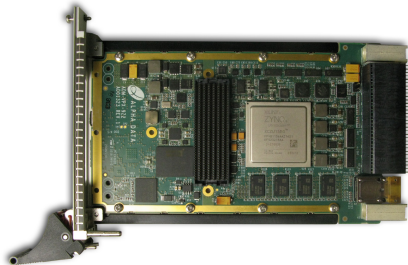


AD01323



Applications

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

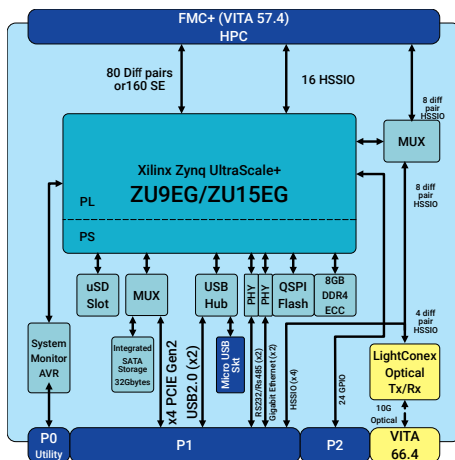
Summary

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.

Board Features

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



Target Device

Xilinx Zynq UltraScale Plus
XCZU15EG (FFVB1156)

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

- 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

Application Data Memory

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

Other User Memory

32GBytes of Flash Memory on an embedded
Multi Media Card (eMMC v4.5 @1.8V)

Configuration Memory

QSPI 2GBit Flash Memory
Configured as DETAILS x - zones

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

Input/Output Interfaces

High-Speed Serial Comms

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

Discrete Digital

80 diff pairs (or 160 single ended) GPIO

Low-Speed Comms

microUSB Interface

High-Speed Comms

10G Ethernet V66.4 Optical Interface
Gigabit Ethernet Interface
USB Interface

Low-Speed Comms

RS-232 and RS-232/485 comms ports

Discrete Digital

LVC MOS 3.3V GPIO connections via P2

On-board Storage

Integrated SATA Storage Device - 32GBytes

Support

Software and Drivers

Board Format

3U VPX (OpenVPX Compliant)

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

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 |