

# VPX3-ZU1-PSDK-A 3U OpenVPX System Development Kit for VPX3-ZU1

## Overview

An air cooled **PanaTeQ System Development Kit VPX3-ZU1-PSDK-A** is available for the developers.

The kit includes:

- An air-cooled desktop chassis with 5-slots VPX 46.0 Full-Mesh 0.8 inch backplane with 250W PSU
- VPX3-ZU1-B1N-AS 3U OpenVPX Zynq Ultrascale+ with FMC Site module
- RTM-ZU1-B Rear Transition Module for the VPX3-ZU1
- PetaLinux Linux BSP
- PanaTeQ FPGA Design Kit (**PAN-FDK**)
- Cables.

The chassis integrated a 3U backplane 5-Slots Full-Mesh VPX Profile with 0.8 inch slot spacing. The Power Supply Unit is a 250W (50W per slot).

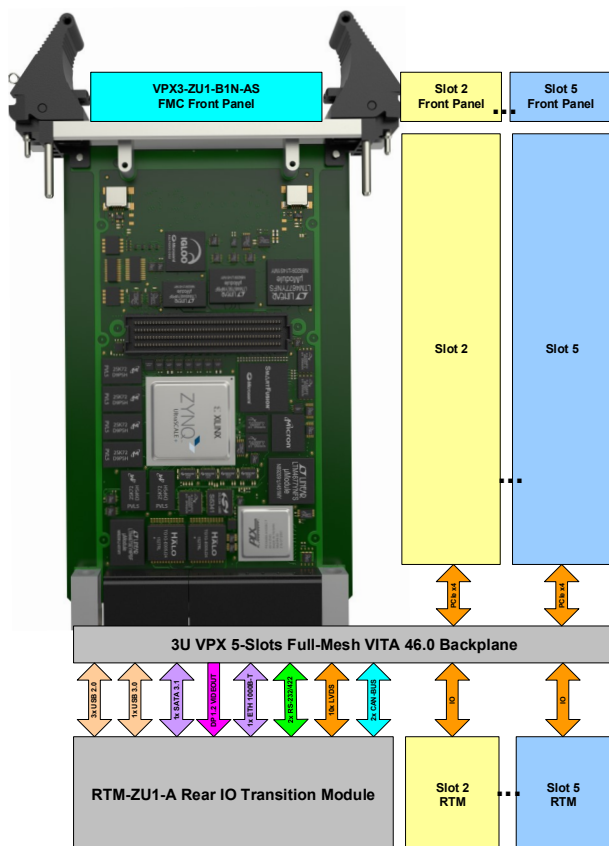
Status indicators are located on front of unit for monitoring the health parameters. The PSDK comes equipped with a VPX3-ZU1-B1N-AS, which integrates a ZU9EG-FFVC900, Speed Grade –1, 2GB PS and 512MB PL DDR4 memory as well.

A RTM-ZU1-B provides at the rear, 1x 1000Base-T RJ45, 2, USB 2.0, 2x USB 3.0 and one mini DisplayPort Video Out connector.

Also a SATA 3.1, 10x LVDS, 2xRS-232/422 and 2x CAN-Bus are available with cables.

Software support comes with a PetaLinux BSP and PanaTeQ' FPGA Design Kit.

## Block Diagram



## Key Features

### VPX3-ZU1-B1N-AS module

- Zynq Ultrascale+ ZU9G Speed Grade –1
- 2GB DDR4 PS / 512MB DDR4 PL memories
- VITA 57.1 FMC HPC Site, 10x MGT, 45x Diff Pairs

### RTM-ZU1-B

- 2x 100/1000Base-T RJ-45
- 2x USB 2.0 Type-A, 2x USB 3.0 Type-A
- 1x SATA 3.1
- 1x mini DisplayPort 1.2
- 20x GPIO, 2x RS-232/422/485, 2x CAN-Bus 2.0B

### Desktop Chassis

- 5-Slots VPX 46.0 Full-Mesh backplane
- 0.8 Inch Slot Pitch
- Support Rear I/O Through RTMs on each Slots
- AC/DC Input PSU 250W
- Air Cooled

### Software & VHDL Support

- PetaLinux BSP
- PanaTeQ FPGA Design Kit (PAN-FDK)

## Typical Applications

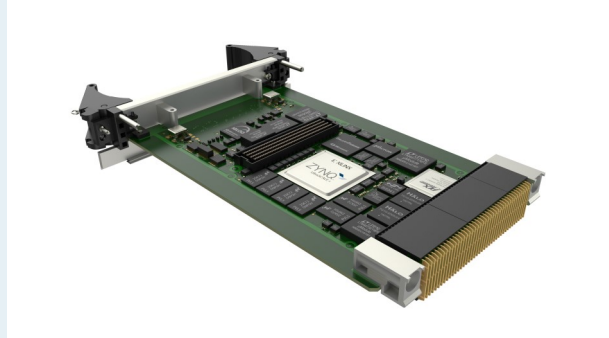
- MILCOM, Software Defined Radio, MIMO
- Situational Awareness Systems
- Electronic Warfare, Signal Intelligence
- LIDAR/RADAR/SONAR Systems
- Advanced Multi-Axes Motors Control
- Video CODEC and Signal Processing



# VPX3-ZU1-PSDK-A PanaTeQ System Development Kit Specifications

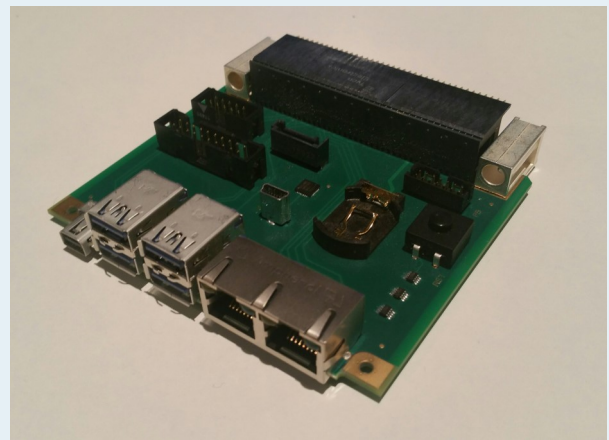
## VPX3-ZU1-B1N-AS

- VITA 46.0 65.0 VPX/OpenVPX specifications compliant
- Xilinx Zynq Ultrascale+ ZCU9G, FFVC900, Speed Grade -1
- 2GB PS DDR4-2400 memory 64-bit, 8-bit ECC
- 512MB PL DDR4-2400 memory 16-bit, no ECC
- 64GB eMMC managed NAND Flash
- 1x1000BASE-T, 2x RS-232/422/485, 2x USB 2.0, 2x USB 3.0 on VPX
- 1x SATA 3.1, 2x CAN 2.0B, 2x RS-232/422/485 on VPX
- 1x Display Port 1.2 Video Out on VPX
- VITA 57.1 FMC HPC site, 10x MGT, 45 Diff Pairs (LA[33:0] + HA[10:0])
- Board Management Controller (BMC) Interface VITA 46.11 Ready



## RTM-ZU1-B

- 2x 100/1000BaseT RJ-45 with Link Activity Leds Rear Panel connectors
- 1x mini Display Rear-Panel connector
- 2x USB 2.0 Type-A dual-stacked Rear-Panel connectors
- 2x USB 3.0 Type-A dual-stacked Rear-Panel connectors
- 1x SATA 3.1 vertical on-board connector
- 2x CANBus 2.0B pin-header on-board connector
- 20x GPIO 3M flat-cable on-board connector
- 2x RS-232/422/485 pin-header on-board connector



## Desktop Chassis

- Mechanical: W=180mm, H= 5U, D= 275mm
- Cooling: Air Cooled
- Backplane: 3U 5-Slots Vita 46.0 Full\_Mesh backplane
- RTM support
- 250W PSU
- For other VITA 65.0 Backplane profile and PSU, please contact us

## Software & VHDL

- Petalinux BSP
- PanaTeQ FPGA Design Kit (PAN-FDK)

## Cables

- Video mini DisplayPort to standard HDMI adaptator
- SATA, USB



## Ordering Information

- **VPX3-ZU1-PSDK-A** : VPX3-ZU1 System Development Kit

## Contact Information

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