## **6G-SDI INTERFACE BOARD**

FOR SONY FCB-ER8300
New SONY FCB-ER8550 & FCB-ER8530





TWIGA has designed the first 6G-SDI interface board for SONY 4K camera blocks.

All the camera resolutions and frame rates are supported. You will take advantage of the full range of HD resolutions the Sony 4k camera offers (up to 2160p29.97) and much more.



## **FEATURES**

- o 6G-SDI (SMPTE ST-2081) digital video output
- o Supports 4k resolution 2160p25/29.97Hz
- o Supports 1080p50/59.94, 1080p25/29.97, 720p 50/59.94
- o Powerful Kintex-7 FPGA
- o Real time scaling & image processing
- o Board and camera control via RS232/TTL
- o BNC connector- SMB or MCX option
- Low consumption
- o Tiny module

#### Video output from HD to 4K

The 6G-SDI module can output the camera 4k image or a region of interest (ROI) in 1080p. You can move the ROI position within the 4k image and you can switch instantaneously from one to the other without restarting the camera.

#### Custom image processing

The Twiga 6G-SDI interface board is based on a powerful Kintex-7 FPGA that allows real time scaling and enables you to implement your custom image processing algorithms.

### Compact & cost effective solution

In addition to the greater details and clearer 4k picture, the Twiga 6G-SDI interface board combined with the Sony 4k camera module, offer a cost effective solution for wide variety of imaging application.

Highly compact the 6G-SDI module can be mounted at the top or the rear of the Sony FCB-ER range 4K camera blocks.



# Onboard Connectors



#### J100 FCB-ER8300 TMDS input

J4 Communication

Pin Name

3 UART RX (RS232)

2 UART TX (RS232)

1 GND

J3	Power IN			
Pin	Name			
1	VSvS (+6/+12V			

**2** GND





DIP Sv	vitches		Video format configuration					
1	2	3	4	FCB-ER8300				
OFF	OFF	OFF	OFF	External				
ON	OFF	OFF	OFF	1080p29.97*				
OFF	ON	OFF	OFF	1080p25*				
ON	ON	OFF	OFF	1080i59.94				
OFF	OFF	ON	OFF	1080i50				
ON	OFF	ON	OFF	720p59.94				
OFF	ON	ON	OFF	720p50				
ON	ON	ON	OFF	720p29.97				
OFF	OFF	OFF	ON	ePT 25*				
ON	OFF	OFF	ON	2160p29.97				
OFF	ON	OFF	ON	2160p25				
ON	ON	OFF	ON	1080p50				
OFF	OFF	ON	ON	1080p59.94				
ON	ON	ON	ON	ePT 29.97*				

\*Output indicates that the same image is output two times

Functions	Specifications
Digital video output	6G-SDI SMPTE-ST2081
SDI output Connector	BNC by default - SMB, MCX in option
Video format	2160p25/29.97Hz, 1080p50/59.94, 1080p25/29.97, 720p50/59.94
Video format configuration	DIP switches
Camera communication & settings	VISCA – Default: RS232 level – TTL level (Option)
Power supply	6 to 12 VDC, 6 W (including camera)
Operating temperature range	0°C to 60°C
Regulation	EMC FCC part 15, PCB : UL 94 V0
Dimensions (mm)	65 (H) x 55 (W) x 20 (D)

P/N – TV10 0059 60	G-SDI interface bo	ard for SONY EAG	SLE / FCB-ER8300		
P/N - TV50 0008	Accessory set for TV10 0059				
Content					
USL20-30SS-012-C Cable assembly		✓			
2 way harness, 200mm long for power		✓			
3 way harness, 200mm long for communication		✓			
6G-SDI Connector Options	BNC	SMB	MCX	without connector	



