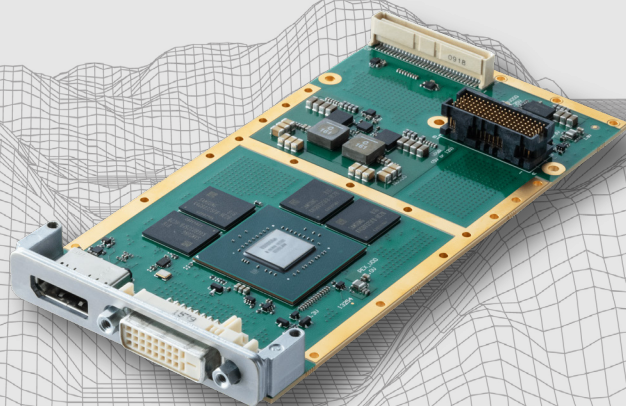


Chip-down XMC graphics & GPGPU card based on the NVIDIA Quadro P2000 GPU featuring NVIDIA Pascal architecture (GP107) with rear & front DVI video outputs.



HIGH PERFORMANCE GPU

Chip-down NVIDIA® Quadro® Pascal™ P2000 (GP107) with up to 2.3 TFLOPS FP32 Single Floating Point Performance.

MULTIPLE VIDEO OUTPUTS

Front and Rear PMC I/O
DisplayPort++ and DVI

BUILT TO WITHSTAND

Four 3G-SDI inputs & outputs
with metadata insertion and
extraction.

XMC Graphics & GPGPU Card with Rear & Front DVI Video Outputs

The Condor NVP2000xPF is a chip-down XMC graphics output and GPGPU card based on the NVIDIA® Pascal™ (GP107) Quadro® P2000 GPU. This card leverages the high performance of the GPU with its 768 CUDA cores and 4 GB of GDDR5 graphics memory to deliver up to 2.3 TFLOPs of peak performance with CUDA™ and OpenCL™ support. The mezzanine card is designed to be used as a front or rear PMC I/O card in rugged VME and Compact PCI systems but can be configured to support OpenVPX systems.

The Condor NVP2000xPF is ideal for GPGPU applications such as C5ISR, situational awareness, signal intelligence (SIGINT), and includes machine learning and autonomy. It has a built-in H.265 (HEVC) / H.264 (MPEG4 AVC) hardware encoder (NVENC) and decoder (NVDEC) and supports NVIDIA GPUDirect® RDMA for transferring video data to GPU memory over PCIe.

The card has a rear PMC I/O on Pn4 and front panel I/O and 3U VPX and PCIe form factors are supported with carrier boards. In addition, EIZO Rugged Solutions' Adapt Series can be used to seamlessly convert DisplayPort to DVI or VGA format. The card is available as air cooled or conduction cooled.



MIL-STD 810
Shock



MIL-STD 810
Temperature



MIL-STD 810
Vibration



SWaP

Condor NVP2000xPF Specifications

Graphics Processor	NVIDIA® Quadro® Pascal™ P2000 GPU (Chip-down GP107) Supporting DirectX 12 and OpenGL 4.5
Interface	XMC 1.0 or XMC 2.0 8 Lane PCIe 3.0
Graphics Memory	4 GB GDDR5 128-bit Memory Interface 96 GB/s Memory Bandwidth
Video Outputs	Front Panel: One Dual-Link DVI-D* & One DisplayPort++ Rear Pn4 PMC I/O: One Dual-Link DVI-D* & One Single-Link DVI-D *Note: The Rear Dual-Link DVI and Front Dual-Link DVI are mutually exclusive
GPGPU Capabilities	768 CUDA Cores Up to 2.3 TFLOPS FP32 Single Floating Point Performance Supports CUDA 10 (Compute Capability 6.1) OpenCL 1.2 and Shader Model 5.1 H.265 (HEVC) / H.264 (MPEG4/AVC) Hardware Encode & Decode NVIDIA GPUDirect™ RDMA, NVENC, NVDEC
Power Consumption	25 - 50 W
Operating Temperature (MIL-STD-810)	0°C to 55°C (Standard Air Cooled) -40°C to 70°C (Rugged Air 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 VME, VPX, cPCI & PCIe

Condor NVP2000xPF Block Diagram

