Setting the Test Standard for Tomorrow

July 2014
Nasdaq: AEHR
Safe Harbor Statement

This presentation contains forward-looking statements that involve risks and uncertainties relating to projections regarding industry growth and customer demand for the Company’s products. Actual results may vary from projected results. These risks and uncertainties include without limitation, acceptance by customers of the ABTS™ and FOX™ technologies, the Company’s development and manufacture of a commercially successful wafer-level test and burn-in system, world economic conditions, the timing of the recovery of the semiconductor equipment market, the Company’s ability to maintain sufficient cash to support operations, and the potential emergence of alternative technologies, which could adversely affect demand for the Company’s products in fiscal year 2015. See the Company’s recent 10-K and 10-Q reports filed with the SEC for a more detailed description of the risks facing the Company’s business. The Company disclaims any obligation to update information contained in any forward-looking statement to reflect events or circumstances occurring after the date of this presentation.
Aehr Test Systems Company Overview

Leading provider of systems that reduce the cost of testing and reliability screening of integrated circuits (ICs) used in today’s cutting edge technology.

- Listed on NASDAQ: AEHR
- HQ in Fremont, CA
- 76 employees
- 2,500 systems in production worldwide
- Current TAM: $100 million annually
- Fiscal year ends May 31:
  - FY13 rev: $16.5M, up 6%
  - FY14 rev (9 mos): $14.3M, up 8%
- New emerging IC test markets:
  - SSD Flash testing market: new $200-$300 million annual market opportunity
  - Emerging Automotive IC testing market: new $50-$75 million annual market opportunity
  - Wafer Level Reliability testing market: new $50 million annual market opportunity
- New emerging test markets driving expanded TAM in fiscal 2015 and beyond to $400 - $500 million

Source: Aehr Test Systems, VLSI Research 2014
Substantial Emerging Opportunities

- **New Emerging IC Test Markets:**
  - **SSD Flash manufacturers** ($200 - $300 million annual TAM opportunity):
    - Samsung
    - Intel
    - Micron
    - Hynix
    - Toshiba
    - SanDisk
  - **Emerging Auto IC manufacturers** ($50 - $75 million annual TAM opportunity):
    - nVidia
    - Qualcomm
    - Broadcom
    - Sierra Wireless
    - Toshiba
    - Intersil
    - TI
    - Renesas
    - Linear Technology
  - **Wafer Level Reliability testing market** ($50 million annual TAM opportunity):
    - TI
    - Fujitsu
    - Renesas
    - Infineon
    - Freescale
    - Intel
    - JDSU
    - Samsung
    - Global Foundries

Source: Aehr Test Systems, VLSI Research 2014
SSD Flash Cycling Market

NAND Application Share (2013)

Source: Storage Look, 2013

NAND Wafers by Application

Source: VLSI Research 2014

Worldwide SSD Revenue ($B)

Source: HIS iSuppli Research, 2013
# SSD Flash Wafer Level Cycling Yield Savings

## NAND FLASH SSD – Stacked die yield loss w/o WLBI

<table>
<thead>
<tr>
<th>Die Stack</th>
<th>Effective Final Yield for Stacked Die Package</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>98.4% 92.3% 85.1% 78.5% 72.4% 66.7% 61.4% 56.6% 52.0%</td>
</tr>
<tr>
<td>12</td>
<td>98.8% 94.2% 88.6% 83.4% 78.5% 73.8% 69.4% 65.2% 61.3%</td>
</tr>
<tr>
<td>8</td>
<td>99.2% 96.1% 92.3% 88.6% 85.1% 81.7% 78.4% 75.2% 72.1%</td>
</tr>
<tr>
<td>4</td>
<td>99.6% 98.0% 96.1% 94.1% 92.2% 90.4% 88.5% 86.7% 84.9%</td>
</tr>
<tr>
<td>1</td>
<td>99.9% 99.5% 99.0% 98.5% 98.0% 97.5% 97.0% 96.5% 96.0%</td>
</tr>
</tbody>
</table>

### Per Die Yield

8 Die Stack Yield Loss w/o WLBI:
- 98.5% – 92.3% → 6%
- 97.5% – 85.1% → 12%
- 96.5% – 74.4% → 22%

## NAND FLASH SSD – Stacked die yield loss w/ WLBI

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### Per Die Yield

16 Die Stack Yield Loss w/o WLBI:
- 98.5% – 85.1% → 13%
- 97.5% – 72.4% → 25%
- 96.5% – 61.4% → 35%
Emerging Auto IC Test Market Opportunity

- **Automotive IC growth** in sensors, control, information, and entertainment has substantially higher requirements for initial quality and long term reliability.
Emerging Auto IC Market Drivers

New Automotive Technology Driving Automotive IC Test Market Growth
Our Products

ABTS
Packaged Part Test & Burn-in Systems

Cost-effective, reliable and highly configurable Test & Burn-in Systems

FOX
Multiple Wafer Test & Burn-in Systems and Contactors

Unique solution for test & burn-in for KGD and automotive applications

FOX
Single Wafer Test & Burn-in Systems and Contactors

Reduced cost of test with high throughput parallel test at wafer probe
Significant Worldwide Customer Base

Over 2500 Systems Shipped Worldwide

(Partial Customer List)
AEHR Burn-in & Test Innovations

Memory

- ATS-12000 Dynamic Burn-in
- MBT Test During Burn-in
- MTX APG Functional Test & Burn-in
- ABTS-M APG Functional Test & Burn-in

1977 1980s 1990s Today

Logic

- ATS-12000 Dynamic Burn-in
- ATX Monitored Burn-in
- MAX Monitored Burn-in
- ABTS-L/P Functional Test & Burn-in
Addressing Test & Burn-in Needs

ABTS Family of Packaged Part Test & Burn-in Systems

- Automotive, Mobile Processors, Video/Graphics, 4G Comms, High Power SOCs, and Memory ICs
- Proprietary family of high performance thermal chambers
- Turn-key solution for individual temperature control of each device under test

ABTS
Advanced Burn-in and Test System
ABTS / MAX Production Test Floor
Full-Wafer Test Evolution

Systems

14 200mm Wafer Slots
Air thermal control
Full Algo PG

Single 300mm Wafer
Liquid Cooled
Full Algo or JTAG/BIST

15 300mm Wafer Slots
Liquid Thermal Control
Vector or Algo PG

Single/Multi 300mm Wafer
Liquid /Air Cooled
Vector with JTAG/BIST

1995
2002
2006
2009
2014

Contactors

Single Die
200mm Wafer
300mm Wafer
300mm Wafer
300mm Wafer
Multi-Wafer Test & Burn-in

- Cost-effective Solution for Producing Known-Good-Die (KGD)
  - Stacked and Multi-Chip Packages
  - Zero-defect tolerant applications

- Wafer Level Reliability test of automotive, communication, and mission critical ICs
  - Move packaged part test and burn-in to wafer test
  - Highest reliability and handling for zero PPM targets

- SSD Flash Wafer Level Cycling
  - Significantly Improves yield on Stacked Package Devices
  - Reduces wafer sort and final test costs by allowing functional test to be done at burn-in
High Volume Manufacturing Floor
FOX-1 Family of Single Wafer Test & Burn-in Systems

- **Low Cost Wafer Test** – More test is moving to wafer with additional DFT, BIST, and Higher Parallelism

- **Automotive ICs** – Full wafer functional, stress, and burn-in test of automotive ICs

- **Discrete and Embedded Memories** – Low cost full wafer test of discrete or embedded memories
FOX-1 Production Test Floor
Investment Considerations

- Current TAM of $100 million expanding to $400 - $500 million

- New emerging IC test markets have no incumbent test providers:
  - SSD Flash testing market ($200 - $300 million annual TAM opportunity)
  - Emerging Auto IC testing market ($50 - $75 million annual TAM opportunity)
  - Wafer Level Reliability testing market ($50 million annual TAM opportunity)

- New FOX product line uniquely positions AEHR to take advantage of substantial new IC test markets in 2015 and beyond

Source: Aehr Test Systems, VLSI Research 2014
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