

INTERFACE TEST ADAPTERS AND FIXTURES

TEXTRON Systems



Better, Faster, More Affordable Testing

Manufacturers often struggle to determine the best method of connecting to the device under test (DUT), or they have unique mechanical or electrical connection requirements. AAI Test & Training's Automated Test Equipment (ATE) group provides a wide range of interface test adapters and fixtures to meet a spectrum of functional test requirements.



INTERFACE TEST ADAPTERS AND FIXTURES

AAI Test & Training's ATE center of excellence is located in Austin, Texas. The team offers decades of ATE experience and creates solutions for customers in a variety of industries. Across the board, customers want highly reliable, accurate and affordable test solutions, and AAI Test & Training delivers fixtures with frequencies up to 50 gigahertz (GHz), voltages as high as 1,000 volts and currents to 100 amperes (amps) per pin.

The team's test fixtures offer:

- Virginia Panel, MacPanel and custom connection interfaces
- Vacuum, pneumatic and mechanical actuation
- Over-clamp and vacuum-sealing covers
- Electromagnetic interference shielding for radio frequency (RF) measurement
- Environmental support for reliability and stress testing
- High-power, fine-pitch and RF probing to 10 GHz

Subassembly Fixtures

AAI Test & Training's ATE group provides fixtures for connection to subassemblies and line replaceable units, or LRUs, using standard cables or special DUT mounting. Fixtures are quickly connected to the DUT to maximize testing throughput, and include connector savers for simplified support. Based on specific DUT requirements, other features might include temperature control or heat sinking.



Interface Test Adapters

In addition to test fixtures, AAI provides custom cables for connection to the DUT. These are available for special requirements, including:

- Tolerance to high temperatures during environmental testing
- Armored to withstand harsh environments
- Low loss, phased matched and phase stable
- Low noise
- Space-qualified and avionics-specific connectors



Functional Board Fixtures

Printed wiring board, or PWB, test fixtures are available in several configurations. These can mate automatically to connectors and probe internal signals on both sides of the board, or enable manual probing and adjustment. Sensitive internal signals can be probed under normal operating conditions, with buffering of key outputs and simulation of key input signals as required.



Special Application Fixtures

Unique test needs demand no less efficiency and effectiveness. The team has provided test fixtures for a range of atypical test needs, including:

- High-volume testing of pressure transducers across temperatures
- Low-cost RF antenna connection for GPS, Bluetooth and cellular phones
- Medical device testing at 1,000 volts and 100 amps



For additional information, please contact:

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