KLA-Tencor

Rick Wallace

President and Chief Executive Officer

Bren Higgins

Chief Financial Officer

COWEN & CO.

45TH ANNUAL TECHNOLOGY, MEDIA & TELECOM CONFERENCE

JUNE 1, 2017

Safe Harbor

This presentation contains certain 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. Except as otherwise specifically indicated herein, the information included in this presentation is as of the date it is delivered.

These forward-looking statements, including estimates involving: WFE and process control market trends; our R&D investment levels; our new platform launches; our revenue from memory customers; WFE investment levels in China; our long-term revenue model; and our non-GAAP gross margin, R&D, SG&A and operating margins; are based on the company's or other third party estimates, assumptions and expectations of future events and are subject to a number of risks and uncertainties. Actual results could differ materially from those projected in the forward-looking statements. For the factors that may cause actual results to differ materially from those projected and anticipated in forward-looking statements in this presentation, please refer to the company's Annual Report on Form 10-K for the year ended June 30, 2016, subsequently filed Quarterly Reports on Form 10-Q and other filings with the Securities and Exchange Commission (including, but not limited to, the risk factors described therein). The company assumes no obligation to, and does not currently intend to, update these forward-looking statements.

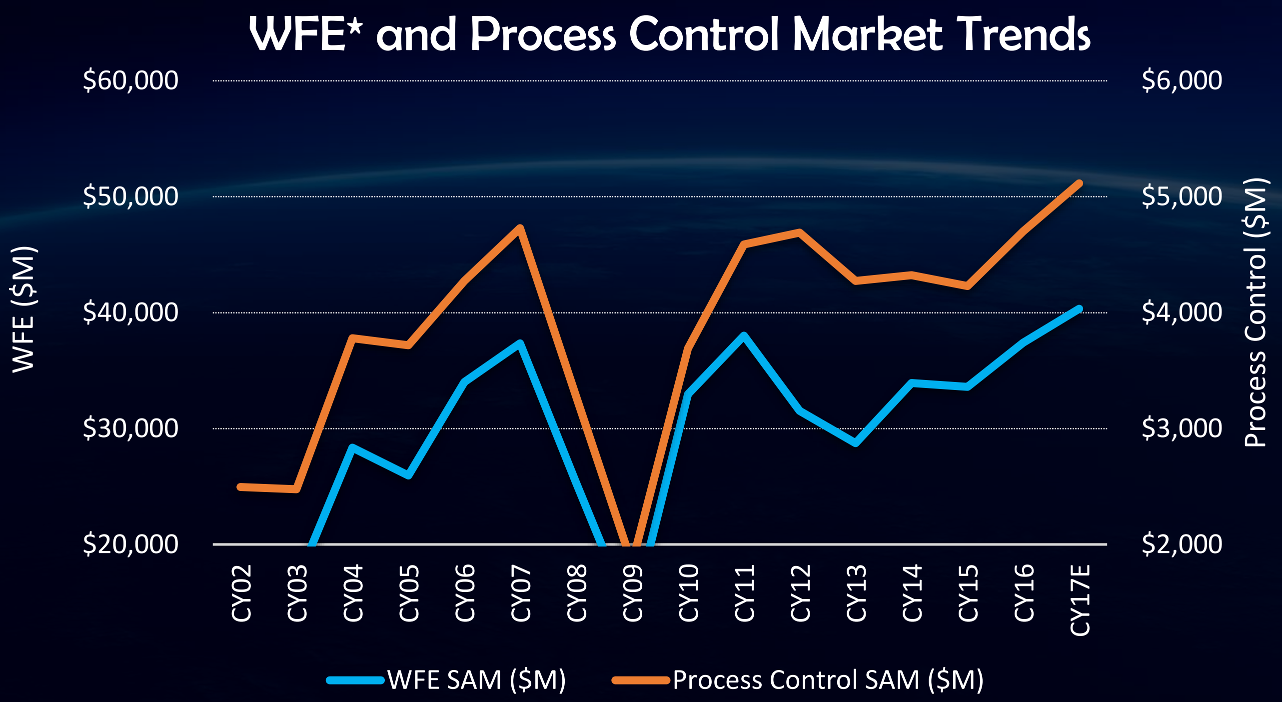
Business Environment

Industry Environment is Healthy and Stable

Semiconductor Industry Growth	*More diversified end markets; Growth in-line with global GDP*
WFE	*Less cyclical*
Process Control Intensity (% of WFE)	*Flat-to-increasing*
KLA-Tencor Market Share	*Extending market leadership with investment in differentiated products*

KLA-Tencor

WFE and Process Control Markets are Growing



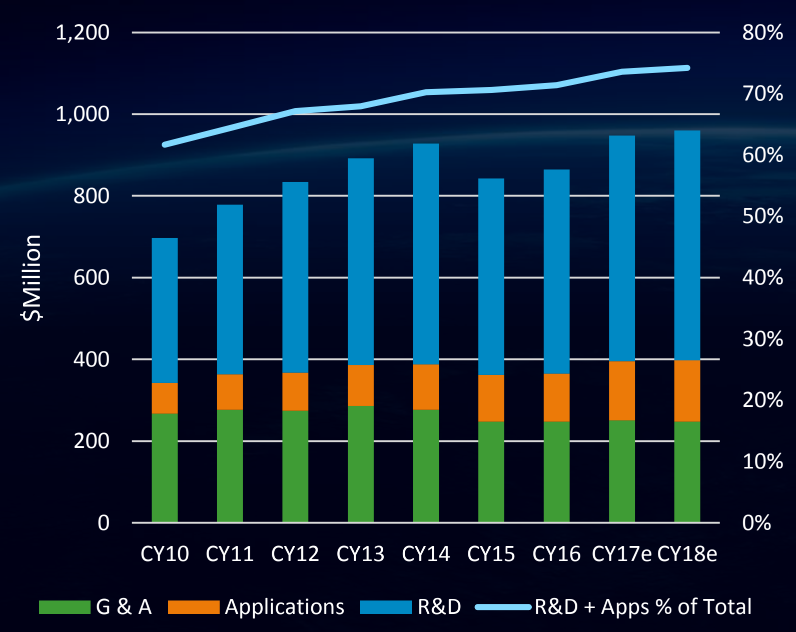
Data source: Gartner
*Including WLP

- 7/10nm Foundry (AI, Mobile)
- EUV Early Qualification
- Memory (Data Storage)
- Legacy Node Technology Conversions and Capacity Growth (IoT, Auto)
- China

KLA-Tencor

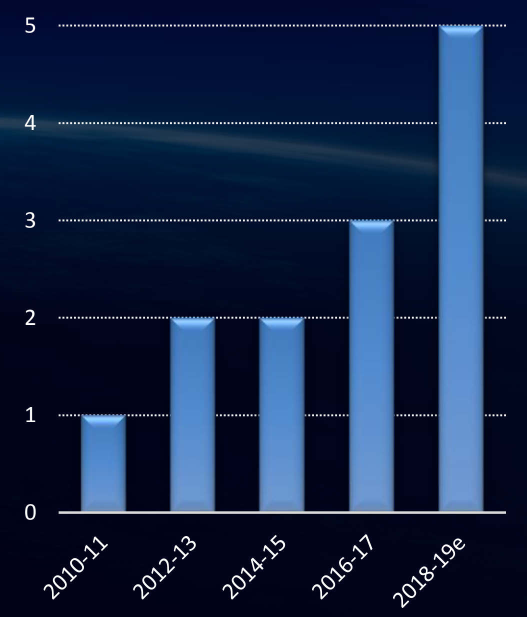
Increased Investment, New Products, Market Leadership

Higher R&D Investment



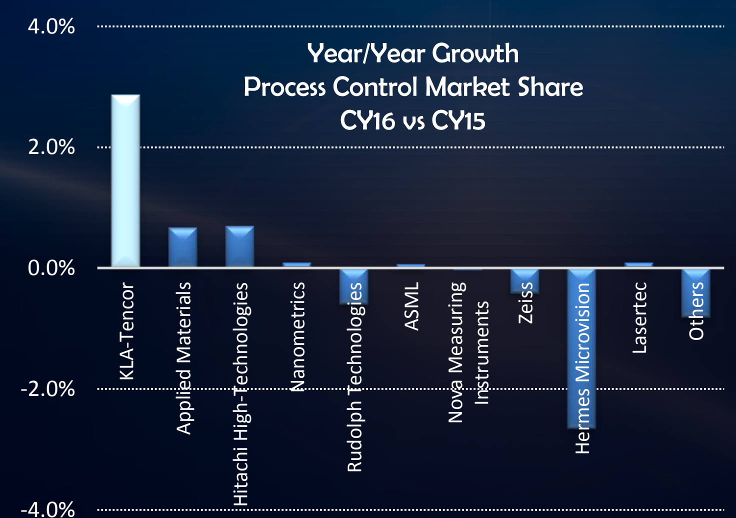
Source: KLA-Tencor (Non-GAAP)

Expanded New Platform Launches



Source: KLA-Tencor

Strengthened Market Leadership

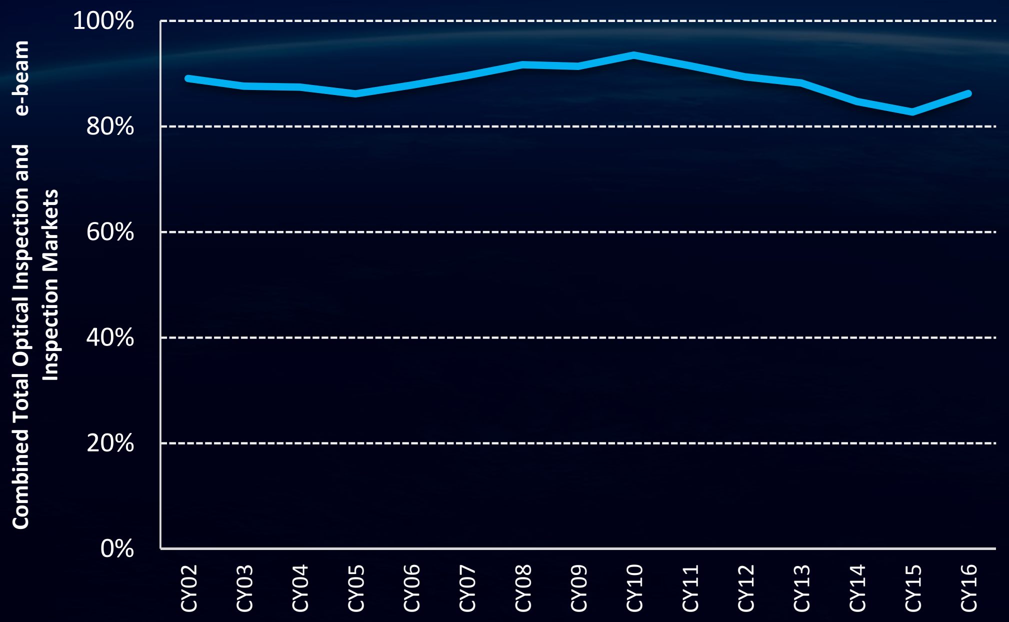


Source: Gartner Apr 2017

KLA-Tencor

Optical Inspection is a Key Enabler of Semiconductor Industry Growth

Optical Inspection % of Combined TAM



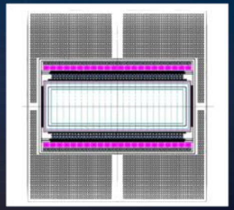
Source: Gartner

- Optical / e-Beam are Complementary
- Future Growth Opportunities: EUV, 7nm

Continuous Innovation:
Light Sources, Optics and Sensors

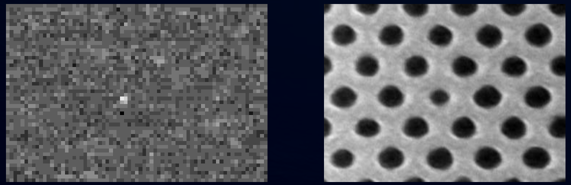
Broad Band Plasma Light Source

High NA Optics



Sensor

EUV Print Check



5nm CD variation

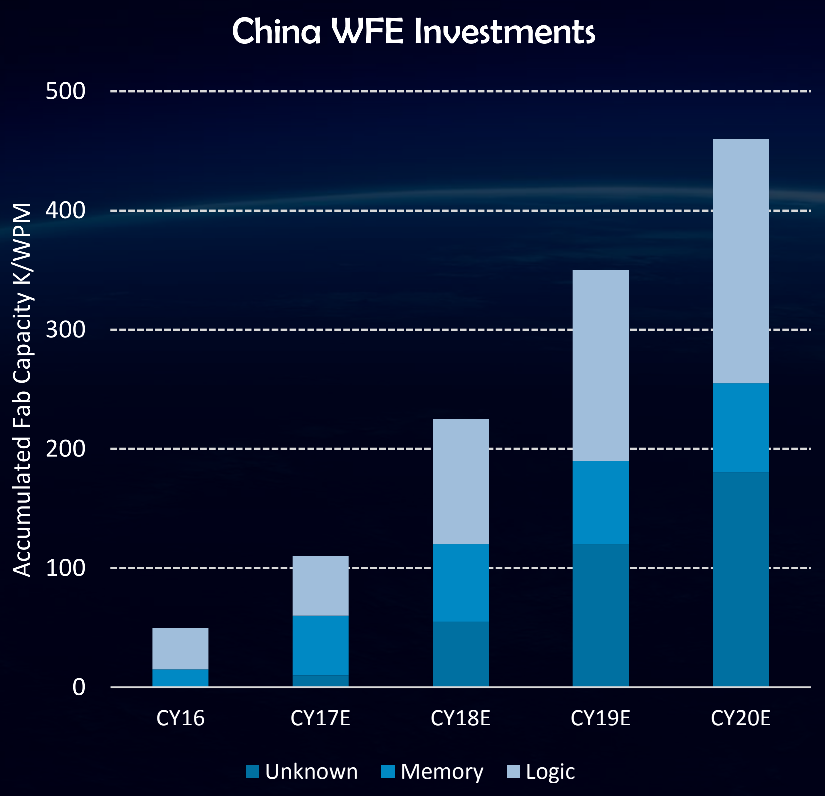
KLA-Tencor

Memory is Growing Driven by Complexity, 3D

Source: KLA-Tencor

- Increasing Cost/Complexity in Advanced Memory Driving new Opportunities for Process Control
- Business Levels with Memory Customers Reaching New Highs
- PC Intensity% Growing in 3D NAND
- New Memory Products in the Pipeline

China is Fertile Ground for KLA-Tencor



Source: IBS, internal estimates

- Higher Process Control Intensity
- Higher market share for KLA-Tencor
- Smaller, geographically distributed fabs
- Distributed support infrastructure required
- $5B Process Control SAM: 2017—2020

KLA-Tencor

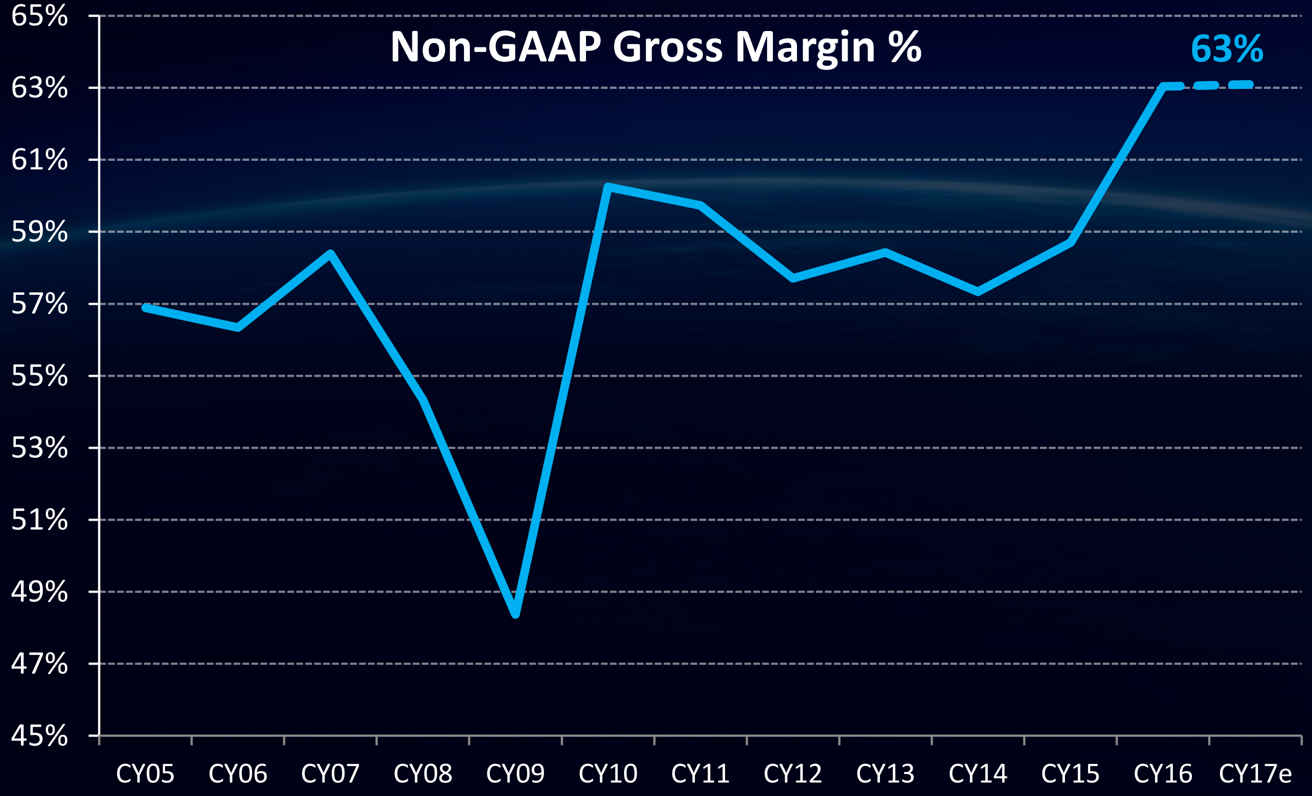
Financial Update

Long-Term Revenue Model Update

2015 MODEL	GROWTH DRIVERS	2017 UPDATE
Services Growth ~1–2%	Growth in Installed Base High Fab Utilization IC Unit Growth	Services Growth ~1–2%
Share Gain ~1–2%	Moore's Law	Share Gain ~1–2%
Industry Growth ~3%	Industry Consolidation Diversification of End Markets New Applications	Industry Growth ~4—5%
5—7%	**Through-Cycle Revenue Growth Target**	**6—8%**

KLA-Tencor

Gross Margin Trends



Source: KLA-Tencor

Systems Margin Drivers

- Higher shipment volume
- More efficient new product execution
- Stronger pricing on new products

Service Margin Drivers

- Large and growing installed base
- Improved reliability of new tools
- Improved resource utilization levels

* CY17E based on analyst estimates

KLA-Tencor

Normalized Business Model

Revenue	$3.0B-$3.3B	$3.3B-$3.6B	$3.6B-$3.9B	$3.9B-$4.2B	$4.2B-$4.5B
Gross Margin	59%–60%	60%–61%	61%–63%	62%–63%	62%–63%
R&D	15%–16%	14%–15%	13%–15%	13%–14%	13%–14%
SG&A	11%–12%	11%–12%	10%–11%	10%–11%	~10%
Operating Margin	31%–33%	33%–36%	36%–37%	37%–38%	38%+

* Non-GAAP

Capital Structure Priorities

- Innovation
- Business Model
- Prudent Tax Strategy
- Debt

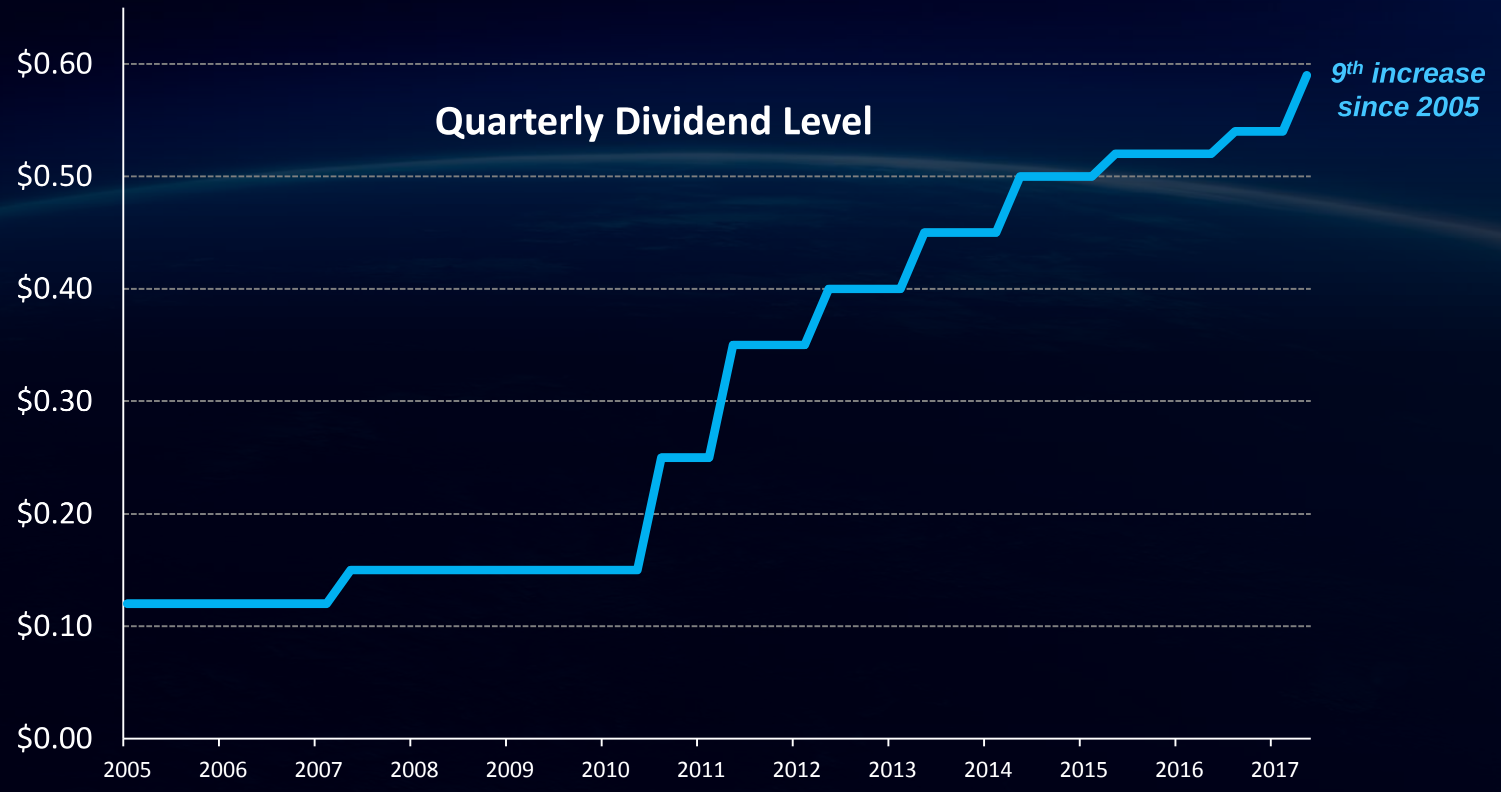
Priorities

1
- R&D
- Working Capital
- Acquisitions

2
- Dividends
- Debt Repayment
- Share Repurchases

KLA-Tencor

Announcing Dividend Increase

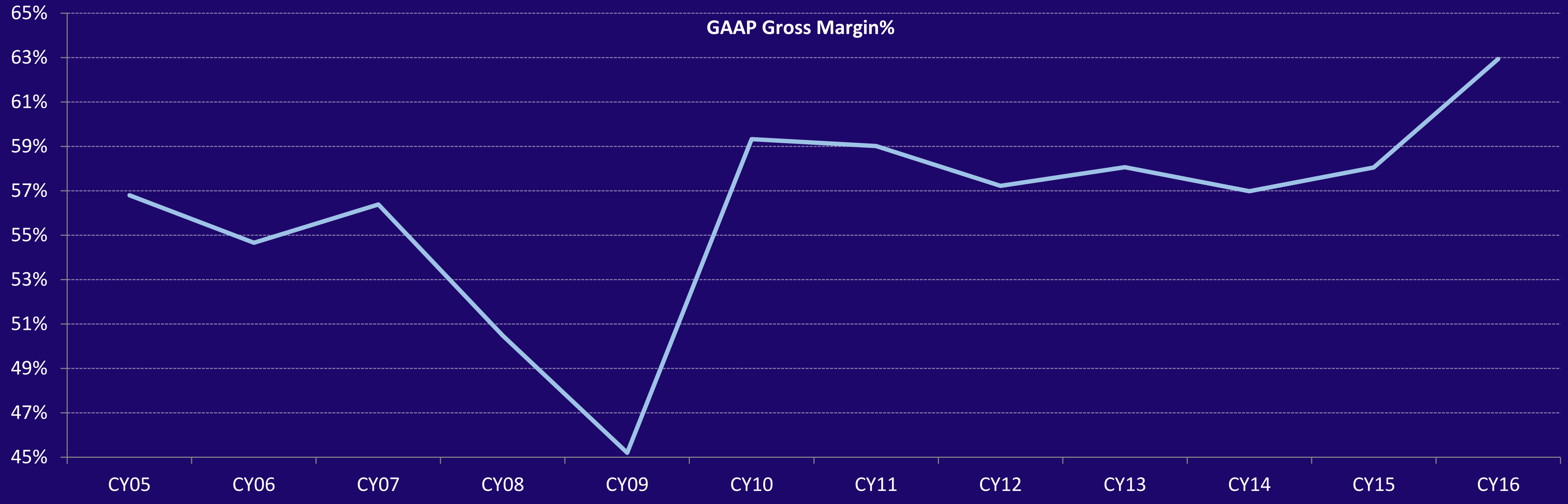


- Strong economic moat and sustainable business model
- Track record of consistent, regular increases in the dividend payout
- Dividend growth governed by long term growth in Free Cash Flow
- Payout ratio: ~40–50% of FCF

KLA-Tencor

Appendix

Reconciliation of GAAP and Non-GAAP Financial Measures – Annual (Calendar Year)



(Dollars in millions)		CY 2005	CY 2006	CY 2007	CY 2008	CY 2009	CY 2010	CY 2011	CY 2012	CY 2013	CY 2014	CY 2015	CY 2016
GAAP gross margin		$ 1,137	$ 1,299	$ 1,568	$ 1,071	$ 621	$ 1,475	$ 1,868	$ 1,789	$ 1,633	$ 1,644	$ 1,653	$ 2,051
Acquisition-related charges	a.	2	10	50	53	32	23	21	15	7	10	8	2
Restructuring, severance and other related charges	b.	-	30	4	29	12	-	2	-	3	-	11	-
Merger-related charges	c.	-	-	-	-	-	-	-	-	-	-	-	1
Restatement related charges	e.	-	-	2	-	-	-	-	-	-	-	-	-
Non-GAAP gross margin		$ 1,139	$ 1,339	$ 1,624	$ 1,153	$ 665	$ 1,498	$ 1,891	$ 1,804	$ 1,643	$ 1,654	$ 1,672	$ 2,054
Revenue		$ 2,002	$ 2,377	$ 2,781	$ 2,122	$ 1,374	$ 2,486	$ 3,165	$ 3,127	$ 2,813	$ 2,885	$ 2,848	$ 3,259
GAAP gross margin as a percentage of revenue		57%	55%	56%	50%	45%	59%	59%	57%	58%	57%	58%	63%
Non-GAAP gross margin as a percentage of revenue		57%	56%	58%	54%	48%	60%	60%	58%	58%	57%	59%	63%

Refer to the section “Reconciliation of GAAP and Non-GAAP Financial Measures – Explanation of Non-GAAP Financial Measures” for detailed descriptions and information for each reconciling item.

Reconciliation of GAAP and Non-GAAP Financial Measures – Annual (Calendar Year)

(Dollars in millions)		CY 2010	CY 2011	CY 2012	CY 2013	CY 2014	CY 2015	CY 2016
GAAP research and development expenses ("R&D")		$ 358	$ 421	$ 470	$ 513	$ 550	$ 492	$ 503
Acquisition-related charges	a.	(4)	(4)	(3)	(3)	(3)	(2)	-
Restructuring, severance and other related charges	b.	-	(3)	-	(4)	(6)	(9)	-
Merger-related charges	c.	-	-	-	-	-	-	(4)
Non-GAAP R&D expenses		$ 354	$ 414	$ 467	$ 506	$ 541	$ 481	$ 499
GAAP selling, general and administrative expenses ("SG&A")		$ 360	$ 378	$ 376	$ 392	$ 396	$ 389	$ 379
Acquisition-related charges	a.	(6)	(6)	(6)	(6)	(3)	(3)	(2)
Restructuring, severance and other related charges	b.	(6)	(2)	(3)	-	(4)	(15)	-
Merger-related charges	c.	-	-	-	-	-	(9)	(12)
Debt extinguishment loss and recapitalization charges	d.	-	-	-	-	(2)	-	-
Restatement related charges	e.	(5)	(6)	-	-	-	-	-
Non-GAAP SG&A expenses*		$ 343	$ 364	$ 367	$ 386	$ 387	$ 362	$ 365
* Comprised of:								
Applications expenses		$ 76	$ 87	$ 93	$ 100	$ 111	$ 114	$ 118
Other SG&A		267	277	274	286	276	248	247
Total Non-GAAP SG&A		$ 343	$ 364	$ 367	$ 386	$ 387	$ 362	$ 365

Refer to the section "Reconciliation of GAAP and Non-GAAP Financial Measures – Explanation of Non-GAAP Financial Measures" for detailed descriptions and information for each reconciling item.

Reconciliation of GAAP and Non-GAAP Financial Measures

Explanation of Non-GAAP Financial Measures:

To supplement our condensed consolidated financial statements presented in accordance with GAAP, we provide certain non-GAAP financial information and reconciliation of GAAP and non-GAAP financial measures, which are adjusted from results based on GAAP to exclude certain costs and expenses, as well as other supplemental information. The non-GAAP and supplemental information is provided to enhance the user's overall understanding of our operating performance and our prospects in the future. Specifically, we believe that the non-GAAP information provides useful measures to both management and investors regarding financial and business trends relating to our financial performance by excluding certain costs and expenses that we believe are not indicative of our core operating results. The non-GAAP information is among the budgeting and planning tools that management uses for future forecasting. However, because there are no standardized or generally accepted definitions for most non-GAAP financial metrics, definitions of non-GAAP financial metrics (for example, determining which costs and expenses to exclude when calculating such a metric) are inherently subject to significant discretion. As a result, non-GAAP financial metrics may be defined very differently from company to company, or even from period to period within the same company, which can potentially limit the usefulness of such information to an investor. The presentation of non-GAAP and supplemental information is not meant to be considered in isolation or as a substitute for results prepared and presented in accordance with United States GAAP.

a. Acquisition-related charges includes amortization of intangible assets associated with acquisitions, various acquisition related fair value adjustments and in-process research and development associated with prior acquisitions . Management believes that the expense associated with the amortization of acquisition related intangible assets as well as various acquisition related fair value adjustment and in-process research and development associated with prior acquisitions are appropriate to be excluded because a significant portion of the purchase price for acquisitions may be allocated to intangible assets that have short lives or various acquisition related fair value adjustments as well as adjustments for in-process research and development are not expected to recur, and exclusion of these expenses allows comparisons of operating results that are consistent over time for both KLA-Tencor's newly acquired and long-held businesses. Management believes excluding these items helps investors compare our operating performance with our results in prior periods as well as with the performance of other companies.

b. Restructuring, severance and other related charges include costs associated with employee severance and other exit costs, facilities consolidations, impairment of certain long-lived assets. Management believes excluding these items helps investors compare our operating performance with our results in prior periods as well as with the performance of other companies.

Reconciliation of GAAP and Non-GAAP Financial Measures

c. Merger-related charges associated with the terminated merger agreement between KLA-Tencor and Lam Research Corporation. Charges primarily includes costs for advisory services, appraisals, legal services, employee retention-related expenses and auditing services. Management believes that it is appropriate to exclude these items as they are not indicative of ongoing operating results and therefore limit comparability and excluding these items helps investors compare our operating performance with our results in prior periods as well as with the performance of other companies.

d. Debt extinguishment loss and recapitalization charges include a pre-tax loss on early extinguishment of debt related to the 6.900% Senior Notes due in 2018, net and certain other expenses incurred in connection with the leveraged recapitalization plan which was completed in the second quarter of fiscal year ended June 30, 2015. Management believes that it is appropriate to exclude these items as they are not indicative of ongoing operating results and therefore limit comparability and excluding these items helps investors compare our operating performance with our results in prior periods as well as with the performance of other companies.

e. Restatement related charges include legal and other expenses related to the stock option investigation, shareholder litigation and related matters as well as compensation related to reimbursement payments by KLA-Tencor to non-executive employees for penalty taxes under section 409A of the Internal Revenue Code. Management believes that it is appropriate to exclude those items as they are not indicative of ongoing operating results and therefore limit comparability. Management believes excluding these items helps investors compare our operating performance with our results in prior periods as well as with the performance of other companies.