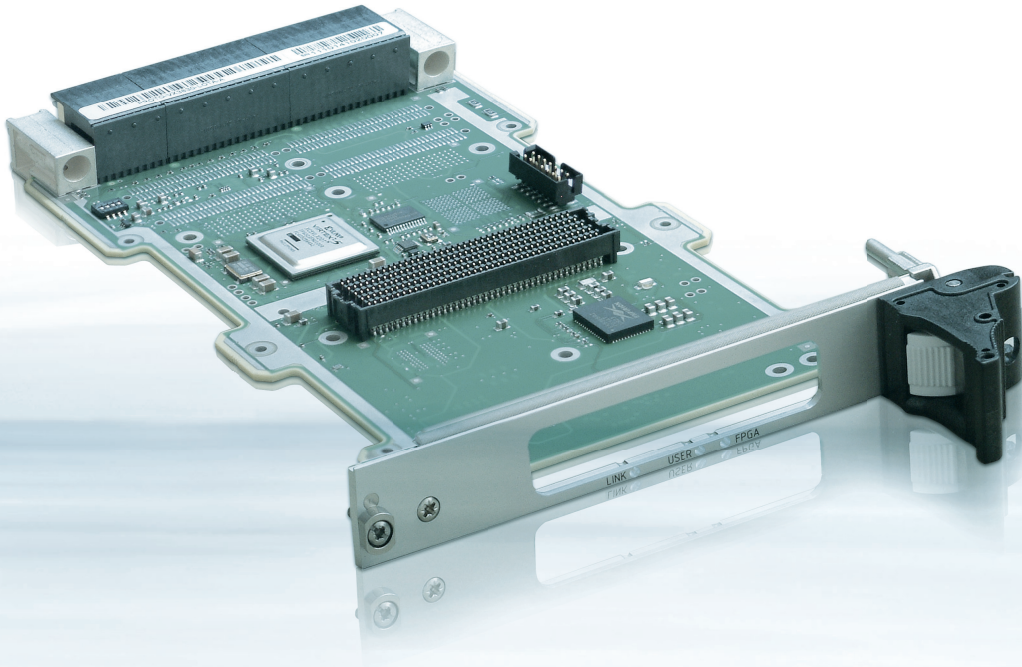


VX3830



3U VPX XILINX® VIRTEX®-5 FPGA PROCESSOR BOARD WITH FMC SITE

- ▶ 3U VPX carrier board for VITA 57 FPGA mezzanine cards (FMC)
- ▶ increased I/O flexibility and scalable development solutions
- ▶ x4 or x1 PCI Express® backplane interface
- ▶ standard air- and rugged conduction-cooled versions
- ▶ 0.8" (4 HP) or 1" (5 HP) face plates

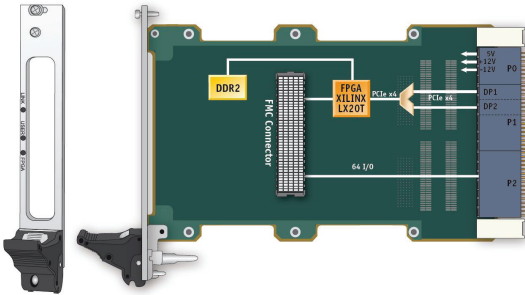
POSSIBILITIES START HERE



To implement custom interfaces using VX3830, the customer develops his IP using Xilinx® tools, and designs a specific FMC. The FPGA image is loaded from a Flash on VX3830 or on the FMC. A rescue FLASH is also present to ease developments and secure deployments.

VX3830 features a Xilinx® Virtex®-5 FPGA (XC5VLX20T) featuring a PCIe endpoint and User I/Os. VX3830 connects its FPGA endpoint to the backplane through a x4 PCIe gen 2 channel (P1 Wafers 1 to 4 is default build option). Selection between x4 or x1 PCIe width is user configurable.

VX3830 is available as a Convection Cooled or Conduction Cooled 3U VPX payload board. It requires +5 V and +12 V power supply rails. VX3830 is a member of Kontron's VPX Ecosystem and is qualified with VX3230 and VX3030 SBCs. Kontron also offers a VITA 57 FMC slot on VME products.



Kontron also offers a development kit containing: FMC-SER0 a sample FMC with wrapping areas, a simple FPGA IP and a Linux rpm with drivers, utilities and test programs. This kit allows non regression tests and is the base for customized derivative work.

► TECHNICAL INFORMATION

VPX INTERFACE	PCI Express® interface to VPX Data Plane 1 (P1 wafers 1 to 4). Interface to Data Plane 2 (P1 wafers 5 to 8) is a build option*
FMC INTERFACE	64 bits I/Os routed to VPX P2
DIMENSIONS	99.85 mm x 162.54 mm 0.8 inch face plate (1 inch is a built option*)

* for build options, please contact Kontron

► ENVIRONMENTAL SPECIFICATIONS

	SA-STANDARD COMMERCIAL	RC - RUGGED CONDUCTION-COOLED
CONFORMAL COATING	Optional	Standard
AIRFLOW	1.5 m/s without throttling at 55 °C	NA
TEMPERATURE	VITA 47-Class AC1	VITA 47-Class CC4
COOLING METHOD	Convection	Conduction
OPERATING	0 °C to +55 °C	-40 °C to +85 °C
STORAGE	-45 °C to +85 °C	-45 °C to +85 °C
VIBRATION SINE (OPERATING)	20/500 Hz: 2 g	22/2.000 Hz: 2 g
RANDOM	VITA 47-Class V 1	VITA 47-Class V 3
SHOCK (OPERATING)	20 g/11 ms Half Sine	40 g/11 ms Half Sine
ALTITUDE (OPERATING)	-1.640 to 15.000 ft	-1.640 to 50.000 ft
RELATIVE HUMIDITY	90 % without condensation	95 % without condensation

► ORDERING INFORMATION

ARTICLE	PART NO.	DESCRIPTION
VX3830-SA	VX3830-SA-00000*	3U Air-Cooled Commercial Build, FMC carrier, VPX DP1 Data Plane interface, FMC rear I/O routing on VPX P2, 0.8" board
VX3830-RC	VX3830-RC-0N000*	3U Rugged Conduction-Cooled Build, FMC carrier, VPX DP1 Data Plane interface, FMC rear I/O routing on VPX P2, 0.8" board
ASSOCIATED PRODUCTS:		
VX3830-RTM	PB-VX3-000	3U VPX Rear Transition Module (with PIM connectors)
KIT-FMC	KIT-FMC-DEV	FMC/VITA 57 Development/test kit. Contains: Linux FPGA/ FMC EEPROM drivers, FPGA Test Image, User's Guide, FMC-SER0-SA-000 FMC card, USB FLASH Drive pre-loaded with Linux Fedora + VITA 57 drivers. Compatible with VM6250 (with FMC I/O option)

* Preferred variants. For other features combinations (see User's Guide), please contact support-kom-sa@kontron.com.

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