



SLA-1550-EAB - Ethernet Adapter Board

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PRELIMINARY

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Summary

The SLA-1550-EAB is the next generation Video Processor with On Board Ethernet switch. The SLA-1550-EAB is similar in many ways to the SLA-1500-EAB with many new features and a reduced mechanical footprint.

Software and Hardware Compatibility

Common note: All SLA firmware and Panel Plus software revisions are available for download on the SightLine Applications Website – <http://www.sightlineapplications.com/support/software>

Board Summary

Dimensions	3.0" x 1.6" x 0.49"
Weight	~23g
Electrical	9 – 15V DC (12V NOM)
Operational Temp Range	TBD
Current Revision	A

Table 1: SLA-1550-OEM Physical Characteristics

Dimensions & Mounting

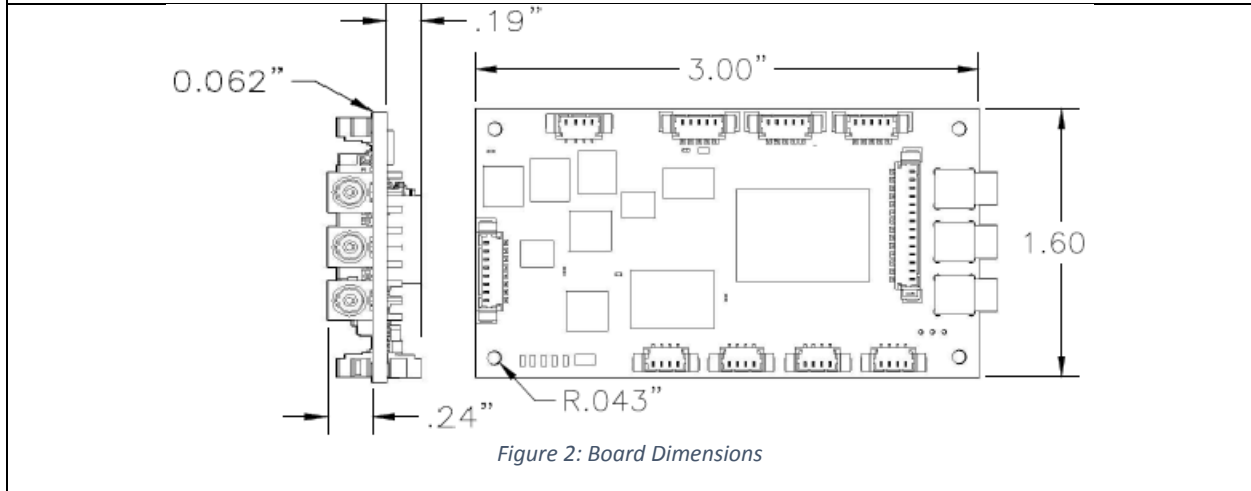
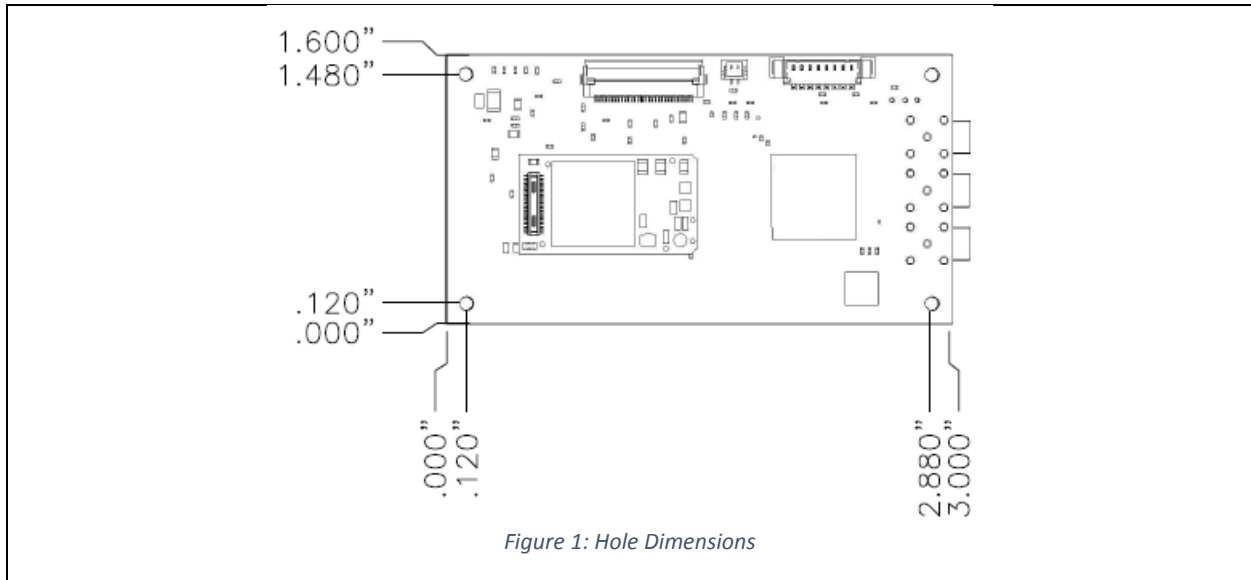


Table 2: Dimension Drawings

Connectors

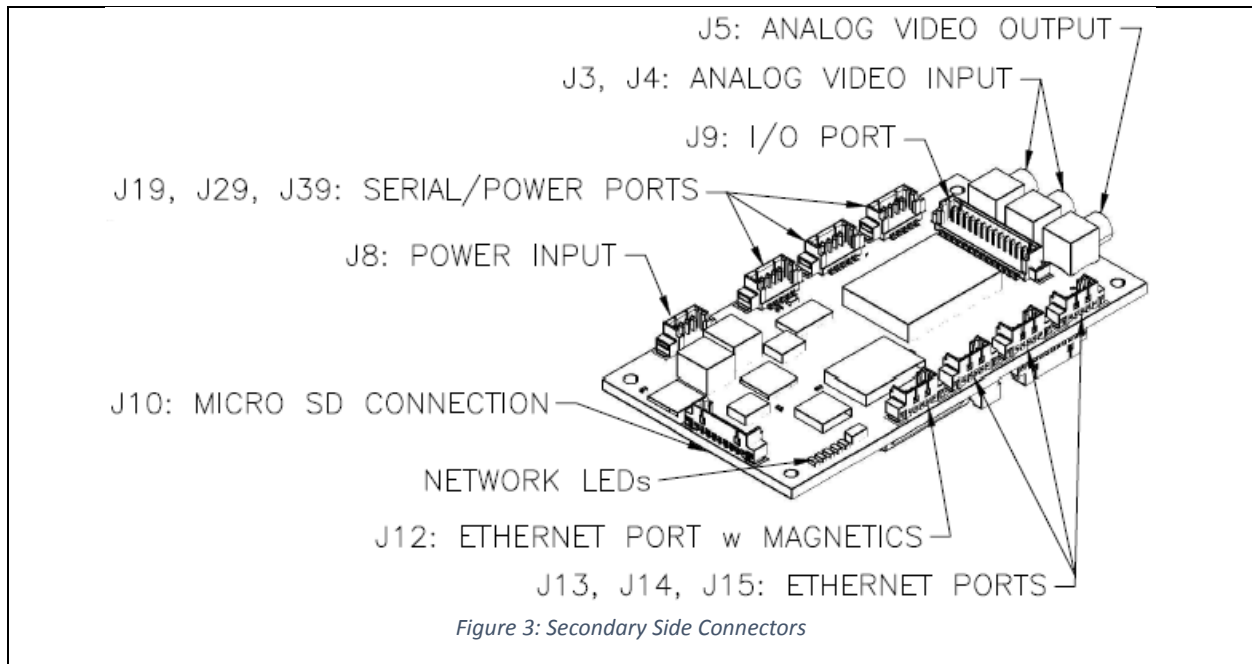


Figure 3: Secondary Side Connectors

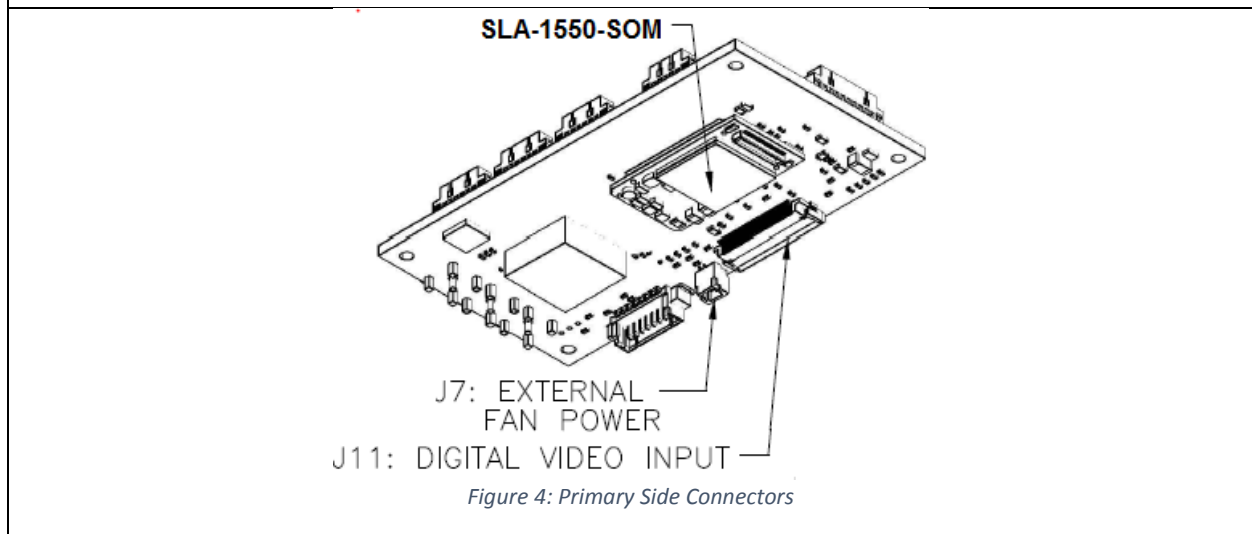


Figure 4: Primary Side Connectors

Table 3: Connector Call-outs

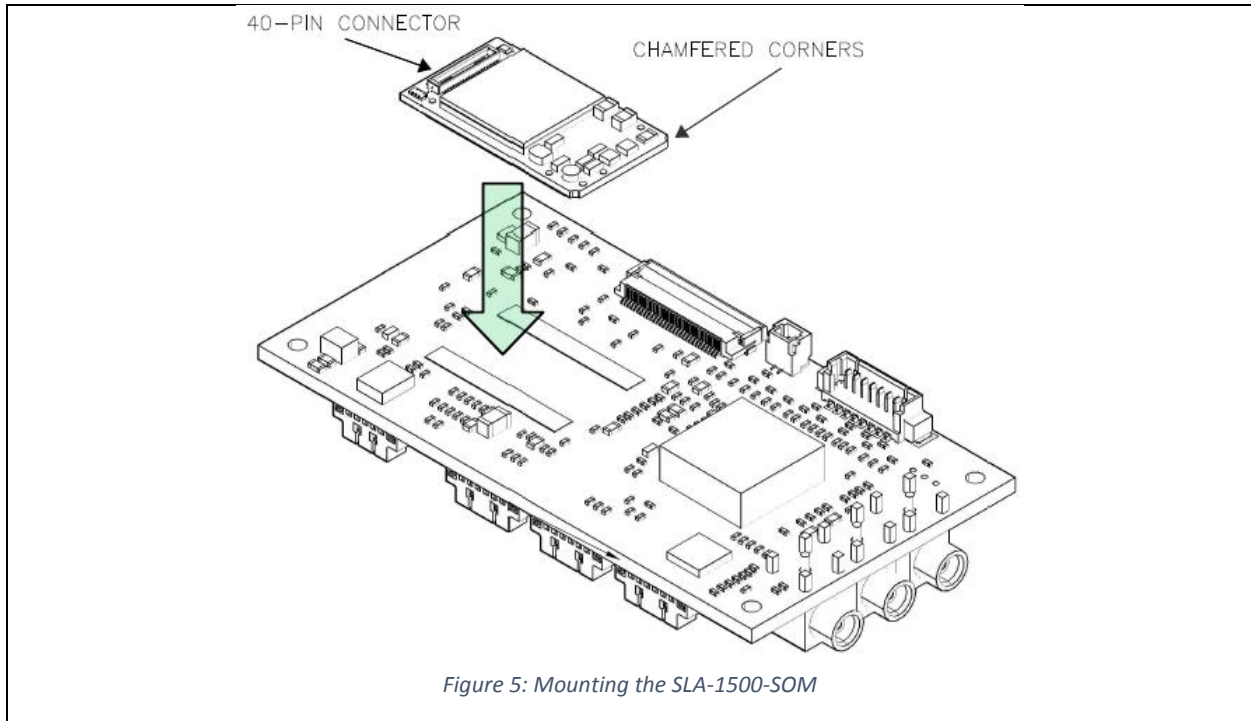
Label	MFG Part Number	Function	Mates with...
J3, J4	1061022-1	Analog Video Input (MCX)	SLA-CAB-P001
J5	1061022-1	Analog Video Output (MCX)	SLA-CAB-P001
J7	TBD	External Fan Power	TDB
J8	53398-0471	Input Power	SLA-CAB-1504
J9	53398-1471	Analog Video In/Out, GPIO, I2C	SLA-CAB-1514
J10	TBD	External microSD connector	TBD
J11		FFC digital video connectors	SLA-FFC-xxxx camera boards
J12	53398-0471	Ethernet (with Magnetics)	SLA-CAB-040x
J13, J14, J15	53398-0471	Ethernet	SLA-CAB-040x
J19 "S0"	53398-0571	Serial Port 0 (/dev/ttyO0)	SLA-CAB-050x

J29 "S1"	53398-0571	Serial Port 1 (/dev/ttyO1)	SLA-CAB-050x
J39 "S2"	53398-0571	Serial Port 2 (/dev/ttyO2)	SLA-CAB-050x

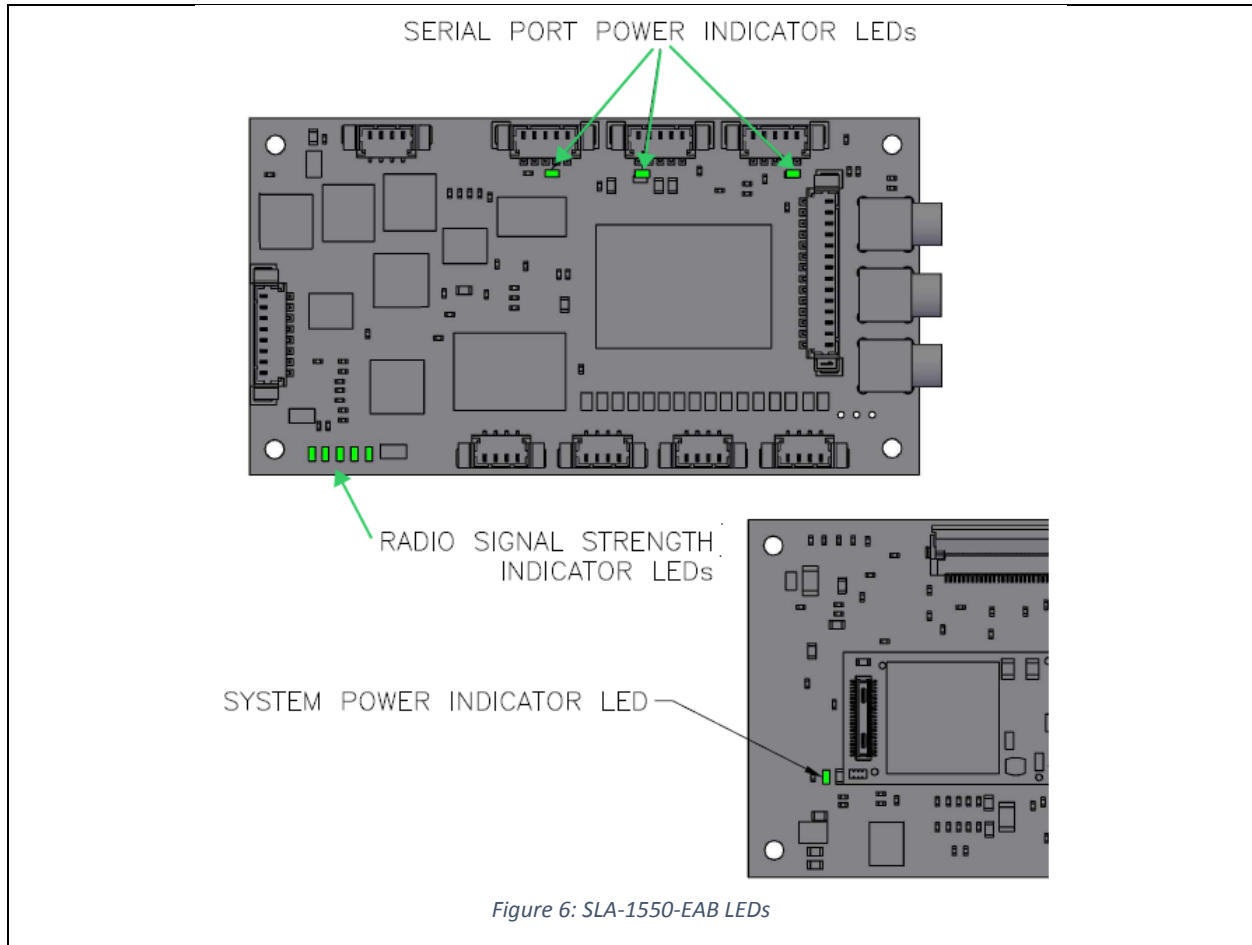
Table 4: Connector Summary

Attaching the SOM

Pay careful attention to the SLA-1550-SOM orientation when mounting. **DO NOT INSERT THE SOM BACKWARDS!**



LEDS



Label	Description	Label	Description
D9	Serial Port 0 Power is hot	D4	LED3-2 (J14)
D10	Serial Port 1 Power is hot	D5	LED4-2 (J15)
D11	Serial Port 2 Power is hot	D6	LED5-2 (SLA-1500-SOM)
D2	LED1-2 (J12)	D12	Main Power In
D3	LED2-2 (J13)		

Table 5: LED Descriptions

Cables

Please refer to the ICD-SLA-CABLES.PDF for a list of all cables that might be applicable to your system.

Connector J8: Power

Pin	Signal	Description
1	Power In	9 – 15V DC
2		
3	Ground	
4		

Table 6: Connector J8

Connector J19, J29, J39: RS-232 + Power

Power can be supplied over the 5-pin Molex connectors (J19, J29, or J39) by populating resistors on the bottom (DSP side) of the board. Use any 0603 0Ω resistor. When using these ports to power devices the current limit would be 0.5A total for all 3 ports combined.

Pin	Signal	Description	
		OPTION	Description
1	Power Out	0	No Connected (DEFAULT)
		1	+5V (Populate R46, R48, R50)
		2	Vin (Populate R45, R47, R49)
2	Ground	RS-232C	
3	Ground		
4	Transmit (TX)		
5	Receive (RX)		

Table 7: Connectors J19, J29, J39

Connector J9: GPIO, I²C, Analog Video

The I/O connector exposes the same Analog Video signals as J3, J4, and J5 as well as providing access to GPIO and the I2C bus. All GPIO and the I2C bus are 3.3V level signals.

Pin	Description	Pin	Description
1	Video In 0	8	GPIO 175
2	Ground	9	GPIO 178
3	Video In 1	10	Ground
4	Ground	11	I2C Bus 2 SCL
5	GPIO 172	12	I2C Bus 2 SDA
6	GPIO 173	13	Ground
7	GPIO 174	14	Analog Video Out

Table 8: Connector J9

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