

# Q3 2017 Earnings Presentation



October 31, 2017

# Safe Harbor

The company's guidance with respect to anticipated financial results for the fourth quarter ending December 31, 2017, potential future growth and profitability, our future business mix, 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 herein or made on the above-announced conference call 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 cyclicality 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 product 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 the press release. 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 the press release.

# Non-GAAP Measures

This release 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 and amortization of intangible assets, as well as non-recurring items such as acquisition-related costs. For the fourth quarter ending December 31, 2017 guidance, the company expects stock based compensation of \$3 million and amortization of intangibles of \$1 million. The non-GAAP measures included in this release 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 regarding this release furnished today to the Securities and Exchange Commission.

# Q3 2017 Earnings Presentation



Yuval Wasserman  
President & CEO

# Q3 2017 Highlights

- Revenue of \$176.6M; +39.5% y/y
  - Semiconductor continued at historical levels
  - Industrial reached 5-year high
  - Service grew to new records
- Non-GAAP\* EPS from continuing ops \$1.19; +54.5% y/y
- Generated \$33.7M of cash
- Cash and cash equivalents of \$369.6M
- Completed \$25M share repurchase
- Acquired Excelsys strengthening Specialty Power portfolio

*\*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.*

# Semiconductor Highlights

- Semiconductor revenue of \$116.5M; +43.5% y/y
  - Accelerated demand for 3DNAND
  - Recovery in DRAM driven by SSDs and higher mobile content per handset
  - Ramp of 1Xnm Foundry Logic
- Era of big data and Artificial Intelligence driving new highs in WFE
  - Exponential increases in data generation, greater complexity across end markets and higher capital intensity
  - Complex architectures and processes (ALD, ALE) necessary to accurately build device features
  - AE is critical enabler to OEM customers' roadmaps as semi manufacturers struggle to achieve acceptable yields of these higher complexity devices

# Semiconductor Outlook

- Growth over third quarter
- Capacity expansions in 3DNAND and DRAM continue
- Uptick in WFE industry
- Strength heading into 2018

# Industrial Highlights

- Total Industrial revenue of \$35.9M; +35.5% y/y
  - Strongest quarter in five years

## Thin Films Industrial

- Capacity expansion for consumer products coatings drove higher demand
  - Increased adoption in China ahead of holiday season
  - Significant recovery in glass coating continued with new capacity buys
- Mobile OLED share gains in Korea w/ advanced pulsed DC pulsed tech
- Full quarter contribution from Excelsys acquisition



# Industrial Highlights (cont.)

## Specialty Power

- Reached record levels
- Strength from high voltage power solutions for mass spectrometry, SEM, PCM for glass, solar cells and lithium ion battery applications
- Full quarter contribution from Excelsys acquisition
- Driving expansion across customer base
- Added 3 new Rockwell channel partners to enhance distribution

# Industrial Outlook

- Long-term goal GDP +2-3%
- Year-to-date growth of 32% (through September 30,2017)
- Timing of capital investments can cause quarterly fluctuations
  - Anticipate Q4 decline after significant build-up in advanced coating capacity with transition to volume production and holiday season
- Expect year-over-year growth in Q4
  - Market share gains in new products and applications

# Innovation Strategy

- Investing in innovation a core component of strategy
  - Deepen relationships with customers
  - Ensure AE designed into customer roadmaps across end markets
- Increased investment in demonstration/evaluation units in Q3
  - Supply to new and existing customers
    - Seeding market in China with latest Ascent portfolio for consumer product coatings
  - Result:
    - Customers realize benefits in real-world applications
    - AE gains better understanding of requirements for pilot production
- Important part of investing for future, bringing new products to market and expanding SAM

# Semiconductor Design Wins

- Enabling applications driving the migration to more advanced Memory and Logic (i.e. plasma processes)
- Continuing design wins ensure AE growth
- Customers span geographies (N. America, China, Korea, Japan)
- Q3: Won all of designs pursued in advanced Memory and Logic
  - PEALD design for memory devices with RF Power solution
  - Etch design for next-gen platform for advanced Memory and <10nm Logic
  - High voltage application
- Design wins transition to mass production 1-2 years from acceptance to reach high volume manufacturing and secure future growth

# Industrial Design Wins

## Thin Films Industrial

- Share gains in China with new and existing products (glass coater wins)
- Advanced pulsing technology products led to share gains in mobile OLED, Solar PV and consume products coating

## Specialty Power

- Thermal and PCM designs in petro-chemical, Solar PV wafer coating and furnaces for lithium ion battery materials
- High voltage wins in mass spectrometry, scanning electron microscopes and x-ray
- Recent low-power portfolio additions expanded SAM with wins in medical, life science, and analytical equipment applications

# Service Highlights and Outlook

- Service revenue of \$24.2M; +28.1% y/y
  - Increased effectiveness in deploying service strategy
  - High end customer utilization driving higher OEM service volumes, benefitting AE
  - Close relationships and highly engineered products driving sizable portion of growth
  - Recent expansions in China and Japan provided faster and more cost-effective solutions for Asian customers
- Outlook for Q4 2017
  - Moderate sequential growth

# Q3 2017 Earnings Presentation



**Tom Liguori**  
Executive VP & CFO

# Q3 2017 Financial Highlights

- Total revenue of \$176.6M; +6.5% q/q and +39.5% y/y
  - Exceeded top line expectations
  - Delivered strong bottom line results
- GAAP operating margin from continuing operations 29.3%
- GAAP EPS from continuing operations \$2.09
  - One-time \$40M tax benefit related to solar inverters
- Non-GAAP\* operating margin from continuing operations 31.9%
- Non-GAAP\* EPS from continuing operations \$1.19

*\*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.*



# Q3 2017 Revenue by Application

	Q3 2017		Q2 2017		Q3 2016	
<i>(in thousands)</i>	Actual	% of Sales	Actual	% of Sales	Actual	% of Sales
Semiconductors	\$ 116,468	66.0%	\$ 117,020	70.5%	\$ 81,157	64.1%
Industrial	35,895	20.3%	26,268	15.8%	26,493	20.9%
Service	24,212	13.7%	22,584	13.7%	18,902	14.9%
<b>Total Revenue</b>	<b>\$176,575</b>		<b>\$165,872</b>		<b>\$126,552</b>	

# Q3 2017 Income Statement

<i>(\$ in Millions, except GM% &amp; EPS)</i>	<b>Q3'17</b>	<b>Q2'17</b>	<b>Q3'16</b>
Revenue	\$176.6	\$165.9	\$126.6
Operating expenses	\$40.6	\$39.4	\$31.8
GAAP Operating margin from continuing ops %	29.3%	28.8%	27.2%
GAAP EPS from continuing ops	\$2.09	\$1.14	\$0.73
Non-GAAP* Operating margin from continuing ops %	31.9%	31.8%	29.0%
Non-GAAP* EPS from continuing ops	\$1.19	\$1.22	\$0.77

*\*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.*

# Q3 2017 Balance Sheet

- Generated \$33.7M in cash from continuing operations
- \$25.0M share repurchase
- Excelsys acquisition \$17.4M
- Ongoing improvements in working capital management
  - NWC days improved 5 days y/y

<i>(\$ in Millions)</i>	Q3'17	Q4'16
Cash & Investments	\$369.6	\$286.7
Accounts Receivable	\$75.0	\$75.7
Inventory	\$73.5	\$55.8
Total Assets	\$721.3	\$571.5
Liabilities	\$172.9	\$179.4
Shareholders' Equity	\$548.4	\$392.1

# Q4 2017 Guidance\*

	Q4 2017		
Revenue	\$172M	-	\$182M
GAAP operating margins from continuing operations	28%	-	30%
GAAP EPS from continuing operations	\$1.08	-	\$1.18
Non-GAAP** operating margins from continuing operations	30%	-	32%
Non-GAAP** EPS from continuing operations	\$1.15	-	\$1.25

\*Estimates as of Q3'17 earnings conference call. The company assumes no obligation to update guidance.

\*\*Q4'17 non-GAAP measures exclude the impact of stock based compensation of \$3M, amortization of intangibles of \$1M, restructuring costs, and significant non-recurring items.

# Reconciliation of Q4 2017 Guidance\*

	Low End		High End
<b>Revenues</b>	<b>\$172M</b>	-	<b>\$182M</b>
<b>Reconciliation of Non-GAAP** operating margin</b>			
GAAP operating margin	28%	-	30%
Stock-based compensation	1%	-	1%
Amortization of intangible assets	1%	-	1%
<b>Non-GAAP** operating margin</b>	<b>30%</b>	-	<b>32%</b>
<b>Reconciliation of Non-GAAP** earnings per share</b>			
GAAP earnings per share	\$1.08	-	\$1.18
Stock-based compensation	0.07	-	0.07
Amortization of intangible assets	0.04	-	0.04
Tax effects of excluded items	(0.04)		(0.04)
<b>Non-GAAP** earnings per share</b>	<b>\$1.15</b>	-	<b>\$1.25</b>

\*Estimates as of Q3'17 earnings conference call. The company assumes no obligation to update guidance.

\*\*Q4'17 non-GAAP measures exclude the impact of stock based compensation of \$3M, amortization of intangibles of \$1M, restructuring costs, and significant non-recurring items.