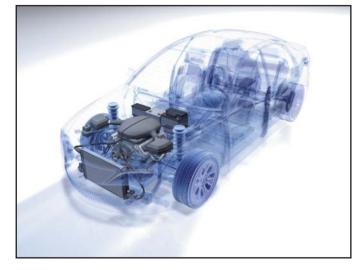
# ATE 5800 Series Automotive Tester





- · Automotive protocol testing
- Highly configurable test platform
- Small footprint
- · Flexible automotive interface options
- In-line or standalone solution
- Reduce test times
- · Adaptable to new technologies
- Ease-of-use
- Safety critical testing
- Simple collection, storage and use of all test data



The automotive electronics industry manufactures products that are utilized in some of the most harsh and changeable environments. These products can be exposed to extremes of temperature and levels of vibration, which are seldom experienced in other environments where consumer electronics are present. In addition these products are often at the cutting edge of technology, performing safety critical functions whilst manufactured as cost effectively as possible. Complete reliability is essential for the electronic devices within a vehicle, with many manufacturers being set goals of zero faulty units delivered to the vehicle manufacturer. With this in mind test is no longer desirable but essential.

# Add Value - Increase Profitability

The 5800 Series automotive tester adds value to your automotive manufacturing.

- Fast program development
- Greater test coverage
- Data collection
- Future proofed

Employing the 5800 will increase profitability by detecting faults earlier (when they are cheaper to fix) and removing the worst scenario of the fault being found by the customer.

# Improve Quality – Less faults, greater throughput, increased profitability

Employing the correct test strategy at the right place in the production process will increase product yield, provide traceability, reduce the PPM (parts per million) failure rate and thus ensuring no financial penalties are imposed by vehicle manufacturer.

#### **Test Capabilities**

The Aeroflex 5800 has the ability to test from the most demanding ECUs to the simplest sensor, utilizing bus protocols such as CAN, LIN, KPW2000, Flexray etc. In addition high power switching, resistive and inductive loads, fault insertion, RF testing are a few of the capabilities within the 5800s automotive arsenal.

#### Automotive Experience

Aeroflex has many years experience within the automotive industry working with such companies as Autoliv, Valeo, VW, Landrover, Saab, Honda, Temic, Continental, Hella and Haldex to name but a few. Our experience has been gained in providing solutions such as infotainment systems, airbag controllers, roll over sensors, head-up display systems, braking controllers and night vision systems. Aeroflex is the only company that can offer the system, application and support from a single source.

# A Future Proofed Solution

Employing the open software and hardware architecture of the 5800 Series ensures that today's test solution is fully upgradeable to meet tomorrows test challenge without the need to re-invest in a new test system.

# Versatility

The 5800 Series is a multi-configuration multi-functional test system that is designed to meet the ever-changing needs of today's electronic manufacturing environment. An open approach to both hardware and software has been adopted. The open software architecture enables integration with code written using third party software such as Labview<sup>TM</sup>, C# <sup>TM</sup> and VB.NET<sup>TM</sup>, in short any platform that is .NET compliant. The open hardware architecture allows configurable chassis and interface styles to accommodate low cost analog in-circuit testing, through to high integrity functional test solutions. The integrated 21-slot PXI-based backplane enables the user to implement solutions using not only Aeroflex PXI cards but also cards from any PXI card supplier.

The 5800 Series of testers comprises three body styles. The 5850 is a floor-standing system that is ergonomically designed for high volume production. The bed of nails style interface locks to the fixture electro-mechanically and provides independent dual-well vacuum control to connect the test subject to the fixture.

The 5830 is rack mountable and facilitates easy cabling to an industry standard interface of the users choice, such as a Virginia panel or MAC panel. The 19 inch rack-mounted system is the easiest platform to integrate additional test resource that is not available in PXI format, such as GPIB controlled instrumentation, as it then can be contained within the one unit.

The 5820 benchtop model provides the same common core system but in a cost-effective package, making it an ideal solution for a test engineering department to facilitate develop of applications away from the main production line. The Aeroflex and 3rd party PXI instrument cards are then interfaced to the test fixture by means of interconnecting cabling.

#### System Architecture

The Aeroflex 5800 Series is unique in the market place as it allows any 3U PXI instrument module to be used alongside the 5800's own test hardware. The system uses a National Instruments MXI-4<sup>™</sup> card to seamlessly connect between the controlling PC and the instrument cards.

To give the system the ultimate flexibility and power, two backplanes have been incorporated into the design. The PXI backplane gives the 5800 the ability to benefit from the wealth of PXI cards available, whilst the Aeroflex backplane ensures that the integrity of fast in-circuit and functional signals between Aeroflex cards are maintained. PXI or PCI card can be fitted to the 5800 and controlled by means of its OEM supplied driver software, which may be in the form of a DLL, Active-X control or .NET assembly. This allows the user to expand the functionality of the system without having to commission specially written software.



# To discuss your specific application please contact your local aeroflex office.

CHINA Beijing Tel: [+86] (10) 6539 1166 Fax: [+86] (10) 6539 1778 CHINA Shanghai Tel: [+86] (21) 5109 5128 Fax: [+86] (21) 6457 7668 FINLAND Tel: [+358] (9) 2709 5541 Fax: [+358] (9) 804 2441 FRANCE Tel: [+33] 1 60 79 96 00

Fax: [+33] 1 60 79 96 00 Fax: [+33] 1 60 77 69 22

As we are always seeking to improve our products, the information in this document gives only a general indication of the product capacity, performance and suitability, none of which shall form part of any contract. We reserve the right to make design changes without notice. All trademarks are acknowledged. Parent company Aeroflex, Inc. ©Aeroflex 2009.

GERMANY Tel: (+49) 8131 2926-0 Fax: (+49) 8131 2926-130 HONG KONG Tel: (+852) 2832 7988 Fax: (+852) 2834 5364

INDIA Tel: [+91] (0) 80 4115 4501 Fax: [+91] (0) 80 4115 4502 JAPAN

Tel: [+81] 3 3500 5591 Fax: [+81] 3 3500 5592 KOREA Tel: [+82] (2) 3424 2719 Fax: [+82] (2) 3424 8620 SCANDINAVIA Tel: [+45] 9614 0045 Fax: [+45] 9614 0047 SPAIN

Tel: [+34] (91) 640 11 34 Fax: [+34] (91) 640 06 40 **UK Cambridge** 

Tel: [+44] (0) 1763 262277 Fax: [+44] (0) 1763 285353

www.aeroflex.com

info-test@aeroflex.com

UK Stevenage Tel: [+44] (0) 1438 742200 Fax: [+44] (0) 1438 727601 Freephone: 0800 282388 USA Tel: [+1] (316) 522 4981

Fax: [+1] (316) 522 4981 Fax: [+1] (316) 522 1360 Toll Free: 800 835 2352





Our passion for performance is defined by three attributes represented by these three icons solution-minded, performance-driven and customer-focused

Part No. 46891/333, Issue 2, 10/09