

## HD-SDI INPUT TO DEDICATED HARDWARE H.264 ENCODING

### ADVANCE INFORMATION

#### KEY FEATURES

- Two HD-SDI (SMPTE 292M) inputs or one 3G-SDI (SMPTE 424M) input
- H.264 (AVC) output via Ethernet 10/100/1000
- STANAG-4609 KLV Metadata Injection over Ethernet or RS-232
- No operating system or software required
- Low operating power (less than 10 Watts)

#### ENCODING FEATURES

- AVC/H.264 encoding, High Profile Level 5.1
- Wide range of bitrates: 1 Kbps to 50 Mbps
- Support CBR, VBR, and capped VBR bitrates
- Programmable GOP structure
- Deinterlacing, Scaling, Noise Reduction
- Adaptive edge enhancement
- Adaptive contrast enhancement
- Color management
- Scene change detection
- Fade detection
- MPEG2 encode up to HD (MP@HL)
- Audio codecs: AAC-LC, MP2

#### SPECIFICATIONS

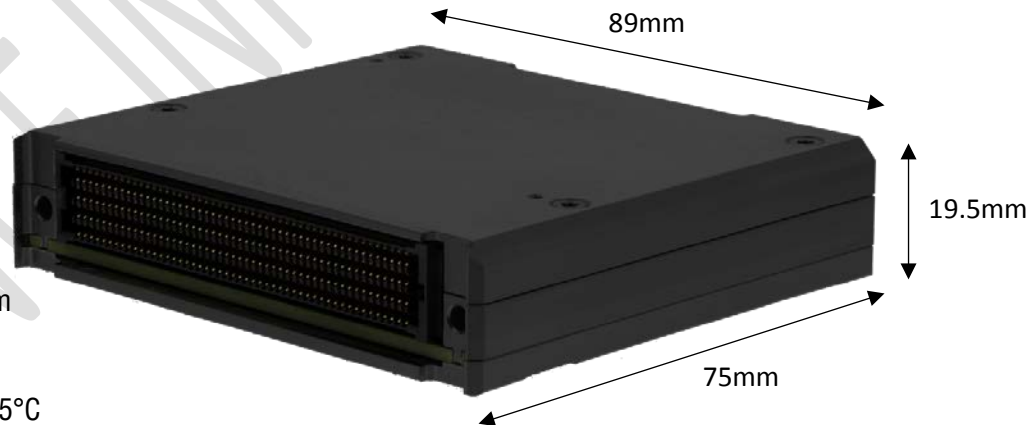
- Dimensions: 75mm x 89mm x 19.5mm
- High level of ruggedization:
  - Rugged conduction-cooled
  - Operating temperature: -40° to +85°C
  - Vibration (sine wave): 10G peak, 5 - 2000Hz
  - Shock: 30G peak for air-cooled, 40G peak for conduction-cooled
- High-speed 400-pin connector derived from VITA 57 FMC spec
- Uses VPX signal mapping and bus structure

#### OVERVIEW

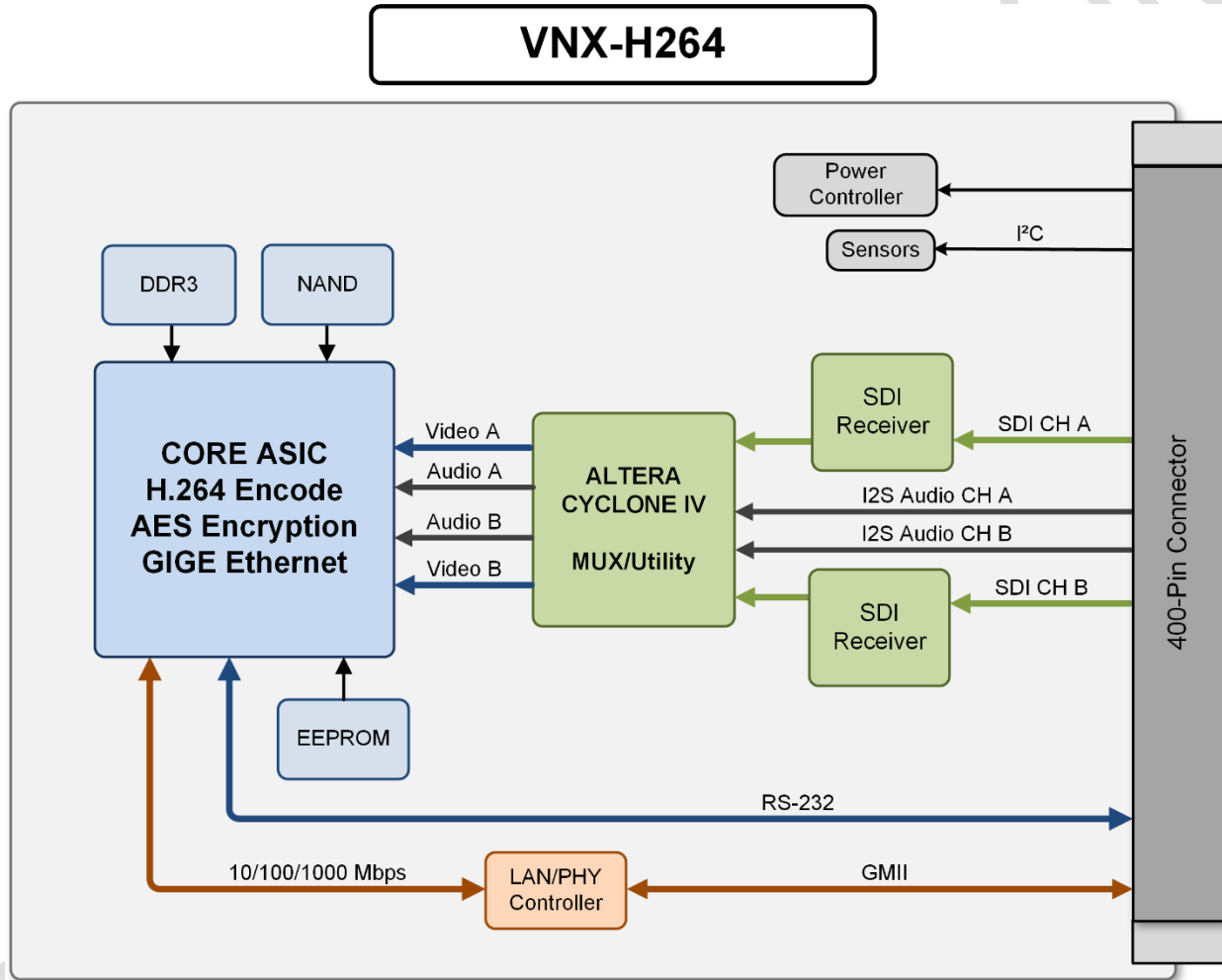
WOLF's VNX-H264 is a video and audio capture and encode module for aerospace and defense.

Absolutely no software or operating system is required for the VNX-H.264 module to operate. WOLF will preconfigure the module to your desired settings and the module will transmit a compressed H.264 video stream using UDP over Ethernet.

The rugged VNX-H264 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.



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### 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)



This is advance information and subject to change.

WOLF VNX Module