

Specifications

XTP II CrossPoint® HD 4K PLUS Boards

TRUE 4K specification

Max. 4K Capabilities		
Resolution and Refresh Rate	Chroma Sampling	Max. Bit Depth per Color
4096 x 2160 at 60 Hz	4:4:4	8 bit
3840 x 2160 at 60 Hz		
4096 x 2160 at 30 Hz		12 bit
3840 x 2160 at 30 Hz		
4096 x 2160 at 60 Hz	4:2:0	12 bit
3840 x 2160 at 60 Hz		

Frame rate¹ 24, 25, 30, 50, or 60 fps
 Chroma sampling¹ 4:4:4, 4:2:2, or 4:2:0
 Color bit depth¹ 8, 10, or 12 bits per color
 Signal type HDMI 2.0b, HDCP 2.3
 Max. video data rate 18 Gbps (6 Gbps per color)

NOTE: ¹Subject to the maximum data rate limit. Use our calculator at www.extron.com/8Kdatarate to determine video parameters supported by this data rate.

Video - XTP II CP 4i HD 4K PLUS, XTP II CP 4i HD DMA 4K PLUS XTP II CP 4o HD 4K PLUS, XTP II CP 4o HD AT 4K PLUS

NOTE: Support for 4K/60 at 4:4:4 color subsampling requires installation in an XTP II CrossPoint frame.

NOTE: * Appropriate HDMI to DVI-D cables or adapters are required for DVI signal input and output.

NOTE: Extron strongly recommends compatibility testing while designing, and before installing, any 3D or HDR (high dynamic range) system. There are several unique 3D and HDR formats in use by source devices and display manufacturers. The level of 3D and HDR product support is governed by pixel clock, signal format, and communication between source and sink devices. Please contact an Extron Applications Engineer for more information.

Gain Unity
 Resolution range Up to 1080p @ 240 Hz or 4K @ 60 Hz (4:4:4 color subsampling)
 Signal type Single-link HDMI (or DVI-D*)
 Digital video RGB digital video (DVI and HDMI standards) or Y, Cr, Cb digital component video (HDMI), actively buffered (supports all single-link DVI (if using an optional adapter) and HDMI standards from 640x480 @ 60 Hz to 4096x2160 @ 60 Hz)
 EDID and DDC Supports Extended Display Identification Data (EDID) and Display Data Channel (DDC) data using DVI and HDMI standards. EDID and DDC signals are actively buffered.
 HDCP Compliant with High-bandwidth Digital Content Protection (HDCP) using DVI and HDMI standards
 HPD Supports hot plug detection (HPD) of display as a pass-through signal.
 Maximum data rate 18 Gbps (6 Gbps per color)

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Maximum pixel clock.....	600 MHz
Standards	DVI 1.0, HDMI 2.0b, HDCP 2.3
Video format	HDMI and DVI
HDR	HDR10, HDR10+, and Dolby Vision

Video input – XTP II CP 4i HD 4K PLUS, XTP II CP 4i HD DMA 4K PLUS

Number/signal type.....	4 digital RGB single-link HDMI (or DVI-D*)
Connectors	4 female HDMI type A
Equalization	Automatic
Input cable length	Up to 25' (7.62 m) at 3840x2160 and 4096x2160 @ 60 Hz 4:4:4 8 bits

NOTE: Lower resolutions may support longer transmission distances. Transmission distance varies depending on the signal resolution, type of cable, and source device used in the system.

Horizontal frequency	15 kHz to 270 kHz for resolutions up to 18 Gbps
Vertical frequency.....	24 Hz to 240 Hz for resolutions up to 18 Gbps

Video output – XTP II CP 4o HD 4K PLUS, XTP II CP 4o HD AT 4K PLUS

Number/signal type.....	4 digital RGB single-link HDMI (or DVI-D*)
Connectors	4 female HDMI type A
Re-clocking.....	Automatic
Peripheral device power.....	5 VDC, 250 ma per output

Audio input – XTP II CP 4i HD 4K PLUS, XTP II CP 4i HD DMA 4K PLUS

Number/signal type.....	4 analog stereo, balanced/unbalanced or 4 digital audio, de-embedded from HDMI
Connectors.....	(4) 3.5 mm captive screw connector, 5 pole 4 female HDMI type A (shared with video input)
Supported formats — Pass through	
HDMI connector	LPCM up to 7.1/24-bit/192 kHz, Dolby® Digital EX, Dolby Digital Plus™, Dolby Digital 5.1, Dolby Digital 2/0 Surround, Dolby Digital 2/0, Dolby TrueHD, Dolby Atmos™, DTS-HD Master Audio, DTS-X, DTS-HD, DTS-ES Discrete 6.1, DTS-ES Matrix 6.1, DTS-Digital Surround 5.1, DTS 2-Channel
Analog connector	Analog stereo
Impedance.....	>10k ohms unbalanced/balanced, DC coupled
Nominal level.....	+4 dBu (1.228 Vrms)
Maximum level	+21 dBu balanced, +15 dBu unbalanced
Input gain adjustment.....	-18 dB to +18 dB, adjustable per input, default = 0 dB

Audio output – XTP II CP 4o HD 4K PLUS

Number/signal type.....	4 analog stereo, balanced/unbalanced or 4 digital audio, embedded with HDMI
Connectors.....	(4) 3.5 mm captive screw connector, 5 pole 4 female HDMI type A (shared with video output)
Supported formats — Pass through	
HDMI connector	LPCM up to 7.1/24-bit/192 kHz, Dolby® Digital EX, Dolby Digital Plus™, Dolby Digital 5.1, Dolby Digital 2/0 Surround, Dolby Digital 2/0, Dolby TrueHD, Dolby Atmos™, DTS-HD Master Audio, DTS-X, DTS-HD, DTS-ES Discrete 6.1, DTS-ES Matrix 6.1, DTS-Digital Surround 5.1, DTS 2-Channel
Analog connector	Analog stereo
Impedance.....	50 ohms unbalanced, 100 ohms balanced
Gain error.....	±0.1 dB channel to channel
Maximum level (Hi-Z).....	>+21 dBu, balanced or unbalanced at 1% THD+N
Maximum level (600 ohm)	>+20 dBm, balanced or unbalanced at 1% THD+N
Volume control range	-64 dB to 0 dB (volume numbers 0 through 64) in 1 dB increments from steps 0 to 64; default = 64 (0 dB)

NOTE: Attenuation = Volume number minus 64. The default is 0 dB = Volume number 64.

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AT ports - audio transport (XTP II CP 4o HD AT 4K PLUS only)

Transmission type	Dante/AES-67, software selectable
Connectors	(2) RJ-45 to Dante interface
Outputs	Up to 8 channels (4 stereo channels)
Audio format	Uncompressed, 24-bit, 48 kHz
Latency.....	Deterministic, based on user selections: 0.25 ms, 0.5 ms, 1.0 ms (default), 2.0 ms, 5.0 ms

General

Power	Supplied by XTP CrossPoint or XTP II CrossPoint enclosure
Power consumption	
XTP II CP 4i HD 4K PLUS.....	18 watts
XTP II CP 4i HD DMA 4K PLUS	20 watts
XTP II CP 4o HD 4K PLUS	14 watts
XTP II CP 4o HD AT 4K PLUS .	14 watts
Product weight	2.0 lbs (0.9 kg)
Regulatory compliance.....	UL, FCC Class A
	Complies with the appropriate requirements of RoHS, WEEE
Warranty	3 years parts and labor

NOTE: All nominal levels are at ±10%.

NOTE: Specifications are subject to change without notice.

NOTE: Shipping weights and dimensions are available at www.extron.com.

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