

MBARI
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Title = Schematic, Load Control Analog for PAR Preamp, Tethys LRAUV

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RevCode = 1.4

Item Number	Quantity	Part Reference	Value	Tolerance	Description	Manufacturer	Manufacturer PN	PCB Footprint
1	1	C1	0.1	10%				CAPC2013X130N_0805
2	1	C3	1uF					CAPC3225X170N_1210
3	1	C5	1uF					CAPC3225X170N_1210
4	1	C7	1uF					CAPC3225X170N_1210
5	1	C8	0.1	10%				CAPC2013X130N_0805
6	1	C26	0.1	10%				CAPC2013X130N_0805
7	1	C27	0.22	10%				CAPC2013X130N_0805
8	1	C28	0.1	10%				CAPC2013X130N_0805
9	1	C30	2.2uF	±10%	CAP CER 2.2UF 50V 10% X7R 0805	Taiyo Yuden	UMK212BB7225KG-T	CAPC2012X145N
10	1	C31	0.22	10%				CAPC2013X130N_0805
11	1	C33	0.22	10%				CAPC2013X130N_0805
12	1	C34	0.1	10%				CAPC2013X130N_0805
13	1	D6	5V		TVS 600W 5.0V UNIDRECT SMB			DIOM5336X262N
14	1	D8	CM1216-06MR		TVS DIODE 5.5VWM 9VC 8MSOP	ON Semiconductor	CM1216-06MR	SOP8P65_300X490X110L60X30N
15	1	D9	BAS-19-7-F		DIODE SWITCH 100V 250MW SOT23-3			SOT95P237X112-3N_13
16	1	D10	BAS-19-7-F		DIODE SWITCH 100V 250MW SOT23-3			SOT95P237X112-3N_13
17	1	D12	BAS-19-7-F		DIODE SWITCH 100V 250MW SOT23-3			SOT95P237X112-3N_13
18	1	D14	3.3V		DIODE DBL ESD SOT23 (ok to sub PESD5V2S2UT)			SOT95P237X112-3N_132
19	1	D21	3.3V		DIODE DBL ESD SOT23 (ok to sub PESD5V2S2UT)			SOT95P237X112-3N_132
20	1	D22	3.3V		DIODE DBL ESD SOT23 (ok to sub PESD5V2S2UT)			SOT95P237X112-3N_132
21	1	FB2	600 ohms @ 100MHz		FERRITE CHIP 600 OHM 500MA 0603			INDC1608X95N_0603
22	1	FB3	600 ohms @ 100MHz		FERRITE CHIP 600 OHM 500MA 0603			INDC1608X95N_0603
23	1	FB4	600 ohms @ 100MHz		FERRITE CHIP 600 OHM 500MA 0603			INDC1608X95N_0603
24	1	FB5	600 ohms @ 100MHz		FERRITE CHIP 600 OHM 500MA 0603			INDC1608X95N_0603
25	1	FB6	600 ohms @ 100MHz		FERRITE CHIP 600 OHM 500MA 0603			INDC1608X95N_0603
26	1	FB7	600 ohms @ 100MHz		FERRITE CHIP 600 OHM 500MA 0603			INDC1608X95N_0603
27	1	FB8	600 ohms @ 100MHz		FERRITE CHIP 600 OHM 500MA 0603			INDC1608X95N_0603
28	1	FB9	600 ohms @ 100MHz		FERRITE CHIP 600 OHM 500MA 0603			INDC1608X95N_0603
29	1	FB11	600 ohms @ 100MHz		FERRITE CHIP 600 OHM 500MA 0603			INDC1608X95N_0603
30	1	FB12	600 ohms @ 100MHz		FERRITE CHIP 600 OHM 500MA 0603			INDC1608X95N_0603
31	1	FB13	600 ohms @ 100MHz		FERRITE CHIP 600 OHM 500MA 0603			INDC1608X95N_0603
32	1	J1	Milli-Grid 6		CONN HEADER 6POS 2MM VERT SMD			MOLEX_87832-0620
33	1	J2	70555-0039		CONN HEADER 5POS .100 R/A 15AU	Molex, LLC	70555-0039	MOLEX_70555-5PIN
34	1	J4	Molex C-Grid SL 3		CONN HEADER 3POS .100 R/A 15AU	Molex, LLC	70555-0037	MOLEX_70555-3PIN
35	1	J5	DIN 32_AB-H		CONN DIN PLUG 32POS RT ANG PCB			AMP_536053-5
36	2	K1,K3	DS2E-SL2-DC12V		RELAY GEN PURPOSE DPDT 2A 12V	Panasonic Electric Works	DS2E-SL2-DC12V	RELAY_DS2E-xL2-xxxx
37	1	NS1	NetSep		0 Ohm 0805			RESC2013X60N_0805
38	1	Q4	DMN601K					SOT95P237X112-3N_132
39	1	Q11	DMN601K					SOT95P237X112-3N_132

40	1	Q12	DMN601K					SOT95P237X112-3N_132
41	1	Q15	VP2450		MOSFET P-ch -500V 160 mA			SOT150P410X160-4N_TO-243AA
42	1	R2	47k	5%				RESC2013X60N_0805
43	1	R4	1 ohm	5%				RESC2013X60N_0805
44	1	R9	47k	5%				RESC2013X60N_0805
45	1	R11	33	5%				RESC2013X60N_0805
46	1	R23	10k	5%				RESC2013X60N_0805
47	1	R32	330k	5%	DIP Network, Bussed			RESCAV127P320X640X70-10N
48	1	R33	330k	5%	DIP Network, Bussed			RESCAV127P320X640X70-10N
49	1	R36	47k	5%				RESC2013X60N_0805
50	1	R38	47k	5%				RESC2013X60N_0805
51	1	R40	0.0	Jumper	RES 0.0 OHM 1/10W 0603 SMD	Vishay/Dale	CRCW06030000Z0EA	VISHAY_CRCW-0603_RESC
52	2	R41,R48	499	1%		Vishay	CRCW0805499RFKEA	RESC2012X50N
53	2	R42,R47	4.99K	1%		Vishay	CRCW08054K99FKEA	RESC2012X50N
54	1	R49	10k	1%				RESC2013X60N_0805
55	1	R50	100k	1%				RESC2013X60N_0805
56	1	R65	47k	5%				RESC2013X60N_0805
57	1	TP1	T POINT S		SMT Test Point .040"			TP_5015
58	1	TP2	T POINT S		SMT Test Point .040"			TP_5015
59	1	TP3	T POINT S		SMT Test Point .040"			TP_5015
60	1	TP4	T POINT S		SMT Test Point .040"			TP_5015
61	1	U12	PIC16F886		IC PIC MCU FLASH 8KX14 28SOIC			SOIC127P1030X215-28N_SOIC28
62	1	U15	74LVC00A		IC QUAD 2-IN NAND GATE 14-SOIC			SOIC127P600X175-14N_SOIC14
63	1	U16	74HC125_SO5		IC BUS BUFF TRI-ST QD 14SOICN			SOIC127P600X175-14N_SOIC14
64	1	U17	MAX6029		IC REF VOLT 2.50V SOT23-5			SOT95P280X145-5N_DBV
65	1	U18	LTC6078		IC OP AMP DUAL R-R I/O 8MSOP			SOP65P490X110-8N_MSOP8
66	1	U2	74LVC1G14		IC SCHMITT TRIG INV SOT-23-5			SOT95P280X145-5N_DBV
67	1	U20	MCP3551		IC ADC 22BIT 2.7V 1CH SPI 8SOIC			SOIC127P600X175-8N_SOIC8
68	1	U21	TMP36		IC SENSOR TEMP 2.7/5.5 TO-92-3			to_92_123