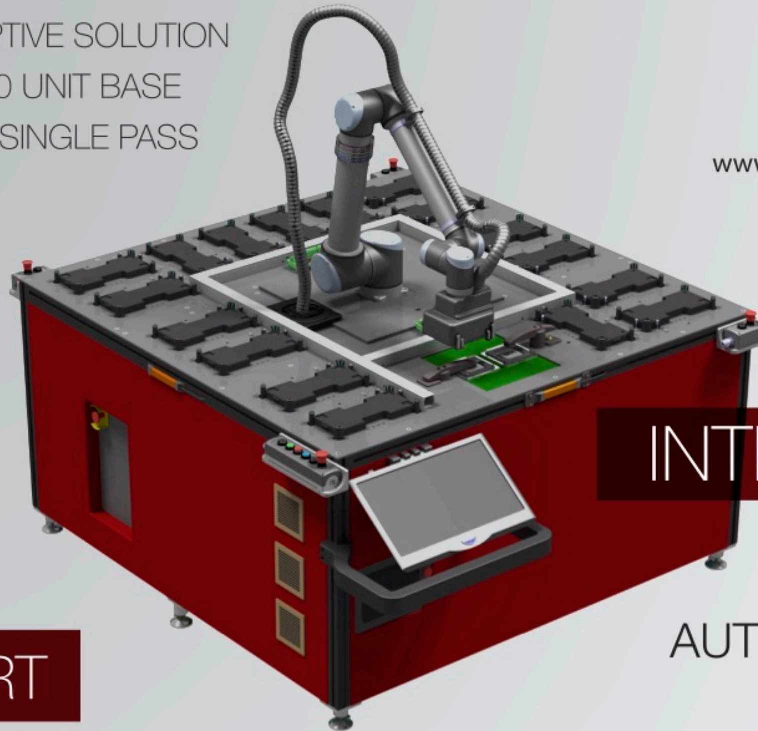
SEMICONDUCTOR IC TEST SERVICES

UNIQUE, INNOVATIVE & ADAPTIVE SOLUTION
USES ADVANTEST EVA100 UNIT BASE
ENABLES 17 SORTS IN A SINGLE PASS

www.ibm.com/assembly



INTEGRATED ROBOTICS WITH AUTOMATED TEST EQUIPMENT

STATE OF THE ART EQUIPMENT

ADVANTEST

TERADYNE

ACCELERATED TIME TO MARKET
REDUCED LIFE CYCLE DEVELOPMENT

SEMICONDUCTOR IC TEST SERVICES

TEST SERVICE STEWARDSHIP AND INNOVATION

IBM's assembly and test facility in North America is your OEM solution for wafer test, final test, system level or burn-in needs. An insightful team, with over 35 years of experience in high-end electronics, will enable you to deliver the performance requirements for your products at a competitive cost.

SERVICE PORTFOLIO

The range of services provided addresses all markets with a complete range of test solutions for digital, analog, mixed signal, RF (including OTA) and optoelectronic tests.

IBM test services encompass product design, where we emphasize both Design for Test (DFT) and Design for Manufacturing (DFM), to deliver unequalled process flow efficiencies and high productivity. This comprehensive approach includes test strategy, programming, prototyping up to final product characterization, as well as test plans for qualification and ramp-up to full production during the complete product life cycle.

Creating customized test solutions is standard practice for us along with providing program generation, program migration to new platforms, pattern conversion (WGL, VCD, Custom) and program optimization for all customer needs.

Built-in-controls monitor test performance in realtime and perform self-diagnostics and readjustment which result in yield improvement, cycle-time reduction and workflow enhancement.

In addition, we offer electrical characterization, post-test statistical analysis, complete package failure analysis and lot disposition.

ADAPTING TO YOUR SPECIFIC NEEDS

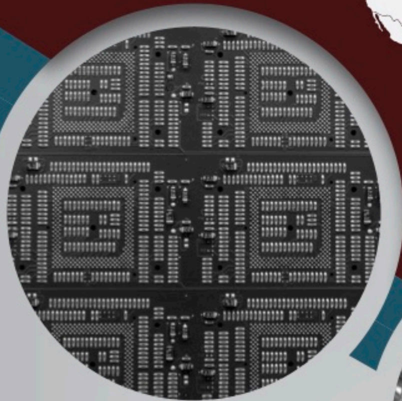
Our test floor is well integrated with assembly lines and logistic tools, allowing interim tests during the packaging assembly process for cost of yield improvement and management of complex product flow. This includes several test insertions for various electrical (low speed vs at speed) and temperature conditions as well as multiple sorting capabilities such as opto dB loss, power, speed, temperature and core sorting for multicore processors.

Another unique feature of our test portfolio is the access to benchmark equipment with real time thermal control to test high power packages.

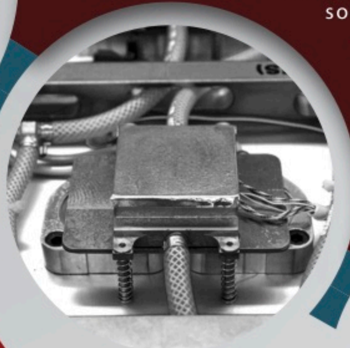
YOUR BEST PARTNERS

Communication with assembly partners and customers is at the heart of the test process to optimize turnaround time at every step.

COMPLETE LIFE CYCLE

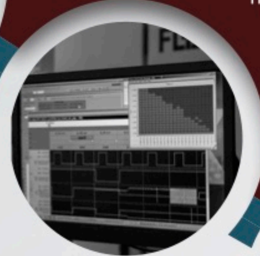


DESIGN



DEVELOP

DEBUG



ANALYZE

TEST

REDEFINING THE LIMITS

PACKAGING AND TEST
assembly@ca.ibm.com

Type	Interface	Platforms	Prober / Handler	Highlight
Wafer Test	Min pitch 30um Pad count up to 30000	Teradyne Ultraflex Advantest 66xx and 65xx Advantest EVA100	TEL P12XLN	Multi-site wafer sorting Pad, solder bump and Cu piller probing Temp. range -35C to 120C
Sub Assembly Test	Max size 90mm Min pitch 0.5mm Lidded, lidless or bare die SCM, MCM, SiPh Packages		Delta Summit SHP Delta Summit ATC-NG Delta Castle Universal Robots	Temp. range -60C to 160C Up to 500W in passive thermal control Up to 150W in active thermal control High Power Handplug solution
Final Test				
Burn-In		MCC HPB-4A and HPB-5A	Universal Robots	Part Power up to 1000W Board current capacity up to 5000A Heat Sink load to 200 lbs