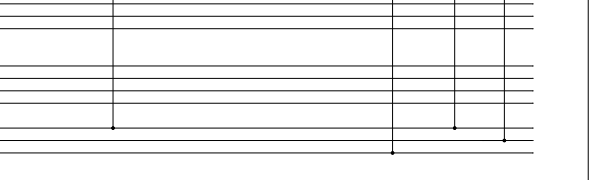
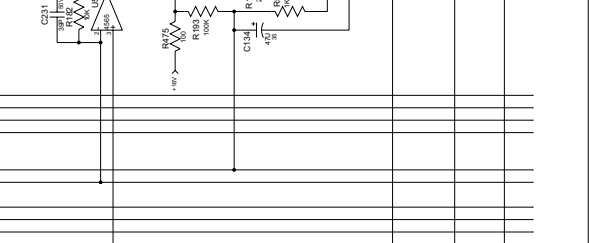
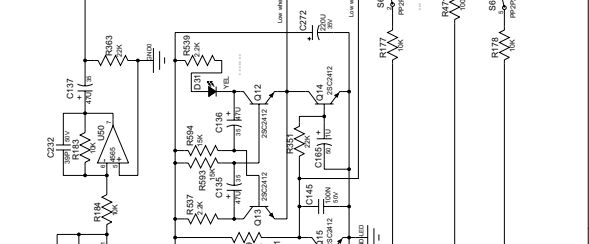
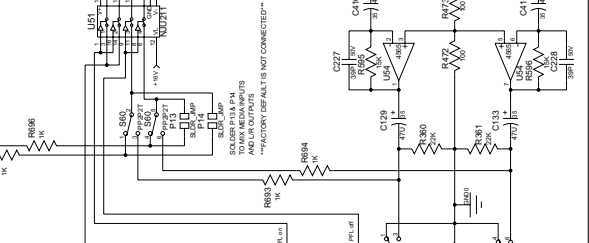
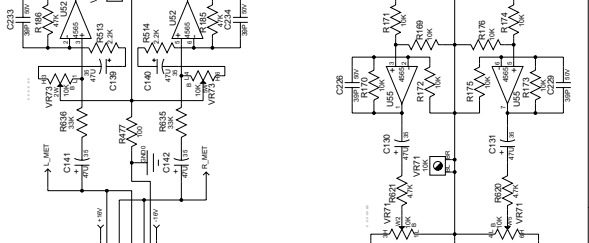
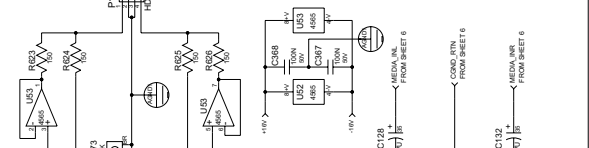
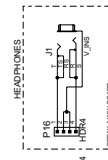
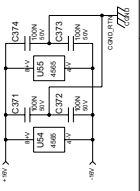
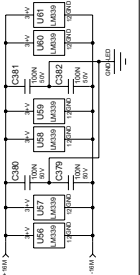
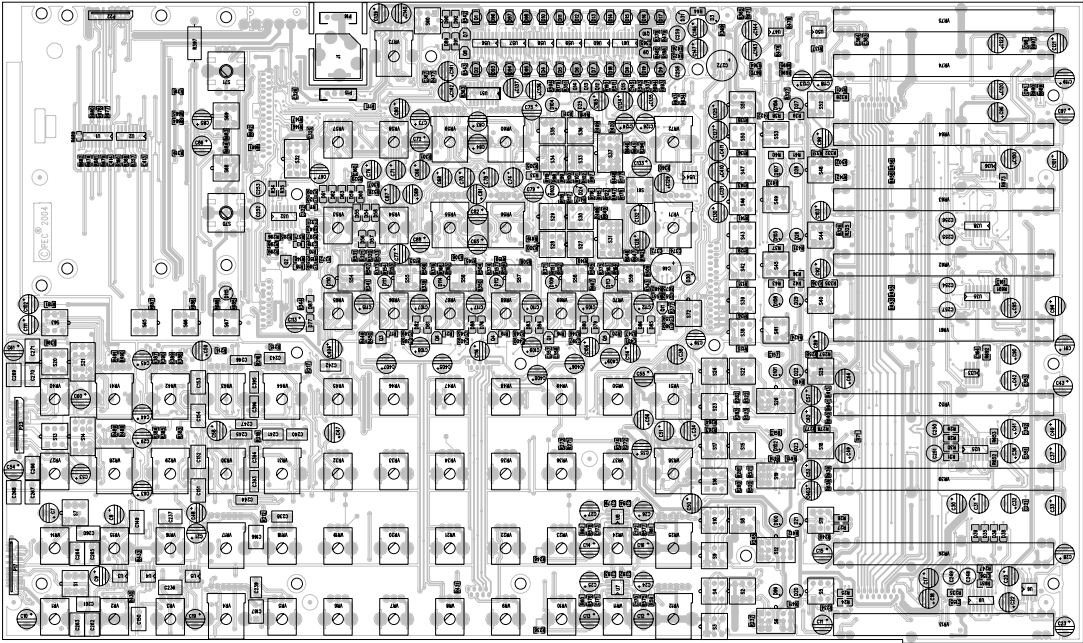
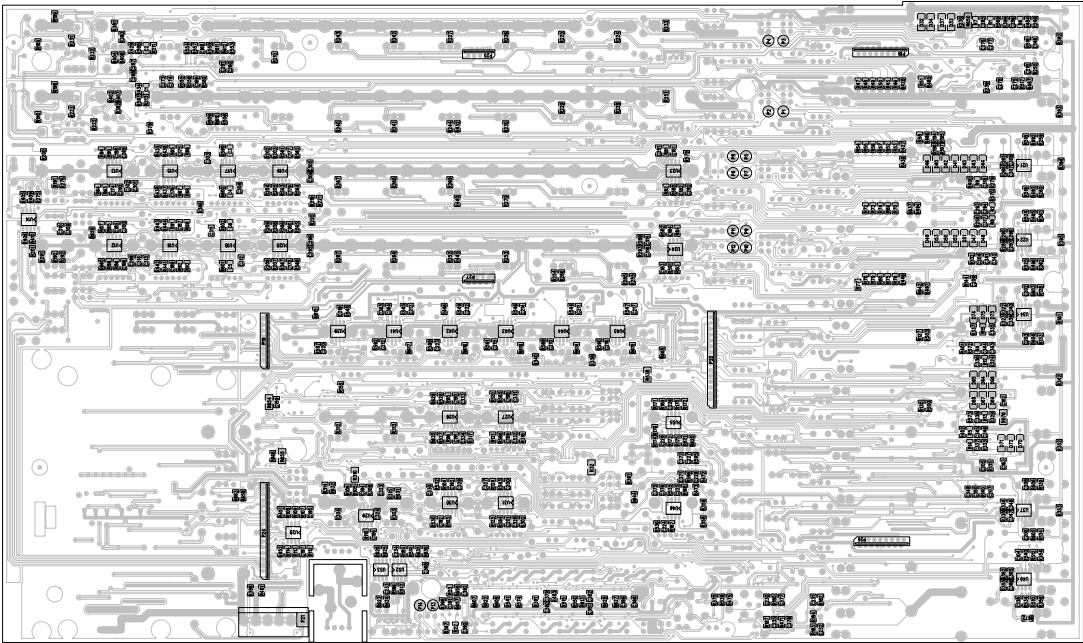


PENNEY
FX ST MASTER
PREAMPLIFIER & LEVEL METERS
P.O. BOX 238
MARIETTA, GA 30066
D1 Sheet 1 of 7 Date: 03-2012-08



LEFT
RIGHT
GROUP3
GROUP2
GROUP1
AUX4
AUX5
AUX6
AUX7
AUX8
AUX9
AUX10
AUX11
AUX12
AUX13
AUX14
AUX15
AUX16
AUX17
AUX18
AUX19
AUX20
AUX21
AUX22
AUX23
AUX24
AUX25
AUX26
AUX27
AUX28
AUX29
AUX30
AUX31
AUX32
AUX33
AUX34
AUX35
AUX36
AUX37
AUX38
AUX39
AUX40
AUX41
AUX42
AUX43
AUX44
AUX45
AUX46
AUX47
AUX48
AUX49
AUX50
AUX51
AUX52
AUX53
AUX54
AUX55
AUX56
AUX57
AUX58
AUX59
AUX60
AUX61
AUX62
AUX63
AUX64
AUX65
AUX66
AUX67
AUX68
AUX69
AUX70
AUX71
AUX72
AUX73
AUX74
AUX75
AUX76
AUX77
AUX78
AUX79
AUX80
AUX81
AUX82
AUX83
AUX84
AUX85
AUX86
AUX87
AUX88
AUX89
AUX90
AUX91
AUX92
AUX93
AUX94
AUX95
AUX96
AUX97
AUX98
AUX99
AUX100





BILL OF MATERIAL REPORT

REPORT DATE/TIME: 8/11/2005 11:00:52 AM

BOARD NAME: FX Master ASSEMBLY LEVEL NUMBER: 99061610

PROJECT NUMBER: P0300087 DESIGNER: FJE

Qty.	Part #	Description	Reference Designators

--			
9 R617	602-70200165-1	RES SMD 0805 1/10W 5% 4.7K	R614 R615 R616 R618 R619 R620 R621 R622
25 R139	602-70200166-1	RES SMD 0805 1/10W 5% 6.8K	R128 R133 R134 R248 R250 R259 R260 R261 R262 R354 R356 R637 R638 R639 R640 R641 R642 R643 R644 R645 R646 R647 R648 R649
122	602-70200168-1	RES SMD 0805 1/10W 5% 10K	R45 R46 R47 R48 R49 R50 R51 R52 R53 R54 R55 R56 R57 R58 R59 R60 R61 R62 R63 R64 R65 R66 R67 R68 R69 R70 R71 R72 R73 R74 R75 R76 R77 R78 R79 R80 R81 R82 R83 R84 R85 R86 R87 R88 R89 R90 R91 R92 R93 R94 R95 R96 R97 R98 R99 R100 R101 R102 R103 R104 R105 R106 R107 R108 R109 R110 R111 R112 R113 R114 R115 R116 R117 R118 R119 R120 R121 R122 R123 R124 R125 R126 R127 R129 R130 R131 R132 R135 R136 R137 R138 R140 R141 R142 R143 R144 R145 R149 R153 R158 R159 R162 R167 R168 R169 R170 R171 R172 R173 R174 R175 R176

R177 R178 R180 R182
R183 R184 R187 R188
R690 R697

113 602-70200169-1 RES SMD 0805 1/10W 5% 22K
R223

R179 R181 R222

R224 R225 R226 R227
R228 R229 R230 R231
R232 R233 R236 R237
R238 R239 R240 R241
R242 R243 R244 R245
R246 R251 R252 R253
R256 R263 R264 R265
R266 R267 R268 R269
R270 R275 R276 R279
R280 R281 R282 R283
R284 R287 R288 R289
R290 R291 R292 R293
R294 R297 R298 R299
R300 R301 R302 R303
R304 R305 R306 R307
R308 R309 R312 R313
R314 R315 R316 R317
R318 R319 R320 R321
R322 R323 R324 R329
R330 R333 R334 R337
R338 R339 R340 R341
R343 R344 R345 R346
R347 R348 R349 R350
R351 R355 R358 R359
R360 R361 R362 R363
R364 R365 R366 R367
R396 R603 R604 R605
R606

42 602-70200170-1 RES SMD 0805 1/10W 5% 47K
R254

R160 R185 R186

R255 R271 R272 R273
R274 R285 R286 R357
R368 R411 R412 R413
R414 R415 R416 R417
R418 R419 R420 R421
R422 R423 R424 R425
R426 R674 R675 R677
R678 R679 R680 R681
R682 R683 R684 R685
R686 R687

34 602-70200172-1 RES SMD 0805 1/10W 5% 1K
R487

R484 R485 R486

R488 R489 R490 R491
R492 R493 R494 R495
R496 R497 R498 R499
R500 R501 R502 R503
R504 R505 R506 R507
R508 R509 R510 R511
R512 R515 R693 R694

			R695 R696
12 R560	602-70200174-1	RES SMD 0805 1/10W 1% 10K	R557 R558 R559 R561 R562 R563 R564 R565 R566 R567 R568
18	602-70200177-1	RES SMD 0805 1/10W 5% 1M	R6 R7 R8 R9 R10 R11 R12 R13 R14 R15 R16 R17 R18 R19 R20 R21 R22 R23
11 R157	602-70200178-1	RES SMD 0805 1/10W 5% 100K	R150 R151 R154 R163 R166 R189 R190 R191 R192 R193
4 R406	602-70200212-1	RES SMD 0805 1/8W 1% 169K	R403 R404 R405
4 R199 R200 R201	602-K11401152-1	RES SMD 0805 1/8W 1% 11.5K T&R (KW000067)	R198
4 R408 R409 R410	602-K11402871-1	RES SMD 0805 1/8W 1% 2.87K T&R (KW000080)	R407
8 R203 R204 R205	602-K11403242-1	RES SMD 0805 1/8W 1% 32.4K T&R (KW000057)	R202 R206 R207 R208 R209
12 R211 R212 R213	602-K11408251-1	RES SMD 0805 1/8W 1% 8.25K T&R (KW000070)	R210 R214 R215 R216 R217 R218 R219 R220 R221
28 R161 R342	602-K11420000-1	RES SMD 0805 1/8W 5% 0R T&R (KW000105)	R146 R147 R352 R353 R392 R393 R394 R395 R398 R481 R482 R658 R659 R660 R661 R662 R663 R664 R665 R666 R667 R668 R669 R670 R671 R672
5 R570 R571 R572	602-K11421202-1	RES SMD 0805 1/8W 5% 12K T&R (KW000008)	R569 R573

2	602-K11421601-1				RES SMD 0805 1/8W 5% 1.6K T&R (KW000023)	R551
R574						
29	602-K11422201-1				RES SMD 0805 1/8W 5% 2.2K T&R (KW000004)	R513
R514 R516 R517						
					R518 R519 R520 R521	
					R522 R523 R524 R525	
					R526 R527 R528 R529	
					R530 R531 R532 R533	
					R534 R535 R536 R537	
					R539 R540 R541 R542	
					R543	
10	602-K11422203-1				RES SMD 0805 1/8W 5% 220K T&R (KW000003)	R234
R249 R258 R277						
					R295 R311 R326 R327	
					R331 R336	
1	602-K11424700-1				RES SMD 0805 1/8W 5% 470R T&R (KW000112)	R550
1	602-K11428200-1				RES SMD 0805 1/8W 5% 820R T&R (KW000111)	R483
1	30210001	22	1W	5% MO AXL		R397
20	70200035	470K	1/4W	5% MF 1206		R235 R247 R257 R278
						R296 R310 R325 R328
						R332 R335 R650 R651
						R652 R653 R654 R655
						R673 R676 R691 R692
1	70200080	15K	1/4W	5% MF 1206		R538
1	70200175	1.1K	1/10W	1% MF 0805		R391
2	70200184	392	1/10W	1% MF 0805		R479 R480
12	70200251	4.75K	1/10W	1% MF 0805		R379 R380 R381 R382
						R383 R384 R385 R386
						R387 R388 R389 R390
1	70200317	56		1/10W 5% MF 0603		R689
4	70200329	7.5K		1/10W 1% MF 0805		R609 R610 R611 R612
111	70300085	0.1UF	50V	80-20% Z5U 0805		C145 C273 C274 C275
						C276 C277 C278 C279
						C280 C281 C282 C283
						C284 C285 C286 C287
						C288 C289 C290 C291
						C292 C293 C294 C295
						C296 C297 C298 C299
						C300 C301 C302 C303
						C304 C305 C306 C307
						C308 C309 C310 C311

						C312 C313 C314 C315
						C316 C317 C318 C319
						C320 C321 C322 C323
						C324 C325 C326 C327
						C328 C329 C330 C331
						C332 C333 C334 C335
						C336 C337 C338 C339
						C340 C341 C342 C343
						C344 C345 C346 C347
						C348 C349 C350 C357
						C358 C359 C360 C363
						C364 C365 C366 C367
						C368 C371 C372 C373
						C374 C375 C376 C377
						C378 C379 C380 C381
						C382 C383 C384 C385
						C386 C389 C390 C391
						C392 C413 C414
6	70300086	10PF	50V	5%	NPO 0805	C1 C2 C3 C4
						C5 C6
60	70300087	39PF	50V	5%	NPO 0805	C168 C169 C170 C171
						C172 C173 C174 C175
						C176 C177 C178 C179
						C180 C181 C182 C183
						C184 C185 C186 C187
						C188 C189 C195 C197
						C198 C199 C200 C201
						C202 C203 C204 C205
						C206 C207 C208 C209
						C210 C211 C212 C213
						C214 C215 C216 C217
						C219 C220 C222 C223
						C224 C225 C226 C227
						C228 C229 C230 C231
						C232 C233 C234 C235
6	70300089	220PF	50V	5%	NPO 0805	C148 C218 C221 C351
						C352 C353
6	70300116	0.01UF	50V	5%	X7R 0805	C397 C398 C399 C400
						C401 C402
10	70300121	0.1UF	50V	5%	X7R 0805	C155 C156 C157 C158
						C159 C160 C161 C162
						C163 C164
2	70300147	680PF	50V	5%	NPO 0805	C104 C138
8	70300185	150PF	200V	5%	NPO 0805	C93 C98 C190 C191
						C192 C193 C194 C196
12	70320184	2.2UF	50V	20%	ELN RAD	C248 C249 C250 C251
						C252 C253 C254 C255

C256 C257 C258 C259

1	70320261	1UF	50V 20% EL	RAD	C165
1	70320264	100UF	63V 20% EL	RAD	C46
2	70320303	2700PF	50V 5% PE	RAD	C166 C167
144	70320344	47UF	35V 20% EL	RAD	C7 C8 C9 C10 C11 C12 C13 C14 C15 C16 C17 C18 C19 C20 C21 C22 C23 C24 C25 C26 C27 C28 C29 C30 C31 C32 C33 C34 C35 C36 C37 C38 C39 C40 C41 C42 C43 C44 C45 C47 C48 C49 C50 C51 C52 C53 C54 C55 C56 C57 C58 C59 C60 C61 C62 C63 C64 C65 C66 C67 C68 C69 C70 C71 C72 C73 C74 C75 C76 C77 C78 C79 C80 C81 C82 C83 C84 C85 C86 C87 C88 C89 C90 C91 C92 C94 C95 C96 C97 C99 C100 C101 C102 C103 C105 C106 C107 C108 C109 C110 C111 C112 C113 C114 C115 C116 C117 C118 C119 C120 C121 C122 C123 C124 C125 C126 C127 C128 C129 C130 C131 C132 C133 C134 C135 C136 C137 C139 C140 C141 C142 C143 C144 C146 C147 C403 C404 C405 C406 C407 C408 C409 C410 C411
1	70320351	220UF	35V 20% EL	RAD	C272
2	70330117	6800PF	50V 5% PE	RAD	C236 C237
12	70330129	0.1UF	50V 5% PE	RAD	C260 C261 C262 C263 C264 C265 C266 C267 C268 C269 C270 C271
6	70330131	1200PF	50V 5% PE	RAD	C149 C150 C151 C152

						C153 C154	
6	70330136	0.047UF	50V	5%	PE RAD	C238 C239 C240 C241 C242 C243	
4	70330153	3900PF	50V	5%	PE RAD	C393 C394 C395 C396	
4	70330155	0.01UF	50V	5%	PE RAD	C244 C245 C246 C247	
60	70418026	1N4148 (LL34)	DIODE	SMT		D32 D33 D34 D35 D36 D37 D38 D39 D40 D41 D42 D43 D44 D45 D46 D47 D48 D49 D50 D51 D52 D53 D54 D55 D56 D57 D58 D59 D60 D61 D62 D63 D64 D65 D66 D67 D68 D69 D70 D71 D72 D73 D74 D75 D76 D77 D79 D80 D81 D82 D83 D84 D85 D86 D87 D88 D89 D90 D91 D92	
2	70418033	MPS6533/34	PNP	SMT		Q9 Q10	
5	70418034	2SC2412	NPN	SMT		Q11 Q12 Q13 Q14 Q15	
8	70418051	MMBTA13LTI	NPN	DARL.	SMT	Q1 Q2 Q3 Q4 Q5 Q6 Q7 Q8	
11	70418110	LM339	QUAD	COMPARATOR	SMT	U9 U25 U32 U35 U38 U56 U57 U58 U59 U60 U61	
3	70418150	2068	DUAL	LN	OPAMP	SO8	U33 U36 U47
1	70418315	NJU211M	4-ANALOG	SW	-SMT		U51
2	70418379	74HC165	PARALLEL-IN/SERIAL	OUT			U1 U2
40	70418506	4565	DUAL	OPAMP	SOIC8W		U3 U4 U5 U6 U7 U8 U12 U13 U14 U15 U16 U17 U18 U19 U20 U21 U22 U23 U24 U26 U27 U28 U29 U30 U31 U34 U37 U39 U41 U42 U43 U44 U45 U46 U49 U50 U52 U53 U54 U55

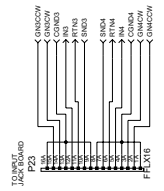
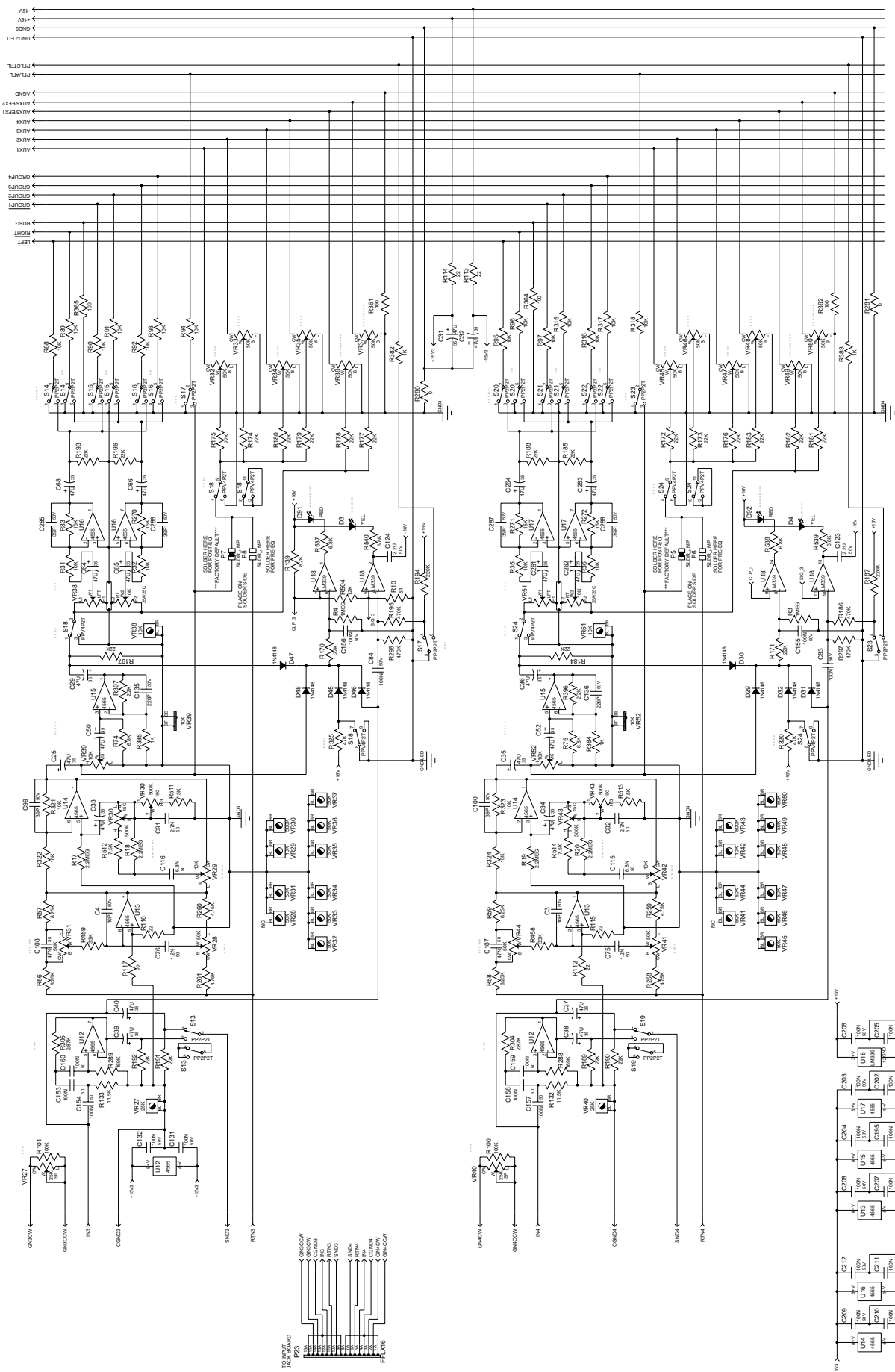
17	70450050	RED T1 LED W/.500" SPCR	D99 D100 D101 D102 D103 D104 D105 D106 D107 D108 D109 D110 D111 D112 D113 D114 D115
1	70450051	GRN T1 LED W/.500" SPCR	D3
12	70450052	YEL T1 LED W/.500" SPCR	D20 D21 D22 D23 D24 D25 D26 D27 D28 D29 D30 D31
2	70450837	RED RECT LED W/0.390" SPACER	D1 D2
16	70450838	GRN RECT LED W/0.390" SPACER	D4 D5 D6 D7 D8 D9 D10 D11 D12 D13 D14 D15 D16 D17 D18 D19
6	70450839	YEL RECT LED W/0.390" SPACER	D93 D94 D95 D96 D97 D98
8	71190257	10KB SNGL 9MM DET VER	VR3 VR16 VR65 VR66 VR67 VR68 VR69 VR70
32	71190259	50KB SNGL 9MM DET VER	VR2 VR5 VR6 VR7 VR8 VR9 VR10 VR11 VR15 VR18 VR19 VR20 VR21 VR22 VR23 VR24 VR32 VR33 VR34 VR35 VR36 VR37 VR45 VR46 VR47 VR48 VR49 VR50 VR53 VR54 VR57 VR58
4	71190261	25KSP SNGL 9MM VER	VR1 VR14 VR27 VR40
6	71190710	10KA/C DUAL 12MM DET VER	VR12 VR25 VR38 VR51 VR55 VR59
3	71190711	10KB DUAL 12MM VER	VR28 VR41 VR73
2	71190715	500K15C SNGL 12MM VER	VR4 VR17
4	71190716	50KB DUAL 12MM DET VER	VR29 VR31 VR42 VR44
6	71190717	10KB DUAL 12MM DET VER	VR30 VR43 VR56 VR60 VR71 VR72
8	71191056	10KA SNGL 60MM VER	VR13 VR26 VR61 VR62

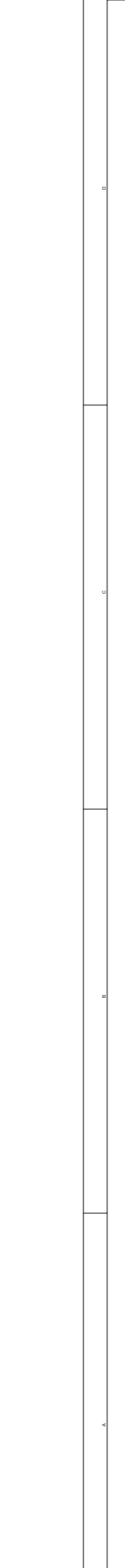
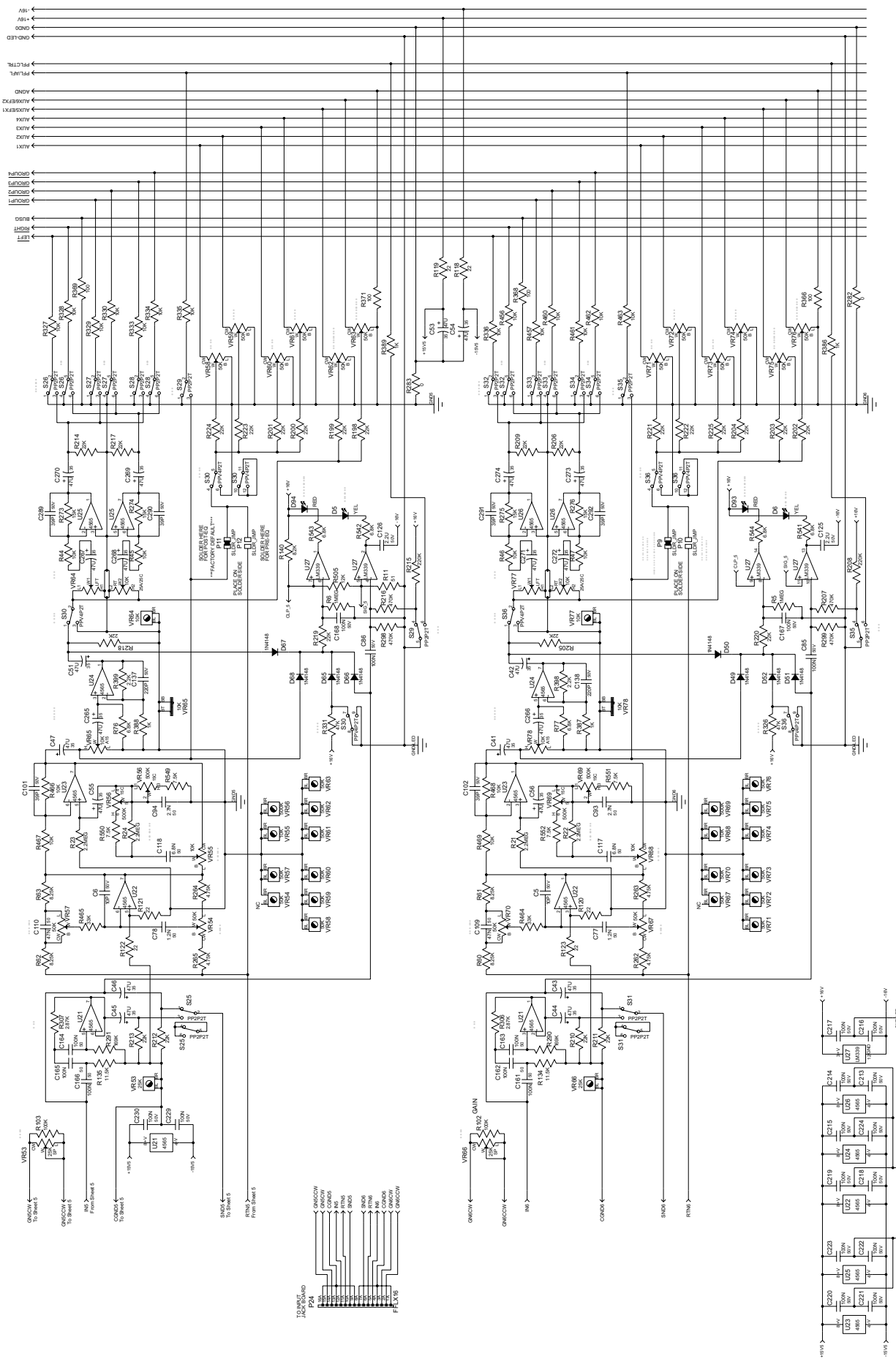
VR63 VR64 VR74 VR75

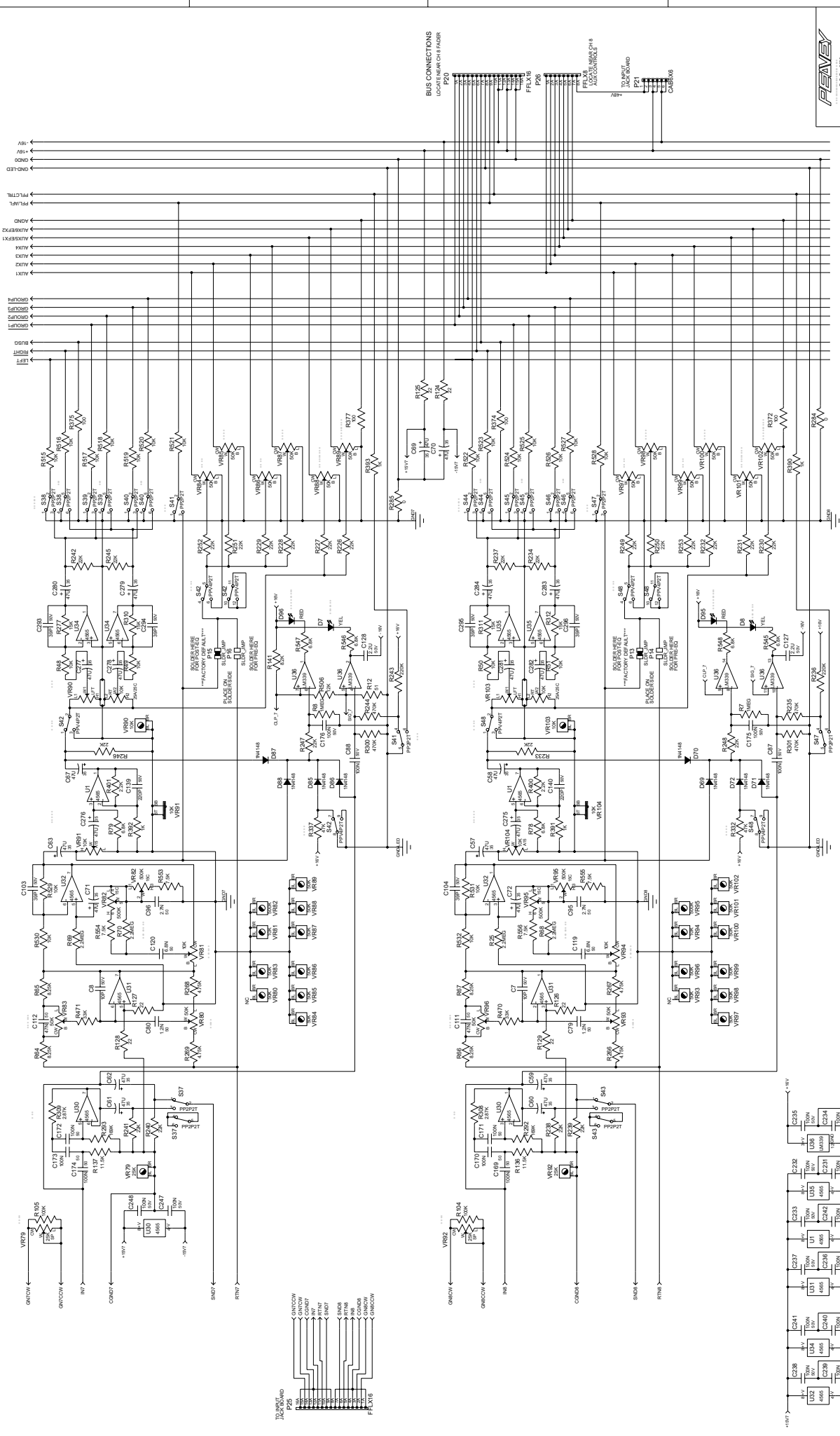
2	71191057	10KA DUAL 60MM VER	VR39 VR52
54	71322356	SWITCH DPDT 2.8MM SHFT V	S1 S2 S3 S4 S5 S7 S8 S9 S10 S11 S13 S15 S16 S17 S18 S20 S22 S23 S24 S25 S27 S28 S29 S30 S33 S34 S35 S36 S38 S39 S40 S41 S42 S43 S44 S45 S46 S47 S48 S49 S50 S51 S52 S53 S54 S55 S56 S57 S58 S59 S60 S61 S63 S72
9	71322360	SWITCH 4PDT 2.8MM SHFT V	S6 S12 S14 S19 S21 S26 S31 S32 S37
5	71322361	SWITCH DPDT 2.8MM MOM V	S65 S66 S67 S68 S69
2	71322479	ENCDR 24P 24D 2BIT SW PC V	S70 S71
1	71466216	STEREO HID JACK INSU W/SP	J1
2	73717197	4 HDR V JST-EHR 2.5MM TIN	P15 P16
1	73719108	6 HDR V SR .156" TIN	P21
2	73719146	16 FLT FLX 1.0MM CONN SMT	P17 P23
3	73719149	16 FLT FLX 1.0MM CONN TH	P18 P19 P26
2	73719150	8 FLT FLX 1.0MM CONN TH	P25 P27
2	73719153	30 FLT FLX 1.0MM CONN TH	P20 P24
1	73719155	12 FLT FLX 1.0MM CONN SMT	P22
4	K702004	8.2K 1/10W 5% MF 0805	R399 R400 R401 R402
8	K702007	3.3K 1/10W 5% MF 0805	R371 R372 R373 R374 R375 R376 R377 R378
8	K702008	150K 1/10W 5% MF 0805	R148 R152 R155 R156 R164 R165 R656 R657
38	K702009	100 1/10W 5% MF 0805	R427 R428 R429 R430

				R431 R432 R433 R434 R435 R436 R437 R438 R439 R440 R441 R442 R443 R444 R445 R446 R447 R448 R449 R450 R451 R452 R453 R455 R456 R458 R466 R471 R472 R473 R474 R475 R477 R478
9	K702011	33K	1/10W 5% MF 0805	R597 R598 R599 R600 R601 R602 R607 R635 R636
7	K702014	68K	1/10W 5% MF 0805	R544 R545 R546 R547 R548 R549 R552
6	K702018	4.7	1/10W 5% MF 0805	R194 R195 R196 R197 R369 R370
4	K70200443	2.2M	1/10W 5% MF 0805	R553 R554 R555 R556
22	K70200444	15K	1/10W 5% MF 0805	R575 R576 R577 R578 R579 R580 R581 R582 R583 R584 R585 R586 R587 R588 R589 R590 R591 R592 R593 R594 R595 R596
1	K70200445	3K	1/10W 5% MF 0805	R608
6	K70200446	7.5K	1/10W 5% MF 0805	R629 R630 R631 R632 R633 R634
2	K70200447	220	1/10W 5% MF 0805	R613 R688
4	K70200448	150	1/10W 5% MF 0805	R623 R624 R625 R626
2	K70200449	120	1/10W 5% MF 0805	R627 R628
5	K70200450	51	1/10W 5% MF 0805	R1 R2 R3 R4 R5
21	K70200451	6.8K	1/4W 5% 1206	R24 R25 R26 R27 R28 R29 R30 R31 R32 R33 R34 R35 R36 R37 R38 R39 R40 R41 R42 R43 R44

 END OF BILL OF MATERIAL REPORT







BUS CONNECTIONS
LOCATED ON CHASSIS

