# AUTOMATED TESTING EQUIPMENT (ATE)

Automated testing during the product development lifecycle is becoming an increasingly crucial element as embedded systems become more complex and require a higher sophistication in testing. Aversan's test equipment performs automated test execution, logging and report generation for both closed-loop and open-loop testing applications. All Aversan test stands are based on a proven modular and expandable platform so they can quickly be tailored for a variety of systems.



#### **FEATURES**

- Automated test capability single or batch
- Test scripts are developed in XML using high level constructs
- HTML test report files showing start date/time, end time, expected, actual, individual pass/fail and overall pass/fail
- Command line or GUI modes
- Hardware abstraction enables the addition or re-configuration of test hardware to be transparent to the higher level test script and test procedure.
- Supports test interruption for user interaction
- Powerful signal definition (e.g. define individual Boolean signals within a CAN bus message)
- AIMS Client (Aversan Integrated Monitor Software)

# **BENEFITS**



Real time reporting of data for offline data analysis.



Versatile: can be used in engineering development and production level testing.



Can be combined with Aversan's Batch Execution System (BES).



Integrate with simulation models, graphing/tabular interfaces, data logging, sharing, and analysis.



Configurable and scalable based on equipment requirements.



Test reports can be custom defined (e.g. XML for use in data analysis).



Savings due to reduced test cycle duration and manual labor.



Regression testing is made easy with the ATE.

### THE AVERSAN EDGE

# Complex Engineered Solutions

Aversan's development team is made up of engineers who are experts in developing ATEs and GSEs for complex systems. Customers come to Aversan for:

- High quality ATE and GSE solutions suitable for safety and mission-critical products
- Support for testing non-standard, complex I/O that don't have Commercial Off-The-Shelf (COTS) interface hardware
- Demonstrable test coverage analysis
- Customer-focused Human Machine Interface (HMI)/Graphical User Interface (GUI) design
- Detailed interface-level test reports for faster root-cause analysis and traceability
- Capability to reverse/re-engineer obsolete ATEs and GSEs
- The ability to interface with your Manufacturing Execution Systems (MES) software

# Long-Term Support and Maintainability

With the understanding that most industries require products to be fielded for multi-year programs, Aversan provides full long-term lifecycle support through:

- Electronic document control and configuration management, with emergency recovery plans and off-site backups
- Best in-class documentation practices and processes to ensure equipment and software can be maintained and upgraded
- Design for reparability practices that simplify ongoing ATE and GSE maintenance
- Design for reliability practices ensure ATEs and GSEs are designed for long service-life from day one
- Long-term support and maintenance service options that are flexible to your needs and the life of your program

#### ✓ Improve Your Production ROI

Aversan has been implementing test automation solutions since 2003. Our ATE and GSE solutions leverage our automation expertise to offer high production throughput—increasing your ROI for capital expenditure through:

- Custom fixturing design which optimizes UUT connection/disconnection time, minimizes connection cycles, and minimizes operator error risk
- Optimized software solutions which minimizes test cycle time to meet throughput objectives
- Consulting services that optimize test coverage across the entire lifecycle to ensure ATE and GSE are only performing high-value tasks
- Support for asynchronous multi-UUT testing that maximizes utilization of ATE and GSE hardware and networking resources to achieve faster test cycle times
- Highly reliable ATE and GSE designs that have more up-time and support built-in self-test to rapidly diagnose issues and return to production
- Integrating test automation tools, such as our Batch Execution System (BES), which maximizes the utilization of available test assets and resources