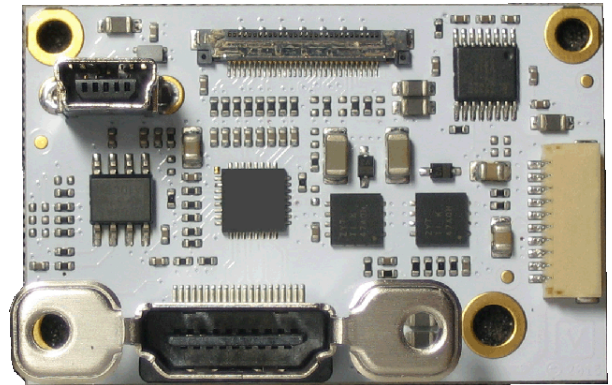


## Features

- + Ultra High Definition video output
- + Seamless connection to Sony FCB-ER8300 4K camera block
- + Integrated input signal equalizer
- + Ultra high speed 3.4Gbps cable driver
- + Up to 3840x2160p @ 30fps HDMI 1.4b video output
- + UHD, FHD, HD video format support
- + RS232 level serial camera control interface
- + Supply voltage 7V to 12V DC regulated
- + Ultra low power - 150mW@8V supply voltage only



## General Description

TL4K1152 is a small form factor digital serial video transmitter. Camera video input signals are equalized, processed and output over an HDMI connector.

Camera control is accomplished by a transparent full duplex communication channel. Physical interface between camera and camera controller / PC is based on RS232 (3.3V TTL level optional). Additionally an USB2 interface is available for camera firmware updates.

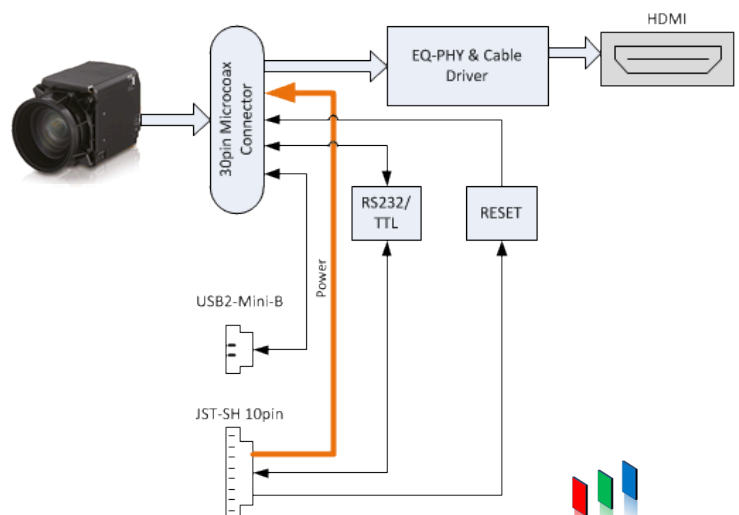
## Applications

- + 4K UHD, Full HD and HD integrated cameras based on Sony FCB-ER8300 4K camera block
- + Industrial, medical, security, law enforcement, video production

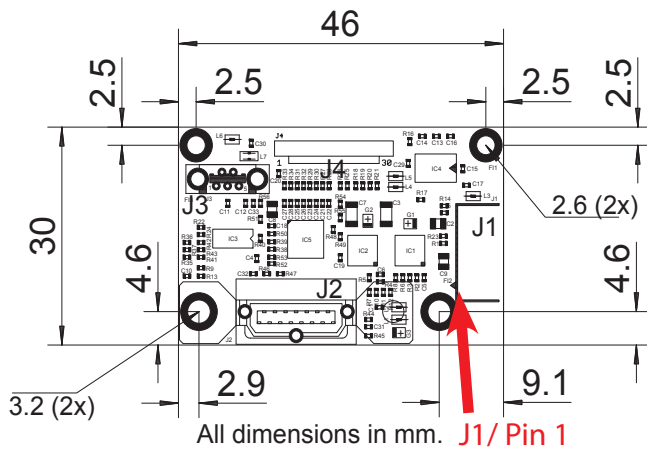
## Quick Specification

- FCB-ER8300 interface on 30pin microcoax connector
- Up to 4K 3840x2160@30fps HDMI 1.4b video output
- Supply voltage 7V to 12V DC, 8V DC recommended
- Operating ambient temperature range -10°C to +60°C
- Operating humidity range 20% to 80%
- Power consumption only 0.15W with 8V DC supply voltage
- Board size (L x W) 46mm x 30mm
- Wire/cable kit for camera and external interconnect
- RoHS compliant (2002/05/EG and 2011/65/EU)
- UL/UR compliant

Internet: [www.aivion.com](http://www.aivion.com)  
E-Mail: [sales@aivion.com](mailto:sales@aivion.com)



## Board Mechanical



+ Max. component height = 10.5mm (HDMI connector, J2)

+ PCB thickness 1.53mm

## Power and Environment

### POWER INPUT:

7V to 12V DC regulated supply input voltage range

### CHARACTERISTICS:

$P_D = 3.05W$  (FCB-ER8300 lens steady + TL4K1152)

$P_{TL4K1152} = 150mW$  (typ.)

(8V DC supply, 3840x2160@29.97fps,  $T_A = 25^\circ C$ , Humidity = 40%)

### OPERATING AND STORAGE CONDITIONS:

Ambient temperature (min/max)  $-5^\circ C/60^\circ C = 23^\circ F/140^\circ F$

Humidity: 20% - 80%

TL4K1152 is RoHS compliant (2002/05/EG and 2011/65/EU)

## Onboard Connectors

J1:

Power, RS232, Shutdown

Pin assignment:

- 1 DC Supply voltage input
- 2 DC Supply voltage input
- 3 GND (0V)
- 4 GND (0V)
- 5 Reset\*
- 6 GND
- 7 TXD\_TTL (serial IF transmit 3.3V, optional)
- 8 RXD\_TTL (serial IF receive 3.3V, optional)
- 9 RXD\_232 (serial IF receive RS232 level)
- 10 TXD\_232 (serial IF transmit RS232 level)

\*Pull pin 5 to GND(0V) for 1ms or longer for reset, leave open for normal operation.

J4:

30wire microcoax connector for FCB-ER8300

Use 30wire micro coaxial cable supplied with cable kit.

J3:

USB connector - do not connect (for FCB-ER8300 firmware updates only)

## Ordering Information

TL4K1152

4K-UHD HDMI output interface

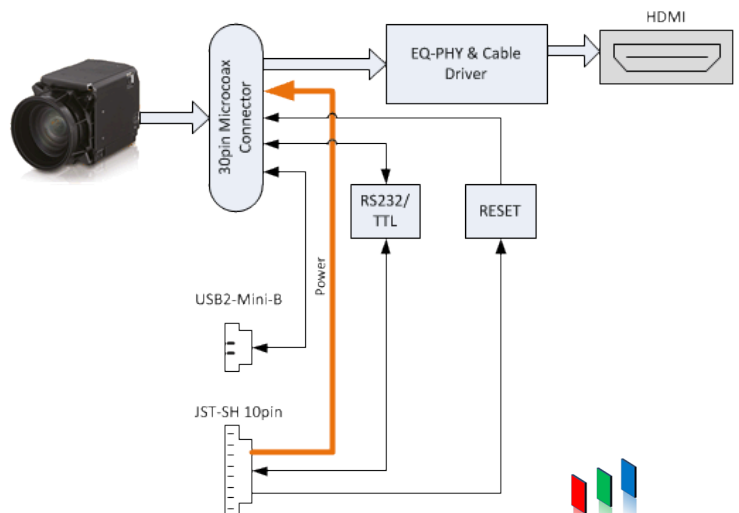
TL4K1152CK

Cable kit for TL4K1152

1 pcs. 30 wire micro coaxial cable

1 pcs. 10 wire cable for J1, (open wires on 2nd end)

## CableConnections



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