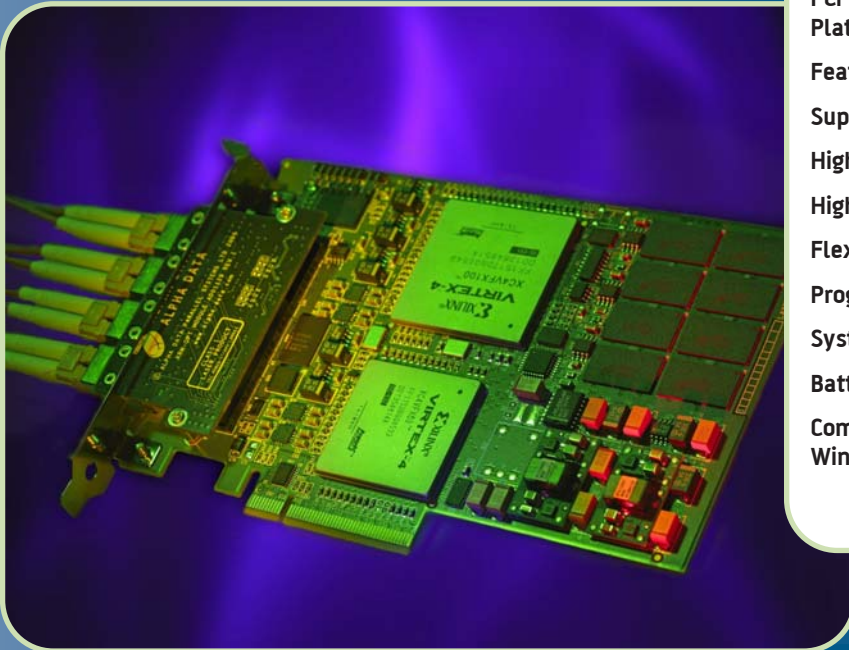




XILINX VIRTEX-4FX PCI Express

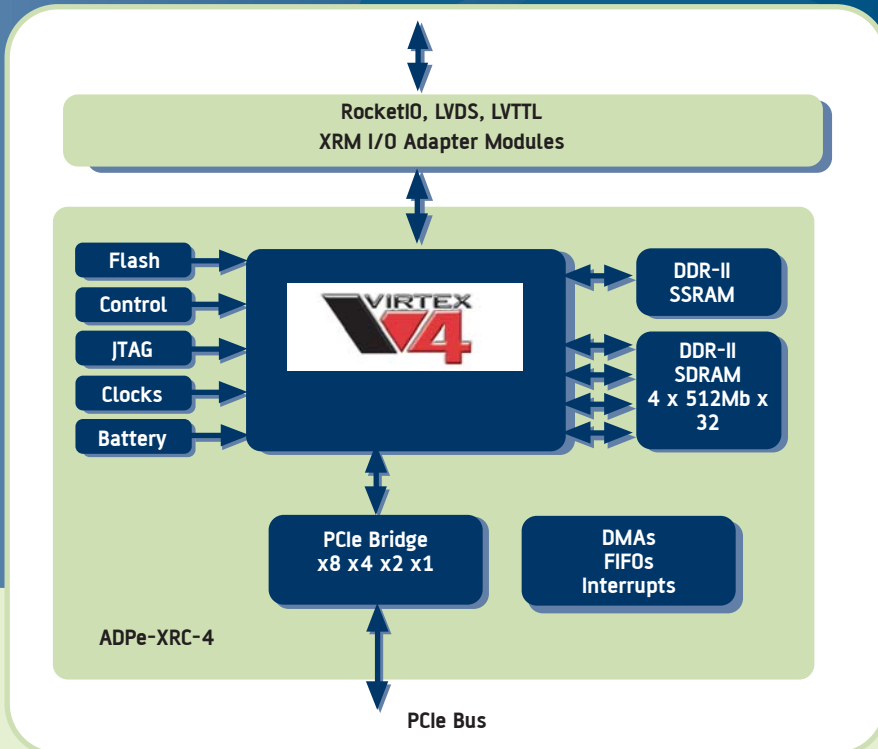
Features



The ADPe-XRC-4 is a high performance reconfigurable PCI Express card based on the Xilinx Virtex-4FX range of Platform FPGAs.

Features include:

- Support for largest Virtex-4 FX FPGA devices
- High speed PCIe x8, x4, x1 bridge
- High speed DDR-II DRAM and SRAM memory
- Flexible RocketIO and high density I/O options
- Programmable clocks
- System health monitoring
- Battery backed encryption and flash boot facilities
- Comprehensive cross platform API with support for WinNT/2000/XP, Linux and VxWorks





XILINX VIRTEX-4FX PCI Express Specifications

XRM-Adapters

XRM-OPT	4 RocketIO Optical Transceivers
XRM-HSSDC-2	4 RocketIO Copper HSSDC-2
XRM-IO146	High Density LVDS/LVTTL
XRM-IO34	Low Density LVDS/LVTTL
XRM-DDR	1/2 bank DDR SDRAM,
XRM-ZBT	2 banks ZBT SSRAM, RS-232
XRM-FPPD	Front Panel Data Port
XRM-MDR26	MDR IO module
XRM-ADC	1/2 ch 105MSPS 14-bit ADC
XRM-DAC	2 ch 105MHz 14-bit DAC
XRM-ETH	Ethernet, LDVS/LVTTL, RS-232
XRM-RIO	Parallel RapidIO
XRM-CLINK	CameraLink (Base / Full)

Ordering Information

ADPe-XRC-4/xxx-yy/(I/O)

xxx	Virtex-4 device	FX100 or FX140
yy	Virtex-4 speed	10, 11 or 12
IO	Front panel adapter	

		ADPe-XRC-4
Target FPGA		Xilinx Virtex-4 FX100 and FX140 FF1517 footprint
PCIe Bridge		PCI Express 2.0 PCI Express x1, x4 and x8 Twin DMA controllers Peak data rate 2.5GByte/sec full duplex
Memory	SSRAM SDRAM Flash	8 MByte in 1 bank DDR-II SSRAM 1 GByte in 4 independent banks DDR-II SDRAM 16 MBytes
I/O		146 I/O via a range of XRM front panel adapters RocketIO - 8 x 3.125 / 6.25 Gb/sec MGT Programmable switching levels of 2.5V or 3.3V
Clocks		Local bus clock programmable up to 100MHz for transfers between PCI bridge and User FPGA. High performance low jitter LVPECL user clock programmable up to 500MHz Additional 200MHz reference clock for IOB delay circuits
Configuration		PCIe Bus direct to SelectMAP port From Flash direct on power up External JTAG connector
SelectMap		Download and read-back performance up to 100MB/s peak
Encryption Software		Dual battery back-up for encryption keys via XRM Drivers for WinNT, 2000, XP, Linux and VxWorks API with template designs in VHDL and Verilog
Environmental		Operating temperature 0 to +50°C Non-operating (storage) temperature -40 to +65°C Operating humidity 5% to 90% at 40°C non-condensing Non-operating (storage) humidity 5% to 90% at 40°C non-condensing
EMC		FCC 47CFR Part 2 EN55022 Equipment Class B
		Specification subject to change without notice