

HD-SDI INTERFACE BOARD

FOR TAMRON MP1010-VC Module



More than a video transmission module, the Twiga HD-SDI interface board for Tamron MP1010M-VC has been designed to be the heart of your industrial vision system.

Thanks to our 3G/HD-SDI module, you will be able to transfer HD video in real time to deliver staggering picture quality.

FEATURES

- Support MP1010M-VC LVDS video input
- SMPTE 292M - HD-SDI video output
- Ultra-low jitter
- Automatic camera detection
- Video mode selection by DIP switches*
- TTL or RS232 VISCA dialog level
- 6 to 12VDC protected and EMC filtered power supply
- BNC 75 ohm connector- SMB or MCX option

* The camera need to be restarted

○ Perfect HD-SDI image quality

HD-SDI technology is the first established standard that provides sufficient bandwidth to allow uncompressed transmission of high-definition video signals (up to 1080p30) from camera to screen.

○ OEM embedded image processing functions

The Twiga HD-SDI module is based on a powerful Xilinx FPGA. On request, image processing functions such as colorimetry tests, measurements, reticles, contrast enhancement, ROI extraction, OSD and even more functions can be applied to the image flow in real time.

○ Cost effective and easy installation

Upgrading existing SD video systems to HD is a cost-effective way to bring high resolution video without any significant modification of existing coaxial cables.

Only front-end and back-end products need to be replaced.

Hence, the number of cameras needed to capture vivid details such as facial features or license plate is largely reduced. This approach increases time efficiency while also cutting costs.

TARGET APPLICATIONS



Onboard Connectors



J4	COM
1	NA
2	NA
3	NA
4	NA
5	NA
6	NA
7	TxD RS232
8	RxD RS232
9	GND
10	NA

J5	Power IN
1	6 to 12V DC
2	GND

LED blink	Status
1	Initialization OK
2	FPGA loading OK
3	VISCA Dialog W/camera OK
4	Camera identification OK
5	Audio ADC configuration OK
6	FPGA video processing OK
7	Video format modification by switches

DIP switches				Video format configuration
1	2	3	4	MP1010M-VC
OFF	OFF	OFF	OFF	External
ON	OFF	OFF	OFF	1080p30
OFF	ON	OFF	OFF	1080p25
ON	ON	OFF	OFF	1080i60
OFF	OFF	ON	ON	1080i50
ON	OFF	ON	OFF	720p60
OFF	ON	ON	OFF	720p50



TTL / RS232 Dialog level	
R29 + R31 Soldered	RS232 level
R30 + R32 Soldered	TTL level

Functions	Specifications
Digital video output	HD-SDI
Video output standard configuration	DIP switches*
Camera control	VISCA – Default : RS232 Level – TTL level (Option)
Power supply	6 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)	48 (H) x 45 (W) x 13 (D)

HD-SDI interface set for Tamron MP1010M-VC			
P/N	TV80 0033-L		
Content			
HD-SDI interface board - ref. TV10 0027	✓		
30 way USL20-30SS-012-C Cable assembly	✓		
2 way cable - power supply (J5)	✓		
10 way cable – COM (J4)	✓		
Connector Options	BNC	SMB	MCX without connector



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