

The low latency processor configured with JPEG XS compression



With the JPEG XS option, based on IntoPix's ISO standardized JPEG XS codec, Axon's Neuron product line is enhanced with compression and decompression functionality.

JPEG XS is designed for latency-critical applications and offers lossless quality video compression at low complexity. At a compression ratio of 10:1 the quality is visually lossless, with only a few lines latency.

Same hardware, different software

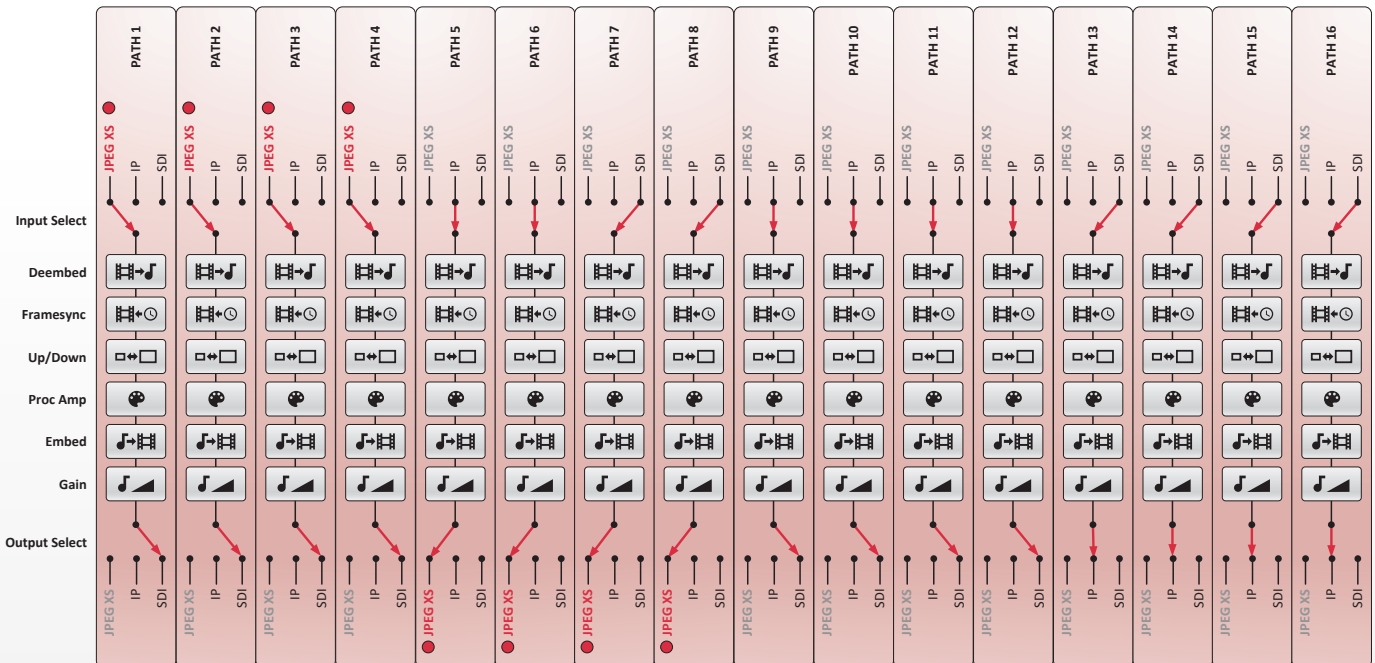
The JPEG XS encoder and decoders run on the same hardware as Neuron's general processing module. By uploading different firmware to this board, up to 8 HD encoders/decoders or up to 4 UHD encoders/decoders can be added.

The decoders and encoders are added to the standard 16 HD processing or 4 UHD paths which allows for (de)compression, frame syncs, video delay, up/down/cross conversion from and to UHD, Proc amps, de-embedding & embedding and more on a single module.

The inputs and outputs of the 16 processing paths can be freely configured to use SDI, ST2022 or ST2110 or (de)compressed JPEG XS feeds. This means when you enable e.g. 4 HD encoders and 4 HD decoders, you have 8 paths left for SDI to IP, IP to SDI or IP to IP processing. See example below.

KEY FEATURES:

- Reconfigurable JPEG XS encoders and decoders
- 16 internal HD or 4 UHD channels (4Q or 2SI, 12G supported)
- Audio Embedding and deembedding
- 16 Framesyncs with delay and proc amps
- Up/down/cross conversion from and to UHD



Example configuration of an NPJ44HC. With 4 JPEG XS encoders and 4 JPEG XS decoders enabled, there are still 8 paths usable for IP to SDI and SDI to IP processing

Firmware versions and configurations

A variety of firmware version is available which can be configured with various numbers of JPEG XS encoders and/or decoders. Contact Axon for the various options.