

GR5-A2000 RC-Series

OpenVPX Graphics and GPGPU Card Based on NVIDIA[®] Ampere™

Key Features

The Condor GR5-A2000 is a rugged OpenVPX 3U form factor card based on NVIDIA[®] Ampere[™] architecture and the NVIDIA[®] RTX[™] platform. This highly integrated "chipdown" graphics and GPGPU card meets strict data integrity requirements for mission-critical applications with uncompromised computing accuracy and reliability.

- GPU-based computing supporting 2560 CUDA[®] cores, 20 RT cores and 80 Tensor cores
- 2x the throughput for matrix operations than previous generations
- PCIe Gen4 (x4 or x8 lane)
- Real-time performance for encoding applications with dedicated H.265 and H.264 encode and decode engines





CONCURRENT

Concurrent Technologies Plc

Concurrent Technologies Inc.

4 Gilberd Court, Colchester, Essex, CO4 9WN, UK Tel: +44 (0)1206 752626 400 West Cummings Park, Suite 1300, Woburn, MA 01801, USA Tel: (781) 933 5900 email: info@gocct.com www.gocct.com

All companies and product names are trademarks of their respective organizations. Specification subject to change; E and OE.

Graphics Processor

- NVIDIA RTX A2000 GPU (Ampere Architecture)
- supports Microsoft® DirectX 12, OpenGL 4.5 and Vulkan 1.2

Graphics Memory

- 8 GB GDDR6 with ECC memory
- 128-bit Memory Interface
- up to 192 GB/s Memory Bandwidth

GPGPU Capabilities

- 2560 CUDA Cores. 80 Tensor Cores. 20 RT Cores.
- up to 9.49 TFLOPS FP32 Single Floating Point Performance
- supports CUDA 11 (Compute Capability 7.5) and CUDA-X
- OpenCL 1.2 and Shader Model 5.1
- H.265 (HEVC) / H.264 (MPEG4/AVC) Hardware Encode and Decode
- NVIDIA® GPUDirect™ RDMA, NVENC, NVDEC

Video Outputs

- up to 4x video outputs accessed via P1 and P2:
 - → 2x DisplayPort and 2x DVI-D or
 - → 4x DVI-D or
 - → 4x DisplayPort or
 - → 2x DVI-D and 2x 3G-SDI

Software Support

supports Linux[®] and Windows[®]

Electrical Specification

- 50 W (typical max)
- Vss = +5 V or +12 V
- surge currents may cause power consumption to go past 50 W temporarily

Environmental Specification

- conduction-cooled
- operating temperature at card edge:
 MIL-STD-810, -40°C to +85°C
- non-operating temperature:
 MIL-STD-810, -55°C to +105°C
- 5% to 95% Relative Humidity, non-condensing

Mechanical Specification

- 3U VPX form-factor
- slot width:
 - → 0.8-inch pitch
- connectors to VITA 46.0 for P0, P1 and P2
- captive screws available to secure front handles
- operating mechanical:
 - → shock MIL-STD-810, 40g
 - → random vibration MIL-STD-810, 0.1g²/Hz



Parhelia B.V. www.parheliabv.com ()+31(0)10 741 00 28