Q2 2019
Earnings Presentation

Advanced Energy

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Safe Harbor Statement

The company's guidance with respect to anticipated financial results for the third quarter ending September 30, 2019, potential future growth and profitability, our future business mix, expectations regarding future market trends and the company's future performance within specific markets, the anticipated closing of the acquisition of Artesyn Embedded Power 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 risks and uncertainties related to the pending acquisition of Artesyn Embedded Power all as more fully outlined in our Form 8-K filed on May 15, 2019; (e) the accuracy of the company's estimates related to fulfilling solar inverter product warranty and post-warranty obligations; (f) the company's ability to realize its plan to avoid additional costs after the solar inverter wind-down; (g) the accuracy of the company's assumptions on which its financial statement projections are based; (h) the impact of product price changes, which may result from a variety of factors; (i) the timing of orders received from customers; (j) the company's ability to realize benefits from cost improvement efforts including avoided costs, restructuring plans and inorganic growth; (k) the company's ability to obtain in a timely manner the materials necessary to manufacture its products; (l) unanticipated changes to management's estimates, reserves or allowances; (m) changes and adjustments to the tax expense and benefits related to the U.S. tax reform that was enacted in late 2017; and (n) the effects of U.S. government trade and export restrictions, Chinese retaliatory trade actions, and other governmental action related to tariffs upon the demand for our, and our customers', 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 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 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 this press release.

Key Messages

- Strong earnings with solid operating performance
  - Revenue of $134.8 million at mid point of guidance range
  - Non-GAAP* EPS of $0.45 was above guidance range (lower tax contributed $0.05)
  - Strong execution in cost improvement, and targeting to further improve our model

- Despite the environment in semiconductor, our R&D investment is delivering results
  - Near-term environment remains dynamic, but demand from some customers started to improve
  - Solid adoption of AE technologies in next-generation semi processes

- Industrial and Service are not immune to macro environment
  - Near-term weakness in the industrial environment impacting our business
  - Industrial design wins support 2H 2019 revenue at 1H level
  - Service growth rate constrained by lower fab utilization
  - Excluding inverter divestiture, service is expected to grow mid/high-single-digit-% in 2019

non-GAAP measures exclude the impact of non-cash related charges such as stock-based compensation and amortization of intangible assets, as well as discontinued operations, and non-recurring items such as acquisition-related costs and restructuring expenses.

Semiconductors

- Semiconductor revenue of $65.1M, -3.6% q/q and -48.9% y/y
  - Including service, sales into semiconductor market was -1.5% q/q and -39.8% y/y
  - Product revenues at our two largest customers increased q/q, offset by lower revenues from Korea and China

- Demand for foundry/logic and share gains offsetting continued weakness in memory
  - Expecting Q3 semi sales to be flat to Q2 level, driven by AE's content in foundry/logic and early revenues from recent share gains in RF
  - Recently improved orders could signal the market is reaching a stabilized level

- Our R&D investments and partnership with customers are delivering results
  - Customers started Beta shipments of next-generation tools using our technologies
  - Significant RF match design win in Q1 drove 30%+ match sales growth from 2H 2018 to 1H 2019 at a leading customer
  - Emerging memory devices (MRAM, PCRAM, ReRAM) are creating new opportunities for AE
  - Continue to gain momentum in Korea with 6 new wins

Industrial and Service

- Industrial Technologies revenue of $41.1M, -7.8% q/q and -2.0% y/y
  - Impacted by overall macro environment in the industrial sector
  - Revenue from solar remained strong in Q2 as customers accelerated investments
  - Demand for consumer electronics investments in FPD and hard coating declined
  - Strong product portfolio led to design wins across many industrial and medical applications
  - Expecting revenues in Q3 2019 to decline, but 2H 2019 to be similar to 1H levels

- Service revenue of $28.6M, flat q/q and +6.8% y/y
  - Excluding divestiture of the central inverter service business, Service grew 5% q/q in Q2
  - However, service was impacted by lower fab utilization and memory fab conversion to logic
  - Utilization expected to remain low in the near-term, resulting in 2H 2019 below 1H levels
  - Reiterate long-term service revenue target growth rate of >10%

Q2 Revenue by Application

($ in thousands)	Q2'19	Q1'19	Q2'18	Q/Q	Y/Y
Semiconductors	$65,086	$67,514	$127,291	(3.6%)	(48.9%)
Industrial Technologies	$41,107	$44,598	$41,944	(7.8%)	(2.0%)
Service	$28,617	$28,631	$26,797	(0.0%)	6.8%
Total Revenue	**$134,810**	**$140,743**	**$196,032**	**(4.2%)**	**(31.2%)**

Q2 2019 Income Statement

($ in Millions, except percentage & EPS)	Q2'19	Q1'19	Q2'18	Q/Q	Y/Y
Revenue	$134.8	$140.7	$196.0	(4.2%)	(31.2%)
GAAP gross margin %	47.6%	46.7%	51.6%		
GAAP operating expenses	$53.1	$53.9	$45.2	(1.5%)	17.5%
GAAP operating margin from continuing ops %	8.2%	8.4%	28.6%		
GAAP EPS from continuing ops	$0.61	$0.40	$1.17	52.5%	(47.9%)
Non-GAAP* Gross Margin %	47.7%	47.0%	51.8%		
Non-GAAP* operating expenses	$47.0	$45.8	$41.9	2.8%	12.3%
Non-GAAP* operating margin	12.8%	14.5%	30.5%		
Non-GAAP* EPS	$0.45	$0.58	$1.25	(22.4%)	(64.0%)

*non-GAAP measures exclude the impact of non-cash related charges such as stock-based compensation and amortization of intangible assets, as well as discontinued operations, and non-recurring items such as acquisition-related costs and restructuring expenses.

Q2 2019 Balance Sheet and Cash Flow

- Generated $11.5 million in cash flow from continuing operations in Q2
- Cash and Investments balance increased to $359.8 million
- Inventory turns at 2.9x; DSO 62 days; DPO 47 days
  - Inventory decreased $6.3 million from Q1
- Paused share repurchase

($ in Millions)	**Q2'19**	**Q4'18**
Cash & Investments	$359.8	$351.8
Accounts Receivable	$93.0	$100.4
Inventory	$92.7	$98.0
Total Assets	$865.8	$816.5
Liabilities	$209.7	$209.2
Shareholders' Equity	$656.0	$607.3

Q3 2019 Guidance*

	Q3 2019		
Revenue	$128M	+/-	$5M
GAAP EPS from continuing operations	$0.23	+/-	$0.05
Non-GAAP** EPS	$0.33	+/-	$0.05

**Estimates as of Q2 2019 earnings conference call. The company assumes no obligation to update guidance.*
***Q3 2019 non-GAAP measures exclude the impact of non-cash related charges such as stock-based compensation and amortization of intangible assets, as well as discontinued operations and non-recurring items such as acquisition-related costs and restructuring expenses.*

Non-GAAP Measures

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 discontinued operations, minority interest, and non-recurring items such as acquisition-related costs and restructuring expenses. The non-GAAP measures 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 - operating expenses and operating income, excluding certain items	Three Months Ended			Six Months Ended	
	June 30,		March 31,	June 30,	
	2019	2018	2019	2019	2018
Gross profit from continuing operations, as reported	$ 64,126	$ 101,235	$ 65,740	$ 129,866	$ 204,880
Adjustments to gross profit:					
Stock-based compensation	55	149	233	288	500
Facility expansion and relocation costs	150	249	170	320	249
Non-GAAP gross profit	64,331	101,633	66,143	130,474	205,629
Operating expenses from continuing operations, as reported	53,121	45,217	53,949	107,070	92,759
Adjustments:					
Amortization of intangible assets	(1,874)	(1,264)	(1,973)	(3,847)	(2,521)
Stock-based compensation	(883)	(1,794)	(2,966)	(3,848)	(5,937)
Acquisition-related costs	(1,531)	(255)	(1,511)	(3,042)	(605)
Facility expansion and relocation costs	—	(13)	(74)	(74)	(489)
Restructuring charges	(1,795)	—	(1,673)	(3,468)	—
Non-GAAP operating expenses	47,038	41,891	45,752	92,791	83,207
Non-GAAP operating income	$ 17,293	$ 59,742	$ 20,391	$ 37,683	$ 122,422

Reconciliation of Non-GAAP measure - operating expenses and operating income, excluding certain items	Three Months Ended			Six Months Ended	
	June 30,		March 31,	June 30,	
	2019	2018	2019	2019	2018
Gross profit from continuing operations, as reported	47.6 %	51.6 %	46.7 %	47.1 %	52.3 %
Adjustments to gross profit:					
Stock-based compensation	—	0.1	0.2	0.1	0.1
Facility expansion and relocation costs	0.1	0.1	0.1	0.1	0.1
Acquisition-related costs	—	—	—	—	—
Non-GAAP gross profit	47.7	51.8	47.0	47.3	52.5
Operating expenses from continuing operations, as reported	39.4	23.1	38.3	38.9	23.7
Adjustments:					
Amortization of intangible assets	(1.4)	(0.6)	(1.4)	(1.4)	(0.6)
Stock-based compensation	(0.7)	(1.1)	(2.0)	(1.4)	(1.6)
Acquisition-related costs	(1.1)	(0.1)	(1.1)	(1.2)	(0.2)
Facility expansion and relocation costs	—	—	(0.1)	—	(0.1)
Restructuring charges	(1.3)	—	(1.2)	(1.3)	—
Non-GAAP operating expenses	34.9	21.3	32.5	33.6	21.2
Non-GAAP operating income	12.8 %	30.5 %	14.5 %	13.7 %	31.3 %

Reconciliation of Non-GAAP measure - income excluding certain items	Three Months Ended			Six Months Ended	
	June 30,		March 31,	June 30,	
	2019	2018	2019	2019	2018
Income from continuing operations, less noncontrolling interest, net of income taxes	$ 23,362	$ 46,356	$ 15,379	$ 38,741	$ 92,695
Adjustments:					
Amortization of intangible assets	1,874	1,264	1,973	3,847	2,521
Acquisition-related costs	1,531	255	1,511	3,042	605
Facility expansion and relocation costs	150	262	244	394	738
Restructuring charges	1,795	—	1,673	3,468	—
Tax Cuts and Jobs Act Impact	—	—	—	—	1,853
Central inverter services business sale	(14,804)	—	—	(14,804)	—
Tax effect of Non-GAAP adjustments	2,536	(238)	(851)	1,685	(547)
Non-GAAP income, net of income taxes, excluding stock-based compensation	16,444	47,899	19,929	36,373	97,865
Stock-based compensation, net of taxes	722	1,477	2,463	3,185	4,937
Non-GAAP income, net of income taxes	$ 17,166	$ 49,376	$ 22,392	$ 39,558	$ 102,802

Reconciliation of Non-GAAP measure - per share earnings excluding certain items	Three Months Ended			Six Months Ended	
	June 30,		March 31,	June 30,	
	2019	2018	2019	2019	2018
Diluted earnings per share from continuing operations, as reported	$ 0.61	$ 1.17	$ 0.40	$ 1.01	$ 2.33
Add back (subtract):					
per share impact of Non-GAAP adjustments, net of tax	(0.16)	0.08	0.18	0.02	0.25
Non-GAAP per share earnings	$ 0.45	$ 1.25	$ 0.58	$ 1.03	$ 2.58

*non-GAAP measures exclude the impact of non-cash related charges such as stock-based compensation and amortization of intangible assets, as well as discontinued operations, and non-recurring items such as acquisition-related costs and restructuring expenses.

Reconciliation of Q3 2019 Guidance*

	Low End		High End
Revenues	**$123M**	**-**	**$133M**
Reconciliation of Non-GAAP earnings per share**			
GAAP earnings per share	**$0.18**	-	**$0.28**
Stock-based compensation	0.06	-	0.06
Amortization of intangible assets	0.05	-	0.05
Restructuring and other	0.01	-	0.01
Tax effects of excluded items	(0.02)	-	(0.02)
Non-GAAP earnings per share**	**$0.28**	-	**$0.38**

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***Q3 2019 non-GAAP measures exclude the impact of non-cash related charges such as stock-based compensation and amortization of intangible assets, as well as discontinued operations and non-recurring items such as acquisition-related costs and restructuring expenses.*