Q3 2018
Earnings Presentation

Advanced Energy

Yuval Wasserman
President & CEO

Paul Oldham
EVP & CFO

October 30, 2018

Safe Harbor

The company's guidance with respect to anticipated financial results for the fourth quarter ending December 31, 2018, 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; (k) unanticipated changes to management's estimates, reserves or allowances; (l) changes and adjustments to the tax expense and benefits related to the recently enacted U.S. tax reform; and (m) the effects of recent U.S. government trade restrictions, Chinese retaliatory trade actions, and other governmental action related to tariffs upon demand for our products and services and the U.S. economy. 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.

Q3 2018 Highlights

- Total revenues of $173.1M, non-GAAP* operating margin of 25.6%, and non-GAAP EPS of $1.05
  - Excluding acquisition of LumaSense, Q3 revenue and non-GAAP* EPS were above the mid-points of our guidance ranges
  - With LumaSense, Q3 revenue surpassed our guidance and EPS was at the high-end
- Record Industrial and Service revenues validate our diversification growth strategy
  - Another record quarter for both Industrial and Service, supported by broad base demand and market share gains
  - Semi revenues impacted by delays of investments
- Closed the acquisition of LumaSense Technologies on September 1st
- Spent $31.0 million on share repurchase program in Q3
  - Repurchased 533k shares at $58.12

Solid Q3 performance versus our guidance

**Non-GAAP measures exclude the impact of non-cash related charges such as stock based compensation, amortization of intangible assets, estimated income tax expenses associated with U.S. tax reform, and restructuring costs, as well as acquisition related costs and other non-recurring items.*

Semiconductor

- Q3 Semiconductor revenue of $96.4M, -24% q/q and -17% y/y
  - Near-term softness will extend into Q4 on capacity digestion and inventory reduction
  - Long-term drivers include growing underlying demand for semiconductors and increased power content in plasma-based processes
- We offer the most critical technologies in plasma-based processes
  - Increased adoption of our highest-performance power supplies and matching networks at the leading-edge
- AE's leadership position across platforms should enable faster-than-market growth
  - In RF/DC Power, our market share remains >2X over our next biggest competitor*
  - Displaced an incumbent in a major win for advanced memory application

Long-term drivers remain intact despite near-term headwinds

*Based on VLSI Research's DC & RF Power Subsystems market share, 2017

Industrial

- Q3 Industrial revenue of $48.5M; +16% q/q and +35% y/y
  - Excluding acquisitions, industrial grew 15% y/y and was a record quarter
  - We expect industrial in Q4 to decline seasonally but be higher than 2017
    - Q4 2017 and Q4 2016 showed similar pattern
- Another record quarter supported by expanding presence in growth markets
  - Strength in thin film PV solar, thin film batteries, glass and steel production
  - Secured design wins in new applications for hard coating, display, glass production and the medical equipment markets
- Executing our acquisition growth strategy
  - LumaSense added $5.6M to Q3 revenue
  - Combined, our 4 acquisitions over the last 5 quarters generated >$90M of annualized revenue in Q3 on a pro forma basis*

Continue to deliver greater than mid-teens-% growth rate

**Based on pro forma Q3 2018 results with a full quarter of LumaSense revenue*

Service

- Q3 Service revenue of $28.2M; +5% q/q and +17% y/y
  - Sustaining double-digit-% y/y and tracking ahead of our target of >10% y/y
  - We expect service to reach another record quarter in Q4

- Growth driven by expanding installed base and share gain
  - Benefits of our growing installed base is just starting
  - Gaining share from regional 3rd party service providers
  - Continued geographic expansion
  - Expanding programs on retrofits, upgrades and refurbishments

Growing installed based and share gains support >10% CAGR

Q3 2018 Financial Highlights

- Total revenue $173.1M; -12% q/q and -2% y/y
  - Industrial and Service revenues were at another record quarter
  - YTD 2018 revenue +15% vs. 2017
    - Semiconductor revenue +6.4%
    - Industrial revenue +45%
- GAAP EPS from continuing operations $0.90
- Non-GAAP EPS from continuing operations $1.05
- Non-GAAP operating margin from continuing operations 25.6%

Q3 2018 Revenue by Application

(in thousands)	Q3 2018 Actual	Q3 2018 % of Sales	Q2 2018 Actual	Q2 2018 % of Sales	Q3 2017 Actual	Q3 2017 % of Sales
Semiconductors	$96,360	55.7%	$127,291	64.9%	$116,468	66.0%
Industrial	48,483	28.0%	41,944	21.4%	35,895	20.3%
Service	28,239	16.3%	26,797	13.7%	24,212	13.7%
Total Revenue	**$173,082**		**$196,032**		**$176,575**	

Q3 2018 Income Statement

($ in Millions, except percentage & EPS)	**Q3'18**	**Q2'18**	**Q3'17**
Revenue	$173.1	$196.0	$176.6
GAAP Gross Margin %	49.4%	51.6%	52.2%
GAAP operating expenses	$45.7	$45.2	$40.6
GAAP operating margin from continuing ops %	23.0%	28.6%	29.3%
GAAP earnings from continuing ops	$0.90	$1.17	$2.09
Non-GAAP Gross Margin %	50.0%	51.8%	52.4%
Non-GAAP operating expenses	$42.2	$41.9	$36.2
Non-GAAP operating margin from continuing ops %	25.6%	30.5%	31.9%
Non-GAAP EPS from continuing ops	$1.05	$1.25	$1.19

Q3 2018 Balance Sheet

- Generated $30.6M in cash from continuing operations
- $31 million share repurchase in Q3 2018
  - $11 million additional share repurchase so far in Q4 2018
  - $80 million share repurchase YTD
  - $160 million spent, 3.5 million shares repurchased since program inception in 2015
- DSO 57 days; DPO 47 days; Inventory 113 days
  - Ex LumaSense, inventory declined $10 million
  - Q4 2018 inventory expected to decrease
- LumaSense acquisition closed September 1st
  - Cash payment of $85 million on debt free basis

($ in Millions)	Q3'18	Q4'17
Cash & Investments	$341.7	$410.4
Accounts Receivable	$110.4	$87.4
Inventory	$110.3	$78.5
Total Assets	$833.6	$733.3
Liabilities	$234.1	$212.7
Shareholders' Equity	$599.5	$520.6

Q4 2018 Guidance*

	Q4 2018		
Revenue	$150M	-	$160M
GAAP operating margins from continuing operations	12.8%	-	17.5%
GAAP EPS from continuing operations	$0.48	-	$0.66
Non-GAAP** operating margins from continuing operations	20.0%	-	22.0%
Non-GAAP EPS from continuing operations	$0.70	-	$0.80

*Estimates as of Q3 2018 earnings conference call. The company assumes no obligation to update guidance.

**Q4 2018 non-GAAP measures exclude the impact of stock based compensation, amortization of intangibles, restructuring costs, and significant non-recurring items.

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 and amortization of intangible assets, as well as non-recurring items such as acquisition-related costs and restructuring expenses. Additionally, the third quarter non-GAAP results exclude estimated income tax expense associated with U.S. tax reform. 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 regarding this presentation furnished today to the Securities and Exchange Commission.

Reconciliation of GAAP to non-GAAP Measures

Reconciliation of Non-GAAP measure - income excluding certain items	Three Months Ended			Nine Months Ended	
	September 30,		June 30,	September 30,	
	2018	2017	2018	2018	2017
Income from continuing operations, less noncontrolling interest, net of income taxes	$ 35,150	$ 83,794	$ 46,356	$ 127,845	$ 165,108
Adjustments:					
Amortization of intangible assets	1,437	1,240	1,264	3,957	3,176
Stock-based compensation	1,024	3,453	1,943	7,461	10,707
Acquisition-related costs	863	—	255	1,468	150
Facility expansion and relocation costs	754	—	262	1,492	—
Restructuring charges	403	—	—	403	—
Nonrecurring tax (benefit) expense associated with inverter business	—	(40,194)	—	—	(40,194)
Loss on foreign exchange hedge	—	—	—	—	3,489
Incremental expense associated with start-up of the Asia regional headquarters	—	1,133	—	—	1,133
Tax Cuts and Jobs Act Impact	2,398	—	—	4,251	—
Tax effect of Non-GAAP adjustments	(843)	(1,426)	(704)	(2,890)	(4,451)
Non-GAAP income from continuing operations, net of income taxes	$ 41,186	$ 48,000	$ 49,376	$ 143,987	$ 139,118

Reconciliation of Non-GAAP measure - per share earnings excluding certain items	Three Months Ended			Nine Months Ended	
	September 30,		June 30,	September 30,	
	2018	2017	2018	2018	2017
Diluted earnings per share from continuing operations, as reported	$ 0.90	$ 2.09	$ 1.17	$ 3.23	$ 4.11
Add back:					
per share impact of Non-GAAP adjustments, net of tax	0.15	(0.90)	0.08	0.41	(0.65)
Non-GAAP per share earnings from continuing operations	$ 1.05	$ 1.19	$ 1.25	$ 3.64	$ 3.46

Reconciliation of Q4 2018 Guidance*

	Low End		High End
Revenues	**$150M**	**-**	**$160M**
Reconciliation of Non-GAAP operating margin**			
GAAP operating margin	12.8%	-	17.5%
Stock-based compensation	1.5%	-	1.3%
Amortization of intangible assets	1.3%	-	1.1%
Restructuring and other	4.4%	-	2.1%
Non-GAAP operating margin	**20.0%**	**-**	**22.0%**
Reconciliation of Non-GAAP earnings per share			
GAAP earnings per share	$0.48	-	$0.66
Stock-based compensation	0.06	-	0.05
Amortization of intangible assets	0.05	-	0.05
Restructuring and other	0.17	-	0.08
Tax effects of excluded items	(0.06)	-	(0.04)
Non-GAAP earnings per share	**$0.70**	**-**	**$0.80**

**Estimates as of Q3 2018 earnings conference call. The company assumes no obligation to update guidance.*
***Q4 2018 non-GAAP measures exclude the impact of stock based compensation, amortization of intangibles, restructuring costs, and significant non-recurring items.*