

Device	As Built		Value	Note	Pkg	Mfg Part Number	Mfg	Most small parts are priced at 100 each				
	QTY	QTY						Cost (100's)	Total			
C1, C9, C11, C12, C13, C18 C14	6	6	0.1uf	X5R, X7R, 50V	0805	C0805C104M5RACTU	Kemet	0.05	0.30	C19, C24 Not Installed	Substitute parts ok	
C3, C4, C5, C6, C7, C8	1	1	.15uf	X5R, X7R, 50V	0805	CC0805KRX7R9BB154	Yageo	0.07	0.07		Substitute parts ok	
C2, C11, C19, C24, C17	6	6	.01uf	X5R, X7R, 50V	0805	C0805C103J5RACT7210	Kemet	0.05	0.30		Substitute parts ok	
C15, C16, C23, C22, C20, C21	5	3	10uf	X5R, X7R, 16V	0805	C0805C106K4PACTU	Kemet	0.07	0.21		Substitute parts ok	
	6	6	2.2uf	X5R, X7R, 16V	0805	CC0805KRX5R7BB225	Yageo	0.08	0.48			
									0.00			
									0.00			
R1, R2, R3, R4	4	4	1.2k		0805	RC0805FR-071K2L	Yageo	0.02	0.08	R22, R29, R37 Not Installed	Substitute parts ok	
R5, R6	2	2	4.7k		0805	RC0805FR-074K7L	Yageo	0.02	0.04		Substitute parts ok	
R7, R8, R9, R10, R11, R12, R13, R14, R22, R37, R29	11	8	10k		0805	RC0805FR-0710KL	Yageo	0.02	0.16		Substitute parts ok	
R20, R30, R31, R15, R16, R17, R18, R19	8	8	120 Ohms		0805	RC0805FR-07120RL	Yageo	0.02	0.16		Substitute parts ok	
R23	1	0	240 Ohms		0805	RC0805FR-07240RL	Yageo	0.02	0.00		Not Installed	
R21	1	0	470 Ohms		0805	RC0805FR-07470RL	Yageo	0.02	0.00	Not Installed	Substitute parts ok	
R27, R35, R25, R28	4	4	100k		0805	RC0805FR-07100KL	Yageo	0.02	0.08		Substitute parts ok	
R32, R24	2	2	0 Ohms		0805	RC0805FR-070RL	Yageo	0.02	0.04		Substitute parts ok	
R26, R34	2	2	1k		0805	RC0805FR-071KL	Yageo	0.02	0.04		Substitute parts ok	
									0.00			
Q1	1	0	IRLML6244TR		SOT-23	IRLML6244TRPBF	Infineon	0.18	0.00	Not Installed	alt part: 2N7002	
									0.00			
									0.00			
L1, L2, L3	3	1	1K @100 MHz		0805	BK2125HS102-T	Taiyo Yuden	0.40	0.40	L2, L3 Not Installed		
									0.00			
U1	1	1	Teensy 4.0	Processor, with pins			PJRC	22.95	22.95			
U2, U3	2	2	PEC11R-4230F-S0024	Encoder		PEC11R-4230F-S0024	Bourns	1.56	3.12			
U4	1	1	AP7313-18SRG	1.8v LDO	SOT-23	AP7313-18SAG-7	Diode Inc	0.19	0.19			
U5	1	1	SGTL5000	Audio Codex	QFN32	SGTL5000XNAA3	NXP	3.03	3.03			
U6	1	0	PVT312LSPBF	SS Relay	6-SMD	PVT312LSPBF	NXP	2.84	0.00	Not Installed		
U7	1	1	OPA2322AID	Dual Op-Amp	8-MSOP	OPA2322AID	TI	1.49	1.49			
									0.00			
J1	1	0	P02EK381V2	Wire Connector, 2 pin		P02EK381V2	Kobiconn	0.49	0.00	Not Installed		
J2, J3	2	2	STX-3120-3B	1/8 in Stero Audio Jack		STX-3120-3B	Kycon	0.49	0.98			
									0.00			
P1	1	0	4 pin, .1in Male Pins	Male Pins	2.54mm			0.68	0.00	Not Installed	I2C Connector	
P2	1	1	14 pin, .1in header	13.59mm tall	2.54mm	ESW-114-23-L-S	Samtec	2.46	2.46			
P3	1	0	9 pin, .1in header	13.59mm tall	2.54mm	ESW-109-23-L-S	Samtec	1.24	0.00	Not Installed	For 2.2in display	
P4	1	1	5 pin, .1in header	13.59mm tall	2.54mm	ESW-105-23-L-S	Samtec	1.05	1.05			
									0.00			
U1 Socket for Teensy 4.0	2	0	14 pin, .1in header	8.5mm tall	2.54mm	PPPC141LFBN-RC	Sullins	0.68	0.00			
U1 Socket for Teensy 4.0	2	2	14 pin, .1in header	7 mm tall	2.54mm	76341-314LF	FCI	1.40	2.80	Preferred part, 4-point contact		
D1, D2, D4	3	0	LED Amber		0805	LTST-C171AKT	Lite-On	0.08	0.00	Not Installed		
D3	1	0	Led Green		0805	LTST-C171KGKT	Lite-On	0.08	0.00	Not Installed		
									0.00			
	2	2	Knob, .250 Shaft	Black		420063B14	APEM	2.81	5.62			
	0	0	Case, Poly	Case, Gray		JG-22450A*01	PolyCase	0.00	0.00	ARSF1, Special Part number, machine and silkscreen Un-Machine case		
	1	1	Case, Poly	Case, Gray		DC-45PMBYT*01	PolyCase	22.00	22.00			
	4	4	Case PCB, Screws	4/24, 3/8 in				0.02	0.08			
PCB	1	1	Circuit Board					3.00	3.00			
LCD	1	1	2.8in TFT LCD	320x240, No Touch Panel		MSP2806	China	6.00	6.00	Alt Parts	MSP2807 with Touch	
PCB Assembly	1	1	PCB Assembly					0.00	0.00			
Shipping Cost, Misc	1	1						0.00	0.00			
Duty	1	1						0.00	0.00			
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