The Condor GR4 PCIe is a rugged, passively cooled PCI Express form factor graphics/video capture/GPGPU processing card specifically designed for rugged rackmount servers and ISR applications. Based on NVIDIA’s Pascal™ GPU architecture, the product comes in two variants based on the NVIDIA® GPUs — Quadro® P3000 or Quadro® P5000. This card offers exceptional GPGPU performance with both CUDA® and OpenCL™ support.

The Condor GR4 PCIe supports four 3G-SDI video inputs and four 3G-SDI video outputs simultaneously. The 3G-SDI I/O supports the Full HD resolution of 1920x1080@60Hz. The board also has one DisplayPort video output that supports 4K UHD. The product supports PCI Express Gen 3.0 (16, 8 or 4 lane) when mated with a compatible computer. The maximum power consumption ranges from 85W to 110W depending upon the variant. It is designed to MIL-STD-810 standard and can operate in harsh environments to withstand extended temperatures, shock, vibration, humidity, etc.

This product is ideal for a myriad of compute intensive applications that require 3G-SDI (or HD-SDI) data to be processed and displayed. Some examples are ISR, C4ISR and remote sensing / analysis. The board design is modular and allows for GPU performance upgrades in the future. The product can be customized for other I/O configurations, video formats or form factors. Please contact EIZO Rugged Solutions at condor@eizo.com for more information.
### Condor GR4 PCIe Specifications

| Graphics Processor | NVIDIA® Pascal™ GPU Architecture  
NVIDIA® Quadro® P5000 or Quadro® P3000 |
|---------------------|--------------------------------------------------|
| Interface           | Rugged Full Size PCIe Form Factor  
16, 8, or 4 Lane PCIe (Factory Configured).  
PCI Express 3.0, 2.0, 1.0 |
| Graphics Memory     | 16GB (P5000), 6GB (P3000) GDDR5 |
| Video Inputs        | Four 3G-SDI, HD-SDI, SD-SDI Video Inputs on HD-BNC Connectors |
| Video Outputs       | Four 3G-SDI, HD-SDI, SD-SDI Video Outputs on HD-BNC Connectors  
One DisplayPort Video Output |
| DirectX / OpenGL Support | DirectX 12, OpenGL 4.5, Shader 5.1 |
| OpenCL™ / CUDA® (GPGPU computing) | CUDA 10 (compute capability 6.1), OpenCL™ 1.2, CUDA™ C, CUDA™ C++  
2048 (P5000) or 1280 (P3000) CUDA Cores |
| Power Consumption   | Up to 85W (P3000) or 110W (P5000) (Based on Application) |
| Operating Temperature (MIL-STD-810) | 0°C to 55°C (Standard)  
-40°C to 70°C (Rugged) |
| Humidity            | 95% Without Condensation |
| Vibration / Shock   | Compliant with MIL-STD-810 |
| Software/Platform Support | Windows or Linux  
x86 |

### Condor GR4 PCIe Block Diagram