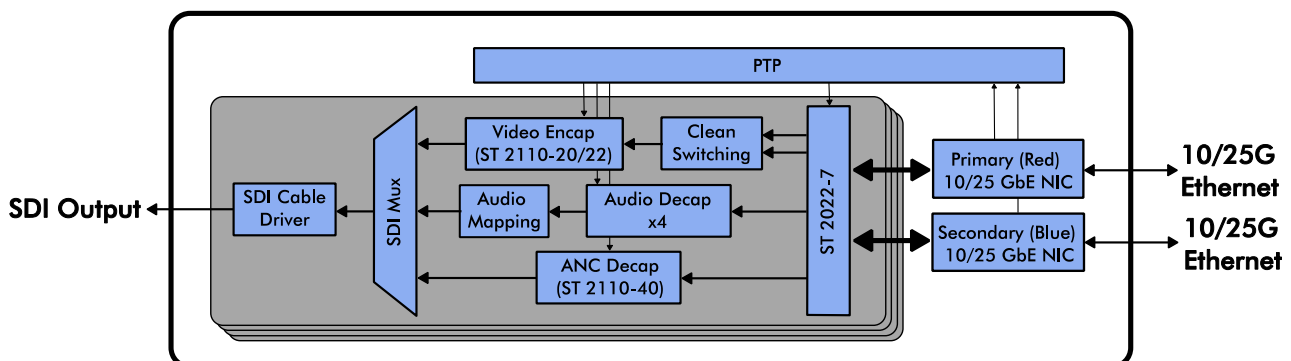
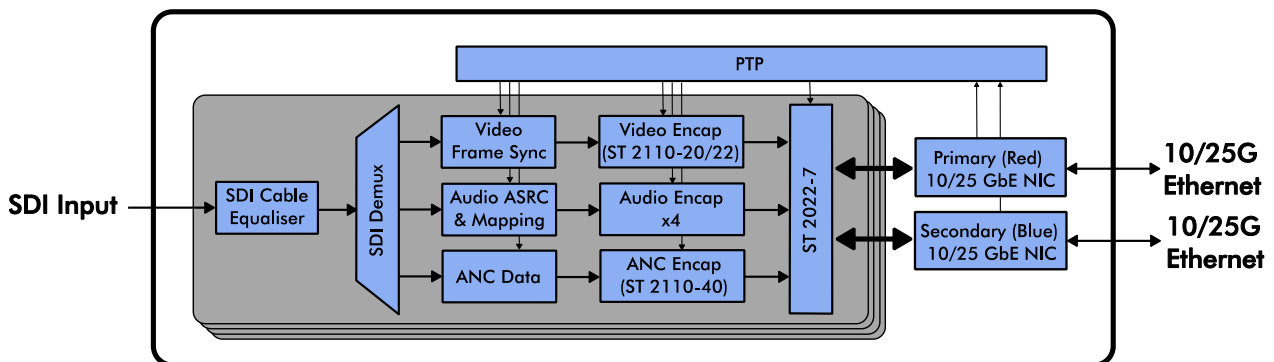


BC880 UHD ST2110 Gateways



Description:

- Modular card version for integration into rack-mounted systems.
- Supports conversion between SDI and ST2110 and JPEG-XS IP formats.
- Available in two configurations — 2-channel for up to 12G-SDI, or 4-channel for up to 3G-SDI, with support for frame rates up to 60p.
- Supports PTP for accurate timing and synchronisation across all devices.
- Includes a USB-C port for out-of-band setup using BluebellConnect software.
- Supports NMOS and Ember+ protocols or can be managed via a RESTful API.
- ST 2022-7 - Features dual 25G Ethernet ports across all models; Dual 10G Ethernet ports for JPEG-XS or 2T2R versions.
- Supports out-of-band configuration via USB-C or network connection, allowing secure and independent system setup and management.
- Optional PTP-synchronised genlock outputs provide precise timing and synchronisation for video and audio signals



Specifications

SDI I/O	
Standards Compliance	HD-SDI: SMPTE ST 292 3G-SDI: SMPTE ST 424 6G-SDI: SMPTE ST 2081 12G-SDI: SMPTE ST 2082
Input Equalisation (Typical)	Automatic to: HD-SDI: 240m @ 1.485 Gb/s 3G-SDI: 170m @ 2.97 Gb/s 6G-SDI: 90m @ 5.94 Gb/s 12G-SDI: 70m @ 11.88 Gb/s
I/O Return Loss	<15 dB, 5 MHz – 1.485 GHz <10 dB, 1.485 GHz – 3 GHz <7 dB, 3 GHz – 6 GHz <4 dB, 6 GHz – 12 GHz
Connectors	75-ohm BNC per IEC 60169-8, Amendment 2
IP	
IP Media Ports	2x 25GbE via two SFP28 Transceivers
Hitless redundancy support	Full support through dual physical links ST2022-7 applies to receiver and sender streams Class D and A
Encapsulator Input	1x SDI
Encapsulator Output	1x ST2110-20 (Video) 4x ST2110-30 (Audio) 1x ST2110-40 (ANC)
Decapsulator inputs	1x ST2110-20 (Video) 4x ST2110-30 (Audio) 1x ST2110-40 (ANC)
Decapsulator Output	1 x HD-SDI
PTP Support	ST2110-10 (AES-R16-2016)
Traffic Shaping	ST2110-21 Senders: Narrow Gapped Receivers: Narrow Gapped, Narrow Linear & Wide

Compressed Audio:	ST2110-31
Encapsulation Processing delay	<ul style="list-style-type: none"> Video w/o frame-sync = less than 1 line Video w/frame-sync = max. 1 frame Audio = depends on the configured packet time Ancillary = depends on the sender profile
Decapsulation Processing delay	<ul style="list-style-type: none"> Video in minimum-delay mode = min. 2 lines, max. almost 1 frame of delay (depends on the output offset configuration) Video in normal mode (frame buffer active) = 1 frame of delay, up to almost 2 frames of delay (depends on the output offset configuration) Audio/ancillary = aligned to video offset Clean Switch = max 2 frames of delay for the make-before-break mechanism to finish
Clean and Quiet Switching	OPTION, Make-before-break
Audio Packet time:	A/B/C all packet times, with up to 16 channels per flow
Audio PCM sample rate(s):	48KHz
HDR metadata:	Passthrough
Management:	IPv4, In-band via Ethernet ports
DHCP support:	RFC-2131 specification
LLDP:	IEEE- 802.1AB
IGMP:	V2 and V3 (RFC-2236 and RFC-3376)
Multicast streams	RTP - RFC 5771
Unicast streams	N/A
NMOS Support	IS-04 (Discovery) v1.2 IS-05 (Routing) v1.0 IS-08 (Audio Mapping) v1.0 IS-09 (System)-Client Only BCP-002-01 (Essence Grouping) TR-1001 Recommendation: System environment and Device behaviours
Ember+	Bess Protocol support (OPTION)
Packet Jitter tolerance	Class A (10ms) – 7 gap between both signal + jitter on signal maximum of 10ms
Sync	
Genlock Output	OPTION 1x PTP-Synchronisation black and burst output
General	
Input Voltage	8-17V
Power Consumption	12W Typical (Depends on SFPs used)
Boot up time:	40 seconds
Operating temp	0-70C
Dimensions	129mm x 40mm x 75mm (HxWxD) Dual slot card

Ordering Information

P/N	Description
BN880/2TBC880 /2T	Dual 12G-SDI Encapsulator
BN880/2RBC880 /2R	Dual 12G-SDI Decapsulator
BN880/1T/1RBC880 /1T/1R	1x 12G-SDI Encapsulator + 1x 12G-SDI Decapsulator
BN880/4TBC880 /4T	Quad 3G-SDI Encapsulator
BN880/4RBC880 /4R	Quad 3G-SDI Decapsulator
BN880/2T/2RBC880 /2T/2R	2x 3G-SDI Encapsulator + 2x 3G-SDI Decapsulator (25 GbE Media Ports)
BN880/2T/2R/10GBC880 /2T/2R/10G	2x 3G-SDI Encapsulator + 2x 3G-SDI Decapsulator (10 GbE Media Ports)
BN880/2T/JPEGXSBC880 /2T/JPEGXS	JPEG-XS Compression Encapsulator for two 12G-SDI to 10GbE networks.
BN880/2R/JPEGXSBC880 /2R/JPEGXS	JPEG-XS Compression Decapsulator for two 12G-SDI to 10GbE networks.
/GL	OPTION – PTP Synchronised Genlock output
/CS	OPTION – Clean & Quiet Switching* (bandwidth limitations apply)
/EP	OPTION – Ember+ instead of NMOS
/OOB	OPTION – 1GbE out of band configuration

