



Condor VPX-H265-SDI



Rugged 3U VPX H.265 (HEVC) or H.264 Video/Audio Encoder with Two 3G-SDI Inputs and CoT / KLV Metadata Insertion

Condor VPX-H265-SDI is a rugged 3U VPX H.265 (HEVC) / H.264 video encoding and streaming solution that is designed to serve video transmission needs in harsh field environments. With low latency encoding, streaming and low power consumption, this unique product offers a powerful solution for customers designing VPX systems.

The product is ruggedized to survive harsh environments (shock, vibration, humidity) and temperatures from -40°C to 85°C (MIL-STD-810). The 1" pitch, 3U VPX form factor card is easy to integrate into a VPX system.

Condor VPX-H265-SDI encodes and streams two 3G-SDI, HD-SDI or SD-SDI video inputs simultaneously using the highly versatile and widely used video encoding standards H.265 or H.264. H.265 (High Efficiency Video Coding or HEVC) provides increased video quality with a lower bitrate as compared to H.264. It can create multiple encoded video streams per input. The H.265 encoding parameters are highly configurable with support for baseline and main profiles, all with variable and constant bitrate configurations (512 Kbps to 30 Mbps). H.264 can also support high profile. The encoded video streams can be output from Ethernet or USB 3.0 and sent to recording products.

CoT and KLV metadata insertion is supported via RS-232 or Ethernet. CoT data can be converted to KLV and multiplexed into the MPEG-2 TS container. The resulting MPEG-2 TS video is then streamed out over UDP with optional RTP support headers. This standardization ensures interoperability with the decoders and displays retrieving the encoded stream.

Control of encoding settings and retrieval of health information are all performed using an API built around SNMP for simple and secure communication. This API is built for easy integration into existing customer applications. Several sample applications are provided to ensure prompt integration into a working system.

In the standard configuration, the product accepts two high definition video inputs in 3G/HD/SD-SDI format. Two stereo audio inputs, 1Gbps Ethernet, USB 3.0 & two RS-232 are also available.

To accommodate other video input formats and connector types, small modifications to the design are possible even for low volume opportunities.

EIZO Rugged Solutions, formerly Tech Source Inc, has provided graphics solutions for over three decades. Responsiveness has been the key to our success. Product customizations or new designs can be developed in a short time to meet your needs. The product comes with our commitment of availability for up to 10 years from the date of release and product support up to 15 years.

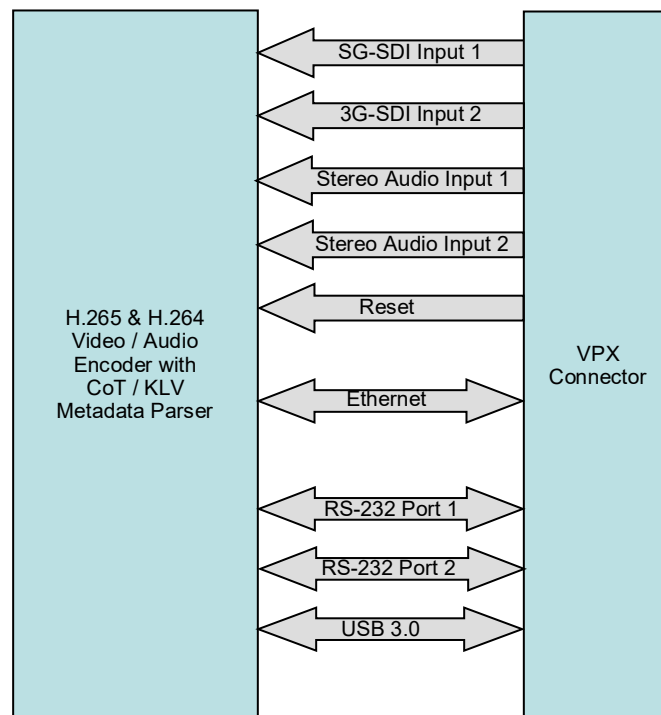
Key Features

- 3U VPX (1" Pitch)
- H.265 / H.264 Video Encoding & Streaming
- Two 3G-SDI / HD-SDI / SD-SDI Video Inputs
- 1Gbps Ethernet Output
- Main Profile (H.265 / HEVC)
- High, Baseline and Main Profiles (H.264)
- Two RS-232 or Ethernet for Metadata
- USB 3.0 (With Encoded Data)
- CoT & KLV Metadata Support
- MPEG-2 TS Muxing of Video and Audio
- Two Stereo Audio Inputs, AAC Audio Encoding
- -40°C to 85°C Operating Temperature
- Ruggedized for Vibration, Shock and Humidity (MIL-STD-810)
- SNMP Control Support
- Long Term Product Availability

Condor VPX-H265-SDI Specifications

Video Encoding & Decoding	H.265 HEVC. MPEG-2 Transport Stream H.264 AVC / MPEG-4 Part 10. MPEG-2 Transport Stream (Capable of creating multiple encoded video streams per input)
Encoding Profiles	H.265 (HEVC) - Main with Adjustable Bitrate. AAC Audio Encoding H.264 (MPEG-4 AVC) - High, Main and Baseline with Adjustable Bitrate. AAC Audio Encoding
Interfaces	Two 3G-SDI, HD-SDI or SD-SDI Video Inputs 1Gbps Ethernet w/ two MPEG-2 TS RTP/UDP Streams Two RS-232 for CoT/KLV Metadata Two Stereo Audio Inputs One USB 3.0 Port
Resolution Support	3G-SDI SMPTE 424M (1080p60, 50, 59.97 [Single-Link]) HD-SDI SMPTE 274M (1080p30) HD-SDI SMPTE 292M (1080i60, 720p60) SD-SDI SMPTE 259M (480i, 576i)
Operating Temperature	-40°C to 85°C
Shock / Vibration / Humidity	MIL-STD-810
Power Consumption	15W
Dimensions	3U VPX, 1" Pitch

Condor VPX-H265-SDI Block Diagram



Bringing your projects to life™



EIZO Rugged Solutions
Formerly Tech Source

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