

Expense Sheet - BOM

Description	Mfg. Part Number	Listing	Schematic Reference	Quantity	Total Price (\$)
SMD LED, amber, package 1206	HSMA-C350	Digi-Key	Main: LED1 - LED62	139	48.29
LED driver, 16-bit shift-register with latching	STP16CPC05MTR	Digi-Key	Main: U1 - U4	10	17.76
Push button, flat, tactile, SPST, normally open	TS05-66-50-BK-260-SMT-67	Digi-Key	Main: U5 - U9	13	4.56
Rotary encoder, mechanical, 15mm D-shaft, 24 PPR, no detents	PEC11R-4015F-N0024	Mouser	Main: SW1 - SW3	8	11.52
I/O port expander, 8-bit, I2C protocol	PCF8574ADWR	Mouser	Main: U10, U11	6	11.7
USB Mini Type B connector, female, 1.5A	GMSB0522102Y7EU	Mouser	Main: USB1	3	4.2
SMD resistor, 1/4W 1Kohms 1%	—	Mouser	Main: R22 - R25	10	1.62
SMD resistor, 1/4W 2Kohms 1%	—	Mouser	Main: R26, R27	6	1.14
SMD resistor, 1/4W 10Kohms 1%	—	Mouser	Main: R1 - R6, R11, R12, R15 - R21	35	5.25
SMD resistor, 1/4W 330ohms 1%	—	Mouser	Main: R28, R29	6	1.14
SMD ceramic capacitor, 10V 0.1uF 0805 5%	—	Mouser	Main: C1	4	2.52
Various SMD resistors, 1/8W 0-10MOhm 1%	—	Amazon	—	1	8.18
USB Type A to Mini B braided cable, USB 2.0, black	—	Amazon	—	2	15.06
SPST rocker switch	1941.1103	Mouser	Breakout: SW1	3	4.41
USB Type A connector, female, 1.5A	USB1046-GF-0190-L-B-A	Mouser	Breakout: USB-A	3	2.25
USB Type B connector, female, 1.5A	61729-0010BLF	Mouser	Breakout: USB-B	3	3.51
Pin header, 1x2, right angle 2.54mm	22-28-9023	Mouser	Breakout: I2C	4	0.96
DC-DC buck converter, 3A current rating	LM2596	Amazon	Breakout: IN+, IN-, OUT+, OUT-	5	9.69
Digi-Key shipping, tariff, sales tax	—	—	—	—	16.79
Mouser shipping and sales tax	—	—	—	—	11.88
JLPCB PCBs and shipping	—	—	—	—	57.38
1/8" Acrylic sheet, opaque black, 12" x 24"	2025 Black	Delvie's Plastics	—	1	11.5
1/8" Acrylic sheet, transparent bronze, 12" x 12"	2370 Bronze	Delvie's Plastics	—	1	7.25
1/8" Acrylic sheet, frosted clear, 12" x 12"	—	Delvie's Plastics	—	1	6
1/8" Acrylic sheet, transparent clear, 12" x 12"	—	Delvie's Plastics	—	1	5.25
1/4" Acrylic sheet, transparent clear, 12" x 24"	—	Delvie's Plastics	—	1	15.75
Wood veneer, mahogany	—	Woodcraft	—	1	12.83
Wood veneer, walnut	—	Woodcraft	—	1	13.9
Cyanoacrylate super glue liquid, 5 grams	—	Ace Hardware	—	2	9.82
Water-based wood finish, semi-gloss, 0.5 pt	—	Ace Hardware	—	1	13.9
Adhesive foam tape	—	Amazon	—	1	12.92
Machine screw caps, brushed aluminum	—	Amazon	—	8	12
Machine screws, counter-sink, #6-32, 1/2" length	—	—	—	8	—
Machine screws, round head, #6-32, 1.5" length	—	—	—	4	—
5V DC wall adapter	—	—	—	2	—
USB Type A to Type B cable	—	—	—	2	—
PLA 3D printing filament, black	—	—	—	—	—
Terasic DE1-SoC board, Cyclone V	Cyclone V: 5CSEMA5F31C6	—	—	2	—
					Grand Total
					360.93
Estimate for two (2) fully assembled FSS prototypes.					