

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.

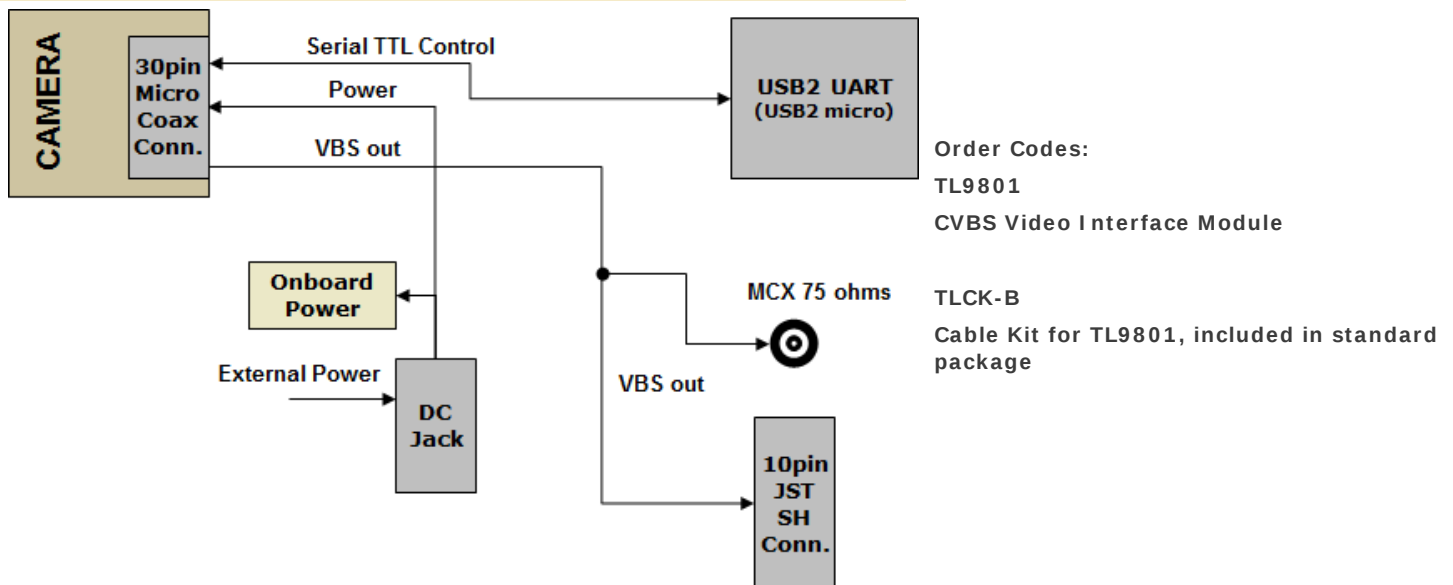
TL9801 - Features

- + 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



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:

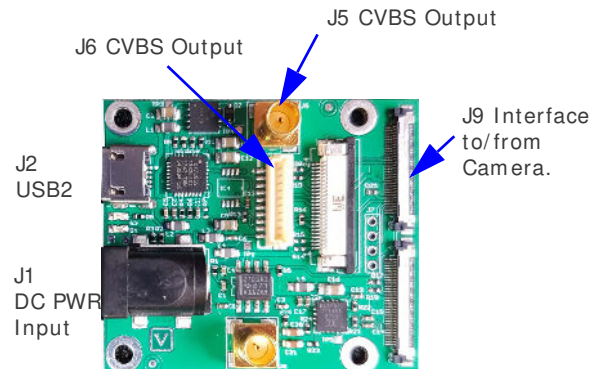
Ambient Temperature (min/max): -5°C/+60°C = 23°F/140°F
Humidity: 20%-80%

STORAGE CONDITIONS:

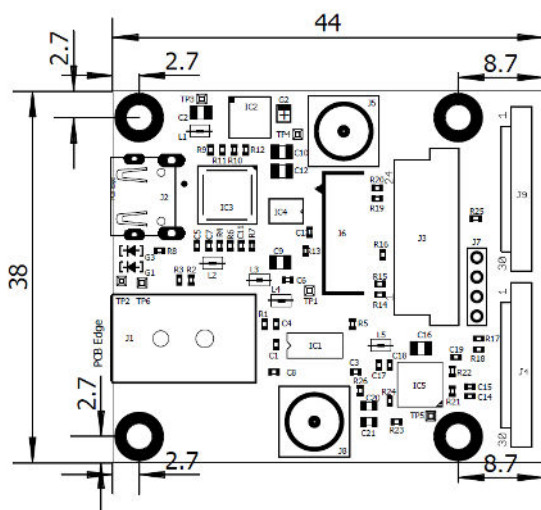
Temperature (min/max): -20°C/+60°C = -4°F/140°F
Humidity: 20%-80%

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.

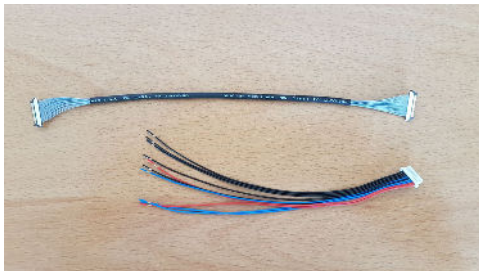
CAUTION:

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

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