

XTP CrossPoint® 1600 and XTP CrossPoint 3200 Series

Video input — XTP CP 4i, XTP CP 4i DMA

Number/signal type	4 sets of proprietary twisted pair AV signals
Connectors	4 female RJ-45 per board

NOTE *Input comes from an Extron XTP Series twisted pair transmitter.*

Video output — XTP CP 4o

Number/signal type	4 sets of proprietary twisted pair AV signals
Connectors	4 female RJ-45 per board

NOTE *Output connects to an Extron XTP Series twisted pair receiver.*

Video — XTP CP 4i VGA

Gain	Unity
Bandwidth	300 MHz (-3 dB), fully loaded 0-10 MHz: no more than +0.1 dB to -0.1 dB 0-130 MHz: no more than +0.8 dB to -0.8 dB
Crosstalk	-88 dB @ 1 MHz, -55 dB @ 10 MHz, -45 dB @ 30 MHz, -37 dB @ 100 MHz
Switching speed	200 ms (max.)

Video input — XTP CP 4i VGA

Number/signal type	4 analog VGA-QXGA RGBHV, RGBS, RGSB, RsGsBs, HDTV, component video, S-video, composite video
Connectors	4 female 15-pin HD
Nominal level	1 Vp-p for Y of component video and S-video, and for composite video 0.7 Vp-p for RGB and for R-Y and B-Y of component video 0.3 Vp-p for C of S-video
Minimum/maximum levels	Analog: 0.5 V to 2.0 Vp-p with no offset
Impedance	75 ohms
Return loss	<-30 dB @ 5 MHz
DC offset (max. allowable)	1.5 V

Video processing — XTP CP 4i VGA

Decoder	8 bit digital
Digital sampling	30 bit, 10 bits per color; 162 Hz standard
Colors	1 billion

Sync — XTP CP 4i VGA

Input type	RGBHV, RGBS, RGSB, RsGsBs
Input level	0.5 V to 5.0 Vp-p, 4.0 Vp-p normal
Input impedance	510 ohms
Horizontal frequency	15 kHz to 150 kHz
Vertical frequency	30 Hz to 150 Hz
Max. propagation delay	30 ns
Max. rise/fall time	4 ns
Polarity	Positive or negative

Video — XTP CP 4i DVI Pro, XTP CP 4o DVI Pro

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

Gain	Unity
Resolution range	Up to 1080p (HDTV) or 1920x1200 (the highest resolution of the single link DVI standard) @ 60 Hz
Signal type	Single link DVI digital video signals are supported.
Digital video	RGB digital video (DVI and HDMI standards) or Y, Cr, Cb digital component video (HDMI), actively buffered (supports all single link DVI and HDMI (if using an optional adapter) standards from 640x480 @ 60 Hz to 1920x1200 @ 60 Hz computer video)

NOTE *These XTP CP DVI Pro boards are compatible with HDMI 1.3.*

Digital audio	Supports HDMI audio (if using an HDMI to DVI adapter) transmitted through the RGB and Y, Cr, Cb lines, actively buffered.
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Consumer Electronics Control (CEC)	Not supported
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 1.3 standards
HPD	Supports hot plug detection (HPD) of display as a pass-through signal.
Maximum data rate	6.75 Gbps (2.25 Gbps per color)
Maximum pixel clock	165 MHz
Standards	DVI 1.0, HDMI 1.3, HDCP 1.1
Switching speed	200 ns, max.

Video input — XTP CP 4i DVI Pro

Number/signal type	4 digital RGB single link DVI-D (or HDMI*)
Connectors	4 female DVI-I (digital only)
Equalization	Automatic
Input cable length	>100' (30 m) at 1920x1200 @ 48, 50, or 60 Hz; or 1080p; 8 bit color

NOTE *The transmission distance varies depending on the signal resolution and on the type of cable, graphics card, and display used in the system.*

Video output — XTP CP 4o DVI Pro

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

Video — XTP CP 4i HDMI, XTP CP 4i HDMI DMA, XTP CP 4o HDMI

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

Gain	Unity
Resolution range	Up to 1080p (HDTV) or 1920x1200 (the highest resolution of the single link DVI standard) @ 60 Hz
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 1920x1200 @ 60 Hz)
Consumer Electronics Control (CEC)	Not supported
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 1.3 standards
HPD	Supports hot plug detection (HPD) of display as a pass-through signal.
Maximum data rate	6.75 Gbps (2.25 Gbps per color)
Maximum pixel clock	165 MHz
Standards	DVI 1.0, HDMI 1.3, HDCP 1.1
Switching speed	200 ns, max.

Video input — XTP CP 4i HDMI, XTP CP 4i HDMI DMA

Number/signal type	4 digital RGB single-link HDMI (or DVI-D*)
Connectors	4 female HDMI type A
Equalization	Automatic
Input cable length	>100' (30 m) at 1920x1200 @ 48, 50, or 60 Hz; or 1080p; 8 bit color

NOTE *The transmission distance varies depending on the signal resolution and on the type of cable, graphics card, and display used in the system.*

Video output — XTP CP 4o HDMI

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 CP 4i DMA, XTP CP 4i HDMI DMA

Source formats	PCM, Dolby Digital 2/0, Dolby Digital 2/0 Surround, Dolby Digital 5.1, Dolby Digital EX, DTS Digital Surround 5.1, DTS-ES Matrix 6.1, DTS-ES Discrete 6.1
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Audio — XTP CP 4i VGA, XTP CP 4o SA

Gain	Unbalanced output: -6 dB; balanced output 0 dB
Frequency response	20 Hz to 20 kHz, ± 0.05 dB
THD + Noise	0.03% @ 1 kHz at nominal level
S/N	>90 dB at maximum output (21 dBu, unweighted) (balanced)
Crosstalk	<-80 dB @ 1 kHz, fully loaded
Stereo channel separation	>80 dB @ 1 kHz
CMRR	>75 dB @ 20 Hz to 20 kHz

Audio input — XTP CP 4i VGA

Number/signal type	4 stereo, balanced/unbalanced
Connectors	(4) 3.5 mm captive screw connector, 5 pole
Impedance	>10k ohms unbalanced/balanced, DC coupled
Nominal level	0 dBu (0.775 Vrms)
Maximum level	+19.5 dBu, (balanced or unbalanced) at 1% THD+N
Input gain adjustment	-18 dB to +18 dB, adjustable per input; default = 0 dB

NOTE 0 dBu = 0.775 Vrms, 0 dBV = 1 Vrms, 0 dBV \approx 2 dBu

Audio output — XTP CP 4o SA

Number/signal type	4 stereo, balanced/unbalanced
Connectors	(4) 3.5 mm captive screw connector, 5 pole
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 0.1% THD+N
Maximum level (600 ohm)	>+15 dBm, balanced or unbalanced at 0.1% THD+N
Volume control range	-98 dB to 0 dB (volume numbers 0 through 64) in a 35 dB increment from step 0 to step 1, then in 1 dB increments from steps 1 to 64; default = 64 (0 dB)

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

Audio — XTP CP 4i DVI Pro, XTP CP 4o DVI Pro, XTP CP 4i HDMI, XTP CP 4o HDMI

Gain	Unbalanced output: -6 dB; balanced output 0 dB
Frequency response	20 Hz to 20 kHz, ± 0.05 dB
THD + Noise	0.01% @ 1 kHz at nominal level
S/N	>105 dB at maximum output (21 dBu, unweighted) (balanced)
Crosstalk	<-89 dB @ 1 kHz, fully loaded
Stereo channel separation	>105 dB @ 1 kHz
CMRR	>83 dB @ 20 Hz to 20 kHz

Audio input — XTP CP 4i DVI Pro, XTP CP 4i HDMI

Number/signal type	4 stereo, balanced/unbalanced
Connectors	(4) 3.5 mm captive screw connector, 5 pole
Impedance	>10k ohms unbalanced/balanced, DC coupled
Nominal level	+4 dBu (1.228 Vrms)
Maximum level	+21 dBu, (balanced or unbalanced) at 0.01% THD+N
Input gain adjustment	+19.5 dBu, (balanced or unbalanced) at 1% THD+N
	-18 dB to +18 dB, adjustable per input; default = 0 dB

Audio output — XTP CP 4o DVI Pro, XTP CP 4o HDMI

Number/signal type	4 stereo, balanced/unbalanced
Connectors	(4) 3.5 mm captive screw connector, 5 pole
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 -75.8 dB to 0 dB (volume numbers 0 through 64) in a 35 dB increment from step 0 to step 1, then in 1 dB increments from steps 1 to 64; default = 64 (0 dB)

NOTE *Attenuation = volume number minus 64. The default is 0 dB = volume number 64.*

Control/remote — switcher host ports

NOTE *The front panel USB port and rear panel RS-232 port are independent of each other and can be used at the same time.*

Serial host control port	1 bidirectional RS-232 or RS-422, rear panel female 9-pin D connector
Baud rate and protocol	9600 (default) to 115200 baud, 8 data bits, 1 stop bit, no parity, no flow control
Serial control pin configurations	
RS-232	2 = Tx, 3 = Rx, 5 = GND
RS-422	2 = Tx-, 3 = Rx-, 5 = GND, 7 = Rx+, 8 = Tx+
USB control port	1 front panel female mini USB B
USB standards	USB 2.0, low speed
Ethernet control port	1 female RJ-45
Ethernet data rate (for network communication)	10/100Base-T, half/full duplex with autodetect
Ethernet protocol	ARP, ICMP (ping), IP, TCP, DHCP, HTTP, SMTP, Telnet
Ethernet default settings	Link speed and duplex level = autodetected IP address = 192.168.254.254 Subnet mask = 255.255.0.0 Default gateway = 0.0.0.0 DHCP = off
Web server	Up to 200 simultaneous sessions 7.0 MB nonvolatile user memory
Program control	Extron control/configuration program for Windows® Extron Simple Instruction Set (SIS™) Microsoft® Internet Explorer® ver. 6 or higher, Telnet

Control/remote — external device (pass-through, unidirectional or bidirectional)

Ethernet pass-through port	1 female RJ-45 connector
Ethernet data rate	10/100Base-T, half/full duplex with autodetect

General

Power	Internal Input: 100-240 VAC, 50-60 Hz
XTP CrossPoint 1600	Redundant power supply is optional.
XTP CrossPoint 3200	Redundant power supply is standard.
Power consumption	
XTP CrossPoint 1600	300 watts
XTP CrossPoint 3200	500 watts
Individual I/O boards	TBD
Temperature/humidity	Storage: -40 to +158 °F (-40 to +70 °C) / 10% to 90%, noncondensing Operating: +32 to +122 °F (0 to +50 °C) / 10% to 90%, noncondensing
Cooling	Fan, left to right (as viewed from front panel)
Mounting	
Rack mount	Yes
Enclosure type	Metal
Enclosure dimensions (Depth excludes connectors. Width excludes rack ears.)	
XTP CrossPoint 1600	8.75" H x 17.0" W x 15.0" D (5U high, full rack wide) (22.2 cm H x 43.2 cm W x 38.1 cm D)
XTP CrossPoint 3200	17.5" H x 17.0" W x 17.5" D (10U high, full rack wide) (44.5 cm H x 43.2 cm W x 44.5 cm D)
Product weight with boards installed	
XTP CrossPoint 1600	18.1 lbs (8.3 kg)
XTP CrossPoint 3200	33.4 lbs (15.2 kg)
Shipping weight with boards installed	
XTP CrossPoint 1600	23 lbs (11 kg)
XTP CrossPoint 3200	42 lbs (20 kg)
Shipping weight of individual boards, if purchased separately	2 lbs (1 kg)
DIM weight	

XTP CrossPoint 1600	25 lbs (12 kg)
XTP CrossPoint 3200	44 lbs (20 kg)
Vibration	ISTA 1A in carton (International Safe Transit Association)
Regulatory compliance	
Safety	CE, c-UL, UL
EMI/EMC	CE, C-tick, FCC Class A, ICES, VCCI
MTBF	30,000 hours
Warranty	3 years parts and labor

NOTE *All nominal levels are at ±10%.*

NOTE *Specifications are subject to change without notice.*

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Shipping Dimensions and Weights

Part #	Height	Width	Depth	Weight
70-939-01	2.0" (5.1 cm)	2.0" (5.1 cm)	13.0" (33.0 cm)	0.32 lbs (0.15 kg)