The 7880IPG8-10GE2 is the optimal Media Gateway video interface access card for video transport applications.

With direct conversion of up to 6 signals to direct mezzanine compression via JPEG2000, the 7880IPG8-10GE2 series delivers unparalleled processing densities. 7880IPG8-10GE2 port 7 & 8 also support up to 2 dedicated signal paths which could carry ASI.

7880IPG8-10GE2 also supports HD/SDI, SD/SDI and ASI encapsulation. Encapsulation can be configured for any path 1-8 over a 10Gig interface or user configurable 1 Gig interface.

The 7880IPG8-10GE2 feature Evertz 3rd generation ultra low latency, high density JPEG2000 codec technology over 10GE Ethernet or user configurable 1GE Ethernet

The 7880IPG8-10GE2 also provides per input AVM monitoring, auto-timing, time stamped Ethernet outputs, multi-resolution JPEG2000 streaming outputs.

The 7880IPG8 series modules incorporates patent pending multi-path, multi-flow packet merge base network bit error resilience for 100% QoS.

A HOT Redundant (HTR) is also available provide 100% uptime under all electronic circuitry faults.

7880IPG8-10GE2 can be managed via Integrated HTTP web interface as well as SNMP management via Frame Controller.

#### Features & Benefits

- 6 x 3G/HD/SD JPEG2000 Encoder/Decoder Standards Supported: 1080p/59.94, 1080p/50,1080i/59.94,1080i/50, 720p/59.94,720p/50, 525i/59.94, 625i/50
- 3G/HD/SD/ASI Encapsulation over 10Gig or 1Gig
- · Mezzanine Encode Processing and encapsulation over IP:
- Video JPEG2000 encoded to native resolution
- 4 groups of audio encapsulated (8 groups for validated 1080p/60 sources)
- Full VANC encapsulation without delay

### • Mezzanine Decode Processing:

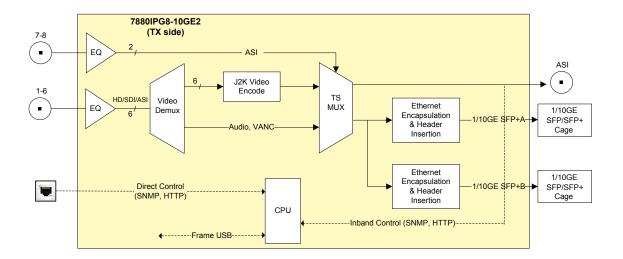
- Video JPEG2000 decoded from native resolution
- 4 groups of audio de-capsulated (8 groups for validated 1080p/60 sources)
- Full VANC decapsulation and embedding on SDI outputs
- Integrated Cross Connect for regeneration of SDI outputs

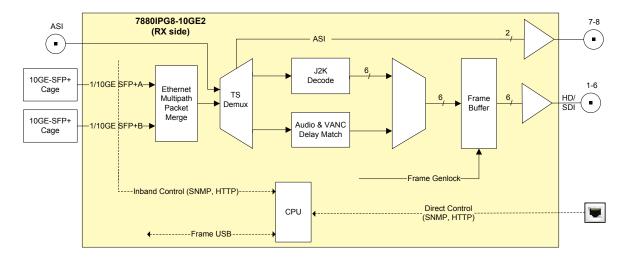
#### Timing Management

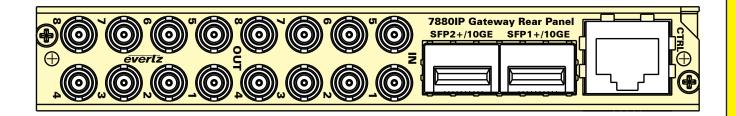
- 7880IPG8-10GE2 accept streaming UTC via 10GE connection
- Time-stamping of all content output over ethernet (UTC at time of reception)
- Features a frame buffer that can be locked to local genlock or UTC and can be used for output phase alignment and auto timing between baseband and J2K signals

## · Control and Baseband Processing

- · Modules support control over frame ethernet or inband from 10G interface
- Modules have on board AVM on all baseband signals
- SNMP control from Vistalink or Magnum Unified Control
- · REM-RX features re-direction of received J2k signal for NOC monitoring







# **▶** Specifications

Serial Digital Video:

Standards: SMPTE 424M (3Gb/s), SMPTE

292M (1.5Gb/s), SMPTE 259M

(270Mb/s), DVB-ASI

Serial Video Input: Number of Inputs:

DIN Connector: Input Equalization:

Automatic to 100m @ 3 Gb/s, 150m @1.5 Gb/s & 350m @ 270 Mb/s Return Loss: >15dB up to .5 GHz, >10dB up to

3 GHz

Serial Video Output:

Number of Outputs: Connector: DIN

Per SMPTE spec Rise and Fall Time:

Ethernet Interface: Dual 10GE from SFP10G-TR13-A

Dual 1GE from SFP1G-TR13
Dual 1GE from SFPTR-RJ45-SGM-AV (User Configurable for 10GE or 1GE)

Encapsulation: MPEG2 TS over IP

Ethernet/IP Signaling: Multicast IGMP V2/V3 (SSM

Support)

Embedding of HANC & VANC:

4x Groups Audio Pass through per encoder All type of VANC data pass through

Electrical:

Power: 40W

Voltage 12VDC FMI/RFI:

Complies with FCC Part 15, Class AEU EMC directive

Physical (number of slots):

**Enclosures:** 

3RU chasis 7801FR: 1RU chasis

# Ordering Information

7880IPG8-10GE2

Hybrid Baseband/Ethernet Infrastructure - Media Gateway (Integrated HTTP web interface or requires Frame Controller for

SNMP)

Ordering Options:

**Processing Modules:** 

8x Baseband Input/Output Hybrid Interface processing module 7880IPG8-10GE2:

(video encapsulation only, no JPEG2000 licenses)

Licensing options:

7880IPG8-CK-J2KF J2K Encode License 7880IPG8-CK-J2KD J2K Decode License

SFP Modules:

SFPTR-RJ45-SGM-AV 1GE electrical SFP SFP1G-TR13 1GE optical SFP SFP10G-TR13 10GE optical SFP+

Rear Panel:

7880IPG8-10GE2 Rear panel with 8 DIN Input/Outputs (2 Slots) RP-7880IPG8-DIN: