

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

### 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
- PCIe x4 Gen2 with up to 2.0 GB/s
- Extended product lifespan

### SPECIFICATIONS

- High level of ruggedization:
  - Rugged air-cooled or 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
- VITA 46.9 I/O compliant mapping for 3U and 6U VPX configurations
- Windows and Linux drivers
- RTOS drivers: VxWorks, Integrity, LynxOS, and others available
- Available with XMC 1.0 or XMC 2.0 configurations

### OVERVIEW

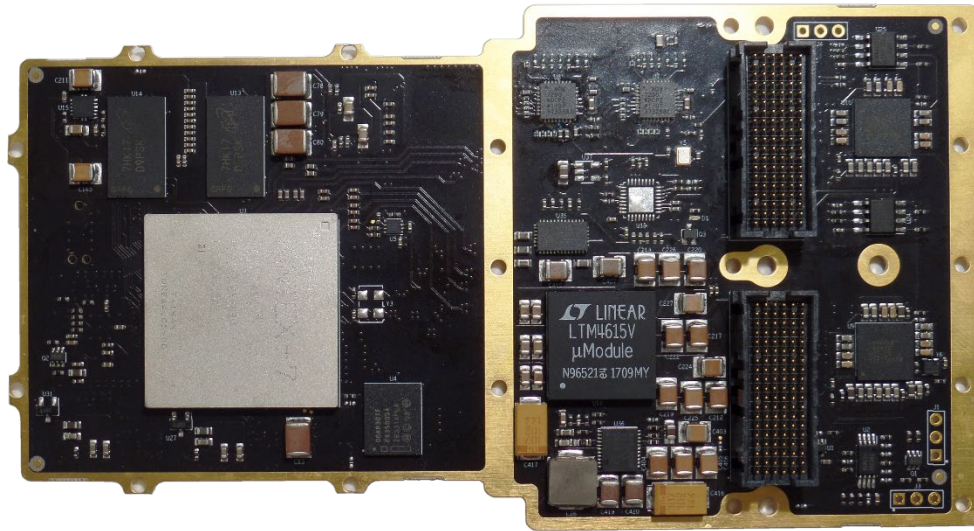
This versatile capture, process and display board includes WOLF's Frame Grabber eXtreme (FGX), built on Xilinx FPGA hardware. This board accepts multiple simultaneous inputs and can output multiple formats, including 3G-SDI, HD-SDI and analog (CVBS, STANAG 3350 or VGA). The module can also accept video 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 sub-frame latency to the host system or to a GPU for storage, analysis, enhancement, encode or display.

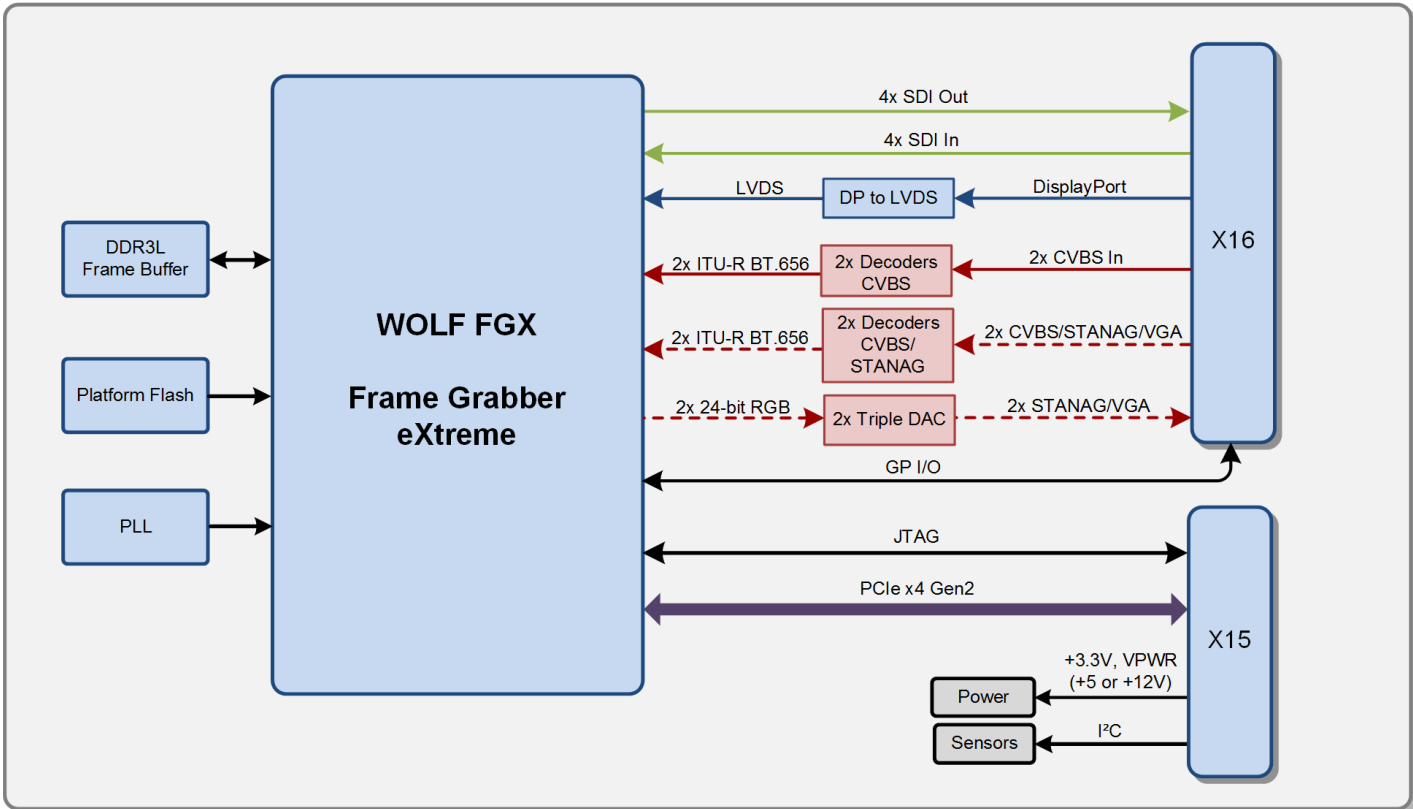
The WOLF FGX high-performance engine provides the flexibility required for fast, cost-effective MCOTS customization, allowing the module to be modified to interface with many video standards or system hosts.



**WOLF- 3080 XMC Module**



**XMC-FGX-SDI-4IO**



- 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

**WOLF-3080**

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## DESIGNED FOR SYSTEM INTEGRATION

The XMC architecture is diverse, spanning custom carrier cards, VPX platforms and differing input / output methodologies. That is precisely why WOLF modules come with factory configuration options to solve virtually all system integration challenges. Typical options include thermal dissipation threshold and module coating.

This module supports VPWR of +5V or +12V and is configurable for ANSI VITA 42 (XMC 1.0) and ANSI VITA 61 (XMC 2.0).

Further options are possible, such as pin mapping changes, rear connector height, enhanced cooling technologies and alternate video interfaces.

## MANUFACTURING AND QUALITY ASSURANCE

WOLF designs modules to pass the following environmental standards:

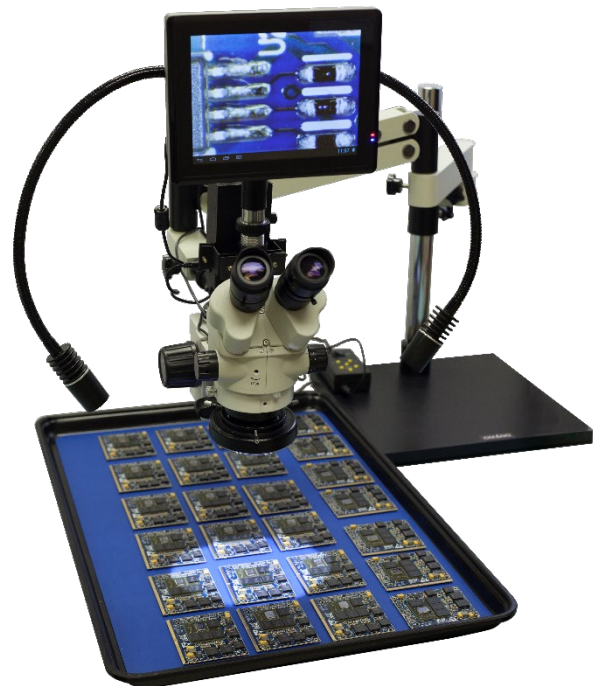
- MIL-STD-810 (United States Military Standard for Environmental Engineering Considerations and Laboratory Tests)
- MIL-HDBK-217 (Reliability Prediction of Electronic Equipment)
- RTCA DO-160 (Environmental Conditions and Test Procedures for Airborne Equipment) on request

WOLF complies with the following quality management systems:

- ISO 9001:2015: Quality management systems (certified)
- SAE AS5553: Counterfeit Electronic Parts; Avoidance, Detection, Mitigation, and Disposition (compliant)
- SAE AS9100D: Quality Management System - Requirements for Aviation, Space and Defense Organizations (preparing for certification in 2019)

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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