

Thunder Link is a family of small form factor modules for formatting and converting generic digital video streams to standard compliant formats. Different interface standards are supported from the transmitter side including DVI/HDMI, VGA, HD-SDI, SDI, USB, CVBS and Y/C video. In addition the Thunder Link family also includes simple modules for interfacing power, analog video and control only.

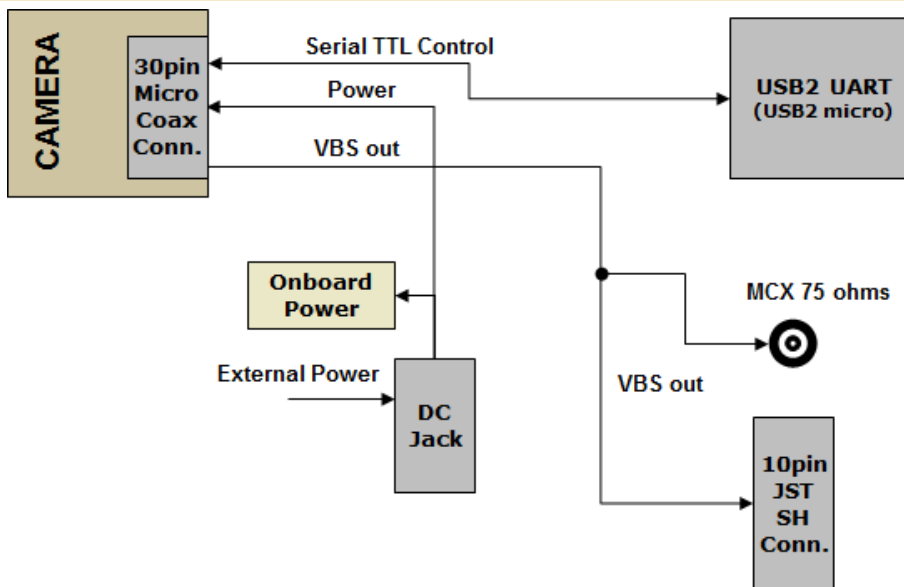
TL9801 - Features

- + Supports Sony FCB-EV7520A camera block
- + Supports Tamron MP1110M-VC and MP2030M-GS camera blocks
- + Supports AZM-FS10L, AZM-FS20L and AZM-FS30L camera blocks
- + CVBS analog video output*
- + USB2 UART based camera control
- + Supply voltage: 9V to 12V DC regulated



* Note: CVBS pass through from camera. Camera must be set to CVBS PAL or NTSC operating mode.

Block Diagram TL9801



Order Codes:
 TL9801
 CVBS Video Interface Module

TLCK-B
 Cable Kit for TL9801, included in standard package



Specification

INPUTS:

Video CVBS Video from camera
 CONTROL Rx USB2 (external)
 CONTROL Rx 3.3V TTL from camera

OUTPUTS:

CONTROL Tx 3.3V TTL to camera
 CONTROL Tx USB2 (external)
 VIDEO CVBS Video, pass through from camera

POWER INPUT:

9V TO 12V regulated
 Power consumption (MP1110M-VC + TL9801) 3.2 W (cam motors inactive)

OPERATING CONDITIONS:

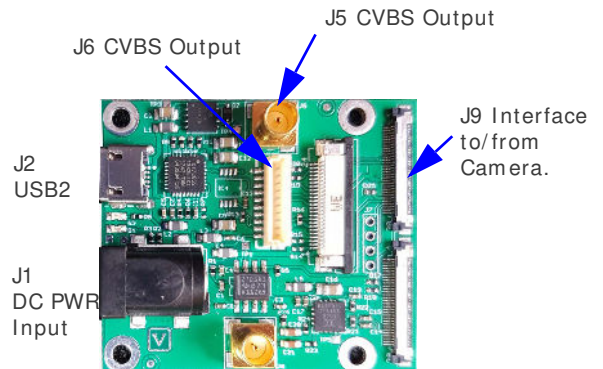
Ambient Temperature (min/max): -5°C/+60°C = 23°F/140°F
 Humidity: 20%-80%

STORAGE CONDITIONS:

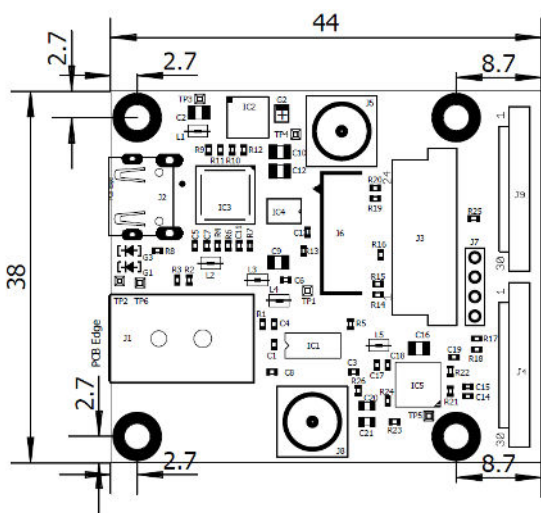
Temperature (min/max): -20°C/+60°C = -4°F/140°F
 Humidity: 20%-80%

Onboard Connectors

PCB Top Side:



Board Mechanical



PCB thickness 1.5mm
 Max. component height 11mm

TOP VIEW (Four mounting holes, drill/ land diameter 2.6mm/ 5.0mm)

External Connector Specification

J1 DC Jack (Wuerth Electronics, Type 694108106102)

Fitting plug inner/outer diameter: 2.55mm/5,5mm

Center Pin DC Power Input
Shield GND**J2 USB2 micro connector****USB2 UART camera control interface**

USB2 UART chip Cypress CY7C65213

J5 MCX Coaxial connector**Primary CVBS Output****J6 JST BM08B-SSRS-TB****CVBS Output (Board to wire connector)**

- 1 CVBS Output (alternative to J5, do not connect both)
- 2 GND
- 3 Do not connect
- 4 Do not connect
- 5 Do not connect
- 6 GND
- 7 Do not connect
- 8 Do not connect

J9 Micro coaxial connector (30pin)

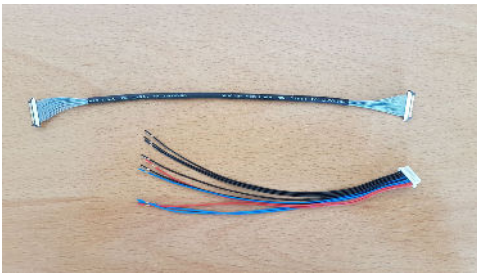
Camera must be connected here.

CAUTION:

The following connectors must be left unconnected at all times.**J3, J4, J8**

Cable Kit Contents

TCLK-B cable kit is included in TL9801 standard package.

**TLCK-B cable kit contents:****External connecting cables:**

1 pcs. - 10pin flying leads cable for CVBS out, lead length = 15cm / 5.9inch

Camera connecting cables:1 pcs. - 30pin KEL USL type micro coaxial cable, connector on both sides,
length = 20cm / 7.8inch