

MBARI

Title = Schematic, Motor Control, Motorized VB Isolation Valve, Tethys LRAUV

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Design = Ed Mellinger

Item Number	Quantity	Part Reference	Value	Rated Voltage	Description	PART_NUMBER	CIS Manufacturer Parts : Manufacturer	CIS Manufacturer Parts : Manufacturer PN	CIS Manufacturer Parts : Digikey PN
1	1	C1	0.47uF	50V		C0805C474K5RAC	Kemet	C0805C474K5RAC	
2	3	C2 C3 C11	4.7uF	50V	CAP CER 4.7UF 50V 10% X7R 1210	C1210X475K5RACTU	Kemet	C1210X475K5RACTU	399-5612-1-ND
3	4	C4 C9 C13 C15	0.10uF	50V		C0603C104K5RAC	Kemet	C0603C104K5RAC	
4	5	C6 C10 C14 C16 C17	1.0uF	16V	CAP 1.0UF 16V CERAMIC X7R 0805	C0805C105K4RAC	Kemet	C0805C105K4RAC	
5	2	C7 C8	5F	2.7V	CAP SUPER 5F 2.7V RADIAL	ESH5R-0005CO-002R7	NessCap Co Ltd	ESH5R-0005CO-002R7	589-1001-ND
6	1	D1	S1AB-13-F	1.1V @ 1A	DIODE GPP 1A 50V SMB	S1AB-13-F	Diodes Inc	S1AB-13-F	S1AB-FDICT-ND
7	1	D2	SMBJ22A-13-F	24.4V	TVS UNIDIRECT 600W 22V SMB	SMBJ22A-13-F	Diodes Inc	SMBJ22A-13-F	SMBJ22A-FDICT-ND
8	1	D3	ZLS1000TA	560mV @ 1A	DIODE SCHOTTKY 40V 1.16A SOT23-3	ZLS1000TA	Diodes Inc	ZLS1000TA	ZLS1000CT-ND
9	2	D5 D6	SMBJ5.0A-13-F	6.4V	TVS 600W 5.0V UNIDIRECT SMB	SMBJ5.0A-13-F	Diodes Inc	SMBJ5.0A-13-F	SMBJ5.0A-FDICT-ND
10	2	D7 D8	BAS19-7-F	1.25V @ 200mA	DIODE SWITCH 100V 250MW SOT23-3	BAS19-7-F	Diodes Inc	BAS19-7-F	BAS19-FDICT-ND
11	1	J1	2-1445094-5		Pin & Socket Connectors MICRO MNL HDR ASSY S/ROW AU LF	2-1445094-5	TE Connectivity / AMP	2-1445094-5	
12	1	J2	0705430009		CONN HEADER 10POS .100 VERT GOLD	0705430009	Molex Inc	0705430009	WM4808-ND
13	2	JMP1 JMP2	87224-2		CONN HEADER VERT .100 2POS 15AU	87224-2_SYM-MOD1	Tyco Electronics	87224-2	A26543-ND
14	1	L1	18uH		18uH, 20%, 1.22A, 6.1 x 6.1 mm	MSS6132-183MLB	Coilcraft	MSS6132-183MLB	
15	1	L2	ACM4520		CHOKE COMMON MODE 900 OHM SMD	ACM4520-901-2P-T000	TDK Corporation	ACM4520-901-2P-T000	445-6137-1-ND
16	1	L3	MMZ1608S601A		FERRITE CHIP 600 OHM 500MA 0603	MMZ1608S601A	TDK Corporation	MMZ1608S601A	445-1549-1-ND
17	3	Q1 Q2 Q3	BSS138W-7-F		MOSFET N-CH 50V 200MA SC70-3	BSS138W-7-F	Diodes Inc	BSS138W-7-F	BSS138W-FDICT-ND
18	4	R1 R5 R10 R14	1.00M	75V		CRCW06031M00FKEA	Vishay	CRCW06031M00FKEA	
19	1	R2	100	75V		CRCW0603100RJNEA	Vishay	CRCW0603100RJNEA	
20	1	R3	35.7K	75V		CRCW060335K7FKEA	Vishay	CRCW060335K7FKEA	541-35.7KHTR-ND
21	1	R4	562.0K	75V		CRCW0603562KFKEA	Vishay	CRCW0603562KFKEA	
22	1	R11	0.0		RES 0.0 OHM 1/10W 0603 SMD	CRCW06030000Z0EA	Vishay/Dale	CRCW06030000Z0EA	541-0.0GCT-ND
23	1	R12	154.0K	75V		CRCW0603154KFKEA	Vishay	CRCW0603154KFKEA	
24	1	R15	42.2K	75V		CRCW060342K2FKEA	Vishay	CRCW060342K2FKEA	
25	1	R16	1.00M	75V		CRCW06031M00JNEA	Vishay	CRCW06031M00JNEA	
26	2	R17 R23	10.0K	75V	RES 10K OHM 1/10W 5% 0603 SMD	CRCW060310K0JNEA	Vishay/Dale	CRCW060310K0JNEA	541-10KGCT-ND
27	3	R18 R21 R22	100	150V		CRCW0805100RJNEA	Vishay	CRCW0805100RJNEA	
28	3	R19 R20 R26	36.0K	75V		CRCW060336K0JNEA	Vishay	CRCW060336K0JNEA	541-36KGTR-ND
29	1	R24	51		RES 51 OHM 1/2W 5% 1210 SMD	CRCW121051R0JNEA	Vishay Dale	CRCW121051R0JNEA	541-51VCT-ND
30	1	R25	330.0K	75V		CRCW0603330KJNEA	Vishay	CRCW0603330KJNEA	541-330KGTR-ND
31	1	U1	LT3991EMSE-5#PBF		IC REG BUCK 5V 1.2A 10-MSOP	LT3991EMSE-5#PBF	Linear Technology	LT3991EMSE-5#PBF	LT3991EMSE-5#PBF-ND
32	1	U3	BD6212HFP-TR		IC H-BRIDGE DVR 7V 1CH 2A HRP7	BD6212HFP-TR	Rohm Semiconductor	BD6212HFP-TR	BD6212HFPCT-ND
33	1	U4	LT6003HS5#TRMPBF		IC OP AMP R-R TSOT23-5	LT6003HS5#TRMPBF	Linear Technology	LT6003HS5#TRMPBF	LT6003HS5#TRMPBFCT-ND
34	1	U5	LT3008ETS8-3.3#TRMPBF		IC REG LDO 3.3V 20MA TSOT23-8	LT3008ETS8-3.3#TRMPBF	Linear Technology	LT3008ETS8-3.3#TRMPBF	LT3008ETS8-3.3#TRMPBFCT-ND
35	1	U7	LTC2934ITS8-1		IC SUPERVISOR ADJ LP TSOT23-8	LTC2934ITS8-1#TRMPBF	Linear Technology	LTC2934ITS8-1#TRMPBF	LTC2934ITS8-1#TRMPBFCT-ND
36	1	U8	SN74AUP1G99DCTR		IC CONFIG MULT-FUNC GATE SM8, AND CONFIGURATION	SN74AUP1G99DCTR_SYM-MOD1	Texas Instruments	SN74AUP1G99DCTR	296-19089-1-ND
37	3	U9 U10 U13	SN74AUP1G99DCTR		IC CONFIG MULT-FUNC GATE SM8, ONE INV AND CONFIGURATION	SN74AUP1G99DCTR_SYM-MOD2	Texas Instruments	SN74AUP1G99DCTR	296-19089-1-ND
38	1	U11	HCPL0701		OPTOCOUPLER DARL OUT 1CH 8-SOIC	HCPL0701	Fairchild Optoelectronics Group	HCPL0701	HCPL0701-ND
39	2	U12 U16	SL353LT		SENSOR OMNIPOLAR HALLEFFECT DGLT	SL353LT	Honeywell Sensing and Control	SL353LT	480-3328-1-ND
40	1	U14	SN74AUP1G74DCUR		IC POS-EDGE-TRIG D F-F-8-US8	SN74AUP1G74DCUR	Texas Instruments	SN74AUP1G74DCUR	296-19761-1-ND
41	1	U15	SN74AUP1G99DCTR		IC CONFIG MULT-FUNC GATE SM8, XOR CONFIGURATION	SN74AUP1G99DCTR_SYM-MOD3	Texas Instruments	SN74AUP1G99DCTR	296-19089-1-ND