

## 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	
3840 x 2160 at 60 Hz		

Frame rate<sup>1</sup> ..... 24, 25, 30, 50, or 60 fps  
 Chroma sampling<sup>1</sup> ..... 4:4:4, 4:2:2, or 4:2:0  
 Color bit depth<sup>1</sup> ..... 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:** <sup>1</sup>Subject to the maximum data rate limit. Use our calculator at [www.extron.com/8Kdatarate](http://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 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.

### 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  $\pm 10\%$ .

**NOTE:** Specifications are subject to change without notice.

**NOTE:** Shipping weights and dimensions are available at [www.extron.com](http://www.extron.com).

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