# Narvi (SP NVB/Bsd-30)



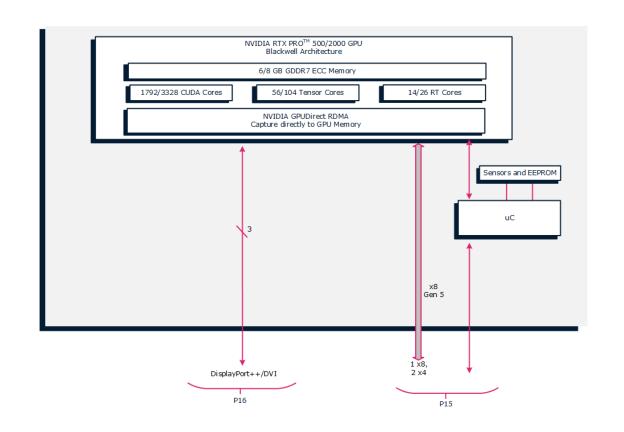
# **Embedded XMC graphics & GPGPU card**

# **Key Features**

Narvi is a rugged XMC video graphics and GPGPU card built with the advanced NVIDIA RTX PRO  $^{\text{TM}}$  500/2000 Blackwell GPU

- Supports 6/8 GB of GDDR7 graphics memory equipped with error correction code (ECC)
- 1,792/3,328 CUDA® cores, 56/104 Tensor Cores and 14/26 RT Cores
- H.265 (HEVC) / H.264 (MPEG4/AVC), AV1 Hardware Codec
- NVIDIA GPUDirect Remote Direct Memory Access (RDMA)
- including 9th Gen NVENC encoders with 4:2:2 support and 6th Gen NVDEC decoders





# **Specification**

# **XMC High-Performance GPGPU Card**

- Rugged XMC video graphics and GPGPU card powered by the NVIDIA RTX PRO™ 500/2000 GPU
- Video Outputs:
  - Up to 3x DisplayPort++/DVI
  - Rear Pn6 XMC I/O. VITA 46.9 x12d+x8d+x16s
- Options in:
  - XMC 1.0 (VITA42)
  - XMC 2.0 (VITA61)

#### **Central Processor**

- NVIDIA RTX PRO™ 500 GPU (Blackwell Generation)
- DirectX12, OpenGL 4.6, Vulkan 1.4
- GPGPU Capabilities:
  - 1,792 CUDA Cores. 56 Tensor Cores. 14 RT Cores.
  - Supports CUDA, CUDA-X, OpenCL<sup>™</sup> and Shader Model 6.8
  - H.265 (HEVC) / H.264 (MPEG4/AVC), AV1 Hardware Codec
  - 9th Gen NVENC Encoders with 4:2:2 support
  - 6th Gen NVDEC Decoders
  - NVIDIA GPUDirect<sup>®</sup> RDMA
- NVIDIA RTX PRO™ 2000 GPU (Blackwell Generation)
- DirectX12, OpenGL 4.6, Vulkan 1.4
- GPGPU Capabilities:
  - 3,328 CUDA Cores. 104 Tensor Cores. 26 RT Cores.
  - Supports CUDA, CUDA-X, OpenCL<sup>™</sup> and Shader Model 6.8
  - H.265 (HEVC) / H.264 (MPEG4/AVC), AV1 Hardware Codec
  - 9th Gen NVENC Encoders with 4:2:2 support
  - o 6th Gen NVDEC Decoders
  - NVIDIA GPUDirect® RDMA

#### **DRAM**

- Option for NVIDIA RTX PRO™ 500 GPU:
- 6 GB GDDR7 with Error Correction Code
  - 128-bit Memory Interface
- Option for NVIDIA RTX PRO™ 2000 GPU:
- 8 GB GDDR7 with Error Correction Code
  - 128-bit Memory Interface

### **Software Support**

Windows or Linux on x86

# **Environmental Specification**

- -40°C to 70°C (Air Cooled)
- -40°C to 85°C (Rugged Conduction Cooled)
- Humidity:
  - 95% Without Condensation

### **Mechanical Specification**

- XMC Form Factor
- Operating mechanical:
  - Shock 40 g
  - Random vibration 0.1 g<sup>2</sup>/Hz

### **Electrical Specification**

- Typical current figure:
  - 12 V Vss
  - 。 35W-60W