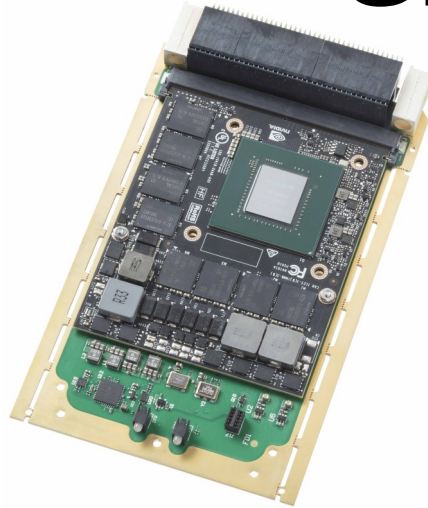




# Condor GR2 3U VPX



## Rugged 3U VPX Graphics & GPGPU Card with CUDA® Support Based on NVIDIA® Quadro® P5000 or P3000 GPU

The Condor GR2 3U VPX is a 3U VPX graphics & GPGPU card that is based on NVIDIA's Pascal™ GPU architecture. The product comes in 2 variants based on the NVIDIA® Quadro® P5000 or Quadro® P3000, in that order of decreasing performance. The Condor GR2 3U VPX offers exceptional graphics and GPGPU capability with CUDA® support for the embedded /rugged market.

The 3U VPX form factor offers higher power tolerance and hence higher performance compared to smaller rugged form factors. It also offers very high GPGPU performance using CUDA™ or OpenCL™ up to 6.4 TFLOPs floating-point performance.

The Condor GR2 3U VPX is a conduction cooled or air cooled 3U VPX card that supports PCI Express 3.0 (16, 8 or 4 lane) when mated with compatible Single Board Computers (SBCs). Two DisplayPort outputs are available from the rear P2 VPX connector. The board can consume up to 100W based on the application.

The Condor GR2 3U VPX graphics / video card is ideal for a myriad of intensive compute applications. The board design is modular to allow for graphics performance upgrades in the future. This product is designed to withstand high temperature, shock and vibration environments and because of this, the board meets MIL-STD-810G standards.

There are many customizations that are possible such as different video outputs from the rear VPX connectors or a front I/O configuration. Please contact EIZO Rugged Solutions at [condor@eizo.com](mailto:condor@eizo.com) for more information.

The product comes with EIZO Rugged Solutions' commitment of support from our experienced and responsive team who can offer immediate assistance to troubleshoot and resolve any technical challenges.

Windows and Linux drivers are provided for x86 based platforms. The max power consumption of the board can be temporarily reduced by adjusting the graphics clock speed with a software utility after boot.

EIZO Rugged Solutions has provided graphics solutions for over three decades and has always met customer needs with long term commitment and support.

### Key Features

- 3U VPX Form Factor
- NVIDIA® Quadro® Pascal™ GPU
- GPUs: NVIDIA® Quadro® P5000 or P3000
- Supports NVIDIA CUDA® 6.1 and OpenCL™ 1.2
- 16 GB or 6 GB GDDR5 Graphics Memory
- 256-bit or 192-bit Memory Width
- 192 or 168 GB/s Memory Bandwidth
- Up to 6.4 TFLOPs Floating-point Performance
- DirectX® 12 & OpenGL 4.6 Support
- 16, 8 or 4 Lane PCI Express 3.0
- H.265 (HEVC) / H.264 Hardware Encode/Decode
- NVIDIA GPUDirect™ DMA
- Two Rear DisplayPort Outputs
- MIL-STD-810G Certified
- Air Cooled and Conduction Cooled Variants
- Long Term Product Availability
- Comprehensive Customer Care

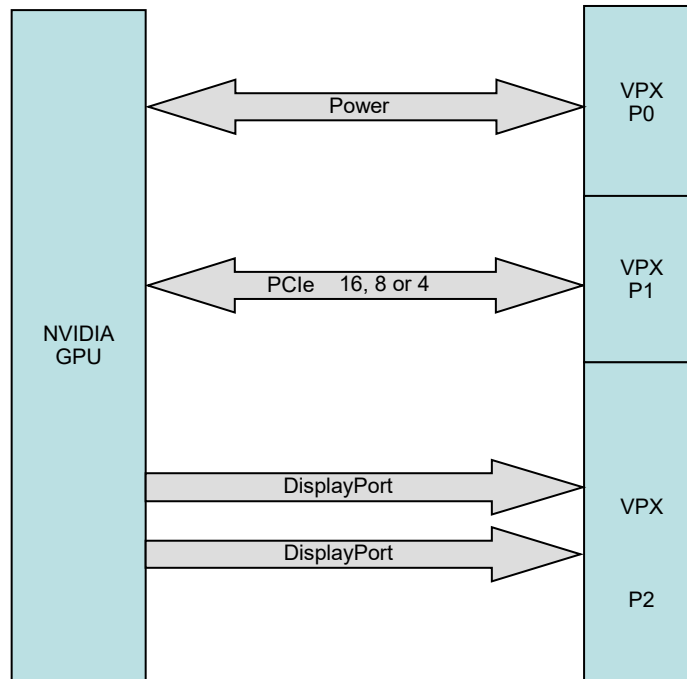
### Platforms

- Linux/Windows 7 on x86
- 3U VPX
- Other Platforms as Required

## Condor GR2 3U VPX Specifications

<b>Graphics Processor</b>	NVIDIA® Pascal™ GPU Architecture NVIDIA® Quadro® P5000 or Quadro P3000
<b>Interface</b>	3U VPX Form Factor. 0.8" Pitch (Conduction Cooled). 1" Pitch (air cooled) 16, 8 or 4 Lane PCI Express 3.0, 2.0, 1.0
<b>Graphics Memory &amp; Bandwidth</b>	Quadro P5000: 16 GB GDDR5, 192 GB/s, 256-bit Quadro P3000: 6 GB GDDR5, 168 GB/s, 192-bit
<b>Video Outputs (Rear VPX P2)</b>	Two DisplayPort (DisplayPort Can Be Converted to DVI or VGA With Adapters)
<b>DirectX / OpenGL Support</b>	DirectX 12, OpenGL 4.6
<b>GPGPU Capabilities</b>	CUDA 6.1, OpenCL™ 1.2, CUDA™ C, CUDA™ C++ 2048 (P5000), 1280 (P3000) CUDA Cores 6.4 TFLOPs (P5000), 3.9 TFLOPs (P3000) Floating-point Performance FP32 H.265 (HEVC) / H.264 Hardware Encode & Decode Capability
<b>Power Consumption</b>	50 - 100W (based on application)
<b>Operating Temperature (MIL-STD-810G)</b>	-40°C to 70°C (Rugged Air Cooled) -40°C to 85°C (Rugged Conduction Cooled)
<b>Humidity</b>	95% Without Condensation
<b>Vibration / Shock</b>	Compliant with MIL-STD-810G
<b>Software/Platform Support</b>	Windows or Linux
	x86

## Condor GR2 3U VPX Block Diagram



For customizations involving I/O or pin-outs, please contact [condor@eizo.com](mailto:condor@eizo.com)

***Bringing your projects to life™***



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5/18/2018 Rev A

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