VNX-FGX



WOLF FRAME GRABBER EXTREME, INCLUDES 4 SDI IN/OUT AND ANALOG

ADVANCE INFORMATION

KEY FEATURES

- WOLF Frame Grabber eXtreme (FGX) capture and process engine
- Up to four HD-SDI or two 3G-SDI inputs
- Up to four HD-SDI or two 3G-SDI outputs
- Up to four analog inputs and two analog outputs
- Low operating power, under 7.5W

ADDITIONAL FEATURES

- Analog input formats: 4 CVBS inputs or 2 CVBS and 2 STANAG inputs
- Analog output formats: 2 STANAG 3350 or VGA
- PCle x4 Gen2 with up to 2.0 GB/s
- Extended product lifespan
- Windows and Linux drivers
- RTOS drivers: VxWorks, Integrity, LynxOS, and others available

OVERVIEW

This versatile capture, process and display module includes WOLF's Frame Grabber eXtreme (FGX), built on Xilinx FPGA hardware. This module accepts multiple simultaneous inputs and can output multiple formats, including 3G-SDI, HD-SDI and analog (CVBS, STANAG 3350 or VGA). The module can also accept video sources from a GPU DisplayPort output or from a PCIe DMA stream for real-time conversion to SDI or analog output.

The raw data from each channel can be streamed with subframe latency to the host system or to a GPU for storage, analysis, enhancement, encode or display.

The rugged VNX-FGX module uses the compact VITA 74 specification which defines an extremely small form factor. This form factor is roughly 50 percent of the weight and 30 percent of the volume compared to a typical 3U VPX.

SPECIFICATIONS

■ Dimensions: 75mm x 89mm x 19.5mm

■ High level of ruggedization:

□ Rugged conduction-cooled

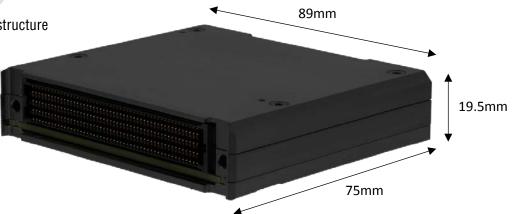
☐ Operating temperature: -40° to +85°C

□ Vibration (sine wave): 10G peak, 5 - 2000Hz

□ Shock: 30G peak for air-cooled, 40G peak for conduction-cooled

 High-speed 400-pin connector derived from VITA 57 FMC spec

■ Uses VPX signal mapping and bus structure

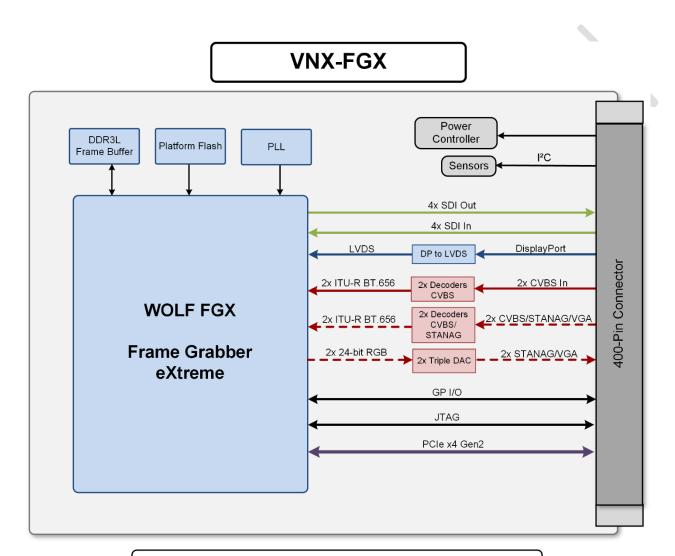


This is advance information and subject to change.

WOLF VNX Module



ADVANCE INFORMATION



Inputs and Outputs:

- Digital Inputs: Up to 4x SDI, DisplayPort
- Digital Outputs: Up to 4x SDI
- Analog Inputs: 4x CVBS or 2x CVBS and 2x STANAG/VGA
- Analog Outputs: 2x STANAG 3350/VGA



ADVANCE INFORMATION

VNX VITA 74 SMALL FORM FACTOR

The VNX VITA 74 specification was a response to an industry demand for a smaller form factor module that maintained many of the advantages of VPX. The VNX specification defines the physical size of the two standard size modules, the module connectors, and the pin assignments of the signals on the module connector. The base specification does not define the enclosure or the how the modules are to be packaged into a system, leaving that to the system designer. Modules are typically conduction cooled and do not include wedgelocks on the VNX enclosure. For higher power, higher performance applications VITA 74.7 defines a chassis that includes wedgelocks mounted in the chassis. VNX signal mapping and bus structure was derived from VPX, specifically VITA 46, providing inter-module connectivity.





MANUFACTURING AND QUALITY ASSURANCE

WOLF stress tests to MIL-STD-810 (United States Military Standard for Environmental Engineering Considerations and Laboratory Tests) and MIL-HDBK-217 (Reliability Prediction of Electronic Equipment); Alternately will stress test to RTCA DO-160 (Environmental Conditions and Test Procedures for Airborne Equipment) on request.

WOLF products meet the following quality standards:

- ISO 9001:2015 (Quality management systems)
- 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 Certified (Requirements for Soldered Electrical and Electronic Assemblies)

Boards are manufactured to meet the following standards:

- SAE AS9100D (Quality Management System Requirements for Aviation, Space and Defense Organizations)
- SAE AS5553 (Counterfeit Electronic Parts; Avoidance, Detection, Mitigation, and Disposition)











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