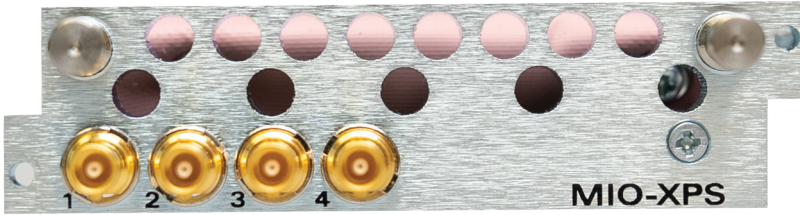


MIO-XPS

High VQ Low Latency HEVC Encoder & Decoder

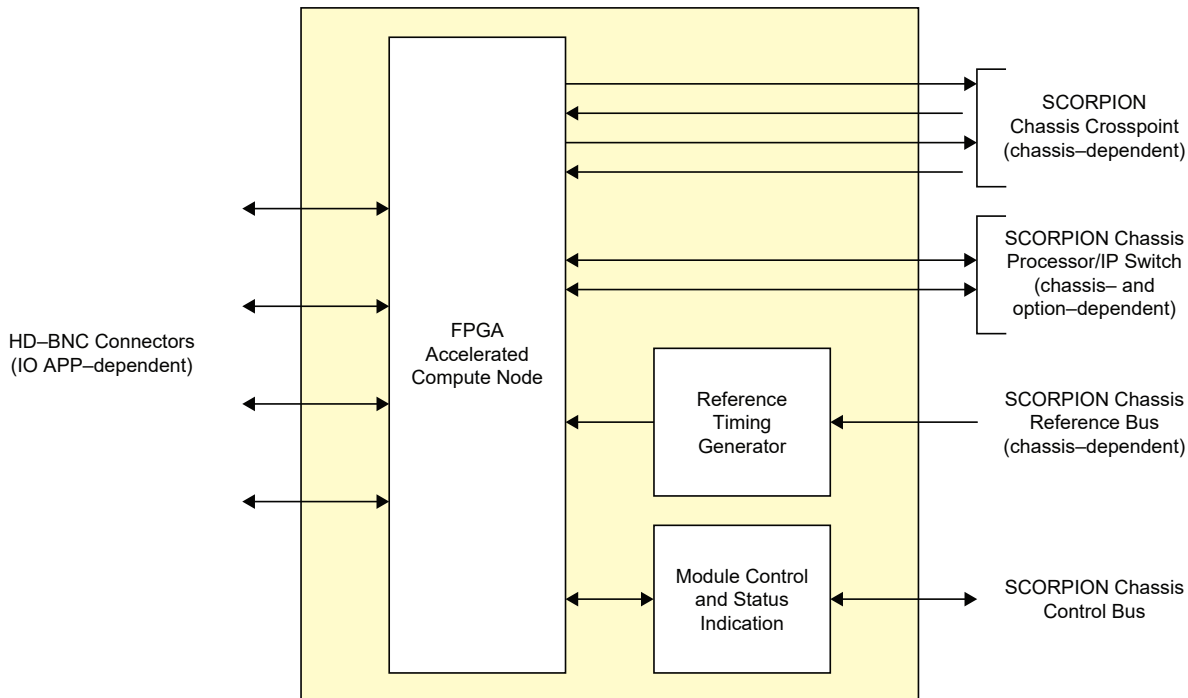


MIO-XPS is part of Evertz XPS encoder series, a set of high quality and low latency video encoder decoder devices for video transport, remote production, cloud on-ramp, Internet streaming and disaster recovery applications.

As a part of the SCORPION platform, MIO-XPS has the advantage of leveraging the catalogue of signal support and processing functions in the MIO toolkit. Embed discrete microphones, timecode or GPIs, perform up/down/cross conversion, color correction or adjust audio levels. Create your customized remote network on-ramp using MIO-XPS in the SCORPION platform.

Features & Benefits

- Dual-slot MIO module
- 4x HD-BNC connectors
- 3G/HD support (12G ready)
- Can be deployed across all SCORPION chassis
- Requires SCORPION-18-PSX-HP/PS3/PS6 when used in SCORPION-X18
- Integrated control and monitoring using MAGNUM, VUE, VistaLINK® PRO, inSITE
- Device-hosted web GUI and web API



MIO-XPS

High VQ Low Latency HEVC Encoder & Decoder



Specifications

Power Consumption:

20W

Physical Requirement:

Dual-slot MIO

Operating Temp.: 0–85°C

Electrical Inputs:

Reclocked Standards:

SMPTE ST 2081
(12G-SDI),
ST 424M (3GB/s),
ST 292M (1.5GB/s),
ST 259M (270MB/s),
DVB-ASI

Connector:

HD-BNC

Impedance:

75Ω (nominal)

Equalization:

Automatic to
80m @ 3GB/s,
100m @ 1.5GB/s,
250m @ 270MB/s
(with Belden 1694A or
equivalent cable)

Return Loss:

>15dB up to 1.5GHz,
>10dB up to 3GHz,
>7dB up to 6GHz,
>4dB up to 12GHz

Electrical Outputs:

Connector:

HD-BNC

Impedance:

75Ω (nominal)

Signal Level:

800mV (nominal)

DC Offset:

0V ±0.5V

Rise and Fall Time:

12G:

<45ps

HD/3G:

<135ps

SD:

<900ps

Overshoot: <10% of amplitude

Alignment Jitter: <0.2UI to 270MB/s (1kHz),

<0.2UI to 1.485GB/s

(100kHz),

<0.3UI to 2.97GB/s

(100kHz),

<0.3UI to 12GB/s

(100kHz)

Timing Jitter:

<0.2UI to 270MB/s (10Hz),

<1UI to 1.485GB/s (10Hz),

<2UI to 2.97GB/s (10Hz),

<8UI to 12GB/s (10Hz)

Software Services

MIO-XPS-1E1D

- 720p, 1080i, 1080p support
- HEVC encoder and decoder
- 4:2:2 10-bit encoding profile
- 10–50Mbps encoded rate
- 150ms latency
- 16-channel PCM audio passthrough
- 8-channel AAC-LC audio encoding
- SMPTE ST 2038 ANC support
- Decoder frame sync
- SMPTE ST 2022-2/7 transport
- SRT transport with stream encryption

Ordering Information

MIO-XPS

Dual slot module for low latency HEVC compression. Supports 1 encode and 1 decode of 3G/HD-SDI using HEVC 10b422 and transport using ST2022-2/7 or SRT. For use in any SCORPION chassis types.

Channel License Options:

evEDGE-HEVC-E

evEDGE license to enable a single channel of HEVC encoding up to 422-10bit. Applicable for 3G/HD signal rates and includes AAC-LC compression.

evEDGE-HEVC-D

evEDGE license to enable a single channel of HEVC decoding up to 422-10bit. Applicable for 3G/HD signal rates and includes AAC-LC compression.

evEDGE-RUDP

evEDGE license for a single path of reliable UDP transport over congested or unmanaged networks.

Enclosures:

SCORPION-SX18

1RU SCORPION chassis. Supports up to 18 single or 8 dual slot modules, 18 SFP slots, and 2 QSFP slots. Includes integrated 12G crosspoint, internal ethernet switch, power module, and power brick. Frame controllers not included.

SCORPION-6

Silent standalone SCORPION chassis. Supports up to 6 single, or 3 dual slot modules and up to 2 SFP slots. Integrated crosspoint routing and gateway support for either ST2022-1/2/6/7 or ST2110.

SCORPION-2

Silent miniature SCORPION chassis. Supports up to 2 single, or one dual slot module and up to 4 SFP slots.