
Summary

The **ADM-XRC-7Z1** 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, high density I/O, system monitoring and flash boot facilities.

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

Features
Applications

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

Target Device(s):

Xilinx Zynq: Z-7045, Z-7100 (FFG900)

Memory:

- SDRAM** - 1 bank of 512MByte of DDR3 SDRAM (PS)
- SDRAM** - 2 banks of 256MByte of DDR3 SDRAM (PL)
- FLASH** - 2 banks of 256Mbits QSPI (PS)
- FLASH** - microSD Card Socket (PS)

Front I/O:

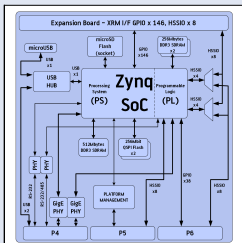
- 8 High-Speed Serial Links
- Up to 146 LVCMOS/LVDS I/O

Rear I/O:

- Dual Gigabit Ethernet Interfaces
- Dual USB Ports
- RS-232 and RS-232/485 comms ports
- Up to 8 High-Speed Serial Links via Pn6 connector
- 38 LVCMOS 3.3V GPIO connections via Pn6 connector (VITA 46.9 X8d+X12d+X38s compatible pinout)

Other I/O:

- micro USB Interface
- JTAG Interface





Specification

Product Name	ADM-XRC-7Z1
Target Device(s)	Xilinx Zynq Z-7045,Z-7100 (FFG900)
Interface	Ethernet, PCI Express or USB
Memory	SDRAM - 1 bank of 512MByte of DDR3 SDRAM (PS) SDRAM - 2 banks of 256MByte of DDR3 SDRAM (PL) FLASH - 2 banks of 256Mbits QSPI (PS) FLASH - microSD Card Socket (PS)
Front I/O	8 High-Speed Serial Links Up to 146 LVCMOS/LVDS I/O
Rear I/O	Dual Gigabit Ethernet Interfaces Dual USB Ports RS-232 and RS-232/485 comms ports Up to 8 High-Speed Serial Links via Pn6 connector 38 LVCMOS 3.3V GPIO connections via Pn6 connector (VITA 46.9 X8d+X12d+X38s compatible pinout)
Other I/O	micro USB Interface JTAG Interface
Clocks	33MHz reference clock for the Zynq ARM Cortex-A9 MPCore processors Low-jitter 250MHz reference clock, suitable for SerDes applications Low-jitter programmable reference clock, suitable for SerDes applications Low-jitter 200MHz reference clock suitable for IOB delay circuits Custom clock inputs available through the XRM interface
Device Configuration	Flexible boot options from on-board SPI Flash or uSD Flash
Software	Software and Drivers
Environmental	Temperature: Air cooled option (AC0) Operating Temperature 0° to +55°C Air cooled industrial option (AC1) Operating Temperature -40° to +70°C Conduction cooled industrial option (CC1) Operating Temperature -40° to 70°C Conformal Coating: Acrylic (Humiseal 1B31) Polyurethane (Aralthane 5750) EMC: FCC 47CFR Part 2 EN55022 Equipment Class B

Ordering 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 coating, A = Acrylic (Humiseal 1B31), P = Polyurethane (Aralthane 5750)
XMC Connector Type	t	blank = XMC (VITA 42) Connectors , /X2 = XMC2 (VITA 61) Connectors
note		Conformal coating not available with air cooled commercial option Contact Sales for other ordering options