

XPS Live Video Encoder Series

Real-Time 4K/UHD/3G/HD Video Encoder Module



XPS-EDGE video encoder module

XPS Live Video Encoder Series is Evertz' real-time high quality and low latency video encoder and decoder module for live streaming, cloud-based, REMI/remote production, OTT, and on-demand applications.

The XPS Live Video Encoder Series provides secure broadcast-quality video encoding at ultra-low latencies for mission-critical applications, supporting up to 4x simultaneous 1080p50/60 HD video encodes or decodes. It can be configured in software to switch between either a four-channel encoder, four-channel decoder or a combination of two encodes and two decodes. Additionally, the XPS Live Video Encoder Series supports up to 2160p50/60 4K UHD video resolutions with 16x channels of audio, with support for different compression standards such as H.265/HEVC or H.264 over any IP network.

The XPS Live Video Encoder Series also supports the latest patent-pending iTrak technology for multi-camera synchronization from multiple locations for cloud production using Evertz' BRAVO Studio.

Applications

- 4K remote contribution
- Monitoring return feeds
- Remote operation
- Remote monitoring
- REMI and remote production
- Esports
- Live interviews
- Mission command and control
- IPTV distribution
- Government and military
- Educational institutions



MIO-XPS SCORPION video encoder module

XPS

Features & Benefits

- Real-time ultra-low latency encoding and decoding with highest video quality for 24/7 up-time applications
- High density with quad-channel encode or decode, standalone or rack mount chassis options
- Native support of protocols such as SRT/RIST/Zixi/RTMPS for streaming over lossy networks like the Internet
- High availability with dual power supply options
- Multiple form-factors to suit all applications



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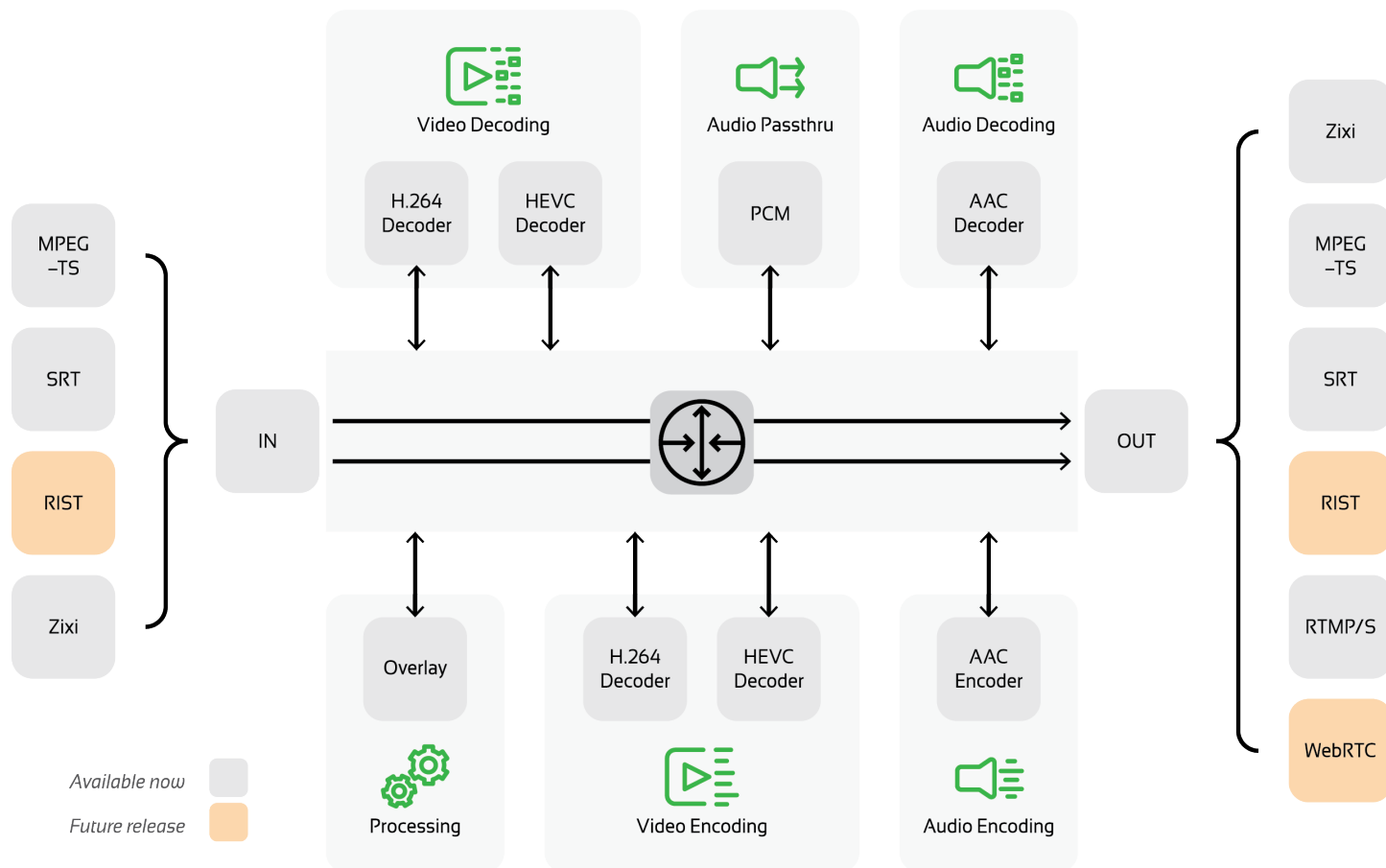


Figure: high-level XPS functional diagram. Please contact Evertz Sales for more information.



5782XPS encoder and decoder blade, shown with fully loaded 3RU chassis

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Specifications

Channels: 4x 3G-SDI or 1x 4K/UHD

Video Inputs/Outputs:

Standards: SD, HD, 3G, UHD (12G-SDI)
Interfaces: 2x RJ-45 1GbE
Streaming: Unicast, multicast
Protocols: MPEG transport, SRT, RIST, RTMP
Codecs: H.265/HEVC, H.264
Chroma Subsampling: 4:2:0/4:2:2

Bit Depth: 8-bit, 10-bit
Audio: 16 channels per input
Embedded:
SD: SMPTE ST 272M
HD: SMPTE ST 299M
Compression: AAC LC

VANC:

- SMPTE ST 2038 support

Control:

Interface: Ethernet or serial
Management: HTTPS, SNMP, API, VistaLINK® PRO, MAGNUM and VUE

Electrical (XPS-EDGE-HW):

Power: 12VDC @ 48W

Physical (XPS-EDGE-HW):

Dimensions: 14.88" W x 1.85" H x 4.13" D
(378mm x 47mm x 105mm)
Includes L-shaped brackets and rubber feet

Compliance (XPS-EDGE-HW):

Safety: TUV listed, complies with CAN/CSA-C22.2 No. 62368-1:2014, UL 62368-1:2014, IEC 62368-1:2014 (Second Edition), IEC 60950-1:2005, AMD1:2009, AMD2:2013
EMC/EMI: CISPR 32:2019/ EN55032:2020, CISPR 35:2016/ EN55035:2017, FCC Part 15 Subpart B, ICES-003:2020

Ordering Information

Standalone Ordering Information:

XPS-EDGE-1E-STRM	Evertz Standalone Fanless XPS Streaming Encoder Appliance, H.264/HEVC, UHD/3G/HD/SD-SDI to IP Single channel Video Encoder with SRT/RIST included.
XPS-EDGE-2E-STRM	Evertz Standalone Fanless XPS Streaming Encoder Appliance, H.264/HEVC, 3G/HD/SD-SDI to IP Dual channel Video Encoder with SRT/RIST included.
XPS-EDGE-3E-STRM	Evertz Standalone Fanless XPS Streaming Encoder Appliance, H.264/HEVC, 3G/HD/SD-SDI to IP Three channel Video Encoder with SRT/RIST included.
XPS-EDGE-4E-STRM	Evertz Standalone Fanless XPS Streaming Encoder Appliance, H.264/HEVC, 3G/HD/SD-SDI to IP Quad channel Video Encoder with SRT/RIST included.
XPS-EDGE-1D-STRM	Evertz Standalone Fanless XPS Streaming Decoder Appliance, H.264/HEVC, IP to UHD/3G/HD/SD-SDI Single channel Video Decoder with SRT/RIST included.
XPS-EDGE-2D-STRM	Evertz Standalone Fanless XPS Streaming Decoder Appliance, H.264/HEVC, IP to 3G/HD/SD-SDI Dual channel Video Decoder with SRT/RIST included.
XPS-EDGE-3D-STRM	Evertz Standalone Fanless XPS Streaming Decoder Appliance, H.264/HEVC, IP to 3G/HD/SD-SDI Three channel Video Decoder with SRT/RIST included.
XPS-EDGE-4D-STRM	Evertz Standalone Fanless XPS Streaming Decoder Appliance, H.264/HEVC, IP to 3G/HD/SD-SDI Quad channel Video Decoder with SRT/RIST included.
XPS-EDGE-1E1D-STRM	Evertz Standalone Fanless XPS Streaming Encoder/Decoder Appliance, H.264/HEVC, UHD/3G/HD/SD Single channel Video Encoder/Decoder with SRT/RIST included.
XPS-EDGE-2E2D-STRM	Evertz Standalone Fanless XPS Streaming Encoder/Decoder Appliance, H.264/HEVC, 3G/HD/SD 2x2 channel Video Encoder/Decoder with SRT/RIST included.

Modular Ordering Information:

5782XPS-HW	Evertz Modular XPS Video Encoder and/or Decoder Hardware only (single slot) for use in Evertz 570FR. Maximum of 2x2 bi-directional or four (4) unidirectional paths. Channel Keys sold separately.
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Channel Key Options:

XPS-STRM-CK-HEVC-422D-3G	Single Streaming Channel Key HEVC/H.264 Decoder with SRT for 3G/HD/SD video formats.
XPS-STRM-CK-HEVC-422D-3G-2	Dual Streaming Channel Key HEVC/H.264 Decoder with SRT for 3G/HD/SD video formats.
XPS-STRM-CK-HEVC-422D-3G-4	Quad Streaming Channel Key HEVC/H.264 Decoder with SRT for 3G/HD/SD video formats.
XPS-STRM-CK-HEVC-422E-3G	Single Streaming Channel Key HEVC/H.264 Encoder with SRT for 3G/HD/SD video formats.
XPS-STRM-CK-HEVC-422E-3G-2	Dual Streaming Channel Key HEVC/H.264 Encoder with SRT for 3G/HD/SD video formats.
XPS-STRM-CK-HEVC-422E-3G-4	Quad Streaming Channel Key HEVC/H.264 Encoder with SRT for 3G/HD/SD video formats.

Enclosures:

570FR	3RU compact high density distribution frame, holds up to 15x single-slot modules with a 750W power supply
+570PS	Redundant power supply for 570FR