

plura®

4K Xpress™

UHD/4K Video Processor



Overview

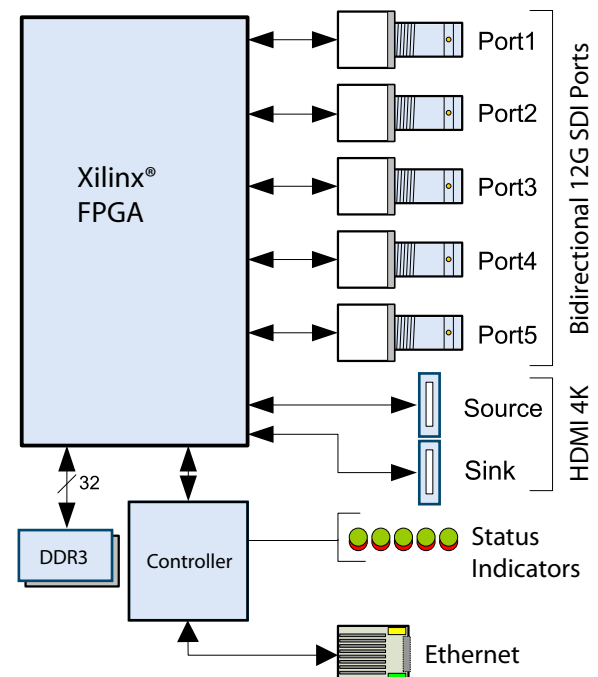
The Plura 4K Xpress is a multi-format and multi protocol video processor.

The Plura 4K Xpress is a great tool for all UHD/4K, 3G broadcast systems and all other wide-range industries. The 4K Xpress was designed and engineered for simple operation and future flexibility. The platform is built around a powerful Xilinx FPGA chipset. The core of this platform is based on fully programmable architecture. Future proof expansion (i.e. additional features and functionalities) can and will be implemented in the field via the Ethernet interface.

As a quad-split converter, the bi-directional 12G-SDI to Quad 3G-SDI feature supports both 2-Sample Interleave (2SI) and Square Division formats.

The commanding bi-directional 12G-SDI ports and HDMI-4K source / sink architecture makes Plura 4K Xpress video processor a solid Platform to be customized for an endless formats and protocol conversion applications.

System Architecture



Key Features

Technical

- 4K/60 capable with five bidirectional 12G-SDI ports
- HDMI4K source and sink ports
- Quad-split support: 2-Sample Interleave (2SI), Square Division
- Xilinx®FPGA for flexibility and future proofing
- Auto-rate and format sensing inputs
- 8Gbits of onboard DDR3 for video processing
- In-system upgradability via web interface
- Mode configuration via DIP switches or web interface
- Bi-color (Red/Green) Status indicator per input
- Universal +5V DC Input
- Hardware flexibility supports multiple applications
- Web-based interface for configuration, control, and in-field upgradability

Applications

- 12G-SDI to Quad Split (2SI) Level A\B
- 12G-SDI to Quad Split (Square Division) Level A\B
- Quad Split (2SI) to 12G-SDI
- Quad Split (Square Division) to 12G-SDI
- 12G-SDI Distribution Amplifier
- 3G-SDI Distribution Amplifier
- Dual 6GSDI to 12G-SDI
- 12G-SDI to dual 6G-SDI
- HDMI-4K to 12G-SDI
- 12G-SDI to HDMI-4K
- 4K over 3G-SDI
- Multiviewer

Functions	Plura 4K Xpress Specifications
Connectors and I/O	• 5 x 75ohm BNC connectors
	• 2 x Full-size HDMI connectors
	• 1 x DC barrel power jack, threaded
	• 1 x RJ45 with Link/Activity LEDs
	• 1 x USB port
Standards	• SMPTE 259M, 292M, 296M, 373M, 424M, 425-1, 425-5, 2036-1, 2082-1, 2082-10
	• Relevant HDMI@standards
Power	• Universal Wall Adapter, 90-264VAC, 47-63Hz
	• +5VDC @ 4.0A; center positive
Environment	• Operating/Storage Temp: 0 to 40°C/-20°C to +45°C
	• Humidity: 10% to 90% non-condensing
	• Power Consumption: 20W max
	• RoHS Compliant / CE Certified
Dimensions & Weight	• Dimensions: 7.6x12.7x2.5cm (3"x5"x1")
	• Weight: 500g (1.2 lbs)
Accessories	• QTY 1: 5VDC Universal Power Supply

Conversion Modes	Interface	Format		Progressive	Structure			Sampling			Color			Frame Rates [fps]								Sub-Image		Mapping								
		Hor	Vert		YCbCr	RGB	4:2:0	4:2:2	4:4:4	8	10	12	23.98	24	25	29.97	30	47.95	48	50	59.94	60	2SI	QSD	Level-A	L\B-DL	L\B-DS					
12G SDI to Quad 3G SDI	1x 12G	3840	2160	•	•																											
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Quad 3G SDI to 12G-SDI	4x 3G	1920	1080	•	•																											
				•																												

Notes / Clarifications:

1. Structure, sampling, color, frame rates, sub-image, and mapping remain unchanged through system
2. Other structures, sampling, color, frame rates, sub-image, and mapping are possible, and may be available in future upgrades
3. The first output provides ancillary / audio information.
4. Audio sampling pass-thru.
5. Please note that the technical details shown here are provisional specifications (as of October 2016) The information is subject to change without notice.

sales@plurabroadcast.com

www.plurabroadcast.com

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