The Fastest Path to Profitability in Test

The Agilent Medalist family is the most complete offering in test today for in-circuit test, automated optical inspection, and automated X-ray inspection.
The Agilent Medalist family includes solutions for In-Circuit Test, Automated Optical Inspection and Automated X-Ray Inspection, all backed by Agilent’s worldwide technical support, professional services, and custom consulting.

It’s the most complete offering in test today—and the fastest path to profitability in manufacturing test.

**Medalist i1000**

Basic ICT, affordable price

The Agilent Medalist i1000 in-circuit test (ICT) system combines the simplicity of an MDA with the scalability, features and flexibility that define all Agilent ICT systems. The i1000 gives you quality test in the least amount of time, at the lowest possible cost.

- Intuitive GUI and one-touch auto debug get programs and fixtures up in hours.
- Automatic guard technology makes debug faster by selecting guard points based on board topology.
- Vectorless test technology catches defects on shrinking packages and components with high-speed signal characteristics.
- Two fixture options include an MDA-type press-down fixture solution or a vacuum-type cable-free solution designed for fast fixture swaps.

[www.agilent.com/see/i1000](http://www.agilent.com/see/i1000)
**Medalist i3070**

Robust ICT, simple to use

The state-of-the-art Medalist i3070 features an advanced point-and-click interface, auto debug and optimization tools, and a host of other features to accelerate test programming and deployment. It includes tried and tested technology, such as:

- **AutoOptimizer** – This feature reduces test times by 10 to 15% per test by automatically removing conflicts in code and cleaning up programs.

- **Board Locator** – This feature accelerates debug by quickly pinpointing the location of a failing component, or the location of specific probes or test resources on the fixture.

- **New test development algorithm** – This algorithm reduces test time on resistors and capacitors, accelerates node sequencing, simplifies wire selection and more.

www.agilent.com/see/i3070

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**Agilent Medalist VTEP v2.0 Test Suite**

Near 100% pins coverage

The VTEP v2.0 suite covers ultra-low-measurement pins (<5 fF) as well as power and ground pins—a crucial capability when testing components and packages with high-speed signals. With VTEP v2.0, you get coverage for your signal pins as well as power and ground pins on your boards without having to program logic patterns (vectors) and without needing to power-up the board. The VTEP v2.0 test suite includes:

- **VTEP** – This original Medalist vectorless test engine features hardware that is 4X more sensitive and up to 5X better in standard deviation than its predecessor, TestJet. It caters for today’s IC packages, connectors and sockets.

- **iVTEP** – This award-winning technology targets ultra-small IC packages, flip chips and devices with minimal or no lead frame, and even works on non-grounded heat spreaders and heat sinks.

- **Network Parameter Measurement** – An industry first, this technology spots defects on power and ground pins for connectors and sockets, catching problems that even functional test might miss.

www.agilent.com/see/vtep

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**Agilent Medalist Bead Probe Technology**

Providing more test access is simple

This awards-winning innovation places bead probes directly on copper traces, providing test access points virtually anywhere on a board while maintaining excellent signal integrity. ICT technology can now reach points that were previously inaccessible on extremely dense boards and even on high-speed lines.

www.agilent.com/see/beadprobe
**Agilent Medalist x6000 and 5DX**

Fast, cost-effective AXI

Automated X-ray Inspection (AXI) technology from Agilent “sees through” obstructions on crowded printed circuit boards to catch up to 95% of all manufacturing defects. You get fast, fixtureless inspection to isolate defects and fine-tune your manufacturing processes.

The new *Medalist x6000* is the fastest 3D X-Ray available today, offering you maximum throughput and maximum ease-of-use. The classic *Medalist 5DX* continues to give you the most comprehensive coverage capabilities while providing you with maximum flexibility.

Agilent’s family of flexible AXI solutions offers you:
- Fast, simultaneous 3D inspection of double-sided panels.
- Ability to match the line rates of most medium-to high-complexity boards and assemblies.
- 3D inspection on lead and lead-free solder joints capability to provide feedback for continuous process improvement.
- Easy-to-learn and easy-to-use development environment that gets products out the door and in the hands of customers.
- Greatest single system defect coverage for all solder-joint related defects on both visible and hidden joints.

[www.agilent.com/see/axi](http://www.agilent.com/see/axi)
**Medalist SP50, SJ50 and sj5000**

Quality AOI leads the way

The Agilent *Medalist* SP50 Series 3 Solder Paste Inspection (SPI), *Medalist* SJ50 Series 3, and sj5000 Automated Optical Inspection (AOI) systems offer leading edge optical inspection technologies such as patented structured lighting, low contrast component location, Solid Shape Modeling (SSM), and improved solder paste analysis algorithms. These capabilities help manufacturers deliver the highest coverage, speed, and flexibility in the AOI industry today.

- Early and accurate defect detection provides actionable information to improve front-end processes and back-end repair.
- Advanced optics and SSM technology create lifelike 3D models of components and joints for high call accuracy and faster mean-time-to-repair.
- Flexible unified platform and small footprint allow the systems to switch functions quickly and be moved to different locations in the line.
- Programming is fast and simple with a Microsoft® Windows® XP operating system, a click-and-drag GUI, universal part programming, self-learning algorithms, a localizable interface and more.

www.agilent.com/see/aoi

**Agilent Process Control Software**

Real-time production monitoring

Agilent Process Control Software runs on *Medalist* SP50 and SJ50 systems to provide paste, pre- and post-reflow trends and defect analysis. It allows captured data to be put to use in the production process immediately, improving the quality of WIP and reducing downstream costs in test and repair.
Taking automotive suppliers from zero to 60 in record time

Automotive electronics manufacturers face time-to-market pressures that few can imagine. In answer, Agilent created the Agilent TS-5000 family of Automotive Functional Test Systems to accelerate test development and deployment in automotive applications. Current users report that functional tests get up-and-running as much as 50 percent faster with the TS-5000 family compared to other functional test systems. It’s the fastest way to get quality, tested automotive modules on the road.

ECM functional testing capabilities

The systems offer a versatile suite of automotive test capabilities for powertrain, comfort and body electronics, passive and active safety, as well as infotainment and telematics.

Investment protection

The systems give your development effort more leverage by enabling future migration of measurement hardware and software. As needs change, you can upgrade your systems and test next generation ECMs with your current platform.

www.agilent.com/find/automotive

Rapid test development

Each system includes fully integrated software and documentation. Agilent TestExec SL software is a mature test executive that combines with the TS-5000 family application software to provide a development environment and a library of over 400 automotive test routines. Its integrated programming language (Microsoft® Visual Basic for applications) supports rapid system and debugging.

High throughput testing

To increase throughput, the systems can perform batch testing of identical ECMs. To accelerate execution time, the test library is provided as compiled C-language routines. From top to bottom, the platform is designed to enable rapid changeovers from one ECM to another.
Integrated, cross-platform Manufacturing Test Software Solutions (MTSS) accelerate the assembly, test, and repair processes, reducing cost-per-assembly while helping you hit quality targets.

Agilent Medalist systems feature MTSS tools to improve the way captured data is used and shared. MTSS tools include the Medalist Repair Tool, Medalist Quality Tool, and CAMCAD Professional.

**Medalist Repair Tool**

*Medalist Repair Tool (Formerly Agilent Repair Tool)* brings efficiency to repair. Sharing a common tool for ICT, AOI and X-ray, operator skills and repair information are leveraged seamlessly.

**Medalist Quality Tool**

*Medalist Quality Tool (Formerly Agilent Quality Tool)* provides SQC and SPC analysis for Agilent test systems, including the Agilent *Medalist Automated X-ray inspection (AXI)* and Automated Optical Inspection (AOI) systems.

**CAMCAD Professional**

CAMCAD Professional is the fastest and most accurate CAD translation tool on the market.
Your team, our team, one team

Agilent has engineers, programmers, consultants, technicians, and trainers worldwide. It’s an advantage that few companies can match. Agilent test experts are on call to help solve problems, optimize programs, accelerate program development, train your operators, and avoid downtime through planned maintenance. No matter where you do business, the Agilent service and support team is part of your team.

Please visit us at www.agilent.com/see/services

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<tr>
<td>Latin America</td>
<td>305 269 7500</td>
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<tr>
<td>United States</td>
<td>(800) 829-4444</td>
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Asia Pacific

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<td>1 800 112 929</td>
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Europe & Middle East

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<td>45 70 13 15 15</td>
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www.agilent.com/find/contactus

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