END-TO-END NPI SERVICES INTRODUCES COMPACTPCI TEST FIXTURE

The CompactPCI Test Fixture is a debug and test suite designed specifically for the development, integration and test of a client-developed CompactPCI card. The CompactPCI Test Fixture is used to verify power, interfaces, and all I/O to the device under test. The CompactPCI Test Fixture also provides powerful processing platforms and integrated displays that aid the client in developing and debugging their product.

The CompactPCI Test Fixture features a series of indicator LEDs and 7-segment displays that provide convenient user feedback during test and debug. Toggle switches and pushbuttons are provided to simulate inputs to the device under test (DUT). For more capability a microcontroller is provided for programmable control of all the test fixtures interfaces.

To simulate sophisticated system conditions the CompactPCI Test Fixture integrates a quad-core P2041 processor. Custom software can be written on this processor to fully simulate any conditions the DTU may see.

KEY FEATURES

- Totally self contained including power supplies and control processor
- Test and verification of high-speed PCIe interface
- Both manual and software controllable I/O interfaces including toggle switches and LED and 7-segment displays
- Imbedded P2041 processor card for custom control and testing of the CompactPCI DUT
- Heat management of DUT
- JTAG interface for application development
- SD card data storage
- Ethernet and serial interfaces for integration into automated test systems

ACDi designed a Test Fixture for a government agency for the development, integration, and test of a compact micro-ATX board. ACDi provided end-to-end value added services tailored to this customer's requirements. **These included:**

REQUIREMENTS DEFINITION

ACDi worked with the customer to collect and document specifications and requirements prior to beginning product design. This ensured an efficient and effective development process.

ENGINEERING DESIGN

ACDi and its partners comprised a professional engineering team that was capable of providing mechanical, electrical, software and manufacturing engineering to ensure the Fixture was designed for testability. The team worked closely with the customer at all phases of the program to make sure the product met the customer's expectations.

TEST FIXTURE FABRICATION

ACDi provided small volume prototypes for test and verification. ACDi later fulfilled low volume production quantities (< 25).

SUPPLY CHAIN

ACDi provided 100 % supply chain management services and sourced all board, box, cable, and raw level materials.

INTELLECTUAL PROPERTY

ACDi provided the customer with configuration managed documentation.

TEST AND QUALITY

ACDi performed tests on 100% of the units for validation prior to shipment.

ACDi
In Touch with Technology

- ✔ **Small Business**
- ✔ **AS9100 Certified**
- ✔ **ITAR**
- ✔ **FAA Registered**
- ✔ **SAM Registered**

CERTIFIED ISO 9001:2015 COMPANY

RoHS COMPLIANT

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