

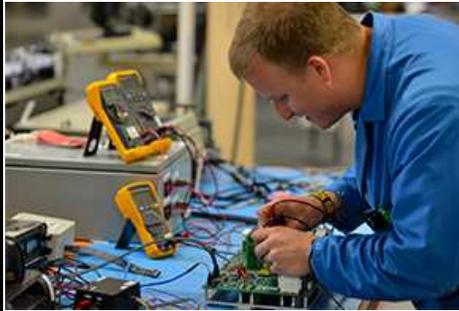
# EMBEDDED TEST SOLUTIONS

## “Low Cost DMM and (OI) MUX Module Create Versatile Test & Measurement Platform”

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Most Test Engineers will tell you if they had their choice, any test solution they develop to support Production Test would include some form of automation. Unfortunately, because of a number of factors (i.e., limited production or simple technology), the cost to automate some test processes are typically not feasible. As a result, the only option is to deploy an all-manual test procedure. In that case, the process can often lead to lengthy test time, limited test coverage and poor product quality. What is needed is a low-cost test method that can accommodate a board range of Functional Test requirements, it should include a simple hardware architecture and definitely support automated test development.

The diagram below highlights a beautifully simple test development platform that is the outgrowth of a unique collaboration between Overton Instruments (OI), and Rigol Technologies. The **MUX-MATE** and a precision DMM, are all that are required to carry-out a complete ICT and Functional Test sequence. The DUT (device-under-test), could be any electrical or electronic device (including Passive Components, Semiconductors, PCB's, Electro-Mechanical Devices, Cable Assemblies and much more).



The MUX-MATE is a 16-Channel Signal Multiplexer module, which is used to route test points on the DUT, to the external DMM. To perform ICT related tasks, the DMM can be easily programmed to measure Continuity, Resistance, Capacitance or Diode parameters. Likewise to support Functional Test (after DUT power is applied), the DMM can be quickly set to make AC or DC, Voltage & Current, Period and Frequency measurements.

The MUX-MATE is part of a special group of Relay Switching Solutions (shown on the right), and are a subset of the innovative ETS SERIES, EMBEDDED TEST SOLUTIONS from (OI). The ETS Series' products are designed for embedded operation which include direct installation inside Mechanical Test Fixtures, you can build custom desktop test equipment or support larger ATE test systems. The ETS Series' are board-level instrument modules that include a standard form factor (just 2.50" x 2.75"). These modules are controlled by an external PC (via an optional USB interface), or with one of our unique EMBEDDED TEST CONTROLLERS (i.e., the Pico-MATE).

In either case, programming our modules' is both simple and fast. In addition to our popular relay modules, the ETS Series' products also include functions that perform Analog Conversion, Digital I/O and Special Function capabilities.

### (OI) RELAY SWITCHING SOLUTIONS

#### SWITCH-MATE<sup>(VI)</sup>

8-SPST Relay Module

#### SWITCH-MATE/HC<sup>(VI)</sup>

4-SPST, 10A High Current Relay Module

#### SWITCH-MATE/HP<sup>(VI)</sup>

8-SPST, High Performance Relay Module

#### SWITCH-MATE/HV<sup>(VI)</sup>

8-SPST, High Voltage Relay Module

#### RELAY-MATE<sup>(VI)</sup>

8-DPDT Relay Module

#### RELAY-MATE/HC<sup>(VI)</sup>

4-DPST, High Current Relay Module

#### RELAY-MATE/HP<sup>(VI)</sup>

8-DPDT, High Performance Relay Module

#### MUX-MATE<sup>(VI)</sup>

16-Ch Signal Multiplexer Module

#### MUX-MATE/HP<sup>(VI)</sup>

16-Ch Signal Multiplexer, High Performance Module

#### MATRIX-MATE<sup>(VI)</sup>

4X4 Relay Matrix Module

#### 4WIRE-MATE<sup>(VI)</sup>

4-CH Signal Multiplexer Module



The **DM3058E** from Rigol Technologies, is the perfect companion for the MUX-MATE. When it comes to supporting cost-sensitive Functional Test applications, the DM058E delivers the best blend of accuracy, resolution, functionality and speed (see highlights below).

- True 5 ½ digit resolution (240,000 counts)
- 123 Readings/second maximum reading rate
- 0.015% DC Voltage Accuracy
- USB and RS-232
- SCPI Command Compatibility
- Available datalogging and sensor connectivity

By combining the DM058E and the MUX-MATE, customers experience a whole new level of flexibility and value, all for a fraction of cost (when compared to conventional test methods). Discover the advantage for yourself. Give us a call to schedule a comprehensive on-site demo session.

## ONE PLATFORM, MANY SOLUTIONS

