AEHR
TEST SYSTEMS

Setting the Test Standard for Tomorrow

December 8, 2021

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 2022. 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

Production Semiconductor Test & Burn-in for over 40 Years!

- World-wide leader in packaged part and wafer-level burn-in and test systems
- Unique full-wafer test and burn-in systems and contactors
- Technology leader in massively parallel test and burn-in systems

Packaged Part Test & Burn-in Production

Wafer Level Test Production

Multi-Wafer Test & Burn-in Production

Worldwide Customer Base

Aehr Test Headquarters, Fremont California

Aehr has been a leader in burn-in test solutions for over 40 years with thousands of systems shipped worldwide

(Partial Customer List)

AEHR TEST SYSTEMS

WW Semiconductor Test Market TAM

- Total Semiconductor Test Market ~ $9B in 2020
  - ~ $4B in Test Systems
  - ~ $1B in wafer level device “probers”
  - ~ $1B in packaged part device “handlers”
  - ~ $1.5B in Probe Cards (contact of die in wafer form)
  - ~ $1.5B in Test & Burn-in Boards and Sockets (contact of packaged devices)

- Aehr Test participates in all 5 segments
  - Test Systems with FOX Wafer Level and ABTS Packaged Part Systems
  - Wafer level device “probers” with FOX WLBI Systems and WaferPak Aligners
  - Packaged part device “handlers” with FOX Singulated Die/Module Autoloaders
  - Probe Cards with Aehr Proprietary WaferPak full wafer Contactors
  - Test & Burn-in Boards and Sockets with Aehr Proprietary DiePak Carriers

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

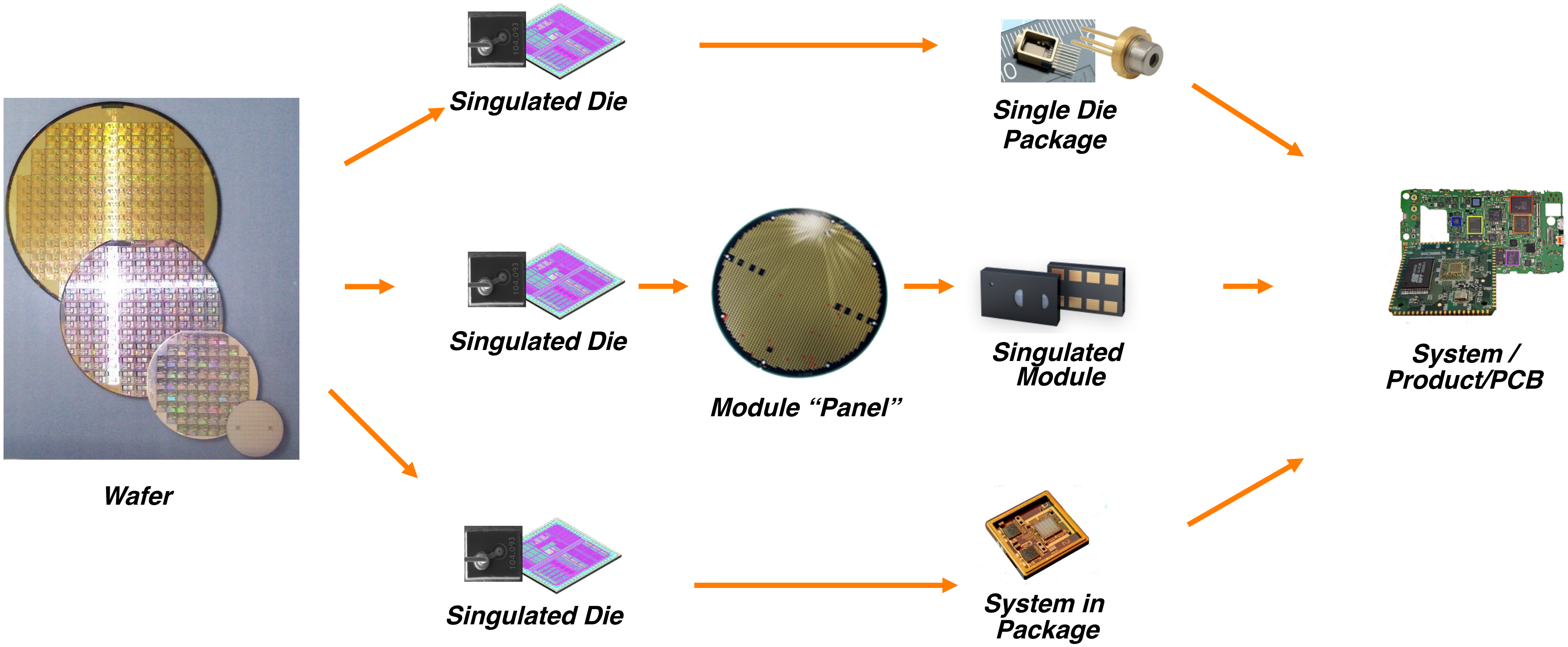
- **Electrification of Vehicles** driving new Silicon Carbide based power conversion that requires stress / burn-in testing to meet requirements for initial quality and long-term reliability
- **Automotive IC growth** in sensors, control, information, and entertainment has substantially higher requirements for initial quality and long-term reliability
- **Silicon Photonics in fiber optic transceivers and processors** driving need for wafer level and singulated die test and burn in / aging to enable low-cost Silicon Photonics deployment
- **Mobility smartphone and tablets** drive increased test, quality, reliability, and environmental demands
- Ever increasing **pressure on cost of test** is driving massive parallelism at wafer level test and burn-in

Testing without Compromise

Reliability, Stress, and DFT Testing without compromise

- Solutions for **package parts, modules, panels,** or **wafers** allow testing at optimal process point
- **Confirm** which devices received desired test with **per device measurements, monitoring, & feedback**
- **100% traceability** with die location (wafer) or device ID read back (module) and electronic tracking ensures knowledge of "good" devices
- Thermal range, uniformity, and capacity permit **reduced test times** & **confidence** in target **test conditions**
- Vast system resources allow for minimal sharing (**higher sample size, higher yields, fewer hostage failures**)
- **Economical solutions** and **customizations** allow required testing to be performed at the **lowest cost**

Production Burn-in / Reliability Test Options



Wafer

Singulated Die

Single Die Package

Singulated Die

Module "Panel"

Singulated Module

Singulated Die

System in Package

System / Product/PCB

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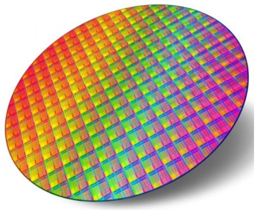
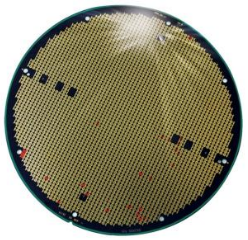
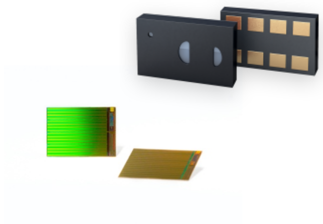
Solutions from Wafer to Package Parts



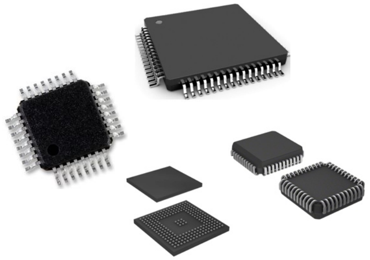
Wafers



Module “Wafer”



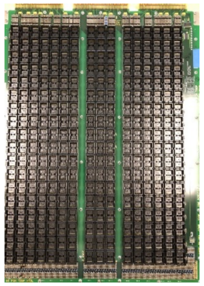
Die/Modules



Package Parts

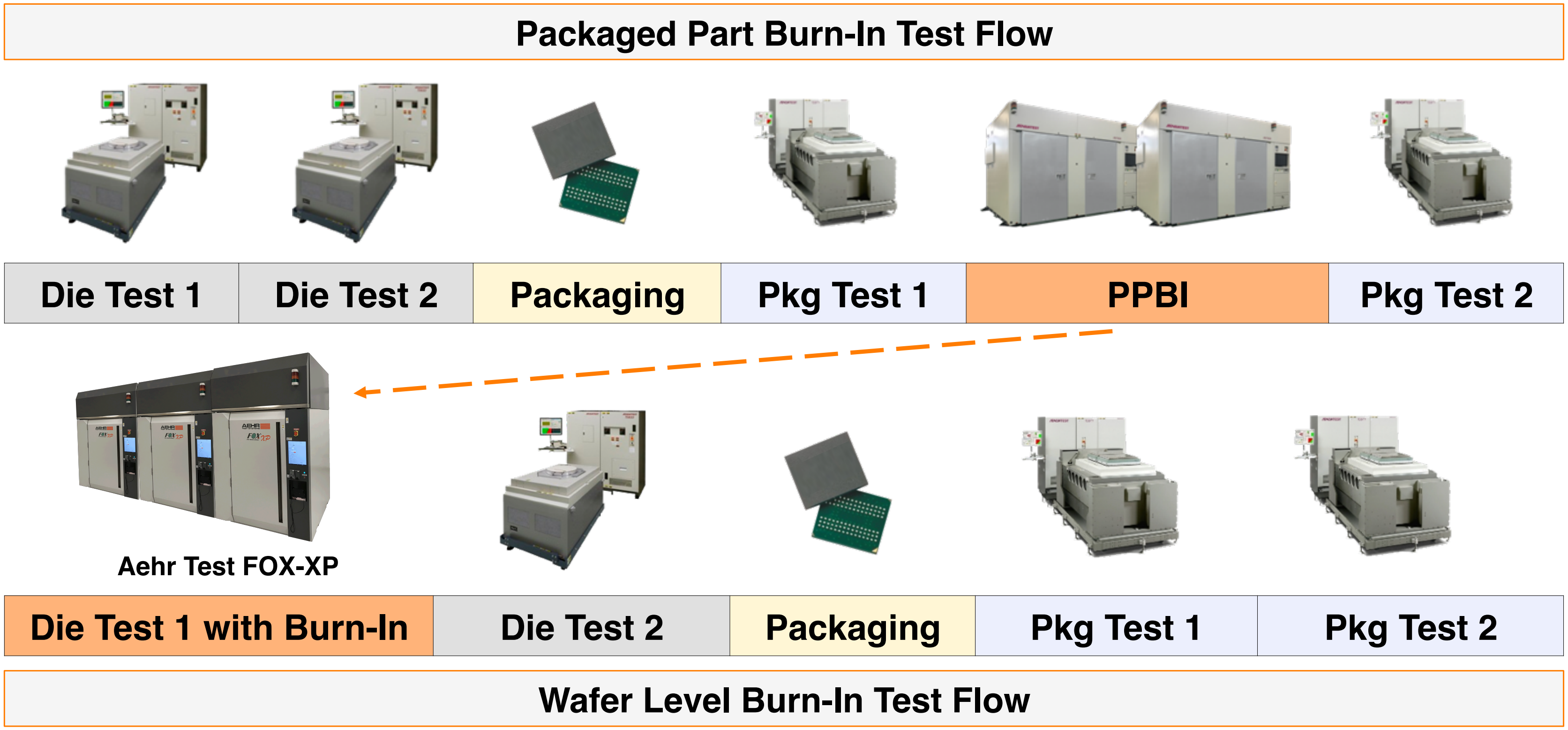
WaferPaks

DiePaks



Burn-in Boards

Wafer Level vs Package Level Burn-in Flow



Packaged Part Burn-In Test Flow

Die Test 1	Die Test 2	Packaging	Pkg Test 1	PPBI	Pkg Test 2

Aehr Test FOX-XP

Die Test 1 with Burn-In	Die Test 2	Packaging	Pkg Test 1	Pkg Test 2

Wafer Level Burn-In Test Flow

Aehr Wafer Level Test & Burn-in Patents

- WaferPak temperature control methods
- Vacuum & pressure-based WaferPaks
- Maintaining probe contact over temp
- Electrical components in WaferPak
- Individual DUT power supplies
- Per Die Current Protection
- Redundant power supplies
- Portable WaferPaks
- And more . . .

FOX-P Family of Test & Burn-in Systems

Solutions for Engineering to Production

FOX-CP

Single Wafer Stepping
Test & Burn-In System

FOX-NP

Dual WaferPak & Dual DiePak
Test & Burn-In System

FOX-XP

Multi WaferPak & Multi DiePak
Test & Burn-In System

FOX- P WaferPak Contactors

FOX- P DiePak Carrier

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FOX-XP Multi-Wafer Production Test & Burn-In System

- **9 / 18 Wafer System High Volume Production**
  - 100% compatible using the same resource options as FOX-NP and FOX-CP blades up to 2 kW per blade
  - Delivers up to 2,048 independent universal channels or 1,024 High current or high voltage channels per blade
  - Deliver over 1,000 amps and dissipate up to 2kW thermal per wafer
  - Integrated standard 20°C to 150°C thermal control unit
- **FOX-P WaferPak Contactor**
  - Up to 50,000 pin “probe card” wafer interface
  - Very high compliance micro pogo pins and/or MEMS capability
  - Offline wafer alignment via Aehr proprietary WaferPak aligners
- **FOX-P DiePak Carrier**
  - Singulated die, module, and package part interface
  - Exceptional thermal density performance and uniformity via conductive thermal transfer

FOX-XP 18 Wafer Test & Burn-In System

FOX-P WaferPak Contactor & DiePak Carrier

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Electric Vehicles and Silicon Carbide WLTBI

- Aehr has demonstrated and begun shipping in volume a world leading solution for multi-wafer full wafer level test and burn-in (WLTBI) of up to 18 wafers per system
- Aehr has booked $47M with its lead customer for silicon carbide in the first six months of its fiscal year ending May 2022
- Aehr recently updated guidance to grow over 3X year over year to at least $50M in revenue this fiscal 2022
- Aehr is engaged with all leading suppliers of Silicon Carbide
- Aehr expects to be selected by several silicon carbide suppliers and ramp into production over the next 18 months
- Silicon carbide is believed to be at the very beginning of a decade long growth ramp of > 36% CAGR to meet the Electric Vehicle demand
- Canaccord Genuity research estimates the market for silicon carbide wafers in 2021 is approximately 150,000 six-inch wafer equivalents. In 2030, the demand is projected to be 4 million wafers of six-inch equivalent for on board electric vehicle silicon carbide devices - and another 4 million wafers for other silicon carbide applications for electrification infrastructure, including power conversion and photovoltaic infrastructure.

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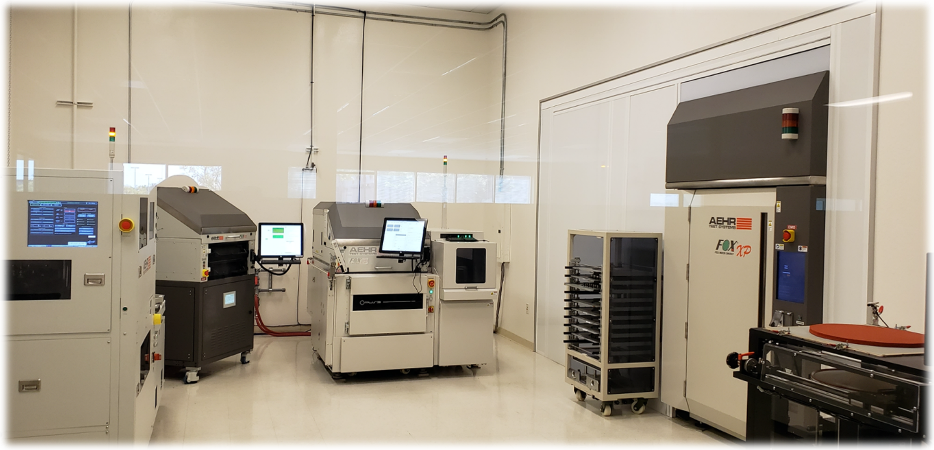
Aehr Fremont Applications Lab



- FOX-XP Multi-Wafer WLTBI System
- FOX-NP Dual-Wafer WLTBI System
- FOX-CP Single Wafer Test Burn-in System with integrated high-power thermal chuck fully automated wafer prober
- FOX WaferPaks, DiePaks, & TLBs
- FOX WaferPak Automated Aligner
- FOX WaferPak Manual Aligner
- WaferPaks Racks & Accessories

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