

# Condor 4000 3U VPX

## High Performance 3U VPX graphics with GPGPU capability

### Features

- 3U VPX form factor, x16 PCIe
- 2 GB frame buffer
- 640 Shader Processors
- OpenGL 4.2, DirectX 11.1, Shader 5.0
- OpenCL 1.2, DirectCompute 11 (GPGPU computing)
- 6 Rear Outputs from VPX P2 Connector. (2x DVI + 4x DisplayPort)
- Resolutions up to 2560 x 1600
- 15 year product availability
- Comprehensive customer care
- Fully Conduction Cooled
- Ideal for rugged applications

### Markets

- Military
- Avionics
- Industrial
- Embedded Systems

### Platforms

- Windows/Linux based Single Board Computers
- VPX, OpenVPX
- VxWorks

The Condor 4000 3U VPX is a leading edge 3U VPX form factor graphics/video card for use in applications that require very high-end graphics and computation. Based on AMD's Radeon E8860 GPU, the Condor 4000x offers ground breaking performance with 60% better performance than the previous series.

The Condor 4000 3U VPX is available in Conduction Cooled and has 6 Digital (2 DVI + 4 DisplayPort) video outputs available from the rear VPX P2 connector on the card. Dual Link DVI is available as a factory configured option. Two optional VPX rear transition modules are available (sold separately). One gives access to 4 DisplayPort outputs and the other gives access to 2 Single-Link DVI outputs. VPX-REDI covers are also available.

The Condor 4000 3U VPX is ideal for very high end graphics processing as well as general purpose graphics processing (GPGPU) applications such as radar and video surveillance/analysis. It offers 768/48 GFLOPs single/double precision performance. The board can operate at higher speeds than the XMC form factor equivalent because it runs in a slot by itself which allows for better cooling.

A comprehensive set of tutorials, libraries and tools are available for OpenCL development. Contact Tech Source for more information.

The product has a long life cycle and will be available for up to 15 years from the date of release. This comes with the legendary support of our seasoned team members, who can offer immediate assistance to troubleshoot and resolve any technical challenges.

Windows and Linux drivers are available by default and other real time operating systems (RTOS) such as VxWorks may be supported as per customer requirements.

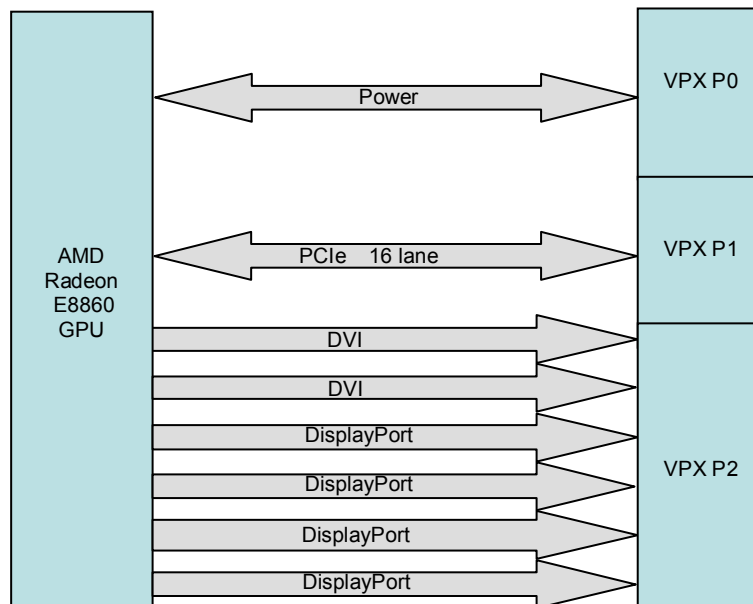
Tech Source has provided graphics solutions for over 28 years and has always met customer needs with long term commitment and support.

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## Condor 4000 3U VPX Specifications

<b>Graphics Processor</b>	AMD Radeon E8860 GPU supporting OpenGL 4.2, DirectX 11.1 and Shader 5.0
<b>Interface</b>	3U VPX 1, 2, 4, 8 or 16 lane PCIe
<b>Graphics Memory</b>	2GB GDDR5 memory
<b>Video Outputs</b>	[Rear VPX P2] Digital (2x Single Link DVI + 4x DisplayPort*) *DisplayPort is 4 lane
<b>Maximum Video Resolution</b>	1920 x 1200 for Single-Link DVI Configuration, 2560 x 1600 for Dual-Link DVI and 2560 x 1600 for DisplayPort
<b>GPGPU Capabilities</b>	OpenCL 1.2, DirectCompute 11 640 Shaders 768/48 GFLOPs single/double precision peak (600e/4.5Gbps)
<b>Power Rating</b>	45 Watts (Can be configured to be as low as 17W)
<b>Operating Temperature (MIL-STD-810)</b>	-40°C to 85°C (Rugged Conduction Cooled)
<b>Non-Operating Temperature</b>	-55°C to 105°C
<b>Humidity</b>	95% without condensation
<b>Vibration (MIL-STD-810)</b>	0.1 g <sup>2</sup> /Hz
<b>Shock (MIL-STD-810)</b>	40g
<b>Software/Platform Support</b>	Windows or Linux
	VxWorks
	x86, PowerPC

## Condor 4000 3U VPX Block Diagram



For Customizations involving I/O or Pin-outs, please contact [embeddedgraphics@techsource.com](mailto:embeddedgraphics@techsource.com)

# Tech Source

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