



4K Point-to-Point Delivery via Multi-Mode or Single-Mode Fiber

The FOX1-KIT consists of a FOX1-ENC transmitter and FOX1-DEC receiver. The transmitter is located at the HDMI source, and the receiver is located at the HDMI destination or display. Power is required at both the transmitter and receiver via supplied 5-volt, 2-amp power supplies. Connection between the transmitter and receiver is accomplished via the supplied multi-mode 10Gb SFP+ fiber optic transceivers and connection between transceivers in the transmitter and receiver with up to 300m (1000ft) of OM3 multi-mode duplex fiber. Optionally, single-mode 10Gb SFP+ fiber optic transceivers and up to 20km (12 miles) of OS2 single-mode duplex fiber. Two multi-mode or single-mode LC type fiber connectors at each end (4 total) are required to connect the duplex fiber to the SFP+ transceivers.

HDMI 2.0 and HDCP 2.2 Distribution with Zero Frame Latency

All FOX1-KIT is HDMI 2.0 and HDCP 2.2 compliant. It can support all resolutions that fit into the HDMI 2.0 timing envelope of 594 MHz, such as 4K/60 8-bit 4:4:4, 4K/60 10-bit 4:2:2 and 4K/60 12-bit 4:2:0 (HDR). Furthermore, they feature light compression technology which is activated automatically when the raw data rate exceeds the Ethernet bandwidth so that all supported timing formats can be delivered through via multi-mode or single-mode with 10G SFP modules allowing for the video signal is delivered with zero frame latency.

Product Snapshot

The LightSpeed Technologies™ FOX1-KIT supports extension of true 4K/60Hz (4:4:4) video with zero frame latency with an ultra-small product size of approximately 3.5in x 2.5in x 1in.

1. Ultra small size SDVoE product
2. HDMI 2.0 and HDCP 2.2 compliant
3. Supports all HDMI 2.0 timing formats envelope of 594 MHz and below, including 3D
4. Maximum timing: 4K/60 8-bit 4:4:4, 4K/60 10-bit 4:2:2 and 4K/60 12-bit 4:2:0 (HDR)
5. Zero frame latency delivery
6. Interoperable with all LightSpeed Technologies SDVoE series products
7. Lossless distribution of most timing formats
8. Light compression when the raw data rate exceeds 10G Ethernet bandwidth.
9. Supports point to point transmission, transports 4K signals over multi-mode or single-mode fiber
10. Bandwidth needed: 4K signal 6-8Gbps, 1080P signal about 3.2Gbps

Technical Specifications

Model	FOX1-ENC	FOX1-DEC
VIDEO		
Input Connection	1 x HDMI	1 x SFP+, 10GBase-SR
Supported Input	640x480 ⁸ , 800x600 ⁸ , 1024x768 ⁸ , 1280x1024 ⁸ , 1360x768 ⁸ , 1440x900 ⁸ , 1440x1050 ⁸ , 1600x1200 ⁸ , 720x480 ⁷ (480i59), 720x480 ⁷ (480p59), 720x576 ⁶ (576i50), 720x576 ⁶ (576p50), 1280x720 ⁵ (720p50), 1280x720 ⁷ (720p59), 1280x720 ⁸ (720p60), 1920x1080 ⁶ (1080i50), 1920x1080 ⁷ (1080i59), 1920x1080 ⁸ (1080i60), 1920x1080 ² (1080p23), 1920x1080 ² (1080p24), 1920x1080 ³ (1080p25), 1920x1080 ⁴ (1080p29), 1920x1080 ⁵ (1080p30), 1920x1080 ⁶ (1080p50), 1920x1080 ⁷ (1080p59), 1920x1080 ⁸ (1080p60), 3840x2160 ¹ (2160p23), 3840x2160 ² (2160p24), 3840x2160 ³ (2160p25), 3840x2160 ⁴ (2160p29), 3840x2160 ⁵ (2160p30), 3840x2160 ⁶ (2160p60), 4096x2160 ⁵ , 4096x2160 ⁸ 1 = at 23.98 Hz, 2 = at 24 Hz, 3 = at 25 Hz, 4 = at 29.97 Hz, 5 = at 30 Hz, 6 = at 50 Hz, 7 = at 59.94 Hz, 8 = 60 Hz, 9 = 75 Hz;	
Output Connection	1 x SFP+, 10GBase-SR	1 x HDMI
Supported Output	640x480 ⁸ , 800x600 ⁸ , 1024x768 ⁸ , 1280x1024 ⁸ , 1360x768 ⁸ , 1440x900 ⁸ , 1440x1050 ⁸ , 1600x1200 ⁸ , 720x480 ⁷ (480i59), 720x480 ⁷ (480p59), 720x576 ⁶ (576i50), 720x576 ⁶ (576p50), 1280x720 ⁵ (720p50), 1280x720 ⁷ (720p59), 1280x720 ⁸ (720p60), 1920x1080 ⁶ (1080i50), 1920x1080 ⁷ (1080i59), 1920x1080 ⁸ (1080i60), 1920x1080 ² (1080p23), 1920x1080 ² (1080p24), 1920x1080 ³ (1080p25), 1920x1080 ⁴ (1080p29), 1920x1080 ⁵ (1080p30), 1920x1080 ⁶ (1080p50), 1920x1080 ⁷ (1080p59), 1920x1080 ⁸ (1080p60), 3840x2160 ¹ (2160p23), 3840x2160 ² (2160p24), 3840x2160 ³ (2160p25), 3840x2160 ⁴ (2160p29), 3840x2160 ⁵ (2160p30), 3840x2160 ⁶ (2160p60), 4096x2160 ⁵ , 4096x2160 ⁸ 1 = at 23.98 Hz, 2 = at 24 Hz, 3 = at 25 Hz, 4 = at 29.97 Hz, 5 = at 30 Hz, 6 = at 50 Hz, 7 = at 59.94 Hz, 8 = 60 Hz, 9 = 75 Hz;	
AUDIO		
Input Connection	1 x HDMI	1 x SFP+, 10GBase-SR
Supported Input	LPCM, 2.0/5.1/7.1 channel, 44.1/48/96/192 kHz, Dolby True HD, up to 7.1,192kHz, DTS-HD Master, up to 7.1,192kHz Dolby Digital AC-3 (DVD format), DTS version 1 (DVD format)	
Output Connection	1 x SFP+, 10GBase-SR	1 x HDMI
Supported Output	LPCM, 2.0/5.1/7.1 channel, 44.1/48/96/192 kHz, Dolby True HD, up to 7.1,192kHz, DTS-HD Master, up to 7.1,192kHz, Dolby Digital AC-3 (DVD format), DTS version 1 (DVD format)	
GENERAL		
Operating Temperature	0 to + 40°C (32 to + 104 °F), 10% to 90%, non-condensing	
Storage Temperature	-20 to +70°C (-4 to + 158 °F), 10% to 90%, non-condensing	
Humidity	10% to 90%, non-condensing	
Product Weight	0.25 lb.	
Power Supply	5V 2A DC	
Power Consumption	4.5W	4.75W
Transport Distance	300m with OM-3 multi-mode optical fiber; 20km with OS-2 single-mode optical fiber	
Product Dimension	87mm x 64mm x 22mm (3.5in x 2.5in x 1in) (L x W x H)	
ESD Protection	Human-body Model: ±8kV (Air-gap discharge)/±4kV (Contact discharge)	

