Setting the Test Standard for Tomorrow

January 2026

Nasdaq: AEH

Aehr Test Systems Company Overview

Semiconductor Test & Burn-in for over 45 Years!

- Worldwide leader in wafer-level test and burn-in systems
- Unique full-wafer test and burn-in systems and contactors
- Technology leader in massively parallel and high-power test and burn-in systems

FOX XP

High Power Multi-Wafer Test & Burn-In System

SONOMA

High Power Test & Burn-In System

FOX CP

Single Wafer Stepping Test & Burn-In System

TAHOE

Medium Power Test & Burn-In System

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Aehr Manufacturing Capacity

- State-of-the-art manufacturing facility located in Fremont, CA
- 50,000+ sq. foot facility
- Power and Infrastructure to support up to 400 wafers (tester Blades) and WaferPaks for Wafer Level Burn-in and 20 Packaged-Part Burn-in Systems per month
- Manufacturing capabilities and quality control procedures have passed rigorous Tier 1 customer qualification processes

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Aehr Fremont Production Floor

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Aehr Test Systems Market Drivers

Need for cost-efficient wafer level, singulated die, and packaged part burn-in, stabilization, & testing is creating significant revenue opportunities for Aehr Test in the following key markets:

- Artificial Intelligence Processors and Processing Infrastructure **driving explosive spend in data center processing, edge processors, communication infrastructure, and power conversion infrastructure which drives AI processors, memory, data storage, Silicon Photonics I/O, and power conversion semiconductors like Silicon Carbide & Gallium Nitride**
- Electric Vehicle & Electrification of Transportation Infrastructure **driving motor control, charging infrastructure, and power conversion using Silicon Carbide & Gallium Nitride semiconductors**
- Electrification of the World's Power Infrastructure and Shift to Clean Energy **driving efficient and economical electrical power conversion using Silicon Carbide & Gallium Nitride semiconductors**
- Data Center Infrastructure and unstoppable growth in Data Storage **driving Silicon Photonics, Flash Memory Solid State Data Storage, and new Photonics Assisted Hard Disk Drive Storage**
- Worldwide 5G Infrastructure **build out using Silicon Photonics fiber optic transceivers and new Optical Network Switches**
- Heterogeneous Integration of semiconductors and 3D fabrication and stacking **driving technology and cost roadmaps pushing known good die with test and burn-in of device in wafer form prior to packaging**

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Worldwide Customer Base

Aehr Test Headquarters,
Fremont California

Aehr has been a leader in burn-in test solutions for over 45 years with thousands of systems shipped worldwide

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(Partial Customer List)

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AI Processor Wafer Level vs Package Burn-in Flow

Packaged Part Burn-In Test Flow




Aehr Sonoma


Wafer Test	Packaging	Pkg Test 1	Package Burn-In	Pkg Test 2	SLT

Aehr FOX-XP




Wafer Burn-In	Wafer Test	Packaging	Pkg Test	SLT

Wafer Level Burn-In Test Flow – High Quality Bare Die

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Proprietary Wafer Level Enabling Technology

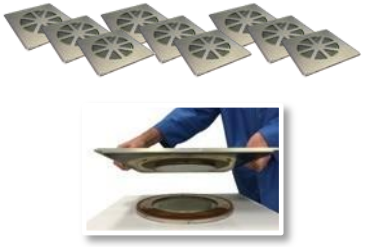
- Aehr's FOX-XP is capable of both functional burn-in and test solutions – leverages proprietary aligner and contactor technology
- Multi-wafer technology enables customers to achieve an overall decrease in test equipment cost and fab footprint – while increasing die yield and throughput

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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Aehr Wafer Level Test & Burn-in Patents

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

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

- **9 / 18 wafer system high volume production**
  - FOX-P blades configurable with same resource options as FOX-NP and FOX-CP blades
  - Delivers up to 2,048 independent universal channels or 1,024 High current or high voltage channels per blade
  - Delivers and dissipates up to 3.5kW of power and up to 4,000 amps to and from the wafer
- **Uses FOX compatible WaferPaks**
  - Up to 50,000 pin “probe cards”
  - Very high compliance micro pogo pins and/or MEMS capability
  - Test & burn-in temperatures to 150C
  - Offline wafer alignment via Aehr proprietary WaferPak aligners

FOX-XP 18 Wafer Test & Burn-In System

FOX WaferPaks

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FOX-XP with 18 Blades

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FOX Fully Automated WaferPak Aligner

- Fully integrated with FOX-XP System
- Available in stand-alone configuration
- Provides customers fully hands-free operation up to lights out SECS/GEM factory automation and integration
- Configurable for 300mm to 100mm wafers using industry standard load ports
- Optical wafer to WaferPak alignment up to 150C test/burn-in temperatures

FOX-XP with Integrated WaferPak Aligner
(Configured for 300mm AI Processor Wafers)

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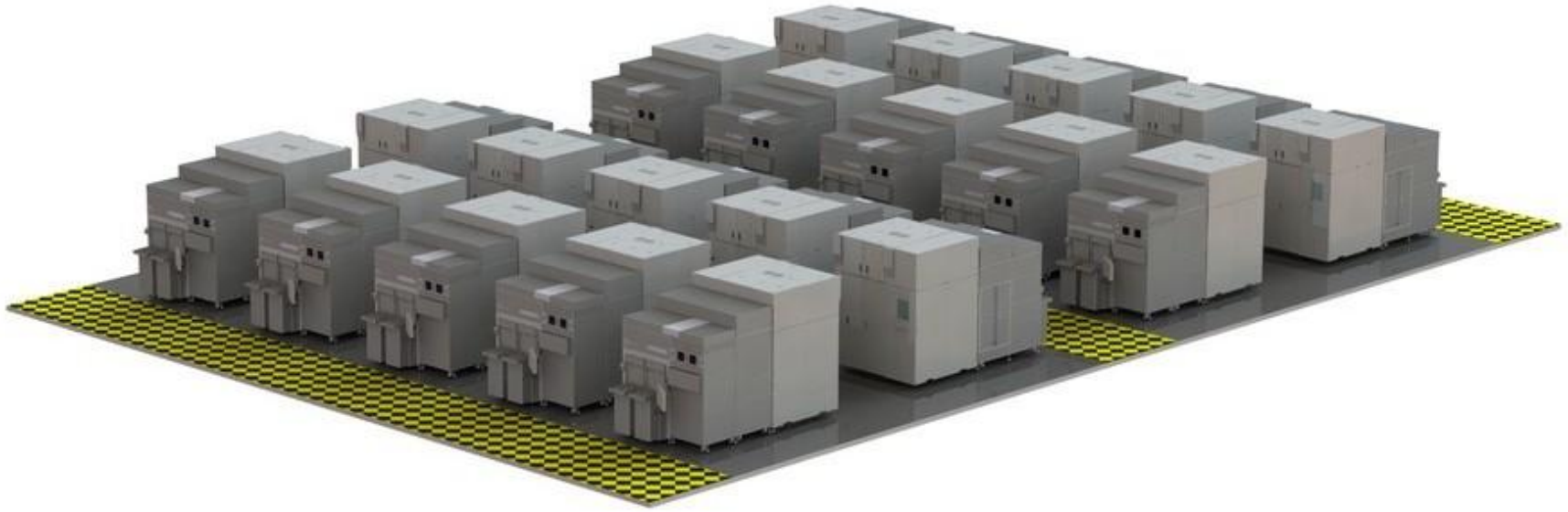
FOX-XP with Integrated WaferPak Aligners Floorplan



360 Wafer Capacity Footprint with full SECS/GEM E84 Automation

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FOX-NP NPI and Engineering Test & Burn-In System

- **Dual wafer system for new product introduction, engineering and low volume production**
  - FOX-P blades configurable with same resource options as FOX-XP and FOX-CP blades up to 3.5 kW per blade
  - Delivers up to 2,048 independent universal channels or 1,024 high current or high voltage channels per blade
  - Integrated standard 20C to 150C thermal control unit
  - Small lab footprint
  - Excellent for program development, process monitoring, new product introduction, stress test, HALT, HTOL, and low volume production test and burn-in
- **Uses FOX compatible WaferPaks**
  - Up to 50,000 pin “probe cards”
  - Very high compliance micro pogo pins and/or MEMS capability
  - Offline wafer alignment via Aehr proprietary WaferPak aligners
- **Uses FOX compatible DiePaks**
  - Singulated die, modules, or packages
  - Exceptional thermal density performance and uniformity via conductive thermal transfer to thermal plates

FOX-NP Dual Wafer Test & Burn-In System

FOX WaferPak & DiePak Contactors

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FOX WaferPak Contactor

- **Extremely simple contactor "Probe Card"**
  - No backside stiffener
  - No interposer required
  - No expensive tester interconnects
  - Simple per-pin repairability
  - Easy to manufacture in high volume
- **Enabling architecture for low cost of test**
  - One aligner shared across many wafer positions
  - Supports stepping across wafer for high die count wafers
  - "Rugged" design allows movement of aligned wafers
  - Allows wide test temperatures after alignment (single probe mark)
- **Enabling architecture for small footprint**
  - Allows high density stacking (18 wafers in a single column)
  - Full functional tester and interface within a 3.4" pitch
  - Conductive thermal chuck per position within 3.4" pitch

FOX WaferPak Contactor

Manual Insertion into FOX-XP

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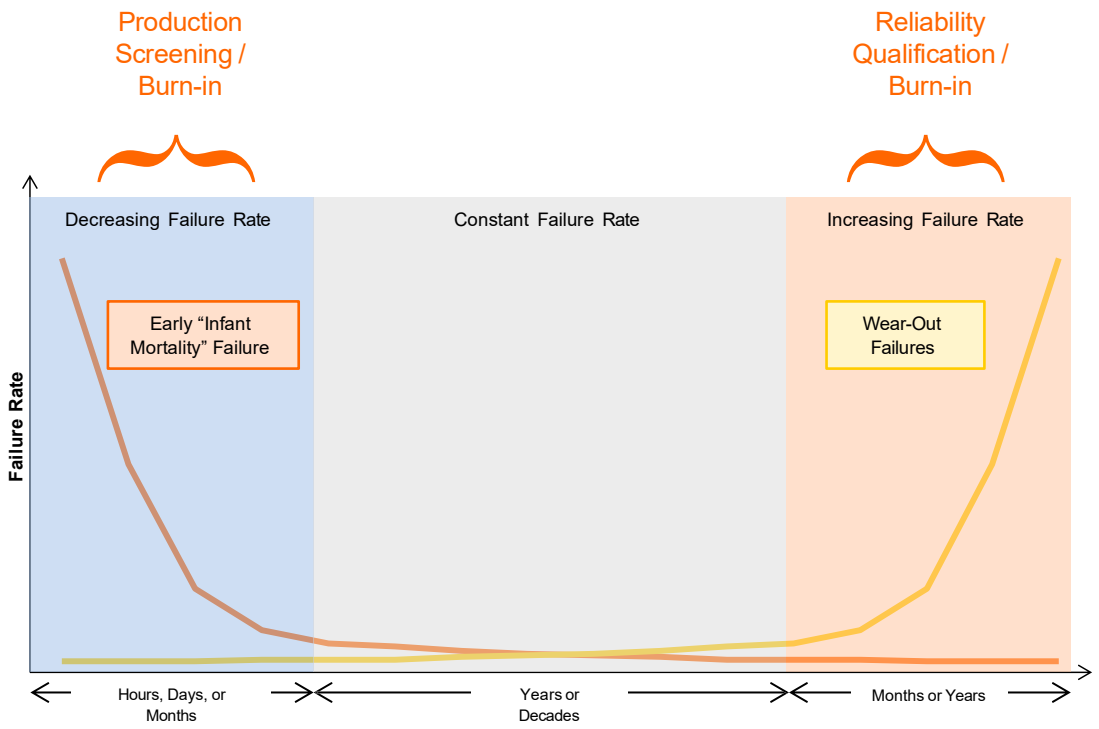
Burn-in Testing – The Bathtub Curve



- **Production Burn-in:** semiconductor components are subjected to elevated voltages and temperatures for a duration of time (2 – 48 hours) to screen for reliability and early failure in production before shipping to customers
- **Reliability Qualification Burn-in:** semiconductor components subjected to elevated voltage and temperatures for 1000 hours to validate and meet industry standards for long term reliability via High Temperature Operating Life (HTOL) tests

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AI Accelerator/Processor PPBI Momentum

- High-power packaged part test & burn-in for production, reliability qualification, and life-time tests
- Up to 88 processors with independent test resources and high-power liquid cooling per device
- Qualification and Production configurations
- Shipping in volume with multiple systems installed at most test houses today

SONOMA

High Power Test & Burn-in System

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AI Accelerator/Processor PPBI Momentum

- Aehr Sonoma platform has the largest installed base of ultra-high-power burn-in systems for High Temperature Operating Life (HTOL) used for AI processors at test houses around the world.
- Successfully captured the production system capacity needs from one of the largest Hyperscalers in the world on the first AI Accelerator that they are doing production burn-in screening on. They have purchased a significant number of Sonoma systems, already installed in Asia at a leading test contract manufacturer, and are forecasting a very large number of systems for shipment in the next 6-9 months.
- Recently won multiple new HTOL reliability burn-in deals for AI processors to be used at world leading test houses that have Aehr Sonoma systems and plan to order additional systems.
- One of these HTOL applications is already slated for production burn-in that will drive large numbers of systems in Asia at test houses and Aehr has the inside lane to capture this business

SONOMA

High Power Test & Burn-in System

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Sonoma with Automated Loader / Unloader

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AI Accelerator/Processor WLTBI Momentum

- Aehr worked with and successfully captured the first production orders from an AI Accelerator company to move their AI processor system level test and burn-in to wafer level on the Aehr FOX-XP system. Recently announced production capacity to drive incremental systems and WaferPaks and also move to fully automated 300mm wafer handling
- Announced paid-for production WLBI evaluation from a leading AI processor supplier which is currently in development with results expected during the next few months
- Two additional potential customers have approached Aehr to demonstrate WLBI on their AI accelerator processors
- Recently announced partnership with ISE/ASE the worlds largest semiconductor Out-Sourced Assembly and Test House (OSAT) to comarket and proliferate WLBI for AI processors

FOX XP

High Power Multi-Wafer Test & Burn-In System
(Shown with Integrated WaferPak Aligner)

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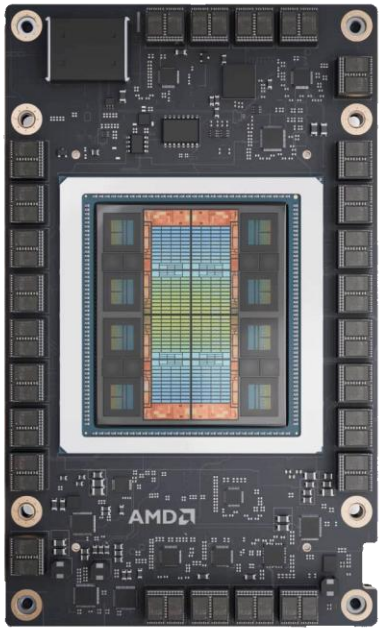
AI Accelerator Example of Multi-Chip Packaging

AMD Instinct™ MI325X Accelerator



- Multiple Compute Chiplets
- 8 12-Die HBM3 DRAM Stacks
- Single OAM Substrate
- Roadmap for new Chiplet Architecture Accelerators each year from 2023 to 2026
- 8 MI325X Cluster:

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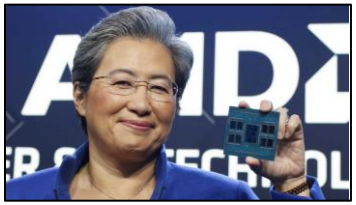
Optical I/O is Coming…

- “TSMC silicon photonics tech first co-package optics (CPO) samples ready for NVIDIA, Broadcom in 2025” – Tweaktown, December 2024
- Ayar Labs CEO: Optical Chiplets Coming to SOCs Soon – HPCwire, Oct 2024
- “Intel’s 4 TB/s Integrated Optical I/O Chiplet Called ‘Important Milestone’” – inside HPC, June 2024
- “Optical communication is a key area that we think is very, very important for us to reach anything like zettascale type of computing capability.” “AMD is working with DARPA on packaging optics solutions into chips” – Dr. Lisa Su, CEO, AMD March 2023 (HPCwire)
- “Performance metrics in applications like machine learning could ultimately pave the way for high-density integration and optical I/O to connect GPUs.” – Vivek Raghuraman, Director of R&D, Broadcom, March 2023
- “In-package optical I/O technology to accelerate data movement and enable future AI” – Yole Group, April 2023



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Flash Memory WLTBI Opportunity

- Aehr has been engaged with multiple Flash memory companies related to our FOX wafer level test and burn-in systems for their high-volume production
- Aehr recently completed the first phase showing full-wafer contact and test/burn-in of their 300mm NAND flash wafer used to evaluate the FOX-XP system with our proprietary WaferPak full wafer contactors for their new HBF flash devices in production
- This application is for 100% test and burn-in of their High Bandwidth Flash memory devices to be used in mission critical applications such as AI LLM, inference, and for automotive and industrial robotics applications
- We see the NAND Flash market as a key new market opportunity for our systems and WaferPaks, with long term potential to also move into DRAM wafer level test and burn-in

FOX XP

Multi-Wafer
Test & Burn-In System
(Shown with Integrated WaferPak Aligner)

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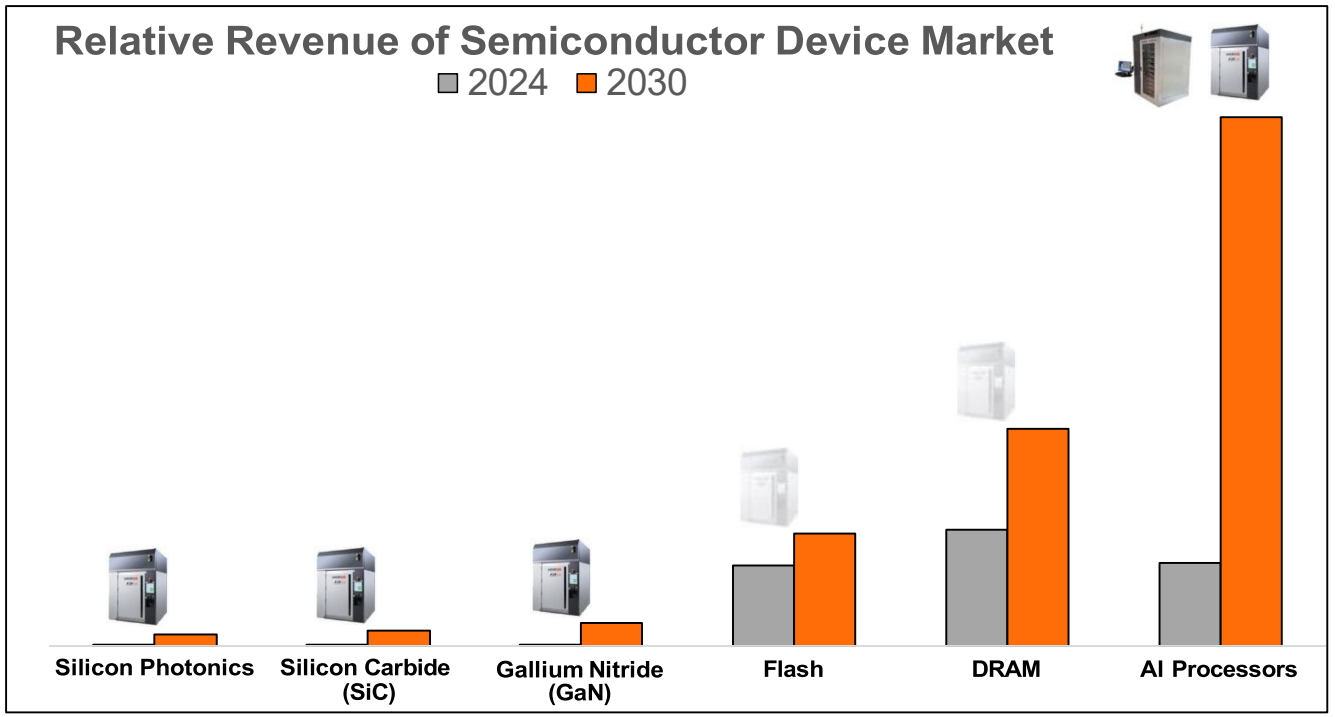
Relative Size of Targeted Semiconductor Device Markets

These are relative annual revenues of these semiconductor devices.

Historically, annual capital spend on test ranges from 2% to 5% of the device annual revenue.



Wafer Level Production Win

Package Part Production Win

Wafer Level Production Target

Estimated market sizes based on third party sources and Aehr estimates.

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Testing without Compromise

Reliability, Stress, and DFT Testing without compromise

- Solutions for **packaged 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**

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