Summary

The **ADM-XRC-5TZ** is a high performance reconfigurable PMC (PCI Mezzanine Card) based on the Xilinx™ Virtex-5 range of Platform FPGAs. Features include high speed PCI-X interface, external memory, high density I/O, programmable clocks, temperature monitoring, battery backed encryption (by using an appropriate XRM) and flash boot facilities.
A comprehensive cross platform API with support for **Microsoft Windows™, Linux and VxWorks** provides access to the full functionality of these hardware features.

Features

Applications:

Military, Aerospace, High Performance Computing, Scientific/ Instrumentation, Broadcast, Medical/Bioinformatics, Telecoms, Security

Target Devices:

Xilinx Virtex-5 - LX110T, LX155T, LX220T, LX330T, SX240T, FX100T, FX130T, FX200T (FFG1738)

Memory:

ZBT - 48MByte of ZBT SRAM in 6 independent banks (2Mx36 each)

FLASH - 4MBbyte serial Flash

FLASH - Configuration Flash providing an initialisation design for automatic loading into the target FPGA.

Front Connector I/O:

Up to 146 LVTTL/LVDS I/O
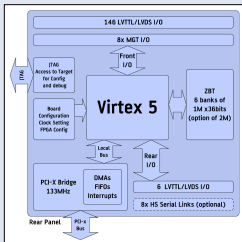Programmable signaling levels of 1.8V, 2.5V or 3.3Vss

8 High-Speed Serial Links

Rear Connector I/O:

6 I/O connections via PMC Pn4 connector
Fixed signaling level of 3.3V

8 High-Speed Serial Links via P15 (pseudo-XMC) connector
- Only if the "Extra Connector fitted" option is chosen

Specification

Product Name	ADM-XRC-5TZ
Target Devices	Xilinx Virtex-5 - LX110T, LX155T, LX220T, LX330T, SX240T, FX100T, FX130T, FX200T (FFG1738)
Host I/F	PCI/PCI-X
Interface	64-bit 66MHz PCI or 64-bit 133MHz PCI-X interface in separate bridge device with 32-bit 80MHz local bus 4 DMA controllers FIFO and interrupt control
Memory	**ZBT** - 48MByte of ZBT SRAM in 6 independent banks (2Mx36 each) **FLASH** - 4MByte serial Flash **FLASH** - Configuration Flash providing an initialisation design for automatic loading into the target FPGA.
Front I/O	Up to 146 LVTTL/LVDS I/O Programmable signalling levels of 1.8V, 2.5V or 3.3Vss 8 High-Speed Serial Links
Rear I/O	6 I/O connections via PMC Pn4 connector Fixed signaling level of 3.3V 8 High-Speed Serial Links via P15 (pseudo-XMC) connector - Only if the "Extra Connector fitted" option is chosen
Special Functions	Option of P15 connector (Pseudo-XMC) providing High Speed Serial link to the carrier
Clocks	Local bus clock programmable up to 80MHz Low-jitter user clock, programmable up to 637.5MHz Additional 200MHz reference clock for IOB delay circuits.
Device Configuration	PCI Bus direct to SelectMAP port From Flash direct on power up External JTAG connector
Software	Drivers for Microsoft Windows™, Linux and VxWorks API with template designs in VHDL and Verilog
Battery	Dual battery back-up for IP encryption keys via XRM
Environmental	**Temperature:** **Air cooled option (AC0)** Operating Temperature 0° to +55°C **Air cooled industrial option (AC1)** Operating Temperature -20° to +55°C **Conduction cooled option (CC1)** Operating Temperature -40° to 71°C **EMC:** FCC 47CFR Part 2 EN55022 Equipment Class B

Ordering Codes

ADM-XRC-5TZ-z-y(x)(c)		
Virtex-5 device	z	LX110T, LX155T, LX220T, LX330T, SX240T, FX100T, FX130T, FX200T
Virtex-5 Speed	y	1, 2, 3
Cooling	c	blank = air cooled commercial, /AC1 = air cooled industrial, /CC1 = conduction cooled industrial
HS Serial Connector Fitted	x	blank = not fitted, /X = Connector fitted