



U4U100

1080p to 4K (3840x2160) Ultra HD 4 wire up converter

A Synapse® product

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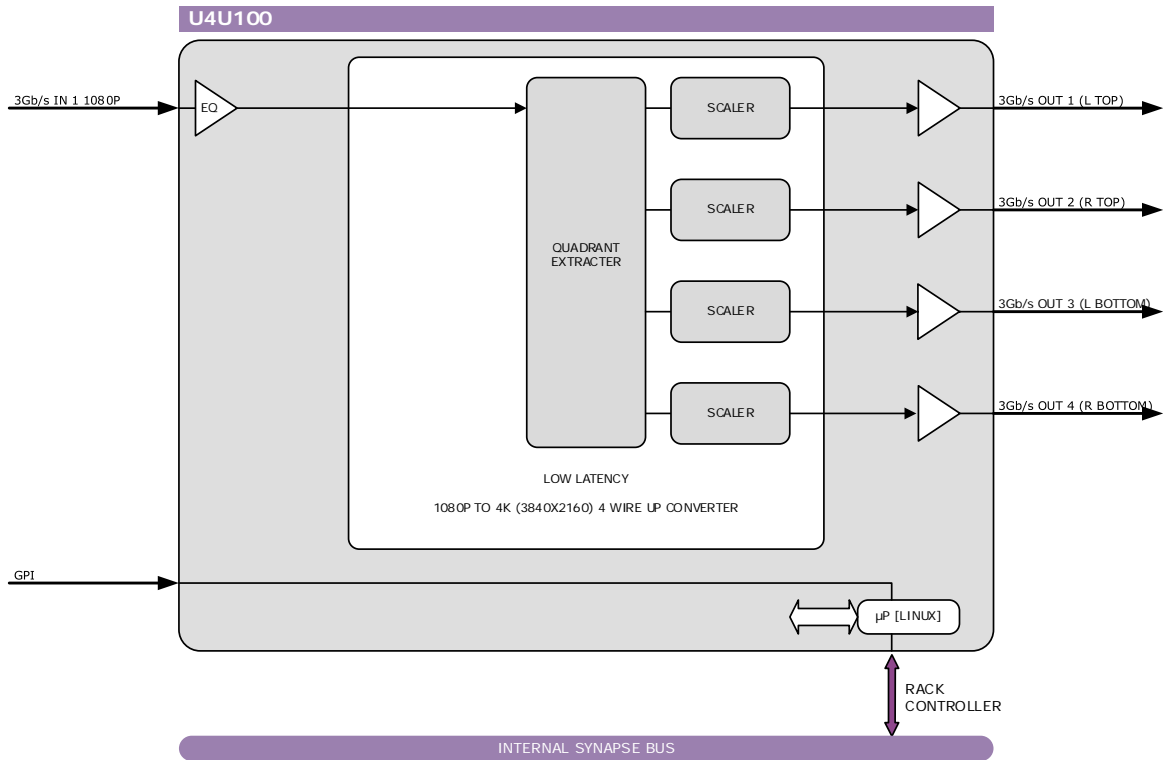


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Block schematic & I/O panel



Features

The U4U100 is a 1080p to 4k (4 wire) up-converter.

The low latency unit extracts four quadrants out of a 1080p (1920x1080) and scales each individual part into to 4 full 1920x1080 pictures

- One 1080p 50 or 59.94 input (level B compliant)
- 4 outputs
- Low Latency (1 1080p Frame 20ms @ 50Hz, 16.7ms @ 59.94 Hz)
- 4K 4 wire (3840 x 2160)
- Compatible with the following formats (auto selecting)
 - 1080p/59.94
 - 1080p/50
- Transparent for 16 channels of embedded audio
- The BPH17 can optionally be fitted with up to two fiber I/O modules (inputs or outputs)
- Full control and status monitoring through the front panel of the SFR04/SFR08/SFR18 frame and the Ethernet port (ACP)

Applications

- Up conversion for 4K production sets

Ordering information

Module:

- **U4U100:** 4k (4 wire) Up converter

Standard I/O:

- **BPH17_U4U100:** I/O-panel for U4X100

Fiber inputs:

- **BPH17R_FC/PC_U4D100:** I/O-panel for U4D100 with one fiber receiver on FC/PC
- **BPH17R_SC_U4D100:** I/O-panel for U4D100 with one fiber receiver on SC

Specifications

Serial Video Input

Standard	3Gb/s SDI: SMPTE424/5 (Level B)
Number of Inputs	1
Connector	BNC
Equalization	Typical maximum equalized length of Belden 1694A cable: 90m at 2.97Gb/s, 120m at 1.485Gb/s,
Return Loss	> 15dB up to 1.5GHz

Serial Video Output

Number of Outputs	4
Connector	BNC
Signal Level	800mV nominal
DC Offset	0V \pm 0.5V
Rise/Fall Time	135ps nominal
Overshoot	< 10% of amplitude
Return Loss	> 15dB up to 1.5GHz (typ.) > 10dB up to 3GHz (typ.)
Wideband Jitter	< 0.2UI

Miscellaneous

Weight	Approx. 450g
Operating Temperature	0 °C to +40 °C
Dimensions	137 x 296 x 20 mm (HxWxD)

Electrical

Voltage	+24V to +30V
Power	<15 Watts