

**NOTES:**

1. LEGEND: \* RESERVED – Consult Factory  
 ▶ Position 1 indicator
2. Mating connectors, pinouts, and signal names on Sheets 3-6
3. SW1 switches shown in factory default positions
4. Image of camera for reference only. Varies with model.

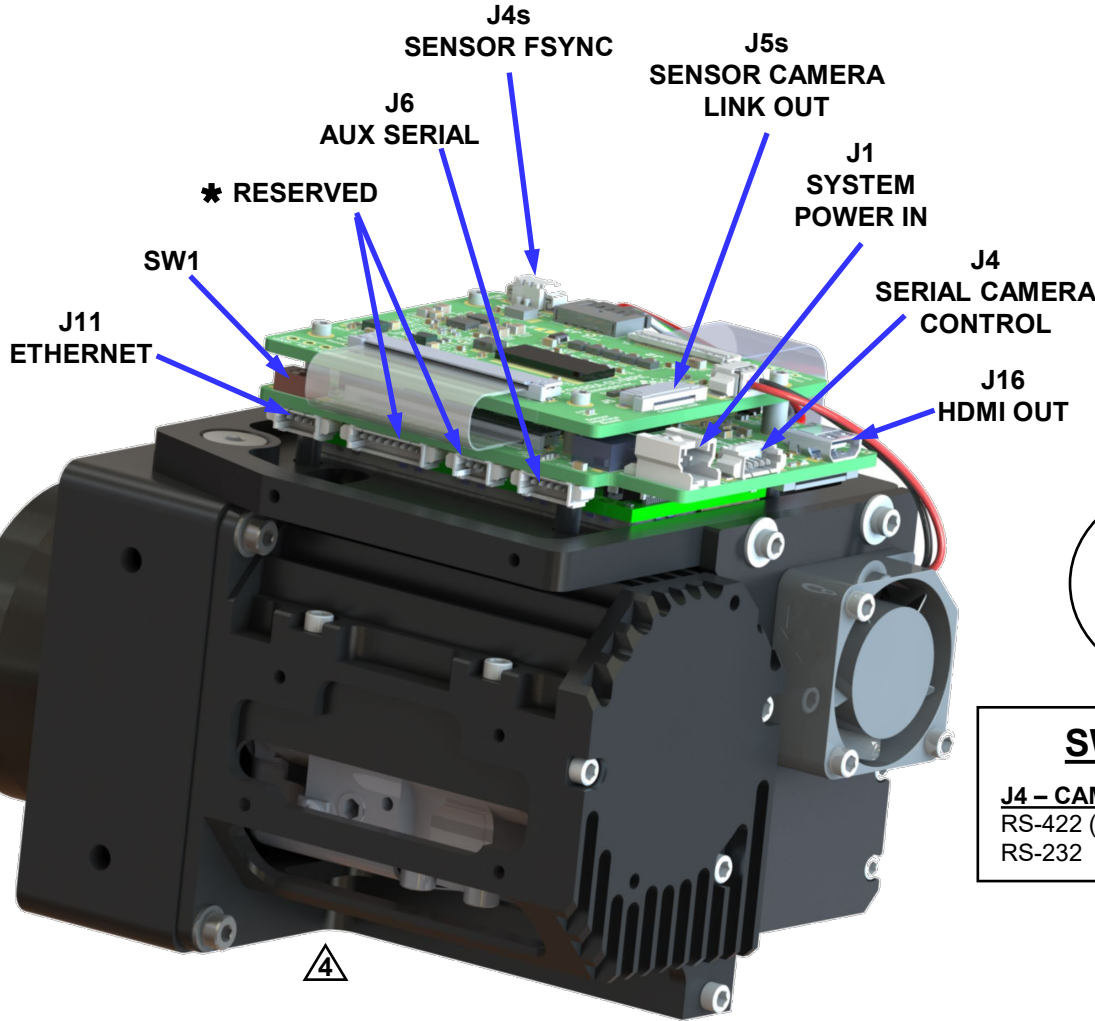
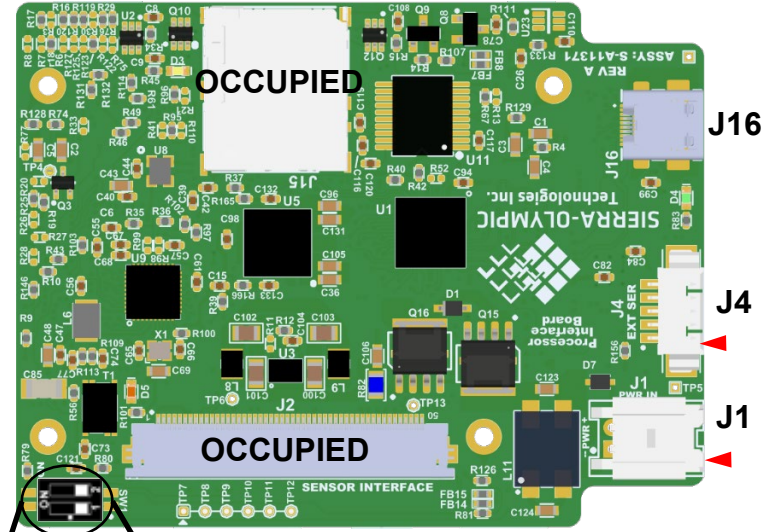
**Applicable to part numbers:**

- SL-HCR-410-01
- SL-HCR-400-01
- SL-HCZ-110-01
- SL-HCZ-130-01

**REVISIONS**

REV	DESCRIPTION	ECO	DATE	Eng.
B	Add details for Ventus HD6-2.4	1530	2023-09-16	DK
C	Add details for Ventus HD6-0.6	1757	2024-05-15	DK

**PROCESSOR INTERFACE BOARD  
TOP VIEW**



**SW1 - SERIAL PORT CONFIGURATIONS**

**J4 – CAMERA CONTROL (SW1-1)**

RS-422 (default) SW1-1 OFF  
 RS-232 SW1-1 ON

**J6 – AUX SERIAL (SW1-2)**

RS-422 (default) SW1-2 OFF  
 3.3V TTL SW1-2 ON

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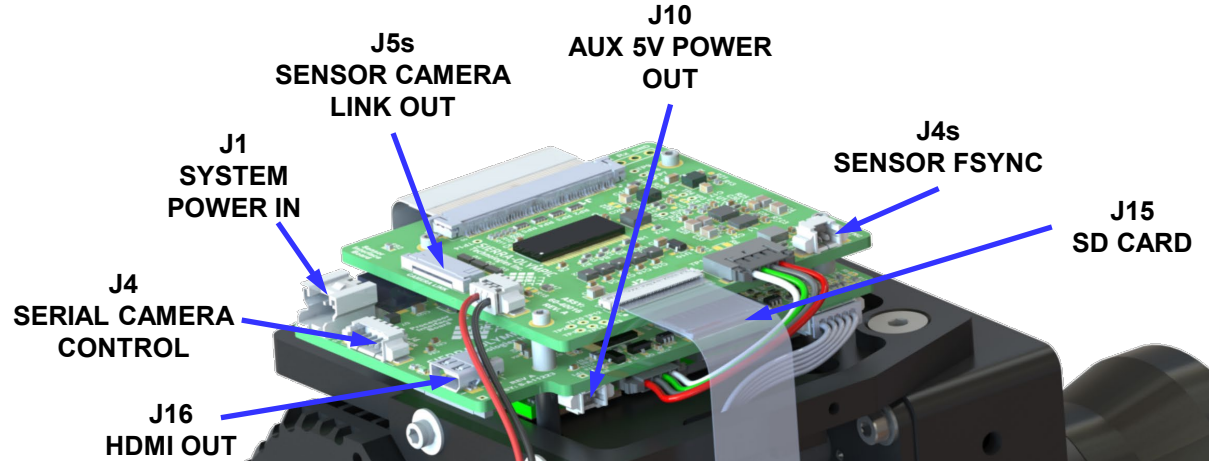
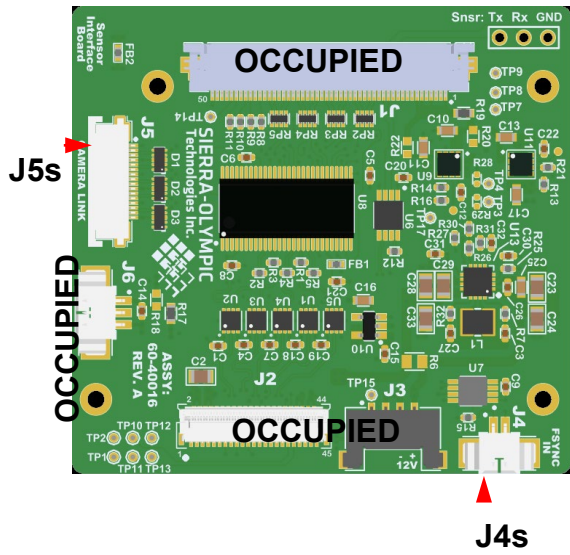
**20-70005**

Electrical ICD, Ventus HD6

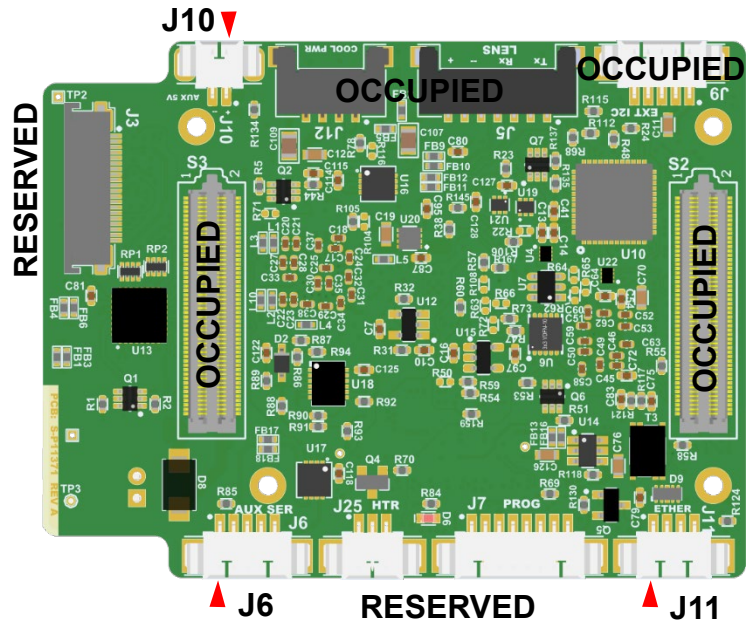
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**SENSOR INTERFACE BOARD**



**PROCESSOR INTERFACE BOARD  
BOTTOM VIEW**



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## NOTES:

- RX indicates input to camera from external system.  
TX indicates output from camera to external system.
- Exceeding Max Ratings could cause damage to components.

### J1 - SYSTEM POWER IN

Molex Sherlock 2-position, 2 mm pitch connector  
Mating connector housing: Molex 0355070200  
Connector terminals: Molex 0502128100

**SOTI mating pigtail cable Assy: S-A07-10237 (18", 24 awg)**

PN	Input Power (Steady State, after cooldown)	Momentary Peak Power	Input Power (lens actuation)
SL-HCR-410-01	10W typical	18W typical	NA
SL-HCR-400-01	10W typical	18W typical	NA
SL-HCZ-110-01	11.5W typical	35W typical	18.5W typical
SL-HCZ-130-01	11.5W typical	39W typical	30W typical

Position	Name	Max Rating
1	Input Power Return	11.0 - 14.5 VDC
2	+12 VDC Nominal Input Power	

### J11 - ETHERNET

Molex PicoBlade 4-position, 1.25 mm pitch  
Mating connector housing: Molex 0510210400  
Connector terminals: Molex 0500798100 (26-28 AWG)

Standard 100BASE-TX UTP Ethernet (recommend 26 awg)

Framerate: 60Hz

Framerate: 60 Hz Default

8-bit through-lens gain/level corrected data with AGC

**SOTI mating patch cable assy: S-A07-10240 (72", RJ45)**

Position	Name
1	ETH_RX-
2	ETH_RX+
3	ETH_TX+
4	ETH_TX-

## PROCESSOR INTERFACE CONNECTORS

### J4 - SERIAL CAMERA CONTROL (SLA Serial0)

Molex PicoBlade 5-position, 1.25 mm pitch  
Mating connector housing: Molex 0510210500  
Connector terminals: Molex 0500588100 (28-32 AWG)

Factory default: RS-422 signal levels - SW1-1 OFF (open)

Optional: RS-232 signal levels - SW1-1 ON (closed)

Baud Rate: Default 57600 8-1-N

**SOTI mating pigtail cable assy: S-A07-10236 (18", 28 awg)**

Position	RS-422 (default)	RS-232 (optional)	Max Rating
1	RX+	RX	+/- 25V
2	RX-	n/c	
3	GND	GND	
4	TX+	n/c	+/- 13.2V
5	TX -	TX	

### J6 - AUX SERIAL (SLA Serial3)

Same connector housing/terminals as J4

This port is for feature expansion (e.g. GPS/NMEA)

Port Disabled by Default

Factory default: RS-422 signal levels - SW1-2 OFF (open)

Optional: LVTTTL (0-3.3 V) signal levels - SW1-2 ON (closed)

Position	RS-422 (default)	LVTTTL (optional)	Max Rating
1	RX+	RX	+/- 10V
2	RX-	n/c	
3	GND	GND	
4	TX+	TX	+/- 10V
5	TX -	n/c	

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SHEET 3 OF 6

## NOTES:

7. Exceeding Max Ratings could cause damage to components.

### J10 - AUX 5V POWER OUT

Molex Picoblade 2-position, 1.25 mm pitch

Mating connector housing: Molex 0510210200

Connector terminals: Molex 0500588100 (28-32 AWG)

Position	Name	Max Rating
1	+5V Out	1.0 A cont.
2	GND	Not Fused

### J16 - HDMI OUTPUT


Output Connector: Molex 46765-0301 (Type D)

Mating connector: Standard Micro-HDMI

8 bit corrected with AGC

Frame rate: 60 Hz Default

## PROCESSOR INTERFACE CONNECTORS

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## NOTES:

8. Exceeding Max Ratings could cause damage to components.

### J4s - SENSOR FSYNC

Molex Picoblade 2-position, 1.25 mm pitch

Mating connector housing: Molex 0510210200

Connector terminals: Molex 0500588100 (28-32 AWG)

See HexaBlu Electrical ICD (DRS Document No. 1043862) for detail.

Position	Name	Max Rating	Notes
1	Fsync Input - 3.3V Logic	-0.5V to 6.0V	120k Ohm Pull-down
2	GND		

## SENSOR INTERFACE CONNECTORS

### J5s - SENSOR CAMERA LINK OUT

Output Connector: Amphenol SFV16R-1STE1HLF, Bottom Contact

Mating cable: 16-position 0.5 mm pitch FFC

16-bit sensor (pre;lens) gain/offset corrected data

Framerate: 30Hz or 60Hz, will match sensor output

**SOTI Camera Link Adapter Kit: S-A07-10277**

Position	Name	Max Rating
1	GND	1.8V LVDS LVDS Driver Output Absolute Max Rating: -0.3V to 2.1V
2	CL_OUT3_P	
3	CL_OUT3_N	
4	GND	
5	CL_OUT2_P	
6	CL_OUT2_N	
7	GND	
8	CL_OUT1_P	
9	CL_OUT1_N	
10	GND	
11	CL_OUT0_P	
12	CL_OUT0_N	
13	GND	
14	CL_CLK_N	
15	CL_CLK_P	
16	GND	

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SHEET 5 OF 6



# HD-SDI OPTIONAL ACCESSORY

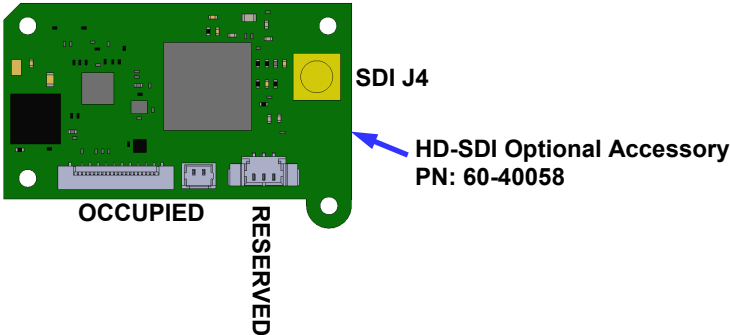
## SDI J4 - 3G/HD-SDI Output (optional)


Output Connector (J4): MCX, 75 Ohm, Molex PN: 0734151631

Mating connector: MCX, 75 Ohm, example PN: 0734155190

8-bit corrected data with AGC

Framerate: 30Hz or 60Hz, will match sensor output



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