

VPX-3U-NVIDIA

HIGH-PERFORMANCE 3U VPX NVIDIA GRAPHICS PROCESSORS

FEATURES

- Multiple independent outputs:
DisplayPort, HDMI, DVI-D, SVGA
- Advanced GPGPU parallel processing capabilities:
CUDA, OpenCL™ 1.2, DirectCompute 11
- Advanced power management, enabling dynamic
real-time control
- Performance tunable GPU processor clock and
memory clock

SPECIFICATIONS

- 3U VPX-REDI VITA 46.0
- High levels of ruggedization
Conduction-cooled: -40° to +71°C
Air-cooled: 0° to +60°C
- PCIe up to x16 Gen3
- 28nm Kepler GPU Core
- Windows 7 and Linux (x86) drivers

GTX-680M (GK104)

- 4GB GDDR5 256-bit (115 GB/s)
- 1344 CUDA Cores (1,933 GFLOPS)
- 100W TDP
- DirectX® 11; OpenGL® 4.1

GTX-770M (GK106)

- 3GB GDDR5 192-bit (96 GB/s)
- 960 CUDA Cores (1,356 GFLOPS)
- 75W TDP
- DirectX® 11; OpenGL® 4.3

GTX-780M (GK104)

- 4GB GDDR5 256-bit (160 GB/s)
- 1536 CUDA Cores (2,369 GFLOPS)
- 100W TDP
- DirectX® 11; OpenGL® 4.3

OVERVIEW

WOLF offers several high-performance 3U VPX NVIDIA graphics processor modules: GTX-680M, GTX-770M, and GTX-780M.

NVIDIA GPUs are well suited for double-precision GPGPU parallel processing CUDA or OpenCL applications.

Hardware options include air-cooled or conduction-cooled, with both front I/O and rear I/O configurations. Custom cooling solutions are also available for development platforms.

Designed for military and aerospace requirements MIL-810, IPC-610 Class 3, air-cooled or conduction-cooled, and up to extended temperature **-40°C to +71°C**. The VPX-3U-GTX680M is highly matched for any application that requires military-grade high-performance GPGPU double-precision processing power.



(actual product may not be exactly as shown)

CUSTOM CONFIGURATIONS:

WOLF offers OEMs customized video configurations on all of its Video Graphic Modules, guaranteeing the perfect fit to your product.



WOLF Industrial Systems Inc.

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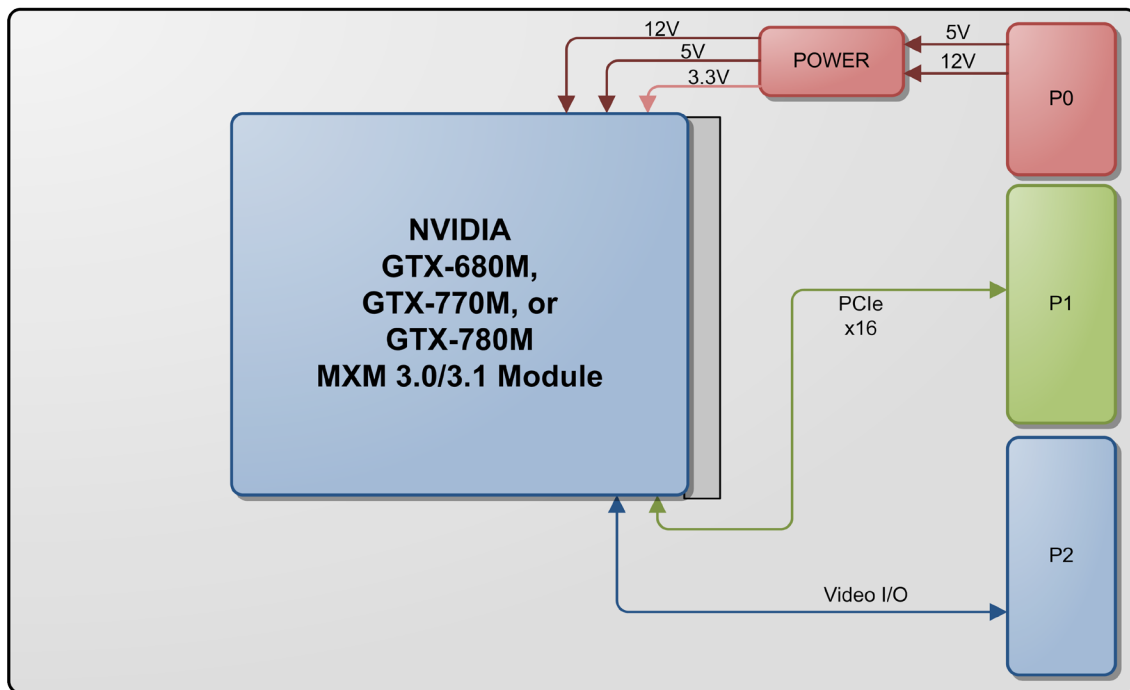
VIDEO OUTPUT OPTIONS:

- DisplayPort™
- DVI-I
- Dual-Link DVI-D
- HDMI 1.4a
- LVDS
- RGBHV

Environmental Specs

Supply Voltage:	+3.3V and +5V and +12V DC
Power Consumption:	as low as 40 watts
Dimensions:	3U VPX VITA 46.0 100mm×160mm Conduction-cooled: 1-slot Rugged air-cooled: 2- or 3-slot
Weight:	Less than 300 grams
Operating Temp:	Conduction-cooled: -40°C to +71°C Air-cooled: 0°C to +60°C
Internal Die temperature not to exceed 105°C	
Storage Temp:	-55°C to +105°C
Relative Humidity:	5% to 95% non-condensing
Shock:	40G, 11ms half-sine shock pulses in 3-axis
Vibration:	0.1G ² /Hz, 5-2,000Hz, 1hr/axis
Explosion Safety:	no voltages above 12V DC

REAR I/O



Ordering Guide

Part Number	Description
024933-F00VPX3v10	GTX-680M 3U VPX, conduction-cooled (-40° to +71°C), rear I/O
026233-F00VPX3v10	GTX-770M 3U VPX, conduction-cooled (-40° to +71°C), rear I/O
026333-F00VPX3v10	GTX-780M 3U VPX, conduction-cooled (-40° to +71°C), rear I/O

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Visit www.WOLF.ca/products/ for more information about this and other advanced video modules and solutions.

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