



Applications

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

Board Features

- 8GB DDR4-2400 SDRAM
- FMC+ I/O Interface

FPGA Features

- 4x ARM® Cortex™-A53 MPCore™ - 1.5GHz
- 2x ARM® Cortex™-R5 MPCore™ - 600MHz
- 1x Mali™-400 MP2 up to 667MHz GPU
- 1x PCIe® Gen2 x4
- 2x USB3.0
- 1x SATA 3.1
- 1x DisplayPort
- 4x Tri-mode Gigabit Ethernet

Summary

The **ADM-VPX3-9Z2** is a high performance reconfigurable 3U OpenVPX format board based on the Xilinx Zynq UltraScale+ range of MPSoC FPGAs.

Features include PCI Express Gen2 interface (x4), external memory, high density I/O using a VITA 57.4 FMC+ interface, Dual Gigabit Ethernet Interface and 10G Ethernet V66.4 Optical Interface, system monitoring and flash boot facilities.



Target Device

Xilinx Zynq UltraScale Plus: XCZU15EG (FFVB1156)

FPGA Specification

LUTs = 341k
 FFs = 682k
 DSPs = 3528
 BRAM = 26.2Mb
 URAM = 31.5Mb

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- 1x SATA 3.1
- 1x DisplayPort
- 4x Tri-mode Gigabit Ethernet

Application Data Memory

- 1x SDRAM 8GB (+ECC) DDR4-2400

FPGA Configuration Memory

QSPI 2Gbit Flash Memory
 Configured as DETAILS x - zones

FPGA Configuration Modes

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

Deliverables

- ADM-VPX3-9Z2 Board
- One Year Warranty
- One Year Technical Support

Host Interface

PCI Express Gen2 x4

Board Format

3U VPX (OpenVPX Compliant)

Input/Output Interfaces

24x 24 High-Speed differential Serial Links (up to 16.3Gbps)

80/160x 80 diff pairs (or 160 single ended) GPIO

1x microUSB Interface

1x 10G Ethernet V66.4 Optical Interface

2x Gigabit Ethernet Interface

2x USB Interface

2x RS-232 and RS-232/485 comms ports

24x LVCMOS 3.3V GPIO connections via P2

1x Integrated SATA Storage Device - 32GBytes

Support

Software and Drivers

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

Ordering Information
Order Code: ADM-VPX3-9Z2/z-2(c)(o)

Option	Code	Description of Options
Zynq Ultrascale+ device	z	15EG = ZU15EG, 9EG = ZU9EG (Contact Sales for availability)
Cooling	c	/AC1 = air cooled industrial, /CC1 = conduction cooled industrial
Optics	o	/blank = No Optics fitted, /O = V66.4 Optical Interface fitted

 Address: 160 Dundee Street, Suite 4A,
 Edinburgh, EH11 1DQ, UK
 Telephone: +44 131 558 2600
 Fax: +44 131 558 2700
 email: sales@alpha-data.com
 website: http://www.alpha-data.com

 Address: 611 Corporate Circle Suite H
 Golden, CO 80401
 Telephone: (303) 954 8768
 Fax: (866) 820 9956 - toll free
 email: sales@alpha-data.com
 website: http://www.alpha-data.com