



Applications

- Image/Video Processing
- JPEG2000
- Radar/Sonar Beamforming
- ELINT
- Data Encryption

Summary

The **ADM-XRC-5T2** is a high performance reconfigurable PMC (PCI Mezzanine Card) based on the Xilinx Virtex-5 LXT, SXT and FXT ranges 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 I/O Module) 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.

Target Devices

Xilinx Virtex-5: LX220T
(FFG1738)

Application Data Memory

2x SDRAM 512MB DDRII-333

FPGA Configuration Memory

BPI 256Mb Flash Memory
Configured as 2x Target

FPGA Configuration Modes

PCI Bus direct to SelectMAP port
From Flash direct on power up
External JTAG connector

Deliverables

ADM-XRC-5T2 Board
One Year Warranty
One Year Technical Support

Board Features

- 1GB DDRII-333 Memory
- Separate PCI Bridge FPGA
- XRM I/O Interface

Host Interface

PCI/PCI-X

Board Format

PMC/PMC-X (PCI/PCI-X Mezzanine Card, VITA 39)

Input/Output Interfaces

146x LVCMOS/LVDS I/O (Programmable signalling levels of 1.8V

8x High-Speed Serial Links to XRM2

64x GPIO (Programmable signalling levels of 2.5V or 3.3V)

8x High-Speed Serial Links via P15 connector

- Only if the 'extra connector fitted' option is chosen



Support

The ADM-XRC-5T2 is supplied with the ADMXRC Support & Development kit (SDK) along with ADMXRC Driver for Windows / Linux / VxWorks.

Environmental Specification
Temperature Ranges

| Cooling Option | Operating Temperatures | | Storage Temperatures | |
|----------------|------------------------|------|----------------------|-------|
| | Min | Max | Min | Max |
| AC0 | 0°C | 55°C | -40°C | 85°C |
| AC1 | -40°C | 70°C | -55°C | 100°C |
| CC1 | -40°C | 70°C | -55°C | 100°C |

Operating Humidity : Up to 95% (non-condensing)

EMC Standards

FCC 47CFR Part 2
EN55022:2010 Equipment ClassB

Ordering Information

Order Code: ADM-XRC-5T2/z-y(m)(c)(x)

| Option | Code | Description of Options |
|----------------------------|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Virtex-5 device | z | LX220T, LX330T, SX240T, FX100T, FX130T, FX200T |
| Virtex-5 speed | y | 1, 2, 3 |
| Memory Size Fitted | m | blank = 512MBytes (2 bank boards) or 1GByte (4 bank boards), /1 = 1GByte of Memory (2 bank boards only), /2 = 2GBytes of Memory (4 bank boards only) |
| 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 |
| Note1 | | not all FPGA speed grades available in all configurations. Contact Alpha Data for full details. |
| Note2 | | The number of memory banks is dependent on the FPGA device selected. LX330T, SX240T and FX200T - have 4 banks of memory. LX220T, FX100T and FX130T - have 2 banks of memory |

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