



AMD® E8860 Based 3U VPX Graphics & GPGPU Card with Six Video Outputs

The Condor 4000 3U VPX is a rugged graphics/video/GPGPU card for use in the embedded market. Based on AMD's Radeon™ E8860 GPU, the Condor 4000 3U VPX products offer superior computing and GPGPU performance. Delivering 768/48 GFLOPs of peak single/double precision floating point performance, the Condor 4000 3U VPX graphics processors are ideal for GPGPU applications such as radar, UAV, C5ISR, and video surveillance/analysis. All Condor 4000 3U VPX products have built-in video decoders to enable dual HD decoding of H.264, VC-1, MPEG4 and MPEG2 compressed video streams.

The product is offered in various ruggedized levels and has digital (DVI/DisplayPort) video outputs available from the rear VPX connector P2. The product is designed to meet the various needs of the defense and aerospace markets and are offered in air cooled and conduction cooled variants and can be used in 3U VPX rugged systems.

Key features of this product:

- AMD® Embedded Radeon™ E8860 GPU
- Video Outputs: Six Multi-Function Video Outputs
(2) Single-Link DVI-D & (4) DisplayPort
- Rear I/O on VPX P2
- 2 GB GDDR5 Graphics Memory
- 640 Shader Processors
- 128-bit Memory Interface
- 72 GB/s Memory Bandwidth
- Up to 768 GFLOPs FP32 Compute Performance
- H.264 Hardware Decoder (UVD 4.0)
- H.264 Hardware Encoder (VCE 1.0)
- MIL-STD-810
- Conduction Cooled & Air Cooled
- Thermally Efficient Heatsink Technology

Fully Ruggedized



Condor 4000 3U VPX Specifications

Graphics Processor	AMD® Embedded Radeon™ E8860 GPU supporting OpenGL 4.2, DirectX 11.1 and Shader 5.0
Interface	3U VPX 16, 8 or 4 Lane PCIe 3.0
Graphics Memory	2 GB GDDR5 128-bit Memory Interface 72 GB/s Memory Bandwidth
Video Outputs	Six Multi-Function Video Outputs. Two Single-Link DVI-D & Four DisplayPort
GPGPU Capabilities	640 Shader Processors Up to 768 GFLOPs FP32 Single Floating Point Performance OpenCL 1.2, DirectCompute 11 H.264 Hardware Decoder UVD 4.0 (Unified Video Decoder) H.264 Hardware Encoder VCE 1.0 (Video Codec Engine)
Power Consumption	17 - 45 W
Operating Temperature (MIL-STD-810)	-40° to 70°C (Rugged Air Cooled) -40°C to 85°C (Rugged Conduction Cooled)
Vibration (MIL-STD-810)	0.1 g ² /Hz
Shock (MIL-STD-810)	40 g
Humidity (MIL-STD-810)	95% Without Condensation
Software & Platform Support	Windows or Linux on x86 RTOS Support - VxWorks (others as needed) 3U VPX

Condor 4000 3U VPX Block Diagram

