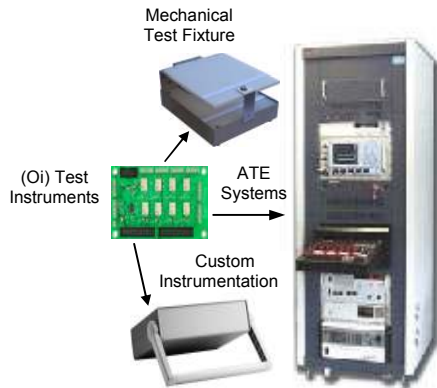# OVERTON INSTRUMENTS (OI), Product Overview

(Oi) helps simplify custom test development by reducing the cost and complexity of building Automated Test Equipment with an innovative product line called the **ETS Series, EMBEDDED TEST SOLUTIONS.** Like the name implies, these solutions are designed for embedded operation which includes easy installation into Mechanical Test Fixture, create 'smart' test instruments or support larger ATE test systems.

Embedded Test Controllers

(Oi) Embedded Test Controllers are first-in-class microcontroller-based system modules which have been optimized for test and measurement.   These controllers are designed to replace tradition PC-based test equipment and set a new standard in design flexibility and cost-efficiency.
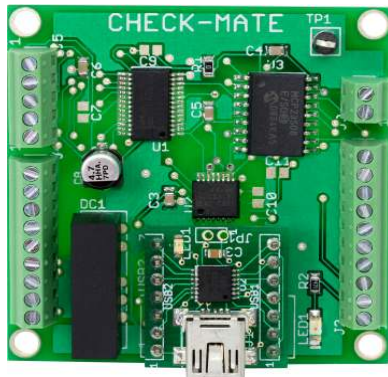
Learn more

- ❖ *Low cost replacement for PC-based test equipment*
- ❖ *Powerful embedded microcontroller optimized for test & measurement*
- ❖ *Multiple serial interfaces, SPI & I^2C bus, RS232 and USB ports*
- ❖ *Operator Interface & Circuit Expansion ports*
- ❖ *Flexible (Oi) Bus ports (interface to any Oi Test Instrument Modules)*
- ❖ *Compact size, 2.5" x 2.75"*

Test Instrument Modules

(Oi) Test Instrument Modules (TIMs), are a unique collection of general and special purpose test & measurement instruments. The versatile TIMs are designed for embedded operation and can be easily driven by our Embedded Test Controllers (via the Oi-Bus), or by an external PC (via an optional USB interface). The product line is broken into 5 categories, Analog Conversion, Digital I/O, Relay Switching Solutions, Communications Interface and Special Functions.
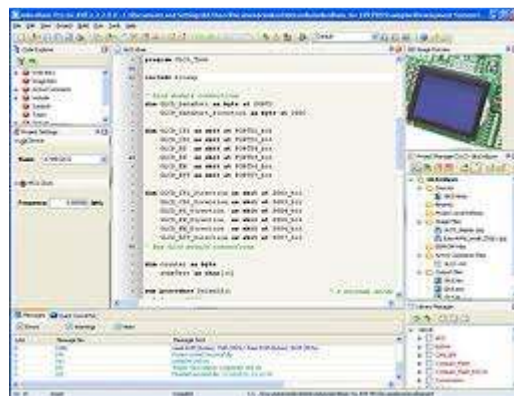
Learn more

* ❖ *Test Digital, Analog, RF, Microwave & High Voltage circuits*
* ❖ *Test semiconductors, hybrid modules, PCB's, panels or box-level units*
* ❖ *Build Functional Test Stations*
* ❖ *Power Supply Test Stations*
* ❖ *Depot Repair Stations*
* ❖ *QA/QC Incoming Inspection & Burn-In*
* ❖ *Support Hardware Engineering*

Program Development

Support for programming (Oi) Embedded Test Controllers are provided by a set of superb compliers (BASIC & 'C'), from MikroElektronika (www.mikroe.com). In addition, code development is also supported by **TES-MATE, TEST EXECUTIVE SUITE**. TES-MATE is a comprehensive software library from (Oi), which includes a robust collection of general purpose utilities, support routines and instrument drivers (all designed to provide the programmer maximum control).

Learn more

SDK, System Design Kit

For those Engineers who are new to the concept of Embedded Test, (Oi) has created an SDK, System Design Kit. The system allows the user to learn embedded test development by performing a series of test & measurement experiments. The kit includes a Pico-MATE (Embedded Test Controller), and the Pico-MATE Demo Interface PCB, both are mounted on the top plate of a sloped instrument box. In addition, a CD is included to provide all of the support files, programs, application notes and technical documents.

Learn more

Scorpion Test Fixture Kits

The Scorpion FaultFinder is a fully self-contained PCB Functional Test system, which is based-on (Oi) Embedded Test Controllers and Test Instrument Modules (TIM's). The Scorpion is provided in kit-form so users can tailor the system to accommodate specific requirements.
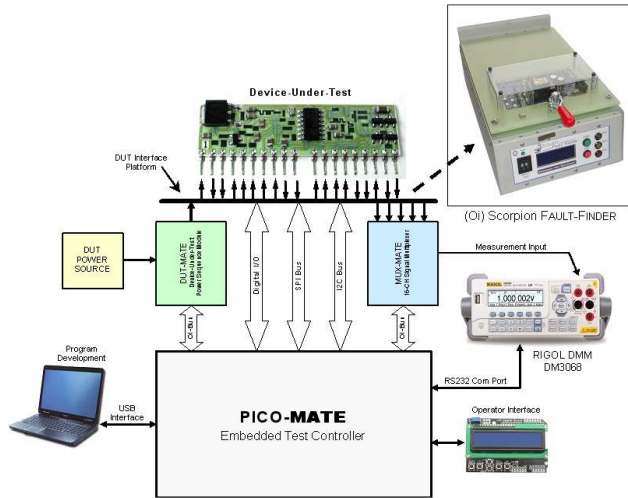
Learn more

- ❖ *Performs both ICT and Functional Test*
- ❖ *All in one, "bed-of-nails" platform that is easy to program, configure, operate and maintain*
- ❖ *Low cost alternative to traditional PC-based test equipment*
- ❖ *Occupies minimal desk space*
- ❖ *Instrumentation 100% reusable*

System Integration Services

Many customers want a "turn-key" test solution and turn to (Oi) for results. Our Application Engineers work with customers to define requirements and then build a custom solution based-on the Scorpion FaultFinder.

Learn more

Support Tools and Accessories

When it comes to debugging (Oi) embedded test equipment, the tool of choice is the LOCIC analyzer from Saleae (www.salease.com).

Learn more