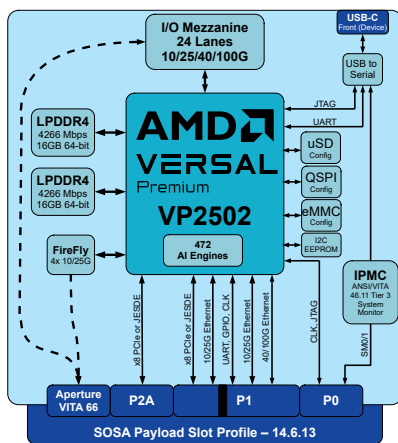


AD-01534



Applications

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

Board Features

- SOSA Aligned I/O and System Monitor
- AMD Versal Premium VP2502
- 32GB in 2 Banks of LPDDR4
- I/O mezzanine slot for optical engines or ADC/DAC

Summary

The **ADM-VB240** is a SOSA-aligned 3U VPX platform featuring the AMD Versal Premium XCV2502. This FPGA processor card adheres to the Open VPX 14.6.13-n slot profile and can be paired with an I/O mezzanine card to support various rear aperture options.

Versal Premium offers reconfigurable and customizable processing performance for the development and deployment of compute-intensive applications such as Radar, Signal Processing, and Machine Learning.

Target Device

AMD Versal™ Premium Adaptive SoC
VP2502 (B3340)

FPGA Specification

LUTs = 2.54M
DSPs = 10.9K
BRAM = 89Mb
URAM = 541Mb
472x AI Engine Tiles
2x ARM Cortex-A72 MPCores™
2x ARM Cortex-R5 MPCores
2x PCI Express Gen5 cores
4x 100G Multirate Ethernet MAC (MRMAC)

Application Data Memory

2x 2G x 64 bit (32 GiB) LPDDR4-2133
LPDDR4-SDRAM

Configuration Memory

Dual-Parallel QSPI 4Gb (2x 2Gb devices)

Configuration Modes

Via QSPI, uSD, eMMC and JTAG

Board Format

SOSA-Aligned 3U VPX
WxHxD = 100mm x 19.55mm x 160mm
Weight = TBDg

Input/Output Interfaces

VPX P1 HSSIO (VPX Backplane)

4x Data Plane 4x HSSIO up to 32G: for 10/25/40/100G Ethernet; PCIe; Aurora; etc.
2x Data/Control Plane 2x HSSIO up to 32G: for 10/25G Ethernet; Aurora; etc.
8x Expansion Plane 8 lanes of PCIe Gen 3/4/5

VPX P1 Low Speed (VPX Backplane)

UART; Clock; and GPIO as per SOSA

VPX P2 Aperture (VPX Backplane)

1x VITA 67/66 Aperture

VPX P0 I2C (VPX Backplane)

2x I2C for System Monitor VITA 46.11 tier 3

Environmental Specification

Cooling Option	Operating Temperatures		Storage Temperatures	
	Min	Max	Min	Max
AC1	-40°C	+85°C	-55°C	+100°C
CC1	-40°C	+85°C	-55°C	+100°C

Operating Humidity

Up to 95% (non-condensing)

Order Code: ADM-VB240/VP2502-2MSI(i)(c)(a)

I/O configuration	i	/VNNN = Contact sales for details and full options
Cooling	c	/AC1 = air cooled industrial /CC1 = conduction cooled industrial
Conformal Coating	a	blank = no conformal coating /A = Acrylic /P = Polyurethane