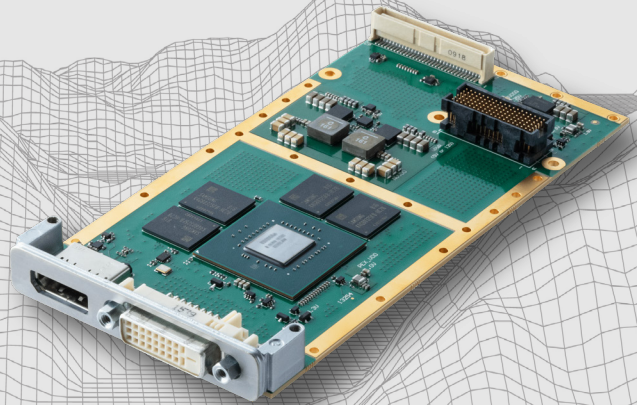


Chip-down XMC graphics & GPGPU card based on the NVIDIA Quadro P2000 GPU featuring NVIDIA Pascal architecture (GP107) with rear & front DVI video outputs.



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

Interface

XMC 1.0 or XMC 2.0
8 Lane PCIe 3.0

Graphics Processor

NVIDIA® Quadro® Pascal™ P2000 GPU (Chip-down GP107)
Supporting DirectX 12 and OpenGL 4.5

Graphics Memory

4 GB GDDR5
128-bit Memory Interface
96 GB/s Memory Bandwidth

GPGPU Capabilities

768 CUDA Cores
Up to 2.3 TFLOPS FP32 Single Floating Point Performance
Supports CUDA, OpenCL, and Shader Model 5.1
H.265 (HEVC) / H.264 (MPEG4/AVC) Hardware Encode & Decode
NVIDIA GPUDirect™ RDMA, NVENC, NVDEC

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

Software & Platform Support

Windows or Linux on x86
VPX & PCIe

Operating Temperature (MIL-STD-810)

0°C to 55°C (Standard Air Cooled)
-40°C to 70°C (Rugged Air Cooled)

Power Consumption

20 - 50 W

Vibration (MIL-STD-810)

0.1 g²/Hz

Shock (MIL-STD-810)

40 g

Humidity (MIL-STD-810)

95% Without Condensation

Condor NVP2000xPF Block Diagram

