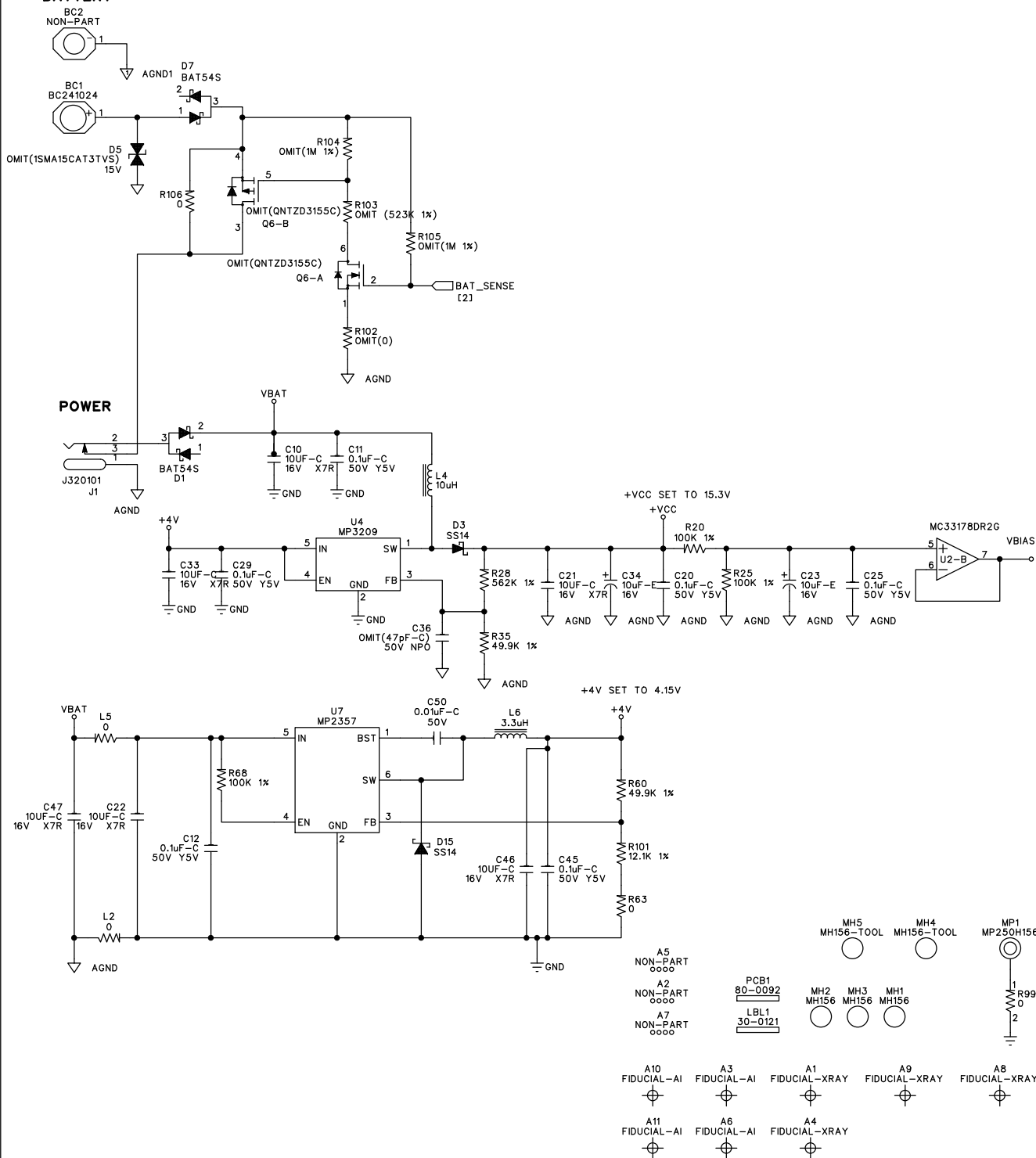
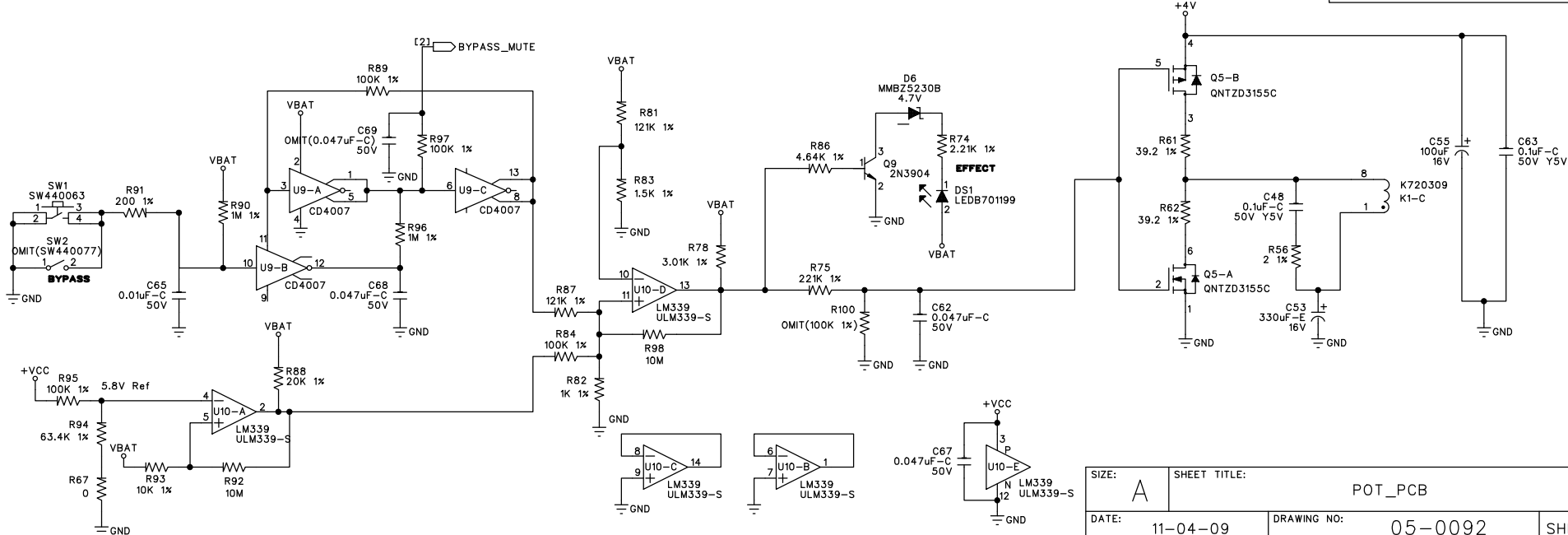
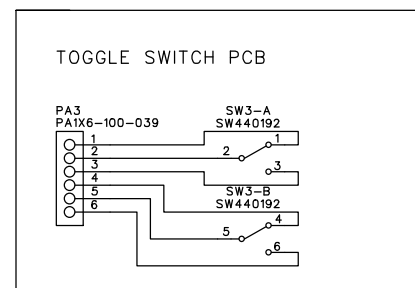


BATTERY



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C1	OMIT BATTERY SENSE PARTS, ADD NEW JACKS	38952	SN	11-04-09
C0	PRODUCTION RELEASE	36658	KB	07-07-08
B1	CHANGED R109, R55 TO 1K, 0	36656	KB	07-03-08
B0	ROTATE C13 TO CORRECT ORIENTATION, ADD C36	36555	JH	06-17-08
A0	PRE-PRODUCTION RELEASE	36430	JH	06-13-08
REV	DESCRIPTION	ECN #	INIT	DATE
REVISION HISTORY				
HARDWIRE 8760 South Sandy Parkway Sandy Utah 84070				
TITLE: METAL (TL-2) 1-TITLE_PAGE				
DESIGNER: KIRK BROWN		ENGINEER: JOHN HANSON		
SIZE: A	DRAWING NO: 05-0092			REVISION C1
DATE: 11-04-09	FILENAME: 050092C1.SCH		SHEET: 1 OF 3	



SIZE: A	SHEET TITLE: POT_PCB		REVISION: C1
DATE: 11-04-09	DRAWING NO: 05-0092	SHEET: 3 OF 3	

Bill Of Materials for 050092C1.sch on Thu Dec 10 15:46:17 2009

Qty	Reference	HMG#	Description	Audit	Schematic Part	PCB Decal
1	PCB1	80-0092	PCB 80-0092 (DIGITECH HARDWIRE METAL TL-2)	PT2044	80XXXXXX	BARCODE
1	BC2	NON-PART	BATCLIP 20mm DIA. X 3.2 BUTTON STYLE BK (NEG PIN)	PT2761	BC241024-1-NEG	BCLIP5-NEG
1	BC1	24-1024	BATCLIP 20mm DIA. X 3.2 BUTTON STYLE BK (POS PIN)	PT2762	BC241024-1-POS	BCLIP5-POS
3	A2 A5 A7	NON-PART	NON-PART PCB ONLY BRKOFF PRT (.50 ROUTING)	PT2738	BRKOFF50	BRKOFF50
1	C32	56-0003	CAP 0.0033uF FILM PTR 100V 5% RF TA	PT1103	C0.0033UF100JR	RFCC200
1	C2	56-0030	CAP 0.0082uF FILM PTR 100V 5% RF TA	PT1753	C0.0082UF100JR	RFDC200
1	C19	56-0007	CAP 0.015uF FILM PTR 100V 5% RF TA	PT1198	C0.015UF100JR	RFDD200
2	C50 C65	62-0300	CAP 0.01uF CER 50V 10% X7R 0603 TA	PT3481	C0.01UC50K0603	0603
4	C1 C42 C49 C61	56-0006	CAP 0.01uF FILM PTR 100V 5% RF TA	PT1379	C0.01UF100JR	RFDD200
1	C26	62-0305	CAP 0.022uF CER 50V 10% X7R 0603 TA	PT3483	C0.022UC50K0603	0603
1	C44	56-0033	CAP 0.027uF FILM PTR 100V 5% RF TA	PT1282	C0.027UF100JR	RFEF200
1	C60	56-0009	CAP 0.033uF FILM PTR 100V 5% RF TA	PT1401	C0.033UF100JR	RFFE200
10	C15-16 C18 C24 C51 C54 C62 C66-68	62-0307	CAP .047uf CER 50V 10% X7R 0603 TA	PT3486	C0.047UC50K0603	0603
1	C69	OMIT	OMIT CAP 0.047uF CER 50V 20% Y5V 0603 TA (62-1309)	PT2783	C0.047UC50M06030	0603
5	C31 C37 C39 C52 C59	56-0010	CAP 0.047uF FILM MTPT 50V 5% RF TA	PT1002	C0.047UF50JR	RFEC200
1	C41	56-0011	CAP 0.068uF FILM MTPT 50V 5% RF TA	PT1076	C0.068UF50JR	RFEC200
8	C11-12 C20 C25 C29 C45 C48 C63	62-1312	CAP 0.1uF CER 50V +80%/-20% Y5V 0603 TA	PT2687	C0.1UC50Z0603	0603
1	C7	56-0012	CAP 0.1uF FILM MTPT 50V 5% RF TA	PT1200	C0.1UF50JR	RFEC200
2	C30 C35	56-0014	CAP 0.22uF FILM MTPT 50V 5% RF TA	PT1077	C0.22UF50JR	RFED200
2	C5 C27	62-3149	CAP 1000pF CER 50V 5% NP0 0805 TA	PT2924	C1000PC50J0805	0805
1	C55	60-0201	CAP 100uF EL 16V 20% GP 6x8R 5LS TA	PT1378	C100UE16MR	REG200P
6	C10 C21-22 C33 C46-47	62-0109	CAP 10uF CER 16V 10% X7R 1206 TA	PT3544	C10UC16K1206	1206
5	C4 C9 C23 C34 C40	60-1063	CAP 10uF EL 16V 20% GP 4X5.5 SM TA	PT3218	C10UE16M4X5.5S	CAP4X5.4
2	C57 C70	62-1304	CAP 120pF CER 50V 5% NPO 0603 TA	PT2655	C120PC50J0603	0603
6	C3 C8 C13-14 C28 C64	60-1076	CAP 1uF EL 50V 20% GP 4x5R 2.5LS TA	PT2445	C1UE50MR1	RED100P
1	C38	60-0400	CAP 2.2uF EL 50V 20% GP 5x11R 5LS TA	PT1083	C2.2UE50MR	REE200P
1	C58	62-0335	CAP 2200pF CER 50V 5% NPO 0603 TA	PT3509	C2200PC50J0603	0603
2	C6 C43	62-1313	CAP 220pF CER 50V 5% NPO 0603 TA	PT2923	C220PC50J0603	0603
1	C53	60-0000	CAP 330uF EL 16V 20% GP 8x11R 5LS TA	PT2862	C330UE16MR2	REJ200P
2	C17 C71	62-1314	CAP 470pF CER 50V 5% NP0 0603 TA	PT2921	C470PC50J0603	0603
1	C36	OMIT	OMIT CAP 47pF CER 50V 5% NPO 0603 TA (62-1302)	PT2851	C47PC50J06030	0603
2	D2 D4	70-0113	DIO MMBD4148SE DUAL 75V 600mA SOT-23 CB	PT3957	DLN4148SE-S	SOT-23
2	D1 D7	70-0174	DIO BAT54S 30V DUAL SCHOTTKY SOT23	PT3535	DBAT54S-S	SOT-23
1	D6	70-0121	DIO MMBZ5230B ZENER 4.7V SOT-23 TA	PT3226	DMMBZ5230B-S	SOT-23
2	D3 D15	70-0147	DIO SCHOTTKY 1A SS14 DO-214AC/SMA	PT1877	DSS14S	DO-214AC/SMA
1	D5	OMIT	OMIT DIO 1SMA15CAT3 TVS BIDIR VBR=16.7 SM TA (70-0201)	PT3940	DTVS15V-SO	SMA
4	A3 A6 A10-11	NON-PART	NON-PART FIDUCIAL TARGET FOR AUTO INSERTION	PT2904	FIDUCIAL-AI	FIDUCIAL-AI
4	A1 A4 A8-9	NON-PART	NON-PART FIDUCIAL TARGET FOR XRAY	PT2905	FIDUCIAL-XRAY	FIDUCIAL-XRAY
1	J1	32-0101	CON JACK BARREL DC 2.0 X 5.5 X 10mm	PT1849	J320101	J320101
2	J2-3	32-0368	CON JACK 1/4" MTL NSE SLM W/GND SW & CLP	PT4184	J320368	J320368
1	K1	72-0309	IC RELAY DPDT MINI 3V LTCH SINGLE COIL SM	PT3642	K720309	KUB2
1	LBL1	30-0121	LABEL BARCODE AUTOINSERTABLE RAW	PT2790	LABEL300121	LABEL300121
1	DS1	70-1199	LED BLUE T-1 3/4 CLEAR DIF 17mm W/ SPACER	PT3644	LEDB701199	RLF100
1	L4	26-0015	IND 10uH 650mA 1812 SM	PT3132	LI260015	LQH43C
1	L6	26-0017	IND 3.3uH 800mA SM	PT3285	LI260017	LQH43C
3	MH1-3	NON-PART	NON-PART MOUNTING HOLE 0.156" NON-PLATED #6	PT3000	MH156	MH156
2	MH4-5	NON-PART	NON-PART TOOLING PIN HOLE 156MIL HOLE	PT2794	MH156-TOOL	MH156-TOOL
1	MP1	NON-PART	NON-PART MECHANICAL PLATED HOLE 250 PAD 156 HOLE #6	PT3223	MP250H156	MP250H156
1	PA2	NON-PART	NON-PART PD ARY 12 PN 0.1"SPC 0.039" HLE	PT2775	PA1X12-100-039	PA1X12-100-039
1	PA1	NON-PART	NON-PART PD ARY 3 PN 0.100 SPC .039 HLE	PT2030	PA1X3-100-039	PA1X3-100-039
1	PA3	NON-PART	NON-PART PAD ARRAY 6 PN 0.1"SPC 0.039" HLE	PT2134	PA1X6-100-039	PA1X6-100-039
5	Q1-4 Q9	70-1058	XSTR 2N3904 NPN SOT-23 TA	PT1203	Q2N3904-S	SOT-23
1	Q7	70-0134	XSTR 2N7002LT1 MFET N-CH 115 mA 60V SM	PT3306	Q2N7002LT1-S	SOT-23
1	Q5	70-0303	XSTR DUAL MFET N/P-CH 20V 430mA SOT-563	PT3645	QNTZD3155C	SOT-563

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1	Q6	OMIT	OMIT XSTR DUAL MFET N/P-CH 20V 430mA SOT-563 (70-0303)	PT4144	QNTZD3155C-O	SOT-563	
12	L2 L5 R2 R4 R18 R30 R36 R55 R63 R67 R99 R106	50-1300	RES 0 5% 1/16W SM 0603 TA	PT2508	R0-B5-0603	0603	
4	R21 R52 R102 R108	OMIT	OMIT RES 0 5% 1/16W SM 0603 TA (50-1300)	PT2509	R0-B5-0603O	0603	
1	R83	52-1314	RES 1.5K 1% 1/16W SM 0603 TA	PT2551	R1.5KB1-0603	0603	
18	R15 R20 R24-25 R29 R38-41 R59 R68 R73 R79-80 R84 R89 R95 R97	52-1360	RES 100K 1% 1/16W SM 0603 TA	PT2613	R100KB1-0603	0603	
1	R100	OMIT	OMIT RES 100K 1% 1/16W SM 0603 TA (52-1360)	PT3454	R100KB1-0603O	0603	
9	R22 R43 R46 R48 R50 R65 R69 R77 R93	52-1338	RES 10K 1% 1/16W SM 0603 TA	PT2584	R10KB1-0603	0603	
2	R92 R98	50-1338	RES 10M 5% 1/16W SM 0603 TA	PT2648	R10MB5-0603	0603	
1	R101	52-1341	RES 12.1K 1% 1/16W SM 0603 TA	PT2593	R12.1KB1-0603	0603	
2	R81 R87	52-1361	RES 121K 1% 1/16W SM 0603 TA	PT2614	R121KB1-0603	0603	
5	R23 R26 R72 R82 R109	52-1313	RES 1K 1% 1/16W SM 0603 TA	PT2550	R1KB1-0603	0603	
3	R8 R90 R96	52-1372	RES 1M 1% 1/16W SM 0603 TA	PT2625	R1MB1-0603	0603	
2	R104-105	OMIT	OMIT RES 1M 1% 1/16W SM 0603 TA (52-1372)	PT2852	R1MB1-0603O	0603	
1	R74	52-1317	RES 2.21K 1% 1/16W SM 0603 TA	PT2555	R2.21KB1-0603	0603	
1	R91	52-1306	RES 200 1% 1/16W SM 0603 TA	PT2514	R200-B1-0603	0603	
6	R10-12 R34 R66 R88	52-1346	RES 20K 1% 1/16W SM 0603 TA	PT2598	R20KB1-0603	0603	
4	R47 R70 R75-76	52-1364	RES 221K 1% 1/16W SM 0603 TA	PT2617	R221KB1-0603	0603	
1	R56	52-0197	RES 2 1% 1/10W SM 0603 TA	PT3288	R2C1-0603	0603	
6	R1 R3 R17 R31-32 R49	52-1316	RES 2K 1% 1/16W SM 0603 TA	PT2553	R2KB1-0603	0603	
3	R6 R44 R78	52-1321	RES 3.01K 1% 1/16W SM 0603 TA	PT2559	R3.01KB1-0603	0603	
1	R19	52-1324	RES 3.32K 1% 1/16W SM 0603 TA	PT2562	R3.32KB1-0603	0603	
1	R51	50-1337	RES 3.9M 5% 1/16W SM 0603 TA	PT2647	R3.9MB5-0603	0603	
3	R7 R13 R45	50-1309	RES 330 5% 1/16W SM 0603 TA	PT2528	R330-B5-0603	0603	
2	R61-62	52-1301	RES 39.2 1% 1/16W SM 0603 TA	PT2515	R39.2-B1-0603	0603	
1	R86	52-1328	RES 4.64K 1% 1/16W SM 0603 TA	PT2568	R4.64KB1-0603	0603	
1	R58	52-1329	RES 4.99K 1% 1/16W SM 0603 TA	PT2566	R4.99KB1-0603	0603	
2	R5 R37	50-1310	RES 470 5% 1/16W SM 0603 TA	PT2529	R470-B5-0603	0603	
1	R42	52-1368	RES 475K 1% 1/16W SM 0603 TA	PT2621	R475KB1-0603	0603	
8	R9 R14 R16 R27 R33 R35 R54 R60	52-1356	RES 49.9K 1% 1/16W SM 0603 TA	PT2609	R49.9KB1-0603	0603	
1	R107	OMIT	OMIT RES 49.9K 1% 1/16W SM 0603 TA (52-1356)	PT3469	R49.9KB1-0603O	0603	
1	R103	OMIT	OMIT RES 523K 1% 1/16W SM 0603 TA (52-1369)	PT3903	R523KB1-0603-O	0603	
1	R28	52-1370	RES 562K 1% 1/16W SM 0603 TA	PT2623	R562KB1-0603	0603	
1	R94	52-1358	RES 63.4K 1% 1/16W SM 0603 TA	PT2611	R63.4KB1-0603	0603	
1	R53	52-1371	RES 634K 1% 1/16W SM 0603 TA	PT2624	R634KB1-0603	0603	
1	RC1	32-3226	RBN CBL 12 COND 0.1 SPC 2" LG	PT2708	RC12-323226	PA1X12-100-039	
1	RC2	32-0242	RBN CBL 3 COND FLEX STRIP .100 SPC 3.5" LONG	PT3617	RC3-320242	PA1X3-100-039	
1	RC3	32-0291	RBN CBL 6 COND 0.1 SP 1" LONG	PT3756	RC6-320291	PA1X6-100-039	
1	SW1	44-0063	SW SPST 6x6mm 50mA 12VDC SM TA	PT3088	SW440063	SW440063	
1	SW2	OMIT	OMIT SWITCH SPST TACT RADIAL (44-0077)	PT2721	SW440077-O	SW440077	
1	SW3	44-0192	SW DPDT TOGGLE MINI ON-NONE-ON VERT PCB	PT3648	SW440192	SWDPDTV	
1	U9	72-5443	IC CD4007 DUAL COMPARE PLUS INVERT SO14	PT2503	UCD4007-S	SO14	
1	U10	72-4034	IC LM339 QUAD COMPARATOR SO14 CB	PT1048	ULM339-S	SO14	
6	U1-3 U5-6 U8	72-0322	IC MC33178DR2G DUAL OP-AMP LOW PWR SO8	PT3641	UMC33178DR2G-S	SO8	
1	U7	70-0128	REG MP2357 ADJ 0.5A 1.4MHz SW BUCK SM	PT4128	UMP2357-S	SOT23-6	
1	U4	70-0194	IC MP3209 1.4MHz 350mA SW Boost TSOT23-5	PT3654	UMP3209-S	TSOT23-5	
1	VR2	40-0040	POT 100K W 50K C 9mm X3 17.5mm D-SFT H	PT3668	VR100K/50K400040	VR9.5X3-17.5DH-1	
1	VR1	40-0041	POT 100K W 9mm ROT X2 17.5mm DSFT HOR	PT3669	VR100K400041	VR9.5X2-17.5DH-2	
1	VR4	40-0044	POT 100K A 9mm ROT 15mm D-SFT 41CLK HOR	PT3664	VR100K400044	VR9.5-15DH	
1	VR3	40-0080	POT 100K B 9mm ROT 15mm D-SFT 41 CLK HOR	PT3647	VR100K400080	VR9.5-15DH	