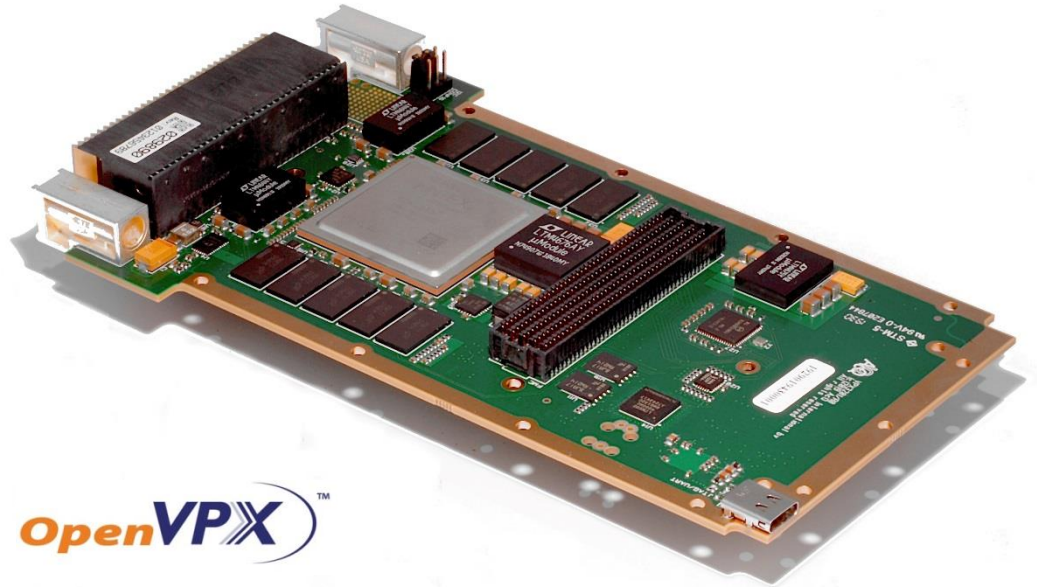


Cost-effective FPGA solution for OpenVPX™

The VPX3201 is a 3U OpenVPX™ board based around a Xilinx Kintex® UltraScale™ FPGA. It is a cost-effective solution for building highly integrated systems with high-speed serial interfaces.



Memory

The VPX3201 has two banks of DDR4 memory, for a total of 8GB of RAM (default configuration). Each bank is 72-bit wide – 64-bits of data plus ECC. Depending on the application, each bank can be used separately, or chained together into one 128-bit wide data bus.

FMC slot

Using the front FMC slot, the card can be flexibly expanded with additional features as needed for a given application, such as storage, analogue or digital I/O. The FMC slot is VITA 57.1 compliant.

Optical backplane interconnect

The card is available with an optional rear optical module, for up to 50Gbit/s of optical data transfer to the backplane. This module is compatible with the VITA 66.5 standard and is connected to the FPGA via 4 GTH serial transceivers

Additional backplane interfaces

The backplane interface includes up to 8 PCIe Gen3 lanes (8 GT/s). These can be configured as 1x 8 lanes or as 2x 4 lanes. Furthermore 2 GTH serial interfaces are present. A switch chip can select 2 extra GTH serial interfaces, at the expense of PCIe lanes.

Additionally, a significant number of LVDS signals are routed from the FPGA directly to the backplane, for any other digital I/O needs.

Features

General

- Xilinx Kintex UltraScale XCKU035 (or XCKU040 / XCKU060 / XCKU095)
- VITA 57.1 FMC slot on front
- 2 banks of DDR4 with ECC:
 - 72-bit wide
 - 8 GBytes total
- 8x GTH Serial Transceivers through P1 connector
- Switch for up to 4x Gigabit serial interfaces
- Optical Backplane interconnect module, 50Gbit/s bandwidth (optional)

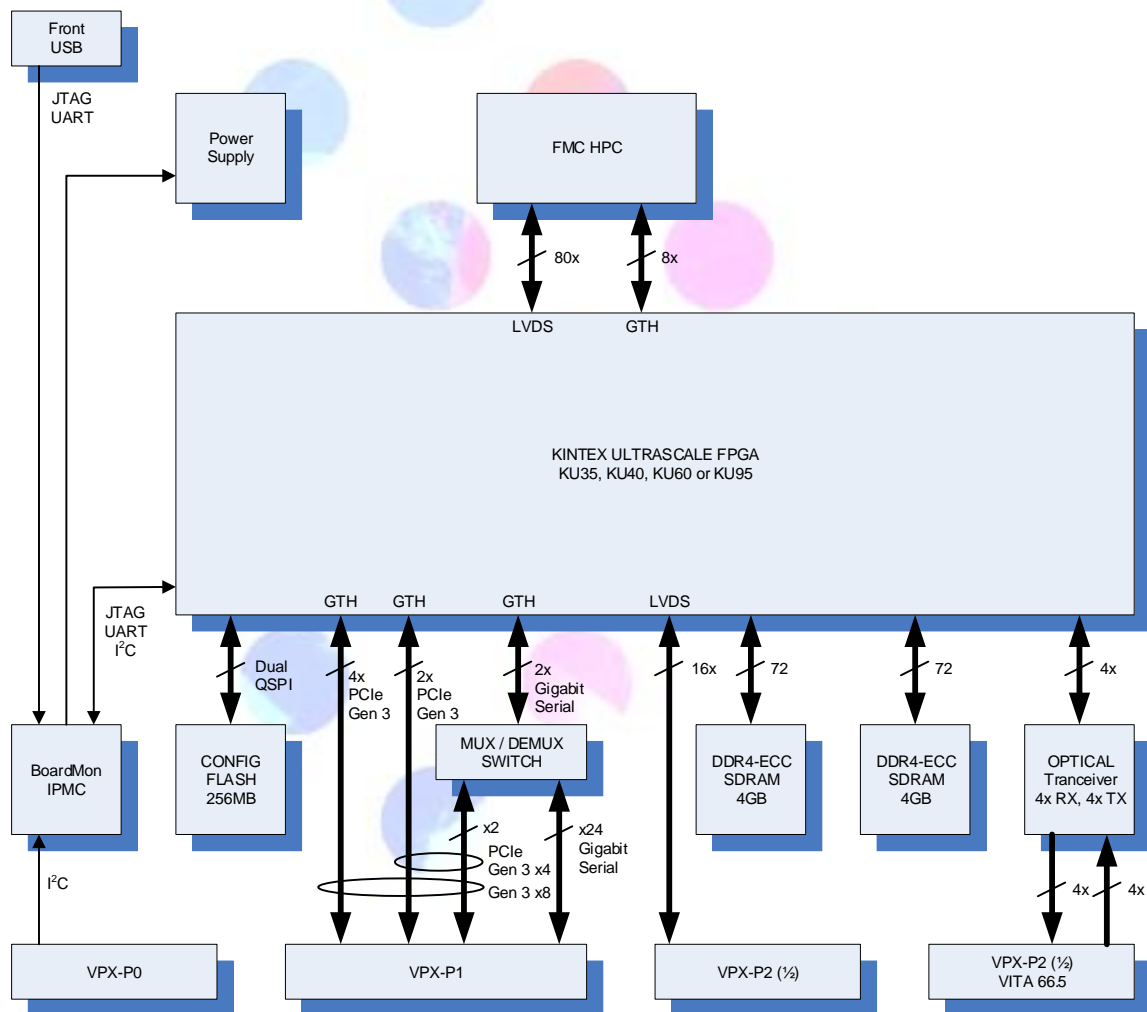
General

- Front USB connector for UART/JTAG
- Configuration flash with room for two images
- On-board temperature and power supply monitoring
- Air-cooled or conduction cooled
- Operation temperature of components is at least -40..+85° Celsius
- Optional: conformal coating
- Compatible with many OpenVPX™ profiles, including new SOSA profiles

Ordering information

Contact us for details to determine the optimal configuration for your needs.

Configuration options include: the type of FPGA, presence of the optical module and the amount of RAM.



Office address
 Alanenweg 6
 5342 PV Oss
 The Netherlands

Phone +31 (0)412 641922
 E-mail: sales@acq.nl
 Website: www.acq.nl