



AMD[®] E4690 Based XMC Graphics Card with Two Multi-Function Video Outputs

The Condor 2000 XMC series is a set of powerful rugged XMC mezzanine graphics processing cards targeted for the defense and aerospace markets. Based on the E4690 GPU from AMD, the Condor 2000 XMC graphics cards are built with superior graphics features and includes hardware acceleration of H.264 and VC-1 HD video as well as MPEG-2, enabling multiple HD video streams while freeing the CPU for other tasks.

The Condor 2000 XMC series includes 512 MB GDDR3 memory using the AMD Radeon E4690 GPU while supporting OpenGL 3.0 and DirectX 10.1. With multiple product variants available to meet the various video output needs of the defense and aerospace markets, these products are also offered in air cooled and conduction cooled form factors, front IO or rear IO versions, and can be used in VME, cPCI, AdvancedTCA, VPX and other single board computers (SBCs) using an XMC mezzanine card interface. The card has a PCI Express x8 interface, consistent with the majority of the SBCs that support this bus width. The series can support a wide variety of video formats (DVI, RGB, LVDS, and NTSC/PAL/SECAM).

Key features of this product:

- AMD[®] Embedded Radeon™ E4690GPU
- Video Outputs: Two Multi-Function Outputs
See Product List Table on Back for Variants
- Front I/O, Rear PMC & Rear XMC I/O Variants
- 2 GB GDDR5 Graphics Memory
- 320 Shader Processors
- 128-bit Memory Interface
- 22.4 GB/s Memory Bandwidth
- Up to 384 GFLOPs FP32 Compute Performance
- H.264, VC-1, MPEG-2 Video Decode
- PCI Express 2.0 x8
- MIL-STD-810
- Conduction Cooled & Air Cooled

Fully Ruggedized



Condor 2000 XMC Specifications

Graphics Processor	AMD® Embedded Radeon™ E4690 GPU supporting OpenGL 3.0 and DirectX 10.1
Interface	XMC 1.0 or XMC 2.0 8 Lane PCIe 2.0
Graphics Memory	512 GB GDDR3 128-bit Memory Interface 22.4 GB/s Memory Bandwidth
Video Outputs	Two Multi-Function Video Outputs. <i>(See below Product List table for options)</i>
GPGPU Capabilities	320 Shader Processors Up to 384 GFLOPs FP32 Single Floating Point Performance Shader Model 4.0 H.264, VC-1, MPEG-2 Video Decode
Power Consumption	10 - 25 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) VME, cPCI, 3U VPX & PCIe (with adapter board)

Condor 2000 XMC Product List

		Product Name		
		Condor 2000x (Front and Rear PMC Video. VME Style Pin-Out. Air Cooled and Conduction Cooled)	Condor 2001x (Rear XMC Video. VPX Style Pin-Out. Conduction Cooled)	Condor 2002x (Rear XMC Video. VPX Style Pin-Out. Conduction Cooled)
Output Type	VGA	2	NA	2
	DVI	2	2	1
	RS-343	NA	2 (fo) (nre)	2 (fo) (nre)
	RS-170 (3 wire)	NA	2 (fo) (nre)	2 (fo) (nre)
	STANAG 3350 A/B/C	NA	2 (fo) (nre)	2 (fo) (nre)
	CVBS (NTSC / PAL / RS-170 1 wire)	1 (fo)	NA	NA

(fo) = Factory option

(nre) = Non-recurring engineering fee may be required

NA = Not Available

Note: Maximum two video outputs at a time.



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