USB3.0 INTERFACE BOARD
FOR SONY FCB-EV, EH & SE600

TWIGA

TWIGA provides a compact USB3.0 interface board for SONY camera blocks.

The board converts the native LVDS signal of Sony camera and transfers the video image to a computer.

You will take advantage of new visualization, processing and image transfer solutions by using the USB3.0 streaming possibilities.

USB 3.0 | Plug & Play | Full HD 1080

FEATURES

- Supports Sony FCB-EV, EH & SE600
- Up to 1080p30, 4:2:2 YUV format
- Y, Pb, Pr 75 ohms, 1 V analog video output *
- USB Video Class (UVC) Compliant
- USB Communication Device Class (CDC)
- Support Windows and Linux OS
- Board and camera management by DIP switches
- Power supply 5V-9 VDC **
- Tiny module size 48mm x 45mm x 11 mm

* Refer to the camera technical manual for video standard supported
**Refer to camera technical manual for max power supply input

o Video output from FCB to USB3.0
Facility and flexibility

A single USB3.0 cable is required to power, to control and collect the video stream from the camera. This enables easy implementation of image capture solutions on most devices with a USB3.0 port.

o Add-on connector

A very useful connector on the back side of the USB3.0 module directly connected to the FPGA will allow you to plug-in additional boards to implement your own functions (Sync information, strobe pulse, external trigger, accelerometer, SD card for local storage...)

o Display video: UVC 1.1 & DirectShow compatibility

The drivers on the camera are compatible with UVC v1.1 (USB Video Class).

This allows to directly use standard software for image capturing and viewing (VLC, Amcap, VirtualDub ...), image processing, streaming (Skype), or application programming using the DirectShow library.
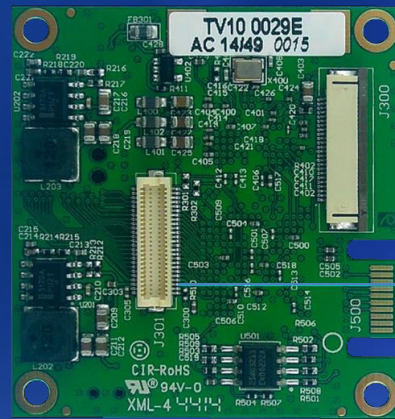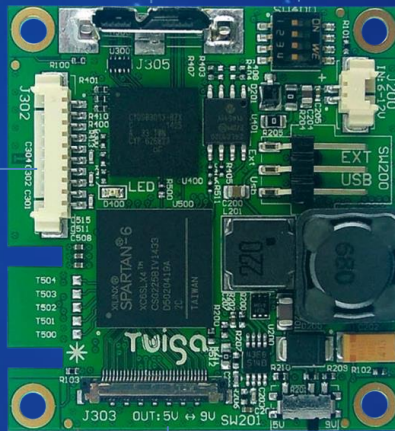
TARGET APPLICATIONS

Medical imaging Low vision

Traffic / Rail / Transport

Defence / Security / Aerospace

Sport Entertainment Broadcast

USB 3.0

J302	Analog HD video output
1	Y
2	GND
3	Pb
4	GND
5	Pr
6	GND
7	GND
8	+3V3
9	Reserved
10	GND

J303	SONY LVDS input

SW400	Operating mode	
	OFF	**ON**
1	RS KEL	RS FFC
2	CDC	UVC
3	NC	NC
4	NC	NC

J200	Optional ext. power supply
1	6 to 12V DC
2	GND

SW200	Power supply mode
1	External
2	USB

SW201	Camera supply out
1	5V (SE600)
2	9V

J301	Add-on connector

Functions	Specifications
Digital video output	USB3.0
Analog video output	Y, Pb, Pr 75 ohms, 1V
Camera setting and control	USB3.0 – UVC v.1.1
Digital video output connector	Micro USB3.0 B-type
Power supply	Self-supply by USB3.0 or 6 to 12 VDC, 6 W (including camera) / **5V for FCB- SE600**
Operating temperature range	0°C to 60°C
Storage temperature range	-20°C to 60°C
Regulation	EMC FCC part 15, PCB : UL 94 V0
Dimensions (mm)	48 (H) x 45 (W) x 11 (D)
Weight (g)	15

USB3.0 interface set for Sony FCB-EV, EH &SE600

P/N	TV80 0031	TV80 0031-L
Content		
USB3.0 interface board - **ref. TV10 0029**	✓	✓
30 way USL20-30SS-012-C Cable assembly (J303)	✓	✓
24 way FFC cable (J300)	✓	
2 way cable - power supply (J200)	✓	✓
Right angle black anodized bracket	✓	
Screws + spacers	✓	