Bill of Materials

Author: Chase Martin		Date: 11/11/24		Name: 8" AIS A-SL RGBW LED Module		Part Number: P-LED-0004-V1A		Total Cost Per Assembly: $28.60	
Category	**Description**	**Manufacturer**	**Part Number**	**Value / Specification**	**Size / Footprint**	**Drawing / Schematic References**	**Quantity Per Assembly**	**Preferred Supplier**	**Total Part Cost Per Assembly**
General type of part	Detailed description of part	For generic / standard parts, manufacturer for specific part sourced from preferred supplier	Manufacturer (not distributor) part number	Key specifications listed where applicable	Standardized size provided where applicable	Multiple references may be listed, depending on existing documentation for assembly	Total quantity required for one assembly, excluding spares	Includes web link to supplier / part where possible	Total cost for one assembly, excluding taxes / shipping, without bulk discounts
LED	High Power RGBW LED	Inolux	IN-P55QSTGRGBW	N/A	SMD 5 mm x 5 mm 8PLCC w/Thermal Pad	LED1 - LED24	24	Mouser Electronics	$ 18.72
Reisistor	Zero Ohm Resistor / Jumper	Yageo	AC1206FR-070RL	0 Ω	SMD 1206	JP1 - JP8	8	Mouser Electronics	$ 0.23
Resistor	Standard Resistor	Panasonic	ERJ-PA3F10R0V	10 Ω, 1/3 W	SMD 0603	R1, R5	2	Mouser Electronics	$ 0.28
Resistor	Standard Resistor	Panasonic	ERJ-PA3F16R0V	16 Ω, 1/3 W	SMD 0603	R2 - R4, R6 - R8	6	Mouser Electronics	$ 0.45
Diode	Transient Voltage Suppression Diode	Semtech	UCLAMP2461P.TNT	24 V Working Voltage	SMD 0603	D4	1	Mouser Electronics	$ 0.96
Diode	Transient Voltage Suppression Diode	Semtech	UCLAMP4061P.TNT	40 V Working Voltage	SMD 0603	D1 - D3	3	Mouser Electronics	$ 3.18
Fuse	Slow Blow Fuse	Bel-Fuse	C1T 3	3 A Slow Blow	SMD 1206	F1 - F4	4	Mouser Electronics	$ 1.20
Connector	Male Horizontal Pin Header	Samtec	TSM-105-01-L-SH-A	5 Pins, Surface Mount, Alignment Pin	SMD 0.1" Pin Spacing	J1	1	Mouser Electronics	$ 1.49
Connector	Female Horizontal Pin Header	Harwin	M20-7910542R	5 Pins, Surface Mount	SMD 0.1" Pin Spacing	J2	1	Mouser Electronics	$ 1.34
PCB	Aluminum Insulated Substrate PC Board	JLCPCB	N/A ("JLCJLCJLCJLC" Location Reference Provided on PCB)	1 Layer, 1 oz Copper, White Silkscreen, HASL Finish	21 mm x 215 mm x 1.6 mm	N/A	1	JLCPCB	$ 0.75