Emerging Technologies

CONTROL CIRCUIT SUB-ASSEMBLY TEST SYSTEM

Brief Description:
Emerging Technologies, LLC. was called upon to design and build an automated control circuit sub-assembly functional test system for DUT's in panelized form.

Emerging Technologies, LLC. worked from the customer provided specification and sample product. Challenges included fixturing of the DUT panel and simulation of the DUT's mating hardware.

Test software was written to customer specification. The test ran to completion automatically upon clamping of the DUT into the fixture. Results of each test were stored.

The test application was developed to allow the user to re-order the test sequence steps and configure the pass/fail parameters via a special configuration file. Additionally, global tester parameters are set from a system configuration window.

The project cycle consisted of system design, system manufacturing, development of the custom test application, and final verification of operation.

Customer Benefit:
The customer is able functionally test full 15 DUT panels prior to separation as a sub-assembly, using the Emerging Technologies, LLC. designed test system. Additionally, the results of testing each product is stored to the system.

ET Responsibilities:
- Functional Specification Generation
- ✓ Design / Engineering
- ✓ Fabrication
- ✓ Programming – Software
- Programming – Firmware
- Circuit & PCB Design
- On-Site Commissioning
- ✓ Post Commissioning Support
- Other

Technologies:
- Embedded Computers
- Microcontrollers
- Visual Software
- ✓ Control Software
- ✓ Data Acquisition
- ✓ Computer Based Control
- ✓ Communications – RS232 w/DC supply
- ✓ System Integration
- ✓ Other – CAD –fixture layout

Special Features:
- ✓ Tests 15 DUT Panel.
- ✓ Customer Configurable Test Sequence.
- ✓ Per Panel & per DUT Pass / Fail Indication on User Interface.
- ✓ Custom DUT Fixture.
- ✓ Results Storage.
- ✓ Mobile Enclosure.

(920) 793-2782