KEY FEATURES

- AMD Radeon™ E8860 28nm GPU
- up to 6 DisplayPort outputs
- up to two HDMI or DVI outputs
- up to 1 analog output
- Configurable power from 15 to 40 Watts

ADDITIONAL FEATURES

- 2GB GDDR5 memory, 128-bits
- Advanced GPGPU capabilities for parallel processing:
  - □ 768 GFLOPs single-precision
  - □ OpenCL™ 1.2, DirectCompute 11.1
  - □ DirectX® 11.1, OpenGL 4.2
- PCIe x16/x8/x4 Gen3
- H.264 hardware accelerated encoding (VCE) and decoding (UVD)
- Windows and Linux drivers
- RTOS drivers optional

SPECIFICATIONS

- High level of ruggedization:
  - □ Rugged Conduction-cooled or Air-cooled
  - □ Operating temperature: -40° to +85°C
  - □ Vibration (sine wave): 10G peak, 5 - 2000Hz
  - □ Shock: 30G peak for air-cooled, 40G peak for conduction-cooled
- Dimensions: 160mm x 100mm x 25.4mm
- Weight: with default conduction-cooled plates: approx. 728g; with default air-cooled plates: approx. 936g
- +12V or +5V power source options
- ANSI/VITA 48, 65 (VPX REDI, OpenVPX)

OVERVIEW

The VPX3U-E8860-VO is capable of driving up to six displays, comprised of combinations of up to six DisplayPort 1.2 digital displays, up to two HDMI or Dual-Link DVI, or one VGA. This board also has GPGPU capabilities with 768 GFLOPS of single-precision parallel processing capability.

This board has a highly efficient operating power which is configurable from 15 to 40 Watts.

Unlocking the best performance requires the best cooling capability. WOLF's advanced cooling technology is designed to move heat using a low weight, high efficiency pipeline from the GPU die to the wedgelocks.
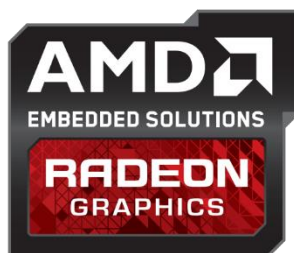
DESIGNED FOR SYSTEM INTEGRATION

The VPX architecture is diverse, spanning custom backplanes, complex system specifications, and differing input and output methodologies. That is precisely why WOLF modules come with factory configuration options to solve virtually all system integration challenges.

VITA 46 is the VPX base standard which specifies the original electrical and mechanical requirements for 3U and 6U modules. The VPX specification was extended in VITA 48 (VITA REDI, Ruggedized Enhanced Design Implementation) to support the increased operating power of high-density electronic modules by defining the mechanical design requirements needed to support enhanced cooling methods. VPX REDI also sets standards for the use of ESD covers on both sides of boards.

OpenVPX (VITA 65) is a system-level VPX specification designed to address interoperability between VPX boards and backplanes from multiple vendors.

This module has been designed to comply with VPX REDI (VITA 48) and OpenVPX (VITA 65).
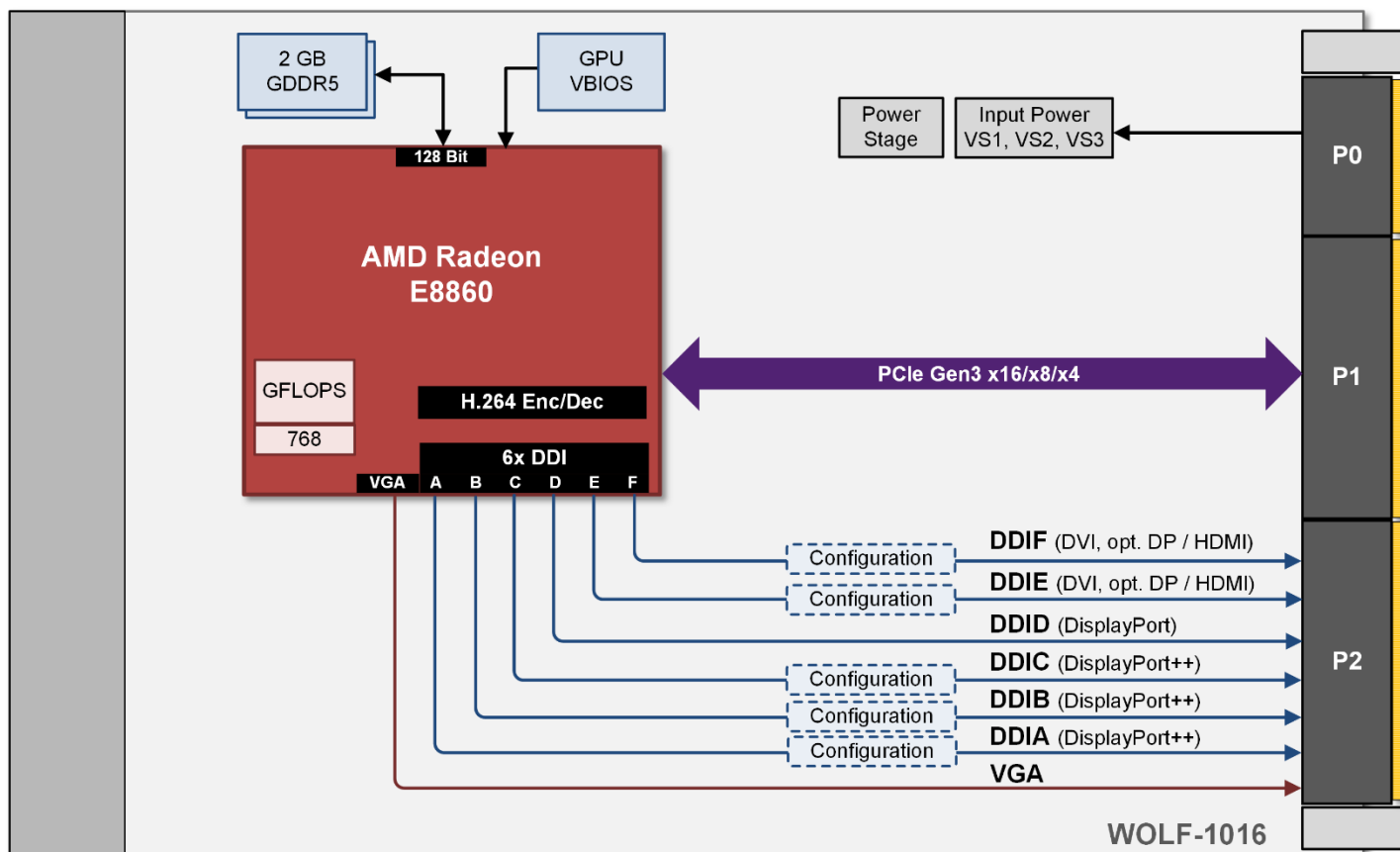
ORDERING CODES

The following table defines series of common order codes for the VPX3U-E8860-VO module. The asterisks denote characters of the part number that are defined based on common configuration options. Some common configuration options for this module are:

- Display Interfaces
- Conformal Coating Type
- Slot Pitch

- +12V / +5V Main Power
- Default Power Threshold
- Cooling Architecture

- RTOS options
- COTS, MCOTS or Variant Locked

	Ordering Number	Description
	3U VPX AMD E8860 Single Slot Configurations	
	101623-F7**VPX3v10	3U VPX, Air Cooled, 1", AMD E8860
	101633-F7**VPX3v10	3U VPX, Conduction Cooled, 1", AMD E8860

Contact Sales for the latest Ordering Numbers and available options

MANUFACTURING AND QUALITY ASSURANCE

WOLF designs modules to pass the following environmental standards:

- MIL-STD-810 (United States Military Standard for Environmental Engineering Considerations and Laboratory Tests)
- MIL-HDBK-217 (Reliability Prediction of Electronic Equipment)
- RTCA DO-160 (Environmental Conditions and Test Procedures for Airborne Equipment) on request

WOLF complies with the following quality management systems:

- AS9100D: Quality Management System - Requirements for Aviation, Space and Defense Organizations (certified)
- ISO 9001:2015: Quality management systems (certified)
- SAE AS5553: Counterfeit Electronic Parts; Avoidance, Detection, Mitigation, and Disposition (compliant)

Boards are manufactured to meet the following standards:

- IPC-A-610 CLASS 3 (Acceptability of Electronic Assemblies)
- IPC 6012 CLASS 3 (Qualification and Performance Specification for Rigid Printed Boards, Class 3 for High Reliability Electronic Products)
- IPC J-STD-001 (Requirements for Soldered Electrical and Electronic Assemblies)

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