

New PCI Express Analog/FPGA Solutions



Ultra Performance X5 Modules

Xilinx Virtex5 FPGA logic
 1GB DDR2 DRAM
 4MB QDR SRAM
 8 Rocket IO Private Links
 2.5 Gbps each
 >1GB/s
 8-lane PCI Express Host

Available I/O Solutions:

X5-400M:
 400 MSPS,
 14-bit A/D (x2)
 14-bit D/A (x2)
 1GB Memory



Flexible PMC Module Form-Factor

Range of adapters supports module use in desktop PCs, industrial cPCI chassis, cabled, dedicated 2.5 Gbps PCIe LANs, 100 Mbps ethernet WANs or completely stand-alone!

Continuous stream rates:
 1 GB/s (X5), 266 MB/s (X3)

Stand-alone (embedded) carriers

Completely autonomous or tethered to PCs or network

Cabled PCIe: 10 meter, 200 MB/s cable to PC/cPCI

10/100 Ethernet : Autonomous

12V dc-only operation



Low Cost X3 Modules

Xilinx Spartan 3 FPGA (1 or 2 MGate)
 Two 2MB SRAMs, 48-bit DIO
 PCI Express with >200 MB/s data rates

Available I/O Solutions:

X3-25M: 16-bit, 25MHz, A/D + D/A (x2)

X3-A4D4: 16-bit, 4 MHz A/D+ D/2 (x4)

X3-DIO: 64-bit, 66 MHz LVDS

X3-SD: 216 kHz, 16-bit, A/D (x16)

X3-SDF: 20 MHz, 24-bit, A/D (x4)

X3-Servo: 16-bit, 250 kHz, A/D+D/A (ultra low-latency & glitch energy)

Using Innovative Integration's **FrameWork Logic VHDL source-code** or **MATLAB board support package** you can readily customize FPGA functionality to include real-time processing such as independent FIR and IIR filters on each channel, real-time FFT processing, ultra-fast feedback and control loops and much more.

Full-featured C++ libraries

allow rapid, seamless integration into OEM equipment, high-speed data loggers/waveform generators or custom instrumentation.

Develop DSP in MATLAB Simulink ...then go straight to hardware!

Using MATLAB Simulink with Xilinx System Generator, develop DSP systems in the MATLAB environment then run them directly on hardware. All with bit-true, cycle-true results that bring the real world data and hardware into MATLAB. With our FrameWork Logic and MATLAB board support packages, you can quickly integrate signal processing into the hardware without lengthy, complex coding!

