



# Agilent TS-5400 Series II Automotive Functional Test Platform

## Platform Details

### **Agilent TS-5400 Series II Scalability**

Through the TS-5400 Series II architecture, you can now purchase "Just Enough Test" resources to meet current ECM test requirements, and add additional test capabilities to the test system when new ECMs move into production. Deploy the same test platform architecture on the production floor at the price point required for a given modules complexity and pin-count. All test platforms have the same library of routines to build testplans and associated measurement routines, leverage automation code and enterprise connectivity, and operator interfaces. Additionally, maintenance and support of the test platform is consistent across the range of TS5400 Series II test platforms deployed, thus lowering these costs also.

### **Four Members to the TS-5400 Series II Family**

*E8770A/E8780A/E8785A/E8786A* These four base platforms test the range of automotive electronic control modules (ECMs). From simple ECMs, like immobilizers and RKE (remote-keyless entry), to safety ECMs (airbag, ABS/TC) to complex ECMs (engine management systems), the TS-5400 Series II automotive functional test platforms meets the price/performance required to ensure that only quality products are shipped. These platforms are tuned for automotive electronic control module functional test and consists of the measurement resources, switching, test executive and automotive tuned library routines. Included is racking, cabling and optional fixturing. Included are standard software development tools that enable test engineers to deploy test systems up to three times faster than building test systems from individual components.

For simple ECMs and smart sensors, the E8770A Platform consists of GPIB based measurement resources (DMM and optional arbitrary signal generator and counter) and a Switch/Load Unit. Four different load switching card, based on load currents and voltage are available. All instrumentation, power supply and load switching takes place in this Switch/Load Unit. Optional fixturing; Agilent's Express Connect or MAC Panel Interface Connector Assemblies (ICA) are available for those desiring Agilent to supply the ICA.

For the medium to high pin-count/complexity ECMs, the measurement engine is VXIbus based: DMM, Measurement Control Module, and optional Event Detector, Automotive arbitrary waveform generator, Digitizer, Counter, and other VXIbus-based instrumentation. Optional GPIB instruments can also be configured. As in the 8770A Platform, the E8780A and E8785A Platforms have switching (instrumentation, power supply and load) residing in the Switch/Load Unit. The E8780A consists of one Switch/Load Unit and addresses the safety ECMs. For large pin count ECMs, that require many loads and I/O pins to be measured, the E8785A contains two Switch/Load Units. Each Switch/Load Unit has 21 slots available to switch instrumentation and loads to the ECM.

For the ultimate in throughput, the E8786A has 5%-10% higher throughput than the E8785A. This high-performance platform addresses the highest-end ECMs, like engine control/management modules and powertrain control modules.

### **Agilent TS-5400 Series II Software Increases Productivity**

All platforms utilized the enhanced version of Agilent Technologies TestExec SL Test Executive: This latest version of TestExec SL has been further tuned to supply faster testplan development, easier integration of message-based instruments, as well as support for Testplans from the TS-5400 Series I Automotive Electronics Functional Test Platform (Agilent TS-5430 and TS-5450). For customers desiring higher test asset utilization, the optional ThroughPut Multiplier allows for testing of multiple ECMs using one test platform. This feature, utilized on ECMs with long settling times, allows for overlap of instrument and ECM settling time and measurements. Multiple ECMs can be loaded into the test fixture and TestExec SLs unique architecture will sequence through set-ups and measurements for fastest throughput.

If a turnkey system is required, Agilent can deliver this capability through its consulting organization, or Agilent Technologies's referenced Channel Partners, with automotive electronics test expertise, can be utilized to complete the platform.

[Virtual Product Tour Home](http://www.agilent.com/find/ts-5400) at <http://www.agilent.com/find/ts-5400>

### **Key Features and Specifications**

For more features, please contact your Agilent Technologies representative, or check out our [Virtual Product Tour](http://www.agilent.com/find/ts-5400) at <http://www.agilent.com/find/ts-5400>