

RECLOSER TEST SYSTEM

Brief Description:

Emerging Technologies, LLC. was called upon to design and build an automated recloser test system based on an existing system. The new system required new functionality to support testing of a new product model.

Emerging Technologies, LLC. developed an updated system that operates similar to the existing system. The new system functionality required additional instrumentation and system I/O, as well as additional sequence steps. The new system included the integration of an existing first pass yield-tracking module that was previously developed by Emerging Technologies for other systems in the plant.

The new system tests functionality of the DUT based on ordered options, performs break in procedures, and stores test results. Operator selectable automated or manual testing can be performed.

An existing, decommissioned, test system was provided by the customer for re-application. Many of the components were the same as required for the new system. Additional new components were provided by Emerging Technologies to complete the system.

The design package included bill of material, mechanical diagrams, electrical diagrams, and updated LabView 8.5 application software.

Customer Benefit:

The customer is able to perform testing and breaking-in on built to order products in a timely manner prior to shipment to the end user. Test reports are provided to the end user and results are stored and analyzed for yield.

Special Features:

- Custom Over-head Cable Management Rack.
- Modular Cable Interface to DUT.
- Hand-held Barcode Scanner.
- First Pass Yield Tracking.
- Manual Testing Capability for Troubleshooting.
- Modular Test by Product Model and Options.
- Rack-mounted Industrial PC, Power Supplies, and Instruments.



Key Components Used:

- National Instruments DIO.
- National Instrument LabView 8.5.
- Agilent 6813B & 6613C Power Supplies w/GPIB.
- Agilent 34401A DMM w/GPIB.
- Valhalla 4300B uOhm Meter w/GPIB.
- Rack-mount industrial PC.

Emerging Technologies, LLC.

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 – serial
- System Integration
- Other

Customer Category:

- ✓ OEM
- Custom Equipment
- Utility
- R&D

SPECIALISTS IN TEST, MEASUREMENT, AND DATA ACQUISITION

Emerging Technologies, LLC.

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