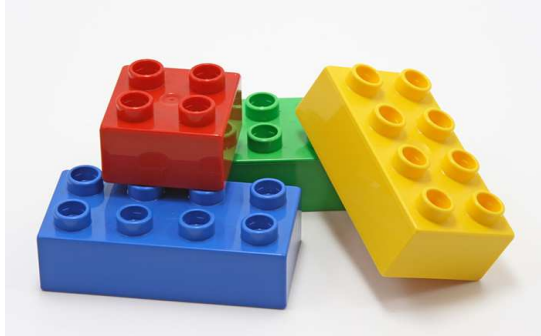


EMBEDDED TEST SOLUTIONS

MARCOM20170125-OI

Product specifications may change without notice



“With Overton Instruments, building custom test & measurement equipment could not be simpler”

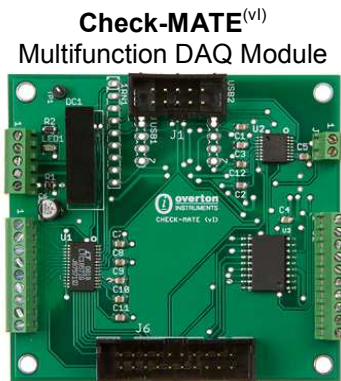
- Overton Claborne, President
OVERTON INSTRUMENTS (Oi)

OVERTON INSTRUMENTS (Oi), has developed an innovative suite of low-cost test and measurement products called the ETS Series, **EMBEDDED TEST SOLUTIONS**. Like the name implies, the ETS Series' board-level instruments are designed for embedded operation, which includes direct installation into Mechanical Test Fixtures, build custom desk-top test equipment, or support larger ATE test systems.

The application possibilities are enormous, use the ETS Series to test a wide array of electrical and electronic circuits including Components, Semiconductors, Printed Circuit Boards, Flex-Circuits or complete Systems.

You can also build fully automated test equipment to perform In-Circuit Test, Functional Test, Burn-In or QA Inspection.

The ETS Series' test instruments can be externally controlled by a standard PC (with an optional USB interface), or with our embedded controllers. Access to the hardware is provided by a combination of screw terminal blocks and box headers. All of the instruments share a common form-factor (2.50" x 2.75"). In addition, the mounting holes allow easy stacking for the instruments as well. The complete ETS Series product line is divided into 7 separate categories (which are further highlighted in the section on the right).



Benefits

- ✓ *Modular design (2.50" x 2.75")*
- ✓ *Large & growing selection of test instrument modules*
- ✓ *Convenient access to instrument resources (screw terminals and/or consolidated box headers)*
- ✓ *PC or Embedded control*
- ✓ *Low cost, as much as 60% less than comparable PC instruments*

Applications

- ✓ *Automate Test Fixture Control Functions*
- ✓ *Perform Digital, Analog, RF, High Voltage & Power Test*
- ✓ *Component & Semiconductor Test*
- ✓ *Cable Harness Assemblies*
- ✓ *Flex & Printed Circuit Boards*
- ✓ *Box & System Level Test*
- ✓ *ICT & Functional Test*
- ✓ *Burn-In & Stress Screening*

ANALOG CONVERSION

Measuring analog voltage is essential in many test applications. Likewise, the need to simulate an input voltage is equally important. (Oi) Analog Conversion products include a wide range of ADC & DAC solutions that feature multiple channels, high-speed and enhanced flexibility.

CHECK-MATE^(vi)
Multifunction DAQ Module

DAQ-MATE^(vi)
16-CH Data Acquisition Module

QDM-MATE^(vi)
Quad DAC Module

SWITCHING SOLUTIONS

The (Oi) product line would not be complete without a robust collection of relay Switching Solutions. These instruments perform signal routing, load switching and circuit interfacing. For example the MUX-MATE can be used to route 1-of-16 test points to an external DMM, Oscilloscope or other test equipment.

RELAY-MATE^(vi)
8 DPDT Relay Modules

RELAY-MATE/HF^(vi)
8 DPDT High Frequency Relay Module

SWITCH-MATE^(vi)
8 SPST Relay Modules

SWITCH-MATE/HC^(vi)
4 SPST, High Current Relay Module

SWITCH-MATE/HV^(vi)
4 SPST, High Voltage Relay Module

MUX-MATE^(vi)
16-CH Signal Multiplexer Module

MATRIX-MATE^(vi)
4x4 Relay Matrix Module

4WIRE-MATE^(vi)
4-CH Signal Multiplexer Module

DIGITAL INPUT/OUTPUT

Digital Test remains a very high priority in the test & measurement world. (Oi) Digital I/O products represent the best combination of price, performance and bit-configuration.

DIO-MATE^(vi)
24-Bit Digital I/O Module

OPTO-MATE^(vi)
16-Bit Isolated Digital I/O Module

SIGNAL GEN. & MEASUREMENT

This group of instruments perform pulse generation and frequency measurement.

FCM-MATE^(vi)
100MHz Frequency Counter Module

PGM-MATE^(vi)
Programmable Pulse Generator Module

SPECIAL FUNCTION

These (Oi) products satisfy a variety of special functions. For example the DUT-MATE provides the means to safely switch DC power to the DUT (device-under-test). Before power is applied the DUT-MATE checks the power rails for a short condition. After power is applied, it monitors both input voltage and current levels, and provides a programmable circuit breaker function.

DUT-MATE^(vi)
Device-Under-Test
Power Sequence Module

SFM-MATE
8-CH Short-Finder Measurement Module

TMM-MATE^(vi)
4-CH Temperature Measurement Module



“The Future of Electronics Test”

EMBEDDED TEST CONTROLLERS

The **Pico-MATE™** is the first in an unique line of embedded controllers from (Oi). Engineers use it to replace traditional PC's when building custom test equipment.

The Pico-MATE™ comes loaded with a high performance Atmel AVR processor, 2K of SRAM and 32K of Flash ROM, 65K EEPROM, 25 Digital I/O lines, a high-speed serial RS232 communications port and a flexible USB interface. Two instrument interface ports are provided to allow access to all (Oi) Test Instrument Modules (i.e., Check-MATE^(vi), DUT-MATE^(vi), Relay-MATE^(vi) and all others). Additional controllers include the Micro-MATE, Mini-MATE and Mega-MATE.

SOFTWARE DEVELOPMENT

Programming the Pico-MATE™ is easy when using BASCOM-AVR. BASCOM-AVR is a full-featured, Windows BASIC Compiler that is wrapped in a professional IDE (Integrated Development Environment). For 'C' programmers, the Pico-MATE™ is the ideal companion for WinAVR (which is a free optimized ANSI C compiler). In addition we offer TES-MATE.

TES-MATE (or *Test Executive Suite*) is a collection of support routines and instrument drivers that can be directly imported into your code and help accelerate the test development process. TES-MATE is also “free” open source code and is provided in both BASIC or 'C' versions. The Pico-MATE™ comes fully assembled and ready to use. Just connect the USB interface, apply power and start coding

TYPE	MODEL	FUNCTION	STANDARD	PRICE	USB OPTION	PRICE
Embedded Test Controller	PICO-MATE	Embedded Test Controller	ETS-1010-00	\$99	N/A	N/A
Analog Conversion	CHECK-MATE ^(vi)	Multifunction DAQ Module	ETS-2010-00	\$119	ETS-2011-00	\$149
3	DAQ-MATE ^(vi)	16-Ch Data Acquisition Module	ETS-2020-00	\$119	ETS-2021-00	\$149
4	QDM-MATE ^(vi)	Quad DAC Module	ETS-2040-00	\$169	ETS-2041-00	\$199
5	CHECK-MATE+ ^(vi)	Multifunction DAQ Module, <i>Plus</i>	ETS-2050-00	\$149	ETS-2051-00	\$179
6	CHECK-MATEII ^(vi)	Multifunction DAQ Module-II	ETS-2060-00	\$219	ETS-2061-00	\$249
7	DAQ-MATEII ^(vi)	32-Ch Data Acquisition Module-II	ETS-2070-00	\$219	ETS-2071-00	\$249
Digital I/O	DIO-MATE ^(vi)	24-Bit Digital I/O Module	ETS-3010-00	\$99	ETS-3011-00	\$129
9	OPTO-MATE ^(vi)	16-Bit Isolated Digital I/O Module	ETS-3020-00	\$119	ETS-3021-00	\$149
10	DIO-MATEII ^(vi)	48-Bit Digital I/O Module-II	ETS-3030-00	\$169	ETS-3031-00	\$199
Switching Solutions	RELAY-MATE ^(vi)	8-DPDT Relay Module	ETS-4010-00	\$119	ETS-4011-00	\$149
12	RELAY-MATE/HC ^(vi)	4-DPST High Current Relay Module	ETS-4020-00	\$119	ETS-4021-00	\$149
13	RELAY-MATE/HP ^(vi)	8-DPDT High Performance Relay Module	ETS-4030-00	\$149	ETS-4031-00	\$179
14	SWITCH-MATE ^(vi)	8-SPST Relay Module	ETS-4110-00	\$119	ETS-4111-00	\$149
15	SWITCH-MATE/HC ^(vi)	4-SPST, High Current Relay Module	ETS-4120-00	\$119	ETS-4121-00	\$149
16	SWITCH-MATE/HP ^(vi)	8-SPST High Performance Relay Module	ETS-4130-00	\$149	ETS-4131-00	\$179
17	MUX-MATE ^(vi)	16-Ch Signal Multiplexer Module	ETS-4210-00	\$169	ETS-4211-00	\$199
18	MUX-MATE/HP ^(vi)	16-Ch High Performance Signal Multiplexer Module	ETS-4220-00	\$219	ETS-4221-00	\$249
19	MATRIX-MATE ^(vi)	4X4 Relay Matrix Module	ETS-4310-00	\$169	ETS-4311-00	\$199
20	4WIRE-MATE ^(vi)	8-CH 4PST Matrix Module	ETS-4410-00	\$169	ETS-4411-00	\$199
Signal Generator & Measurement	FCM-MATE ^(vi)	100MHz Frequency Counter Module	ETS-5010-00	\$149	ETS-5011-00	\$179
22	PGM-MATE ^(vi)	10MHz Pulse Generator Module	ETS-5110-00	\$149	ETS-5111-00	\$179
23	PWG-MATE ^(vi)	25MHz Programmable Waveform Generator Module	ETS-5120-00	\$149	ETS-5121-00	\$179
24	PIT-MATE ^(vi)	10MHz Programmable Interval Timer Module	ETS-5130-00	\$149	ETS-5131-00	\$179
Special Function	DUT-MATE ^(vi)	Device-Under-Test Power Sequence Module, 1Amp	ETS-6010-00	\$249	ETS-6011-00	\$279
26	DUT-MATE ^(vi)	Device-Under-Test Power Sequence Module, 5Amp	ETS-6020-00	\$269	ETS-6021-00	\$299
27	DUT-MATE ^(vi)	Device-Under-Test Power Sequence Module, 10Amp	ETS-6030-00	\$289	ETS-6031-00	\$309
28	TCI-MATE ^(vi)	Test Control Interface Module	ETS-6100-00	\$99	N/A	N/A
29	CIA-MATE ^(vi)	Controller Interface Adaptor Module	ETS-6110-00	\$69	N/A	N/A
30	PLM-MATE	Programmable Load Module	ETS-6130-00	\$499	ETS-6131-00	\$529
31	SFM-MATE ^(vi)	8-CH Short-Finder Module	ETS-6160-00	\$149	ETS-6161-00	\$179
32	TMM-MATE ^(vi)	4-CH Temperature Measurement Module	ETS-6210-00	\$399	ETS-6211-00	\$429
33	TMM-MATE ^(vi)	2-CH Temperature Measurement Module	ETS-6220-00	\$199	ETS-6221-00	\$229
34	SEM-MATE ^(vi)	Switching Expansion Module	ETS-4510-00	\$249	ETS-4511-00	\$279
Data Communications	COM-MATE ^(vi)	Quad Port RS-232 Module	ETS-7010-00	\$149	N/A	N/A
36	COM-MATE ^(vi)	Dual Port RS-232 Module	ETS-7020-00	\$129	N/A	N/A
37	HUB-MATE ^(vi)	7-Port USB 2.0 HUB Module	ETS-7110-00	\$149	N/A	N/A
38	HUB-MATE ^(vi)	4-Port USB 2.0 HUB Module	ETS-7120-00	\$129	N/A	N/A
39	GPIB-MATE ^(vi)	GPIB IEEE488 Module	ETS-7210-00	\$449	ETS-7211-00	\$479