

Safe Harbor

The company's guidance with respect to anticipated financial results for the third quarter ending September 30, 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 earnings 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 endusers 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; (i) 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. 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 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 third quarter ending September 30, 2017 guidance, the company expects stock based compensation of \$3.3 million and amortization of intangibles of \$1.0 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...





Q2 2017 Highlights

- Revenue of \$165.9M; +39.7% y/y
 - Semiconductor outperformed broader WFE equipment industry
 - Industrial growth across all sectors
 - Service surpassed historical levels
- Non-GAAP* EPS from continuing ops \$1.22; +67.1% y/y
- Generated \$64.0M of cash
- Recently 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 \$117.0M; +48.9% y/y
 - Another record performance due to:
 - Expansion of 3DNAND capacity
 - Ramp in 1Xnm Logic to high volume
 - Recovery in DRAM spending
 - Accelerated pull-ins from selected customers
- Began high volume manufacturing/shipping of the Navigator-II FastCap solid-state match product
- WFE market remained robust worldwide
 - Business from all OEMs grew substantially
 - Record quarter in Korea local OEMs +100% y/y growth



Semiconductor Design Wins

- Won majority of designs pursued in advanced memory, logic and PEALD applications
 - Strength across geographies including N.America, Japan & Korea
 - Secured designs with indigenous WFE companies in China
- Early, local engagement enables customers to perform sophisticated, complex processes
- Result of ongoing innovation to maintain industry leading position in precision power solutions for critical applications



Semiconductor Outlook

- Outperforming WFE industry with double-digit CAGRs last few yrs
 - Complexity of plasma process technology and sophistication of power supplies = compounding effect
 - Growing capital intensity as dep/etch process steps increase
 - SAM doubling with industry move from planar to 3D
- 3DNAND biggest driver next few years, aided by:
 - Foundry and Logic ramp
 - DRAM spending
 - Potential demand from China
 - Dep/Etch to outpace other WFE segments given FinFET complexity and 3DNAND architectures
- Q3 semi revenues slightly below record run-rate due to Q2 pull-ins and customer shipments and timetables
- 2H semi revenue equal or higher to 1H



Industrial Highlights

Total Industrial revenue of \$26.3M; +18.5% y/y

Thin Films Industrial – All markets increased

- Capacity ramp of advanced industrial coating for consumer electronics
- Glass coating capacity expansion for coaters, retrofits and upgrades
- FPD fueled by mobile OLED ramp

Specialty Power – Recovery in broader Industrial markets in EMEA

- Strong PCM sales in manufacturing applications, esp. glass float lines
- Delivered 1st integrated power system for glass formation project in N. Am.
- Opportunities in mass spectrometry, life sciences and analytical applications



Industrial Design Wins

Thin Films Industrial

- Glass coaters in U.S., China and Japan
- Successful evaluation of power solution for co-sputtering
- PVD applications for OLED with new, mid-power level platform

Specialty Power

- Strong thermal/PCM driven by build-out of glass formation capacity
- Secured high voltage designs in life science for technical applications,
 (mass spectrometry, genomic cell separation, capillary electrophoresis)



Industrial Outlook

Expect strong third quarter for Industrial business

Thin Films Industrial

- Strength throughout markets
 - Advanced industrial coatings
 - Demand for new glass coaters

Specialty Power

Addition of Excelsys



Industrial Growth Strategy

Excelsys Acquisition

- Small, well-known DC power supply company with established presence
 - Markets include medical, laser drivers, other industrial applications
- Fills in AE portfolio with low power, high density, configurable solutions
 - Advantageous new products without cooling fans for clean environments
 - Field configurability provides competitive advantage
- Part of ongoing strategy to grow and diversify Industrial business
 - Increasing TAM in precision power for critical applications in highly regulated markets
 - Goal to add \$150-\$200M in Industrial revenue over the next few years



Service Highlights and Outlook

- Service revenue of \$22.6M; +10.0% q/q
 - Responded to surges in demand
 - Success of service aftermarket business vs. support function
 - Incremental revenue from highly engineered products enabling capital re-use and extending equipment lifespan
 - Deepening customer relationships and lowering total cost of ownership
- Outlook for Q3 2017
 - Gain market share from 3rd party repair shops
 - Expand engineered service solutions



Global Expansion

- Goal: Stay intimately close to served markets & customers
- Opened 3 new locations
 - Aftermarket business centers in China and Japan
 - Improve proximity to Asian customers
 - Provide highest quality and most responsive services
 - Singapore center of excellence for plasma processing close to Asian customers
 - Close to key customers' operations and Asian markets
 - R&D, supply chain, service/support, customer operations/logistics





Q2 2017 Financial Highlights

- Total revenue of \$165.9M; +11.1% q/q and +39.7% y/y
 - Continued to excel on top line
 - Maintained cost structure and margins
- GAAP operating margin from continuing operations 28.8%
- GAAP EPS from continuing operations \$1.14
- Non-GAAP* operating margin from continuing operations 31.8%
- Non-GAAP* EPS from continuing operations \$1.22



^{*}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.

Q2 2017 Revenue by Application

	Q2 20	17	Q1 2017		Q2 2016	
(in thousands)	Actual	% of Sales	Actual	% of Sales	Actual	% of Sales
Semiconductors	\$ 117,020	70.5%	\$ 104,648	70.1%	\$ 78,583	66.2%
Industrial	26,268	15.8%	24,179	16.2%	22,169	18.7%
Service	22,584	13.7%	20,524	13.7%	18,013	15.1%
Total Revenue	\$165,872		\$149,351		\$118,765	



Q2 2017 Income Statement

(\$ in Millions, except GM% & EPS)	Q2'17	Q1'17	Q2'16
Revenue	\$165.9	\$149.4	\$118.8
Operating expenses	\$39.4	\$35.6	\$31.7
GAAP Operating margin from continuing ops %	28.8%	29.0%	25.5%
GAAP EPS from continuing ops	\$1.14	\$0.88	\$0.68
Non-GAAP* Operating margin from continuing ops %	31.8%	31.9%	27.8%
Non-GAAP* EPS from continuing ops	\$1.22	\$1.04	\$0.73

^{*}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.



Q2 2017 Balance Sheet

- Generated \$64.0M in cash from continuing operations
- Ongoing improvements in working capital management
 - Streamlined order and payments with customers
- Entered into a \$100M line of credit to fund domestic operations, acquisitions and repurchases

(\$ in Millions)	Q2'17	Q4'16
Cash & Investments	\$380.8	\$286.7
Accounts Receivable	\$60.8	\$75.7
Inventory	\$75.6	\$55.8
Total Assets	\$673.1	\$571.5
Liabilities	\$187.7	\$179.4
Shareholders' Equity	\$485.4	\$392.1

Q3 2017 Guidance*

	Q3 2017		
Revenue	\$160M	-	\$170M
GAAP operating margins from continuing operations	27%	-	29%
GAAP EPS from continuing operations	\$1.02	-	\$1.12
Non-GAAP** operating margins from continuing operations	30%	-	32%
Non-GAAP** EPS from continuing operations	\$1.10	-	\$1.20

^{*}Estimates as of Q2'17 earnings conference call. The company assumes no obligation to update guidance.



^{**}Q3'17 non-GAAP measures exclude the impact of stock based compensation of \$3.3M, amortization of intangibles of \$1.0M, restructuring costs, and significant non-recurring items.

Reconciliation of Q3 2017 Guidance*

	Low End		High End
Revenues	\$160M	-	\$170M
Reconciliation of Non-GAAP** operating margin			
GAAP operating margin Stock-based compensation Amortization of intangible assets	27% 2% 1%	-	29% 2% 1%
Non-GAAP** operating margin	30%	-	32%
Reconciliation of Non-GAAP** earnings per share			
GAAP earnings per share Stock-based compensation Amortization of intangible assets Tax effects of excluded items	\$1.02 0.08 0.03 (0.03)	- - -	\$1.12 0.08 0.03 (0.03)
Non-GAAP** earnings per share	\$1.10	-	\$1.20

^{*}Estimates as of Q2'17 earnings conference call. The company assumes no obligation to update guidance.



^{**}Q3'17 non-GAAP measures exclude the impact of stock based compensation of \$3.3M, amortization of intangibles of \$1.0M, restructuring costs, and significant non-recurring items.