

CAMERA INTERFACE BOARDS

Connector Differences - 75-Ohm & 50-Ohm



50-Ohm Connectors (different to 75-Ohm board)

HD-SDI Output Connector (“Video (SDI)”) (J5)

The interface board is fitted with a Hirose Ultra Small Coaxial 50-Ohm impedance connector. (The HD-SDI driver is matched to 50 Ohm as well).

Connector type: Hirose Ultra Small Coaxial Connector (Receptacle), part number U.FL-R-SMT.

Mating Connector: Various height and cable width options from Hirose:
U.FL-LP-040, U.FL-LP-066, U.FL-LP(V)-040, U.FL-LP-062, U.FL-LP-088
See Hirose documentation “Ultra Small Surface Mount Coaxial Connectors – 1.9mm or 2.4mm mated height”.

Power and Control Connector (“PWR/CTRL”) : 7-way (J3)

The interface board is fitted with an industry standard 7-way connector for power, serial control and analog video out.

Connector type: JST SM07B-SRSS-TB

Mating cable: Suitable cable is supplied with the interface board.

PIN	SIGNAL	LEVEL	NOTES
1	Analog SD video out	PAL / NTSC / RS-170 signal levels.	PAL in 720p50, NTSC in 720p60.
2	Analog video GND	0V	Video GND
3	Power GND	0V	GND
4	DC Power In	8.25V to 12.25V	Power supply, nominal 9V
5	VISCA GND	0V	GND for VISCA Comms
6	RxD	TTL compatible 5V tolerant.	Serial Control (VISCA). Signalling is active low. (Input to interface board)
7	TxD	3.3V CMOS	Serial Control (VISCA) Signalling is active low. (Output from interface board)

75-Ohm Board Connectors (different to 50-Ohm board)

3G-SDI Output Connector (“Video (SDI)”) (J5)

The interface board is fitted with a Hirose H.FL Micro Coaxial Connector (75 Ohm).

Connector type: Hirose Micro Coaxial Connector (Receptacle), part number H.FL-R-SMT(01).

Mating Connector: Use mating cable with 75 Ohm characteristic impedance, for example Hirose part number H.FL75-2LP-084H-A-100.

Power and Control Connector (“PWR/CTRL”): 9-way (J3)

The interface board is fitted with an industry standard 9-way connector for power, serial control and analog video out.

Connector type: JST SM09B-SRSS-TB

Mating cable: Example mating cable supplied with the Evaluation Kit.

PIN	SIGNAL	LEVEL	NOTES
1	RS-232 Rx / RS-485 B	EIA/TIA-562 or EIA/TIA-485-B	Selectable VISCA control by DIP switch. See SW2 description.
2	RS-232 Tx / RS-485 A	EIA/TIA-562 or EIA/TIA-485-A	Selectable VISCA control by DIP switch. See SW2 description.
3	Analog SD video out	PAL / NTSC / RS-170 signal levels	PAL in 720p50, NTSC in 720p59.94/60.
4	Analog video GND	0V	Video GND
5	Power GND	0V	GND
6	DC Power In	8.25V to 12.25V	Power supply, nominal 9V
7	VISCA GND	0V	GND for VISCA Comms
8	RxD#	TTL compatible input 5V tolerant. Active low.	Selectable VISCA control by DIP switch. See SW2 description.
9	TxD#	TTL output. (3.3V CMOS compatible with 5V TTL)	Selectable VISCA control by DIP switch. See SW2 description.

Communications Mode Selection (SW2)

The interface board is fitted with a 2-way DIP switch to select the serial communications standard.

SW2-2	SW2-1	Video Format
OFF	OFF	RS-232 VISCA communications on J3 pins 1 and 2.
OFF	ON	RS-485 VISCA communications with RS-485 termination enabled on J3 pins 1 and 2.
ON	OFF	RS-485 VISCA communications with RS-485 termination disabled on J3 pins 1 and 2.
ON	ON	TTL VISCA communications on J3 pins 8 and 9. Transceiver connected to J3 pins 1 and 2 will be shut down. Applications using this configuration should leave J3 pins 1 and 2 unconnected.



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COMPUTER IMAGING PRODUCTS

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