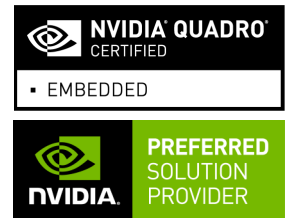




Condor NVP2102xX



NVIDIA Quadro Pascal P2000 (GP107) XMC Graphics & GPGPU Card **Inputs : Four 3G-SDI; Outputs : Two 3G-SDI, Two DVI/DisplayPort, One VGA**

The Condor NVP2102xX is a rugged XMC graphics card and raw video capture board based on the NVIDIA Quadro Pascal P2000 (GP107) GPU architecture. The board is designed for use in applications that require very high-end graphics capabilities or CUDA support when performing GPGPU and require raw video capture and display. The board has two 3G-SDI, one VGA and two DVI or DisplayPort video outputs. It also supports four 3G-SDI video inputs.

The board is currently being offered in Conduction Cooled or Air Cooled with rear XMC I/O on Pn6. The rear XMC pin-out is compatible with VPX systems that follow VITA 46.9 x12d+x8d+24s. 3U VPX and PCIe form factors are supported with carrier boards. This board can be used in conjunction with our Adapt series product line to output DVI or VGA.

The Condor NVP2102xX graphics processor is ideal for general purpose graphics processing unit (GPGPU) applications such as radar and video surveillance/analysis. At the maximum power consumption, the card provides 2.3 TFLOPs of single precision floating point compute performance (FP32).

The video capture (frame grabber) auto detects the input resolution and then transfers raw video frames directly to GPU memory or host memory. In GPU memory, the applications can do processing such as image analysis, image enhancement, 360 degree video stitching, sensor fusion and target detection, using GPGPU (CUDA / OpenCL), with minimal latency. The captured data can also be encoded using the GPU native H.265 (HEVC) or H.264 encoders directly in the GPU memory. Windows or Linux drivers and API are available for x86 systems.

The product comes with EIZO Rugged Solutions' commitment of long term product availability. This comes with the legendary support of our seasoned team members, who may offer immediate assistance to troubleshoot and resolve any technical challenges.

EIZO Rugged Solutions has provided graphics solutions for over three decades and has always met customer needs with long term commitment and support.

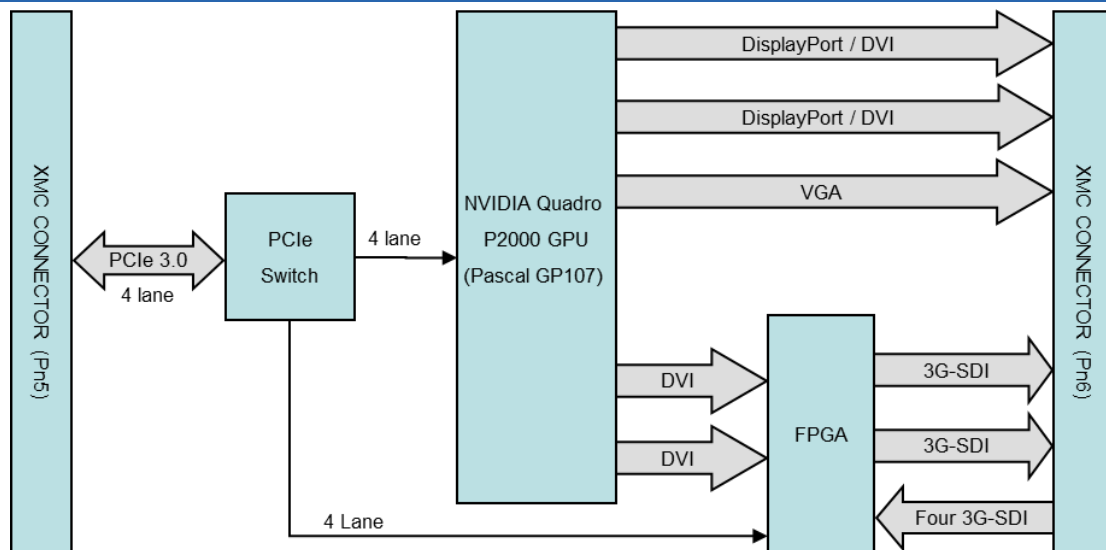
Key Features

- NVIDIA Quadro Pascal P2000 GP107 GPU Architecture
- XMC Form Factor (3U VPX & PCIe w/ carrier board)
- Two 3G-SDI, One VGA & Two DVI or DisplayPort Video Outputs.
- Four 3G-SDI Video Inputs
- Rear XMC I/O (VITA 46.9, x12d+x8d+24s)
- GPGPU - Supports CUDA 10 and OpenCL 1.2
- 4 GB GDDR5 Graphics Memory
- 128-bit Memory Width
- 96 GB/s Memory Bandwidth
- 768 Shader Processors
- 2.3 TFLOPs of CUDA Processing Performance
- OpenGL 4.5, DirectX 12
- H.265 (HEVC) / H.264 Hardware Encode/Decode
- NVIDIA GPUDirect DMA
- MIL-STD-810G Certified
- Conduction Cooled & Air Cooled
- Long Term Product Availability
- Comprehensive Customer Care

Condor NVP2102xX Specifications

Graphics Processor	NVIDIA Quadro Pascal P2000 GPU107 GPU Supporting DirectX 12 and OpenGL 4.5
Interface	XMC 1.0 or XMC 2.0 4 Lane PCIe 3.0 (PCIe and 3U VPX Carrier Boards Available)
Graphics Memory	4 GB GDDR5 128-bit Memory Width 96 GB/s Memory Bandwidth
Video Outputs	Rear Pn6 XMC I/O. VITA 46.9 x12d+x8d+24s. Two 3G-SDI, One VGA and Two DVI or DisplayPort
Video Inputs	Rear Pn6 XMC I/O. VITA 46.9 x12d+x8d+24s. Four 3G-SDI
GPGPU Capabilities	Supports CUDA 10 (Compute Capability 6.1), Open CL 1.2 and Shader Model 5.0 768 Shaders 2.3 TFLOPs FP32 Single Floating Point Compute Performance Peak H.265 (HEVC) / H.264 Hardware Encode & Decode Capability
Power Rating	25 - 50W
Operating Temperature (MIL-STD-810G)	-45°C to 85°C (Rugged Conduction Cooled) -40°C to 70°C (Rugged Air Cooled) 0°C to 55°C (Standard Air Cooled)
Humidity	95% Without Condensation
Vibration (MIL-STD-810G)	0.1 g ² /Hz
Shock (MIL-STD-810G)	40g
Software & Platform Support	Windows or Linux on x86 VPX & PCIe

Condor NVP2102xX Block Diagram



Bringing your projects to life™



EIZO Rugged Solutions

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