



Applications

- Radar/Sonar Beamforming
- ELINT/ISR
- Image/Video Processing/Machine Vision
- Digital Signal Processing
- Data Encryption

Board Features

- 1GB DDR3 (PS)
- 512MB DDR3 (PL)
- microSD Socket
- Tri-Mode Ethernet IFs
- USB 2.0 IFs
- Dual-redundant MIL-STD-1553 Interface
- Air-Cooled/Conduction-Cooled Options

FPGA Features

- 2x ARM® Cortex™-A9 MPCore™ up to 1GHz
- 1x PCIe® Gen2 x8
- 2x Tri-mode Gigabit Ethernet
- 2x USB 2.0

Summary

The **ADM-XRC-7Z4** is a high performance reconfigurable XMC (compliant to VITA 42.0) based on the Xilinx Zynq range of Programmable System-on-Chips.

Features include Ethernet, PCI Express and USB interfaces, external memory, optional dual-redundant MIL-STD-1553 Interface, GPIO, system monitoring and flash boot facilities.

Software and Drivers for **Linux** and **VxWorks**.

Target Device

Xilinx Zynq: XC7Z045
(FFG900)

LUTs = 218k

FFTs = 437k

DSPs = 900

BRAM = 19.2Mb

2x ARM® Cortex™-A9 MPCore™ up to 1GHz

1x PCIe® Gen2 x8

2x Tri-mode Gigabit Ethernet

2x USB 2.0

Application Data Memory

1x SDRAM 1GB DDR3

FPGA Configuration Memory

QSPI 512MBit Flash Memory

FPGA Configuration Modes

Flexible boot options from on-board SPI Flash or uSD Flash

Deliverables

ADM-XRC-7Z4 Board

One Year Warranty

One Year Technical Support

Host Interface

Ethernet, PCI Express or USB

Board Format

XMC (Switched Mezzanine Card, VITA 42)

Input/Output Interfaces

1x microUSB Interface

1x JTAG Interface

2x Gigabit Ethernet Interfaces - 2x SGMII

2x USB Ports

2x RS-232 and RS-485 Ports

38x LVCMOS 3.3V GPIO connections (VITA

46.9 X8d+X12d+X38s compatible pinout)

2x MIL-STD-1553 Interfaces

Support

Software and Drivers - contact Alpha Data for further details

Environmental Specification
Temperature Ranges

Cooling Option	Operating Temperatures		Storage Temperatures	
	Min	Max	Min	Max
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

Conformal Coating Options

 Acrylic or Polyurethane
 Contact sales for specification of coatings.

Ordering Information
Order Code: ADM-XRC-7Z4/Z045-1/1/B(c)(a)

Option	Code	Description of Options
Cooling	c	/AC1 = air cooled industrial, /CC1 = conduction cooled industrial
Conformal Coating	a	blank = no conformal coating, A = Acrylic, P = Polyurethane

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