

Schematic, Power Switch Board, Coastal Profiling Float
100221094 Release F

MBARI
7700 Sandholdt Rd
Moss Landing CA 95039
831-775-1730

Bill Of Materials January 19,2017 18:25:06

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Item	Quantity	Reference	Description	Value	Length	Gauge	Insul Color	Type	Manufacturer	PART_ NUMBER	Distributor	Distributor Number	Stuff
1	8	C1,C2,C5,C6,C17,C18,C29,C30	CAP, CER, 0.10uF, 16V, 10%, X7R, 0603	0.10uF					Kemet	C0603C104K4RAC			
2	2	C3,C4	CAP 1.0UF 16V CERAMIC X7R 0805	1.0uF					Kemet	C0805C105K4RAC			
3	15	C7,C8,C9,C10,C11,C19,C20,C21,C22,C23,C31,C32,C33,C34,C35		0.22uF					Kemet	C0603C224K3RAC			
4	3	C12,C24,C36	CAP POLY HYB 470UF 20% 16V SMD	470uF				Hybrid Polymer	United Chemi-Con	HHXB160ARA471MJA0G			
5	6	C13,C15,C25,C27,C37,C39	CAP .10UF 50V CERAMIC X7R 0805	0.10uF					Kemet	C0805C104K5RAC			
6	3	C14,C26,C38		47,000.0pF					Kemet	C0603C473K5RAC			
7	3	C16,C28,C40	CAP CER 1UF 50V 10% X7R 0805	1.0uF					Kemet	C0805C105K5RACTU			
8	3	D1,D4,D5	TVS DIODE 12VWM 19.9VC SMB	SMBJ12A-13-F				SMBJ12A	Diodes Incorporated	SMBJ12A-13-F			
9	3	D2,D3,D6	TVS DIODE 6.5VWM 11.2VC SMB	SMBJ6.5A-13-F				SMBJ6.5A	Diodes Incorporated	SMBJ6.5A-13-F		SMBJ6.5CA-FDICT-ND	
10	6	JP1,JP2,JP3,JP4,JP5,JP6	MISC 3 PIN JUMPER 0.100" PITCH 0.025" SQ	LS=0.100"						MISC_JMPR-TH-3PIN			
11	1	J1	CONN DIN PLUG 48POS RT ANG PCB	5650948-5					TE Connectivity AMP Connectors	5650948-5			
12	1	J2	CONN HDR 2MM R/A W/SCREW 10POS	M80-5401042				Datamate J-Tek	Harwin Inc.	M80-5401042			
13	1	J3	2X6POS MALE H BOARD MOUNT	M80-5401242				Datamate J-Tek	Harwin Inc.	M80-5401242	DigiKey	952-1931-ND	
14	2	J4,J5	CONN HDR 2MM R/A W/SCREW 6POS	M80-5400642				Datamate J-Tek	Harwin Inc.	M80-5400642			
15	3	L1,L2,L3	FERRITE CHIP 220 OHM 3A 0805	MPZ2012S221A					TDK Corporation	MPZ2012S221A			
16	3	L4,L5,L6	EMI/RFI Suppressors & Ferrites 100M Ohm 15A SMD	BNX024H01L					Murata	BNX024H01L			
17	3	Q1,Q2,Q3	MOSFET N-CH 30V 94A DPAK	FDD8896					Fairchild Semiconductor	FDD8896		FDD8896CT-ND	
18	16	R1,R5,R7,R10,R18,R23,R27,R29,R30,R35,R45,R49,R51,R52,R57,R68	TO BE DETERMINED, HEIGHT 0.5mm	TBD						TBD_R0603			
19	14	R2,R3,R6,R8,R9,R17,R28,R31,R32,R33,R50,R53,R54,R55	RES 0.0 OHM 1/10W 0603 SMD	0					Vishay/Dale	CRCW06030000Z0EA			
20	1	R4		22.0K					Vishay	CRCW060322K0JNEA			
21	24	R11,R12,R13,R14,R15,R16,R19,R20,R34,R36,R37,R38,R39,R40,R41,R42,R56,R58,R59,R60,R61,R62,R63,R64		100k					Vishay Dale	CRCW0603100KJNEA			
22	3	R21,R43,R65	RES .04 OHM 1W 1% 2512 SMD	0.04					Vishay/Dale	WSL2512R0400FEA			
23	3	R22,R44,R66		10					Vishay	CRCW060310R0FKEA			
24	3	R24,R46,R67		22.1K					Vishay	CRCW060322K1FKEA			
25	3	R25,R47,R69		33					Vishay	CRCW060333R0JNEA			
26	3	R26,R48,R70		42.2K					Vishay	CRCW060342K2FKEA			
27	36	SB1,SB2,SB3,SB4,SB5,SB6,SB7,SB8,SB9,SB10,SB11,SB12,SB13,SB14,SB15,SB16,SB17,SB18,SB19,SB20,SB21,SB22,SB23,SB24,SB25,SB26,SB27,SB28,SB29,SB30,SB31,SB32,SB33,SB34,SB35,SB36	MISC 2 PIN JUMPER SOLDER BRIDGE 0603	603						MISC_SOLDERBRIDGE_SM0603			
28	2	TS1,TS2	TVS DIODE 5VWM 8.5VC SOT23	824011					Würth Electronics Inc	824011			
29	1	U1	IC OSC SILICON 7.3728MHZ 8-MSOP	LTC6930IMS8-7.37#PBF					Linear Technology	LTC6930IMS8-7.37#PBF			
30	3	U2,U7,U12	UART Interface IC 1Ch 12C/SPI UART w/ Lvl Shftrs & 8 GPIOs	XR20M1280IL32-F					Exar	XR20M1280IL32-F			
31	1	U3	IC TXRX RS-232 W/SHTDWN 28-SSOP	MAX3244EEAI+					Maxim Integrated	MAX3244EEAI+			
32	3	U4,U9,U14	IC SINGLE INVERTER-GATE SOT-23-5	SN74LVC1G04DBVR					Texas Instruments	SN74LVC1G04DBVR			
33	3	U5,U11,U16	IC LOW CUR SURGE STOPPER 10MSOP	LTC4380IMS-3#PBF					Linear Technology	LTC4380IMS-3#PBF			
34	3	U6,U10,U15	IC ENERGY MONITOR I2C 16MSOP	LTC2946CMS#PBF					Linear Technology	LTC2946CMS#PBF			
35	2	U8,U13	IC TXRX RS232 250KBPS SD 16-SSOP	MAX3226EAE+					Maxim Integrated	MAX3226EAE+			