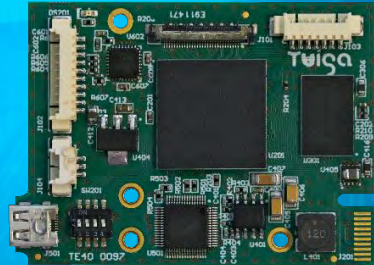


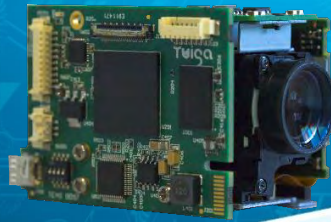
# LVDS to YPbPr, CVBS or HDMI INTERFACE BOARD



For TAMRON MP1010M-VC / MP1110M-VC



*Twiga has designed the first solution for both LVDS to digital HDMI or analog HD/ SD output for Tamron MP1010M-VC and new MP1110M-VC module*



## FEATURES

- Digital HDMI video output
- YPbPr analog HD video output
- CVBS & YC analog SD video output
- NTSC / PAL video format
- "Letter box" / "Crop" analog video conversion
- 720p50/60, 1080p25/30 (YPbPr)
- 1080p25/30 to PAL/NTSC (Y/C - CVBS)
- RS232 / TTL - VISCA serial control
- GPIO for zoom, focus, freeze control
- 8 to 12 VDC power supply
- Size : 55mm x 41.5mm

### Video format HDMI – Analog HD & SD

The board supports HDMI video output, up to 1080p25/30 YPbPr analog HD video format and 1080p25/30 analog SD NTSC/PAL video format.

"Letter box" or "Crop" conversion from HD 16/9 to SD 4/3 aspect ratio are available.

### Serial and GPIO control

The board supports RS232 / TTL levels - VISCA protocol. GPIO are available for zoom, focus and freeze control.

### Compact & cost effective solution

Highly compact, Twiga LVDS to analog HD & SD interface board is the ideal cost effective solution for a wide variety of applications.

## TARGET APPLICATIONS

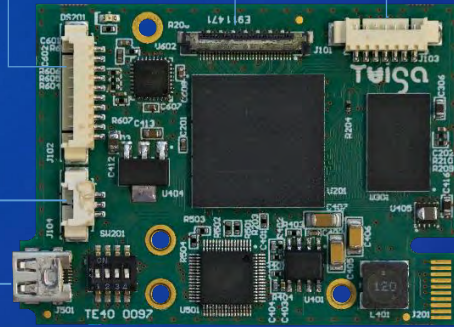


Drone / Video conferencing / UAV'S / ROV'S / Inspection / Low vision / Traffic control / ANPR / Medical

# Onboard Connectors

J102	COM + Power + Analog
1	CVBS / Y
2	0V-GND
3	TxD (board input) TTL
4	RxD (board output) TTL
5	0V-GND
6	+ 8 to 12 V
7	0V-GND
8	C video / Pr
9	0V-GND
10	Y video / Pb

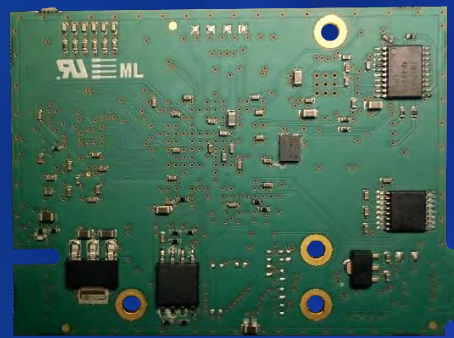
**J101 Tamron LVDS Camera Input**



J103	GPIO
1	0V-GND
2	Zoom TELE
3	Zoom WIDE
4	Focus auto / manual
5	Focus NEAR
6	Focus FAR
7	Freeze

**HDMI output**

J104	RS232
1	RxD-232 (board output)
2	TxD-232 (board input)
3	0V-GND



P/N – TV10 0070	LVDS to YPbPr, CVBS or HDMI interface board for Tamron MP modules
Functions	Specifications
Digital video output	HDMI
Analog HD video output	YPbPr
Analog SD video output	CVBS & Y/C NTSC/PAL format
Analog video conversion	« Letter box » or « Crop » format
GPIO control	Zoom, focus, freeze control
Camera control	TTL/RS232 levels - VISCA protocol
Power supply	8 to 12 VDC, 5 W (including camera)
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)	55 (H) x 41.5 (W) x 4.5 (D)
Weight (g)	13

P/N - TV50 0015	Accessory set
Content	
30 way USL20-30SS-012-C micro coaxial cable	✓
10 way cable - power supply + COM + SD/HD output	✓
7 way cable – GPIO – Zoom, Focus, Freeze	✓
3 way cable – RS232	✓
Screws + spacers	✓

PB\_TWIGA\_LVDS to HDMI + Analog HD & SD\_03/10/2017

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