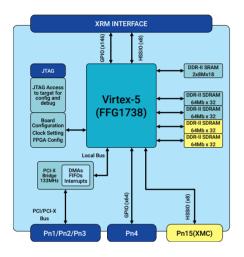


ADM-XRC-5T2

Datasheet Revision: 2.0 1st November 2020

AD01164





Applications

- Development Platform for Space Grade Virtex-5 systems
- 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, LX330T, SX240T, FX100T, FX130T, FX200T (FFG1738)

Application Data Memory

2x 512MB DDRII-333 - (2G in 4 banks for LX330T

Configuration Memory

BPI 256Mb Flash Memory Configured as 2x Target

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

hardware features. Host Interface

PCI/PCI-X

Input/Output Interfaces

Board Features

XRM I/O Interface

1GB DDRII-333 MemorySeparate PCI Bridge FPGA

Discrete Digital

LVCMOS/LVDS I/O (Programmable signaling levels of 1.8V

High-Speed|Serial Links

High-Speed Serial Links to XRM2

Discrete Digital

GPIO (Programmable signaling levels of 2.5V or 3.3V)

High-Speed|Serial Links

High-Speed Serial Links via P15 connector - Only if the 'extra connector fitted' option is chosen

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

Board Format

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

Environmental Specification

| 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 | у | 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 | С | blank = air cooled commercial, /AC1 = air cooled industrial, /CC1 = conduction cooled industrial | | |
| HS Serial Connector Fitted | х | 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 | | | |

