

Ultra Low-Latency Video Input/Output, Includes 3G/HD-SDI, Analog

PRELIMINARY INFORMATION

KEY FEATURES

- WOLF Frame Grabber eXtreme (FGX) capture and process engine
- Digital Inputs: up to 4x SDI, 3 DP
- Digital Outputs: up to 4x SDI
- Analog: up to 3x CVBS inputs, 3x RGB outputs
- Low operating power, under 9.5W

ADDITIONAL FEATURES

- Modifiable for alternate video formats (e.g., STANAG 3350)
- PCIe x4 Gen2 with up to 2.0 GB/s
- Extended product lifespan
- Windows (64-bit) and Linux drivers

SPECIFICATIONS

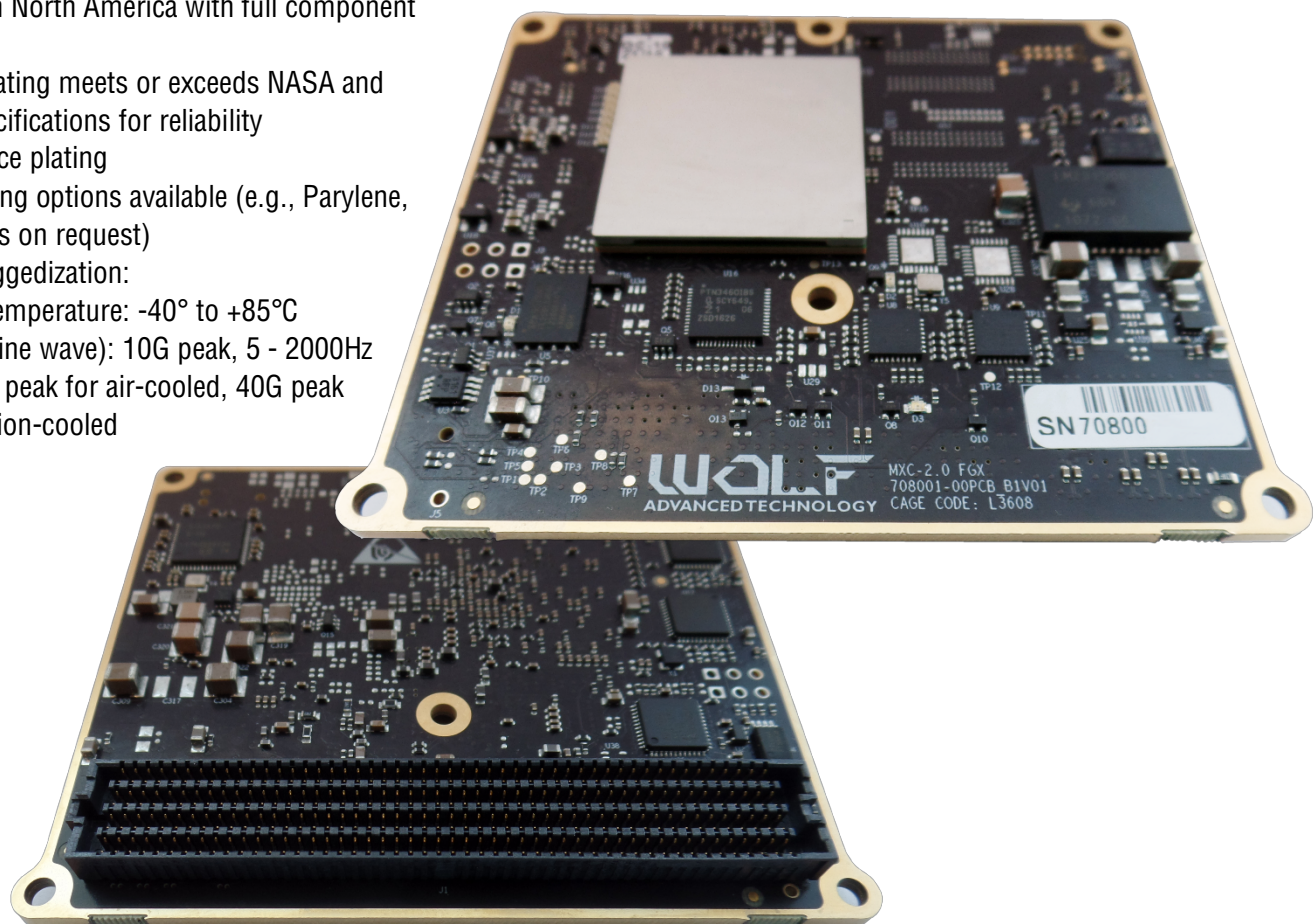
- 80x68mm mezzanine module, 400-pin connector
- Manufactured in North America with full component traceability
- Component derating meets or exceeds NASA and Rome Labs specifications for reliability
- ENIG PCB surface plating
- Conformal coating options available (e.g., Parylene, Humiseal, others on request)
- High level of ruggedization:
 - Operating temperature: -40° to +85°C
 - Vibration (sine wave): 10G peak, 5 - 2000Hz
 - Shock: 30G peak for air-cooled, 40G peak for conduction-cooled

OVERVIEW

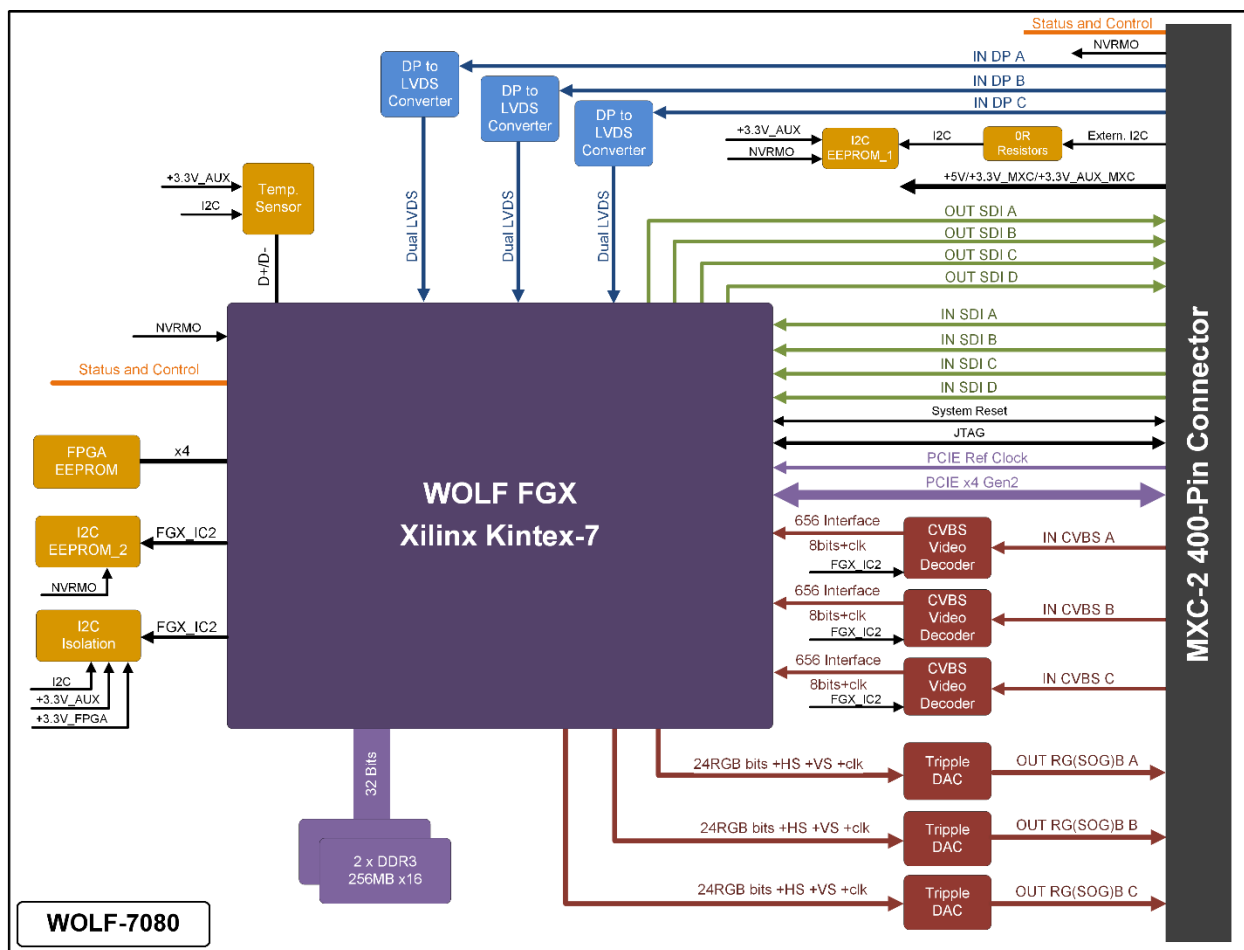
This versatile MXC capture, process and display module includes WOLF's Frame Grabber eXtreme (FGX), built on Xilinx FPGA hardware. This board accepts multiple simultaneous HD-SDI, 3G-SDI, DP and analog inputs and can output multiple HD-SDI, 3G-SDI and analog outputs. The module can also accept video sources 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 also 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-7080 MXC Module



MANUFACTURING AND QUALITY ASSURANCE

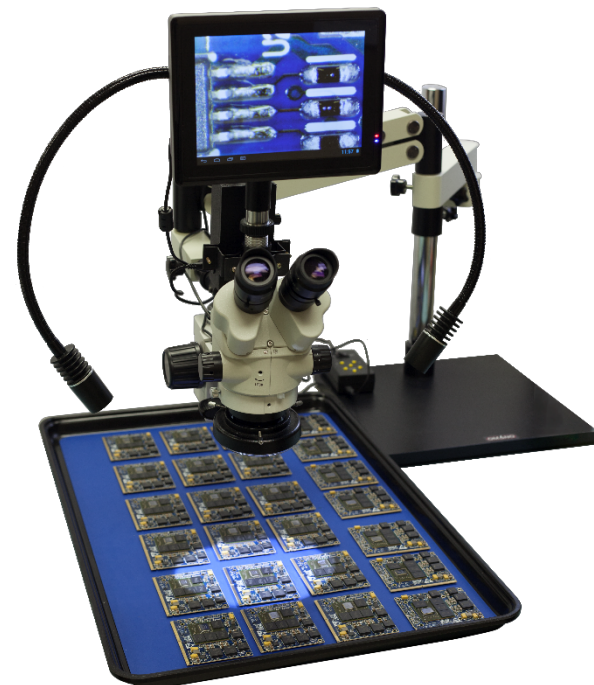
WOLF stress tests to MIL-STD-810 (United States Military Standard for Environmental Engineering Considerations and Laboratory Tests) and MIL-HDBK-217 (Reliability Prediction of Electronic Equipment); Alternately will stress test to RTCA DO-160 (Environmental Conditions and Test Procedures for Airborne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



WOLF -7080 MXC Module