SLA-FFC Interface Control Documentation

Overview

This document describes many of the camera specific SLA-FFC adapter boards available for use with the SLA-1500 and SLA-3000. The SLA-FFC board can be connected to the appropriate SLA-OEM adapter using a COTS FFC cable.

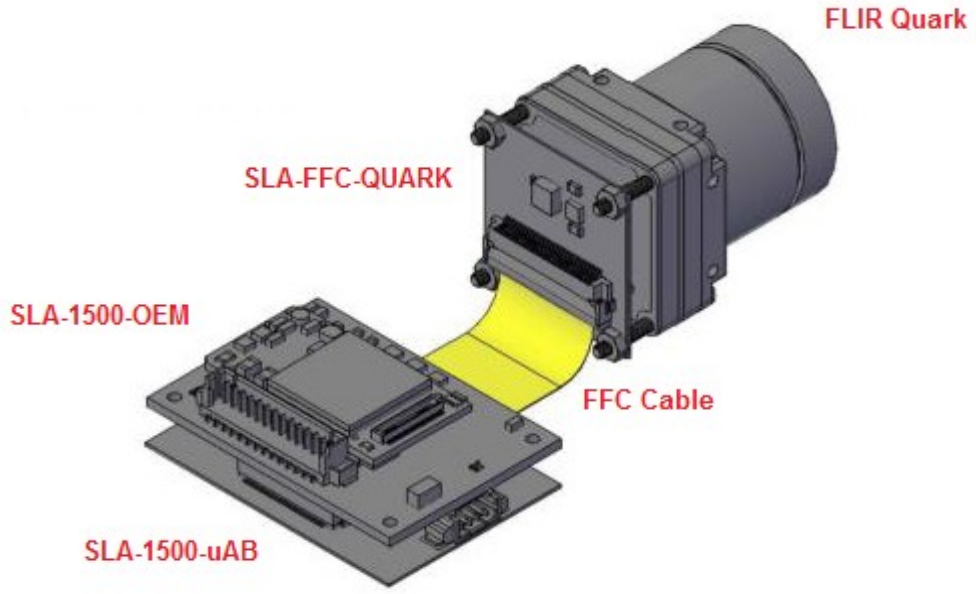

Illustration 1: Example SLA-FFC hookup

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Board Summary

Board Name (xxxx)	SLA-FFC-TAU	SLA-FFC-DRS	SLA-FFC-QUARK
Dimensions (L"xW"xD")	1.496 x 1.496 x 0.251	0.866 x 0.866 x 0.282	0.866 x 0.866 x 0.282
Weight	5g	3g	~3g
Designed Temp Range	-40° to 85°C		
Current Revision	A		

Table 1: SLA-FFC-xxxx Physical Characteristics

Contact your SightLine Sales Representative for 3D Models and detailed dimensioned drawings.

Connectors

BOARD	Label	MFG Part Number	Mates with...
TAU	J9	DF12B-50DS-0.5V(86)	FLIR TAU Camera
	J70	**FH12-30S-0.5SH(55)**	**FFC Cable (Molex 21020-0323)**
DRS	J2	SS4-30-3.00-1-L-D-K-TR	DRS Tamarisk Camera
	J71	**FH12-30S-0.5SH(55)**	**FFC Cable (Molex 21020-0323)**
QUARK	J5	SS4-30-3.00-1-L-D-K-TR	FLIR Quark Camera
	J72	**FH12-30S-0.5SH(55)**	**FFC Cable (Molex 21020-0323)**

For descriptions of the pin-outs for the camera connectors, please refer to the manufactures instructions and design recommendations.

Connector J7x:

Descriptions here are from the CAMERA's perspective.

Pin	Description	Pin	Description
1	Camera TX	2	Camera RX
3	NC	4	NC
5	Ground	6	Digital Data 13
7	Digital Data 12	8	Digital Data 11
9	Digital Data 10	10	Digital Data 9
11	Digital Data 8	12	Digital Data 7
13	Digital Data 6	14	Digital Data 5
15	Digital Data 4	16	Digital Data 3

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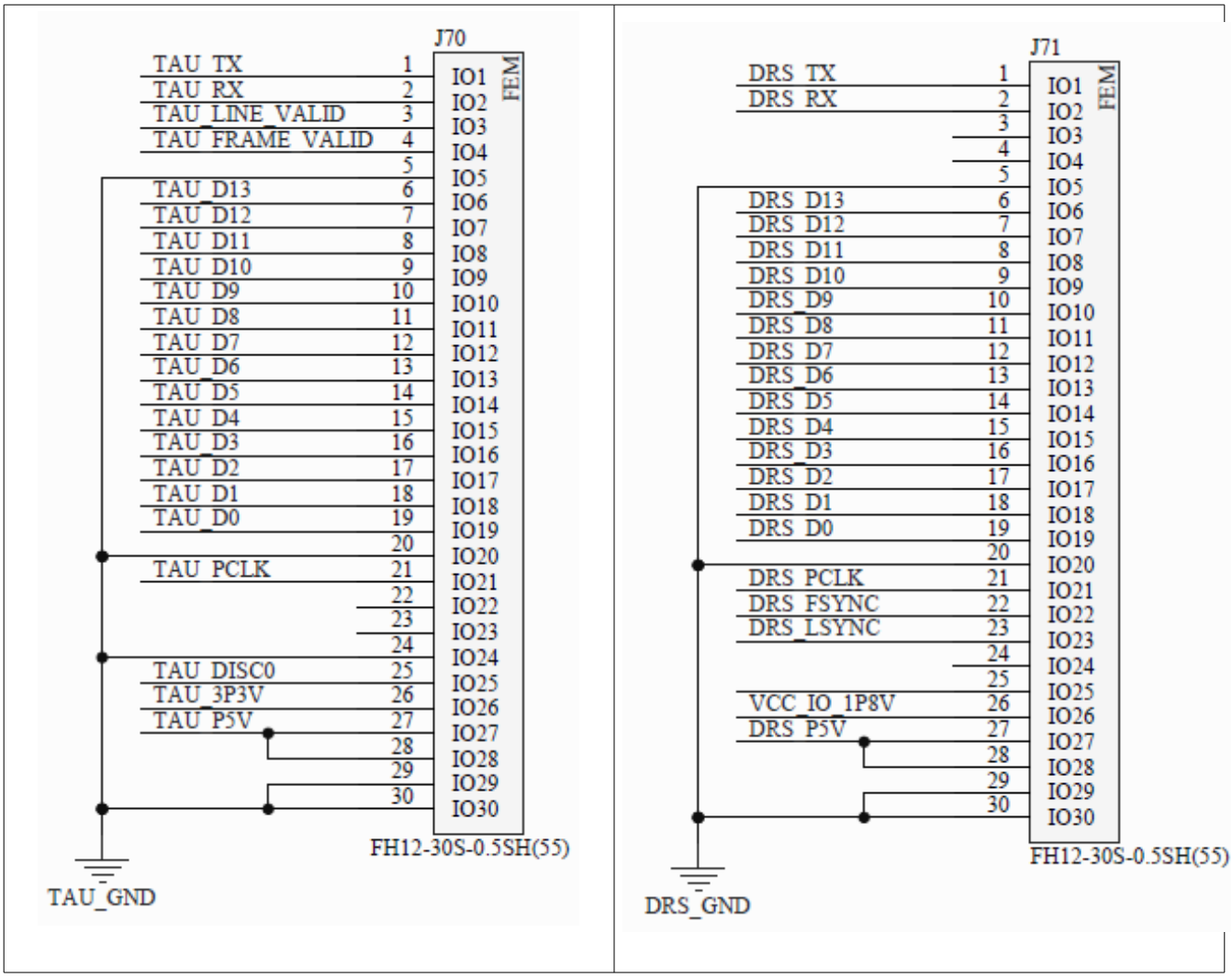
17	Digital Data 2	18	Digital Data 1
19	Digital Data 0	20	Ground
21	Pixel Clock Out	22	Frame Valid
23	Line Valid	24	NC
25	NC	26	+3.3V out
27	+5V input	28	+5V input
29	Ground	30	Ground

EXAMPLE J7x SCHEMATIC:



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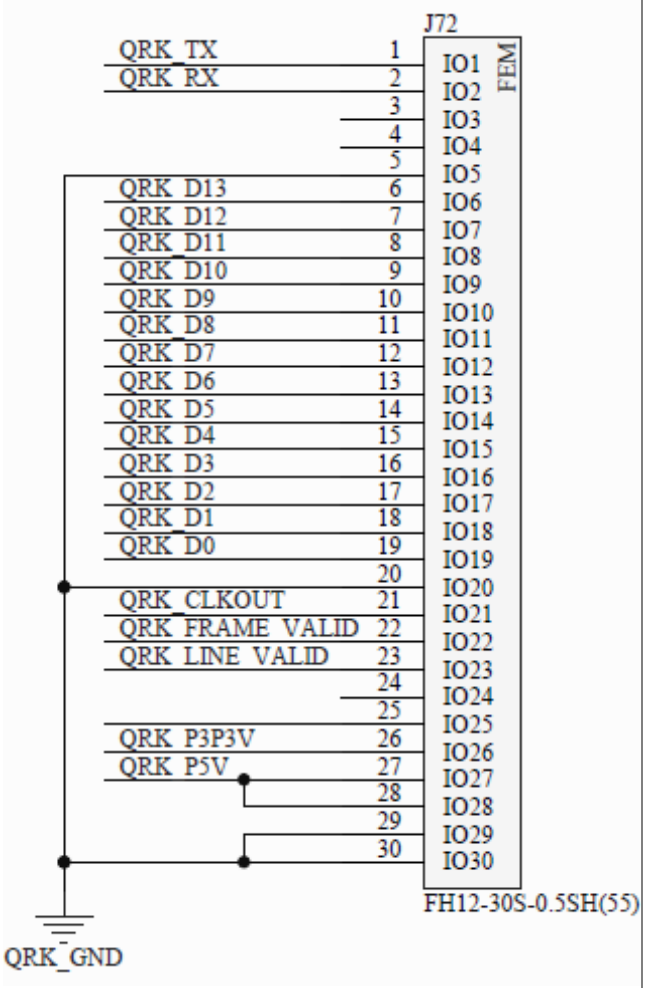

NOTE: These sample schematics are for example purposes only. Please contact your SightLine Sales Representative to get the latest updates.

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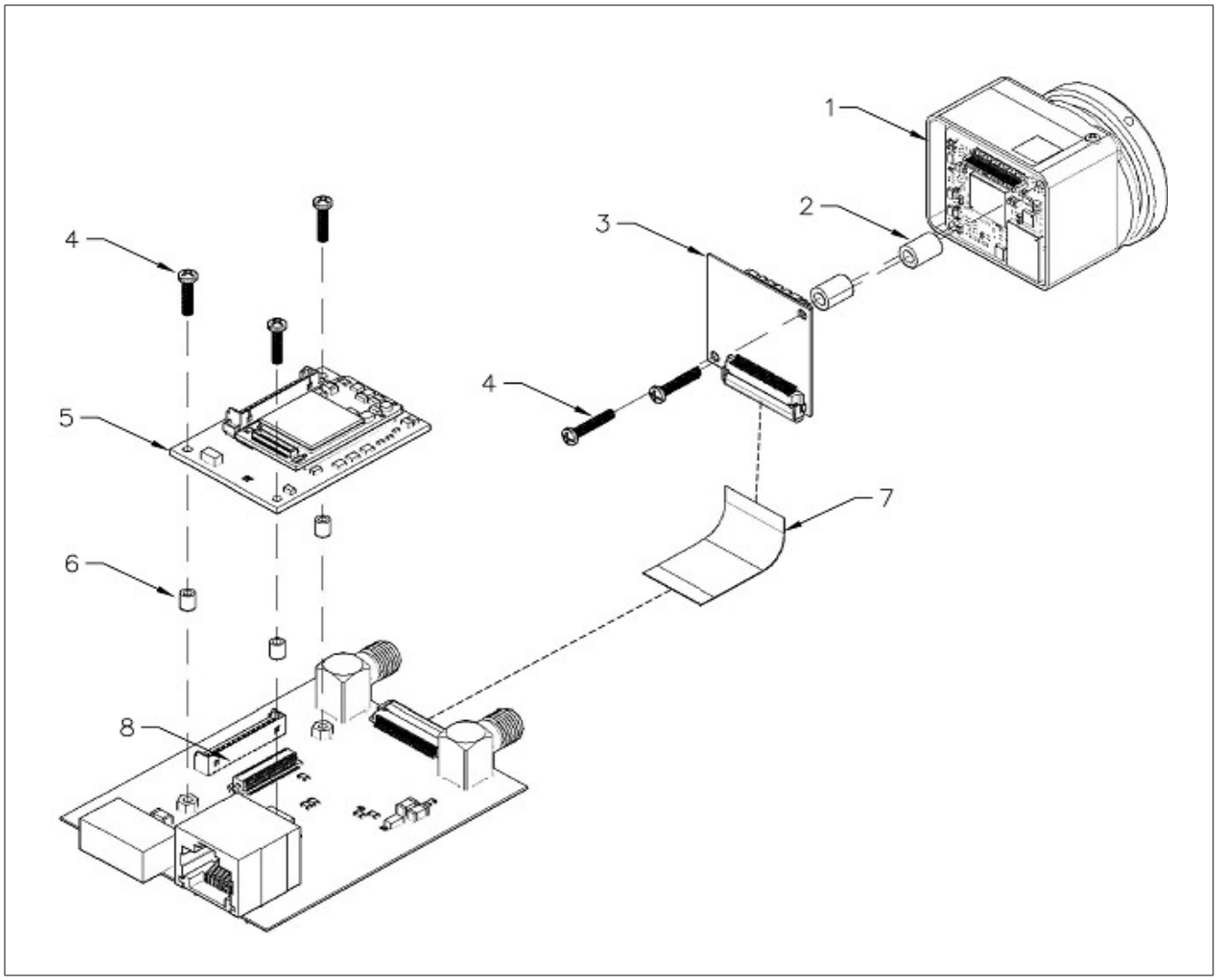
Assembly Drawings:

Assembly drawing exist for each camera and SLA-FFC board. Please contact your SightLine Sales Representative for additional information and availability.

EXAMPLE: SLA-FFC-DRS



ITEM	QTY	Description	ITEM	QTY	Description
1	1	DRS Tamarisk Camera	5	1	SLA-1500-OEM
2	2	6mm standoff (Nylon)	6	3	M1.6 x 3mm standoff (steel)
3	1	SLA-FFC-DRS	7	1	FFC Cable (Molex 21020-0323)
4	5	M1.6 x 10mm machine screw	8	1	SLA-1500-mAB

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Cables

SLA-FFC boards are designed to work with **MOLEX 21020-0323** 0.50mm Pitch Premo-Flex™ FFC Jumper, Same Side Contacts (Type A), 30 Circuits, 0.127m Cable Length, 0.27mm Cable Thickness, Tin(Sn) Plating. Longer and shorter cables have also been test with positive results.

SightLine Part Number	Manufacture's Part Number	Description
SLA-CAB-FF06	MOLEX 21020-0323	5” FFC Cable; 30 Circuits

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FILES

Additional files such as 3D models, Schematics, Gerbers, etc. may be available for some products. Contact your Sales Representative for more information.

ERRATA

Please contact your Sales Representative often as new versions of the product (new schematics, etc.) may be available.

Contacts

SightLine Applications, Inc.
1107 13TH STREET
HOOD RIVER, OR 97031

SightLine Applications, Inc.
524 N Tillamook Street Suite 101
Portland, OR 97227

Sales sales@sightlineapplications.com
General info@sightlineapplications.com

sightlineapplications.com

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