

PRESS-RELEASE



New 3U VPX GPU and FPGA-based board (IC-GRA-VPX3a)

Quimper, France, March, 08th 2022 - Interface Concept announced today the new IC-GRA-VPX3a 3U VPX FPGA-based graphics module that provides a high-performance and low power consumption image processing and video capture (frame grabber) solution needed in today's compute-intensive applications.

The IC-GRA-VPX3a graphics card features an AMD embedded Radeon™ E9171 Graphics Processor Unit (GPU) coupled to a programmable Xilinx UltraScale™ FPGA. It turns out to be both a powerful and versatile board. The combination of the on-board FPGA, GPU and capture module makes the IC-GRA-VPX3a extremely scalable so that it can offer multiple solutions in terms of video (ARINC818, STANAG 3350, 3G-SDI) capture and conversion configurations.

The AMD E9171 provides the best performance-per-watt balance for embedded systems with strict thermal constraints, enabling passive cooling for many designs. In addition, its "Polaris" architecture brings a range of improvements in the 14nm technology microchip compared to previous GPU generations, with 1.2 TFLOPS computing capabilities, 4GB video memory and up to 5 video outputs.

Interface Concept has designed a customizable mezzanine FMC card (VITA57.1 compliant) fitted for the IC-GRA-VPX3a card. This FMC card provides differential, loosely single-ended, multi-gigabit signals that can be customized according to your needs.

The 3U VPX graphics module supports Microsoft® DirectX® 12 technology, OpenGL™4.5 and OpenCL™2.0 (open standard programming software) to provide a higher graphic rendering. It can transfer ultra-high definition over 8Gb/s via 8 PCIe Gen4 lanes.

"The IC-GRA-VPX3a is an all-in-one solution consisting of a GPU, a GPGPU and a video capture solution for use in low-power and harsh environment applications" said Franck Lefèvre, Interface Concept's Sales Director. The IC-GRA-VPX3a is available in standard, extended and rugged grades in air-cooled and conduction-cooled versions.

INTERFACE CONCEPT is a leader in the design and manufacturing of high-performance embedded board and systems, aimed at ground, naval, air and industrial applications. The company markets Commercial-Off-The-Shelf (COTS) products, based on industrial standards (3U/6U VPX, cPCI, VME, FMC, XMC, PMC) and high-end technologies. Product portfolio includes Gigabit Ethernet switches, Single Board Computers, FPGA processing boards, Analog and digital acquisition mezzanine cards (ADC/DAC), and 2D/3D graphic solutions.

Web page product: <https://www.interfaceconcept.com/products/StorageIOsGraphicsSerial-RS/3U-VPX/377-IC-GRA-VPX3a-3U-VPX-GPU-board-with-on-board-FPGA>

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