (GAAP)	\$30.9	\$36.3	\$38.1	
Net Income (non-GAAP)	\$34.5	\$40.0	\$41.9	22.0%
EPS (non-GAAP)	\$0.68	\$0.77	\$0.81	19.1%
Cash Flow from Operations	\$35.5	\$40.6	\$67.2	
EBITDA (non-GAAP)	\$72.0	\$77.1	\$78.3	8.8%



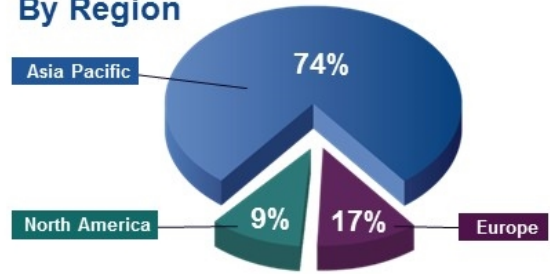
In millions	Dec 31, 2017	Dec 31, 2018	Sept 30, 2019
Cash	\$204	\$241	\$218.4
Short-term Investments	\$5	\$7.5	\$7.9
Inventory	\$217	\$215	\$231
Current Assets	\$662	\$735	\$763
Total Assets	\$1489	\$1526	\$1610
Long-term Debt (including the current portion)	\$247	\$213.8	\$119.0
Total Liabilities	\$615	\$549	\$533
Total Equity	\$874	\$977	\$1077



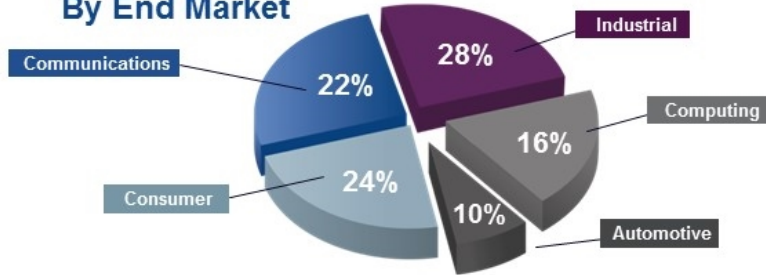
By Channel



By Region



By End Market



- Revenue to be approximately \$300 million, +/- 2.0%, which at the mid-point represents annual growth of 2.8 percent even in the overall weak market environment and continued outperformance of our served market
- GAAP gross margin to be 36.5%, +/- 1%
- Non-GAAP operating expenses, which are GAAP operating expenses adjusted for amortization of acquisition-related intangible assets, are expected to be approximately 22.0% of revenue, +/- 1%
- Interest expense to be approximately \$2.0 million, and income tax rate is expected to be 21.0%, +/- 3%
- Shares used to calculate diluted EPS approximately 52.5 million
- Purchase accounting adjustments of \$3.7 million, after tax, for Pericom and previous acquisition are not included in these non-GAAP estimates

**Guidance as provided on August 5, 2019*



- **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



The logo for Diodes Incorporated, featuring the word "DIODES" in a bold, blue, sans-serif font with a registered trademark symbol, and the word "INCORPORATED" in a smaller, blue, sans-serif font directly below it.

DIODES
INCORPORATED

Thank you

A decorative graphic consisting of two overlapping curved shapes. The top shape is a light gray arc, and the bottom shape is a darker blue arc. The website address is positioned within the blue arc.

www.diodes.com

