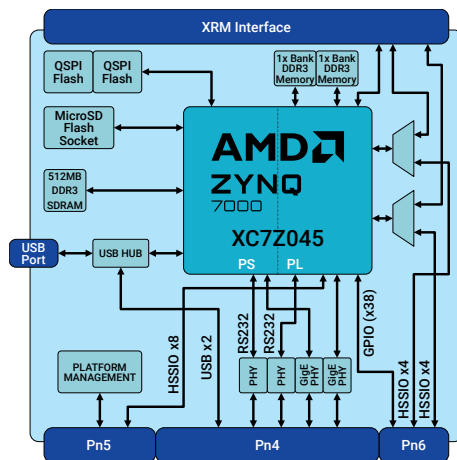
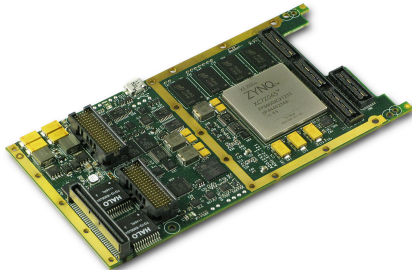


AD01253



Applications

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

Board Features

- XRM2 I/O Interface
- 512MB DDR3 (PS)
- 512MB DDR3 (PL)
- microSD Socket
- Tri-Mode Ethernet IFs
- USB 2.0 IFs
- Air-Cooled/Conduction-Cooled Options

Summary

The **ADM-XRC-7Z1** is a high performance reconfigurable XMC (compliant to VITA 42.0) based on the AMD Zynq range of Programmable System-on-Chips.

Features include Ethernet, PCI Express and USB interfaces, external memory, high density I/O, system monitoring and flash boot facilities.

Software and Drivers for [Linux](#) and [VxWorks](#).

Target Devices

AMD Series 7 Zynq
XC7Z045, XC7Z100 (FFG900)

FPGA Specification

LUTs = 218k(277k)
FFs = 437k(554k)
DSPs = 900(2020)
BRAM = 19.2Mb(26.5Mb)

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 512MB DDR3 SDRAM - (Connected to PS - Option for 1GB)
2x 256MB DDR3 SDRAM - (Connected to PL)
1x SD Card specific SDC microSD - (Connected to PL)

Configuration Memory

QSPI 512MBit

Configuration Modes

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

Host Interface

Ethernet, PCI Express or USB

Input/Output Interfaces

Discrete Digital (XRM2 I/F)
146x LVCMOS/LVDS I/O

HSSIF (XRM2 I/F)
8x High-Speed Serial Links

Comms (On-board)
1x microUSB Interface

Configuration (On-board)
1x JTAG Interface

HSSIF (P6)
2x Gigabit Ethernet Interfaces

Comms (P6)
2x USB Ports
2x RS-232 and RS-485 Ports

Discrete Digital (P6)
38x LVCMOS 3.3V GPIO connections (VITA 46.9 X8d+X12d+X38s compatible pinout)

HSSIO (P6)
8x High-Speed Serial Links

Support

Software and Drivers - contact Alpha Data for further details

Deliverables

ADM-XRC-7Z1 Board
One Year Warranty
One Year Technical Support
RD-9Z1 Reference Designs

Board Format

XMC (Switched Mezzanine Card, VITA 42)

Environmental Specification

Cooling Option	Operating Temperatures		Storage Temperatures	
	Min	Max	Min	Max
AC0	0°C	+55°C	-40°C	+85°C
AC1	-40°C	+85°C	-55°C	+100°C
CC0	0°C	+55°C	-40°C	+85°C
CC1	-40°C	+85°C	-55°C	+100°C

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

Conformal Coating Options

Acrylic or Polyurethane
Contact sales for specification of coatings.

Order Code: ADM-XRC-7Z1/z-2(c)(a)(t)

Zynq device	z	Z045=Z-7045, Z100=Z-7100
Cooling	c	blank = air cooled commercial, /AC1 = air cooled industrial, /CC1 = conduction cooled industrial
Conformal Coating	a	blank = no conformal coating, A = Acrylic, P = Polyurethane
XMC Connector Type	t	blank = XMC (VITA 42) Connectors , /X2 = XMC2 (VITA 61) Connectors
Notes:	Conformal coating not available with air cooled commercial option Contact Sales for other ordering options	