ESI Computing, Inc.

Engineering Scientific Industrial

Experts in Data Acquisition, Telephony, DSP, FPGAs, and Rugged Systems

Signal Intelligence Transceiver System Bundle III - VME System

Buy the Solution Not the Problem

ESI has over 14 years experience designing real-time systems for SIGINT applications. As a manufacturers' representative we have spent countless hours helping our customers like BAE Systems, Pratt & Whitney, DOD, and General Dynamics design architectures and source COTS hardware and software for high-performance, real-time applications in SIGINT.

We Take the Guess Work Out of Component Selection

We source the best-of-breed technology and make them available as system bundles or as integrated turnkey solutions through our systems integration partners. The ESI SIGINT VME Transceiver System Bundle III contains everything necessary to begin application development "out of the box." Our first MIT Lincoln Laboratory customer was able to deploy this system within one week to acquire field data that is currently under analysis at the main lab.

For More Information:

To learn more about the Signal Intelligence System Bundle II, contact ESI Computing at 978-369–8499 or by sending email to sales@esicomputing.com.

Components:

- DRS SI-9136A dual channel wideband VHF/UHF tuner providing phase- coherent or independent tuning of signal in the 20 to 3000 MHz range.
- Pentek Model 4205 VME carrier card with 1 GB SDRAM and triple PMC expansion module, two Xilinx II Virtex-II FPGAs and GigE or Fibre channel I/O.
- Two Pentek Model 7140 transceiver PMC modules for a total of four 14 bit 105 MHz A/Ds, four wideband digital receivers, four 500 MSPS 16-bit D/As, two Xilinx Virtex-II Pro FPGAs, and LVDS clock/synch bus for multi-mode synchronization.
- Pentek ReadyFlow software library and GateFlow Xilinx FPGA development software kit (IP cores optional).
- JBOD or RAID for real-time data archiving at up to 160 MB/sec. Scalable to hundreds of Terabytes online disk-based storage.
- 7-slot portable VME chassis.
- Desktop, lunchbox or laptop ruggedized portable PC.

Expansion & Options:

- Pentek Model 6236 dual 14-bit channel A/Ds with GC1012B Wideband Digital Receivers and one Xilinx Virtex-II FPGA card.
- Pentek Model 6228 quad 16-bit 500 MSPS D/As, two digital upconverters, and one Xilinx-II FPGA Card.
- Pentek Model 6256 quad 105 MHz 14-bit A/D converter and two user configurable Virtex-II PRO FPGAs.
- 210 MHz, 12-bit A/D with dual Virtex-II Pro FPGAs.
- 21-slot VME chassis is capable of supporting up to 80 channels of A/D.
- FFT, digital receiver, Radar pulse compression IP cores.
- GPS and IRIG B timing.
- Clock & Synch generator for Pentek Model 7140
- Motorola MVME6100 1.2 GHz 7457 PPC w/ VXS Single Board Computer.
- End-to-end systems integration and project support from system definition, to algorithm development, to hardware system delivery from DSPCon.

PENTEK DSPCon KSI a division of DSPCon, Inc.