
AEHR
TEST SYSTEMS
Setting the Test Standard for Tomorrow
Nasdaq: AEHR

Forward Looking Statements

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 burn-in and test 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 2019. 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

Aehr Test Systems Company Overview

Production Semiconductor Test & Burn-in for over 40 Years

- Technology leader in massively parallel test & burn-in systems with 2,500 systems installed worldwide
- Unique full-wafer test & burn-in systems and contactors
- High parallel wafer level and package test products

Packaged Part Test & Burn-in Solutions

Multiple Wafer / Die Level Test & Burn-in Solutions

Single Wafer Test & Burn-in Solutions

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Aehr Test Systems - WW Customer Base

Over 2500 Aehr Test Systems shipped Worldwide!

(Partial Customer List)

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Aehr Test Systems' Market Drivers

Need for cost-efficient burn-in & testing is growing rapidly due to increasing IC complexity, costs, miniaturization, and mission-critical functionality

- **Worldwide 5G Infrastructure** build out using **Silicon Photonics** fiber optic transceivers
- **Data Center Infrastructure and Unstoppable growth in Data Storage**
- **Automotive IC growth** in sensors, control, information, and entertainment
- **Security Sensors including facial recognition in smartphones, tablets, and other applications**
- **Heterogeneous Integration of semiconductors and 3D fabrication and stacking** driving technology and cost roadmaps pushing known good die with test and burn in to wafer prior to packaging

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Silicon Photonics Market – 5G and Data Centers

Integrated laser devices directly on silicon transceiver drastically lowering the cost of fiber optic transceivers for data centers and the internet cloud are driving a new requirement and opportunity for wafer level and singulated die burn in and test

Silicon Photonics Growth driven by Data Centers, Sensors, and Optical Switches

Aehr Test has announced customer orders from at least four customers worldwide and is engaged in over one half dozen new customers in this space.

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Automotive Device Expansion

Automotive IC growth in sensors, control, information, and entertainment has substantially higher requirements for initial quality and long term reliability

Gesture Recognition

Collision Detection

Autonomous / Driver Assistance

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Vehicle Reliability and Safety

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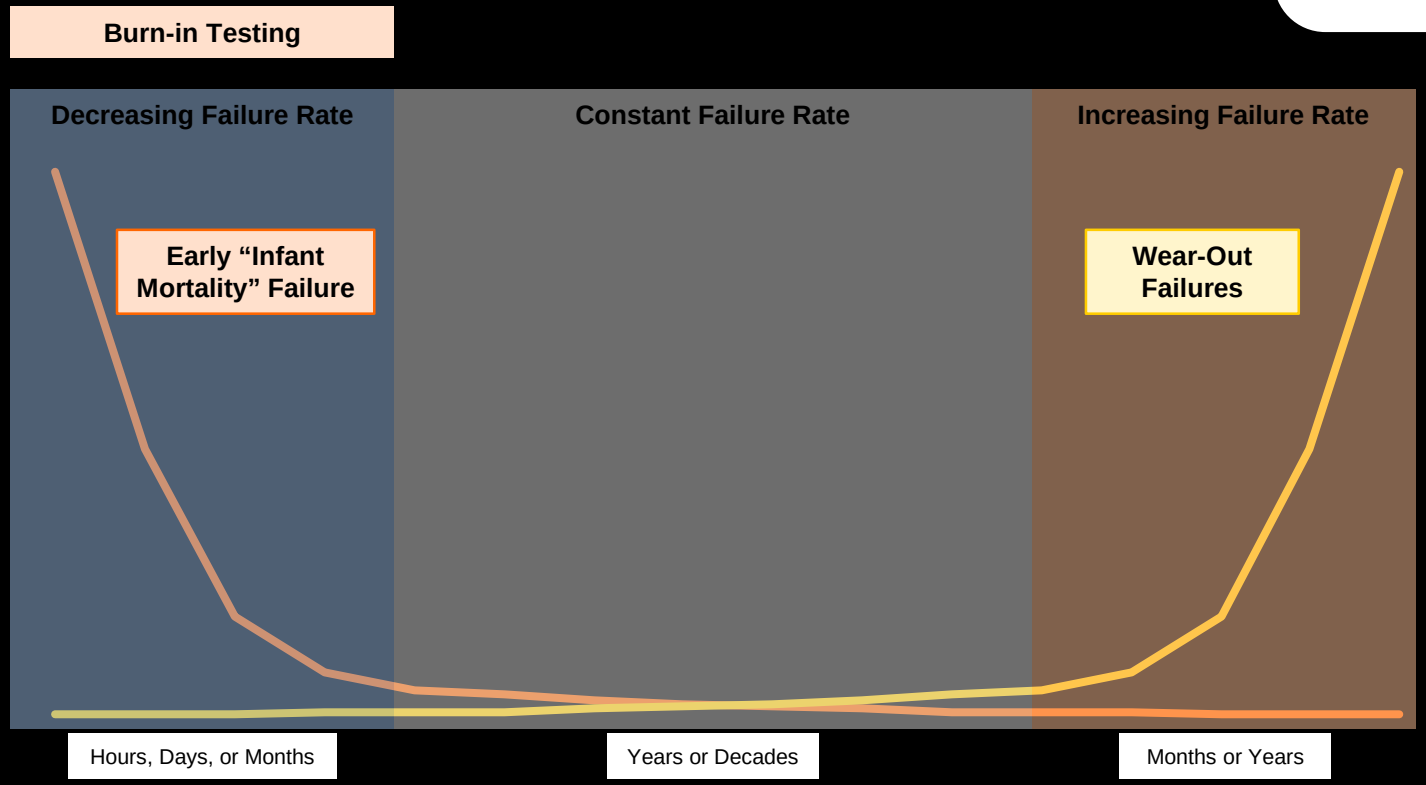
Burn-in Testing – The Bathtub Curve

- Aehr seeks to virtually eliminate “Infant Mortality” failure in electronic components
- Burning-in components exposes them to a high-stress level and screens out infant failures prior to the components making it into a module

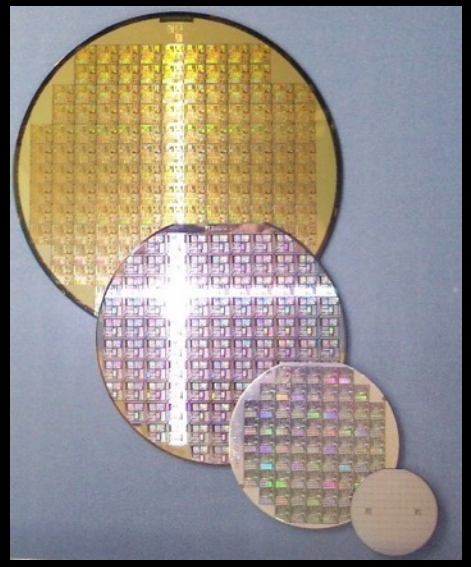
Burn-in:

A functional test in which electronic components are subject to elevated voltages and/or temperatures for a duration of time (2 – 48 hours) to screen for reliability and early failure

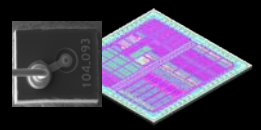


- Burn-in testing eliminates early “infant mortality” failure

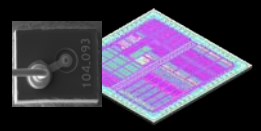
Production Burn-in / Reliability Test Options



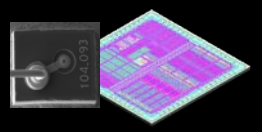
Wafer



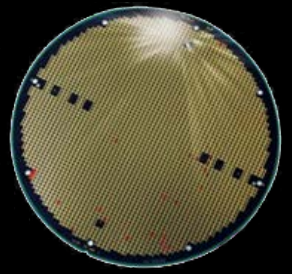
Singulated Die



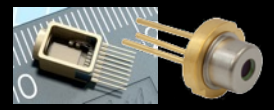
Singulated Die



Singulated Die

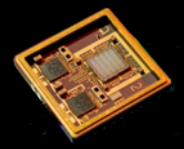


Module “Panel”



Single Die Package

Singulated Module



System in Package

System /Product/PCB

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Proprietary Wafer Level Enabling Technology

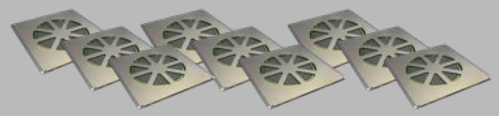
- **Aehr's FOX-XP is capable of both functional burn-in and test solutions – leverages proprietary aligner and contactor technology**
- **Multi-wafer technology enables customers to achieve an overall decrease in test equipment cost and fab footprint – while increasing die yield and throughput**

MULTI-WAFER TESTER

FOX-XP Multi-Wafer Test System

- May be configured with up to 18 Blades, enabling 18 wafers to be tested in parallel – driving cost efficiency and throughput
- High performance thermal chucks allow uniform temperature control of the wafers
- Footprint similar to single wafer automated test equipment – reducing lab test space

CONTACTOR



FOX-XP WaferPaks

- Houses the wafer and distributes signals and power to the wafer itself
- The WaferPak contactor is capable of over 50,000 contacts in a single touchdown on up to 300mm wafers
- Consumable input into the test system driving recurring revenue from the installed base

ALIGNER

FOX WaferPak Aligner

- Integral piece of test cell as it loads the wafer in the WaferPak at immense levels of precision
- By perfectly setting the wafer in a cartridge it ensures perfect contact
- Performs wafer alignment "offline" which eliminates the need for one wafer prober per wafer during long burn-in and test times

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Patent / IP Protected Wafer & Singulated Die Test Innovations

42 active patents issued and outstanding, including:

- WaferPak and DiePak temperature control methods
- Vacuum & pressure-based WaferPaks & DiePaks
- Maintaining probe contact over temp
- Electrical components in WaferPak/DiePak
- Individual DUT power supplies
- Per die current protection
- Redundant power supplies
- Portable WaferPaks
- and more . . .

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Recent Announcements

Recent Customer Wins

- Major new customer for very high volume devices in data center on Aehr proprietary wafer level burn in
- Top 3 semiconductor company significantly expanding Silicon Photonics production capacity with Aehr FOX-XP and recently introduced FOX-NP systems
- New customer win in Silicon Photonics singulated die test and burn in with FOX-NP will move to high volume with FOX-XP
- New customer win in Silicon Photonics wafer level burn in

New Customer / Market Opportunities

- Aehr engaged in over one dozen new customer applications for wafer level and singulage die test and burn in with new FOX-P line of solutions
- Multiple Silicon Photonics and 5G communication infrastructure and data center devices
- Data Storage devices
- Automotive devices including EV control and Sensors for ADAS and autonomous vehicles
- Artificial Intelligence Engine Test & Burn in
- Memory Device Wafer Leve Burn in

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Aehr Test Manufacturing Capacity

- State of the art manufacturing facility located in Fremont, CA
- 50,000+ sq. foot facility
- Ability to scale production by an order of magnitude increase in existing footprint
- Manufacturing capabilities and quality control procedures have passed rigorous Tier 1 customer qualification processes

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