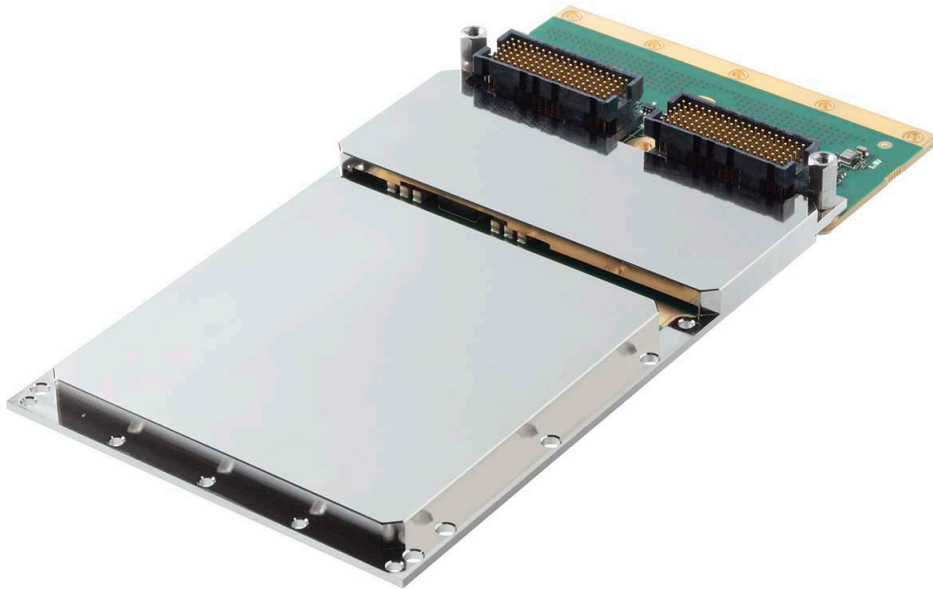




# Condor NVP2000xX



## NVIDIA® Quadro® Pascal™ P2000 XMC Graphics & GPGPU with DisplayPort Outputs

The Condor NVP2000xX is a chip-down XMC graphics and GPGPU card based on the NVIDIA® Pascal™ (GP107) Quadro® P2000 GPU. This rugged XMC 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.

This XMC card has three DisplayPort++ video outputs available from the rear XMC I/O connector Pn6. The rear XMC pin-out is compatible with 3U and 6U VPX systems that follow VITA 46.9 x12d+x8d+24s. The DisplayPort++ video outputs can be converted to DVI or VGA using EIZO's rugged Adapt product line or off the shelf commercial adapters. This product is currently being offered in Conduction Cooled or Air Cooled.

The Condor NVP2000xX graphics processor is ideal for GPGPU applications such as radar and video surveillance / analysis, C5ISR, situational awareness, signal intelligence (SIGINT), and includes machine learning and autonomy. NVIDIA NVENC (HW encode) and NVDEC (HW decode) can be used to hardware encode or decode video on the GPU. Video data can be sent over PCIe directly to GPU memory for analysis/processing using GPUDirect™ RDMA.

### Key features of this product:

- NVIDIA® Quadro® P2000 GPU (Pascal GP107)
- Video Outputs: Three DisplayPort++
- 4 GB GDDR5 Graphics Memory
- 128-bit Memory Interface
- 96 GB/s Memory Bandwidth
- 768 CUDA Cores
- Up to 2.3 TFLOPs FP32 Compute Performance
- CUDA 10, OpenCL 1.2, DirectX® 12, OpenGL 4.5
- 8 Lane PCI Express 3.0
- H.265 & H.264 Hardware Encoder/Decoder
- NVIDIA GPUDirect™ RDMA, NVENC, NVDEC
- MIL-STD-810
- Conduction Cooled & Air Cooled
- Thermally Efficient Heatsink Technology
- Long Term Product Availability
- Comprehensive Customer Care
- Rear XMC I/O (VITA 46.9, x12d+x8d+24s)

Fully Ruggedized



# Condor NVP2000xX 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 4 Lane PCIe 3.0
Graphics Memory	4 GB GDDR5 128-bit Memory Interface 96 GB/s Memory Bandwidth
Video Outputs	Three DisplayPort++ Rear Pn6 XMC I/O. VITA 46.9 x12d+x8d+24s
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) -40°C to 85°C (Rugged Conduction Cooled)
Vibration (MIL-STD-810)	0.1 g <sup>2</sup> /Hz
Shock (MIL-STD-810)	40 g
Humidity (MIL-STD-810)	95% Without Condensation
Software & Platform Support	Windows or Linux on x86 VPX & PCIe

# Condor NVP2000xX Block Diagram

