NASDAQ 39th Investor Conference
London, UK
Bren Higgins, EVP and Chief Financial Officer

December 4th, 2018
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, 2018, 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.
KLA-Tencor Overview
Global Leader in Semiconductor Process Control for 42 Years

- ~6,900 global employees
- ~23,400 tools installed worldwide
- $4.3B CY18E revenue*
- $2.2B R&D investment over last 4 years*

* Based on midpoint of Dec’18 estimates
## December Quarter Guidance

<table>
<thead>
<tr>
<th></th>
<th>Sep-18 Guidance</th>
<th>Sep-18 Actual</th>
<th>Dec-18 Guidance</th>
</tr>
</thead>
<tbody>
<tr>
<td>SHIPMENT</td>
<td>$935M – $1.015B</td>
<td>$1.01B</td>
<td>$985M – $1.065B</td>
</tr>
<tr>
<td>REVENUE</td>
<td>$1.03B – $1.11B</td>
<td>$1.09B</td>
<td>$1.03B – $1.11B</td>
</tr>
<tr>
<td>*EPS</td>
<td>$2.04 – $2.36</td>
<td>$2.46</td>
<td>$2.02 – $2.34</td>
</tr>
</tbody>
</table>

* Non-GAAP, See appendix for GAAP to Non-GAAP reconciliation
Process Control: Inspection and Measurement

Inspection
Find Critical Defects

Metrology
Measure Critical Parameters

You can’t fix what you can’t find

You can’t control what you can’t measure
Core Competency: Technology Innovation

Core Technologies + System Integration

- DUV/UV & Visible Optics
- Electron Optics
- Illumination Systems
- Image Sensors and Cameras
- Precision Motion Control
- Advanced Algorithms
- Computational Lithography
- High Speed Data Processing
Strong Market Leadership: 4x Share vs. Nearest Competitor

- KLA-Tencor
- Applied Materials
- Hitachi High Tech
- ASML / HMI
- Others

Sources: Gartner
Trends Driving Industry Growth
Broad Range of End-User Applications

The “Data” Era

everything becomes smart producing an enormous amount of data
WFE Spending and Process Control Demand at Historical High

Sources: Gartner
<table>
<thead>
<tr>
<th>1970s</th>
<th>1980s</th>
<th>1990s</th>
<th>2000s</th>
<th>2010s</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measurement Systems</td>
<td>Automated Engineering Analysis</td>
<td>Automated Inline Monitor</td>
<td>Integrated Yield Management</td>
<td>Innovations and Connected Solutions</td>
</tr>
<tr>
<td>Reticle Inspection</td>
<td>Bare Wafer Inspection</td>
<td>BBP Patterned Wafer Inspection</td>
<td>LS Patterned Wafer Inspection</td>
<td>All-Surface Macro Patterned Wafer Inspection</td>
</tr>
<tr>
<td>Surface Profiling</td>
<td>Resistivity</td>
<td>Overlay</td>
<td>Film Thickness</td>
<td>Optical CD</td>
</tr>
<tr>
<td>Defect Analytic Software</td>
<td>Litho</td>
<td>Patterning Simulation Software</td>
<td>Reticle Registration</td>
<td>Reticle Analytic Software</td>
</tr>
</tbody>
</table>

Enabling Semiconductor Industry Growth for 40+ Years
Business Model and Capital Structure
Virtuous Circle of Success

- Investment in Growth & Cash Returns to Stockholders
- Market Leadership & Differentiated Solutions
- Strong Operating Margins & Free Cash Flow
- Strong Gross Margins
- Investment in New Products
Revised Business Model to Match new Industry Growth

<table>
<thead>
<tr>
<th>2015 MODEL</th>
<th>GROWTH DRIVERS</th>
<th>2018</th>
</tr>
</thead>
</table>
| Services Growth | Growth in Installed Base  
High Fab Utilization  
IC Unit Growth | Services Growth  
~1-2% |
| Share Gain | Moore’s Law / Strength of New  
Product Pipeline | 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% |
Revenue Growth and Strong Free Cash Flow  Leverage

10 yr. Revenue CAGR = 7.2%
10 yr. FCF CAGR = 13.3%
Strategic Capital Allocation Priorities

First
- R&D
- Working Capital
- Acquisitions

Second
- Dividends
- Share Repurchases
- Debt Repayment
Orbotech’s Fast Growing Markets Complement KLA-Tencor’s Portfolio

### Solutions

**Printed Circuit Boards**
- **PCB imaging and inspection**
  - Automated Opt. Insp. (AOI)
  - Direct Imaging (Di)
  - Automate Opt. Shaping (AOS)
  - Inkjet 3D Printing
  - UV Drilling
  - CAM

**Flat Panel Displays**
- **LCD and OLED inspection, test, and repair**
  - AOI
  - Test
  - Repair

**Semiconductor Devices**
- **Advanced wafer processing solutions**
  - Physical Vapor Deposition (PVD)
  - Chemical Vapor Deposition (CVD)
  - Plasma Etch

### Market Growth

‘17–’20 CAGR
- **Printed Circuit Boards**: 8%
- **Flat Panel Displays**: 13%
- **Semiconductor Devices**: 15%

### Select Customers

**Unimicron**

**MekTec**

**AUO**

**OSRAM**

### Market Leadership

- ✓ **Product Leadership**: DI, AOI, AOS
- ✓ **First to market and industry leader in AOI and Electrical testing**
- ✓ **Top semiconductor suppliers**:
  - 5 of top 5 OSATs
  - 4 of top 5 IDMs
  - 27 of top 30 MEMS manufacturers
  - 7 of top 10 Power semiconductor manufacturers

Source: Orbotech annual report and company presentations
Orbotech: Compelling Strategic Transaction for Further Growth

- Extends KLA-Tencor’s technology and market reach within the electronics value chain
- Increases exposure to fast growing end markets (5G, AR/VR, smart mobile, OLED, Automotive)
- Complementary geographic and customer footprints, focused on customer loyalty and success
- Expands KLA-Tencor’s product addressable market from $6.0 billion to $8.5 billion by 2020
- Immediately accretive to revenue growth, non-GAAP earnings, and free cash flow per share with ~$50 million run rate cost synergies
- Supports KLA-Tencor’s long term revenue and earnings growth targets

1 excluding service
Summary

• Global leader in process control enabling Semiconductor Industry growth for 40+ years

• Long term Semiconductor Industry growth driven by broad range of end-user applications requiring advanced semiconductor devices

• Customer focus and high levels of investment in R&D drive technology leadership and high barriers to entry for KLA-Tencor in process control

• Business model features high levels of profitability and strong cash flow across industry cycles

• Pending acquisition of Orbotech provides drives further growth and market leadership
Thank you
Appendix
## Reconciliation of Non-GAAP Financial Measures

(For the three months ended September 30, 2018)

<table>
<thead>
<tr>
<th>GAAP net income</th>
<th>Adjustments to reconcile GAAP net income to non-GAAP net income*</th>
<th>Non-GAAP net income</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Acquisition-related charges</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Income tax effect of non-GAAP adjustments</td>
<td></td>
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<tr>
<td></td>
<td>Discrete tax items</td>
<td></td>
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<tr>
<td></td>
<td>$</td>
<td>$384,079</td>
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<td></td>
<td>$</td>
<td>$2.46</td>
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Note: The guidance as of October 29, 2017 and July 30, 2018 represents our best estimate considering the information known as of the date of issuing the guidance. We undertake no responsibility to update the above in light of new information or future events. Refer to the forward looking statements for important information. Also Refer to “Reconciliation of Non-GAAP Financial Measures – Explanation of Non-GAAP Financial Measures” for detailed descriptions and information of each reconciling item.

## Reconciliation of Q1 and Q2 Fiscal Year 2019 Guidance Range

(For Q2FY19 and Q1FY19)

<table>
<thead>
<tr>
<th>GAAP diluted net income per share</th>
<th>Acquisition-related charges (a)</th>
<th>Effect on net income per diluted share</th>
<th>Shares used in net income per diluted shares calculation</th>
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</thead>
<tbody>
<tr>
<td>Low</td>
<td>High</td>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>$1.88</td>
<td>$2.20</td>
<td>$2.01</td>
<td>$2.33</td>
</tr>
<tr>
<td>0.14</td>
<td>0.14</td>
<td>0.03</td>
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<tr>
<td>$2.02</td>
<td>$2.34</td>
<td>$2.04</td>
<td>$2.36</td>
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<tr>
<td>$152.8</td>
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<td>$156.2</td>
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## Reconciliation of Calendar Year Free Cash Flow

<table>
<thead>
<tr>
<th>CY08</th>
<th>CY09</th>
<th>CY10</th>
<th>CY11</th>
<th>CY12</th>
<th>CY13</th>
<th>CY14</th>
<th>CY15</th>
<th>CY16</th>
<th>CY17</th>
<th>CY18 E</th>
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<tbody>
<tr>
<td>Cash from operating activities</td>
<td></td>
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<tr>
<td>$377,375</td>
<td>$386,777</td>
<td>$500,403</td>
<td>$939,930</td>
<td>$859,396</td>
<td>$882,871</td>
<td>$532,377</td>
<td>$854,002</td>
<td>$857,780</td>
<td>$1,190,475</td>
<td>$1,265,525</td>
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<tr>
<td>Capital expenditures</td>
<td></td>
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<td></td>
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<td></td>
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<tr>
<td>(36,930)</td>
<td>(19,497)</td>
<td>(38,547)</td>
<td>(55,482)</td>
<td>(67,913)</td>
<td>(73,426)</td>
<td>(57,514)</td>
<td>(34,842)</td>
<td>(34,974)</td>
<td>(49,207)</td>
<td>(76,152)</td>
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<tr>
<td>Free cash flow</td>
<td></td>
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<td>$340,445</td>
<td>$367,280</td>
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