

APPLICATION BRIEF

2020

CUSTOM SUB-ASSEMBLY TESTER

Brief Description:

Emerging Technologies, LLC. was called upon to develop a electronic sub-assembly tester. Three separate ranges of sub-assemblies, five units at a time were to be tested. The tester requires connection to separate bench top instruments for operation. DC bench top power supply, AC current source, and an oscilloscope were also supplied by Emerging Technologies.

The purpose of the tester is to randomly sample electronic sub-assemblies, to verify compliance with specification, prior to use in the manufacture of the final product.

Emerging Technologies utilized off the shelf DC bench top power supply and oscilloscope, custom designed and built current source, and in house PCB design / build and custom fabrication capabilities to supply this custom tester.

Customer Benefit:

The customer was able to verify performance of electronic sub-assemblies prior to use in production using the Emerging Technologies, LLC. custom designed tester when no off the shelf tester was available. The customer was able to focus attention in other areas as Emerging Technologies managed this effort from concept to completion. Customer alignment was maintained through on-site concept and design reviews.



ET Responsibilities:

- ✓ Functional Specification Generation
- ✓ Design / Engineering
- ✓ Fabrication
 - Programming – Software
 - Programming – Firmware
- ✓ Field Installation
- ✓ On-Site Commissioning
- ✓ Post Commissioning Support
- ✓ Other – Concept development

Technologies:

- Embedded Computers
- Microcontrollers
- Visual Software
- Control Software
- Data Acquisition
- Computer Based Control
- Communications
- System Integration
- ✓ Other – Hard-wired Logic

Special Features:

- ✓ Automated Clamping and Programming w/Verification.
- ✓ Portable Fixture with Internal Device Mounting Area.
- ✓ Works with Multiple Product Styles.
- ✓ Designed for Easy Duplication.