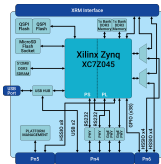


AD01253



### Applications

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

### 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**.

### Target Devices

- Xilinx Series 7 Zynq  
XC7Z045, XC7Z100 (FFG900)  
LUTs = 218k FFs = 437k DSPs = 900  
BRAM = 19.2Mb(26.5Mb)  
2x ARM® Cortex™-A9 MPCore™ up to 1GHz  
1x PCI® Gen2 x8  
2x Tri-mode Gigabit Ethernet  
2x USB 2.0

### Application Data Memory

- 1x 512MB DDR3  
2x 256MB DDR3

### Configuration Memory

QSPI 512Mbit Flash Memory

### Configuration Modes

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

### Deliverables

- ADM-XRC-7Z1 Board  
One Year Warranty  
One Year Technical Support

### 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

### Host Interface

Ethernet, PCI Express or USB

### Input/Output Interfaces

**Discrete Digital**  
LVC MOS/SLVDS I/O

**HSSIF**  
High-Speed Serial Links

**Comms**  
microUSB Interface

**Configuration**  
JTAG Interface

**HSSIF**  
Gigabit Ethernet Interfaces

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

**Discrete Digital**  
LVC MOS 3.3V GPIO connections (VITA 46.9  
XbD+X12d+X3Bs compatible pinout)

**HSSIO**  
High-Speed Serial Links

**Support**

Software and Drivers - contact Alpha Data for further details

**Board Format**

XMC (Switched Mezzanine Card, VITA 42)	ERROR	ERROR	ERROR	ERROR
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**Environmental Specification**

Cooling Option	Operating Temperatures		Storage Temperatures	
	Min	Max	Min	Max
AC0	0°C	55°C	-40°C	85°C
ACE	0°C	70°C	-55°C	100°C
AC1	-40°C	70°C	-55°C	100°C
CC0	0°C	55°C	-40°C	85°C
CCE	0°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-7Z1/z-2(c)(a)(t)**

Option	Code	Description of Options
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

**UK Office**

 Address: Suite L4A, 160 Dundee Street,  
 Edinburgh, EH11 1DQ, UK  
 Telephone: +44 131 558 2600  
 Fax: +44 131 558 2700  
 email: [sales@alpha-data.com](mailto:sales@alpha-data.com)
**USA Office**

 611 Corporate Circle, Suite H  
 Golden, CO 80401  
 (303) 954 8768  
 (866) 820 9956 - toll free  
[sales@alpha-data.com](mailto:sales@alpha-data.com)