

VPX3U-TESLA-M6

HIGH-PERFORMANCE COMPUTE ENGINE AND GRAPHICS VIRTUALIZATION

Key Features

- NVIDIA TESLA M6 GPU (GM204)
- 2,857 GFLOPs single precision (32-bit)
- 8GB GDDR5 video memory
- NVIDIA GRID™ 2.0 vGPU virtualization
- PCIe x16 Gen3
- Supports High Performance Compute (HPC) mode, exposing an 8GB BAR for DMA

Additional Features

- ECC memory support
- Power Brake PWRBRK#
Emergency Power Reduction fail-safe
- Graphics Controller mode for legacy support
- 1536 CUDA cores
- Advanced GPGPU parallel processing capabilities: CUDA 7.5, OpenCL™ 1.2

Specifications

- High level of ruggedization
 - MIL-STD-810, IPC 6012 Class-3
 - -40 to +71°C operating temperature
 - Conduction-cooled or Rugged air-cooled
- Windows and Linux drivers
- VPX 3U form factor: 160×100 mm
- Supported VPX configurations:
 - VPX-REDI (ANSI/VITA 48.x)
 - OpenVPX (ANSI/VITA 65)
- Standard Ordering P/Ns
 - 034923-F00VPX3v10 (Rugged air-cooled)
 - 034933-F00VPX3v10 (Conduction-cooled)

Overview

WOLF's VPX3U-TESLA-M6 board leverages NVIDIA's latest Maxwell 28nm GPU technology, bringing extreme high performance and GRID virtualization technology to a ruggedized embedded platform.

NVIDIA GRID is the industry's most advanced technology for sharing true virtual GPU (GRID 2.0 vGPU™) hardware acceleration between multiple users. This technology ensures complete application compatibility, which means features and experience are the same as they would be on a physical device.

The NVIDIA High Performance Compute (HPC) mode makes this board especially suitable for use as an advanced GPGPU compute engine, and is only available on the Tesla M6 and M60. When the board is in HPC mode it exposes an 8GB base address register (BAR) for direct access to the framebuffer from the CPU and other PCIe devices.

Due to the critical importance of size, weight and power (SWaP) in aerospace and defense applications, each ruggedized VPX3U-TESLA-M6 video graphic board can be individually tuned to maximize GPGPU capability while minimizing power usage.



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3U VPX TESLA M6

