

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	C12	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 Ripple	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	33 uF		450V	Al Elect High Ripple	CYL/D.650/LS.300/.040	Panasonic EEU-EB2W330	DigiKey P5949-ND	CAP 33UF 450V ELECT EB RADIAL, 16 x 31.5mm	
11	3	C15,C16,C31	.047			X7R	SM/C 0805	Vishay VJ0805Y473KXAMT	Garrett 0805 Lab Kit		
12	1	C17	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	C23,C24	470pF		1kV	SL/GP	Radial 13mm dia	Panasonic ECC-D3A471JGE	DigiKey P10812-ND	CAP 470PF 1KVDC CERAMIC SL/GP 5%	
17	5	C25,C26,C27,C28,C29	.01		630V	X7R	SM/C 1206	Panasonic ECJ-3FB2J103K	DigiKey PCC2292CT-ND		
18	1	DS1	LAMP NEON			A1C		Chicago Miniature Lamp A1C	Mouser 606-A1C	95/135V T-2 NEON LMP	
19	1	D1	43V	5%	5KW	TVS	5KP180C	Littelfuse 5KP43A	DigiKey 5KP43ACCCT-ND		
20	1	D2	43V	5%	5KW	TVS	5KP180C	LittelfusLittelfuse 5KP43Ae 5KP43A	DigiKey 5KP43ACCCT-ND		
21	2	D3,D4	US1M		1kV	Ultrafast	SMA	Diodes Inc US1M	DigiKey US1MDICT-ND	DIODE ULTRA FAST SW 1000V 1A SMA	
22	1	D5	BAS19				TO236AA/SOT23	Diodes Inc BAS19-7	DigiKey BAS19DICT-ND		
23	4	D6,D7,D8,D9	200V		1.5kW		1.5KE	Vishay 1.5KE200A	Newark 09F2534		
24	3	D10,D11,D12	220V		1.5kW		1.5KE	Vishay 1.5KE220A	Newark 09F2542		
25	2	FB1,FB2	31 ohms @ 100MHz		3A	0805		Steward HI0805Q310R	DigiKey 240-1007-1-ND		
26	1	FC1	1A3399			5x20mm	FUSE CLIPS	Bussmann BK/1A3399-10	Mouser 504-1A3399-10	Fuse Clip PC Mount Bronze/Tin	
27	1	F1	8A			5x20 Non-Delay	DUMMY	Wickmann 1941800000	DigiKey WK2069-ND	FUSE FAST 8.00A CER IEC 5X20MM	
28	2	JMP1,JMP2	PWB Jumper				JMPR 2				
29	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	
30	2	J3,J2	MMNL4J				AMP 770968	AMP 770968-2		Header, Mini Universal Mate-N-Lok, Dual Row, Right Angle, 4 Circuit, Duplex Plated	
31	1	L1	100mH		0.55A	ED78HL27	ED78	Magnetic Circuit Elements ED78HL27			
32	1	L3	BNX-003		150V/10A		BNX003	Murate BNX003-01			
33	1	P3	MMNL4P				DUMMY	AMP 172167-1		Housing, Mini Universal Mate-N-Lok, Free Hanging, Dual Row, 4 Circuit	
34	2	Q2,Q1	FDD3682				TO252AA/DPAK	Fairchild FDD3682			
35	2	R1,R2	10	5%			SM/R 0805	KOA RK73B	Garrett 0805 5% Lab Kit		
36	1	R3	20.0K				SM/R 0805				
37	1	R4	698k	1%			SM/R 0805	KOA RK73H	Garrett 0805 1% Lab Kit		
38	2	R5,R7	102k	1%			SM/R 0805	KOA RK73H	Garrett 0805 1% Lab Kit		
39	1	R6	619k	1%			SM/R 0805	KOA RK73H	Garrett 0805 1% Lab Kit		
40	2	R8,R11	20.0k	1%			SM/R 0805	KOA RK73H	Garrett 0805 1% Lab Kit		
41	1	R9	0				SM/R 0805				
42	1	R10	27.4k	1%			SM/R 0805	KOA RK73H	Garrett 0805 1% Lab Kit		
43	1	R12	576k	1%			SM/R 0805	KOA RK73H	Garrett 0805 1% Lab Kit		
44	1	R13	5.76k	1%			SM/R 0805	KOA RK73H	Garrett 0805 1% Lab Kit		
45	1	R14	86.6k	1%			SM/R 0805	KOA Speer RK73H	Garrett 0805 1% Lab Kit		
46	1	R15	14.3k	1%			SM/R 0805	KOA Speer RK73H	Garrett 0805 1% Lab Kit		
47	1	R16	10.0k	1%			SM/R 0805	KOA Speer RK73H	Garrett 0805 1% Lab Kit		
48	2	R18,R17	1.00k	1%			SM/R 0805	KOA Speer RK73H	Garrett 0805 1% Lab Kit		
49	2	R19,R20	41.2k	1%			SM/R 0805	KOA Speer RK73H	Garrett 0805 1% Lab Kit		
50	1	R21	SEE NOTE	5%			SM/R 0805	KOA RK73B			
51	1	R22	18.7k	1%			SM/R 0805	KOA Speer RK73H	Garrett 0805 1% Lab Kit		
52	1	R23	10.7k	1%			SM/R 0805	KOA Speer RK73H	Garrett 0805 1% Lab Kit		
53	1	R24	.010	1%	1W		SM/R 2512	Vishay Dale WSL2512.01FR79	Garrett 2512 Low-Ohm Lab Kit		
54	2	R25,R28	10	5%			SM/R 0805	KOA Speer RK73B	Garrett 0805 5% Lab Kit		
55	1	R29	240k	5%	1W		SM/R 2512	KOA RK73B3A	Garrett Lab Kit 2512 5% RK73B3A Series		
56	2	ST1,ST2	SCREW TERMINAL				MT HOLE NO 4				
57	1	TP1	Thermal Pad				DUMMY	Bergquist .125 GP1500 4x4	DigiKey BER165-ND	Gap Pad 1500 0.125"	
58	13	TP2,TP3,TP4,TP5,TP6,TP7,TP8,TP9,TP10,TP11,TP12,TP13,TP14	T POINT S				TP 5015	Keystone 5015	DigiKey 5015KCT-ND	SMT Test Point .040"ii	
59	1	T1	TRANSFORMER E625		20:400:12 (P	MCE Dwg O-2116T2	TRANSFORMER	Magnetic Circuit Elements O-2116T1			
60	1	U1	HIP2101				SOG.050/8/WG.244/L.200	Intersil HIP2101IB			
61	1	U2	ISL6740				SOG.050/16/WG.244/L.375	Intersil ISL6740IB			
62	2	U4,U3	LT3010				LT3010 MSOP-8	Linear Tech LT3010EMS8E			
63	1	U5	OP296				SOG.050/8/WG.244/L.200	Analog Devices OP296GS			
64	1	U8	AD8631RT				AD8631 SM/SOT23 RT-5	Analog Devices AD8631RT			
65	1	U10	PhotoMOS Relay 6				SOG.050/6/WG.275/L.250	NEC PS7160L-1A			
66	1	1	WARNING TRIANGLE								