

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.

Features

Applications

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

Target Device(s):

Xilinx Zynq Ultrascale+ ZU15EG, (Contact Sales for other device options) (FFVB1156)

Memory:

SDRAM - 1 bank of DDR4-2400 SDRAM, 1GB x72, 8GB total + ECC
FLASH - Two Quad SPI Flash memory, up to 2Gbits Each
FLASH - microSD Card Socket (PS)
SATA - Integrated SATA Storage Device - 32GBBytes

Front I/O:

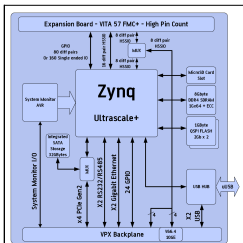
Vita 57.4 FMC+ Connector:
 24 High-Speed differential Serial Links (up to 16.3Gbps)
 80 diff pairs (or 160 single ended) GPIO

Rear I/O:

10G Ethernet V66.4 Optical Interface
 Dual Gigabit Ethernet Interfaces
 Dual USB Ports
 RS-232 and RS-232/485 comms ports
 24 LVCMOS 3.3V GPIO connections via P2

Other I/O:

micro USB Interface



Specification

Product Name	ADM-VPX3-9Z2
Target Device(s)	Xilinx Zynq Ultrascale+ ZU15EG, (Contact Sales for other device options) (FFVB1156)
Interface	PCI Express Gen2 x4 4 DMA Controllers Interrupt Controller
Memory	SDRAM - 1 bank of DDR4-2400 SDRAM, 1GB x72, 8GB total + ECC FLASH - Two Quad SPI Flash memory, up to 2GBits Each FLASH - microSD Card Socket (PS) SATA - Integrated SATA Storage Device - 32GBytes
Front I/O	Vita 57.4 FMC+ Connector: 24 High-Speed differential Serial Links (up to 16.3Gbps) 80 diff pairs (or 160 single ended) GPIO
Rear I/O	10G Ethernet V66.4 Optical Interface Dual Gigabit Ethernet Interfaces Dual USB Ports RS-232 and RS-232/485 comms ports 24 LVCMOS 3.3V GPIO connections via P2
Other I/O	micro USB Interface
Clocks	REFCLK100M (to fanout buffer - PCIe) PROGCLK (programmable clock to fanout buffer - 150MHz default) REFCLK300M (to fanout buffer - DDR4) FABRIC_CLK (to PL side - IDELAY) 2 Bidirectional FMC Clocks
Device Configuration	Flexible boot options from on-board SPI Flash or uSD Flash
Software	Software and Drivers
Environmental	Temperature: Air cooled industrial option (AC1): Operating Temperature -40° to +70°C Conduction cooled industrial option (CC1): Operating Temperature -40° to 70°C EMC: FCC 47CFR Part 2 EN55022 Equipment Class B RoHS Compliance: All standard products are RoHS compliant.

Ordering Code

ADM-VPX3-9Z2/z-2(c)(o)		
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

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