

Specifications

XTP CP Fiber 4K I/O Boards

TRUE 4K

| Max. 4K Capabilities | | |
|-----------------------------|-----------------|--------------------------|
| Resolution and Refresh Rate | Chroma Sampling | Max. Bit Depth per Color |
| 4096 x 2160 at 24 Hz | 4:4:4 | 8 bit |
| 3840 x 2160 at 30 Hz | | |
| 3840 x 2160 at 60 Hz | 4:2:0 | |

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 bits per color
 Signal type Refer to XTP endpoints
 Max. video data rate 8.91 Gbps (2.97 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.

NOTE: The I/O boards are class 1 laser products. They meet the safety regulations of IEC-60825-1.

Video – XTP CP 4i Fiber 4K, XTP CP 4o Fiber 4K

NOTE: Extron strongly recommends compatibility testing while designing, and before installing, any 3D system. There are several unique 3D formats in use by source devices and display manufacturers. The level of 3D 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 2560x1600 @ 60 Hz*, 1080p @ 120Hz or
 4K (4096x2160) @ 24 Hz, UHD (3840x2160) @ 30 Hz
 UHD @ 60 Hz with 4:2:0 color subsampling
 *reduced blanking
 Signal type Single-link HDMI (or DVI-D or DisplayPort)
 Maximum data rate 8.91 Gbps (2.97 Gbps per color)
 Maximum pixel clock 300 MHz
 Video formats RGB and YCbCr digital video
 Standards Refer to XTP endpoints
 Switching speed 200 ms (max.)
 Audio format Analog stereo, Dolby® Digital®, Dolby Digital EX, Dolby Digital Plus, Dolby TrueHD,
 Dolby Atmos™, DTS®, DTS-ES, DTS 96/24, DTS-HD High Res, DTS-HD Master
 Audio™, up to 8 ch PCM

Specifications • XTP CP Fiber 4K I/O Boards (Continued)

Optical fiber interconnection

| | |
|-------------------------|-------------------------------|
| Number/signal type..... | 4 sets of proprietary signals |
| Connectors..... | 4 LC fiber connector |
| Operating distance | |

NOTE: Operating distance is approximate. These are typical maximum bandwidth distances that may vary depending on factors such as fiber type, fiber bandwidth, connector splicing, losses, modal or chromatic dispersion, environmental factors, and kinks.

| | |
|------------------|---|
| Singlemode | 10 km (6.2 miles) with singlemode cables |
| Multimode | 200 m (650') with 62.5 μm OM1 multimode cable |
| | 300 m (980') with 50 μm OM2 multimode cable |
| | 400 m (1312') with 50 μm OM3 2000 MHz bandwidth laser optimized multimode cable |
| | 500 m (1640') with 50 μm OM4 4700 MHz bandwidth laser optimized multimode cable |

NOTE: Multimode units are compatible with OM1 and OM2 multimode cables, but at reduced operating distances.

| | |
|------------------------------|---------------------------|
| Nominal peak wavelength | |
| Singlemode | 1490 nm, 1550 nm, 1310 nm |
| Multimode | 850 nm, 980 nm, 780 nm |
| Data rate..... | 8.5 Gbps |
| Transmission power | |
| Singlemode | -6 dBm, typical |
| Multimode | -5 dBm, typical |
| Maximum receiver sensitivity | |
| Singlemode | -15 dBm, typical |
| Multimode | -13 dBm, typical |
| Optical loss budget | |
| Singlemode | 9 dB, maximum |
| Multimode | 8 dB, maximum |

Communications – external device (pass-through, unidirectional or bidirectional)

| | |
|--|---|
| Serial control pass-through ports ... | RS-232 (\pm 5V) via (4) 3.5 mm, 5 pole captive screw connectors (uses 3 poles) (connector is shared with IR control ports) |
| Baud rates | 300 to 115200 baud |
| Protocol..... | 5 to 8 data bits 1 or 2 stop bits no parity (default), even or odd parity flow control Xon, Xoff, and none |
| Serial control pin configuration | 1 = Tx, 2 = Rx, 3 = Gnd |
| IR control port..... | (4) 3.5 mm, captive screw connector, 5-pole (uses 3 poles) (connector is shared with RS-232 control ports) TTL level (0 to 5 V) modulated infrared control from 30 kHz up to 56 kHz |
| IR control pin configuration | 3 = Gnd, 4 = IR Tx, 5 = IR Rx |
| Ethernet pass-through ports | 4 female RJ-45 |
| Ethernet data rate | 10/100Base-T, full duplex with autodetect |

Specifications • XTP CP Fiber 4K I/O Boards (Continued)

General

| | |
|----------------------------|--|
| Power | Supplied by XTP CrossPoint or XTP II CrossPoint enclosures |
| Power consumption..... | 19 watts |
| Product weight | 2.0 lbs (0.9 kg) |
| Regulatory compliance..... | 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.

5798-D17