

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	
1	1	C12	MMNLC	Contact		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	CYL/D.650/LS.300/.040	EEU-FC1J821	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	2	C12,C10	180pF				C0G	SM/C 0805	Vishay/Vitramon VJ0805A181JXBMT	Garrett 0805 Lab Kit	
9	2	C14,C13	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
10	1	C17		0.33			X7R	SM/C 0805	Vishay VJ1206Y334KXAMT	Garrett	
11	5	C18,C19,C21,C35,C36		0.1			X7R	SM/C 0805	Vishay VJ0805Y104KXAMT	Garrett 0805 Lab Kit	
12	1	C20	470pF				C0G	SM/C 0805	Vishay/Vitramon VJ0805A471JXBMT	Garrett 0805 Lab Kit	
13	1	C22	33pF				C0G	SM/C 0805	Vishay/Vitramon VJ0805A330JXBMT	Garrett 0805 Lab Kit	
14	5	C25,C26,C27,C28,C29		0.01		630V	X7R	SM/C 1206	Panasonic ECJ-3FB2J103K	DigiKey PCC2292CT-ND	
15	1	C31		0.047			X7R	SM/C 0805	Vishay VJ0805Y473KXAMT	Garrett 0805 Lab Kit	
16	1	C32		0.0022		630V	X7R	SM/C 1206	Panasonic ECJ-3FB2J222K	DigiKey PCC2293CT-ND	
17	1	C33		0.01	10%	50V	X7R	SM/C 0805	Vishay Vitramon VJ0805Y103KXAMT	Garrett Lab Kit VJ0805 X7R	
18	1	C34		0.082	10%	50V	X7R	SM/C 0805	Vishay Vitramon VJ0805Y823KXAMT	Garrett Lab Kit VJ0805 X7R	
19	1	DS1	LAMP NEON			A1C	A1C NEON	Chicago Miniature Lamp A1C	Mouser 606-A1C	95/135V T-2 NEON LMP	
20	1	D1	43V		5%	5KW	TVS	5KP180C	Littelfuse 5KP43A	DigiKey 5KP43ACCCT-ND	
21	1	D2	43V		5%	5KW	TVS	5KP180C	LittelfusLittelfuse 5KP43Ae 5KP43A	DigiKey 5KP43ACCCT-ND	
22	1	D5	BAS19					SM/SOT23 321	Diodes Inc BAS19-7	DigiKey BAS19DICT-ND	
23	1	D8	200V			1.5kW		1.5KE	Vishay 1.5KE200A	Newark 09F2534	
24	1	D11	220V			1.5kW		1.5KE	Vishay 1.5KE220A	Newark 09F2542	
25	4	D13,D14,D15,D16	US1M			1kV	Ultrafast	SMA	Diodes Inc US1M	DigiKey US1MDICT-ND	DIODE ULTRA FAST SW 1000V 1A SMA
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	1	J2	MMNL4J					A25603-ND	AMP770174-2	DigiKey A25599-ND	Header, Mini Universal Mate-N-Lok, Dual Row, Right Angle, 4 Circuit, Duplex Plated
31	1	J3	MMNL4J					A25603-ND	AMP 770174-2	DigiKey A25599-ND	Header, Mini Universal Mate-N-Lok, Dual Row, Right Angle, 4 Circuit, Duplex Plated
32	1	L1	100mH			0.55A	ED78HL27	ED78	Magnetic Circuit Elements ED78HL27		
33	1	L3	BNX-003			150V/10A		BNX003-01 SCOTT	Murate BNX003-01		
34	1	L4	501-1					WCMAG-501 SURFACE	West Coast Magnetics 501-1		Common Mode Inductor, 1980 uH
35	1	L5	501-12					WCMAG-501 THROUGH	West Coast Magnetics 501-12		Common Mode Inductor, 416 uH
36	1	P3	MMNL4P					DUMMY	AMP 172167-1		Housing, Mini Universal Mate-N-Lok, Free Hanging, Dual Row, 4 Circuit
37	2	Q2,Q1	FDD3682					TO252AA/DPAK	Fairchild FDD3682		
38	2	R1,R2		10	5%			SM/R 0805	KOA RK73B	Garrett 0805 5% Lab Kit	
39	1	R4	866k		1%			SM/R 0805	KOA RK73H	Garrett 0805 1% Lab Kit	
40	2	R5,R7	102k		1%			SM/R 0805	KOA RK73H	Garrett 0805 1% Lab Kit	
41	1	R6	619k		1%			SM/R 0805	KOA RK73H	Garrett 0805 1% Lab Kit	
42	1	R9		0				SM/R 0805			
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		0.01	1%	1W		SM/R 2512	Vishay Dale WSL2512.01FR79	Garrett 2512 Low-Ohm Lab Kit	
54	1	R29	240k		5%	1W		SM/R 2512	KOA RK73B3A	Garrett Lab Kit 2512 5% RK73B3A Series	
55	4	R30,R31,R32,R35	261k		1%	1/8 W		SM/R 0805	KOA Speer RK73H2A	Garrett Lab Kit 0805 1% RK73H2A	
56	1	R33	40.2k		1%	1/8 W		SM/R 0805	KOA Speer RK73H2A	Garrett Lab Kit 0805 1% RK73H2A	
57	1	R34	2.67k		1%	1/8 W		SM/R 0805	KOA Speer RK73H2A	Garrett Lab Kit 0805 1% RK73H2A	
58	1	R36	6.65k		1%	1/8 W		SM/R 0805	KOA Speer RK73H2A	Garrett Lab Kit 0805 1% RK73H2A	
59	2	ST1,ST2	SCREW TERMINAL					MT HOLE NO 4			
60	1	TP1	Thermal Pad					DUMMY	Bergquist .125 GP1500 4x4	DigiKey BER165-ND	Gap Pad 1500 0.125"
61	12	TP2,TP3,TP5,TP6,TP7,TP8,	T POINT S					TP 5015	Keystone 5015	DigiKey 5015KCT-ND	SMT Test Point .040"ti
		TP9,TP10,TP11,TP12,TP13,									
		TP14									
62	1	T1	TRANSFORMER E625			20:400:12 (Pri:Sec)	MCE Dwg O-2116T2	TRANSFORMER	Magnetic Circuit Elements O-2116T1		
63	1	U1	HIP2101					SOG.050/8/WG.244/L.200	Intersil HIP2101IB		
64	1	U2	ISL6740					SOG.050/16/WG.244/L.375	Intersil ISL6740IB		
65	2	U4,U3	LT3010					MICRO8	Linear Tech LT3010EMS8E		
66	1	U8	AD8631RT					AD8631_SM/SOT23_RT-5	Analog Devices AD8631RT		
67	1	U10	PhotoMOS Relay 6					NEC_PS7160L-1A	NEC PS7160L-1A		
68	1	U11	AD202			1 kV		AD202_JOSE	Analog Devices AD202JY		Isolation Amplifier
69	1	U12	OP196					OP196	Analog Devices OP196GS		Micropower Op Amp
70	1	U13	LTC1798-2.5					LT1798	Linear Tech LTC1798CS8-2.5		Micropower Reference
71	1		WARNING TRIANGLE					DUMMY			