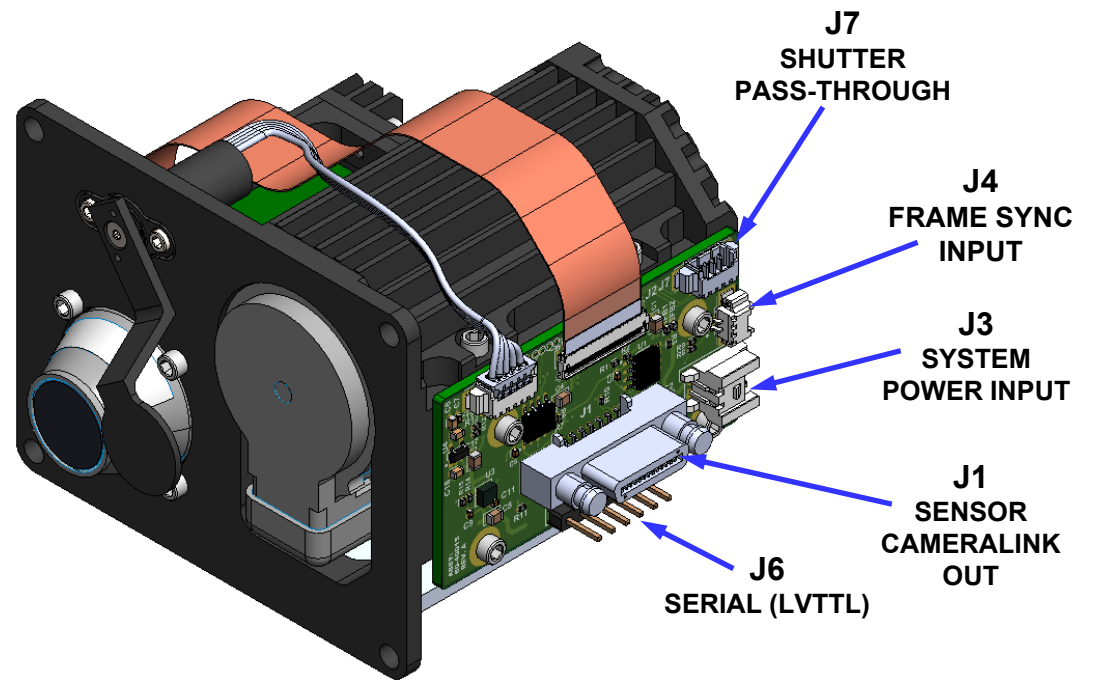
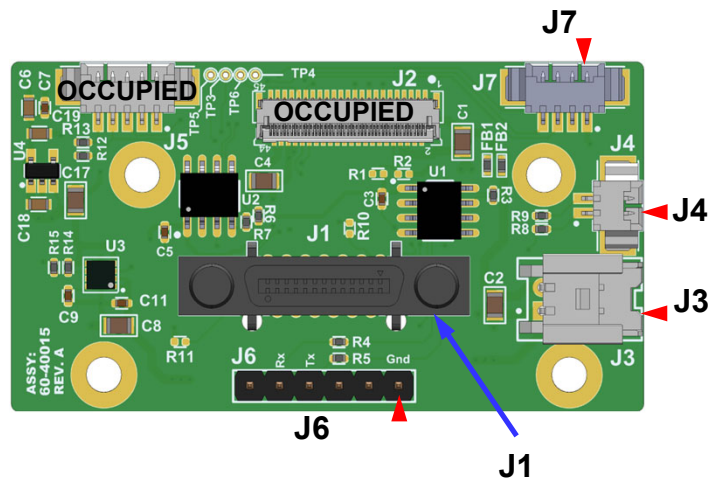


NOTES:

1. LEGEND: ▶ Position 1 indicator
2. Mating connectors, pinouts, and signal names on Sheets 2-3

REVISIONS				
REV	DESCRIPTION	ECO	DATE	Eng.
A	Initial Release	1308	2023-01-26	DK
B	Corrected signal levels for J6 and J7	1483	2023-07-17	WK
C	Corrected J6 pinout, update to latest template	1793	2024-08-14	GO

**60-40015
HexaCore Adapter Board**



PROPRIETARY AND CONFIDENTIAL

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF SIERRA-OLYMPIA TECHNOLOGIES, INC. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF SIERRA-OLYMPIA TECHNOLOGIES, INC. IS PROHIBITED.

SIERRA-OLYMPIA
TECHNOLOGIES INC.

20-70006
Electrical ICD, Ventus HD6 Core

Product Export Classification Control Number (ECCN): 6A003.b.4.a. This document does not contain export-controlled technology.

Size: A	Revision Date: 2024-08-14	Document Rev: C
N T S		Drawn: D. Kaminski
		SHEET 1 OF 3

NOTES:

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

J3 - SYSTEM POWER INPUT

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

SOT1 mating pigtail cable Assy: S-A07-10237 (18", 24 awg)

Input Power, Steady State after cooldown	Input Power, during cooldown
5.6W typical	10.1W typical

Position	Name	Max Rating
1	Input Power Return	11.0 - 16.0 VDC
2	+14 VDC Nominal Input Power	

J1 - SENSOR CAMERALINK OUT

Output Connector: 3M 12226-1150-00FR
Mating cable: 26 position SDR Male

16-bit raw (before non-uniformity correction)
Frame rate: 30Hz or 60Hz, will match sensor output

1.8V LVDS Driver Output, Absolute Max Rating: -0.3V to 2.1V

Position	Name	Position	Name
1	GND/POCL	14	GND
2	CL_OUT0_N	15	CL_OUT0_P
3	CL_OUT1_N	16	CL_OUT1_P
4	CL_OUT2_N	17	CL_OUT2_P
5	CL_CLK_N	18	CL_CLK_P
6	CL_OUT3_N	19	CL_OUT3_P
7	n/c	20	n/c
8	n/c	21	n/c
9	n/c	22	n/c
10	n/c	23	n/c
11	n/c	24	n/c
12	n/c	25	n/c
13	GND	26	GND/POCL

INTERFACE CONNECTORS

J4 - FRAME SYNC INPUT

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 details.

Position	Name	Max Rating
1	Fsync IN - 3.3V Logic	-0.5V to 6.0V
2	GND	-

J6 - SERIAL (LVTTTL)

Standard 0.1" header, mates with FTDI TTL-232R3V3

For direct communication with camera sensor.
Default baud rate 115200/8/N/1

Position	Name	Signal Direction	Max Rating
1	GND	-	-
2	n/c	-	-
3	n/c	-	-
4	TX - 3.3V Logic	INPUT	-0.5 to 6.0V
5	RX - 3.3V Logic	OUTPUT	
6	n/c	-	-

PROPRIETARY AND CONFIDENTIAL

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF SIERRA-OLYMPIA TECHNOLOGIES, INC. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF SIERRA-OLYMPIA TECHNOLOGIES, INC. IS PROHIBITED.

Product Export Classification Control Number (ECCN): 6A003.b.4.a. This document does not contain export-controlled technology.



SIERRA-OLYMPIA
TECHNOLOGIES INC.

20-70006

Electrical ICD, Ventus HD6 Core

Size: **A** Revision Date: 2024-08-14

Document Rev: **C**

N T S Drawn: D. Kaminski

SHEET 2 OF 3

NOTES:

- Exceeding Max Ratings could cause damage to components.


J7 - SHUTTER PASS-THROUGH

Molex Picoblade 4-position, 1.25 mm pitch
Mating connector housing: Molex 0510210400
Connector terminals: Molex 0500588100 (28-32 AWG)

All signals are 3.3V Logic levels.
SDA and SCL have 4.99k pull-up resistors.
Shutter Reset_N is an active low reset and has an internal pull-up resistor.
See Nanomotion User Manual FS08 Rotary Shutter for shutter commands.

Position	Name	Max Rating
1	GND	-
2	Shutter Reset_N	-0.5V to 3.6V
3	SDA	
4	SCL	

INTERFACE CONNECTORS

PROPRIETARY AND CONFIDENTIAL <small>THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF SIERRA-OLYMPIA TECHNOLOGIES, INC. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF SIERRA-OLYMPIA TECHNOLOGIES, INC. IS PROHIBITED.</small>	 SIERRA-OLYMPIA TECHNOLOGIES INC.	
	20-70006 Electrical ICD, Ventus HD6 Core	
Product Export Classification Control Number (ECCN): 6A003.b.4.a. This document does not contain export-controlled technology.	Size: A Revision Date: 2024-08-14	Document Rev: C
N T S	Drawn: D. Kaminski	SHEET 3 OF 3