Application Brief
2020

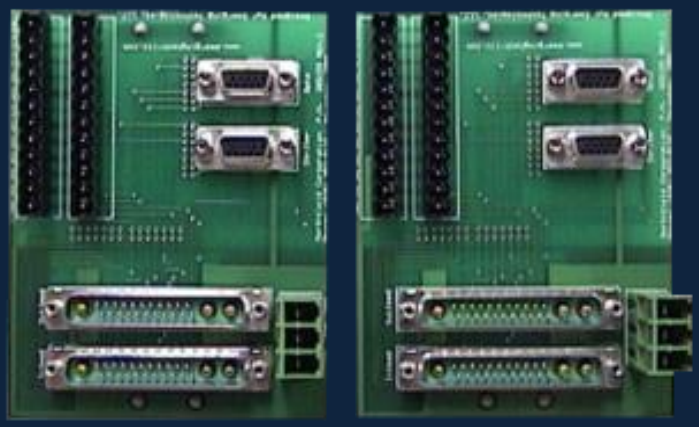
Emerging Technologies

Servo Interface Enhancement

Brief Description:

Emerging Technologies, LLC. was called upon to add additional functionality to a design previously developed by Emerging Technologies, LLC.

The original design was developed to add integrity to the OEM product while reducing assembly time resulting in a more robust product at a lower assembled cost. After further review of the overall assembly process, it was determined that it would be beneficial to add additional items to the interface PCB. After the first revision of the PCB, separate power and sensor cables still needed to be connected via separate terminal strips mounted on a DIN rail located beneath the interface PCB. A new revision of the PCB including the separate connections would clearly allow for easier assembly and field troubleshooting, as well as reduce assembly cost.



Emerging Technologies, LLC. recommended an approach using combination connectors, with dual pigtail style cables, to make for a simple assembly and clean connection. Removable terminal strip style connections for pass through sensors were recommended as well. The PCB can now be installed or removed with out disconnecting individual wires.

Custom cables were designed to support the new combination connectors. Using the new cable design the field devices receive power and I/O connection through a common PCB connector.

Emerging Technologies, LLC. provides complete PCB / Cables sets to the OEM customer for assembly.

Customer Benefit:

The customer saves time and material on each machine by eliminating the need for costly wiring and testing. Wiring now takes minutes instead of hours for each machine. Field maintenance is significantly easier. The field controls are now plug and play.

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

Technologies:
- Embedded Computers
- Microcontrollers
- Visual Software
- Control Software
- Data Acquisition
- Computer Based Control
- ✓ Communications
- System Integration
- ✓ Other – *Production Cable Design*

Customer Category:
- ✓ OEM
- Industrial Manufacturer
- Custom Equipment
- Utility
- R&D

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