

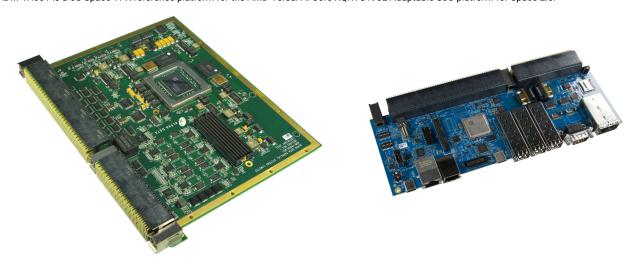
ADK-VA601 Datasheet Revision: 0.1 1st November 2023

Application

Off-the-Shelf Development Platform for Space 2.0

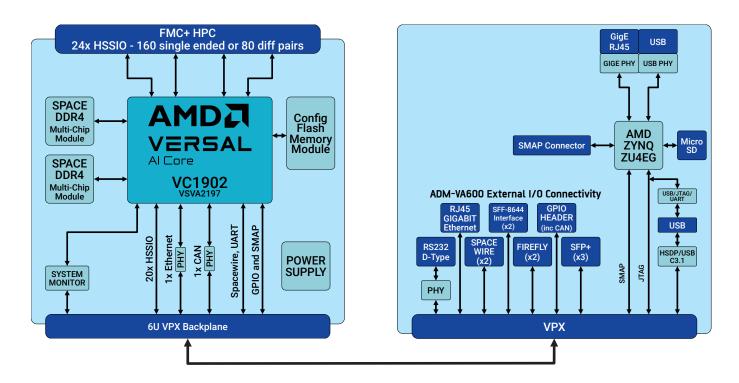
Summary

The ADM-VA601 is a 6U Space VPX reference platform for the AMD Versal Al Core XQRVC1902 Adaptable SoC platform for Space 2.0.



AMD Versal AI Core provides a massive leap forward in reconfigurable and customizable processing performance for Space mission deployment of compute intensive applications such as Signal Processing and Machine Learning. The development platform is designed to accept components suitable for Space 2.0 level missions with limited radiation environment or mission length, such as LEO applications. The standard manufacturing build of this platform is however intended for laboratory prototyping use only with commercial footprint compatible parts and unqualified space parts fitted in most cases. The primary customers will be using this version for design proving and other prototype level testing.

The kit features a reference Space Grade power supply co-designed with Texas Instruments, along with many other Space Enhanced Plastic devices covering clocking and system monitoring functionality. The kit also features Space Grade DDR4 Memory modules from Teledyne-e2v and QSPI configuration flash from Infineon Technologies.



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ADK-VA601

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ADM-VA601 Features

AMD XCVC1902 AI Core Adaptable SoC

Texas Instruments power supplies, system monitoring and programmable clocking devices

2x Teledyne e2v Space DDR4

1Gb Infineon Flash Memory

VITA 57.4 FMC+ site for advanced IO and Data Converter module connectivity

ADM-VA600-RTM Features

Rear-Transition Module for breakout of VPX backplane signals for development.

Onboard Zynq ZU4EG MPSoC for debugging and development configuration control

Gigabit Ethernet Connectivity

USB Connectivity

Serial Connectivity

Kit Deliverables

ADM-VA601 Adaptable System on Module

ADM-SDEV-FL1 Infineon Configuration Flash Daughter Module

ADM-VA600-RTM Rear Transition I/O Module

RD-VA601 reference designs and board schematics

One Year Warranty

One Year Technical Support

Ordering Information

The ADK-VA601 is made up of the following products

ADM-VA601 /**DEV** - 6U Space VPX platform for the AMD Versal AI Core XQRVC1902 Adaptable SoC Platform for Space 2.0

ADM-VA600-RTM - 6U VPX Rear Transition Module

ADM-SDEV-FL1 - Flash Memory Module

RD-VA600 - ADK-VA601 Reference Designs

Please contact the factory for other options



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