

# VPX6U-TESLA-M6

## HIGH-PERFORMANCE COMPUTE ENGINE AND GRAPHICS VIRTUALIZATION

### Key Features

- Dual or Single NVIDIA Maxwell-2 Tesla M6 (GM204) 28nm GPUs
- Per GPU:
  - 2857 GFLOPS single precision (FP32)
  - 8 GB GDDR5, 256-bit memory width
  - 1536 CUDA Cores
- High Performance Compute (HPC) Mode
- NVIDIA GRID™ vGPU virtualization
- PCIe x16 Gen3

### Additional Features

- In HPC mode: full 8GB BAR access per GPU
- ECC memory support
- Power Brake PWRBRK#  
Emergency Power Reduction fail-safe
- Graphics Controller mode for legacy support
- Memory Bandwidth: 147.2 GB/s
- Advanced GPGPU parallel processing capabilities: CUDA 7.5, OpenCL™ 1.2
- Max operating power: Single 110W, Dual 225W

### 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 6U form factor: 233x100 mm
- Supported VPX configurations:
  - VPX REDI (ANSI/VITA 48.x)
  - OpenVPX (ANSI/VITA 65)

### Overview

WOLF's VPX3U-TESLA-M6 board leverages single or dual NVIDIA® Tesla® Maxwell-2 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.

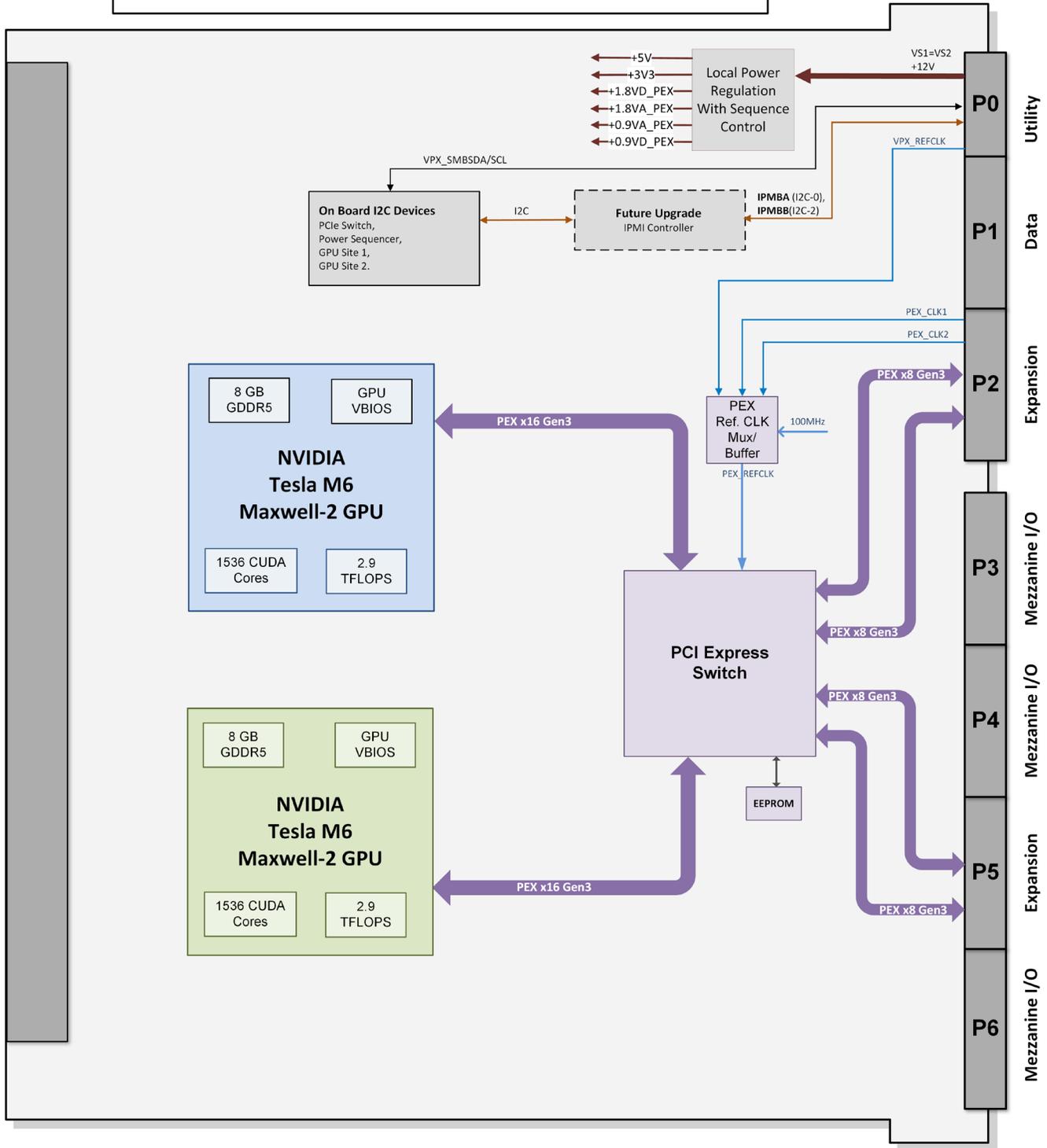
The NVIDIA High Performance Compute (HPC) mode makes this board especially suitable for use as an advanced GPGPU compute engine, and is only available on the Tesla M6 and M60. When the board is in HPC mode it exposes an 8GB base address register (BAR) for direct access to the framebuffer from the CPU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

Due to the critical importance of size, weight and power (SWaP) in aerospace and defense applications, each ruggedized VPX6U-TESLA-M6 video graphic board can be individually tuned to meet the required GPGPU capability while minimizing power usage.



# VPX6U-TESLA-M6

## VPX6U-TESLA-M6-DUAL



### Standard Ordering Part Numbers

#### DUAL TESLA:

- 029723-FN0xVPX6v10 (Rugged air-cooled)
- 029733-FN0xVPX6v10 (Conduction-cooled)

#### SINGLE TESLA:

- 029723-F60xVPX6v10 (Rugged air-cooled)
- 029733-F60xVPX6v10 (Conduction-cooled)