Q1 2019
Earnings Presentation

Advanced Energy

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Safe Harbor Statement

The company's guidance with respect to anticipated financial results for the second quarter ending June 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 (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 U.S. tax reform that was enacted in late 2017; and (m) the effects of recent 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 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.

Key Messages

- Q1 revenue within guidance range while non-GAAP EPS above guidance range
  - Revenue of $140.7 million, non-GAAP* operating margin of 14.5%, and non-GAAP* EPS of $0.58 (approx. $0.47 excluding discrete tax benefit)
  - Macro and market conditions were challenging in Q1 but our team executed to solid profitability
  - Q2 to decline modestly due to consumer electronics markets, timing of solar projects and further softening in the DRAM market
- Semiconductor in the early stage of market stabilization
  - Near-term environment remains dynamic, but demand from some customers started to improve
  - Good progress on our accelerated R&D and new design wins position AE for long-term growth
- Industrial remains solid
  - Solar strength offsets FPD weakness and new design wins support a strong 2H'19
- Service is on-track to deliver long-term target of >10% CAGR
- Executing our strategic initiatives in acquisition integration and the second production site

*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, estimated income tax expense associated with U.S. tax reform, and non-recurring items such as acquisition-related costs and restructuring expenses.

Semiconductors

- Semiconductor revenue of $67.5M, -19% q/q and -50% y/y
  - Including service Revenue down -15% and 42% from last years peak
  - Environment remains challenging, with incremental weakness in memory partially offset by a pick up in foundry/logic

- Incremental weakness in DRAM, but in early stages of stabilization
  - Modest decline in Q2 due to further weakening in DRAM market and continued inventory adjustment by our customers
  - Demand from some customers has recovered, while others continues to decline
  - Early stage of market stabilization with our 2H’19 revenue remaining around 1H’19 level

- Our accelerated R&D investments and partnership with customers delivered results
  - Secured a critical design win for RF match in one of the leading etch companies
  - Won a PECVD hard mask application at a leading Korean OEM customer
  - Completed three RF evaluation programs and started to ship units for Beta testing in fabs
  - The importance of Power in next-generation semi manufacturing processes

Industrial and Service

- Industrial Technologies revenue of $44.6M, +7% q/q and +27% y/y
  - Revenue from solar cell manufacturers was strong in Q1, reaching 2nd highest quarterly revenue
  - Solar project timing impacted Q2, but demand for c-Si cell manufacturing remains strong
  - Demand for consumer electronics investments in FPD and hard coating is slowing
  - Secured multiple wins in the quarter in solar, medical, foldable OLED and glass production
  - Stage set for growth in 2H'19

- Service revenue of $28.6M, -2% q/q and +17% y/y
  - Seasonality, lower fab utilization in China, and timing of repair impacted in Q1
  - Business to improve over the rest of the year
  - Divestiture of the U.S.-based grid-tied central inverter service business will reduce our long-term liabilities and focus our service operations on our core business
  - Reiterate service target growth rate of >10% even after divestiture

Q1 Revenue by Application

($ in thousands)	Q1'19	Q4'18	Q1'18	Q/Q	Y/Y
Semiconductors	$67,514	$83,480	$136,010	(19.1%)	(50.4%)
Industrial Technologies	$44,598	$41,559	$35,199	7.3%	26.7%
Global Service	$28,631	$29,122	$24,408	(1.7%)	17.3%
Total Revenue	**$140,743**	**$154,161**	**$195,617**	**(8.7%)**	**(28.1%)**

Q1 2019 Income Statement

($ in Millions, except percentage & EPS)	Q1'19	Q4'18	Q1'18	Q/Q	Y/Y
Revenue	$140.7	$154.2	$195.6	(8.7%)	(28.1%)
GAAP gross margin %	46.7%	48.8%	53.0%		
GAAP operating expenses	$53.9	$55.6	$47.5	(3.0%)	13.5%
GAAP operating margin from continuing ops %	8.4%	12.7%	28.7%		
GAAP EPS from continuing ops	$0.40	$0.50	$1.16	(20.0%)	(65.5%)
Non-GAAP* Gross Margin %	47.0%	49.4%	53.2%		
Non-GAAP* operating expenses	$45.8	$47.5	$41.3	(3.6%)	10.7%
Non-GAAP* operating margin	14.5%	18.6%	32.0%		
Non-GAAP* EPS	$0.58	$0.73	$1.34	(20.5%)	(56.7%)

**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, estimated income tax expense associated with U.S. tax reform, and non-recurring items such as acquisition-related costs and restructuring expenses.*

Q1 2019 Balance Sheet and Cash Flow

- Generated $6.9 million in cash flow from continuing operations in Q1
- Cash and Investments balance increased to $353.7 million
- Paused share repurchase
  - Due to large repurchases in 2018 and projected Q1 cash flow
- Inventory turns at 3.0x; DSO 65 days; DPO 53 days
  - Inventory increased $1 million from the end of Q4 on timing of materials receipts

($ in Millions)	**Q1’19**	**Q4’18**
Cash & Investments	$353.7	$351.8
Accounts Receivable	$102.4	$100.4
Inventory	$99.1	$98.0
Total Assets	$857.0	$816.5
Liabilities	$234.8	$209.2
Shareholders’ Equity	$622.1	$607.3

Q2 2019 Guidance*

	Q2 2019		
Revenue	$130M	-	$140M
GAAP EPS from continuing operations	$0.10	-	$0.25
Non-GAAP** EPS	$0.25	-	$0.40

**Estimates as of Q1 2019 earnings conference call. The company assumes no obligation to update guidance.*

***Q2 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

This presentation 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 discontinued operations and non-recurring items such as acquisition-related costs and restructuring expenses. Additionally, the first quarter non-GAAP results exclude estimated income tax expense associated with U.S. tax reform. 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.

Reconciliation of GAAP to non-GAAP* Measures

Reconciliation of Non-GAAP measure - operating expenses and operating income, excluding certain items (in thousands)

	Three Months Ended		
	March 31,		December 31,
	2019	2018	2018
Gross profit from continuing operations, as reported	$ 65,740	$ 103,645	$ 75,188
Adjustments to gross profit:			
Stock-based compensation	233	351	166
Facility expansion and relocation costs	170	—	354
Acquisition-related costs	—	—	411
Non-GAAP gross profit	66,143	103,996	76,119
Operating expenses from continuing operations, as reported	53,949	47,542	55,618
Adjustments:			
Amortization of intangible assets	(1,973)	(1,257)	(1,816)
Stock-based compensation	(2,966)	(4,143)	(2,077)
Acquisition-related costs	(1,511)	(350)	(416)
Facility expansion and relocation costs	(74)	(476)	—
Restructuring charges	(1,673)	—	(3,836)
Non-GAAP operating expenses	45,752	41,316	47,473
Non-GAAP operating income	$ 20,391	$ 62,680	$ 28,646

Reconciliation of Non-GAAP measure - operating expenses and operating income, excluding certain items

	Three Months Ended		
	March 31,		December 31,
	2019	2018	2018
Gross profit from continuing operations, as reported	46.7%	53.0%	48.8%
Adjustments to gross profit:			
Stock-based compensation	0.2	0.2	0.1
Facility expansion and relocation costs	0.1	—	0.2
Acquisition-related costs	—	—	0.3
Non-GAAP gross profit	47.0	53.2	49.4
Operating expenses from continuing operations, as reported	38.3	24.3	36.1
Adjustments:			
Amortization of intangible assets	(1.4)	(0.6)	(1.2)
Stock-based compensation	(2.0)	(2.1)	(1.3)
Acquisition-related costs	(1.1)	(0.2)	(0.3)
Facility expansion and relocation costs	(0.1)	(0.2)	—
Restructuring charges	(1.2)	—	(2.5)
Non-GAAP operating expenses	32.5	21.2	30.8
Non-GAAP operating income	14.5%	32.0%	18.6%

Reconciliation of Non-GAAP measure - income excluding certain items

	Three Months Ended		
	March 31,		December 31,
	2019	2018	2018
Income from continuing operations, less noncontrolling interest, net of income taxes	$ 15,379	$ 46,339	$ 19,218
Adjustments:			
Amortization of intangible assets	1,973	1,257	1,816
Acquisition-related costs	1,511	350	827
Facility expansion and relocation costs	244	476	354
Restructuring charges	1,673	—	3,836
Tax Cuts and Jobs Act Impact	—	1,853	1,452
Tax effect of Non-GAAP adjustments	(851)	(309)	(1,198
Non-GAAP income, net of income taxes, excluding stock-based compensation	19,929	49,966	26,305
Stock-based compensation, net of taxes	2,463	3,460	1,705
Non-GAAP income, net of income taxes	$ 22,392	$ 53,426	$ 28,010

Reconciliation of Non-GAAP measure - per share earnings excluding certain items

	Three Months Ended		
	March 31,		December 31,
	2019	2018	2018
Diluted earnings per share from continuing operations, as reported	$ 0.40	$ 1.16	$ 0.50
Add back:			
per share impact of Non-GAAP adjustments, net of tax	0.18	0.18	0.23
Non-GAAP per share earnings	$ 0.58	$ 1.34	$ 0.73

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Reconciliation of Q2 2019 Guidance*

	Low End		High End
Revenues	**$130M**	**-**	**$140M**
Reconciliation of Non-GAAP earnings per share**			
GAAP earnings per share	**$0.10**	-	**$0.25**
Stock-based compensation	0.06	-	0.06
Amortization of intangible assets	0.05	-	0.05
Restructuring and other	0.08	-	0.07
Tax effects of excluded items	(0.04)	-	(0.03)
Non-GAAP earnings per share**	**$0.25**	-	**$0.40**

**Estimates as of Q1 2019 earnings conference call. The company assumes no obligation to update guidance.*

***Q2 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.*