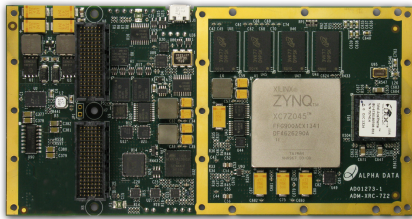


AD01350



## Applications

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

## Board Features

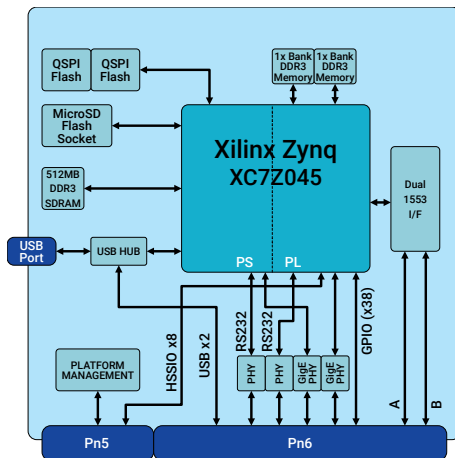
- 1GB DDR3 (PS)
- 512MB DDR3 (PL)
- microSD Socket
- Tri-Mode Ethernet IFs
- USB 2.0 IFs
- Dual-redundant MIL-STD-1553 Interface
- Air-Cooled/Conduction-Cooled Options

## 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 FFs = 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 1GB DDR3 - (Connected to PS)  
2x 256MB DDR3 - (Connected to PL)  
1x microSD

## Configuration Memory

QSPI 512MBit Flash Memory

## 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

## Input/Output Interfaces

**Comms**  
microUSB Interface

**Configuration**  
JTAG Interface

**HSSIF**  
Gigabit Ethernet Interfaces - 2x SGMII

**Comms**  
USB Ports  
RS-232 and RS-485 Ports

**Discrete Digital**  
LVCMOS 3.3V GPIO connections (VITA 46.9  
X8d+X12d+X38s compatible pinout)

**Comms**  
MIL-STD-1553 Interfaces

**Support**

Software and Drivers - contact Alpha Data for further details

**Board Format**

XMC (Switched Mezzanine Card, VITA 42)

**Environmental Specification**

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