

Backplane and Midplane Vision Inspection System

The Challenge

PVI Systems designed the Scorpion™ Pin Inspection System in response to the growing concerns of costs associated with the debug and inspection for bent or broken pins in assembled backplanes and midplanes.

Features

- Portable for field service use
- Slot inspection time of under three minutes
- Dramatically increase inspection repeatability and accuracy
- Image capture and traceability
- Unique lighting scheme used to verify connector pin integrity
- Data collection of test results, images, and traceability
- Developed using National Instruments LabVIEW and Vision Acquisition Software

For more information, contact us at info@pvisys.com.

The Solution

Old Method



Using miniature optics and drive components mounted within a card that is mechanically compatible with a system card, the Scorpion Pin Inspection System can scan the backplane or midplane of a system rack, using only the width of a single slot. Scorpion eliminates the need to remove cards or partial disassemble the rack to perform an inspection.

New Method



The user configurable Scorpion software drives the scanning process while also performing the evaluation and data logging. The software will obtain the coordinates of bent or missing pins, capture the image, and display the findings in a result panel. Following the inspection, the operator can use the results data to quickly go to the stored or live image of the failed pins.

Deployment

The Scorpion Pin Inspection System has been deployed by large enterprise system vendors, allowing their support team to quickly check for backplane problems without powering down the system.

