

Part Name/Description		Unit	Quantity	Unit Prototype Cost	Total Prototype Cost	Unit Production Cost	Total Production Cost	Manufacturer	Manufacturer Part #	Vendor Link	Datasheet Link	Supplier	Supplier Part #	# Ordered	Date Ordered	# Received	Surplus	Schematic Reference	Designators
10k Resistor			2	\$0.36	\$3.60	\$0.36	\$0.72	Vishay	GRCW121010K0JNEAIF	Mouser	Datasheet	Mouser	71-CRCW121010K0JNNAIF	10	10/7/2024	TBD	#VALUE!	R	
1k Resistor			1	\$0.11	\$2.16	\$0.11	\$0.49	Vishay / Dale	GRCW121010K0JNEAIF	Mouser	Datasheet	Mouser	71-CRCW121010K0JNNAIF	20	10/7/2024	TBD	#VALUE!	R	
3k Resistor			1	\$1.07	\$21.40	\$0.53	\$0.53	Bourns	CRT0603ABY-3001E1F	Mouser	Datasheet	Mouser	652-CRT0603ABY-3001E1	20	10/7/2024	TBD	#VALUE!	R	
4.7k Resistor			1	\$0.10	\$1.00	\$0.10	\$0.10	Vishay Dale	GRCW06034K70JNEA	Digikey	Datasheet	Digikey	CRCW06034K70JNEA	10	10/7/2024	TBD	#VALUE!	R	
22k Resistor			2	\$0.02	\$0.20	\$0.10	\$0.20	Stackpole Electronics Inc	RMCF1206J22K2CT	Digikey	Datasheet	Digikey	RMCF1206J22K2CT-ND	10	10/7/2024	TBD	#VALUE!	R	
220µf capacitor			1	\$2.08	\$20.80	\$1.08	\$1.08	KYOCERA AVX	TPS227K16R0050V	Mouser	Datasheet	Mouser	581-TPS227K16R0050V	10	10/7/2024	TBD	#VALUE!	C	
100µf Capacitor			1	\$0.34	\$6.78	\$0.34	\$0.34	Samsung Electro-Mechanics	CL31A100M0J0NNEA	Digikey	Datasheet	Digikey	1276-CL31A-ND	20	10/7/2024	TBD	#VALUE!	C	
0.1µf Capacitor			1	\$0.60	\$12.00	\$0.60	\$0.60	Cal Chip Electronics, Inc.	GMCC31GCG106G2SNTR	Digikey	Datasheet	Digikey	2571-GMCC31GCG106G2SNTR-N	20	10/7/2024	TBD	#VALUE!	C	
0.22 µf capacitor			1	\$0.26	\$2.63	\$0.26	\$0.26	Vishay Sprague	TMCA1V22MTBTR	Digikey	Datasheet	Digikey	718-2522-1-ND	10	10/7/2024	TBD	#VALUE!	C	
Diode			1	\$0.25	\$2.51	\$0.25	\$0.25	Vishay	BZT52C12-1HE3_A-08	Mouser	Datasheet	Mouser	78-BZT52C12-1HE3_A-08	10	10/7/2024	TBD	#VALUE!	D	
Heaters (M-M)			2	\$3.57	\$14.28	\$3.57	\$7.14	Molex	90120-0784	Mouser	Datasheet	Mouser	538-90120-0784	4	10/7/2024	TBD	#VALUE!	n/a	
Heaters (M-F)			2	\$0.34	\$2.04	\$0.34	\$0.68	Sullins Connector Solutions	PPPO32L1FRN-RC	Digikey	Datasheet	Digikey	S7035-ND	6	10/7/2024	TBD	#VALUE!	n/a	
Microcontroller			1	\$2.65	\$31.80	\$2.65	\$2.65	Microchip Technology	PIC18F47K42T-I/P-T	Mouser	Datasheet	Mouser	579-PIC18F47K42TIP-T	12	10/7/2024	TBD	#VALUE!	MC	
Voltage Regulator			1	\$2.70	\$8.10	\$2.70	\$2.70	onsemi	LM2596DSADJR4G	Digikey	Datasheet	Digikey	LM2596DSADJR4GOSCT-ND	3	10/7/2024	TBD	#VALUE!	VR	
DC Motor			2	\$2.97	\$11.88	\$2.97	\$5.94	NMB Technologies Corporation	PPNTPA12C1	Digikey	Datasheet	Digikey	942-PPNTPA12C1-ND	4	10/7/2024	TBD	#VALUE!	M	
DC Motor Driver			2	\$1.64	\$8.20	\$1.64	\$3.28	Texas Instruments	DRV8830DGQR	Digikey	Datasheet	Digikey	296-24165-1-ND	5	10/7/2024	TBD	#VALUE!	MD	
Inductor			1	\$0.38	\$1.90	\$0.38	\$0.38	Oil Well Electromics Inc	OWENR8040-330	Digikey	Datasheet	Digikey	3949-OWENR8040-330CT-ND	5	10/7/2024	TBD	#VALUE!	L	
12V Battery			1	\$2.23	\$4.46	\$2.23	\$2.23	Energyzer Battery Company	A23BPZ	Digikey	Datasheet	Digikey	A23BPZ-ND	2	10/7/2024	TBD	#VALUE!	B	
Temperature Sensor			1	\$1.15	\$6.90	\$1.15	\$1.15	Microchip Technology	TC7440-3-3VCTTR	Digikey	Datasheet	Digikey	TC7440-3-3VCTCT-ND	6	10/7/2024	TBD	#VALUE!	YS	
Humidity Sensor			1	\$14.99	\$58.36	\$14.99	\$14.99	Honeywell Sensing and Productivity Solutions	HH660304021-001	Digikey	Datasheet	Digikey	480-5704-1-ND	4	10/7/2024	TBD	#VALUE!	HS	
				Total	\$221.01														