

MBARI
7700 Sandholdt Road
Moss Landing CA 95039
831-775-1700

Item	Quantity	Reference	Value	Tolerance	Rating	Type	PCB Footprint	Manufacturer Number	Distributor Number	Description	Comment
1	1	CI1	MMNLContact			20-16AWG	DUMMY	AMP 171637-3		Contact, Mini Univeral Mate-N-Lok, 20-16AWG, Duplex Plated	
2	1	C1	50 uF	5%	50V	5ME28	5ME28	Elec Concepts 5ME28B506J			
3	1	C2	50uF	5%	50V	5ME28	5ME28	Elec Concepts 5ME28B506J			
4	3	C3,C4,C30	0.47uF		100V	X7R	SM/C_1210	Panasonic ECJ-4YB2A474K	DigiKey PCC2240CT-ND		
5	2	C5,C6	0.33		50V	X7R	SM/C_1206	Vishay VJ1206Y334KXAMT	Garrett		
6	2	C7,C8	820uF		63V	Al Elect High Ripp	16mm dia x 31.5mm h	EEU-FC1J821L	DigiKey P11278-ND	CAP 820UF 63V ELECT FC RADIAL	
7	2	C11,C9	3.3uF		20V	293D	SM/CT_3216_12	Vishay/Sprague 293D335X9020A2T	Garrett 293D Lab Kit		
8	1	C10	180pF			C0G	SM/C_0805	Vishay/Vitramon VJ0805A181JXBMT	Garrett 0805 Lab Kit		
9	1	C12	180pF			C0G	SM/C_0805	Vishay/Vitramon VJ0805A181JXBMT	Garrett 0805 Lab Kit		
10	2	C13,C14	4700 uF		16V	Al Elect High Ripp	CYL/D.650/LS.300/.040	Panasonic EEU-FC1C472	DigiKey P10263ND	CAP 4700UF 16V ELECT FC RADIAL, 16 x 31.5mm	
11	3	C15,C16,C30	.047			X7R	SM/C_0805	Vishay VJ0805Y473KXAMT	Garrett 0805 Lab Kit		
12	2	C17,C25	0.33			X7R	SM/C_0805	Vishay VJ1206Y334KXAMT	Garrett		
13	3	C18,C19,C21	0.1			X7R	SM/C_0805	Vishay VJ0805Y104KXAMT	Garrett 0805 Lab Kit		
14	1	C20	470pF			C0G	SM/C_0805	Vishay/Vitramon VJ0805A471JXBMT	Garrett 0805 Lab Kit		
15	1	C22	33pF			C0G	SM/C_0805	Vishay/Vitramon VJ0805A330JXBMT	Garrett 0805 Lab Kit		
16	2	C24,C23	.001			X7R	SM/C_0805	Vishay VJ0805Y222KXBMT	Garrett 0805 Lab Kit		
17	4	C26,C27,C28,C29	.01		630V	X7R	SM/C_1206	Panasonic ECJ-3FB2J103K	DigiKey PCC2292CT-ND		
18	1	D1	43V	5%	5KW	TVS	5KP180C	Littelfuse 5KP43A	DigiKey 5KP43ACCCT-ND		
19	1	D2	43V	5%	5KW	TVS	5KP180C	LittelfuseLittelfuse 5KP43Ae 5KP43A	DigiKey 5KP43ACCCT-ND		
20	2	D3,D4	50WQ10FN				TO-252AA DPAK	International Rectifier 50WQ10FN	DigiKey 50WQ10FN-ND		
21	1	D5	BAS19				TO236AA/SOT23	Diodes Inc BAS19-7	DigiKey BAS19DICT-ND		
22	1	D6	15V		5kW		5KP180C	Littelfuse 5KP15A	DigiKey 5KP15ACCCT-ND		
23	1	FC1	1A3399			5x20mm	FUSE CLIPS	Bussmann BK/1A3399-10	Mouser 504-1A3399-10	Fuse Clip PC Mount Bronze/Tin	
24	1	F1	8A			5x20 Non-Delay	DUMMY	Wickmann 1941800000	DigiKey WK2069-ND	FUSE FAST 8.00A CER IEC 5X20MM	
25	1	JMP1	PWB Jumper				JMPR_2				
26	1	J1	MUMNL6J				AMP_6_PIN_HEADER	AMP 770178-2	DigiKey A25603-ND	Header, Mini Universal Mate-N-Lok, Dual Row, Straight, 6 Circuit, Duplex Plated	
27	2	J2,J3	MUMNL8J				AMP_8_PIN_HEADER	AMP 794065-2	DigiKey A25605-ND	Header, Mini Universal Mate-N-Lok, Dual Row, Straight, 8 Circuit, Duplex Plated	
28	1	L1	250/40uH			ED78HL14	ED78	Magnetic Circuit Elements ED78HL14			
29	1	L2	BNX-005		50V/15A		BNX005	Murate BNX005-01			
30	1	L3	BNX-003		150V/10A		BNX003	Murate BNX003-01			
31	1	P_12V_1	MMNL8P				DUMMY	AMP 770579-1		Housing, Mini Universal Mate-N-Lok, Free Hanging, 8 Circuit	
32	4	Q1,Q2,Q3,Q4	FDD3682				TO252AA/DPAK				
33	2	Q6,Q5	IRFL1006				TO261AA/SOT223				
34	2	R1,R2	10	5%			SM/R_0805	KOA RK73B	Garrett 0805 5% Lab Kit		
35	1	R3	20.0K				SM/R_0805				
36	1	R4	698k	1%			SM/R_0805	KOA RK73H	Garrett 0805 1% Lab Kit		
37	2	R5,R7	102k	1%			SM/R_0805	KOA RK73H	Garrett 0805 1% Lab Kit		
38	1	R6	619k	1%			SM/R_0805	KOA RK73H	Garrett 0805 1% Lab Kit		
39	2	R8,R11	20.0k	1%			SM/R_0805	KOA RK73H	Garrett 0805 1% Lab Kit		
40	1	R9	0				SM/R_0805				
41	1	R10	27.4k	1%			SM/R_0805	KOA RK73H	Garrett 0805 1% Lab Kit		
42	1	R12	576k	1%			SM/R_0805	KOA RK73H	Garrett 0805 1% Lab Kit		
43	1	R13	5.76k	1%			SM/R_0805	KOA RK73H	Garrett 0805 1% Lab Kit		
44	1	R14	86.6k	1%			SM/R_0805	KOA Speer RK73H	Garrett 0805 1% Lab Kit		
45	1	R15	14.3k	1%			SM/R_0805	KOA Speer RK73H	Garrett 0805 1% Lab Kit		
46	1	R16	10.0k	1%			SM/R_0805	KOA Speer RK73H	Garrett 0805 1% Lab Kit		
47	2	R18,R17	1.00k	1%			SM/R_0805	KOA Speer RK73H	Garrett 0805 1% Lab Kit		
48	2	R19,R20	41.2k	1%			SM/R_0805	KOA Speer RK73H	Garrett 0805 1% Lab Kit		
49	1	R21	SEE NOTE	5%			SM/R_0805	KOA RK73B			
50	1	R22	18.7k	1%			SM/R_0805	KOA Speer RK73H	Garrett 0805 1% Lab Kit		
51	1	R23	10.7k	1%			SM/R_0805	KOA Speer RK73H	Garrett 0805 1% Lab Kit		
52	1	R24	.010	1%	1W		SM/R_2512	Vishay Dale WSL2512.01FR79	Garrett 2512 Low-Ohm Lab Kit		
53	2	R25,R28	10	5%			SM/R_0805	KOA Speer RK73B	Garrett 0805 5% Lab Kit		
54	2	R29,R30	10k	5%			SM/R_0805	KOA Speer RK73B	Garrett 0805 5% Lab Kit		
55	2	ST1,ST2	SCREW TERMINAL				MT_HOLE_NO_4				
56	1	TP1	Thermal Pad				DUMMY	Bergquist .125 GP1500 4x4	DigiKey BER165-ND	Gap Pad 1500 0.125"	
57	1	T1	TRANSFORMER E625		20:14(8):14	MCE Dwg O-2116	TRANSFORMER	Magnetic Circuit Elements O-2116T1			
58	1	U1	HIP2101				SOG.050/8/WG.244/L.200	Intersil HIP2101IB			
59	1	U2	ISL6740				SOG.050/16/WG.244/L.375	Intersil ISL6740IB			
60	2	U4,U3	LT3010				LT3010_MSOP-8	Linear Tech LT3010EMS8E			
61	1	U5	OP296				SOG.050/8/WG.244/L.200	Analog Devices OP296GS			
62	1	U8	AD8631RT				AD8631_SM/SOT23_RT-5	Analog Devices AD8631RT			
63	1	U10	PhotoMOS Relay 6				SOG.050/6/WG.275/L.250	NEC PS7160L-1A			