



Needham & Company's 20<sup>th</sup> Annual Growth Conference

January 17<sup>th</sup>, 2018

New York, NY

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 expectations of revenue and gross profit in 2017 and beyond, and expectations of the achievement of the goal of \$1 billion annual revenue in fiscal 2017 and long-term financial targets of \$1 billion annual gross profit by 2025, stated as of December 14, 2017; as well as updates to Diodes Incorporated's fourth quarter 2017 business outlook as of November 7, 2017, which include the following: expect revenue to range between \$260 million and \$280 million, or down 8.9 to 1.8 percent sequentially or up 12.0 to 20.6 percent year-over-year; expect GAAP gross margin to be 34.9 percent, plus or minus 1 percent; expect non-GAAP gross margin to be 35.0 percent, plus or minus 1 percent; non-GAAP operating expenses, which are GAAP operating expense adjusted for KFAB closure costs, retention costs, and amortization of acquisition-related intangible assets, are expected to be approximately 23.5 percent of revenue, plus or minus 1 percent; expect net interest expense to be approximately \$3.0 million; expect tax rate to be 29.0 percent, plus or minus 3 percent; shares used to calculate diluted EPS for the fourth quarter are anticipated to be approximately 50.8 million; purchase accounting adjustments for Pericom and previous acquisitions of \$3.9 million after tax and KFAB closure costs of \$3.8 million 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, such as Pericom, 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 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 change 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 7, 2017 titled, "Diodes Incorporated Reports Third Quarter 2017 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

**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** (冯蓉媞)

**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 and analog markets, serving the **consumer, computing, communications, Industrial** and **automotive** segments.





## *Global Operations and World-class Manufacturing & Packaging*

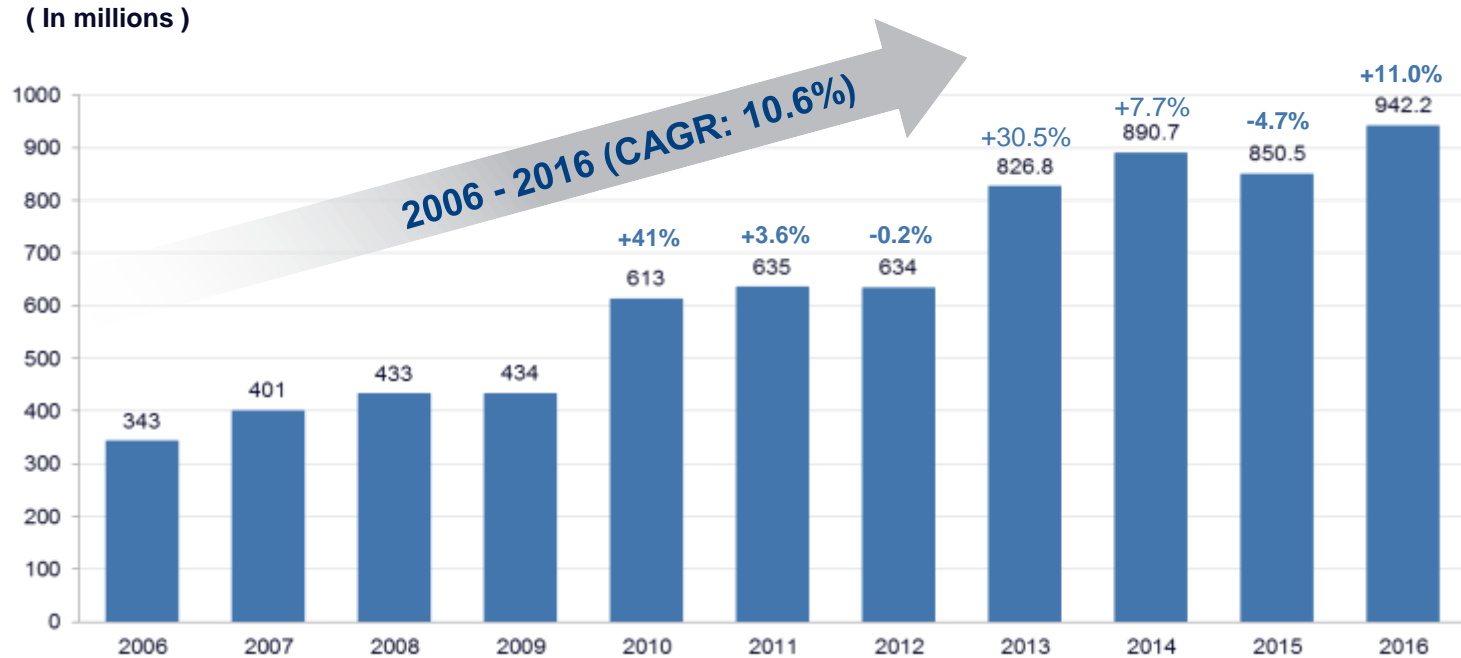
- NASDAQ: DIOD
- Founded in 1959
- Headquartered in Plano, TX; 21 locations globally
- Manufacturing in UK, Germany, China and Taiwan
- ISO9001:2008 Certified / TS16949:2009 Certified  
ISO14001 Certified
- Key acquisitions:
  - Anachip Corporation, Taiwan Jan. 2006
  - Advanced Power Devices Nov. 2006
  - Zetex June 2008
  - Power Analog Microelectronics (PAM) Oct. 2012
  - BCD Semiconductor Mar. 2013
  - Pericom Semiconductor Nov. 2015
- Over 7,692 employees worldwide
- 26 consecutive years of profitability





# Track Record of Consistent Growth

## 2016: Record Annual Revenue & Gross Profit



***Anticipates Achieving Goal of \$1 Billion in Annual Revenue in Fiscal 2017***



# Vision: Create Shareholder Value

- 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

\* 4Q guidance midpoint: \$270M

## Mission:

Profitability growth to  
expand shareholder value

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## Strategy:

Grow revenue to \$2.5B  
at 40% GPM

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## Goal:

\$1B Gross Profit by 2025



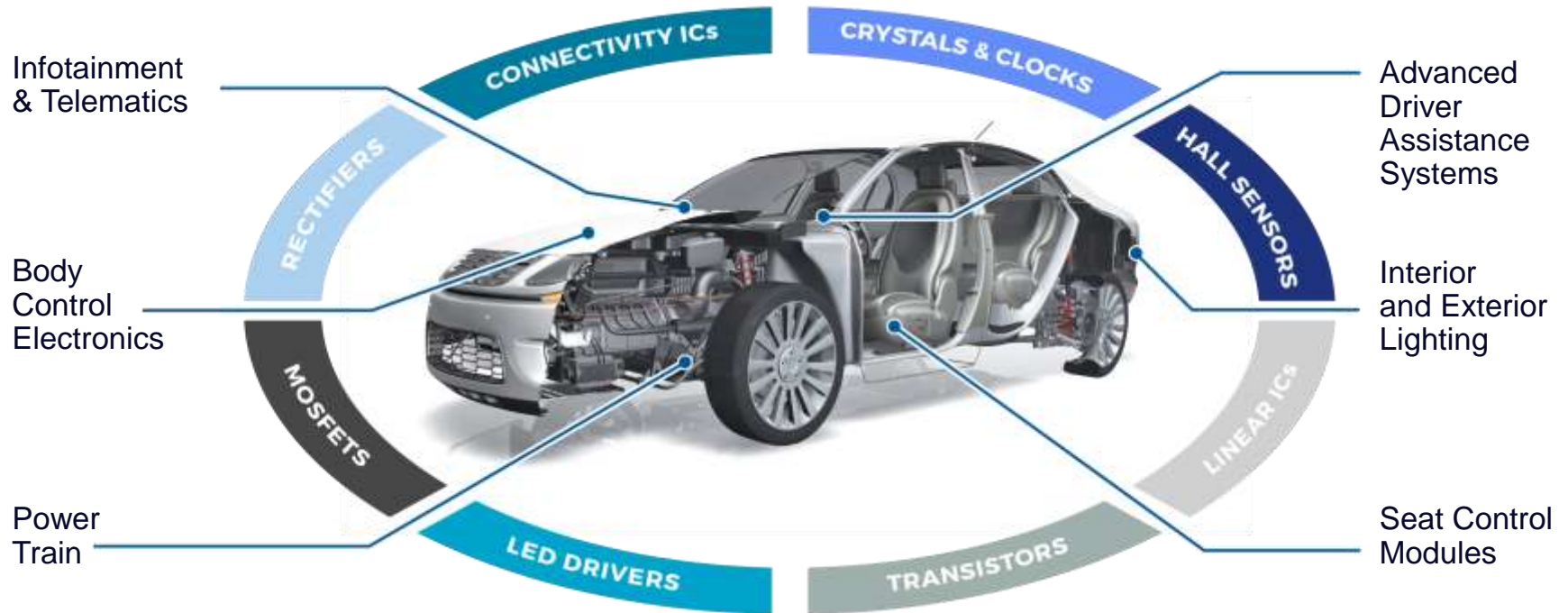
	2017		2025
NR	\$1B	→	2.5B
GM%	35%	→	40%
<b>GP</b>	<b>\$350M</b>	<b>→</b>	<b>\$1B</b>
R&D%	5%	→	7%
SG&A%	15%	→	13%
<b>PFO</b>	<b>15%</b>	<b>→</b>	<b>20%</b>



Market Segment ~ 20% each

- **Automotive**
  - Adaptive lighting, body controls and connected driving
- **Industrial**
  - Embedded systems and precision controls
- **Consumer**
  - IoT: Wearables, home automation, and smart infrastructure
- **Communication**
  - Smart phones: advanced protocols and charging
- **Computing**
  - Cloud computing: server, storage and data centers

# Extensive Portfolio of Automotive 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





- Ultra low power for battery operated, IoT applications
- Serial protocols and switching for networked systems
- Noise immunity for integrated cameras and sensors

- **Focus on signal integrity and higher data rates**
- **Proliferation of USB Type-C™ connectivity and power delivery**
- **Power regulation and protection for new features**
- **Advanced power solutions for quick charge protocols**

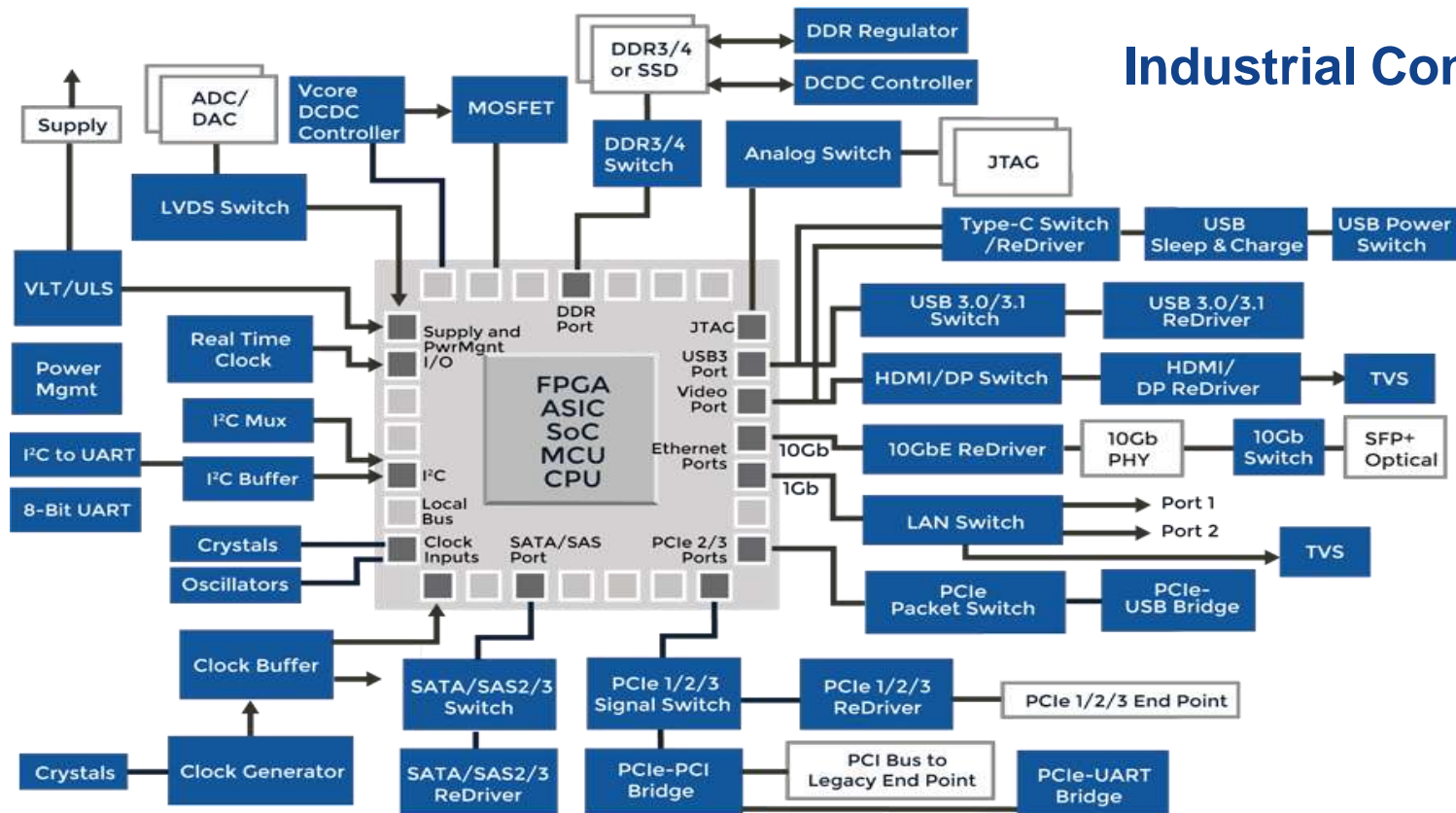




- **ReDriver support for USB connectivity**
- **Wide range of signal protocols: PCIe, SAS, SATA, GbE, USB**
- **MUX products for high capacity solid state storage**
- **Crystal oscillators for increasing clocking speeds**

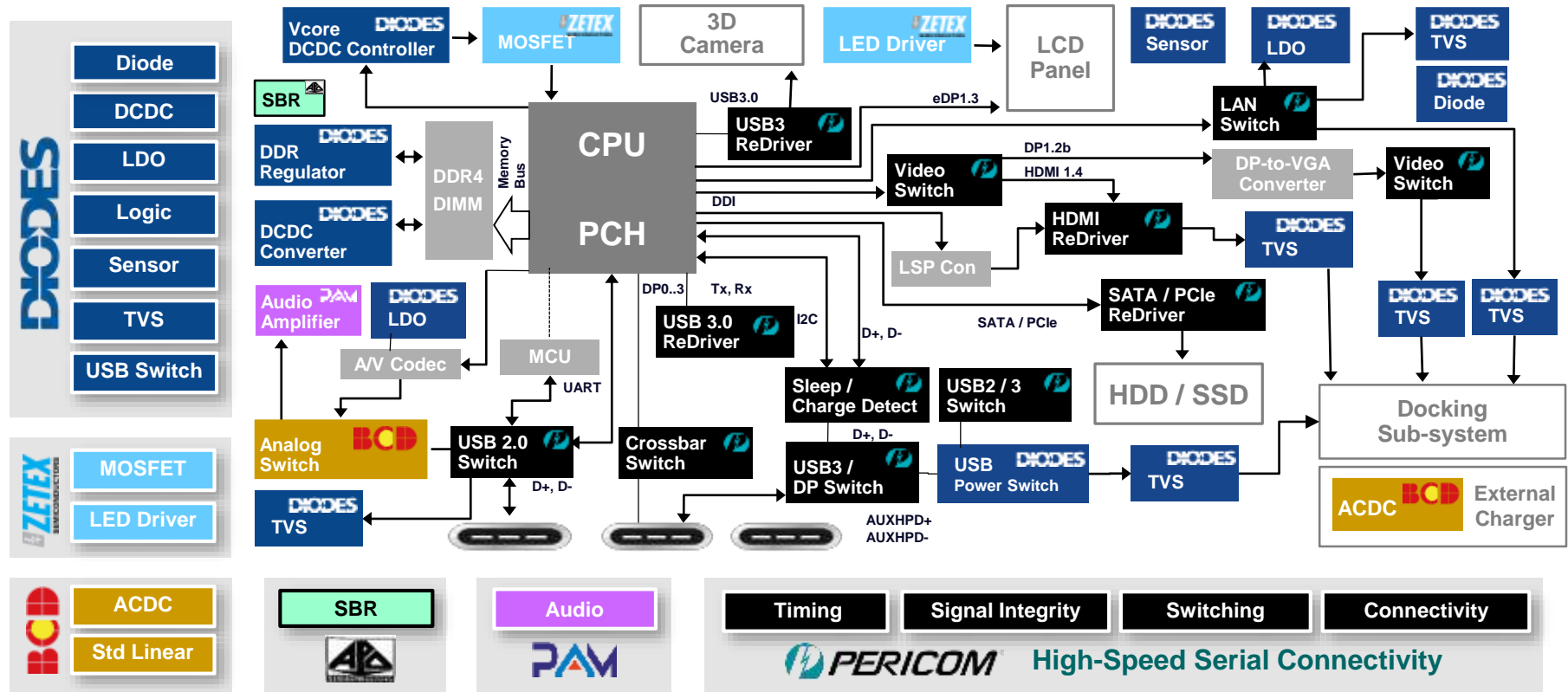


## Industrial Controls





# Complete Platform Solutions: Notebooks



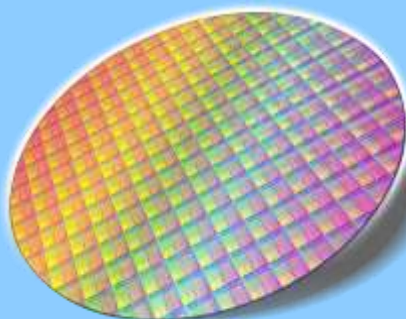
## Products



- 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  $C_j$  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



## Focus: Miniaturization and Power Efficiency

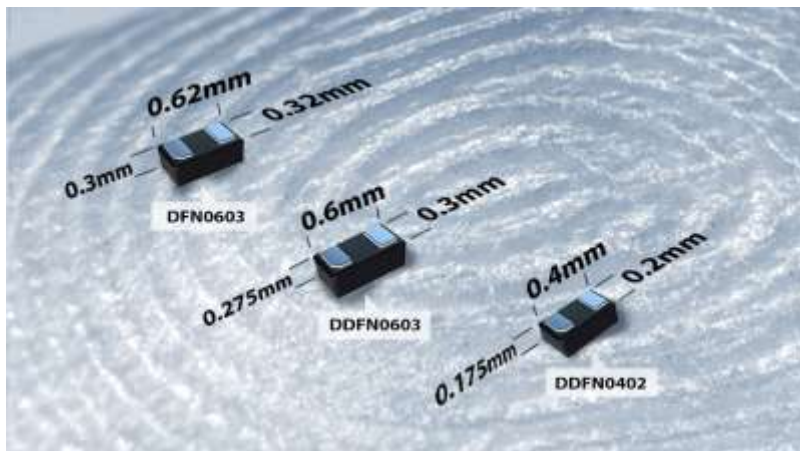


## *Miniaturization and Multi-Chip Packaging*

### Miniaturization

**DDFN0402**

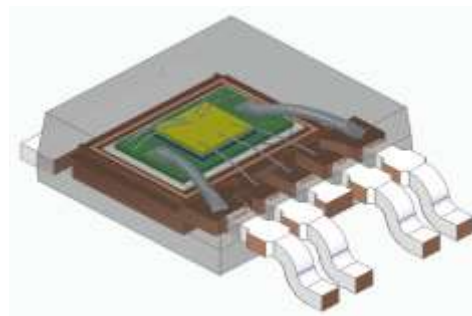
the smallest discrete  
semiconductor package



### 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



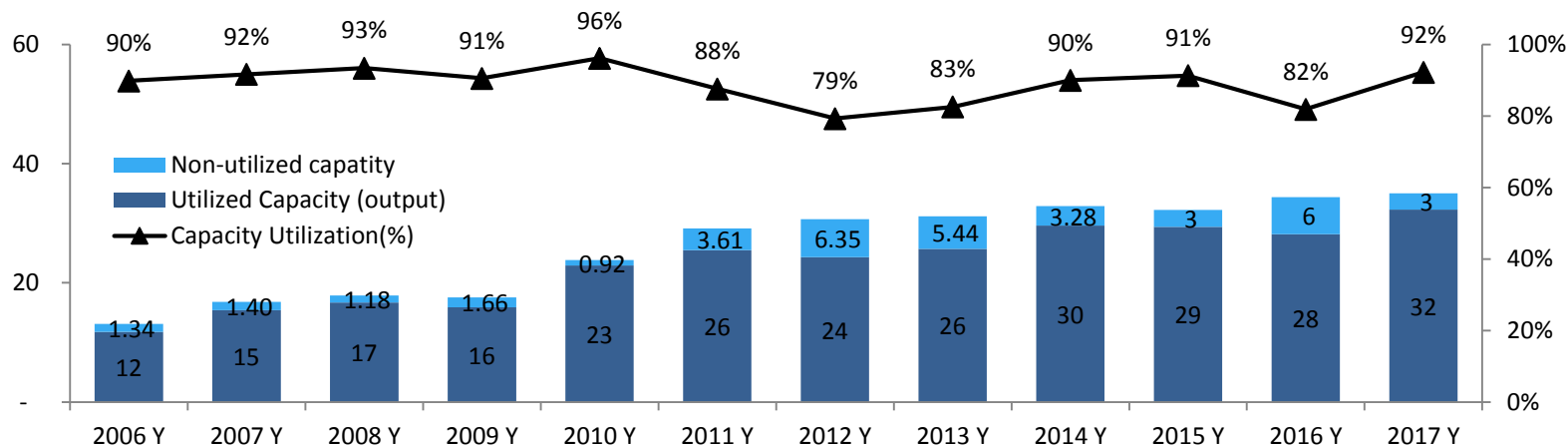
## Wafer Fabs

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



### Economies of Scale: Capacity & Loading Percentage in SAT

\*CapEx Model = 5% - 9% of Revenue



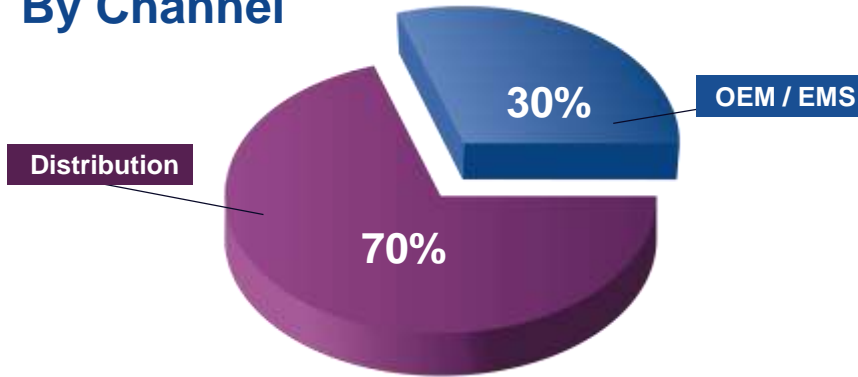


# FINANCIAL OVERVIEW

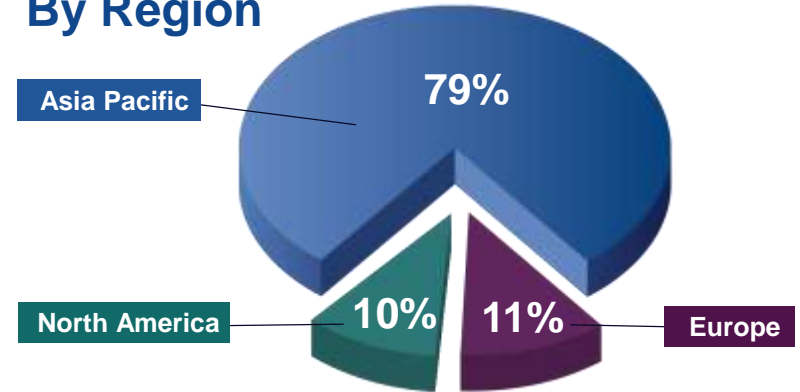
# Third Quarter 2017 Financial Performance

In millions, except per share	3Q16	2Q17	3Q17	YoY
Revenue	\$250.7	\$264.2	\$285.2	13.8%
Gross Profit (GAAP)	\$80.6	\$90.1	\$96.3	20.5%
Gross Profit Margin % (GAAP)	32.2%	34.1%	34.7%	+60bp
Net Income (GAAP)	\$10.6	\$13.2	\$14.5	
Net Income (non-GAAP)	\$15.1	\$17.8	\$22.6	
EPS (non-GAAP)	\$0.30	\$0.36	\$0.45	50.0%
Cash Flow from Operations	\$33.1	\$19.8	\$40.9	
EBITDA (non-GAAP)	\$42.0	\$45.8	\$46.8	10.0%

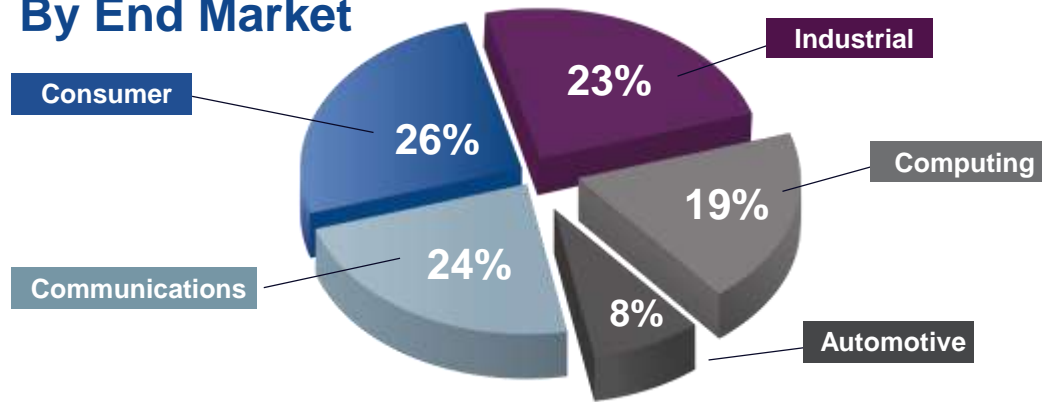
## By Channel



## By Region



## By End Market



In millions	Dec 31, 2015	Dec 31, 2016	SEPT 30, 2017
Cash	\$218	\$248	\$201
Short-term Investments	\$65	\$30	\$13
Inventory	\$203	\$193	\$211
Current Assets	\$751	\$733	\$701
Total Assets	\$1599	\$1531	\$1541
Long-term Debt	\$454	\$413	\$326
Total Liabilities	\$756	\$708	\$646
Total Equity	\$843	\$820	\$895

- Revenue to range between \$260 million and \$280 million, or down 8.9% to 1.8% sequentially or up 12.0 to 20.6 percent year-over-year
  - Anticipates achieving goal of \$1 billion in annual revenue in 2017\*\*
- GAAP gross margin to be 34.9% +/- 1%, and non-GAAP gross margin to be 35.0% +/- 1%
- Non-GAAP operating expenses to be 23.5% of revenue, +/- 1%
- Interest expense to be approximately \$3.0 million, and income tax rate is expected to be 29.0%, +/- 3%
- Shares used to calculate diluted EPS approximately 50.8 million
- Purchase accounting adjustments for Pericom and previous acquisitions of \$3.9 million after tax and KFAB closure costs of \$3.8 million are not included in non-GAAP estimates

*\*Guidance as provided on November 7, 2017*

*\*\*As stated in December 14, 2017 press release*



- **Vision: Expand shareholder value**
- **Mission: Profitability growth to drive 20% PFO**
- **Next Strategic Goal: \$1B gross profit**
- **Strategy: \$2.5B revenue at 40% GPM**
- **Tactics:**
  - Increased focus on Automotive and Industrial markets
  - Investment for technology leadership in target products, fab processes, and advanced packaging
  - Systems solutions to drive business expansion



**Thank you**