



**Advanced Energy**

January 31, 2017

Q4 2016  
Earnings Call

# Safe Harbor

The company's guidance with respect to anticipated financial results for the first quarter ending March 31, 2017, potential future progress towards our new aspirational goals, expectations regarding future market trends and the company's future performance within specific markets (e.g., statements regarding anticipated semiconductor and industrial market growth) and other statements that are not historical information are forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. Forward-looking statements are subject to known and unknown risks and uncertainties that could cause actual results to differ materially from those expressed or implied by such statements. Such risks and uncertainties include, but are not limited to: (a) the effects of global macroeconomic conditions upon demand for our products and services; (b) the volatility and cyclicity of the industries the company serves, particularly the semiconductor industry; (c) delays in capital spending by end-users in our served markets; (d) the accuracy of the company's estimates related to fulfilling solar inverter product warranty and post-warranty obligations; (e) the company's ability to realize its plan to avoid additional costs after the solar inverter wind-down; (f) the accuracy of the company's assumptions on which its financial statement projections are based; (g) the impact of price changes, which may result from a variety of factors; (h) the timing of orders received from customers; (i) the company's ability to realize benefits from cost improvement efforts including avoided costs, restructuring plans and inorganic growth; (j) the company's ability to obtain in a timely manner the materials necessary to manufacture its products; and (k) unanticipated changes to management's estimates, reserves or allowances. These and other risks are described in Advanced Energy's Form 10-K, Forms 10-Q and other reports and statements filed with the Securities and Exchange Commission (the "SEC"). These reports and statements are available on the SEC's website at [www.sec.gov](http://www.sec.gov). Copies may also be obtained from Advanced Energy's investor relations page at <http://ir.advanced-energy.com> or by contacting Advanced Energy's investor relations at 970-407-6555. Forward-looking statements are made and based on information available to the company on the date of this presentation. Aspirational goals and targets discussed on the conference call or in the presentation materials should not be interpreted in any respect as guidance. The company assumes no obligation to update the information in this presentation.

# Non-GAAP Measures

This presentation includes GAAP and non-GAAP income and per-share earnings data and other GAAP and non-GAAP financial information. Advanced Energy's non-GAAP measures exclude the impact of non-cash related charges such as stock based compensation, amortization of intangible assets and restructuring costs, as well as acquisition related costs and other non-recurring items. For the first quarter ending March 31, 2017 guidance, the company expects stock based compensation of \$2.0 million and amortization of intangibles of \$1.0 million. The non-GAAP measures included in this presentation are not in accordance with, or an alternative for, similar measures calculated under generally accepted accounting principles and may be different from non-GAAP measures used by other companies. In addition, these non-GAAP measures are not based on any comprehensive set of accounting rules or principles. Advanced Energy believes that these non-GAAP measures provide useful information to management and investors to evaluate business performance without the impacts of certain non-cash charges and other charges which are not part of the company's usual operations. The company uses these non-GAAP measures to assess performance against business objectives, make business decisions, develop budgets, forecast future periods, assess trends and evaluate financial impacts of various scenarios. In addition, management's incentive plans include these non-GAAP measures as criteria for achievements. Additionally, the company believes that these non-GAAP measures, in combination with its financial results calculated in accordance with GAAP, provide investors with additional perspective. While some of the excluded items may be incurred and reflected in the company's GAAP financial results in the foreseeable future, the company believes that the items excluded from certain non-GAAP measures do not accurately reflect the underlying performance of its continuing operations for the period in which they are incurred. The use of non-GAAP measures has limitations in that such measures do not reflect all of the amounts associated with the company's results of operations as determined in accordance with GAAP, and these measures should only be used to evaluate the company's results of operations in conjunction with the corresponding GAAP measures. Please refer to the Form 8-K for our latest earnings release filed with the Securities and Exchange Commission regarding this information.



**Advanced Energy**

**Yuval Wasserman**  
*President and CEO*

# Full Year and Q4 2016 Highlights

- 2016 Revenue \$484M +16.6% y/y, Non-GAAP\* EPS \$3.11 +43.3% y/y
  - 4<sup>th</sup> year of sizable double-digit increases across key financial metrics
  - Record Semiconductor and Service revenue
  - Op Income of \$127M +18.9% y/y
  - Generated \$126.5M of operating cash from continuing operations
  - New aspirational goals
    - >\$800M Revenue; >\$4 Non-GAAP EPS; >\$350M cumulative cash generation
- Q4 Revenue \$135.3M +6.9% q/q: Non-GAAP\* EPS \$1.06 +37.7% q/q
  - Strong Semiconductor revenue, aided by Service, offset Industrial decline
  - Generated \$44.4M of operating cash from continuing operations

*\*Non-GAAP measures exclude the impact of stock based compensation, amortization of intangibles, restructuring costs and significant non-recurring items.*

# Semiconductor Highlights

- 2016 Record Semiconductor revenue of \$326.3M +22.5% y/y
- Q4 Record Semiconductor revenue of \$96.8M +19.3% q/q
  - Wafer fab equipment industry and AE business surged in Q4
- Technology upgrades in full swing
  - Accelerated ramp of 3DNAND primary contributor
  - Migration to 1Xnm Logic ramped high volume manufacturing
  - Strength from Korean OEMs in etch and deposition



# Semiconductor Design Wins

- Ongoing investment in 2016 in next generation power solutions
  - Increasing # of design wins
  - Expanding market presence
  - Capitalizing on market trends
- Multiple wins in advanced memory applications in Q4
  - 2 Substantial wins for PECVD processes for 3DNAND applications
  - Designs for etch applications related to LEDs and MEMS for manufacturing of sensors used in IoT solutions
  - Another e-chuck power supply design win due to high reliability

# Semiconductor Outlook

- Positive outlook entering Q1 2017
  - Advanced memory continues to drive majority of Semiconductor business
  - Strong demand for solid state drives and growing memory content for handsets should drive further expansion of 3DNAND
  - Early signs of recovery in DRAM spending
  - Build-out of 10nm Logic and development of 7nm/5nm underway

# Industrial Highlights

- 2016 Industrial revenue flat with 2015
- Q4 Industrial revenue of \$19.1M -28.1% q/q
  - Decline after 3 consecutive Qs of q/q growth
  - Due to high concentration in Q3 of project installations for OLED, FPD, Solar PV and Glass Coating markets
  - Lumpy investments typical of Industrial Thin Films markets
- Specialty Industrial Power saw similar trend
  - Lower revenues in thermal and high voltage markets due to of cyclical investments, project timing, and delivery schedules

# Industrial Thin Films Design Wins

- Flat Panel Display win
- Solar PV
  - High capacity crystalline silicon application in China displacing incumbent with new Ascent AP product
  - 1st Phase of project with major North American solar company
  - PECVD solar cell application
  - Increasing demand for AE products from capacity additions for solar cells

# Specialty Industrial Power Design Wins

- Thermal Power Control Modules

- First order in North America for integrated power system
  - Key step in thermal strategy to expand from modules to systems
- PCM project for Solar PV application
  - Extended existing customer relationship with additional AE product
  - Success at introducing acquired products into new regions and applications

- High Voltage

- New glass float line
- Scanning electron microscope application win using new AE platform

# Industrial Outlook

- Expect Q1 2017 to increase
  - Specialty Industrial Power markets bounce back
    - Recovery in PCMs and high voltage
  - Industrial Thin Films improves
    - Slight increase in glass and industrial coatings, partially offset by ongoing pause in FPD and Solar PV

# Service Highlights and Outlook

- 2016 Record Service revenue of \$73.1M +14.0% y/y
- Q4 Record Service revenue of \$19.5M +2.9% q/q
  - 2nd year of q/q growth in Q4 vs. typical year-end seasonal slowdown
  - Share gains in traditional precision power service (Americas, Japan, EMEA)
  - Highly engineered service products drove new business and growth from Specialty Industrial Power markets
  - Partnership award from Samsung in Korean in recognition of ongoing, superior support
- Outlook for Q1 2017
  - Expect q/q increase from regional growth and market share increases



**Advanced Energy**

Tom Liguori  
*Executive Vice President & CFO*

# Q4 2016 Financial Highlights

- Total revenue of \$135.3M +6.9% q/q
  - Exceeded guidance on the top and bottom lines
  - Reached important financial milestones
- GAAP operating margin from continuing operations 28.5%
- GAAP EPS from continuing operations \$1.01
- Non-GAAP\* operating margin from continuing operations improved to 30.7%
- Non-GAAP\* EPS from continuing operations \$1.06

*\*Non-GAAP measures exclude the impact of stock based compensation, amortization of intangibles, restructuring costs, and significant non-recurring items.*

# Q4 2016 Revenue by Application

	Q4 2016		Q3 2016		Q4 2015	
<i>(in thousands)</i>	Actual	% of Sales	Actual	% of Sales	Actual	% of Sales
Semiconductors	\$ 96,830	71.5%	\$ 81,157	64.1%	\$ 50,219	57.8%
Industrial	19,055	14.1%	26,493	20.9%	21,345	24.6%
Service	19,458	14.4%	18,902	15.0%	15,327	17.6%
<b>Total AE</b>	<b>\$135,343</b>		<b>\$126,552</b>		<b>\$86,891</b>	

# Q4 2016 Income Statement Review

<i>(\$ in Millions, except GM% &amp; EPS)</i>	<b>Q4'16</b>	<b>Q3'16</b>	<b>Q4'15</b>
Revenue	\$135.3	\$126.6	\$86.9
Operating expenses	\$33.0	\$31.8	\$26.5
GAAP Operating margin from continuing ops %	28.5%	27.2%	18.6%
GAAP EPS from continuing ops	\$1.01	\$0.73	\$0.28
Non-GAAP* Operating margin from continuing ops %	30.7%	29.0%	20.7%
Non-GAAP* EPS from continuing ops	\$1.06	\$0.77	\$0.32

*\*Non-GAAP measures exclude the impact of stock based compensation, amortization of intangibles, restructuring costs, and significant non-recurring items.*

# Q4 2016 Balance Sheet

- Ending cash balance of \$286.7M
- Q4 Operating cash from continuing operations of \$44.4M
- 2016 Operating cash from continuing operations of \$126.5M
- Net working capital days decreased to 64 vs. 77 in Q3, 108 in Q415
  - Higher inventory turns
  - Lower receivables DSO
  - Efficient cash management

<i>(\$ in Millions)</i>	<b>Q4'16</b>	<b>Q3'16</b>
Cash & Investments	\$286.7	\$249.8
Accounts Receivable	\$75.7	\$69.4
Inventory	\$55.8	\$56.0
<b>Total Assets</b>	<b>\$571.5</b>	<b>\$538.7</b>
Liabilities	\$179.5	\$183.9
Shareholders Equity	\$392.1	\$354.8

# Q1 2017 Guidance\*

	Q1 2017		
Revenue	\$141M	-	\$151M
GAAP operating margins from continuing operations	26%	-	29%
GAAP EPS from continuing operations	\$0.84	-	\$0.94
Non-GAAP** operating margins from continuing operations	29%	-	31%
Non-GAAP** EPS from continuing operations	\$0.90	-	\$1.00

\*Estimates as of Q416 earnings conference call. The company assumes no obligation to update guidance.

\*\*Q117 non-GAAP measures exclude the impact of stock based compensation of \$2.0M, amortization of intangibles of \$1.0M, restructuring costs, and significant non-recurring items.

# Reconciliation of Q1 2017 Guidance\*

	Low End		High End
<b>Revenues</b>	<b>\$141M</b>	-	<b>\$151M</b>
<b>Reconciliation of Non-GAAP operating margin**</b>			
GAAP operating margin	26%	-	29%
Stock-based compensation	2%	-	1%
Amortization of intangible assets	1%	-	1%
<b>Non-GAAP operating margin**</b>	<b>29%</b>	-	<b>31%</b>
<b>Reconciliation of Non-GAAP earnings per share**</b>			
GAAP earnings per share	\$0.84	-	\$0.94
Stock-based compensation	0.05	-	0.05
Amortization of intangible assets	0.03	-	0.03
Tax effects of excluded items	(0.02)		(0.02)
<b>Non-GAAP earnings per share**</b>	<b>\$0.90</b>	-	<b>\$1.00</b>

\*Estimates as of Q416 earnings conference call. The company assumes no obligation to update guidance.

\*\*Q117 non-GAAP measures exclude the impact of stock based compensation of \$2.0M, amortization of intangibles of \$1.0M, restructuring costs, and significant non-recurring items.

THANK YOU

