

7772MFX-HD

JPEG2000 SD & HD Encoder and Decoder

The 7772MFX-HD is a JPEG2000 SD & HD encoder and decoder card. The 7772MFX-HD is the most versatile JPEG2000 codec on the market. It offers variable JPEG2000 compression rate on SDI or ASI. The 7772MFX-HD can be reconfigured on the fly to be used as a JPEG2000 encoder or JPEG2000 decoder. The 7772MFX-HD also supports pass through of up to 4 AES groups (8 pairs) of audio embedded or can do the embedding of the audio. The card functions are controlled from the card edge or through the VistaLINK® interface.

The 7772MFX-HD is the perfect product to back haul or archive high quality contribution video with low end-to-end delay. The JPEG2000 offers superior quality than MPEG-2 codec without the MPEG-2 blocking artifacts.

►Features & Benefits

- Supports 1080i/59.94, 1080i/50, 720p/59.94, 720p/50, 480i/29.97, 576i/25
- Automatic detection of input format
- Handles up to 8 embedded AES pairs of audio (Pass through, no compression)
- Built-in audio embedder/de-embedder
- All VANC & HANC passthrough

- SDI framing with embedded uncompressed audio
- ASI framing with JPEG2000 encapsulated as piped data
- VistaLINK® capability is available when modules are used with the 3RU 7800FR frame and a 7700FC VistaLINK® Frame Controller module in slot 1 of the frame

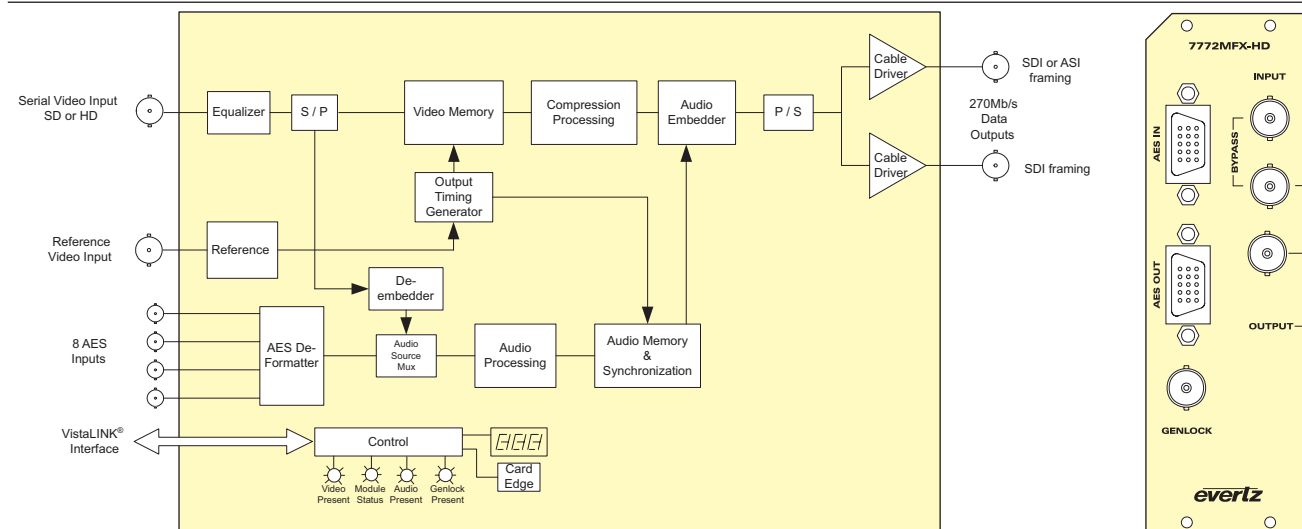
Additional Encoder Features

- Variable video Bitrate from 30 to 50Mb/s for SD and 65 to 160Mb/s for HD
- Offers control over encoding parameters for optimizing encoding depending on application

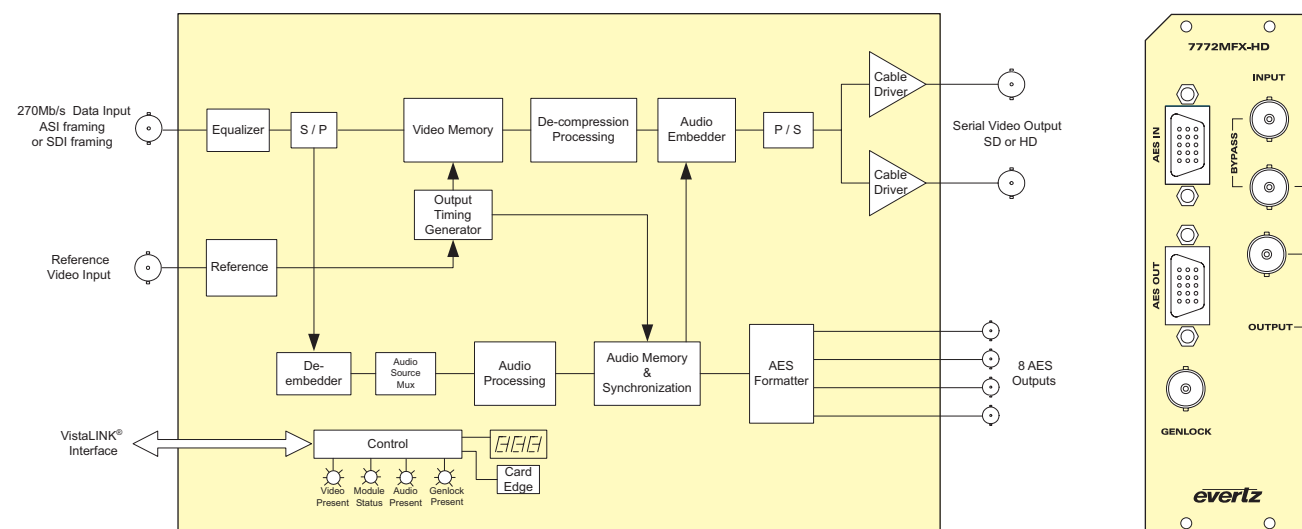
Additional Decoder Features

- Audio delay processing to match video decompression delay
- Eight separate stereo unbalanced outputs

►Encoder



►Decoder



► Specifications

Serial Video Inputs/Outputs:

Standard:
 HD: SMPTE 292M, (1080i/59.94, 1080i/50, 720p/59.94, 720p/50)
 SD: SMPTE 259M (480i/29.97, 576i/25)
 Number of Inputs: 1 (Encoder)
 Number of Outputs: 2 (Decoder)
 Connector: BNC per IEC 61169-8 Annex A

JPEG2000 Over SDI Inputs/Outputs:

Standard: SMPTE 259M-C (270Mb/s)
 Number of Inputs: 1 (Decoder)
 Number of Outputs: 2 (Encoder)
 Connector: BNC per IEC 61169-8 Annex A
 Signal Level: 800mV nominal

JPEG2000 Over ASI Inputs/Outputs:

Standard: DVB TR 101 891-270Mb/s
 Number of Inputs: 1 (Decoder)
 Number of Outputs: 1 (Encoder)
 Min ASI TS output bitrate 20Mb/s
 Max total ASI TS output bitrate 212Mb/s

AES Audio Inputs/Outputs:

Standard: SMPTE 276M, single ended AES
 Number: 8
 Sampling Rate: 48kHz
 Impedance: 75Ω unbalanced
 Embedding: SMPTE 272M

Encoding parameters:

Encoding: CBR or capped VBR mode
 Bitrate setting: 30 to 50Mb/s for SD
 65 to 160Mb/s for HD
 Control of codec parameters:
 Video Bit rate separately adjustable for luma and chroma
 JPEG2000 Progression Style
 Output Code Stream Format
 Control: VistaLINK® offers setup and remote monitoring of the card
 Card edge control for easy setup

Reference Input:

Connector: 1 BNC per IEC 61169-8 Annex A
 Type: NTSC/PAL Color Black (1V p-p) or composite bi-level sync (525i/59.94 or 625i/50) 300mV
 Termination: 75Ω jumper selectable

Encoding/Decoding Delay:

Total Delay: 4 frames interlaced
 6 frames progressive

Electrical:

Voltage: +12V DC
 Power: 15W
 EMI/RFI: Complies with FCC Part 15, Class A
 EU EMC Directive

Physical:

350FR: 2
 7700FR-C: 2
 7800FR: 2

► Ordering Information

7772MFX-HD JPEG2000 SD & HD Encoder and Decoder

Ordering Options Rear Plate and Fiber Connector must be specified at time of order
 Eg. Model +3RU

Rear Plate Suffix

+3RU 3RU Rear Plate for use with 350FR, 7700FR-C or 7800FR Multiframe
 +1RU 1RU Rear Plate for use with 7701FR Multiframe
 +SA Standalone Enclosure Rear Plate

Enclosures

350FR
7700FR-C
7800FR
7701FR
S7701FR

3RU Portable Multiframe which holds up to 7 single slot modules
 3RU Multiframe which holds up to 15 single slot modules
 3RU Multiframe which holds up to 15 single slot modules
 1RU Multiframe which holds up to 3 single or dual slot modules
 Standalone enclosure

