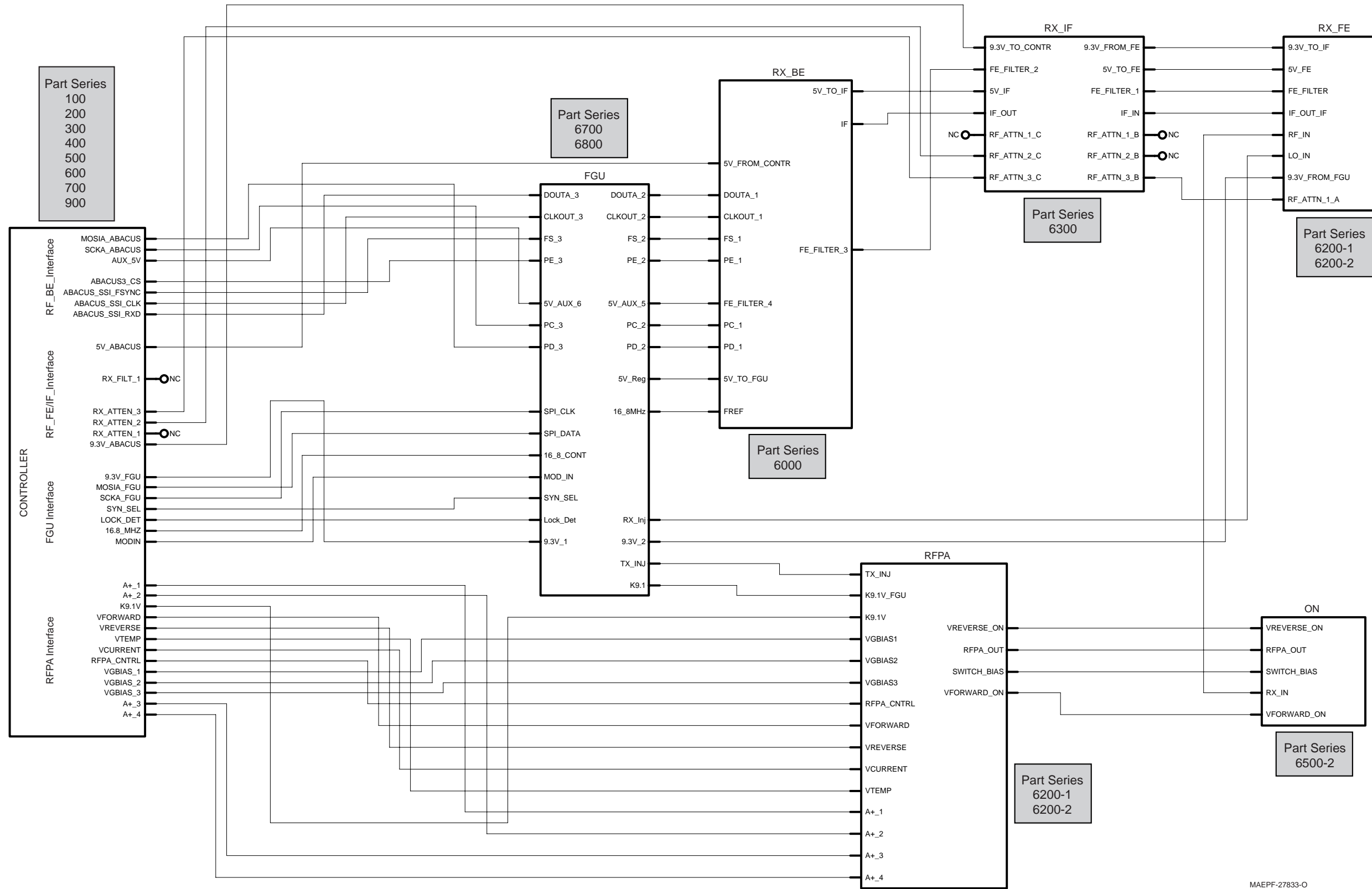


7.5 HUF4017A (700-800 MHz) Main Board



MAEPF-27833-O

Figure 7-117. HUF4017A Main Board Overall Block Diagram and Interconnections

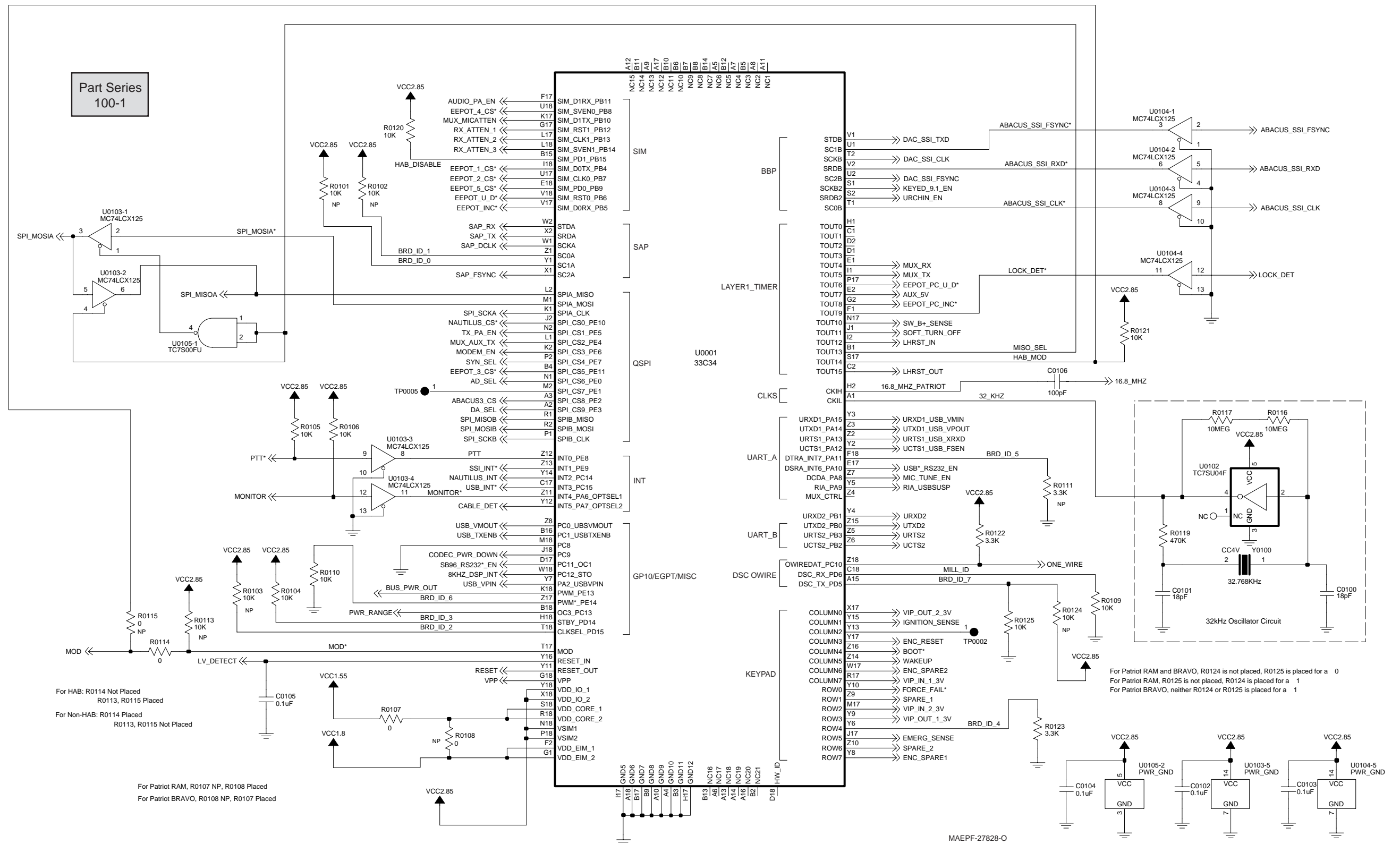


Figure 7-118. HUF4017A Controller Block Diagram and Interconnections (Sheet 1 of 3)

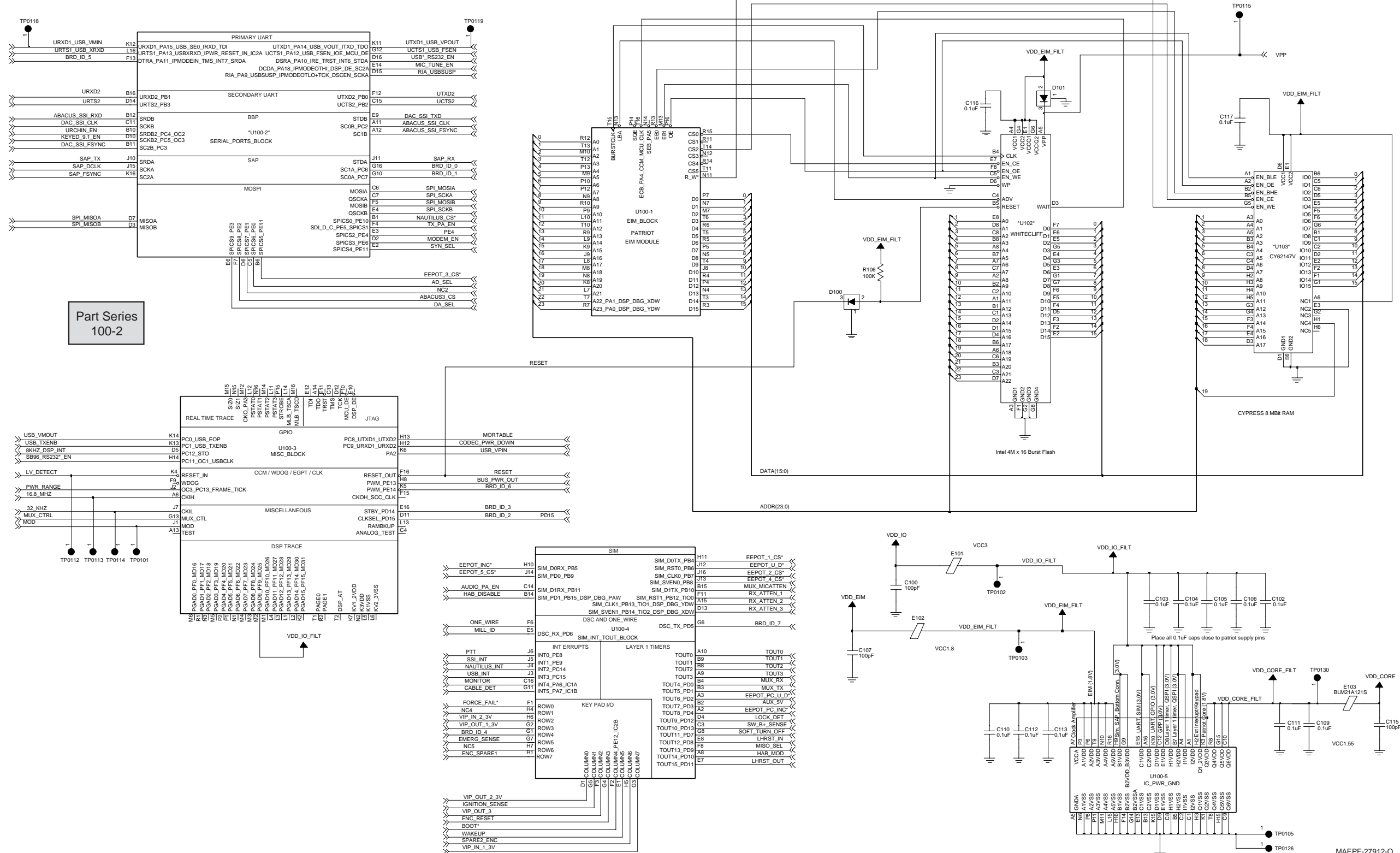
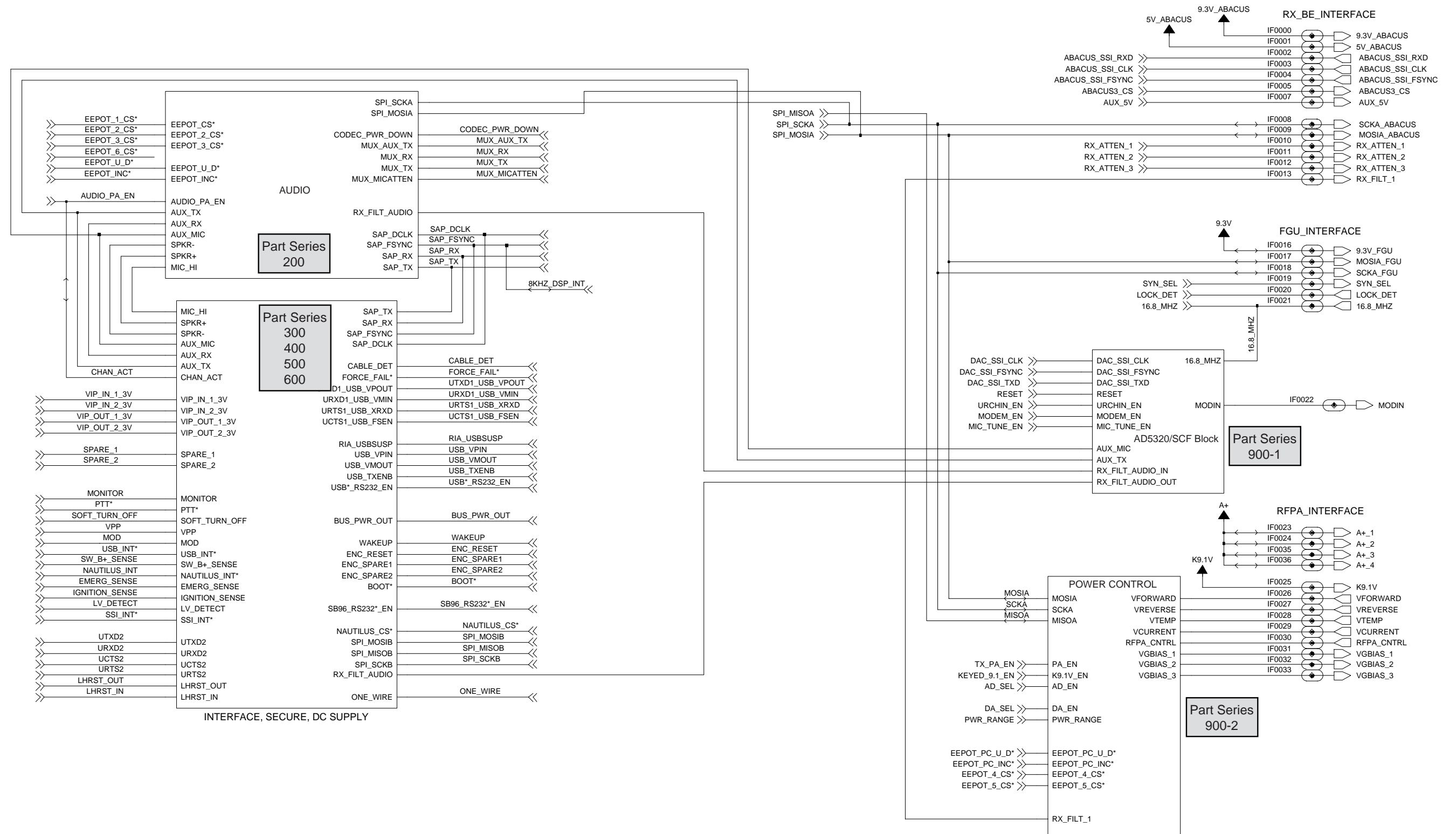


Figure 7-119. HUF4017A Controller Block Diagram and Interconnections (Sheet 2 of 3)



MAEPF-27827-O

Figure 7-120. HUF4017A Controller Block Diagram and Interconnections (Sheet 3 of 3)

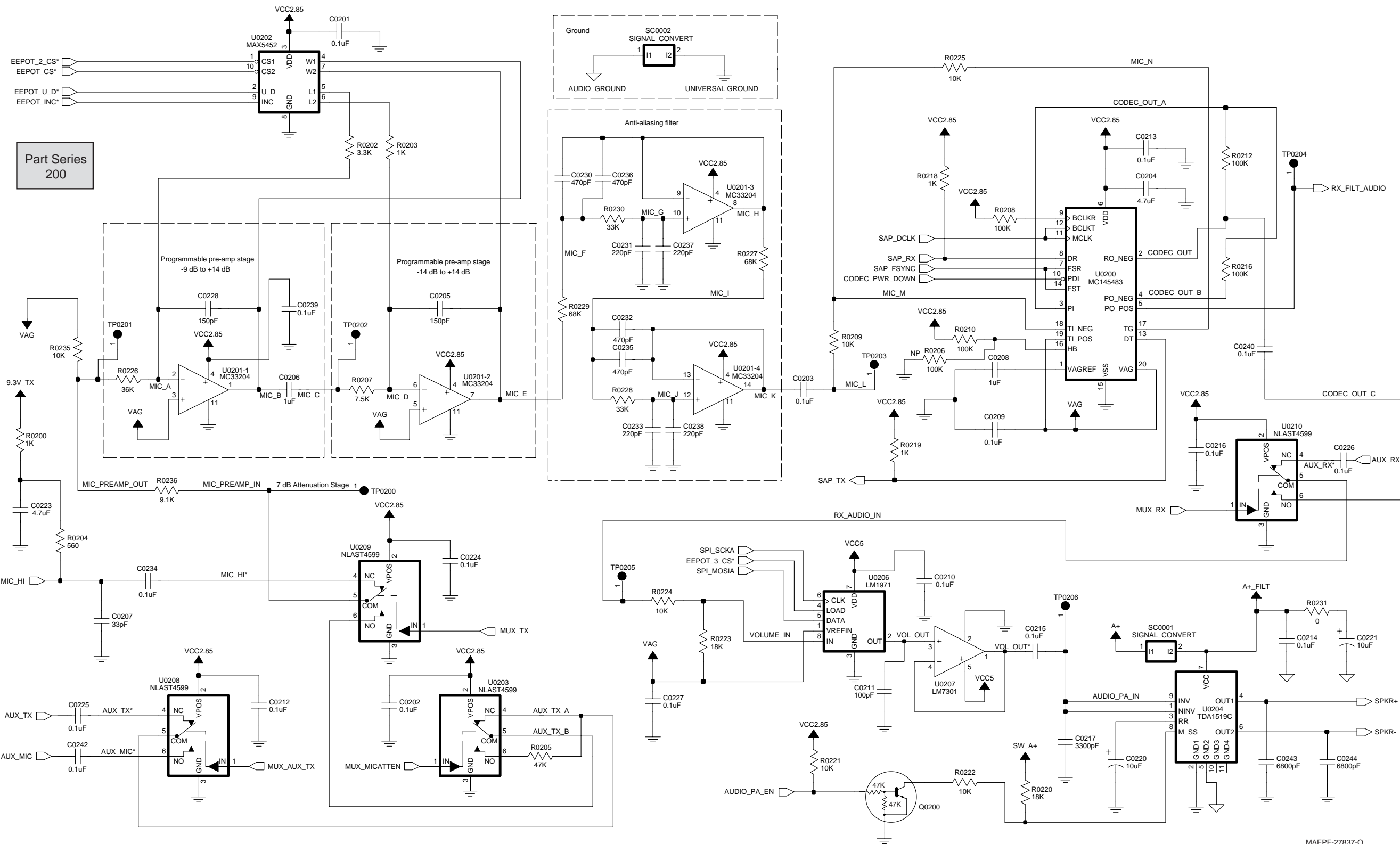


Figure 7-121. HUF4017A Controller Audio Schematic

MAEPF-27837-0

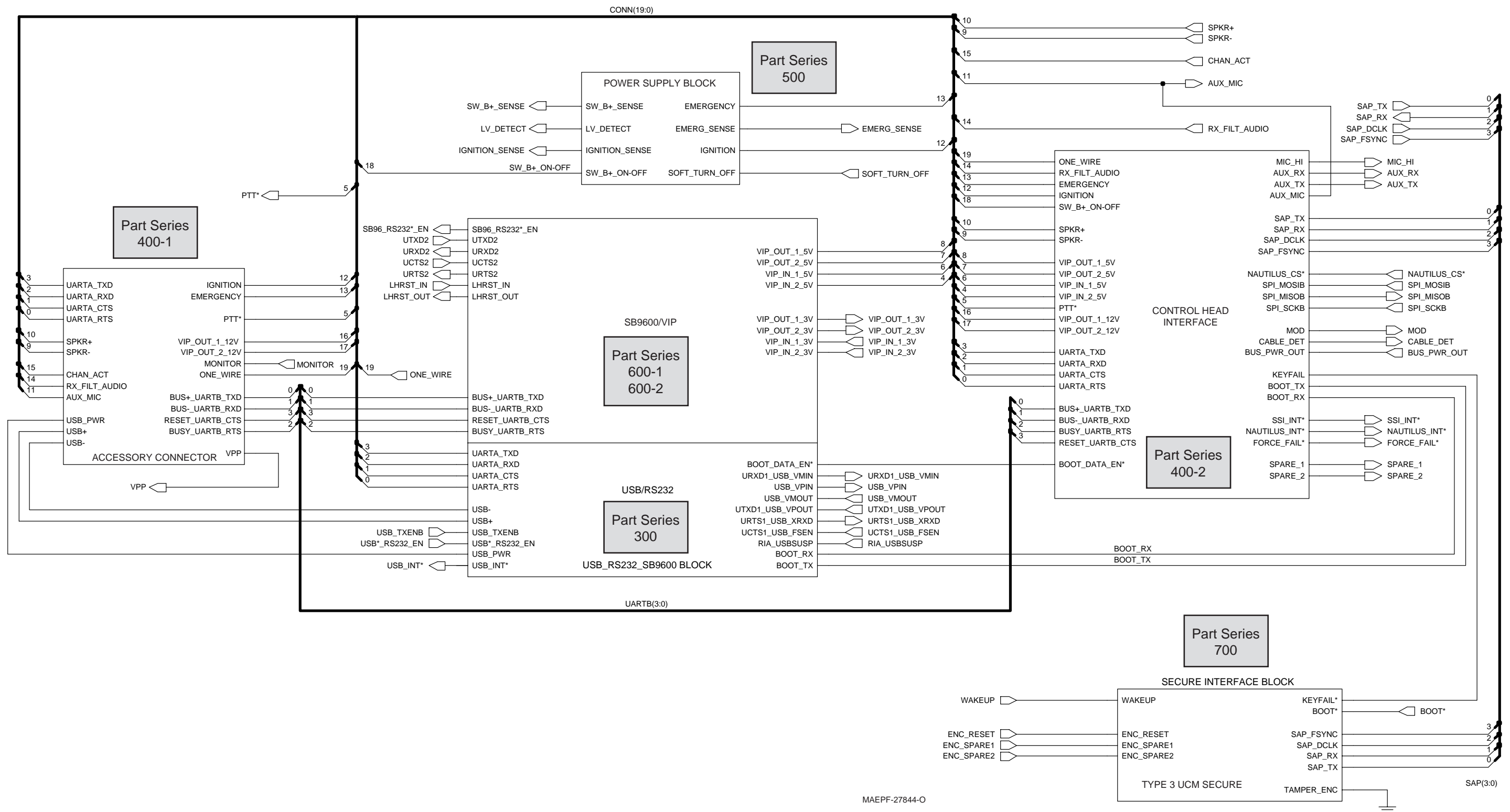


Figure 7-122. HUF4017A Power, Data, Secure, and Front/Rear Connector Block Diagrams

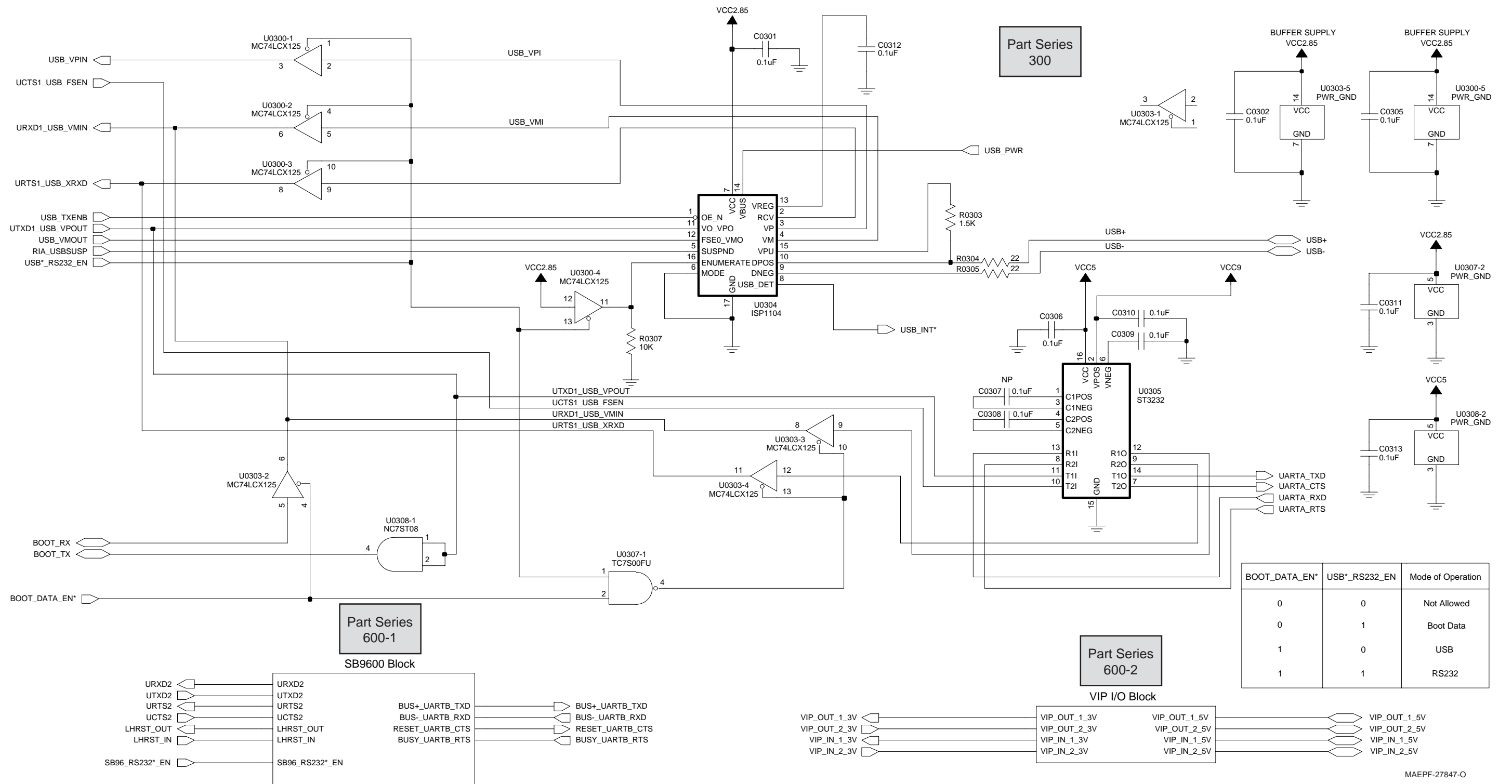
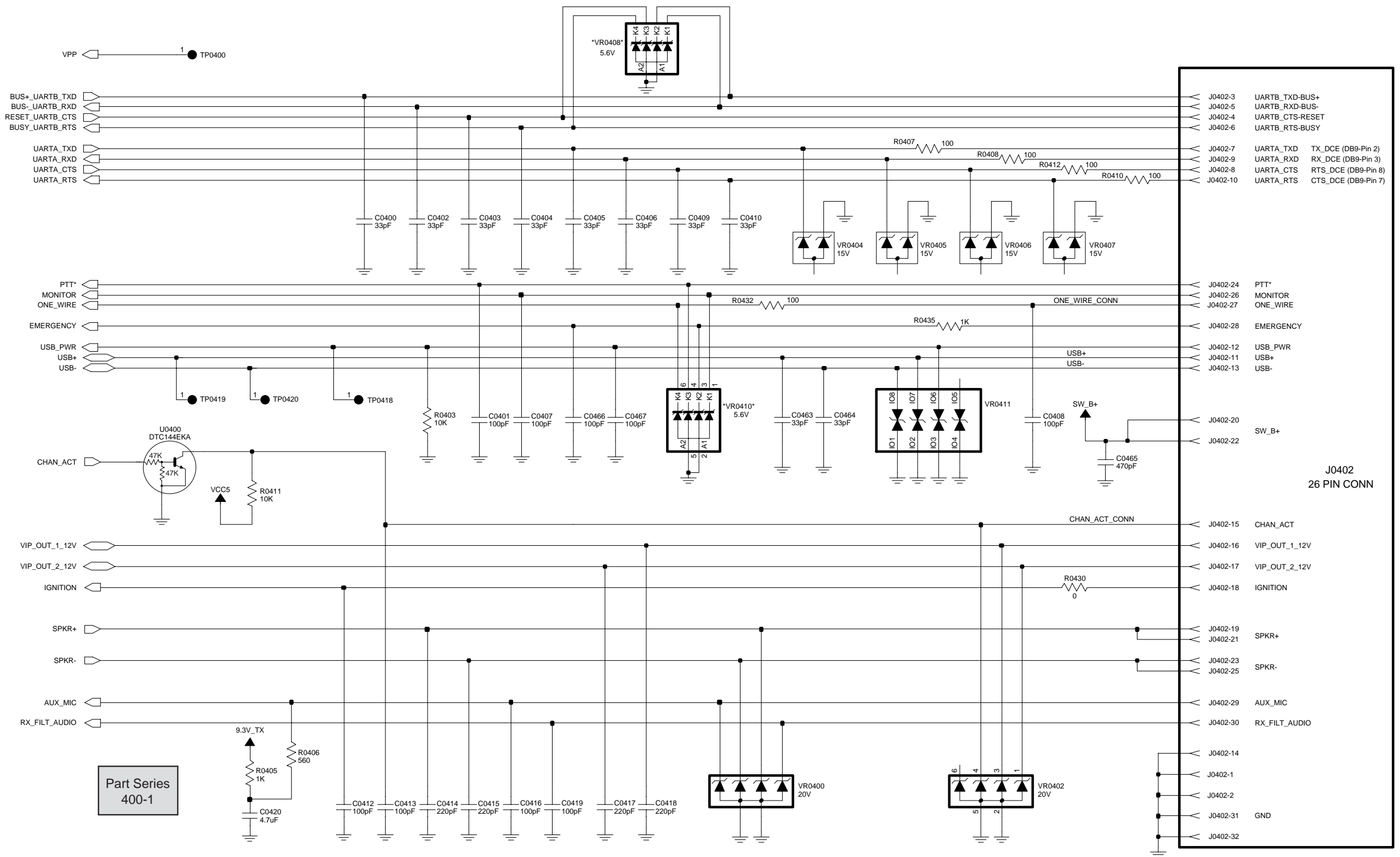


Figure 7-123. HUF4017A USB/RS232/SB9600 Schematic



MAEPF-27842-O

Figure 7-124. Rear Accessory Connector (J0402) Schematic

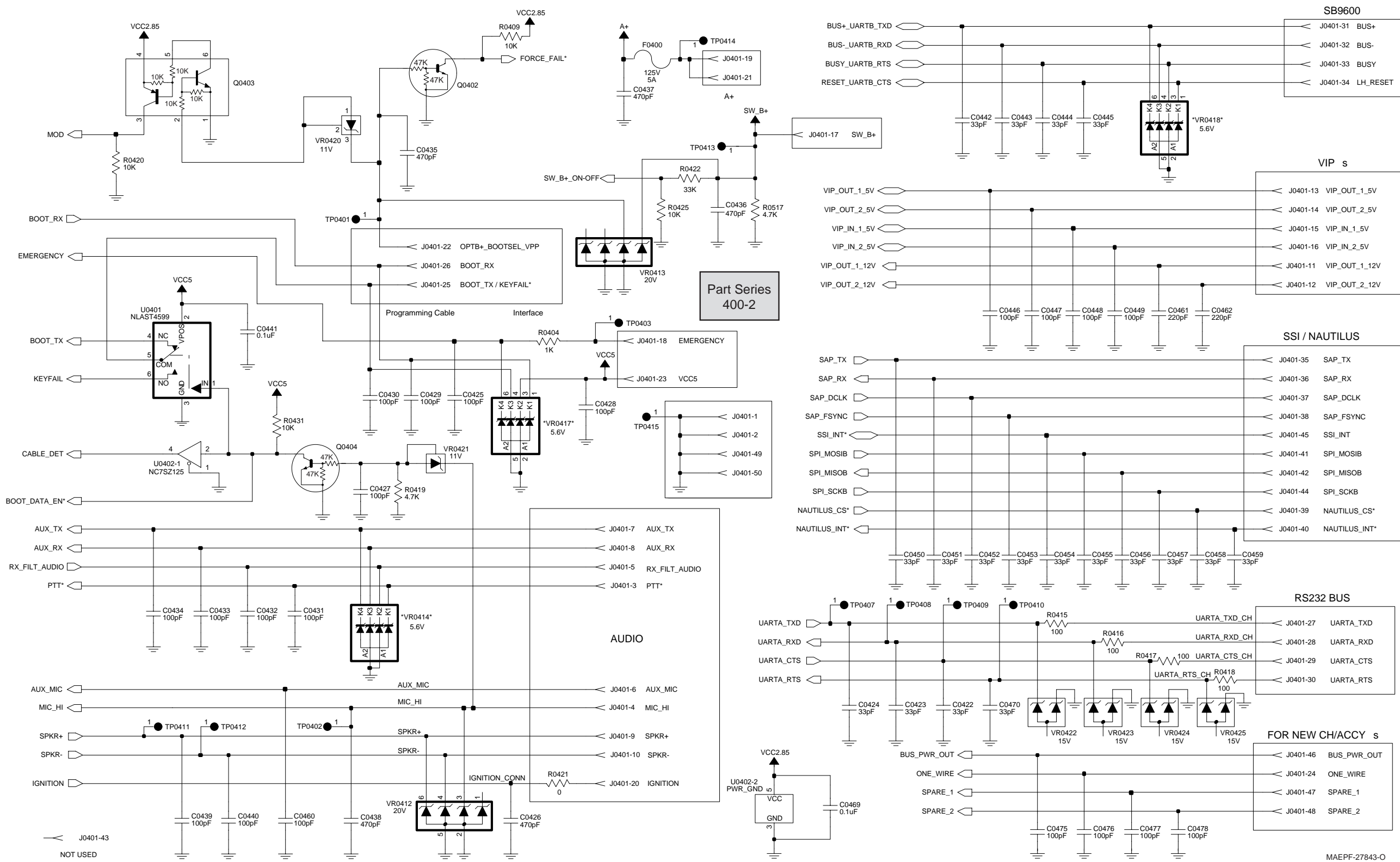


Figure 7-125. Control-Head Front Connector Schematic

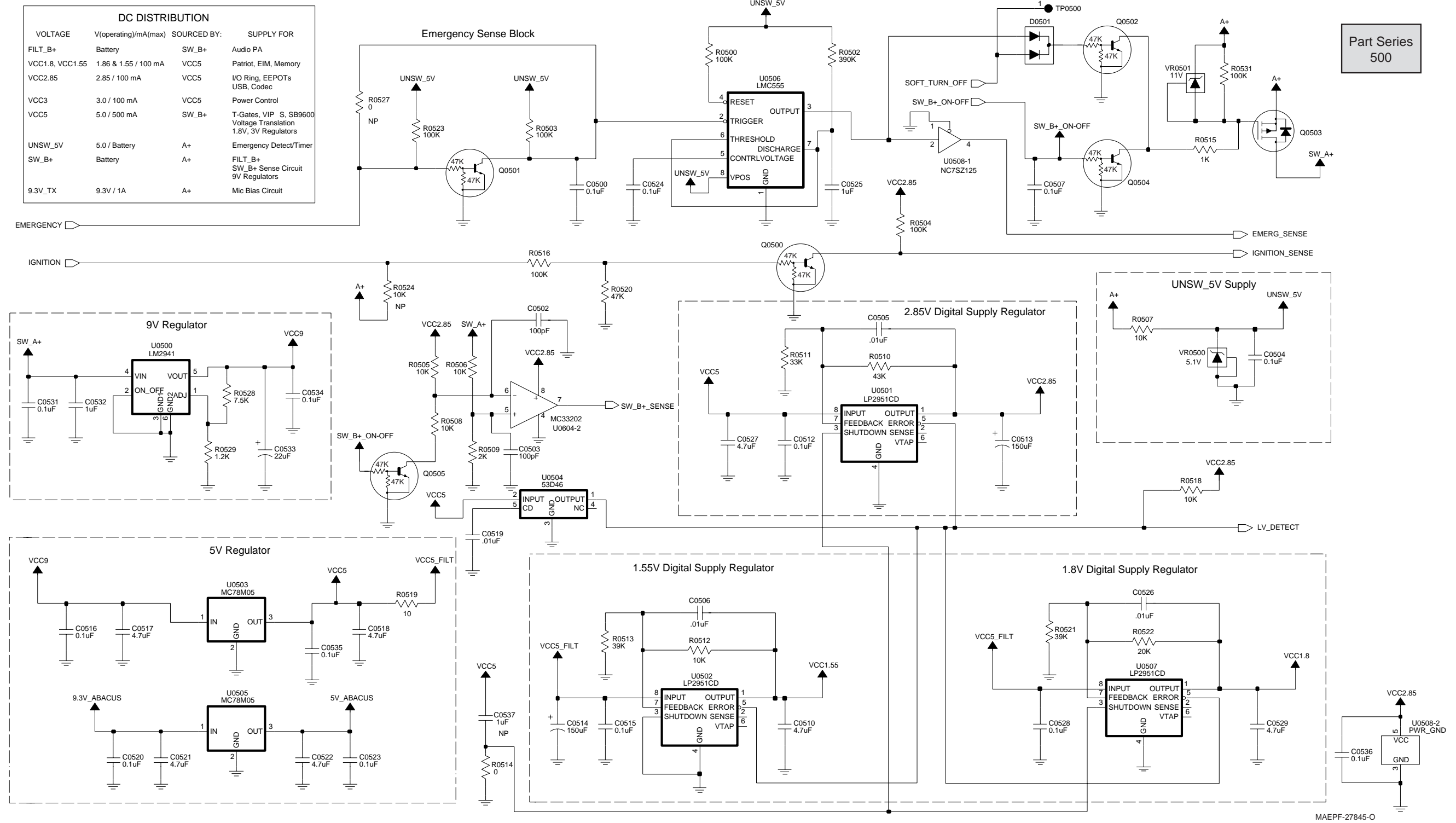


Figure 7-126. Controller Power Supply and Emergency Schematic

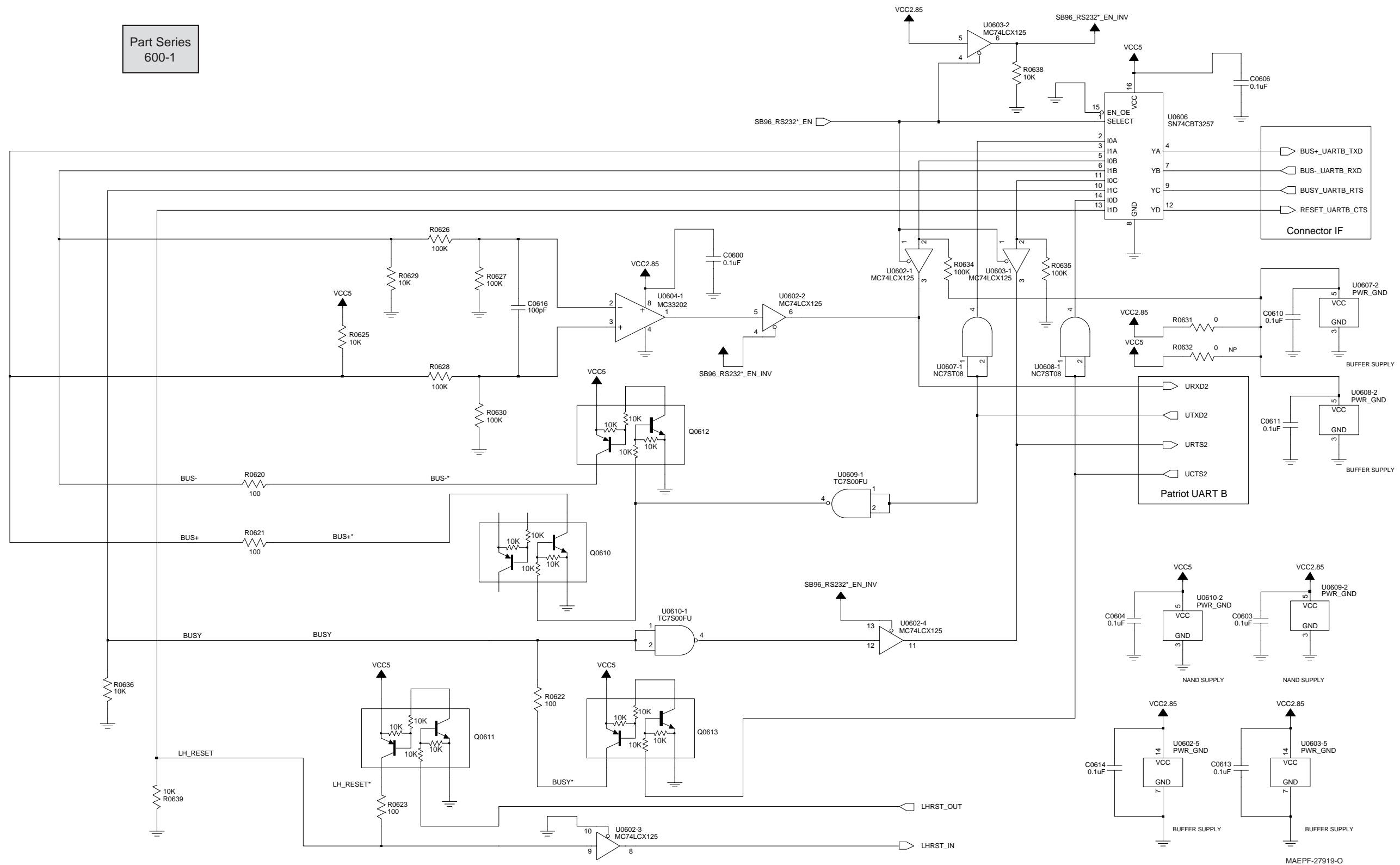


Figure 7-127. Controller RS232/SB9600 Schematic

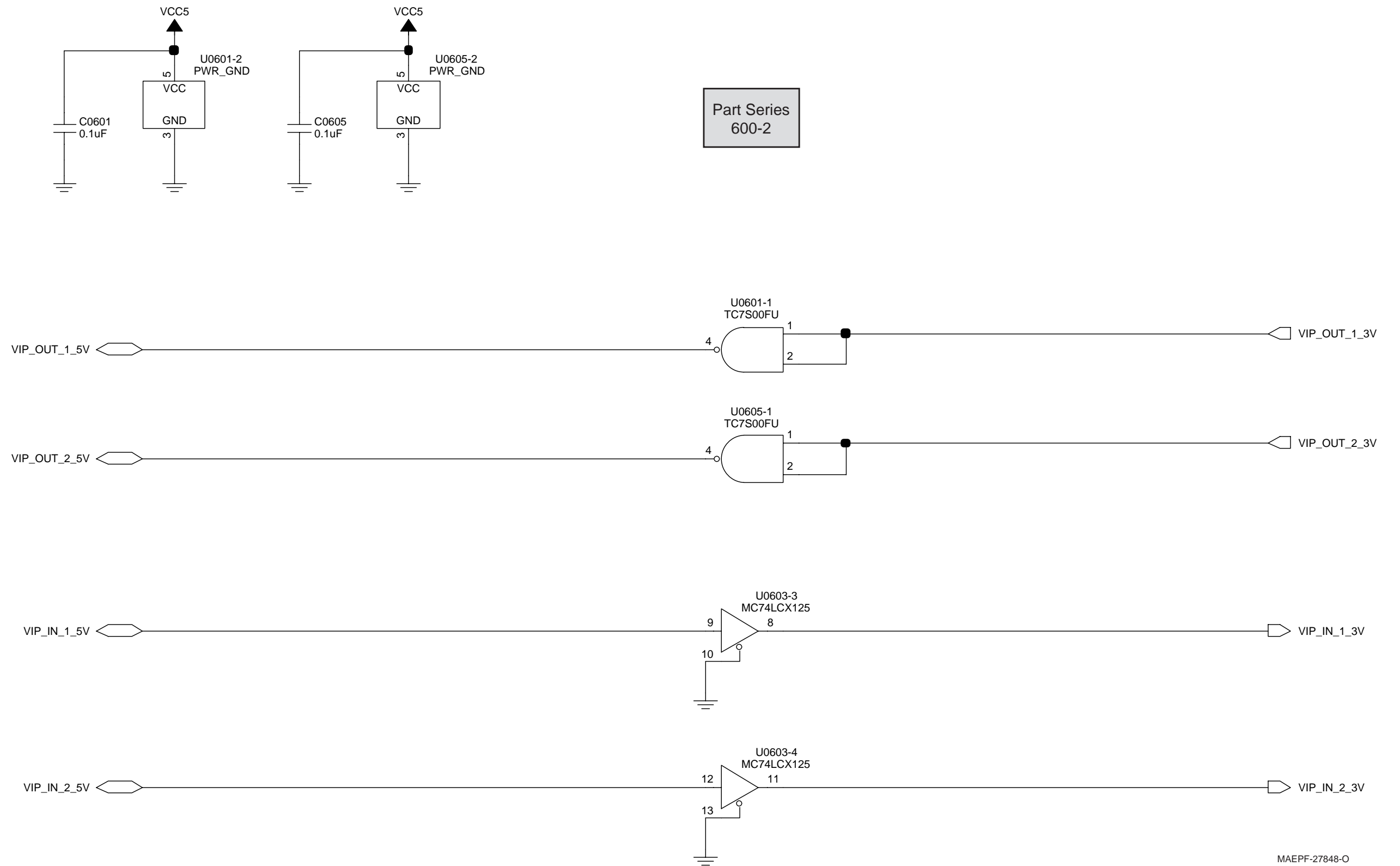
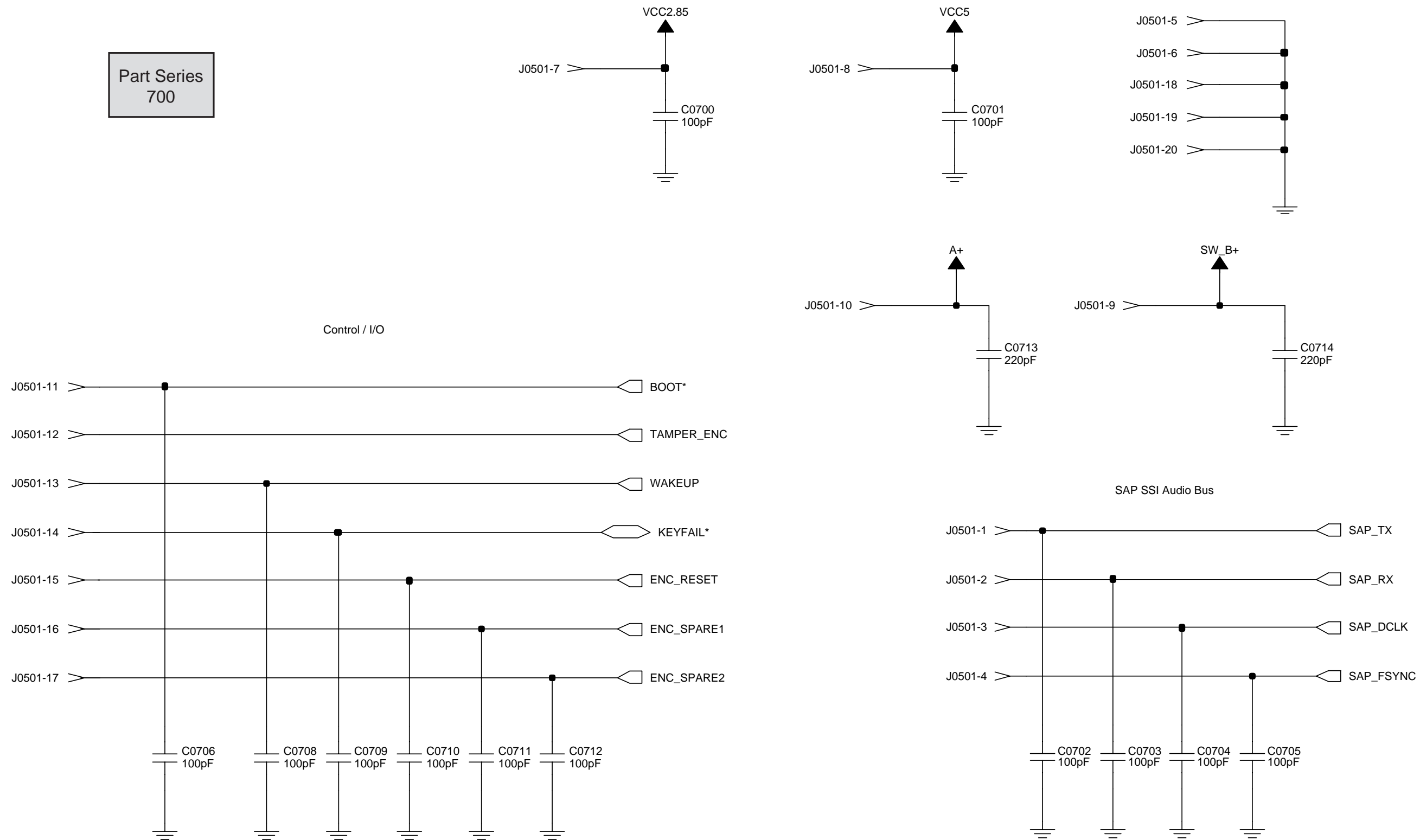


Figure 7-128. Controller VIP Input/Output Schematic



MAEPF-27846-O

Figure 7-129. Controller Secure Interface Connector Schematic

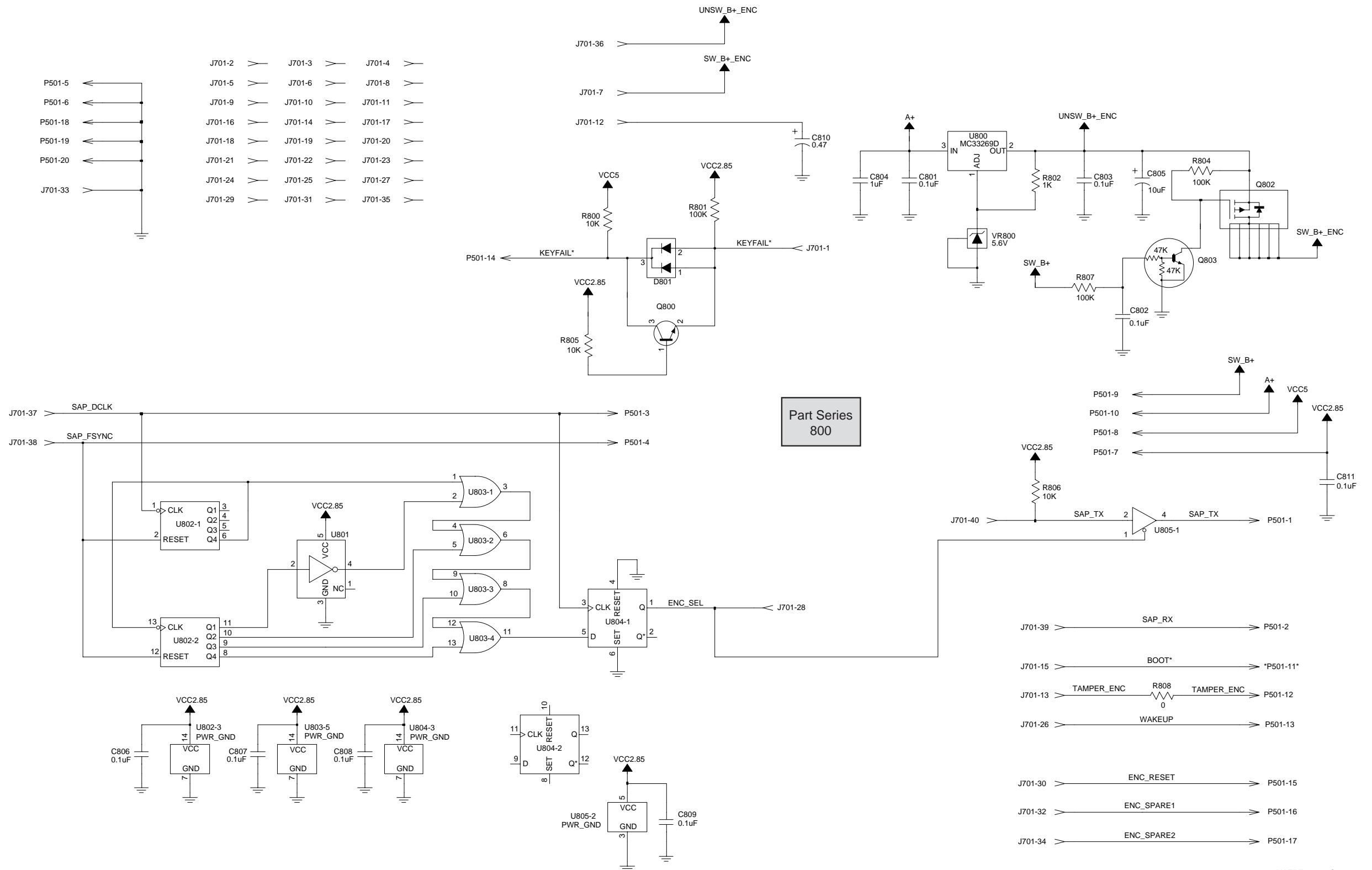


Figure 7-130. Secure Interface Board Schematic

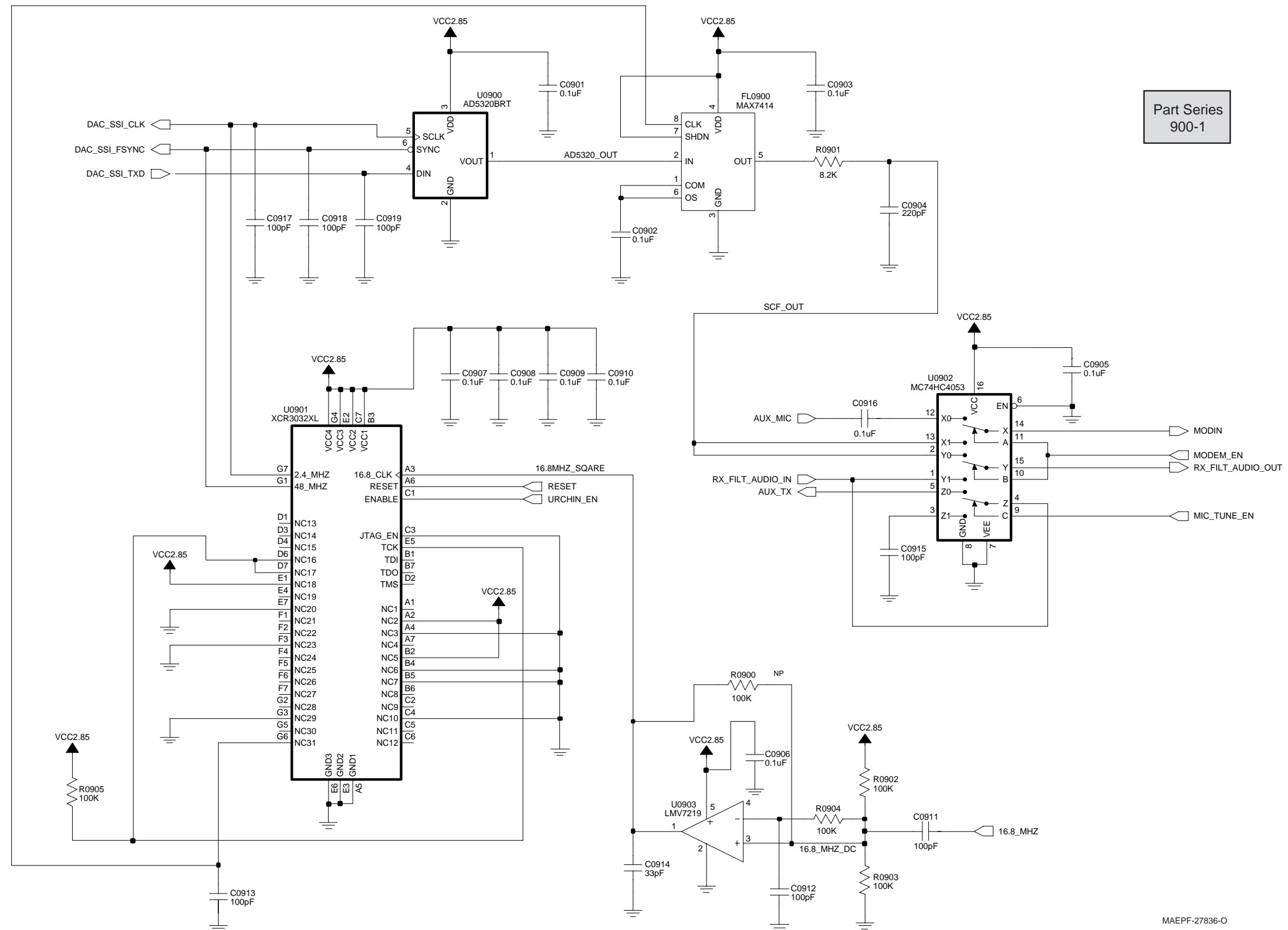
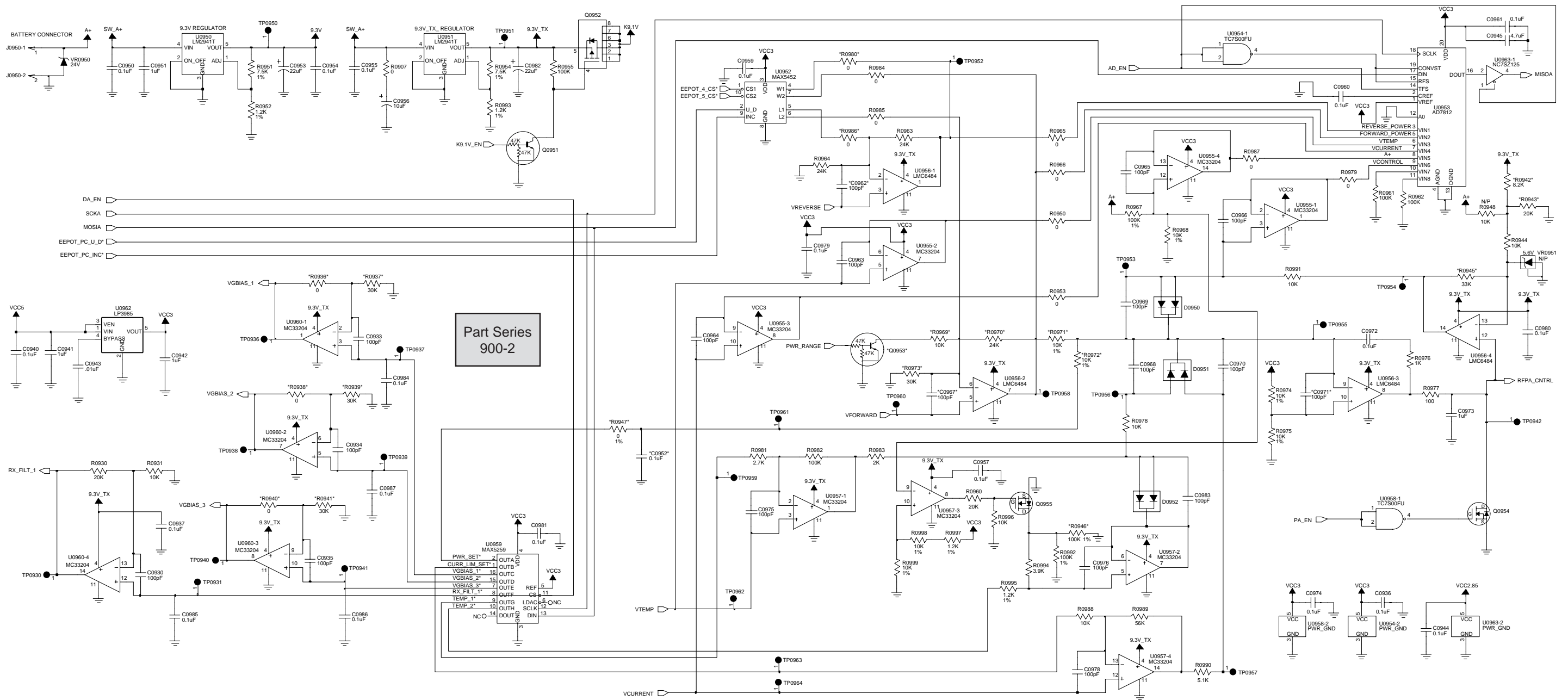


Figure 7-131. HUF4017A Controller Urchin IC, MUX, and AD5320 DAC Schematic

MAEPF-27836-O



MAEPF-27920-O

Figure 7-132. HUF4017A Controller Power Supply Schematic

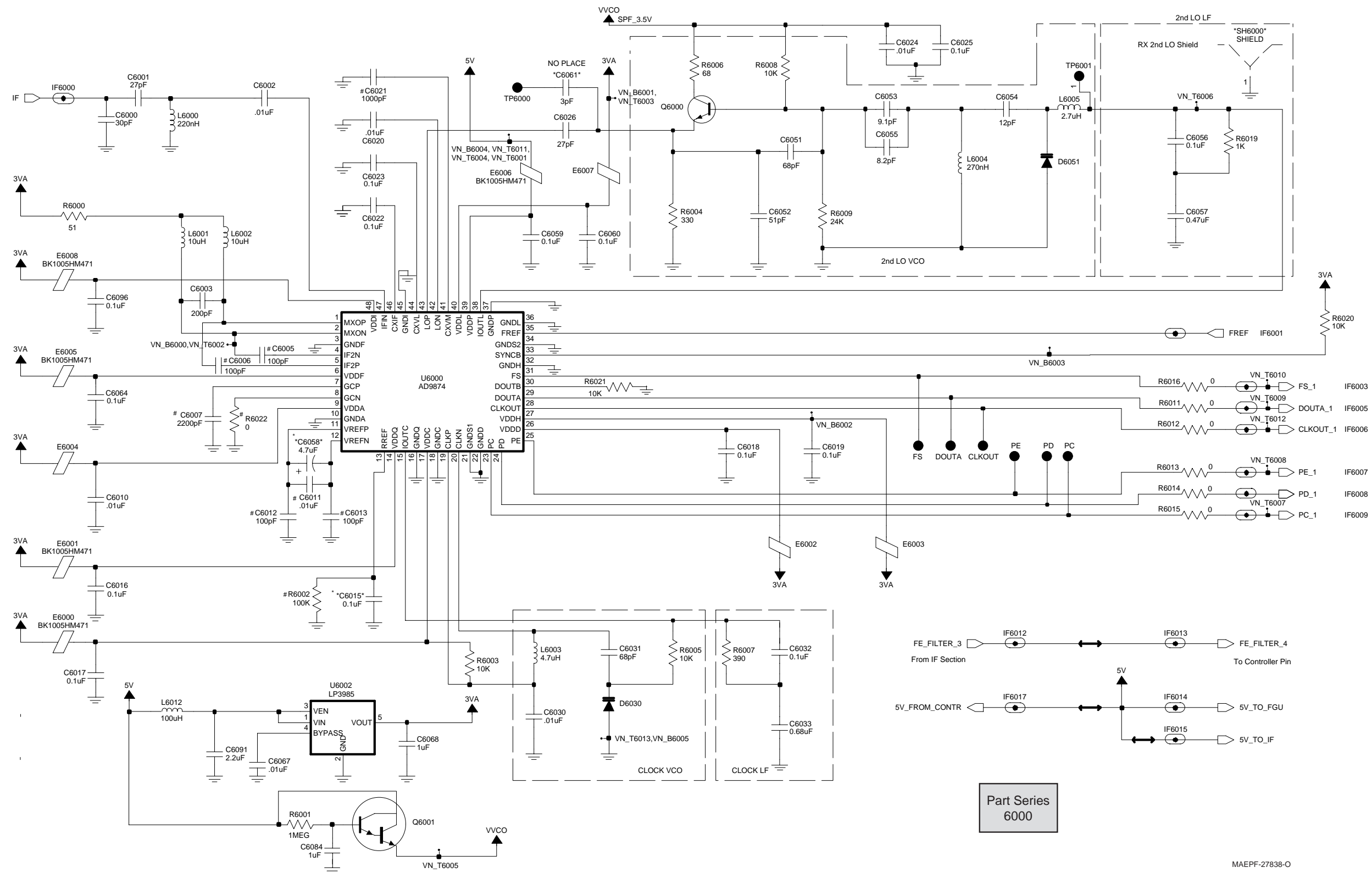
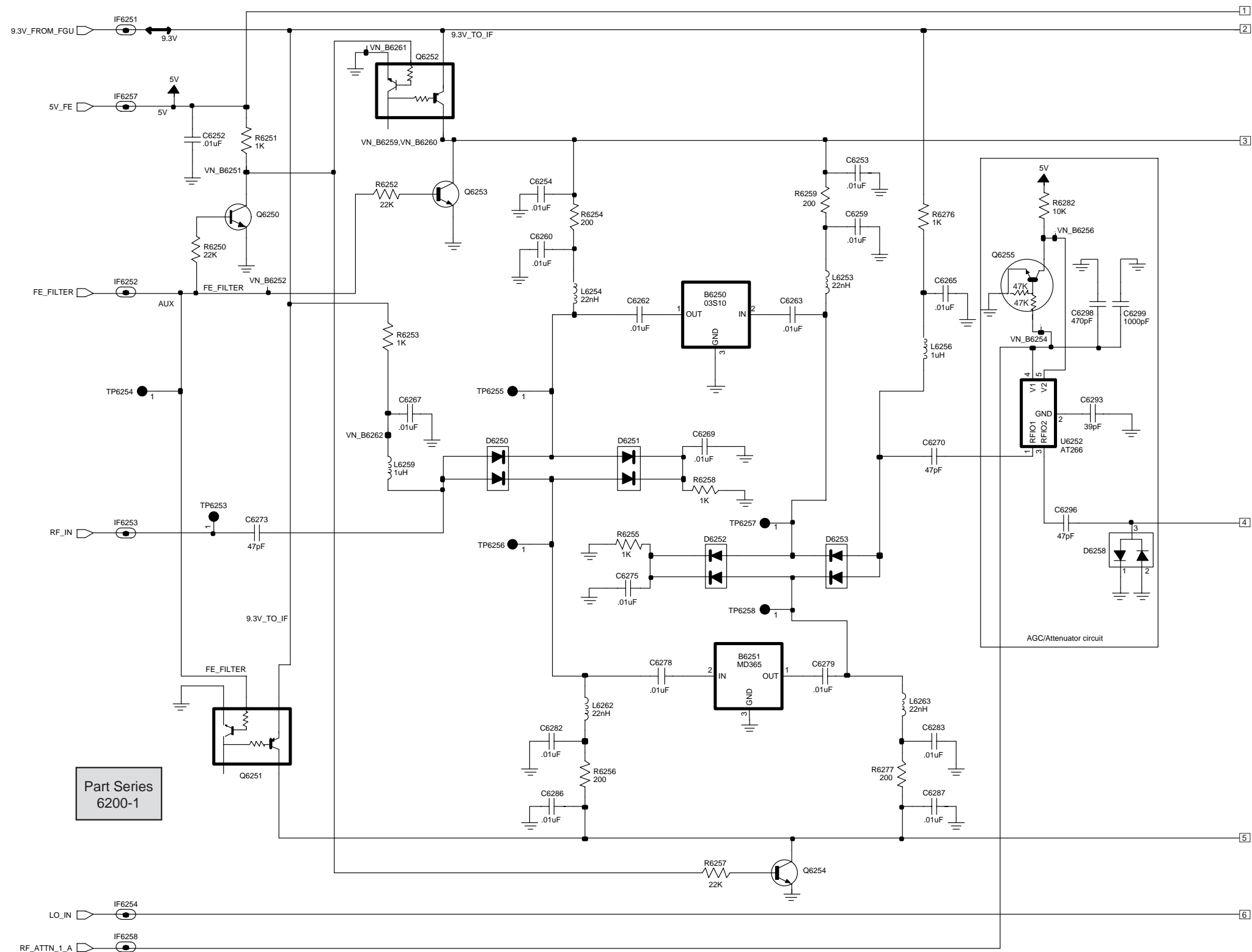


Figure 7-133. HUF4017A Receiver Back-End Schematic



MAEPF-27839-O

Figure 7-134. HUF4017A Receiver Front-End Schematic (Sheet 1 of 2)

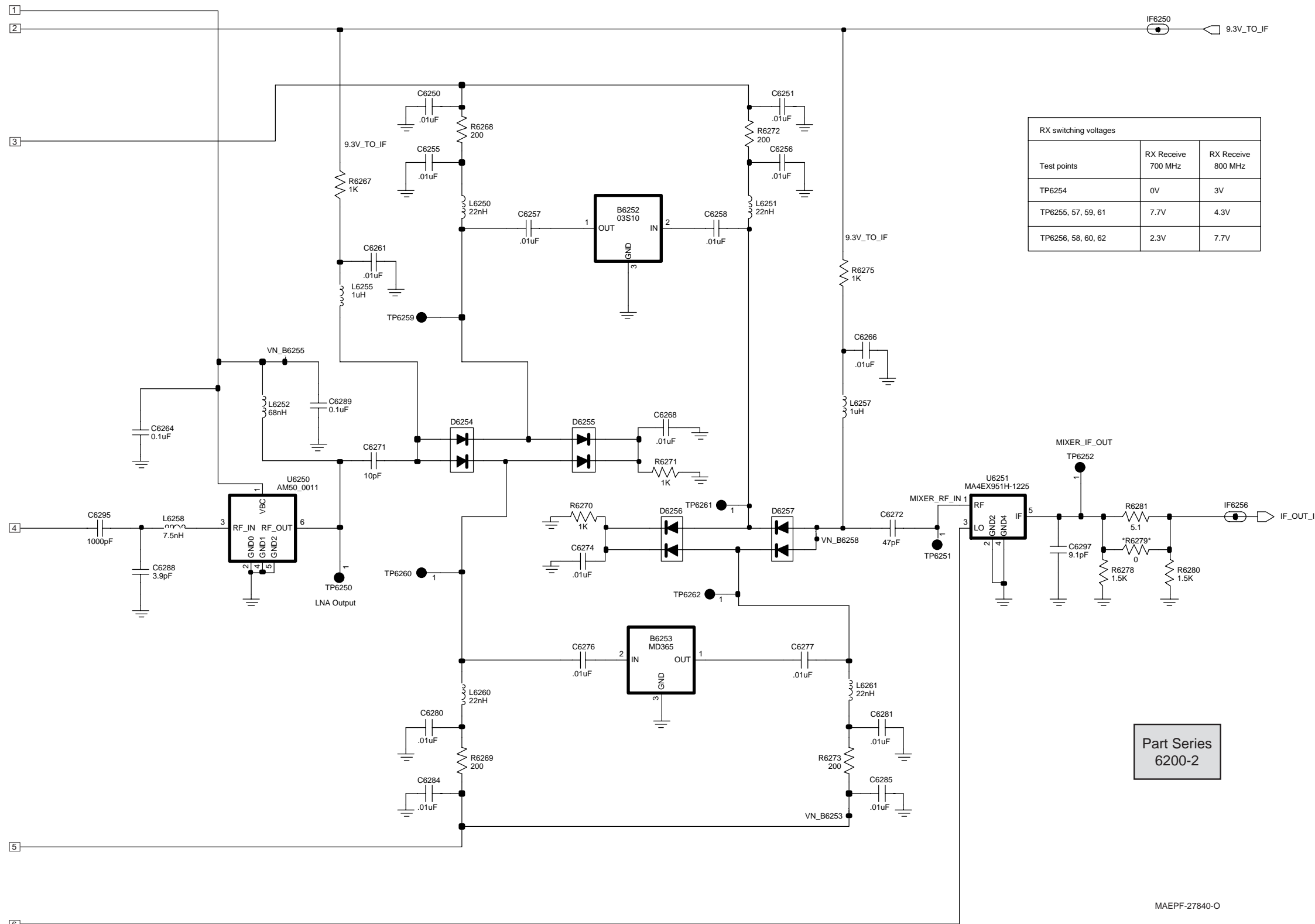


Figure 7-135. HUF4017A Receiver Front-End Schematic (Sheet 2 of 2)

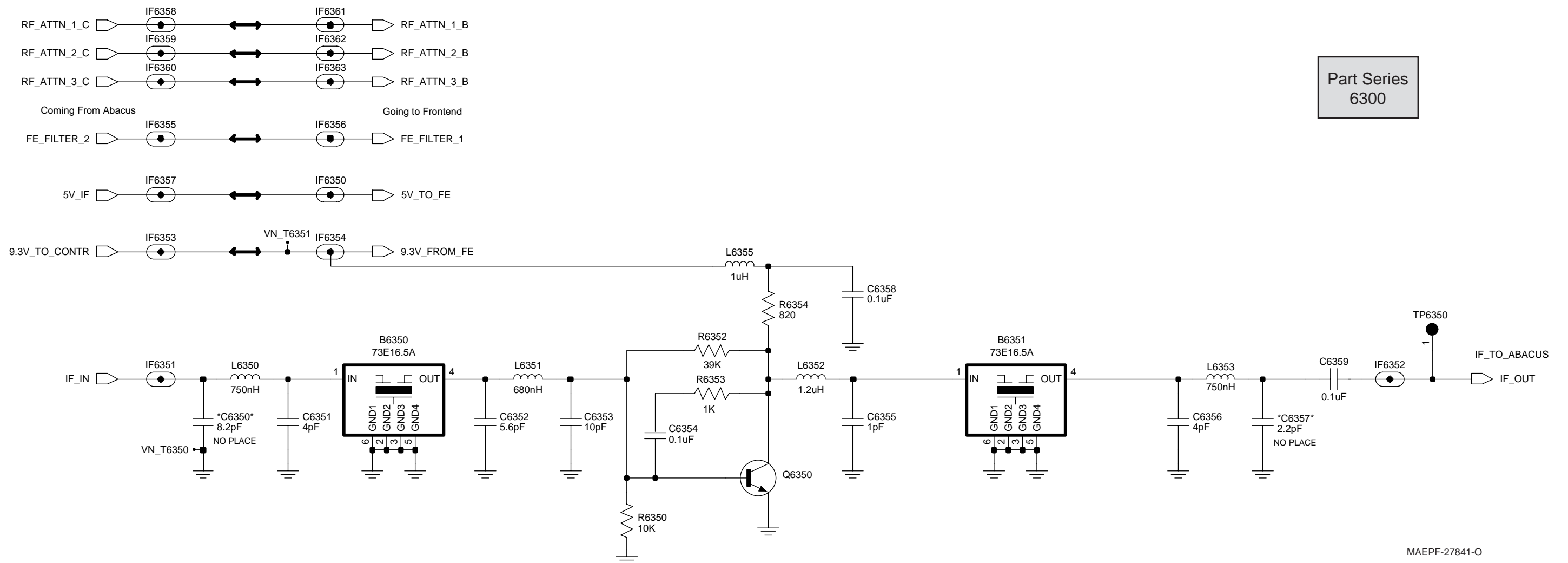
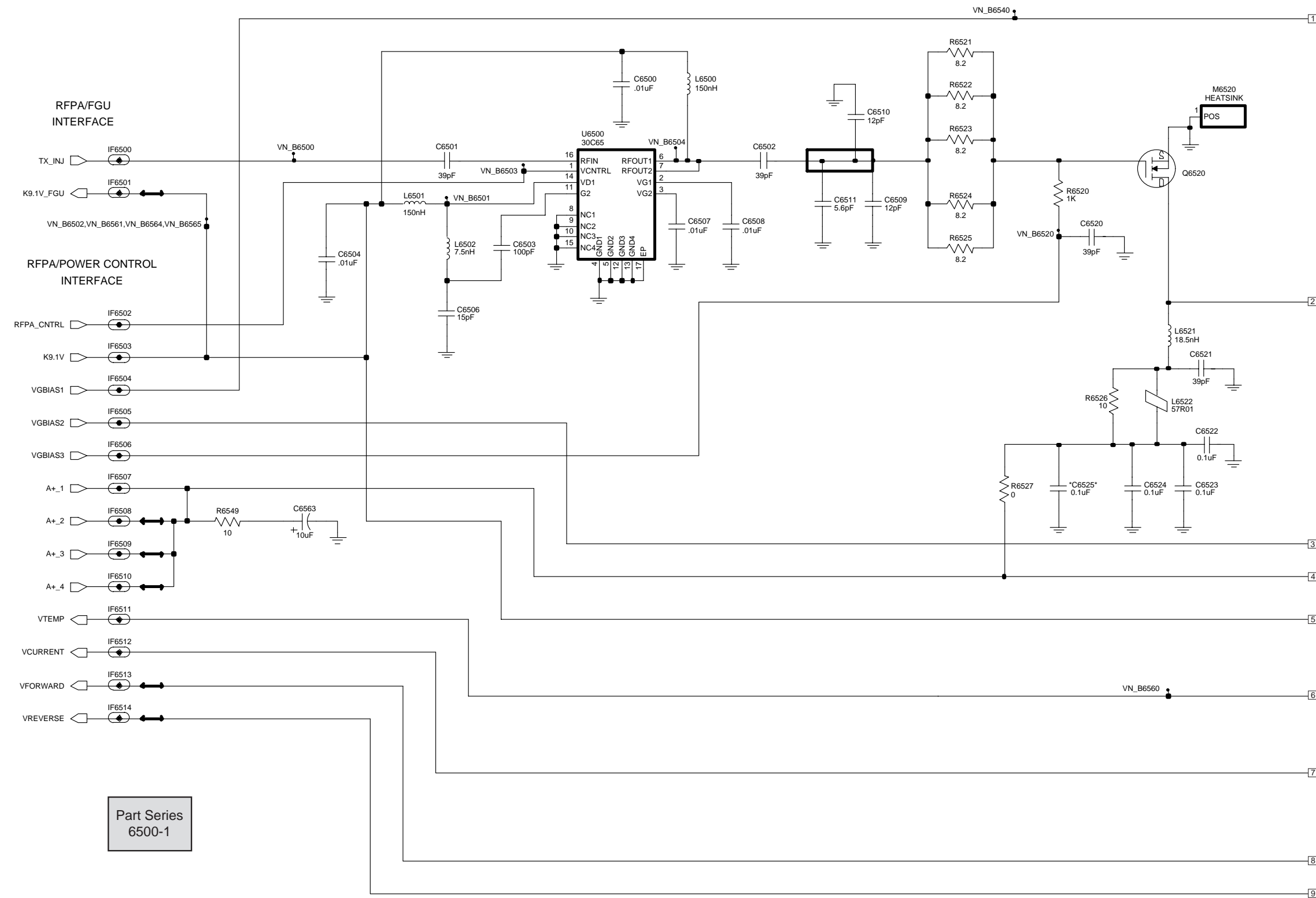


Figure 7-136. HUF4017A Receiver Intermediate Frequency (IF) Schematic



MAEPF-27834-O

Figure 7-137. HUF4017A RF Power Amplifier (PA) Schematic (Sheet 1 of 2)

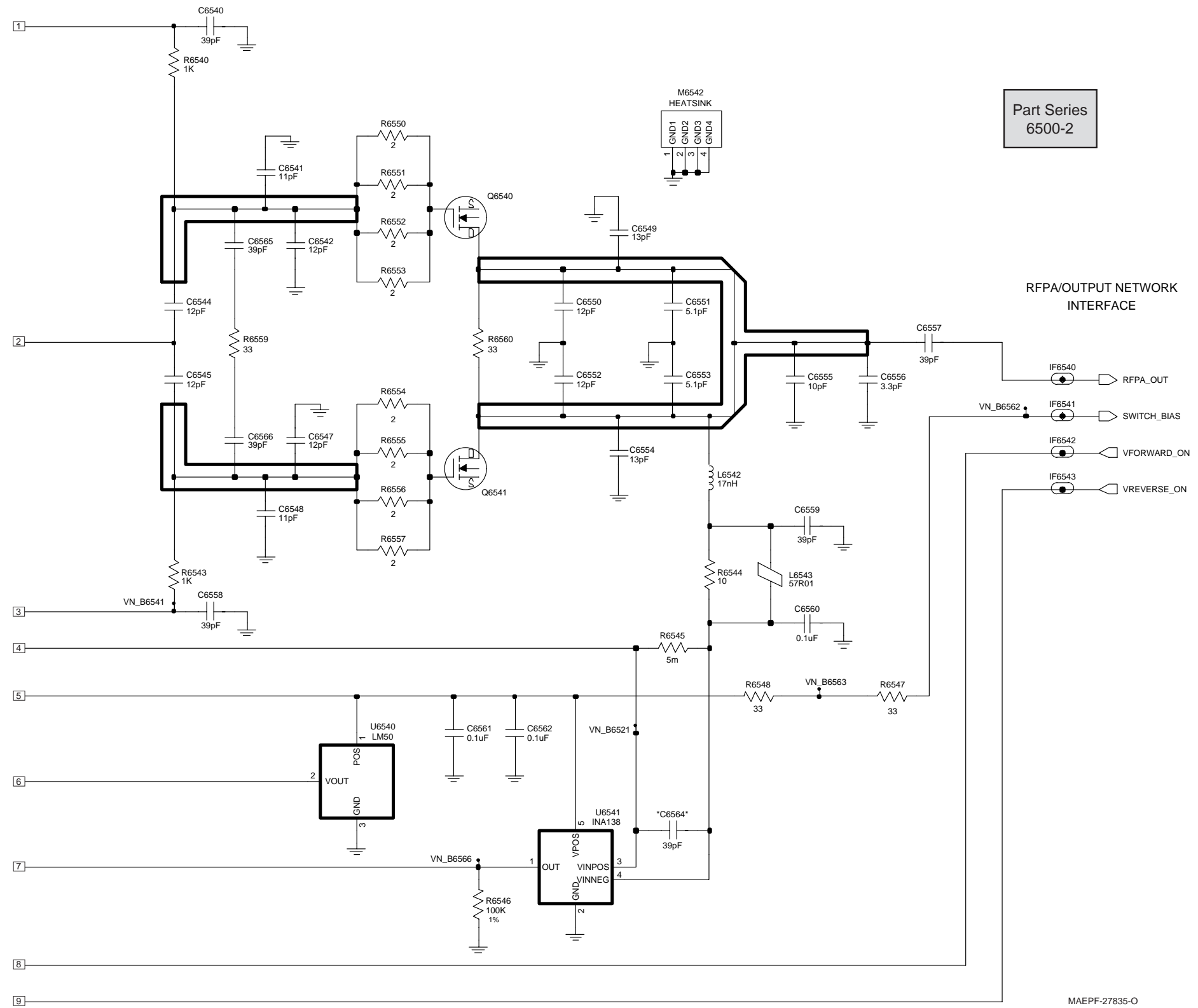


Figure 7-138. HUF4017A RF Power Amplifier (PA) Schematic (Sheet 2 of 2)

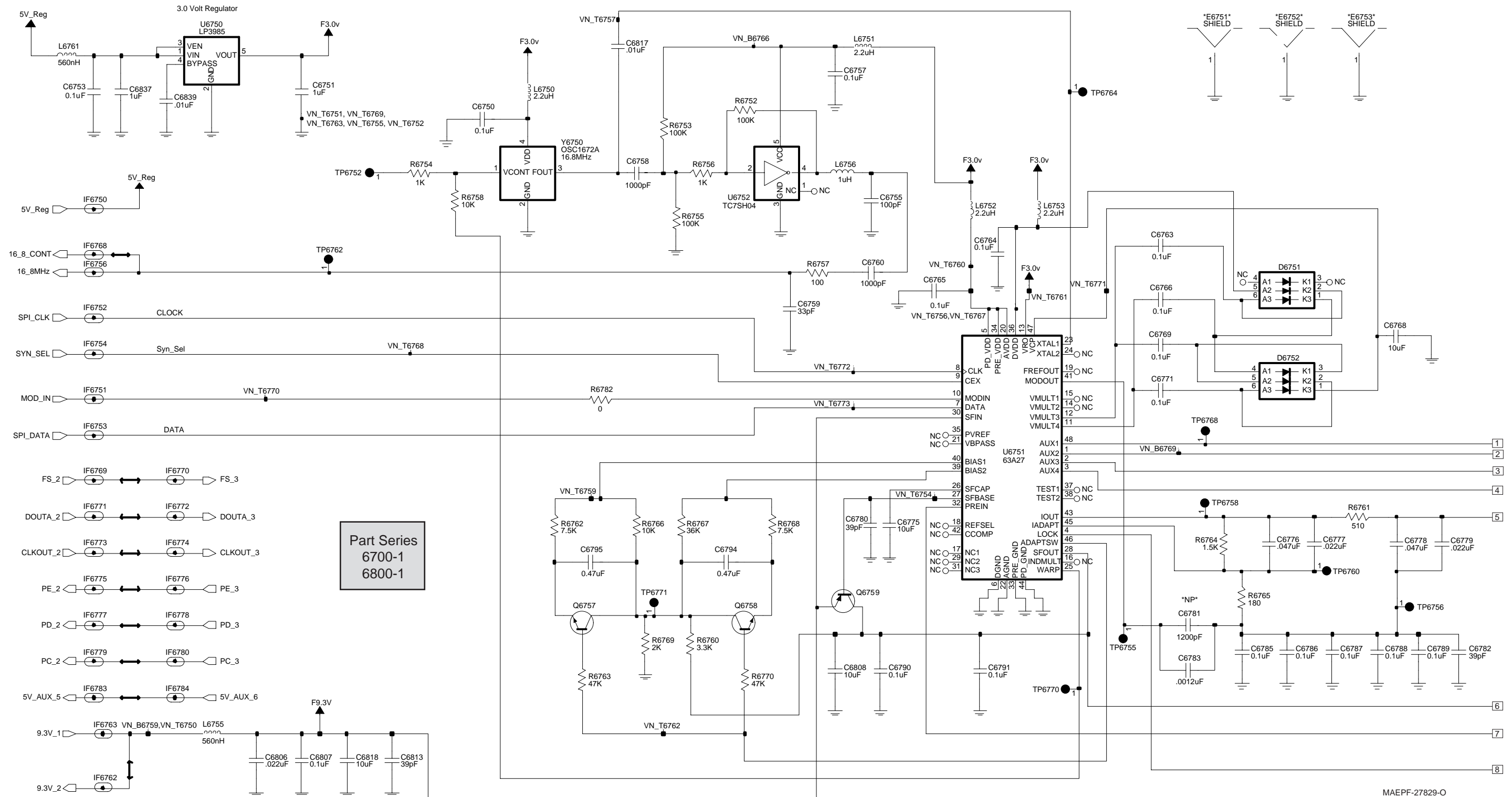
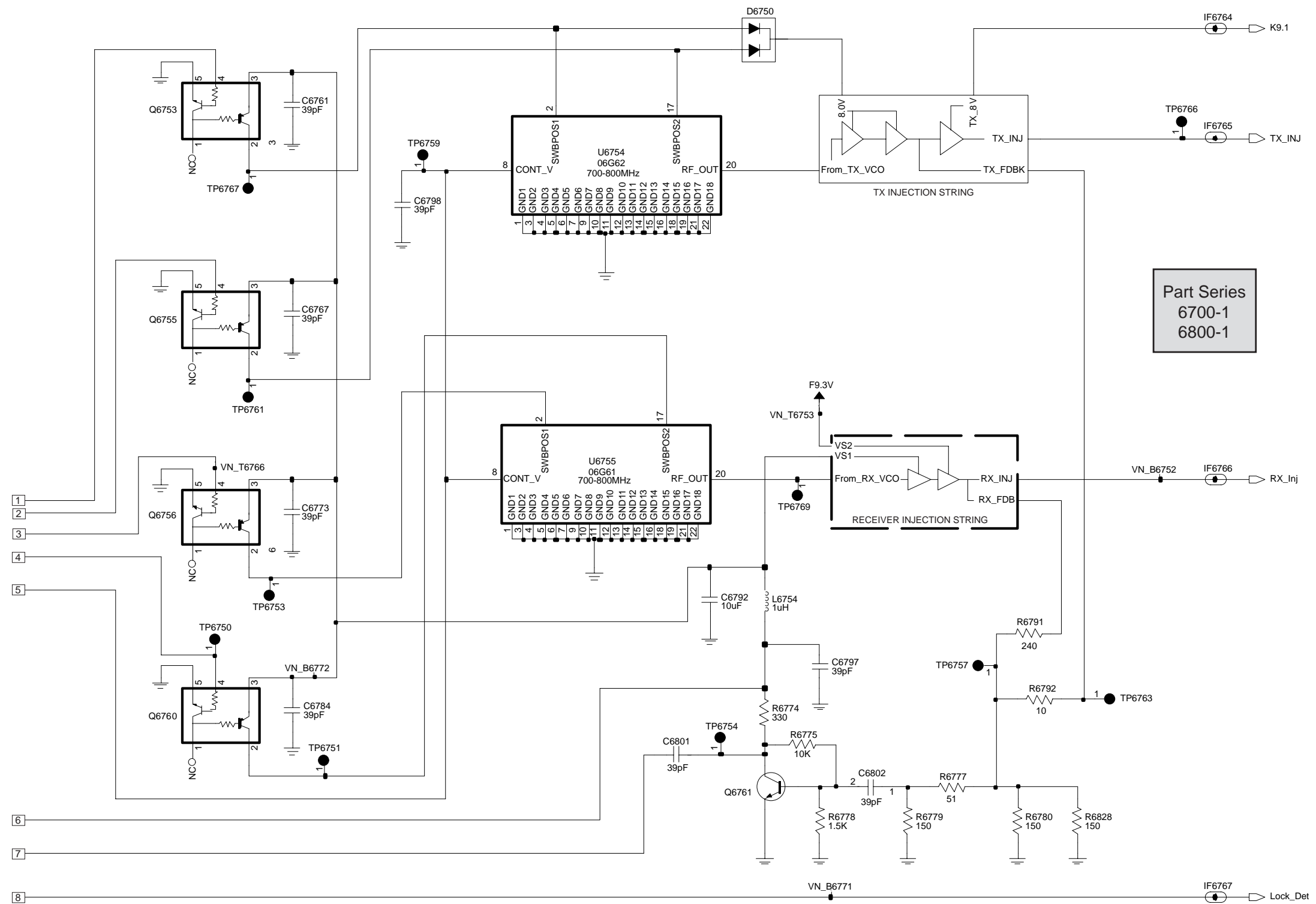
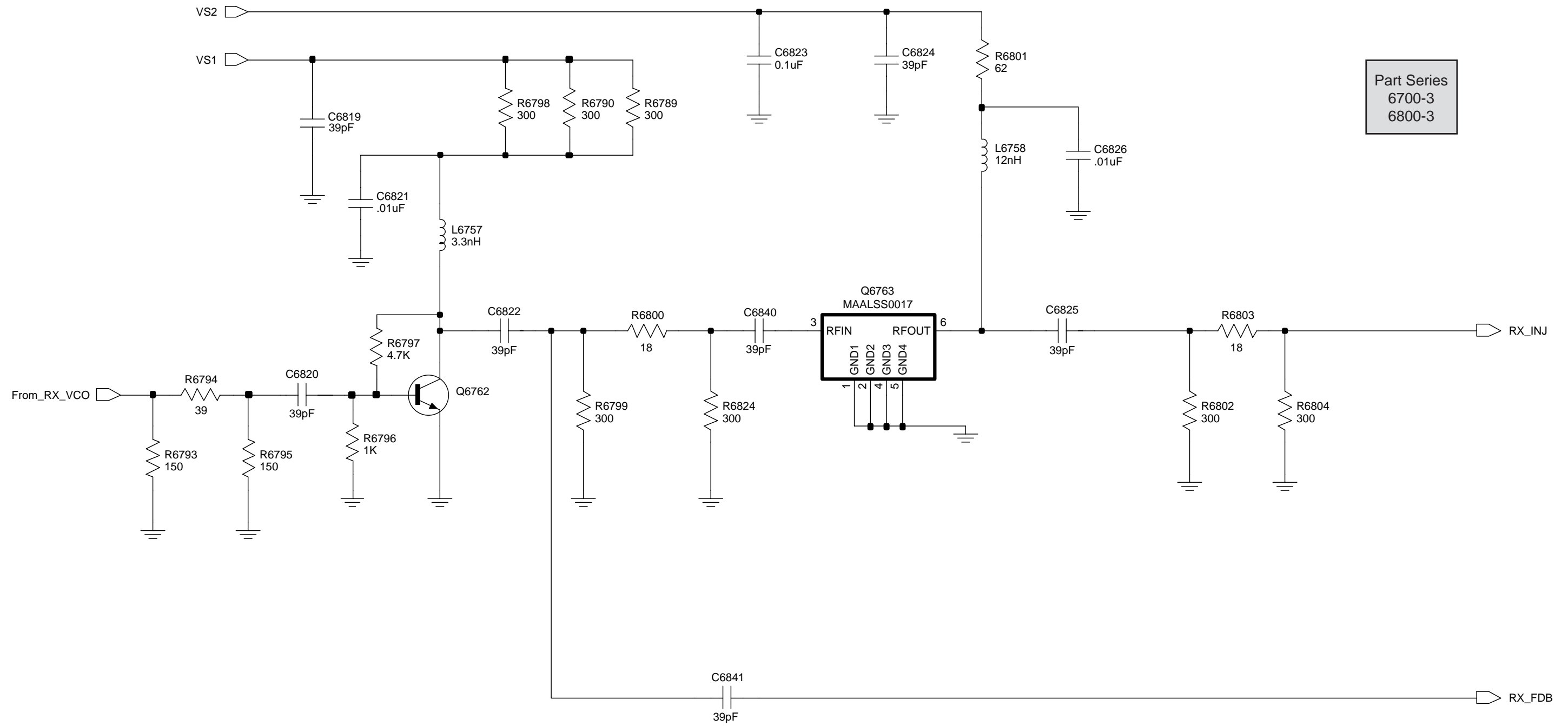


Figure 7-139. HUF4017A Frequency Generation Unit Overall Schematic (Sheet 1 of 2)



MAEPF-27830-O

Figure 7-140. HUF4017A Frequency Generation Unit Overall Schematic (Sheet 2 of 2)



MAEPF-27831-O

Figure 7-141. HUF4017A Frequency Generation Unit 800 MHz Receive Injection Schematic

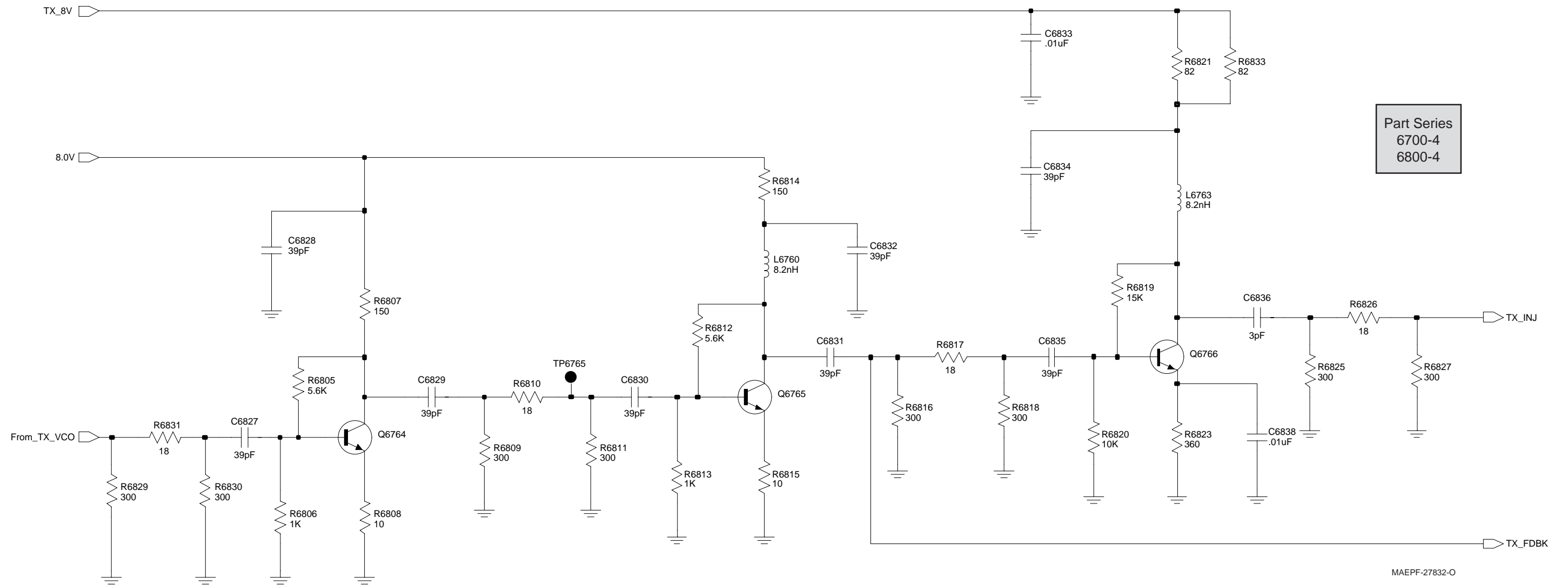
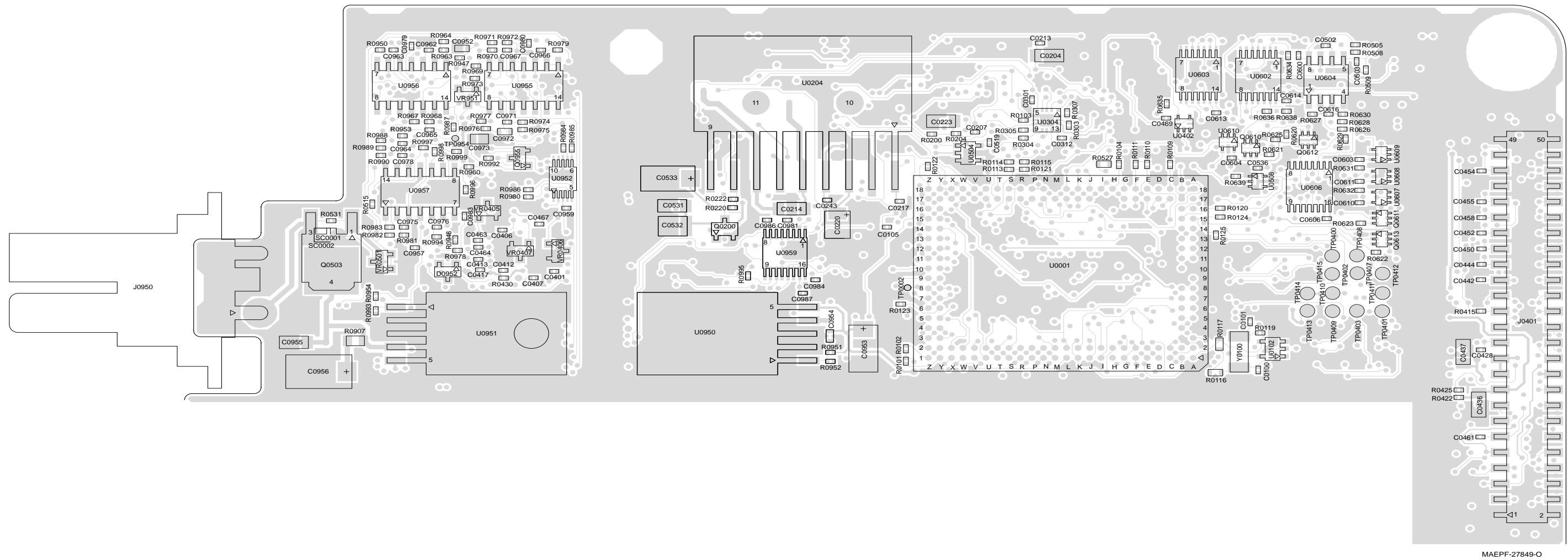


Figure 7-142. HUF4017A Frequency Generation Unit 800 MHz Transmit Injection Schematic

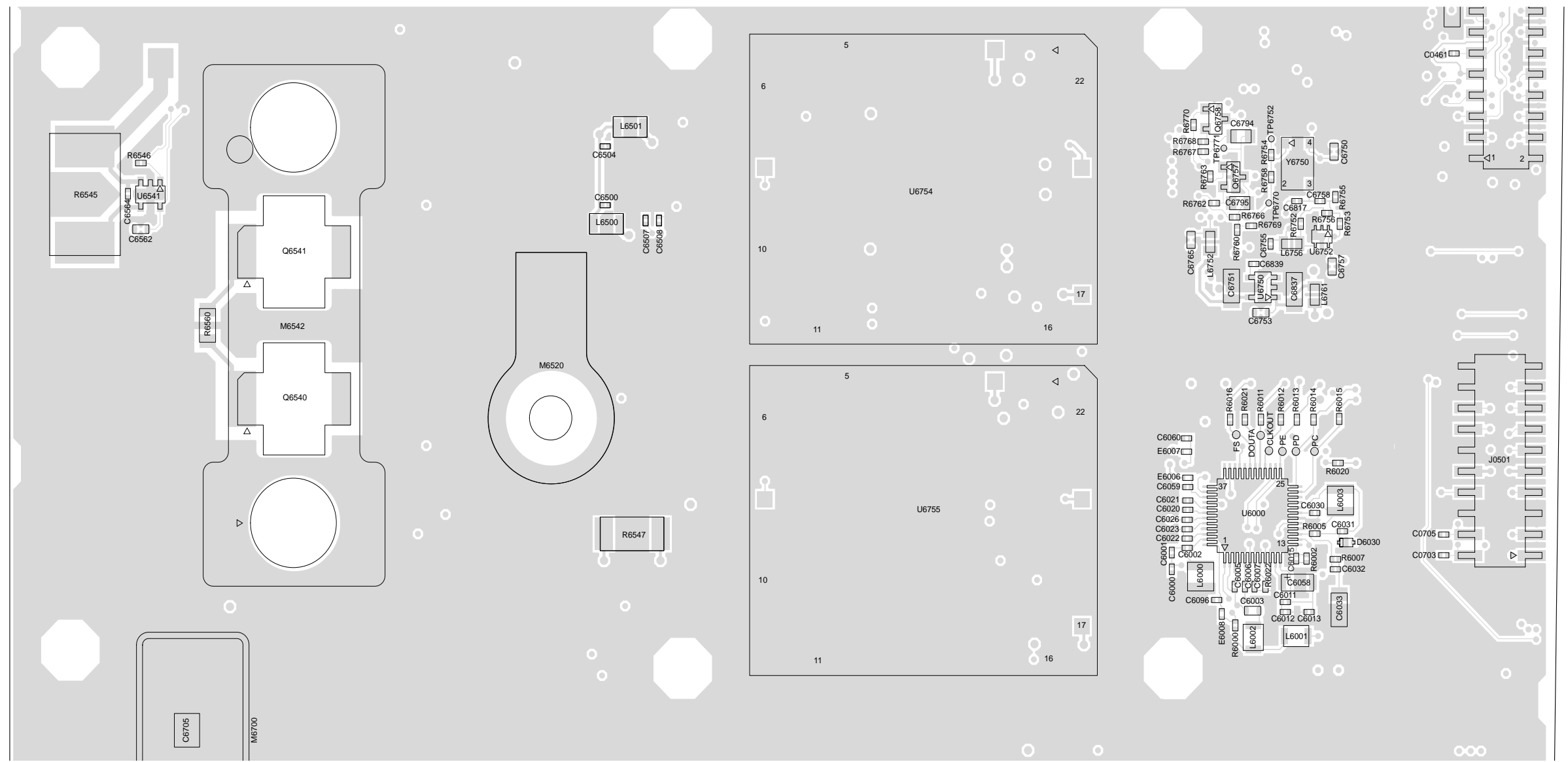
SIDE 1 - TOP PORTION OF CIRCUIT BOARD



MAEPF-27849-O

Figure 7-143. HUF4017A Main Board Layout—Side 1 Top

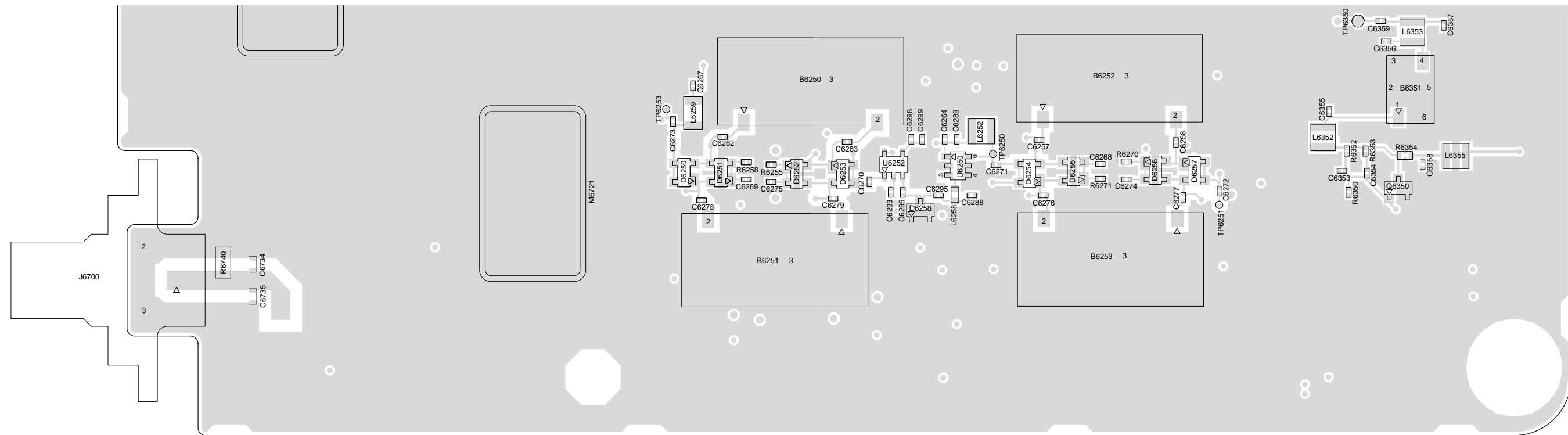
SIDE 1 - MIDDLE PORTION OF CIRCUIT BOARD



MAEPF-27850-O

Figure 7-144. HUF4017A Main Board Layout—Side 1 Middle

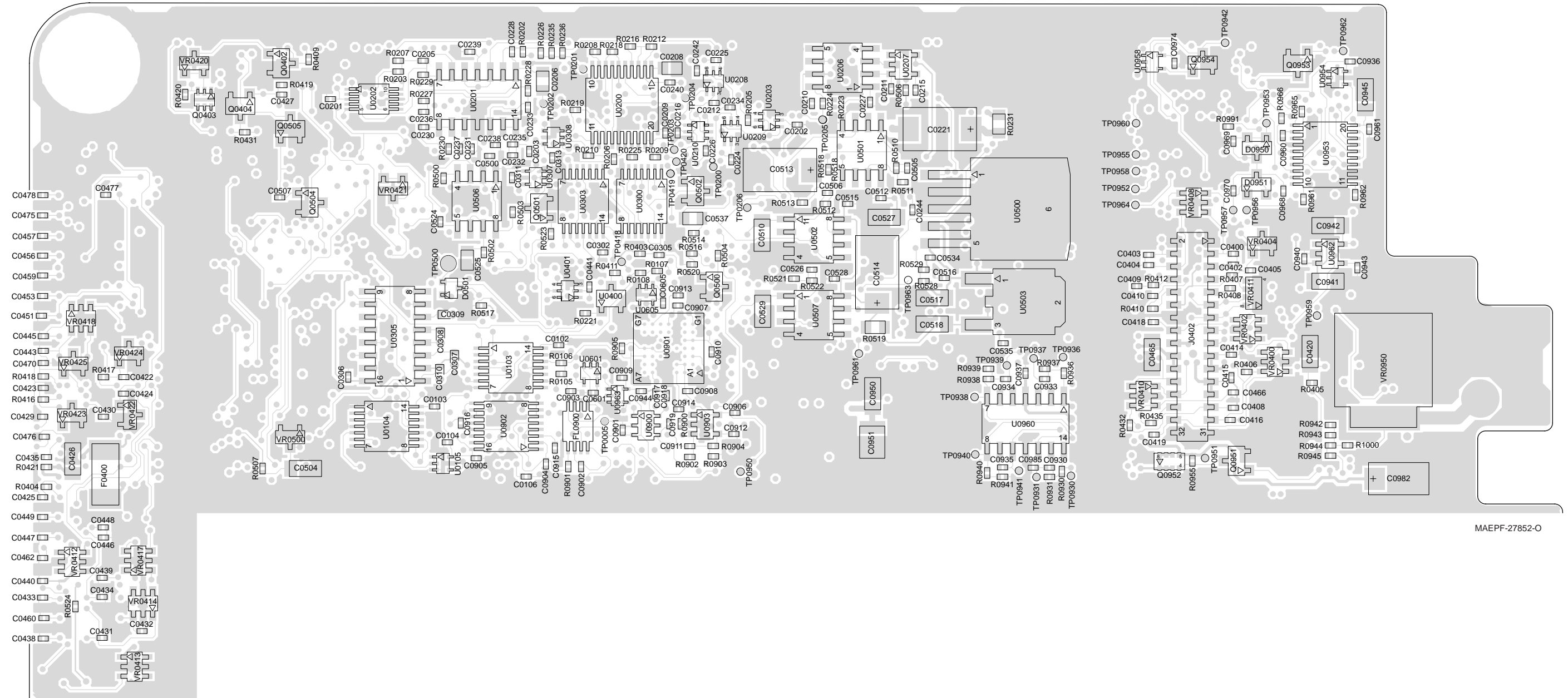
SIDE 1 - BOTTOM PORTION OF CIRCUIT BOARD



MAEPF-27851-O

Figure 7-145. HUF4017A Main Board Layout—Side 1 Bottom

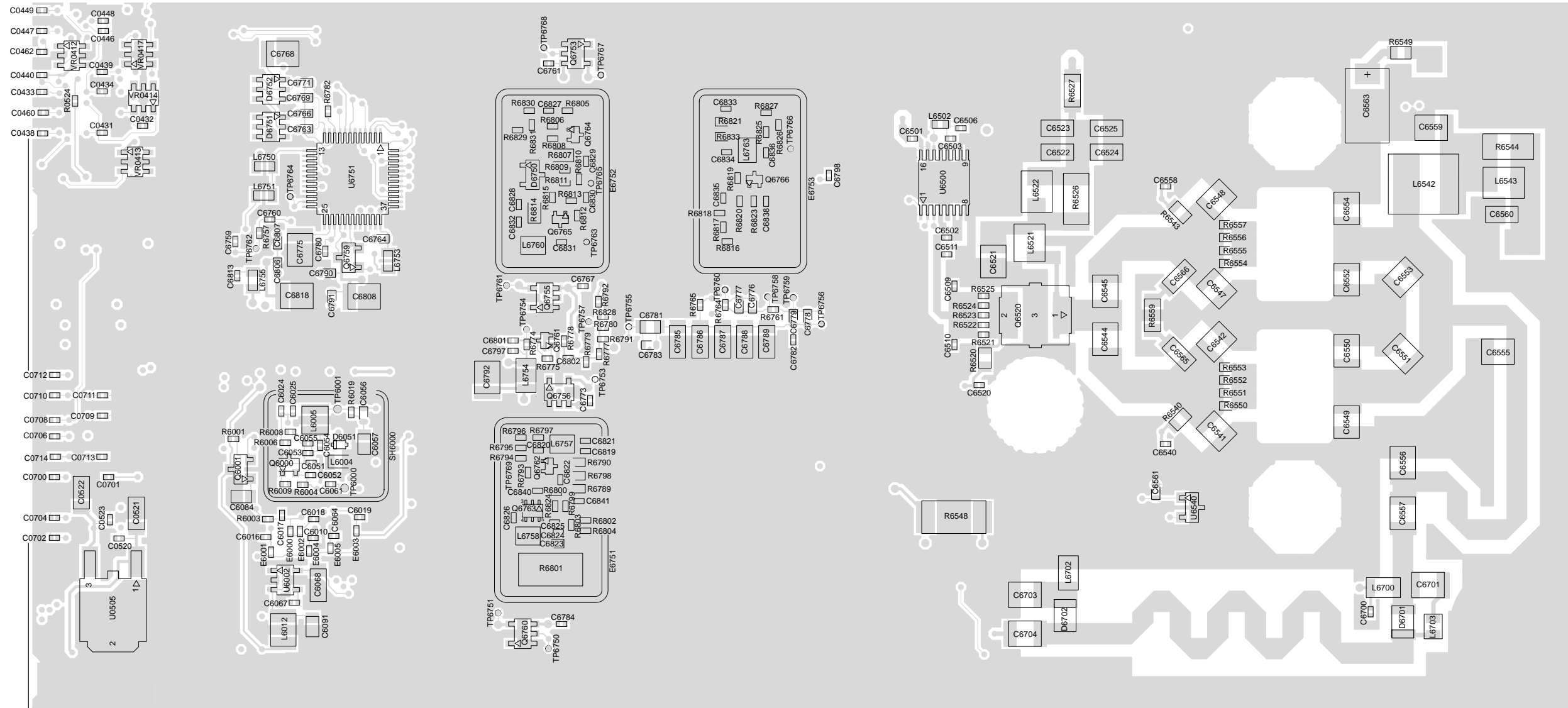
SIDE 2 - TOP PORTION OF CIRCUIT BOARD



MAEPF-27852-O

Figure 7-146. HUF4017A Main Board Layout—Side 2 Top

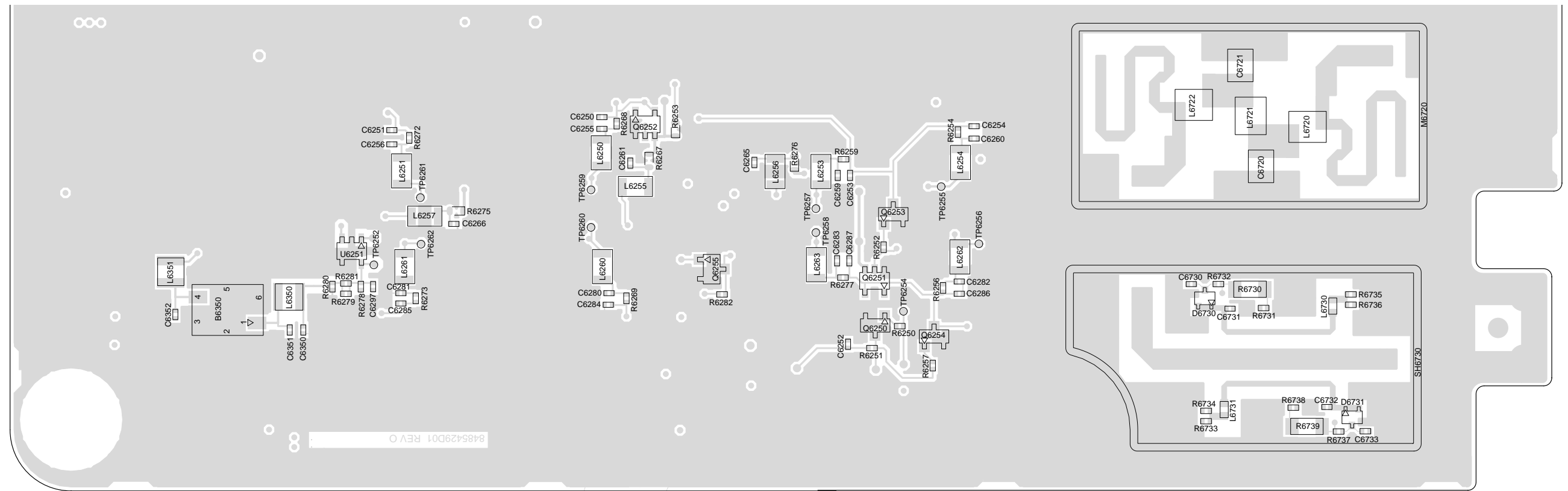
SIDE 2 - MIDDLE PORTION OF CIRCUIT BOARD



MAEPF-27909-O

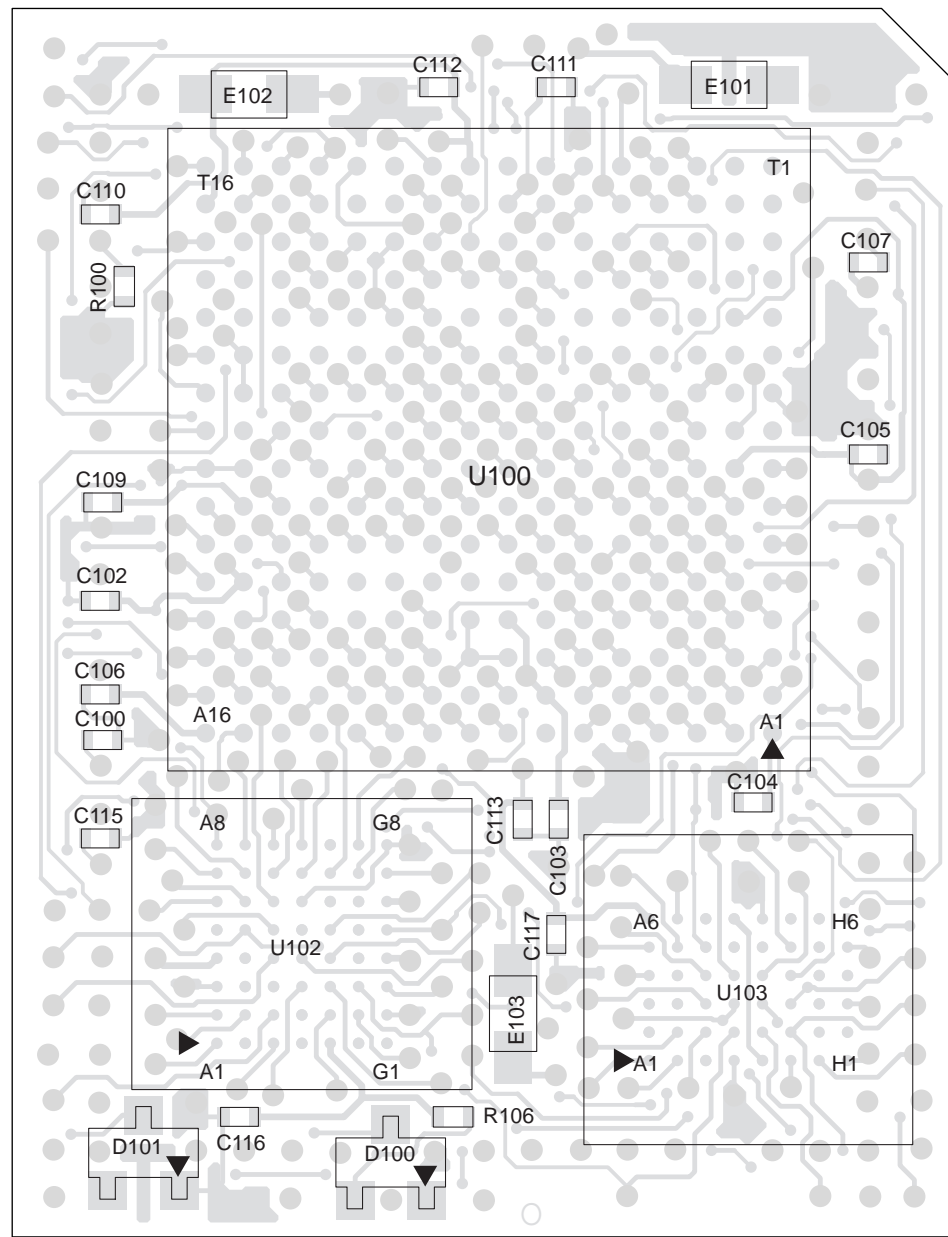
Figure 7-147. HUF4017A Main Board Layout—Side 2 Middle

SIDE 2 - BOTTOM PORTION OF CIRCUIT BOARD



MAEPF-27910-0

Figure 7-148. HUF4017A Main Board Layout—Side 2 Bottom



MAEPF-27911-O

Figure 7-149. HUF4017A Daughtercard Module Board Layout

HUF4017A Main Board Parts List

Reference Designator	Motorola Part Number	Description
B6250	9102603S10	FILTER 860.5 MHZ
B6251	9185503C01	FILTER CERAMIC 770 MHZ
B6252	9102603S10	FILTER 860.5 MHZ
B6253	9185503C01	FILTER CERAMIC 770 MHZ
B6350	9185116C01	FILTER CRYSTAL
B6351	9185116C01	FILTER CRYSTAL
C0001	2380090M24	CAP ALU 10 20 50V SURF MT
C0100	2113743N32	CAP CHIP 18.0 PF 5% COG
C0101	2113743N32	CAP CHIP 18.0 PF 5% COG
C0102	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C0103	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C0104	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C0105	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C0106	2113743N50	CAP CHIP 100 PF 5% COG
C0201	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C0202	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C0203	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C0204	2185802B01	CAP 10V 4.7UF
C0205	2113743N54	CAP CHIP 150 PF 5% COG
C0206	2113928E01	CAP CER CHIP 1.0 UF 10 % 10V
C0207	2113743N38	CAP CHIP 33.0 PF 5% COG
C0208	2113928E01	CAP CER CHIP 1.0 UF 10 % 10V
C0209	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C0210	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C0211	2113743N50	CAP CHIP 100 PF 5% COG
C0212	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C0213	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C0214	2113741N69	CAP CHIP CL2 X7R 10% 100000
C0215	2113743M24	CAP CHIP 100000 PF +80-20% Y5V

Reference Designator	Motorola Part Number	Description
C0216	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C0217	2113743L29	CAP CHIP 3300 PF 10% X7R
C0220	2311049A57	CAP TANT CHIP A/P 10UF 10% 16V
C0221	2311049A78	CAP TANT CHIP 10.0 UF 10% 50V
C0223	2185802B01	CAP 10V 4.7UF
C0224	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C0225	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C0226	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C0227	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C0228	2113743N54	CAP CHIP 150 PF 5% COG
C0230	2113743L09	CAP CHIP 470 PF 10% X7R
C0231	2113743L01	CAP CHIP 220 PF 10% X7R
C0232	2113743L09	CAP CHIP 470 PF 10% X7R
C0233	2113743L01	CAP CHIP 220 PF 10% X7R
C0234	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C0235	2113743L09	CAP CHIP 470 PF 10% X7R
C0236	2113743L09	CAP CHIP 470 PF 10% X7R
C0237	2113743L01	CAP CHIP 220 PF 10% X7R
C0238	2113743L01	CAP CHIP 220 PF 10% X7R
C0239	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C0240	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C0242	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C0243	2113945B01	CAP CER CHIP 6800 PF 25V 10%
C0244	2113945B01	CAP CER CHIP 6800 PF 25V 10%
C0301	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C0302	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C0305	2113743M24	CAP CHIP 100000 PF +80-20% Y5V

Reference Designator	Motorola Part Number	Description
C0306	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C0307	NOTPLACED	64AM DUMMY PART NUMBER
C0308	2113743E20	CAP CHIP .10 UF 10%
C0309	2113743E20	CAP CHIP .10 UF 10%
C0310	2113743E20	CAP CHIP .10 UF 10%
C0311	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C0312	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C0313	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C0400	2113743N38	CAP CHIP 33.0 PF 5% COG
C0401	2113743N50	CAP CHIP 100 PF 5% COG
C0402	2113743N38	CAP CHIP 33.0 PF 5% COG
C0403	2113743N38	CAP CHIP 33.0 PF 5% COG
C0404	2113743N38	CAP CHIP 33.0 PF 5% COG
C0405	2113743N38	CAP CHIP 33.0 PF 5% COG
C0406	2113743N38	CAP CHIP 33.0 PF 5% COG
C0407	2113743N50	CAP CHIP 100 PF 5% COG
C0408	2113743N50	CAP CHIP 100 PF 5% COG
C0409	2113743N38	CAP CHIP 33.0 PF 5% COG
C0410	2113743N38	CAP CHIP 33.0 PF 5% COG
C0412	2113743N50	CAP CHIP 100 PF 5% COG
C0413	2113743N50	CAP CHIP 100 PF 5% COG
C0414	2113743L01	CAP CHIP 220 PF 10% X7R
C0415	2113743L01	CAP CHIP 220 PF 10% X7R
C0416	2113743N50	CAP CHIP 100 PF 5% COG
C0417	2113743L01	CAP CHIP 220 PF 10% X7R
C0418	2113743L01	CAP CHIP 220 PF 10% X7R
C0419	2113743N50	CAP CHIP 100 PF 5% COG
C0420	2185802B01	CAP 10V 4.7UF
C0422	2113743N38	CAP CHIP 33.0 PF 5% COG
C0423	2113743N38	CAP CHIP 33.0 PF 5% COG
C0424	2113743N38	CAP CHIP 33.0 PF 5% COG
C0425	2113743N50	CAP CHIP 100 PF 5% COG

Reference Designator	Motorola Part Number	Description
C0426	2113741B13	CAP CHIP CL2 X7R REEL 470
C0427	2113743N50	CAP CHIP 100 PF 5% COG
C0428	2113743N50	CAP CHIP 100 PF 5% COG
C0429	2113743N50	CAP CHIP 100 PF 5% COG
C0430	2113743N50	CAP CHIP 100 PF 5% COG
C0431	2113743N50	CAP CHIP 100 PF 5% COG
C0432	2113743N50	CAP CHIP 100 PF 5% COG
C0433	2113743N50	CAP CHIP 100 PF 5% COG
C0434	2113743N50	CAP CHIP 100 PF 5% COG
C0435	2113743L09	CAP CHIP 470 PF 10% X7R
C0436	2113741B13	CAP CHIP CL2 X7R REEL 470
C0437	2113741B13	CAP CHIP CL2 X7R REEL 470
C0438	2113743L09	CAP CHIP 470 PF 10% X7R
C0439	2113743N50	CAP CHIP 100 PF 5% COG
C0440	2113743N50	CAP CHIP 100 PF 5% COG
C0441	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C0442	2113743N38	CAP CHIP 33.0 PF 5% COG
C0443	2113743N38	CAP CHIP 33.0 PF 5% COG
C0444	2113743N38	CAP CHIP 33.0 PF 5% COG
C0445	2113743N38	CAP CHIP 33.0 PF 5% COG
C0446	2113743N50	CAP CHIP 100 PF 5% COG
C0447	2113743N50	CAP CHIP 100 PF 5% COG
C0448	2113743N50	CAP CHIP 100 PF 5% COG
C0449	2113743N50	CAP CHIP 100 PF 5% COG
C0450	2113743N38	CAP CHIP 33.0 PF 5% COG
C0451	2113743N38	CAP CHIP 33.0 PF 5% COG
C0452	2113743N38	CAP CHIP 33.0 PF 5% COG
C0453	2113743N38	CAP CHIP 33.0 PF 5% COG
C0454	2113743N38	CAP CHIP 33.0 PF 5% COG
C0455	2113743N38	CAP CHIP 33.0 PF 5% COG
C0456	2113743N38	CAP CHIP 33.0 PF 5% COG
C0457	2113743N38	CAP CHIP 33.0 PF 5% COG
C0458	2113743N38	CAP CHIP 33.0 PF 5% COG

Reference Designator	Motorola Part Number	Description
C0459	2113743N38	CAP CHIP 33.0 PF 5% COG
C0460	2113743N50	CAP CHIP 100 PF 5% COG
C0461	2113743L01	CAP CHIP 220 PF 10% X7R
C0462	2113743L01	CAP CHIP 220 PF 10% X7R
C0463	2113743N38	CAP CHIP 33.0 PF 5% COG
C0464	2113743N38	CAP CHIP 33.0 PF 5% COG
C0465	2113741B13	CAP CHIP CL2 X7R REEL 470
C0466	2113743N50	CAP CHIP 100 PF 5% COG
C0467	2113743N50	CAP CHIP 100 PF 5% COG
C0469	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C0470	2113743N38	CAP CHIP 33.0 PF 5% COG
C0475	2113743N50	CAP CHIP 100 PF 5% COG
C0476	2113743N50	CAP CHIP 100 PF 5% COG
C0477	2113743N50	CAP CHIP 100 PF 5% COG
C0478	2113743N50	CAP CHIP 100 PF 5% COG
C0500	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C0502	2113743N50	CAP CHIP 100 PF 5% COG
C0503	2113743N50	CAP CHIP 100 PF 5% COG
C0504	2113741N69	CAP CHIP CL2 X7R 10% 100000
C0505	2113743L41	CAP CHIP 10000 PF 10% X7R
C0506	2113743L41	CAP CHIP 10000 PF 10% X7R
C0507	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C0510	2185802B01	CAP 10V 4.7UF
C0512	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C0513	2311049A43	CAP TANT CHIP 150 10 6
C0514	2311049A43	CAP TANT CHIP 150 10 6
C0515	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C0516	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C0517	2185802B01	CAP 10V 4.7UF
C0518	2185802B01	CAP 10V 4.7UF
C0519	2113743L41	CAP CHIP 10000 PF 10% X7R
C0520	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C0521	2185802B01	CAP 10V 4.7UF
C0522	2185802B01	CAP 10V 4.7UF

Reference Designator	Motorola Part Number	Description
C0523	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C0524	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C0525	2113928E01	CAP CER CHIP 1.0 UF 10 % 10V
C0526	2113743L41	CAP CHIP 10000 PF 10% X7R
C0527	2185802B01	CAP 10V 4.7UF
C0528	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C0529	2185802B01	CAP 10V 4.7UF
C0531	2113741N69	CAP CHIP CL2 X7R 10% 100000
C0532	2113741Y32	CAP CER 1,000,000 10% 50V
C0533	2311049C47	CAP TANT CHIP 22.0UF 10% 16V
C0534	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C0535	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C0536	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C0537	NOTPLACED	64AM DUMMY PART NUMBER
C0600	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C0601	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C0603	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C0604	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C0605	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C0606	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C0610	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C0611	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C0613	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C0614	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C0616	2113743N50	CAP CHIP 100 PF 5% COG
C0700	2113743N50	CAP CHIP 100 PF 5% COG
C0701	2113743N50	CAP CHIP 100 PF 5% COG
C0702	2113743N50	CAP CHIP 100 PF 5% COG
C0703	2113743N50	CAP CHIP 100 PF 5% COG
C0704	2113743N50	CAP CHIP 100 PF 5% COG
C0705	2113743N50	CAP CHIP 100 PF 5% COG

Reference Designator	Motorola Part Number	Description
C0706	2113743N50	CAP CHIP 100 PF 5% COG
C0708	2113743N50	CAP CHIP 100 PF 5% COG
C0709	2113743N50	CAP CHIP 100 PF 5% COG
C0710	2113743N50	CAP CHIP 100 PF 5% COG
C0711	2113743N50	CAP CHIP 100 PF 5% COG
C0712	2113743N50	CAP CHIP 100 PF 5% COG
C0713	2113743L01	CAP CHIP 220 PF 10% X7R
C0714	2113743L01	CAP CHIP 220 PF 10% X7R
C0901	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C0902	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C0903	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C0904	2113743L01	CAP CHIP 220 PF 10% X7R
C0905	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C0906	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C0907	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C0908	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C0909	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C0910	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C0911	2113743N50	CAP CHIP 100 PF 5% COG
C0912	2113743N50	CAP CHIP 100 PF 5% COG
C0913	2113743N50	CAP CHIP 100 PF 5% COG
C0914	2113743N38	CAP CHIP 33.0 PF 5% COG
C0915	2113743N50	CAP CHIP 100 PF 5% COG
C0916	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C0917	2113743N50	CAP CHIP 100 PF 5% COG
C0918	2113743N50	CAP CHIP 100 PF 5% COG
C0919	2113743N50	CAP CHIP 100 PF 5% COG
C0930	2113743N50	CAP CHIP 100 PF 5% COG
C0933	2113743N50	CAP CHIP 100 PF 5% COG
C0934	2113743N50	CAP CHIP 100 PF 5% COG
C0935	2113743N50	CAP CHIP 100 PF 5% COG
C0936	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C0937	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C0940	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C0941	2113743S01	CAP CER CHIP 1.0 UF 10% 16V

Reference Designator	Motorola Part Number	Description
C0942	2113743S01	CAP CER CHIP 1.0 UF 10% 16V
C0943	2113743L41	CAP CHIP 10000 PF 10% X7R
C0944	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C0945	2185802B01	CAP 10V 4.7UF
C0950	2113741N69	CAP CHIP CL2 X7R 10% 100000
C0951	2113741Y32	CAP CER 1,000,000 10% 50V
C0952	NOTPLACED	64AM DUMMY PART NUMBER
C0953	2311049C47	CAP TANT CHIP 22.0UF 10% 16V
C0954	2113743E20	CAP CHIP .10 UF 10%
C0955	2113741N69	CAP CHIP CL2 X7R 10% 100000
C0956	2311049A78	CAP TANT CHIP 10.0 UF 10% 50V
C0957	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C0959	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C0960	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C0961	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C0962	NOTPLACED	64AM DUMMY PART NUMBER
C0963	2113743N50	CAP CHIP 100 PF 5% COG
C0964	2113743N50	CAP CHIP 100 PF 5% COG
C0965	2113743N50	CAP CHIP 100 PF 5% COG
C0966	2113743N50	CAP CHIP 100 PF 5% COG
C0967	NOTPLACED	64AM DUMMY PART NUMBER
C0968	2113743N50	CAP CHIP 100 PF 5% COG
C0969	2113743N50	CAP CHIP 100 PF 5% COG
C0970	2113743N50	CAP CHIP 100 PF 5% COG
C0971	NOTPLACED	64AM DUMMY PART NUMBER
C0972	2113743E20	CAP CHIP .10 UF 10%
C0973	2113928E01	CAP CER CHIP 1.0 UF 10 % 10V
C0974	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C0975	2113743N50	CAP CHIP 100 PF 5% COG
C0976	2113743N50	CAP CHIP 100 PF 5% COG
C0978	2113743N50	CAP CHIP 100 PF 5% COG
C0979	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C0980	2113743M24	CAP CHIP 100000 PF +80-20% Y5V

Reference Designator	Motorola Part Number	Description
C0981	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C0982	2311049C47	CAP TANT CHIP 22.0UF 10% 16V
C0983	2113743N50	CAP CHIP 100 PF 5% COG
C0984	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C0985	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C0986	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C0987	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C6000	2113743N37	CAP CHIP 30.0 PF 5% COG
C6001	2113743N36	CAP CHIP 27.0 PF 5% COG
C6002	2113743L41	CAP CHIP 10000 PF 10% X7R
C6003	2113740F58	CAP CHIP REEL CL1 +/-30 200
C6005	2113743N50	CAP CHIP 100 PF 5% COG
C6006	2113743N50	CAP CHIP 100 PF 5% COG
C6007	2113743L25	CAP CHIP 2200 PF 10% X7R
C6010	2113743L41	CAP CHIP 10000 PF 10% X7R
C6011	2113743L41	CAP CHIP 10000 PF 10% X7R
C6012	2113743N50	CAP CHIP 100 PF 5% COG
C6013	2113743N50	CAP CHIP 100 PF 5% COG
C6015	NOTPLACED	64AM DUMMY PART NUMBER
C6016	2113928N01	CAP CER CHIP 0.1UF 10% 6.3
C6017	2113928N01	CAP CER CHIP 0.1UF 10% 6.3
C6018	2113928N01	CAP CER CHIP 0.1UF 10% 6.3
C6019	2113928N01	CAP CER CHIP 0.1UF 10% 6.3
C6020	2113743L41	CAP CHIP 10000 PF 10% X7R
C6021	2113743L17	CAP CHIP 1000 PF 10% X7R
C6022	2113928N01	CAP CER CHIP 0.1UF 10% 6.3
C6023	2113928N01	CAP CER CHIP 0.1UF 10% 6.3
C6024	2113743L41	CAP CHIP 10000 PF 10% X7R
C6025	2113928N01	CAP CER CHIP 0.1UF 10% 6.3

Reference Designator	Motorola Part Number	Description
C6026	2113743N36	CAP CHIP 27.0 PF 5% COG
C6030	2113743L41	CAP CHIP 10000 PF 10% X7R
C6031	2113743N46	QAP CHIP 68.0 PF 5% COG
C6032	2113928N01	CAP CER CHIP 0.1UF 10% 6.3
C6033	2113743B27	CAP CHIP .680 UF 10% X7R
C6051	2113743N46	QAP CHIP 68.0 PF 5% COG
C6052	2113743N43	CAP CHIP 51.0 PF 5% COG
C6053	2113743N25	CAP CHIP 9.1 PF + -.5PF COG
C6054	2113743N28	CAP CHIP 12.0 PF 5% COG
C6055	2113743N24	CAP CHIP 8.2 PF + -.5PF COG
C6056	2113743E20	CAP CHIP .10 UF 10%
C6057	2113743A27	CAP CHIP .470 UF 10% 16V
C6058	NOTPLACED	64AM DUMMY PART NUMBER
C6059	2113928N01	CAP CER CHIP 0.1UF 10% 6.3
C6060	2113928N01	CAP CER CHIP 0.1UF 10% 6.3
C6061	NOTPLACED	64AM DUMMY PART NUMBER
C6064	2113928N01	CAP CER CHIP 0.1UF 10% 6.3
C6067	2113743L41	CAP CHIP 10000 PF 10% X7R
C6068	2113743S01	CAP CER CHIP 1.0 UF 10% 16V
C6084	2113743A31	CAP CHIP 1.0 UF 10% X7R
C6091	2113743F18	CAP CHIP 2.2 UF 16V +80-20%
C6096	2113928N01	CAP CER CHIP 0.1UF 10% 6.3
C6250	2113743L41	CAP CHIP 10000 PF 10% X7R
C6251	2113743L41	CAP CHIP 10000 PF 10% X7R
C6252	2113743L41	CAP CHIP 10000 PF 10% X7R
C6253	2113743L41	CAP CHIP 10000 PF 10% X7R
C6254	2113743L41	CAP CHIP 10000 PF 10% X7R

Reference Designator	Motorola Part Number	Description
C6255	2113743L41	CAP CHIP 10000 PF 10% X7R
C6256	2113743L41	CAP CHIP 10000 PF 10% X7R
C6257	2113743L41	CAP CHIP 10000 PF 10% X7R
C6258	2113743L41	CAP CHIP 10000 PF 10% X7R
C6259	2113743L41	CAP CHIP 10000 PF 10% X7R
C6260	2113743L41	CAP CHIP 10000 PF 10% X7R
C6261	2113743L41	CAP CHIP 10000 PF 10% X7R
C6262	2113743L41	CAP CHIP 10000 PF 10% X7R
C6263	2113743L41	CAP CHIP 10000 PF 10% X7R
C6264	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C6265	2113743L41	CAP CHIP 10000 PF 10% X7R
C6266	2113743L41	CAP CHIP 10000 PF 10% X7R
C6267	2113743L41	CAP CHIP 10000 PF 10% X7R
C6268	2113743L41	CAP CHIP 10000 PF 10% X7R
C6269	2113743L41	CAP CHIP 10000 PF 10% X7R
C6270	2113743N42	CAP CHIP 47.0 PF 5% COG
C6271	2113743N26	CAP CHIP 10.0 PF 5% COG
C6272	2113743N42	CAP CHIP 47.0 PF 5% COG
C6273	2113743N42	CAP CHIP 47.0 PF 5% COG
C6274	2113743L41	CAP CHIP 10000 PF 10% X7R
C6275	2113743L41	CAP CHIP 10000 PF 10% X7R
C6276	2113743L41	CAP CHIP 10000 PF 10% X7R
C6277	2113743L41	CAP CHIP 10000 PF 10% X7R
C6278	2113743L41	CAP CHIP 10000 PF 10% X7R
C6279	2113743L41	CAP CHIP 10000 PF 10% X7R
C6280	2113743L41	CAP CHIP 10000 PF 10% X7R

Reference Designator	Motorola Part Number	Description
C6281	2113743L41	CAP CHIP 10000 PF 10% X7R
C6282	2113743L41	CAP CHIP 10000 PF 10% X7R
C6283	2113743L41	CAP CHIP 10000 PF 10% X7R
C6284	2113743L41	CAP CHIP 10000 PF 10% X7R
C6285	2113743L41	CAP CHIP 10000 PF 10% X7R
C6286	2113743L41	CAP CHIP 10000 PF 10% X7R
C6287	2113743L41	CAP CHIP 10000 PF 10% X7R
C6288	2113743N16	CAP CHIP 3.9 PF +-.25PF COG
C6289	2113743M24	CAP CHIP 100000 PF +80-20% Y5V
C6293	2113743N40	CAP CHIP 39.0 PF 5% COG
C6295	2113743L17	CAP CHIP 1000 PF 10% X7R
C6296	2113743N42	CAP CHIP 47.0 PF 5% COG
C6297	2113743N25	CAP CHIP 9.1 PF + -.5PF COG
C6298	2113743L09	CAP CHIP 470 PF 10% X7R
C6299	2113743L17	CAP CHIP 1000 PF 10% X7R
C6350	NOTPLACED	64AM DUMMY PART NUMBER
C6351	2113743N58	CAP CHIP 4.0PF 16V .25PF COG
C6352	2113743N20	CAP CHIP 5.6 PF + -.5PF COG
C6353	2113743N26	CAP CHIP 10.0 PF 5% COG
C6354	2113928N01	CAP CER CHIP 0.1UF 10% 6.3
C6355	2113743Q03	CAP CHIP 1.0 PF +/- .1PF 20*40
C6356	2113743N58	CAP CHIP 4.0PF 16V .25PF COG
C6357	NOTPLACED	64AM DUMMY PART NUMBER
C6358	2113928N01	CAP CER CHIP 0.1UF 10% 6.3
C6359	2113928N01	CAP CER CHIP 0.1UF 10% 6.3
C6500	2113743L41	CAP CHIP 10000 PF 10% X7R

Reference Designator	Motorola Part Number	Description
C6501	2113743N40	CAP CHIP 39.0 PF 5% COG
C6502	2113743N40	CAP CHIP 39.0 PF 5% COG
C6503	2113743N50	CAP CHIP 100 PF 5% COG
C6504	2113743L41	CAP CHIP 10000 PF 10% X7R
C6506	2113743N30	CAP CHIP 15.0 PF 5% COG
C6507	2113743L41	CAP CHIP 10000 PF 10% X7R
C6508	2113743L41	CAP CHIP 10000 PF 10% X7R
C6509	2113743N28	CAP CHIP 12.0 PF 5% COG
C6510	2113743N28	CAP CHIP 12.0 PF 5% COG
C6511	2113743N20	CAP CHIP 5.6 PF + -.5PF COG
C6520	2113743N40	CAP CHIP 39.0 PF 5% COG
C6521	2111078B32	CAP CHIP RF 39 5 NPO 100V
C6522	2113741N69	CAP CHIP CL2 X7R 10% 100000
C6523	2113741N69	CAP CHIP CL2 X7R 10% 100000
C6524	2113741N69	CAP CHIP CL2 X7R 10% 100000
C6525	NOTPLACED	64AM DUMMY PART NUMBER
C6540	2113743N40	CAP CHIP 39.0 PF 5% COG
C6541	2111078B14	CAP CHIP RF 11 5 NPO 100V
C6542	2111078B15	CAP CHIP RF 12 5 NPO 100V
C6544	2111078B15	CAP CHIP RF 12 5 NPO 100V
C6545	2111078B15	CAP CHIP RF 12 5 NPO 100V
C6547	2111078B15	CAP CHIP RF 12 5 NPO 100V
C6548	2111078B14	CAP CHIP RF 11 5 NPO 100V
C6549	2111078B16	CAP CHIP RF 13 5 NPO 100V
C6550	2111078B15	CAP CHIP RF 12 5 NPO 100V
C6551	2111078B06	CAP CHIP RF 5.1 .25 NPO 100V
C6552	2111078B15	CAP CHIP RF 12 5 NPO 100V

Reference Designator	Motorola Part Number	Description
C6553	2111078B06	CAP CHIP RF 5.1 .25 NPO 100V
C6554	2111078B16	CAP CHIP RF 13 5 NPO 100V
C6555	2111078B13	CAP CHIP RF 10 .5 NPO 100V
C6556	2111078B01	CAP CHIP RF 3.3 .25 NPO 100V
C6557	2111078B32	CAP CHIP RF 39 5 NPO 100V
C6558	2113743N40	CAP CHIP 39.0 PF 5% COG
C6559	2111078B32	CAP CHIP RF 39 5 NPO 100V
C6560	2113741N69	CAP CHIP CL2 X7R 10% 100000
C6561	2113743E20	CAP CHIP .10 UF 10%
C6562	2113743E20	CAP CHIP .10 UF 10%
C6563	2311049A78	CAP TANT CHIP 10.0 UF 10% 50V
C6564	NOTPLACED	64AM DUMMY PART NUMBER
C6565	2113740B39	CAP CHIP REEL CL1 +/-30 39
C6566	2113740B39	CAP CHIP REEL CL1 +/-30 39
C6700	2113743N40	CAP CHIP 39.0 PF 5% COG
C6701	2111078B32	CAP CHIP RF 39 5 NPO 100V
C6703	2111078B20	CAP CHIP RF 18 5 NPO 100V
C6704	2111078B32	CAP CHIP RF 39 5 NPO 100V
C6705	2111078B32	CAP CHIP RF 39 5 NPO 100V
C6720	2111078B05	CAP CHIP RF 4.7 .25 NPO 100V
C6721	2111078B05	CAP CHIP RF 4.7 .25 NPO 100V
C6730	2113743N40	CAP CHIP 39.0 PF 5% COG
C6731	2113743N19	CAP CHIP 5.1 PF + -.5PF COG
C6732	2113743N19	CAP CHIP 5.1 PF + -.5PF COG
C6733	2113743N40	CAP CHIP 39.0 PF 5% COG
C6734	2113951A07	CAP NPO 0.70PF +/-1PF 250V HI FREQ
C6735	2113951A07	CAP NPO 0.70PF +/-1PF 250V HI FREQ
C6750	2113743E20	CAP CHIP .10 UF 10%

Reference Designator	Motorola Part Number	Description
C6751	2113743S01	CAP CER CHIP 1.0 UF 10% 16V
C6753	2113743E20	CAP CHIP .10 UF 10%
C6755	2113743N50	CAP CHIP 100 PF 5% COG
C6757	2113743E20	CAP CHIP .10 UF 10%
C6758	2113743L17	CAP CHIP 1000 PF 10% X7R
C6759	2113743N38	CAP CHIP 33.0 PF 5% COG
C6760	2113743L17	CAP CHIP 1000 PF 10% X7R
C6761	2113743N40	CAP CHIP 39.0 PF 5% COG
C6763	2113743E20	CAP CHIP .10 UF 10%
C6764	2113743E20	CAP CHIP .10 UF 10%
C6765	2113743E20	CAP CHIP .10 UF 10%
C6766	2113743E20	CAP CHIP .10 UF 10%
C6767	2113743N40	CAP CHIP 39.0 PF 5% COG
C6768	2113743T19	CAP 10UF 16V CER 3225 X5R
C6769	2113743E20	CAP CHIP .10 UF 10%
C6771	2113743E20	CAP CHIP .10 UF 10%
C6773	2113743N40	CAP CHIP 39.0 PF 5% COG
C6775	2113743T19	CAP 10UF 16V CER 3225 X5R
C6776	2113743E12	CAP CHIP .047 UF 10% X7R
C6777	2113743E07	CER CHIP CAP .022UF
C6778	2113743E12	CAP CHIP .047 UF 10% X7R
C6779	2113743E07	CER CHIP CAP .022UF
C6780	2113743N40	CAP CHIP 39.0 PF 5% COG
C6781	NOTPLACED	64AM DUMMY PART NUMBER
C6782	2113743N40	CAP CHIP 39.0 PF 5% COG
C6783	2185419D08	CAP CER SUPER L/D 0.0012UF
C6784	2113743N40	CAP CHIP 39.0 PF 5% COG
C6785	2185419D06	CAP CER SUPER L/D 0.1UF
C6786	2185419D06	CAP CER SUPER L/D 0.1UF
C6787	2185419D06	CAP CER SUPER L/D 0.1UF
C6788	2185419D06	CAP CER SUPER L/D 0.1UF
C6789	2185419D06	CAP CER SUPER L/D 0.1UF

Reference Designator	Motorola Part Number	Description
C6790	2113743K15	CER CHIP CAP .100UF
C6791	2113743K15	CER CHIP CAP .100UF
C6792	2113743T19	CAP 10UF 16V CER 3225 X5R
C6794	2113743A27	CAP CHIP .470 UF 10% 16V
C6795	2113743A27	CAP CHIP .470 UF 10% 16V
C6797	2113743N40	CAP CHIP 39.0 PF 5% COG
C6798	2113743N40	CAP CHIP 39.0 PF 5% COG
C6801	2113743N40	CAP CHIP 39.0 PF 5% COG
C6802	2113743N40	CAP CHIP 39.0 PF 5% COG
C6806	2113743E07	CER CHIP CAP .022UF
C6807	2113743K15	CER CHIP CAP .100UF
C6808	2113743T19	CAP 10UF 16V CER 3225 X5R
C6813	2113743N40	CAP CHIP 39.0 PF 5% COG
C6817	2113743L41	CAP CHIP 10000 PF 10% X7R
C6818	2113743T19	CAP 10UF 16V CER 3225 X5R
C6819	2113743N40	CAP CHIP 39.0 PF 5% COG
C6820	2113743N40	CAP CHIP 39.0 PF 5% COG
C6821	2113743L41	CAP CHIP 10000 PF 10% X7R
C6822	2113743N40	CAP CHIP 39.0 PF 5% COG
C6823	2113743E20	CAP CHIP .10 UF 10%
C6824	2113743N40	CAP CHIP 39.0 PF 5% COG
C6825	2113743N40	CAP CHIP 39.0 PF 5% COG
C6826	2113743L41	CAP CHIP 10000 PF 10% X7R
C6827	2113743N40	CAP CHIP 39.0 PF 5% COG
C6828	2113743N40	CAP CHIP 39.0 PF 5% COG
C6829	2113743N40	CAP CHIP 39.0 PF 5% COG
C6830	2113743N40	CAP CHIP 39.0 PF 5% COG
C6831	2113743N40	CAP CHIP 39.0 PF 5% COG
C6832	2113743N40	CAP CHIP 39.0 PF 5% COG

Reference Designator	Motorola Part Number	Description
C6833	2113743L41	CAP CHIP 10000 PF 10% X7R
C6834	2113743N40	CAP CHIP 39.0 PF 5% COG
C6835	2113743N40	CAP CHIP 39.0 PF 5% COG
C6836	2113743N13	CAP CHIP 3.0 PF +/- .25PF COG
C6837	2113743S01	CAP CER CHIP 1.0 UF 10% 16V
C6838	2113743L41	CAP CHIP 10000 PF 10% X7R
C6839	2113743L41	CAP CHIP 10000 PF 10% X7R
C6840	2113743N40	CAP CHIP 39.0 PF 5% COG
C6841	2113743N40	CAP CHIP 39.0 PF 5% COG
D0501	4805218N57	DIODE DUAL
D0950	4813833C02	DIODE DUAL 70V '5B' COMM CATH
D0951	4813833C02	DIODE DUAL 70V '5B' COMM CATH
D0952	4813833C02	DIODE DUAL 70V '5B' COMM CATH
D6030	4805656W28	DIODE VARACTOR 18PF@1V +6PF@4V
D6051	4809877C13	DIODE VARACTOR ISV305 SMD
D6250	4880154K06	DIODE PIN SCHOTTKY
D6251	4880154K06	DIODE PIN SCHOTTKY
D6252	4880154K06	DIODE PIN SCHOTTKY
D6253	4880154K06	DIODE PIN SCHOTTKY
D6254	4880154K06	DIODE PIN SCHOTTKY
D6255	4880154K06	DIODE PIN SCHOTTKY
D6256	4880154K06	DIODE PIN SCHOTTKY
D6257	4880154K06	DIODE PIN SCHOTTKY
D6258	4880154K03	DIODE DUAL SCHOTTKY MIXER
D6701	4802482J02	PIN DIODE SMD
D6702	4802482J02	PIN DIODE SMD
D6730	4805218N57	DIODE DUAL
D6731	4805218N57	DIODE DUAL
D6750	4813833C02	DIODE DUAL 70V '5B' COMM CATH
D6751	4802233J09	DIODE TRIPLE SOT25-RH
D6752	4802233J09	DIODE TRIPLE SOT25-RH
E6000	2480640Z01	SURFACE MOUNT FERRITE BEAD
E6001	2480640Z01	SURFACE MOUNT FERRITE BEAD
E6002	2480640Z01	SURFACE MOUNT FERRITE BEAD

Reference Designator	Motorola Part Number	Description
E6003	2480640Z01	SURFACE MOUNT FERRITE BEAD
E6004	2480640Z01	SURFACE MOUNT FERRITE BEAD
E6005	2480640Z01	SURFACE MOUNT FERRITE BEAD
E6006	2480640Z01	SURFACE MOUNT FERRITE BEAD
E6007	2480640Z01	SURFACE MOUNT FERRITE BEAD
E6008	2480640Z01	SURFACE MOUNT FERRITE BEAD
E6751	NOTPLACED	64AM DUMMY PART NUMBER
E6752	NOTPLACED	64AM DUMMY PART NUMBER
E6753	NOTPLACED	64AM DUMMY PART NUMBER
F0400	6583049X16	FUSE 5A FAST ACT
FL0900	9185130D01	FLTR SW CAP 3 POLE BUTTERW
J0401	0985722E01	CONN 50 POS FM SMT RTANG
J0402	0985631E01	CONNECTOR FEMALE 32 PIN ACCY
J0501	0985473E01	CONN SECURE 20 POS FM SMT RT ANG
J0950	0905902V07	CONNECTOR DC
J6700	0905901V11	CONNECTOR RF
L6000	2462587N57	CHIP IND 220 NH 5%
L6001	2405769X05	COIL INDUCTOR
L6002	2405769X05	COIL INDUCTOR
L6003	2462587N76	CHIP IND 4700 NH 5%
L6004	2404574Z34	INDUCTOR 270 NH 2% 0805 WIREWOUND
L6005	2462587N73	WIREWOUND INDUCTOR 2700 NH 5% 1008
L6012	2462587L50	FERRITE INDUCTOR 100UH
L6250	2462587T38	IND CHIP 22NH 5% LOW PRO
L6251	2462587T38	IND CHIP 22NH 5% LOW PRO
L6252	2462587N51	CHIP IND 68 NH 5%
L6253	2462587T38	IND CHIP 22NH 5% LOW PRO
L6254	2462587T38	IND CHIP 22NH 5% LOW PRO
L6255	2462587T30	IND CHIP 1000NH 5% LOW PRO
L6256	2462587T30	IND CHIP 1000NH 5% LOW PRO

Reference Designator	Motorola Part Number	Description
L6257	2462587T30	IND CHIP 1000NH 5% LOW PRO
L6258	2488428L05	IND CHIP WW 7.5NH 5% 2.1A 1608
L6259	2462587T30	IND CHIP 1000NH 5% LOW PRO
L6260	2462587T38	IND CHIP 22NH 5% LOW PRO
L6261	2462587T38	IND CHIP 22NH 5% LOW PRO
L6262	2462587T38	IND CHIP 22NH 5% LOW PRO
L6263	2462587T38	IND CHIP 22NH 5% LOW PRO
L6350	2462587N65	CHIP IND 750 NH 5%
L6351	2462587N64	CHIP IND 680 NH 5%
L6352	2462587N69	CHIP IND 1200 NH 5%
L6353	2462587N65	CHIP IND 750 NH 5%
L6355	2462587N68	CHIP IND 1000 NH 5%
L6500	2462587T17	IND CHIP 150NH 5% LOW PRO
L6501	2462587T17	IND CHIP 150NH 5% LOW PRO
L6502	2488428L05	IND CHIP WW 7.5NH 5% 2.1A 1608
L6521	2484562T04	COIL SURFACE MOUNT AIR WOUND
L6522	2484657R01	INDUCTOR BEAD CHIP
L6542	2460592A01	COIL AW 2 TURN 17 NH
L6543	2484657R01	INDUCTOR BEAD CHIP
L6700	2462587T17	IND CHIP 150NH 5% LOW PRO
L6702	2462587T17	IND CHIP 150NH 5% LOW PRO
L6703	2462587V60	IND CHIP 43 NH 5%
L6720	2484562T21	COIL AIR WOUND ENCAP SPRING AUTO INSERT
L6721	2484562T21	COIL AIR WOUND ENCAP SPRING AUTO INSERT
L6722	2484562T21	COIL AIR WOUND ENCAP SPRING AUTO INSERT
L6730	2488428L09	IND CHIP WW 18 NH 5% 1.9A 1608
L6731	2488428L06	COILCRAFT 0603HC
L6750	2462587Q20	IND CHIP 2,200 NH 20%
L6751	2462587Q20	IND CHIP 2,200 NH 20%
L6752	2462587Q20	IND CHIP 2,200 NH 20%
L6753	2462587Q20	IND CHIP 2,200 NH 20%
L6754	2462587T30	IND CHIP 1000NH 5% LOW PRO
L6755	2462587Q44	IND CHIP 560 NH 10%
L6756	2462587Q47	IND CHIP 1,000 NH 10%
L6757	2462587V20	CHIP IND 3.3 NH 5% 0805

Reference Designator	Motorola Part Number	Description
L6758	2462587V23	CHIP IND 12 NH 5% 0805
L6760	2462587V22	CHIP IND 8.2 NH 5% 0805
L6761	2462587Q44	IND CHIP 560 NH 10%
L6763	2462587V22	CHIP IND 8.2 NH 5% 0805
M6520	2685838C01	HEATSINK PLD1.5 TRANSISTOR ASSY
M6542	2685837C03	HEATSINK TRANSISTOR CARRIER
M6700	NOTPLACED	64AM DUMMY PART NUMBER
M6720	2685059F01	SHIELD,FLTR,,,,,SHIELD HAR FLTR
M6721	NOTPLACED	64AM DUMMY PART NUMBER
PCB	8485429D01	MAIN BOARD
Q0200	4880048M01	TSTR NPN DIG 47K/47K
Q0402	4880048M01	TSTR NPN DIG 47K/47K
Q0403	4805723X03	TRANS DUAL NPN-PNP UMD3N ROHM
Q0404	4880048M01	TSTR NPN DIG 47K/47K
Q0500	4880048M01	TSTR NPN DIG 47K/47K
Q0501	4880048M01	TSTR NPN DIG 47K/47K
Q0502	4880048M01	TSTR NPN DIG 47K/47K
Q0503	4813821A09	TSTR P-CH 60V 12A 2955
Q0504	4880048M01	TSTR NPN DIG 47K/47K
Q0505	4880048M01	TSTR NPN DIG 47K/47K
Q0610	4805723X03	TRANS DUAL NPN-PNP UMD3N ROHM
Q0611	4805723X03	TRANS DUAL NPN-PNP UMD3N ROHM
Q0612	4805723X03	TRANS DUAL NPN-PNP UMD3N ROHM
Q0613	4805723X03	TRANS DUAL NPN-PNP UMD3N ROHM
Q0951	4880048M01	TSTR NPN DIG 47K/47K
Q0952	4885844C01	XSTR FET
Q0953	NOTPLACED	64AM DUMMY PART NUMBER
Q0954	4809579E16	TSTR MOSFET N-CHAN TN0200T
Q0955	4809579E16	TSTR MOSFET N-CHAN TN0200T
Q6000	4805218N63	RF TRANS SOT 323 Bfq67w
Q6001	4805128M19	TSTR SOT23 MMBTA13 RH
Q6250	4813824A10	TSTR NPN 40V .2A GEN PURP
Q6251	4805921T04	XISTOR FMC1 RH REELED
Q6252	4805921T04	XISTOR FMC1 RH REELED

Reference Designator	Motorola Part Number	Description
Q6253	4813824A10	TSTR NPN 40V .2A GEN PURP
Q6254	4813824A10	TSTR NPN 40V .2A GEN PURP
Q6255	4880048M01	TSTR NPN DIG 47K/47K
Q6350	4805218N55	TRANSISTOR 3 LEAD BFG67
Q6520	4813828A09	TSTR 8W 450MHZ 7.5V
Q6540	4813828C46	TSTR 1 GHZ 45W TO270 T&R
Q6541	4813828C46	TSTR 1 GHZ 45W TO270 T&R
Q6753	4805921T04	XISTOR FMC1 RH REELED
Q6755	4805921T04	XISTOR FMC1 RH REELED
Q6756	4805921T04	XISTOR FMC1 RH REELED
Q6757	4813824A10	TSTR NPN 40V .2A GEN PURP
Q6758	4813824A10	TSTR NPN 40V .2A GEN PURP
Q6759	4813824A17	XSTR PNP40V .2A GENP B=100-300
Q6760	4805921T04	XISTOR FMC1 RH REELED
Q6761	4809527E41	TRANSISTOR UHF PRF949 SC75
Q6762	4809527E41	TRANSISTOR UHF PRF949 SC75
Q6763	5186258W01	IC GAAS RF GAIN STAGE
Q6764	4809527E41	TRANSISTOR UHF PRF949 SC75
Q6765	4809527E41	TRANSISTOR UHF PRF949 SC75
Q6766	4809527E41	TRANSISTOR UHF PRF949 SC75
R0101	NOTPLACED	64AM DUMMY PART NUMBER
R0102	NOTPLACED	64AM DUMMY PART NUMBER
R0103	NOTPLACED	64AM DUMMY PART NUMBER
R0104	0662057M98	RES. CHIP 10K 5% 20X40
R0105	0662057M98	RES. CHIP 10K 5% 20X40
R0106	0662057M98	RES. CHIP 10K 5% 20X40
R0107	0662057M01	RES. CHIP 0 5% 20X40
R0108	NOTPLACED	64AM DUMMY PART NUMBER
R0109	0662057M98	RES. CHIP 10K 5% 20X40
R0110	0662057M98	RES. CHIP 10K 5% 20X40
R0111	NOTPLACED	64AM DUMMY PART NUMBER

Reference Designator	Motorola Part Number	Description
R0113	NOTPLACED	64AM DUMMY PART NUMBER
R0114	0662057M01	RES. CHIP 0 5% 20X40
R0115	NOTPLACED	64AM DUMMY PART NUMBER
R0116	0662057B46	CHIP RES 10.0 MEG OHMS 5%
R0117	0662057B46	CHIP RES 10.0 MEG OHMS 5%
R0119	0662057N39	RES. CHIP 470K 5% 20X40
R0120	0662057M98	RES. CHIP 10K 5% 20X40
R0121	0662057M98	RES. CHIP 10K 5% 20X40
R0122	0662057M86	RES CHIP 3300 5% 20X40
R0123	0662057M86	RES CHIP 3300 5% 20X40
R0124	NOTPLACED	64AM DUMMY PART NUMBER
R0125	0662057M98	RES. CHIP 10K 5% 20X40
R0200	0662057M74	RES. CHIP 1000 5% 20X40
R0202	0662057M86	RES CHIP 3300 5% 20X40
R0203	0662057M74	RES. CHIP 1000 5% 20X40
R0204	0662057M68	RES CHIP 560 5% 20X40
R0205	0662057N15	RES. CHIP 47K 5% 20X40
R0206	NOTPLACED	64AM DUMMY PART NUMBER
R0207	0662057M95	RES. CHIP 7500 5% 20X40
R0208	0662057N23	RES. CHIP 100K 5% 20X40
R0209	0662057M98	RES. CHIP 10K 5% 20X40
R0210	0662057N23	RES. CHIP 100K 5% 20X40
R0212	0662057N23	RES. CHIP 100K 5% 20X40
R0216	0662057N23	RES. CHIP 100K 5% 20X40
R0218	0662057M74	RES. CHIP 1000 5% 20X40
R0219	0662057M74	RES. CHIP 1000 5% 20X40
R0220	0662057N05	RES. CHIP 18K 5% 20X40
R0221	0662057M98	RES. CHIP 10K 5% 20X40
R0222	0662057M98	RES. CHIP 10K 5% 20X40
R0223	0662057N05	RES. CHIP 18K 5% 20X40
R0224	0662057M98	RES. CHIP 10K 5% 20X40
R0225	0662057M98	RES. CHIP 10K 5% 20X40
R0226	0662057N12	RES. CHIP 36K 5% 20X40
R0227	0662057N19	RES. CHIP 68K 5% 20X40
R0228	0662057N11	RES. CHIP 33K 5% 20X40
R0229	0662057N19	RES. CHIP 68K 5% 20X40

Reference Designator	Motorola Part Number	Description
R0230	0662057N11	RES. CHIP 33K 5% 20X40
R0231	0662057C01	CHIP RES 0 OHMS +.050 OHMS
R0235	0662057M98	RES. CHIP 10K 5% 20X40
R0236	0662057M97	RES CHIP 9100 5% 20X40
R0303	0662057M78	RES. CHIP 1500 5% 20X40
R0304	0662057M34	RES. CHIP 22 5% 20X40
R0305	0662057M34	RES. CHIP 22 5% 20X40
R0307	0662057M98	RES. CHIP 10K 5% 20X40
R0403	0662057M98	RES. CHIP 10K 5% 20X40
R0404	0662057M74	RES. CHIP 1000 5% 20X40
R0405	0662057M74	RES. CHIP 1000 5% 20X40
R0406	0662057M68	RES CHIP 560 5% 20X40
R0407	0662057M50	RES. CHIP 100 5% 20X40
R0408	0662057M50	RES. CHIP 100 5% 20X40
R0409	0662057M98	RES. CHIP 10K 5% 20X40
R0410	0662057M50	RES. CHIP 100 5% 20X40
R0411	0662057M98	RES. CHIP 10K 5% 20X40
R0412	0662057M50	RES. CHIP 100 5% 20X40
R0415	0662057M50	RES. CHIP 100 5% 20X40
R0416	0662057M50	RES. CHIP 100 5% 20X40
R0417	0662057M50	RES. CHIP 100 5% 20X40
R0418	0662057M50	RES. CHIP 100 5% 20X40
R0419	0662057M90	RES. CHIP 4700 5% 20X40
R0420	0662057M98	RES. CHIP 10K 5% 20X40
R0421	0662057M01	RES. CHIP 0 5% 20X40
R0422	0662057V15	RES CHIP 33K 1% 1/16W
R0425	0662057M98	RES. CHIP 10K 5% 20X40
R0430	0662057M01	RES. CHIP 0 5% 20X40
R0431	0662057M98	RES. CHIP 10K 5% 20X40
R0432	0662057M50	RES. CHIP 100 5% 20X40
R0435	0662057M74	RES. CHIP 1000 5% 20X40
R0500	0662057N23	RES. CHIP 100K 5% 20X40
R0502	0662057N37	RES CHIP 390K 5% 20X40
R0503	0662057N23	RES. CHIP 100K 5% 20X40
R0504	0662057N23	RES. CHIP 100K 5% 20X40
R0505	0662057M98	RES. CHIP 10K 5% 20X40
R0506	0662057M98	RES. CHIP 10K 5% 20X40
R0507	0662057M98	RES. CHIP 10K 5% 20X40
R0508	0662057M98	RES. CHIP 10K 5% 20X40
R0509	0662057M81	RES. CHIP 2000 5% 20X40
R0510	0662057V18	RES CHIP 43K 1% 1/16W
R0511	0662057V15	RES CHIP 33K 1% 1/16W

Reference Designator	Motorola Part Number	Description
R0512	0662057V02	RES CHIP 10K 1% 1/16W
R0513	0662057V17	RES CHIP 39K 1% 1/16W
R0514	0662057M01	RES. CHIP 0 5% 20X40
R0515	0662057M74	RES. CHIP 1000 5% 20X40
R0516	0662057N23	RES. CHIP 100K 5% 20X40
R0517	0662057M90	RES. CHIP 4700 5% 20X40
R0518	0662057M98	RES. CHIP 10K 5% 20X40
R0519	0662057C27	CHIP RES 10 OHMS 5%
R0520	0662057N15	RES. CHIP 47K 5% 20X40
R0521	0662057V17	RES CHIP 39K 1% 1/16W
R0522	0662057V10	RES CHIP 20K 1% 1/16W
R0523	0662057N23	RES. CHIP 100K 5% 20X40
R0524	NOTPLACED	64AM DUMMY PART NUMBER
R0527	NOTPLACED	64AM DUMMY PART NUMBER
R0528	0662057M95	RES. CHIP 7500 5% 20X40
R0529	0662057M76	RES. CHIP 1200 5% 20X40
R0531	0662057N23	RES. CHIP 100K 5% 20X40
R0620	0662057M50	RES. CHIP 100 5% 20X40
R0621	0662057M50	RES. CHIP 100 5% 20X40
R0622	0662057M50	RES. CHIP 100 5% 20X40
R0623	0662057M50	RES. CHIP 100 5% 20X40
R0625	0662057M98	RES. CHIP 10K 5% 20X40
R0626	0662057N23	RES. CHIP 100K 5% 20X40
R0627	0662057N23	RES. CHIP 100K 5% 20X40
R0628	0662057N23	RES. CHIP 100K 5% 20X40
R0629	0662057M98	RES. CHIP 10K 5% 20X40
R0630	0662057N23	RES. CHIP 100K 5% 20X40
R0631	0662057M01	RES. CHIP 0 5% 20X40
R0632	NOTPLACED	64AM DUMMY PART NUMBER
R0634	0662057N23	RES. CHIP 100K 5% 20X40
R0635	0662057N23	RES. CHIP 100K 5% 20X40
R0636	0662057M98	RES. CHIP 10K 5% 20X40
R0638	0662057M98	RES. CHIP 10K 5% 20X40
R0639	0662057M98	RES. CHIP 10K 5% 20X40
R0900	NOTPLACED	64AM DUMMY PART NUMBER

Reference Designator	Motorola Part Number	Description
R0901	0662057M96	RES. CHIP 8200 5% 20X40
R0902	0662057N23	RES. CHIP 100K 5% 20X40
R0903	0662057N23	RES. CHIP 100K 5% 20X40
R0904	0662057N23	RES. CHIP 100K 5% 20X40
R0905	0662057N23	RES. CHIP 100K 5% 20X40
R0907	0662057C01	CHIP RES 0 OHMS +.050 OHMS
R0930	0662057N06	RES. CHIP 20K 5% 20X40
R0931	0662057M98	RES. CHIP 10K 5% 20X40
R0936	0662057M98	RES. CHIP 10K 5% 20X40
R0937	0662057N10	RES. CHIP 30K 5% 20X40
R0938	0662057M98	RES. CHIP 10K 5% 20X40
R0939	0662057N10	RES. CHIP 30K 5% 20X40
R0940	0662057M01	RES. CHIP 0 5% 20X40
R0941	NOTPLACED	64AM DUMMY PART NUMBER
R0942	0662057M96	RES. CHIP 8200 5% 20X40
R0943	0662057N06	RES. CHIP 20K 5% 20X40
R0944	0662057M98	RES. CHIP 10K 5% 20X40
R0945	0662057N11	RES. CHIP 33K 5% 20X40
R0946	NOTPLACED	64AM DUMMY PART NUMBER
R0947	0662057M01	RES. CHIP 0 5% 20X40
R0948	NOTPLACED	64AM DUMMY PART NUMBER
R0950	0662057M01	RES. CHIP 0 5% 20X40
R0951	0662057U98	RES CHIP 7.5K 1% 1/16W
R0952	0662057U78	RES CHIP 1.2K 1% 1/16W
R0953	0662057M01	RES. CHIP 0 5% 20X40
R0954	0662057U98	RES CHIP 7.5K 1% 1/16W
R0955	0662057N23	RES. CHIP 100K 5% 20X40
R0960	0662057N06	RES. CHIP 20K 5% 20X40
R0961	0662057N23	RES. CHIP 100K 5% 20X40
R0962	0662057N23	RES. CHIP 100K 5% 20X40
R0963	0662057N08	RES CHIP 24K 5% 20X40
R0964	0662057N08	RES CHIP 24K 5% 20X40
R0965	0662057M01	RES. CHIP 0 5% 20X40
R0966	0662057M01	RES. CHIP 0 5% 20X40
R0967	0662057V27	RES CHIP 100K 1% 1/1 6W
R0968	0662057V02	RES CHIP 10K 1% 1/16W
R0969	NOTPLACED	64AM DUMMY PART NUMBER

Reference Designator	Motorola Part Number	Description
R0970	NOTPLACED	64AM DUMMY PART NUMBER
R0971	0662057V02	RES CHIP 10K 1% 1/16W
R0972	0662057V02	RES CHIP 10K 1% 1/16W
R0973	0662057N01	RES CHIP 12K 5% 20X40
R0974	0662057V02	RES CHIP 10K 1% 1/16W
R0975	0662057V02	RES CHIP 10K 1% 1/16W
R0976	0662057M74	RES. CHIP 1000 5% 20X40
R0977	0662057M50	RES. CHIP 100 5% 20X40
R0978	0662057M98	RES. CHIP 10K 5% 20X40
R0979	0662057M01	RES. CHIP 0 5% 20X40
R0980	NOTPLACED	64AM DUMMY PART NUMBER
R0981	0662057M84	RES. CHIP 2700 5% 20X40
R0982	0662057N23	RES. CHIP 100K 5% 20X40
R0983	0662057M81	RES. CHIP 2000 5% 20X40
R0984	0662057M01	RES. CHIP 0 5% 20X40
R0985	0662057M01	RES. CHIP 0 5% 20X40
R0986	NOTPLACED	64AM DUMMY PART NUMBER
R0987	0662057M01	RES. CHIP 0 5% 20X40
R0988	0662057M98	RES. CHIP 10K 5% 20X40
R0989	0662057N17	RES. CHIP 56K 5% 20X40
R0990	0662057M91	RES CHIP 5100 5% 20X40
R0991	0662057M98	RES. CHIP 10K 5% 20X40
R0992	0662057V27	RES CHIP 100K 1% 1/1 6W
R0993	0662057U78	RES CHIP 1.2K 1% 1/16W
R0994	0662057M88	RES. CHIP 3900 5% 20X40
R0995	0662057U78	RES CHIP 1.2K 1% 1/16W
R0996	0662057M98	RES. CHIP 10K 5% 20X40
R0997	0662057U78	RES CHIP 1.2K 1% 1/16W
R0998	0662057V02	RES CHIP 10K 1% 1/16W
R0999	0662057V02	RES CHIP 10K 1% 1/16W
R6000	0662057M43	RES. CHIP 51 5% 20X40
R6001	0662057N47	RES. CHIP 1.0 MEG 5% 20X40
R6002	0662057N23	RES. CHIP 100K 5% 20X40
R6003	0662057M98	RES. CHIP 10K 5% 20X40
R6004	0662057M62	RES. CHIP 330 5% 20X40
R6005	0662057M98	RES. CHIP 10K 5% 20X40
R6006	0662057M46	RES. CHIP 68 5% 20X40
R6007	0662057M64	RES. CHIP 390 5% 20X40
R6008	0662057M98	RES. CHIP 10K 5% 20X40
R6009	0662057N08	RES CHIP 24K 5% 20X40
R6011	0662057M01	RES. CHIP 0 5% 20X40
R6012	0662057M01	RES. CHIP 0 5% 20X40

Reference Designator	Motorola Part Number	Description
R6013	0662057M01	RES. CHIP 0 5% 20X40
R6014	0662057M01	RES. CHIP 0 5% 20X40
R6015	0662057M01	RES. CHIP 0 5% 20X40
R6016	0662057M01	RES. CHIP 0 5% 20X40
R6019	0662057M74	RES. CHIP 1000 5% 20X40
R6020	0662057M98	RES. CHIP 10K 5% 20X40
R6021	0662057M98	RES. CHIP 10K 5% 20X40
R6022	0662057M01	RES. CHIP 0 5% 20X40
R6250	0662057N07	RES. CHIP 22K 5% 20X40
R6251	0662057M74	RES. CHIP 1000 5% 20X40
R6252	0662057N07	RES. CHIP 22K 5% 20X40
R6253	0662057A49	CHIP RES 1000 OHMS 5%
R6254	0662057M57	RES CHIP 200 5% 20X40
R6255	0662057M74	RES. CHIP 1000 5% 20X40
R6256	0662057M57	RES CHIP 200 5% 20X40
R6257	0662057N07	RES. CHIP 22K 5% 20X40
R6258	0662057M74	RES. CHIP 1000 5% 20X40
R6259	0662057M57	RES CHIP 200 5% 20X40
R6267	0662057A49	CHIP RES 1000 OHMS 5%
R6268	0662057M57	RES CHIP 200 5% 20X40
R6269	0662057M57	RES CHIP 200 5% 20X40
R6270	0662057M74	RES. CHIP 1000 5% 20X40
R6271	0662057M74	RES. CHIP 1000 5% 20X40
R6272	0662057M57	RES CHIP 200 5% 20X40
R6273	0662057M57	RES CHIP 200 5% 20X40
R6275	0662057A49	CHIP RES 1000 OHMS 5%
R6276	0662057A49	CHIP RES 1000 OHMS 5%
R6277	0662057M57	RES CHIP 200 5% 20X40
R6278	0662057M78	RES. CHIP 1500 5% 20X40
R6279	NOTPLACED	64AM DUMMY PART NUMBER
R6280	0662057M78	RES. CHIP 1500 5% 20X40
R6281	0662057M19	RES. CHIP 5.1 5% 20X40
R6282	0662057M98	RES. CHIP 10K 5% 20X40
R6350	0662057M98	RES. CHIP 10K 5% 20X40
R6352	0662057N13	RES. CHIP 39K 5% 20X40
R6353	0662057M74	RES. CHIP 1000 5% 20X40
R6354	0662057A47	CHIP RES 820 OHMS 5%
R6520	0662057C75	CHIP RES 1000 OHMS 5%
R6521	0662057M24	RES CHIP 8.2 5% 20X40
R6522	0662057M24	RES CHIP 8.2 5% 20X40
R6523	0662057M24	RES CHIP 8.2 5% 20X40
R6524	0662057M24	RES CHIP 8.2 5% 20X40

Reference Designator	Motorola Part Number	Description
R6525	0662057M24	RES CHIP 8.2 5% 20X40
R6526	0680195M01	RES CHIP 10 OHMS 5% .5W
R6527	0611077A01	RES CHIP JUMPER
R6540	0662057C75	CHIP RES 1000 OHMS 5%
R6543	0662057C75	CHIP RES 1000 OHMS 5%
R6544	0680195M01	RES CHIP 10 OHMS 5% .5W
R6545	0685934D01	RES FIXED CHIP (CURRENT SENOR)
R6546	0662057V27	RES CHIP 100K 1% 1/1 6W
R6547	0680194M13	RES 33 OHMS 5% 1W
R6548	0680194M13	RES 33 OHMS 5% 1W
R6549	0662057C27	CHIP RES 10 OHMS 5%
R6550	0662057B55	CHIP RES 2.0 OHMS 5%
R6551	0662057B55	CHIP RES 2.0 OHMS 5%
R6552	0662057B55	CHIP RES 2.0 OHMS 5%
R6553	0662057B55	CHIP RES 2.0 OHMS 5%
R6554	0662057B55	CHIP RES 2.0 OHMS 5%
R6555	0662057B55	CHIP RES 2.0 OHMS 5%
R6556	0662057B55	CHIP RES 2.0 OHMS 5%
R6557	0662057B55	CHIP RES 2.0 OHMS 5%
R6559	0611077A38	RES CHIP 33 5 1/8W
R6560	0611077A38	RES CHIP 33 5 1/8W
R6730	0680149M02	THERMISTOR CHIP 100K OHM
R6731	0662057M98	RES. CHIP 10K 5% 20X40
R6732	0662057M78	RES. CHIP 1500 5% 20X40
R6733	0662057M55	RES CHIP 160 OHM 5%
R6734	0662057M55	RES CHIP 160 OHM 5%
R6735	0662057M56	RES. CHIP 180 5% 20X40
R6736	0662057M56	RES. CHIP 180 5% 20X40
R6737	0662057M78	RES. CHIP 1500 5% 20X40
R6738	0662057M98	RES. CHIP 10K 5% 20X40
R6739	0680149M02	THERMISTOR CHIP 100K OHM
R6740	0611077A98	RES CHIP 10K 5 1/8W
R6752	0662057N23	RES. CHIP 100K 5% 20X40
R6753	0662057N23	RES. CHIP 100K 5% 20X40
R6754	0662057M74	RES. CHIP 1000 5% 20X40
R6755	0662057N23	RES. CHIP 100K 5% 20X40
R6756	0662057M74	RES. CHIP 1000 5% 20X40
R6757	0662057M50	RES. CHIP 100 5% 20X40
R6758	0662057M98	RES. CHIP 10K 5% 20X40
R6760	0662057M86	RES CHIP 3300 5% 20X40

Reference Designator	Motorola Part Number	Description
R6761	0662057M67	RES. CHIP 510 5% 20X40
R6762	0662057M95	RES. CHIP 7500 5% 20X40
R6763	0662057N15	RES. CHIP 47K 5% 20X40
R6764	0662057M78	RES. CHIP 1500 5% 20X40
R6765	0662057M56	RES. CHIP 180 5% 20X40
R6766	0662057M98	RES. CHIP 10K 5% 20X40
R6767	0662057N12	RES. CHIP 36K 5% 20X40
R6768	0662057M95	RES. CHIP 7500 5% 20X40
R6769	0662057M81	RES. CHIP 2000 5% 20X40
R6770	0662057N15	RES. CHIP 47K 5% 20X40
R6774	0662057M62	RES. CHIP 330 5% 20X40
R6775	0662057M98	RES. CHIP 10K 5% 20X40
R6777	0662057M43	RES. CHIP 51 5% 20X40
R6778	0662057M78	RES. CHIP 1500 5% 20X40
R6779	0662057M54	RES. CHIP 150 5% 20X40
R6780	0662057M54	RES. CHIP 150 5% 20X40
R6782	0662057M01	RES. CHIP 0 5% 20X40
R6789	0662057A36	CHIP RES 300 OHMS 5%
R6790	0662057A36	CHIP RES 300 OHMS 5%
R6791	0662057M59	RES CHIP 240 5% 20X40
R6792	0662057M26	RES. CHIP 10 5% 20X40
R6793	0662057M54	RES. CHIP 150 5% 20X40
R6794	0662057M40	RES. CHIP 39 5% 20X40
R6795	0662057M54	RES. CHIP 150 5% 20X40
R6796	0662057M74	RES. CHIP 1000 5% 20X40
R6797	0662057M90	RES. CHIP 4700 5% 20X40
R6798	0662057A36	CHIP RES 300 OHMS 5%
R6799	0662057M61	RES. CHIP 300 5% 20X40
R6800	0662057M32	RES. CHIP 18 5% 20X40
R6801	0683962T44	RES CHIP 62 5-1
R6802	0662057M61	RES. CHIP 300 5% 20X40
R6803	0662057M32	RES. CHIP 18 5% 20X40
R6804	0662057M61	RES. CHIP 300 5% 20X40
R6805	0662057M92	RES. CHIP 5600 5% 20X40
R6806	0662057M74	RES. CHIP 1000 5% 20X40
R6807	0662057C55	CHIP RES 150 OHMS 5%
R6808	0662057M26	RES. CHIP 10 5% 20X40
R6809	0662057M61	RES. CHIP 300 5% 20X40
R6810	0662057M32	RES. CHIP 18 5% 20X40
R6811	0662057M61	RES. CHIP 300 5% 20X40
R6812	0662057M92	RES. CHIP 5600 5% 20X40

Reference Designator	Motorola Part Number	Description
R6813	0662057M74	RES. CHIP 1000 5% 20X40
R6814	0662057C55	CHIP RES 150 OHMS 5%
R6815	0662057M26	RES. CHIP 10 5% 20X40
R6816	0662057M61	RES. CHIP 300 5% 20X40
R6817	0662057M32	RES. CHIP 18 5% 20X40
R6818	0662057M61	RES. CHIP 300 5% 20X40
R6819	0662057N03	RES. CHIP 15K 5% 20X40
R6820	0662057M98	RES. CHIP 10K 5% 20X40
R6821	0662057A23	CHIP RES 82 OHMS 5%
R6823	0662057M63	RES CHIP 360 5% 20X40
R6824	0662057M61	RES. CHIP 300 5% 20X40
R6825	0662057M61	RES. CHIP 300 5% 20X40
R6826	0662057M32	RES. CHIP 18 5% 20X40
R6827	0662057M61	RES. CHIP 300 5% 20X40
R6828	0662057M54	RES. CHIP 150 5% 20X40
R6829	0662057M61	RES. CHIP 300 5% 20X40
R6830	0662057M61	RES. CHIP 300 5% 20X40
R6831	0662057M32	RES. CHIP 18 5% 20X40
R6833	0662057A23	CHIP RES 82 OHMS 5%
SH6000	NOTPLACED	64AM DUMMY PART NUMBER
SH6730	NOTPLACED	64AM DUMMY PART NUMBER
U0001	5185633C34	MODULE RAM/MEMORY
U0102	5185623B01	HIGH SPEED CMOS INVERTER
U0103	5113837A15	IC 3.3V QUAD BUFFER
U0104	5113837A15	IC 3.3V QUAD BUFFER
U0105	5109522E17	IC SNGL NAND TC7S00FU
U0200	5105109Z38	3 VOLT LINEAR PCM CODEC FILTER
U0201	5113819A14	IC QD OP AMP _33204_
U0202	5185353D35	IC DUAL EPOT 256 TAP
U0203	5162852A79	IC MOS TTL SPDT ANALOG SC70
U0204	5185794L01	AUDIO AMP TAPE AND REEL
U0206	5185143E67	IC LM1971-62 DB LOG POT
U0207	5109731C15	IC OP AMP SNGL OPA237 SOT23
U0208	5162852A79	IC MOS TTL SPDT ANALOG SC70
U0209	5162852A79	IC MOS TTL SPDT ANALOG SC70
U0210	5162852A79	IC MOS TTL SPDT ANALOG SC70
U0300	5113837A15	IC 3.3V QUAD BUFFER
U0303	5113837A15	IC 3.3V QUAD BUFFER
U0304	5187970L15	IC USB TRANS FULL-SPEED

Reference Designator	Motorola Part Number	Description
U0305	5185353D94	IC RS232 TRANSCEIVER
U0307	5109522E17	IC SNGL NAND TC7S00FU
U0308	5109522E74	IC 2-INPUT AND GATE
U0400	4880048M01	TSTR NPN DIG 47K/47K
U0401	5162852A79	IC MOS TTL SPDT ANALOG SC70
U0402	5109522E53	IC SNGL BUF NC7S125P5X SC70
U0500	5183308X01	IC, LM2941, TO DRPOUT RGTR
U0501	5185353D55	IC VOLTAGE REGULATOR 100MZ ADJ
U0502	5185353D55	IC VOLTAGE REGULATOR 100MZ ADJ
U0503	5113816A07	REG 5V POS 500MA MC78M05BDTRK
U0504	5185353D46	IF 4.3V VOLTAGE DETECTOR
U0505	5113816A07	REG 5V POS 500MA MC78M05BDTRK
U0506	5185143E57	CMOS TIMER-LMC555CM
U0507	5185353D55	IC VOLTAGE REGULATOR 100MZ ADJ
U0508	5109522E53	IC SNGL BUF NC7S125P5X SC70
U0601	5109522E17	IC SNGL NAND TC7S00FU
U0602	5113837A15	IC 3.3V QUAD BUFFER
U0603	5113837A15	IC 3.3V QUAD BUFFER
U0604	5113818A14	IC DL OP AMP RAIL TO RAIL
U0605	5109522E17	IC SNGL NAND TC7S00FU
U0606	5105109Z31	IC QUAD 2:1 MUX/DEMUX
U0607	5109522E74	IC 2-INPUT AND GATE
U0608	5109522E74	IC 2-INPUT AND GATE
U0609	5109522E17	IC SNGL NAND TC7S00FU
U0610	5109522E17	IC SNGL NAND TC7S00FU
U0900	5185368C83	IC 12 BIT DAC
U0901	5185143E43	IC 23 MACROCELL CPLD
U0902	5113805B39	IC MUX/DEMUX, TRIP 2-CH ANALOG
U0903	5185143E68	IC LM7219 HIGH SPEED COMPARATOR
U0950	5105625U25	IC 9.3V REG 2941
U0951	5105625U25	IC 9.3V REG 2941
U0952	5185353D35	IC DUAL EPOT 256 TAP
U0953	5185143E16	IC ANALOG TO DIGITAL CONVERTER
U0954	5109522E17	IC SNGL NAND TC7S00FU
U0955	5113819A14	IC QD OP AMP _33204_
U0956	5185956E24	QUAD OP AMP RAIL TO RAIL 14
U0957	5113819A14	IC QD OP AMP _33204_

Reference Designator	Motorola Part Number	Description
U0958	5109522E17	IC SNGL NAND TC7S00FU
U0959	5185143E05	IC DAC OCTAL 8 BIT
U0960	5113819A14	IC QD OP AMP _33204_
U0962	5185353D14	IC SOT23-5 HI PRECISION REG 3V
U0963	5109522E53	IC SNGL BUF NC7S125P5X SC70
U6000	5185963A85	IC-ABACUS III-LP
U6002	5185353D14	IC SOT23-5 HI PRECISION REG 3V
U6250	5186377E03	MMIC LNA 700-1000 MHZ
U6251	5185353D39	IC DOUBLE BALANCED MIXER 700/800MHZ
U6252	5185963A87	IC ATTENUATOR
U6500	5185130C65	IC VHF/UHF/800 MHZ LDMOS DRIVER
U6540	5185963A15	IC TEMPERTURE SENSOR 1M50C
U6541	5185353D92	IC CURRENT SHUNT MONITOR
U6750	5185353D14	IC SOT23-5 HI PRECISION REG 3V
U6751	5185963A27	IC TESTED AT25016 48 PIN GFP
U6752	5105492X03	IC SNG HI SPD L-MOS NOT GATE
U6754	0180706G62	MILLENNIUM TRANSMIT VCO 700/800 MHZ
U6755	0180706G61	MILLENNIUM RECEIVER VCO 700/800 MHZ
VR0400	4805656W09	DIODE QUAD 20 VOLT ZENER
VR0402	4805656W09	DIODE QUAD 20 VOLT ZENER
VR0404	4805656W10	DIODE DUAL 15 VOLT ZENER
VR0405	4805656W10	DIODE DUAL 15 VOLT ZENER
VR0406	4805656W10	DIODE DUAL 15 VOLT ZENER
VR0407	4805656W10	DIODE DUAL 15 VOLT ZENER
VR0408	4813832C75	DIODE ZENER QU O
VR0410	4813832C75	DIODE ZENER QU O
VR0411	4805656W39	QUAD ESD SUPPRESSOR ARRAY - 41206ESD
VR0412	4805656W09	DIODE QUAD 20 VOLT ZENER
VR0413	NOTPLACED	64AM DUMMY PART NUMBER
VR0414	4813832C75	DIODE ZENER QU O
VR0417	4813832C75	DIODE ZENER QU O

Reference Designator	Motorola Part Number	Description
VR0418	4813832C75	DIODE ZENER QU O
VR0420	4813830A24	DIODE 11V 5% 225MW MMBZ5241B_
VR0421	4813830A24	DIODE 11V 5% 225MW MMBZ5241B_
VR0422	4805656W10	DIODE DUAL 15 VOLT ZENER
VR0423	4805656W10	DIODE DUAL 15 VOLT ZENER
VR0424	4805656W10	DIODE DUAL 15 VOLT ZENER
VR0425	4805656W10	DIODE DUAL 15 VOLT ZENER
VR0500	4813830A14	DIODE 5.1V 5% 225MW MMBZ5231B_
VR0501	4813830A24	DIODE 11V 5% 225MW MMBZ5241B_
VR0950	4813832C77	TRANS SUP .24V HIGH PWR
VR0951	NOTPLACED	64AM DUMMY PART NUMBER
Y0100	4809995L05	XTAL QUARTZ 32.768KHZ CC4V-T1
Y6750	5185143E07	IC 16.8 MHZ REF OSC .8 PPM
*	1085674C03	PASTE/NC-SMQ230
*	5405569Y02	LBL BARCODE APC
*	5405569Y03	LABEL BARCODE
*	1105033S02	RIBBON LABEL LT. PACK LABEL
*	1105033S13	RIBBON LBL

Notes

Chapter 8 Interconnect Boards Schematics, Component Location Diagrams, and Parts Lists

8.1 List of Interconnect Board Schematics and Component Location Diagrams 8.2 W3 Hand-Held Control Head (HHCH) Interconnect Board

The following table lists the remote interconnect boards schematics and component location diagrams contained in this chapter.

Table 8-1. List of Interconnect Board Schematics and Component Location Diagrams

Figure Title	Page
Remote Interconnect Board Schematic (HLN6883A/B, HLN6884A, HLN6885A/B) - for mid power	8-2
Remote Interconnect Board Component Location Diagram (HLN6883A/B, HLN6884A, HLN6885A/B) - for mid power	8-3
Remote Interconnect Board Schematic (HLN6915B) - for mid power	8-9
Remote Interconnect Board Component Location Diagram (HLN6915B) - for mid power	8-10
Remote Interconnect Board Schematic (HLN6901C, HLN6902C) - for high power	8-13
Remote Interconnect Board Component Location Diagram (HLN6901C, HLN6902C) - for high power	8-14
Secure Interface Board Component Location Diagram—Side 1	8-20
Secure Interface Board Component Location Diagram—Side 2	8-20
Motorcycle Signal-Routing Diagram	8-21

Note: HLN6883A/B (Standard W4, W5, W7, and W9 control heads)
 HLN6884A (Motorcycle W4, W5, and W7 control heads)
 HLN6885A/B (W3 control head only)
 HLN6915B (W3 control head only)

HLN6902C (Standard W4, W5, W7, and W9 control heads)
 HLN6901C (W3 control head only)

The motorcycle signal-routing diagram (Figure 8.6, on page 8-21) also is included in this chapter.

The HLN6885 (W3 option) interface board has additional electronics to facilitate the power-control requirements of the Hand-Held Control Head (HHCH). The circuit is based around a D-flop (U601), which remembers the condition of the power switch. It controls a power MOSFET that switches power to SWB+ from the unswitched A+ supply. Unlike the other control heads, shorting the MIC_HI_J5 to ground toggles the condition of power ON/OFF. When the radio is On, the MIC_HI line is normally 9 V and, when the PTT is pressed, a typical microphone will bias between 4 and 6 V, so the threshold on a comparator (U602-2) is set to about 2.5 V for the ON/OFF condition. When the power is Off, bias is supplied by R609 through CR601 to allow the ON/OFF circuit to work. The other half of CR601 is to block the normal microphone phantom power from loading this circuit down when the radio is off.

Regulator U603 between the SWB+ line and J5-22 (SW_B+_REG_J5) keeps alternator whine from coupling onto the MIC_HI line when supplying power to the control head during transmit.

An RC time constant resets the D-flop to a known condition of Off each time a power source is actively applied to A+. Another comparator (U602-1) monitors the condition of a reset line on J5. J5-4 needs to be grounded for the D-flop to be allowed to toggle to the On condition. This is normally accomplished when the HHCH is connected to the J5 connector, either directly or through a remote "Y" cable.

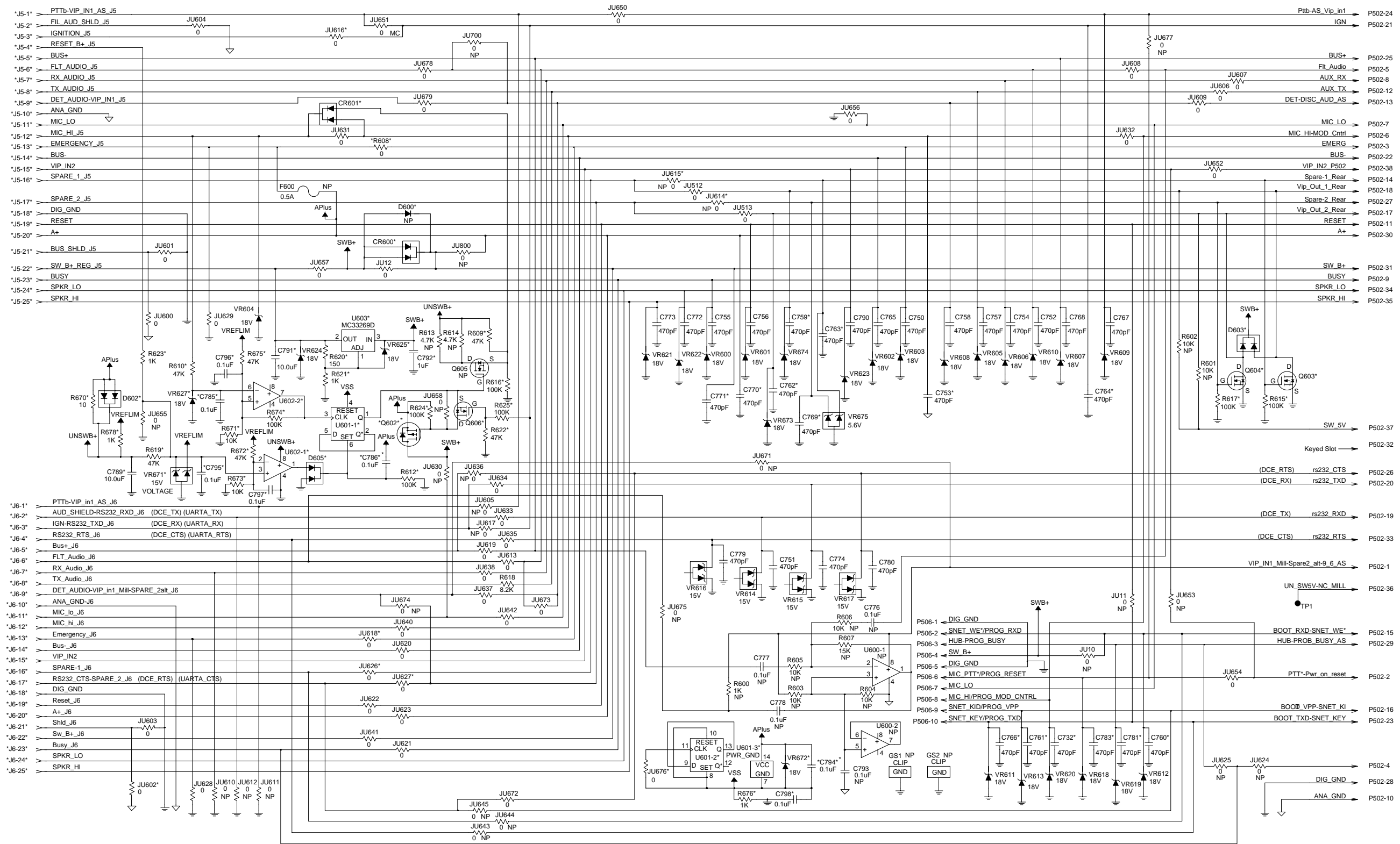
Ignition sense is accomplished through Q606, which allows Q602 to be biased on when the IGN line is high. This allows the radio to be turned off by the ignition switch of the vehicle without losing the memory of the last ON/OFF condition, which is maintained by the D-flop and A+.

Another feature of the HHCH is POTT: Power-on-to-Transmit. If the D-flop is off, pressing the PTT button causes the MIC_HI line to momentarily go low enough to turn the radio on. It is assumed that no one would press the PTT unless they had the desire to transmit. This is useful if the operator has difficulty finding the On button in an emergency. The way to defeat this option, to prevent unintentional power-On, is to add Q605, R613 and R614.

Another difference from the other control heads is that the HHCH does not have internal VIP transistors for accessories, such as for horn and lights. This is facilitated by Q604 and Q603 on the interconnect board.

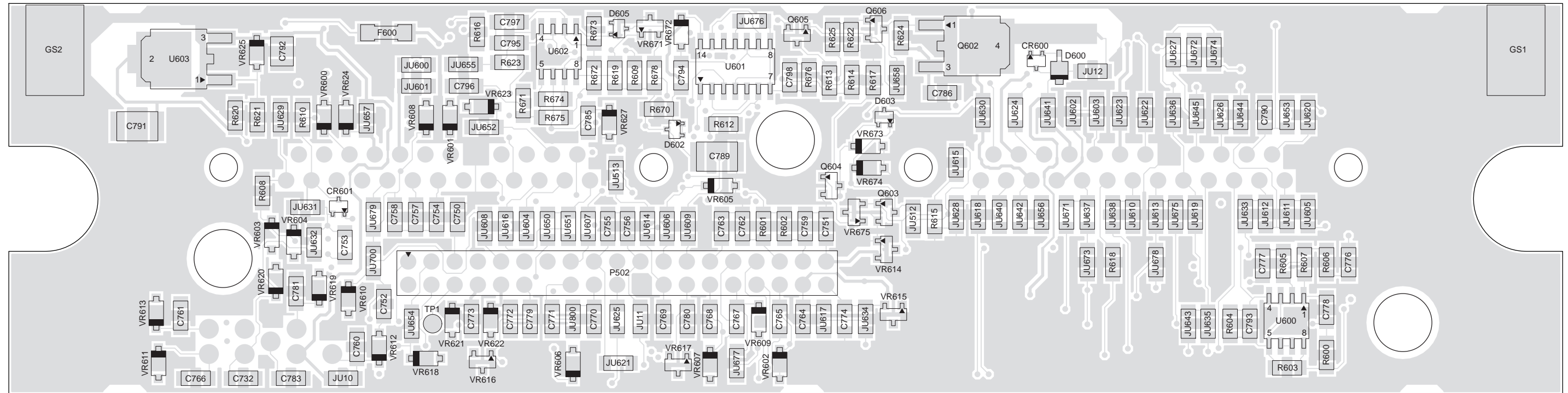
The final difference is protection from reverse current from SWB+ back to the A+ source by using a blocking diode CR600. For this reason, devices connected to SWB+ can be as much as 0.8 V lower than the A+ supply source.

8.3 Remote Interconnect Boards (Mid Power Only)



MAEPF-27907-O

Figure 8-1. HLN6883A/B, HLN6884A, HLN6885A/B Remote Interconnect Board Schematic (for Mid Power only)



MAEPF-27908-O

Figure 8-2. HLN6883A/B, HLN6884A, HLN6885A/B Remote Interconnect Board Component Location Diagram (for Mid Power only)

HLN6883A/B Remote Interconnect Board (Standard)
Parts List

Reference Designator	Motorola Part Number	Description
PCB	8485919E01	PCB INTERCONNECT HLN6883B
-	1010041C22	SOLDER PASTE
-	1105033S02	RIBBON LABEL LT. PACK LABEL
-	1105033S13	RIBBON LBL
-	5405569Y02	LBL BARCODE APC
-	5405569Y03	LABEL BARCODE
HD001	0300139581	SCR MCH 4-40X5/16 PHLPAN STL
HD002	0300139581	SCR MCH 4-40X5/16 PHLPAN STL
HD003	0300139581	SCR MCH 4-40X5/16 PHLPAN STL
HD004	0300139581	SCR MCH 4-40X5/16 PHLPAN STL
JU12	0611077A01	RES CHIP JUMPER
JU512	0611077A01	RES CHIP JUMPER
JU513	0611077A01	RES CHIP JUMPER
JU600	0611077A01	RES CHIP JUMPER
JU601	0611077A01	RES CHIP JUMPER
JU603	0611077A01	RES CHIP JUMPER
JU604	0611077A01	RES CHIP JUMPER
JU606	0611077A01	RES CHIP JUMPER
JU607	0611077A01	RES CHIP JUMPER
JU608	0611077A01	RES CHIP JUMPER
JU609	0611077A01	RES CHIP JUMPER
JU613	0611077A01	RES CHIP JUMPER
JU619	0611077A01	RES CHIP JUMPER
JU620	0611077A01	RES CHIP JUMPER
JU621	0611077A01	RES CHIP JUMPER
JU622	0611077A01	RES CHIP JUMPER
JU623	0611077A01	RES CHIP JUMPER
JU628	0611077A01	RES CHIP JUMPER
JU629	0611077A01	RES CHIP JUMPER
JU631	0611077A01	RES CHIP JUMPER
JU632	0611077A01	RES CHIP JUMPER
JU633	0611077A01	RES CHIP JUMPER
JU634	0611077A01	RES CHIP JUMPER

Reference Designator	Motorola Part Number	Description
JU635	0611077A01	RES CHIP JUMPER
JU637	0611077A01	RES CHIP JUMPER
JU638	0611077A01	RES CHIP JUMPER
JU640	0611077A01	RES CHIP JUMPER
JU641	0611077A01	RES CHIP JUMPER
JU642	0611077A01	RES CHIP JUMPER
JU650	0611077A01	RES CHIP JUMPER
JU654	0611077A01	RES CHIP JUMPER
JU656	0611077A01	RES CHIP JUMPER
JU657	0611077A01	RES CHIP JUMPER
JU672	0611077A01	RES CHIP JUMPER
JU673	0611077A01	RES CHIP JUMPER
JU678	0611077A01	RES CHIP JUMPER
JU679	0611077A01	RES CHIP JUMPER
R608	0611077A01	RES CHIP JUMPER
R618	0611077A96	RES CHIP 8200 5 1/8
J5	0980159P02	CONNECTOR 25-PIN
J6	0980159P02	CONNECTOR 25-PIN
C750	2113740B65	CAP CHIP REEL CL1 +/-30 470
C751	2113740B65	CAP CHIP REEL CL1 +/-30 470
C752	2113740B65	CAP CHIP REEL CL1 +/-30 470
C754	2113740B65	CAP CHIP REEL CL1 +/-30 470
C755	2113740B65	CAP CHIP REEL CL1 +/-30 470
C756	2113740B65	CAP CHIP REEL CL1 +/-30 470
C757	2113740B65	CAP CHIP REEL CL1 +/-30 470
C758	2113740B65	CAP CHIP REEL CL1 +/-30 470
C765	2113740B65	CAP CHIP REEL CL1 +/-30 470
C767	2113740B65	CAP CHIP REEL CL1 +/-30 470
C768	2113740B65	CAP CHIP REEL CL1 +/-30 470
C772	2113740B65	CAP CHIP REEL CL1 +/-30 470
C773	2113740B65	CAP CHIP REEL CL1 +/-30 470

Reference Designator	Motorola Part Number	Description
C774	2113740B65	CAP CHIP REEL CL1 +/-30 470
C779	2113740B65	CAP CHIP REEL CL1 +/-30 470
C780	2113740B65	CAP CHIP REEL CL1 +/-30 470
C790	2113740B65	CAP CHIP REEL CL1 +/-30 470
P506	2880068M01	HEADER MIC
P502	2885361E01	CONN 38 PIN MALE (RM CH)
VR675	4805656W03	DIODE DUAL 5.6V ZENER
VR614	4805656W10	DIODE DUAL 15 VOLT ZENER
VR615	4805656W10	DIODE DUAL 15 VOLT ZENER
VR616	4805656W10	DIODE DUAL 15 VOLT ZENER
VR617	4805656W10	DIODE DUAL 15 VOLT ZENER
VR600	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR601	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR602	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR603	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR604	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR605	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR606	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR607	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR608	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR609	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR610	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR611	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR612	4813830C31	DIODE 18V 'J3' MMSZ5248BT1

Reference Designator	Motorola Part Number	Description
VR613	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR618	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR619	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR620	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR621	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR622	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR623	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR673	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR674	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
C732	NOTPLACED	
C753	NOTPLACED	
C759	NOTPLACED	
C760	NOTPLACED	
C761	NOTPLACED	
C762	NOTPLACED	
C763	NOTPLACED	
C764	NOTPLACED	
C766	NOTPLACED	
C769	NOTPLACED	
C770	NOTPLACED	
C771	NOTPLACED	
C776	NOTPLACED	
C777	NOTPLACED	
C778	NOTPLACED	
C781	NOTPLACED	
C783	NOTPLACED	
C785	NOTPLACED	
C786	NOTPLACED	
C789	NOTPLACED	
C791	NOTPLACED	
C792	NOTPLACED	
C793	NOTPLACED	
C794	NOTPLACED	
C795	NOTPLACED	

Reference Designator	Motorola Part Number	Description
C796	NOTPLACED	
C797	NOTPLACED	
C798	NOTPLACED	
CR600	NOTPLACED	
CR601	NOTPLACED	
D600	NOTPLACED	
D602	NOTPLACED	
D603	NOTPLACED	
D605	NOTPLACED	
F600	NOTPLACED	
GS1	NOTPLACED	
GS2	NOTPLACED	
JU10	NOTPLACED	
JU11	NOTPLACED	
JU602	NOTPLACED	
JU605	NOTPLACED	
JU610	NOTPLACED	
JU611	NOTPLACED	
JU612	NOTPLACED	
JU614	NOTPLACED	
JU615	NOTPLACED	
JU616	NOTPLACED	
JU617	NOTPLACED	
JU618	NOTPLACED	
JU624	NOTPLACED	
JU625	NOTPLACED	
JU626	NOTPLACED	
JU627	NOTPLACED	
JU630	NOTPLACED	
JU636	NOTPLACED	
JU643	NOTPLACED	
JU644	NOTPLACED	
JU645	NOTPLACED	
JU651	NOTPLACED	
JU652	NOTPLACED	
JU653	NOTPLACED	
JU655	NOTPLACED	
JU658	NOTPLACED	
JU671	NOTPLACED	
JU674	NOTPLACED	
JU675	NOTPLACED	

Reference Designator	Motorola Part Number	Description
JU676	NOTPLACED	
JU677	NOTPLACED	
JU700	NOTPLACED	
JU800	NOTPLACED	
Q602	NOTPLACED	
Q603	NOTPLACED	
Q604	NOTPLACED	
Q605	NOTPLACED	
Q606	NOTPLACED	
R600	NOTPLACED	
R601	NOTPLACED	
R602	NOTPLACED	
R603	NOTPLACED	
R604	NOTPLACED	
R605	NOTPLACED	
R606	NOTPLACED	
R607	NOTPLACED	
R609	NOTPLACED	
R610	NOTPLACED	
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R616	NOTPLACED	
R617	NOTPLACED	
R619	NOTPLACED	
R620	NOTPLACED	
R621	NOTPLACED	
R622	NOTPLACED	
R623	NOTPLACED	
R624	NOTPLACED	
R625	NOTPLACED	
R670	NOTPLACED	
R671	NOTPLACED	
R672	NOTPLACED	
R673	NOTPLACED	
R674	NOTPLACED	
R675	NOTPLACED	
R676	NOTPLACED	
R678	NOTPLACED	
U600	NOTPLACED	

Reference Designator	Motorola Part Number	Description
U601	NOTPLACED	
U602	NOTPLACED	
U603	NOTPLACED	
VR624	NOTPLACED	
VR625	NOTPLACED	
VR627	NOTPLACED	
VR671	NOTPLACED	
VR672	NOTPLACED	

HLN6884A Remote Interconnect Board (Motorcycle) Parts List

Reference Designator	Motorola Part Number	Description
PCB	8485919E01	PCB INTERCONNECT HLN6884A
-	1010041C22	SOLDER PASTE
-	1105033S02	RIBBON LABEL LT. PACK LABEL
-	1105033S13	RIBBON LBL
-	5405569Y02	LBL BARCODE APC
-	5405569Y03	LABEL BARCODE
HD001	0300139581	SCR MCH 4-40X5/16 PHLPAN STL
HD002	0300139581	SCR MCH 4-40X5/16 PHLPAN STL
JU12	0611077A01	RES CHIP JUMPER
JU512	0611077A01	RES CHIP JUMPER
JU513	0611077A01	RES CHIP JUMPER
JU600	0611077A01	RES CHIP JUMPER
JU601	0611077A01	RES CHIP JUMPER
JU603	0611077A01	RES CHIP JUMPER
JU604	0611077A01	RES CHIP JUMPER
JU606	0611077A01	RES CHIP JUMPER
JU607	0611077A01	RES CHIP JUMPER
JU608	0611077A01	RES CHIP JUMPER
JU609	0611077A01	RES CHIP JUMPER
JU619	0611077A01	RES CHIP JUMPER
JU620	0611077A01	RES CHIP JUMPER
JU621	0611077A01	RES CHIP JUMPER
JU622	0611077A01	RES CHIP JUMPER
JU623	0611077A01	RES CHIP JUMPER
JU631	0611077A01	RES CHIP JUMPER

Reference Designator	Motorola Part Number	Description
JU632	0611077A01	RES CHIP JUMPER
JU633	0611077A01	RES CHIP JUMPER
JU634	0611077A01	RES CHIP JUMPER
JU635	0611077A01	RES CHIP JUMPER
JU637	0611077A01	RES CHIP JUMPER
JU638	0611077A01	RES CHIP JUMPER
JU640	0611077A01	RES CHIP JUMPER
JU641	0611077A01	RES CHIP JUMPER
JU642	0611077A01	RES CHIP JUMPER
JU651	0611077A01	RES CHIP JUMPER
JU654	0611077A01	RES CHIP JUMPER
JU656	0611077A01	RES CHIP JUMPER
JU657	0611077A01	RES CHIP JUMPER
JU672	0611077A01	RES CHIP JUMPER
JU673	0611077A01	RES CHIP JUMPER
JU678	0611077A01	RES CHIP JUMPER
JU679	0611077A01	RES CHIP JUMPER
R608	0611077A74	RES CHIP 1000 5 1/8
R618	0611077A96	RES CHIP 8200 5 1/8
J5	0980159P02	CONNECTOR 25-PIN
C750	2113740B65	CAP CHIP REEL CL1 +/-30 470
C751	2113740B65	CAP CHIP REEL CL1 +/-30 470
C752	2113740B65	CAP CHIP REEL CL1 +/-30 470
C754	2113740B65	CAP CHIP REEL CL1 +/-30 470
C755	2113740B65	CAP CHIP REEL CL1 +/-30 470
C756	2113740B65	CAP CHIP REEL CL1 +/-30 470
C757	2113740B65	CAP CHIP REEL CL1 +/-30 470
C758	2113740B65	CAP CHIP REEL CL1 +/-30 470
C765	2113740B65	CAP CHIP REEL CL1 +/-30 470
C767	2113740B65	CAP CHIP REEL CL1 +/-30 470
C768	2113740B65	CAP CHIP REEL CL1 +/-30 470
C772	2113740B65	CAP CHIP REEL CL1 +/-30 470

Reference Designator	Motorola Part Number	Description
C773	2113740B65	CAP CHIP REEL CL1 +/-30 470
C774	2113740B65	CAP CHIP REEL CL1 +/-30 470
C779	2113740B65	CAP CHIP REEL CL1 +/-30 470
C780	2113740B65	CAP CHIP REEL CL1 +/-30 470
C790	2113740B65	CAP CHIP REEL CL1 +/-30 470
P506	2880068M01	HEADER MIC
P502	2885361E01	CONN 38 PIN MALE (RM CH)
VR675	4805656W03	DIODE DUAL 5.6V ZENER
VR614	4805656W10	DIODE DUAL 15 VOLT ZENER
VR615	4805656W10	DIODE DUAL 15 VOLT ZENER
VR616	4805656W10	DIODE DUAL 15 VOLT ZENER
VR617	4805656W10	DIODE DUAL 15 VOLT ZENER
VR600	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR601	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR602	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR603	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR604	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR605	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR606	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR607	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR608	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR609	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR610	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR611	4813830C31	DIODE 18V 'J3' MMSZ5248BT1

Reference Designator	Motorola Part Number	Description
VR612	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR613	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR618	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR619	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR620	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR621	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR622	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR623	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR673	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR674	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
C732	NOTPLACED	64AM DUMMY PART NUMBER
C753	NOTPLACED	
C759	NOTPLACED	
C760	NOTPLACED	
C761	NOTPLACED	
C762	NOTPLACED	
C763	NOTPLACED	
C764	NOTPLACED	
C766	NOTPLACED	
C769	NOTPLACED	
C770	NOTPLACED	
C771	NOTPLACED	
C776	NOTPLACED	
C777	NOTPLACED	
C778	NOTPLACED	
C781	NOTPLACED	
C783	NOTPLACED	
C785	NOTPLACED	
C786	NOTPLACED	
C789	NOTPLACED	
C791	NOTPLACED	
C792	NOTPLACED	
C793	NOTPLACED	

Reference Designator	Motorola Part Number	Description
C794	NOTPLACED	
C795	NOTPLACED	
C796	NOTPLACED	
C797	NOTPLACED	
C798	NOTPLACED	
CR600	NOTPLACED	
CR601	NOTPLACED	
D600	NOTPLACED	
D602	NOTPLACED	
D603	NOTPLACED	
D605	NOTPLACED	
F600	NOTPLACED	
GS1	NOTPLACED	
GS2	NOTPLACED	
J6	NOTPLACED	
JU10	NOTPLACED	
JU11	NOTPLACED	
JU602	NOTPLACED	
JU605	NOTPLACED	
JU610	NOTPLACED	
JU611	NOTPLACED	
JU612	NOTPLACED	
JU613	NOTPLACED	
JU614	NOTPLACED	
JU615	NOTPLACED	
JU616	NOTPLACED	
JU617	NOTPLACED	
JU618	NOTPLACED	
JU624	NOTPLACED	
JU625	NOTPLACED	
JU626	NOTPLACED	
JU627	NOTPLACED	
JU628	NOTPLACED	
JU629	NOTPLACED	
JU630	NOTPLACED	
JU636	NOTPLACED	
JU643	NOTPLACED	
JU644	NOTPLACED	
JU645	NOTPLACED	
JU650	NOTPLACED	
JU652	NOTPLACED	

Reference Designator	Motorola Part Number	Description
JU653	NOTPLACED	
JU655	NOTPLACED	
JU658	NOTPLACED	
JU671	NOTPLACED	
JU674	NOTPLACED	
JU675	NOTPLACED	
JU676	NOTPLACED	
JU677	NOTPLACED	
JU700	NOTPLACED	
JU800	NOTPLACED	
Q602	NOTPLACED	
Q603	NOTPLACED	
Q604	NOTPLACED	
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Q606	NOTPLACED	
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R614	NOTPLACED	
R615	NOTPLACED	
R616	NOTPLACED	
R617	NOTPLACED	
R619	NOTPLACED	
R620	NOTPLACED	
R621	NOTPLACED	
R622	NOTPLACED	
R623	NOTPLACED	
R624	NOTPLACED	
R625	NOTPLACED	
R670	NOTPLACED	
R671	NOTPLACED	
R672	NOTPLACED	

Reference Designator	Motorola Part Number	Description
R673	NOTPLACED	
R674	NOTPLACED	
R675	NOTPLACED	
R676	NOTPLACED	
R678	NOTPLACED	
U600	NOTPLACED	
U601	NOTPLACED	
U602	NOTPLACED	
U603	NOTPLACED	
VR624	NOTPLACED	
VR625	NOTPLACED	
VR627	NOTPLACED	
VR671	NOTPLACED	
VR672	NOTPLACED	

HLN6885A/B Remote Interconnect Board (W3 Hand-Held Control Head) Parts List

Reference Designator	Motorola Part Number	Description
PCB	8485919E01	PCB INTERCONNECT HLN6885B
-	1010041C22	SOLDER PASTE
-	1105033S02	RIBBON LABEL LT. PACK LABEL
-	1105033S13	RIBBON LBL
-	5405569Y02	LBL BARCODE APC
-	5405569Y03	LABEL BARCODE
HD001	0300139581	SCR MCH 4-40X5/16 PHLPAN STL
HD002	0300139581	SCR MCH 4-40X5/16 PHLPAN STL
HD003	0300139581	SCR MCH 4-40X5/16 PHLPAN STL
HD004	0300139581	SCR MCH 4-40X5/16 PHLPAN STL
JU512	0611077A01	RES CHIP JUMPER
JU513	0611077A01	RES CHIP JUMPER
JU600	0611077A01	RES CHIP JUMPER
JU602	0611077A01	RES CHIP JUMPER
JU604	0611077A01	RES CHIP JUMPER
JU606	0611077A01	RES CHIP JUMPER

Reference Designator	Motorola Part Number	Description
JU607	0611077A01	RES CHIP JUMPER
JU608	0611077A01	RES CHIP JUMPER
JU609	0611077A01	RES CHIP JUMPER
JU613	0611077A01	RES CHIP JUMPER
JU616	0611077A01	RES CHIP JUMPER
JU618	0611077A01	RES CHIP JUMPER
JU619	0611077A01	RES CHIP JUMPER
JU620	0611077A01	RES CHIP JUMPER
JU621	0611077A01	RES CHIP JUMPER
JU622	0611077A01	RES CHIP JUMPER
JU623	0611077A01	RES CHIP JUMPER
JU626	0611077A01	RES CHIP JUMPER
JU632	0611077A01	RES CHIP JUMPER
JU633	0611077A01	RES CHIP JUMPER
JU634	0611077A01	RES CHIP JUMPER
JU635	0611077A01	RES CHIP JUMPER
JU637	0611077A01	RES CHIP JUMPER
JU638	0611077A01	RES CHIP JUMPER
JU640	0611077A01	RES CHIP JUMPER
JU641	0611077A01	RES CHIP JUMPER
JU642	0611077A01	RES CHIP JUMPER
JU650	0611077A01	RES CHIP JUMPER
JU652	0611077A01	RES CHIP JUMPER
JU654	0611077A01	RES CHIP JUMPER
JU656	0611077A01	RES CHIP JUMPER
JU672	0611077A01	RES CHIP JUMPER
JU673	0611077A01	RES CHIP JUMPER
JU676	0611077A01	RES CHIP JUMPER
JU678	0611077A01	RES CHIP JUMPER
JU679	0611077A01	RES CHIP JUMPER
R608	0611077A01	RES CHIP JUMPER
R670	0611077A26	RES CHIP 10 5 1/8W
R620	0611077A54	RES CHIP 150 5 1/8W
R621	0611077A74	RES CHIP 1000 5 1/8
R623	0611077A74	RES CHIP 1000 5 1/8
R676	0611077A74	RES CHIP 1000 5 1/8
R678	0611077A74	RES CHIP 1000 5 1/8
R618	0611077A96	RES CHIP 8200 5 1/8
R671	0611077A98	RES CHIP 10K 5 1/8W
R673	0611077A98	RES CHIP 10K 5 1/8W
R609	0611077B15	RES CHIP 47K 5 1/8W

Reference Designator	Motorola Part Number	Description
R610	0611077B15	RES CHIP 47K 5 1/8W
R619	0611077B15	RES CHIP 47K 5 1/8W
R622	0611077B15	RES CHIP 47K 5 1/8W
R672	0611077B15	RES CHIP 47K 5 1/8W
R675	0611077B15	RES CHIP 47K 5 1/8W
R612	0611077B23	RES CHIP 100K 5 1/8W
R615	0611077B23	RES CHIP 100K 5 1/8W
R616	0611077B23	RES CHIP 100K 5 1/8W
R617	0611077B23	RES CHIP 100K 5 1/8W
R624	0611077B23	RES CHIP 100K 5 1/8W
R625	0611077B23	RES CHIP 100K 5 1/8W
R674	0611077B23	RES CHIP 100K 5 1/8W
J5	0980159P02	CONNECTOR 25-PIN
J6	0980159P02	CONNECTOR 25-PIN
C789	2109822S06	CAP CHIP CER 10UF 16V
C791	2109822S06	CAP CHIP CER 10UF 16V
C792	2109822S09	CAP CERAMIC CHIP 1UF 20 50V
C732	2113740B65	CAP CHIP REEL CL1 +/-30 470
C750	2113740B65	CAP CHIP REEL CL1 +/-30 470
C751	2113740B65	CAP CHIP REEL CL1 +/-30 470
C752	2113740B65	CAP CHIP REEL CL1 +/-30 470
C753	2113740B65	CAP CHIP REEL CL1 +/-30 470
C754	2113740B65	CAP CHIP REEL CL1 +/-30 470
C755	2113740B65	CAP CHIP REEL CL1 +/-30 470
C756	2113740B65	CAP CHIP REEL CL1 +/-30 470
C757	2113740B65	CAP CHIP REEL CL1 +/-30 470
C758	2113740B65	CAP CHIP REEL CL1 +/-30 470
C759	2113740B65	CAP CHIP REEL CL1 +/-30 470
C760	2113740B65	CAP CHIP REEL CL1 +/-30 470
C761	2113740B65	CAP CHIP REEL CL1 +/-30 470

Reference Designator	Motorola Part Number	Description
C762	2113740B65	CAP CHIP REEL CL1 +/-30 470
C763	2113740B65	CAP CHIP REEL CL1 +/-30 470
C764	2113740B65	CAP CHIP REEL CL1 +/-30 470
C765	2113740B65	CAP CHIP REEL CL1 +/-30 470
C766	2113740B65	CAP CHIP REEL CL1 +/-30 470
C767	2113740B65	CAP CHIP REEL CL1 +/-30 470
C768	2113740B65	CAP CHIP REEL CL1 +/-30 470
C769	2113740B65	CAP CHIP REEL CL1 +/-30 470
C770	2113740B65	CAP CHIP REEL CL1 +/-30 470
C771	2113740B65	CAP CHIP REEL CL1 +/-30 470
C772	2113740B65	CAP CHIP REEL CL1 +/-30 470
C773	2113740B65	CAP CHIP REEL CL1 +/-30 470
C774	2113740B65	CAP CHIP REEL CL1 +/-30 470
C779	2113740B65	CAP CHIP REEL CL1 +/-30 470
C780	2113740B65	CAP CHIP REEL CL1 +/-30 470
C781	2113740B65	CAP CHIP REEL CL1 +/-30 470
C783	2113740B65	CAP CHIP REEL CL1 +/-30 470
C790	2113740B65	CAP CHIP REEL CL1 +/-30 470
C785	2113741N69	CAP CHIP CL2 X7R 10% 100000
C786	2113741N69	CAP CHIP CL2 X7R 10% 100000
C794	2113741N69	CAP CHIP CL2 X7R 10% 100000
C795	2113741N69	CAP CHIP CL2 X7R 10% 100000
C796	2113741N69	CAP CHIP CL2 X7R 10% 100000

Reference Designator	Motorola Part Number	Description
C797	2113741N69	CAP CHIP CL2 X7R 10% 100000
C798	2113741N69	CAP CHIP CL2 X7R 10% 100000
P506	2880068M01	HEADER MIC
P502	2885361E01	CONN 38 PIN MALE (RM CH)
CR600	4805218N57	DIODE DUAL
CR601	4805218N57	DIODE DUAL
D602	4805218N57	DIODE DUAL
D603	4805218N57	DIODE DUAL
D605	4805218N57	DIODE DUAL
VR675	4805656W03	DIODE DUAL 5.6V ZENER
VR614	4805656W10	DIODE DUAL 15 VOLT ZENER
VR615	4805656W10	DIODE DUAL 15 VOLT ZENER
VR616	4805656W10	DIODE DUAL 15 VOLT ZENER
VR617	4805656W10	DIODE DUAL 15 VOLT ZENER
VR671	4805656W10	DIODE DUAL 15 VOLT ZENER
Q603	4809579E16	TSTR MOSFET N-CHAN TN0200T
Q604	4809579E16	TSTR MOSFET N-CHAN TN0200T
Q606	4809579E16	TSTR MOSFET N-CHAN TN0200T
Q602	4813821A09	TSTR P-CH 60V 12A _2955_
VR600	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR601	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR602	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR603	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR604	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR605	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR606	4813830C31	DIODE 18V 'J3' MMSZ5248BT1

Reference Designator	Motorola Part Number	Description
VR607	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR608	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR609	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR610	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR611	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR612	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR613	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR618	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR619	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR620	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR621	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR622	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR623	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR624	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR625	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR627	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR672	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR673	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR674	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
U601	5113806A05	IC FLIP-FLOP,DUAL D
U603	5113816A19	IC ADJ LO DROPOUT POS REG .8A
U602	5113818A06	IC LOW PWR SING SPLY MC33172DR
C776	NOTPLACED	64AM DUMMY PART NUMBER
C777	NOTPLACED	
C778	NOTPLACED	

Reference Designator	Motorola Part Number	Description
C793	NOTPLACED	
D600	NOTPLACED	
F600	NOTPLACED	
GS1	NOTPLACED	
GS2	NOTPLACED	
JU10	NOTPLACED	
JU11	NOTPLACED	
JU12	NOTPLACED	
JU601	NOTPLACED	
JU603	NOTPLACED	
JU605	NOTPLACED	
JU610	NOTPLACED	
JU611	NOTPLACED	
JU612	NOTPLACED	
JU614	NOTPLACED	
JU615	NOTPLACED	
JU617	NOTPLACED	
JU624	NOTPLACED	
JU625	NOTPLACED	
JU627	NOTPLACED	
JU628	NOTPLACED	
JU629	NOTPLACED	
JU630	NOTPLACED	
JU631	NOTPLACED	
JU636	NOTPLACED	
JU643	NOTPLACED	
JU644	NOTPLACED	
JU645	NOTPLACED	
JU651	NOTPLACED	
JU653	NOTPLACED	
JU655	NOTPLACED	
JU657	NOTPLACED	
JU658	NOTPLACED	
JU671	NOTPLACED	
JU674	NOTPLACED	
JU675	NOTPLACED	
JU677	NOTPLACED	
JU700	NOTPLACED	
JU800	NOTPLACED	
Q605	NOTPLACED	
R600	NOTPLACED	

Reference Designator	Motorola Part Number	Description
R601	NOTPLACED	
R602	NOTPLACED	
R603	NOTPLACED	
R604	NOTPLACED	
R605	NOTPLACED	
R606	NOTPLACED	
R607	NOTPLACED	
R613	NOTPLACED	
R614	NOTPLACED	
U600	NOTPLACED	

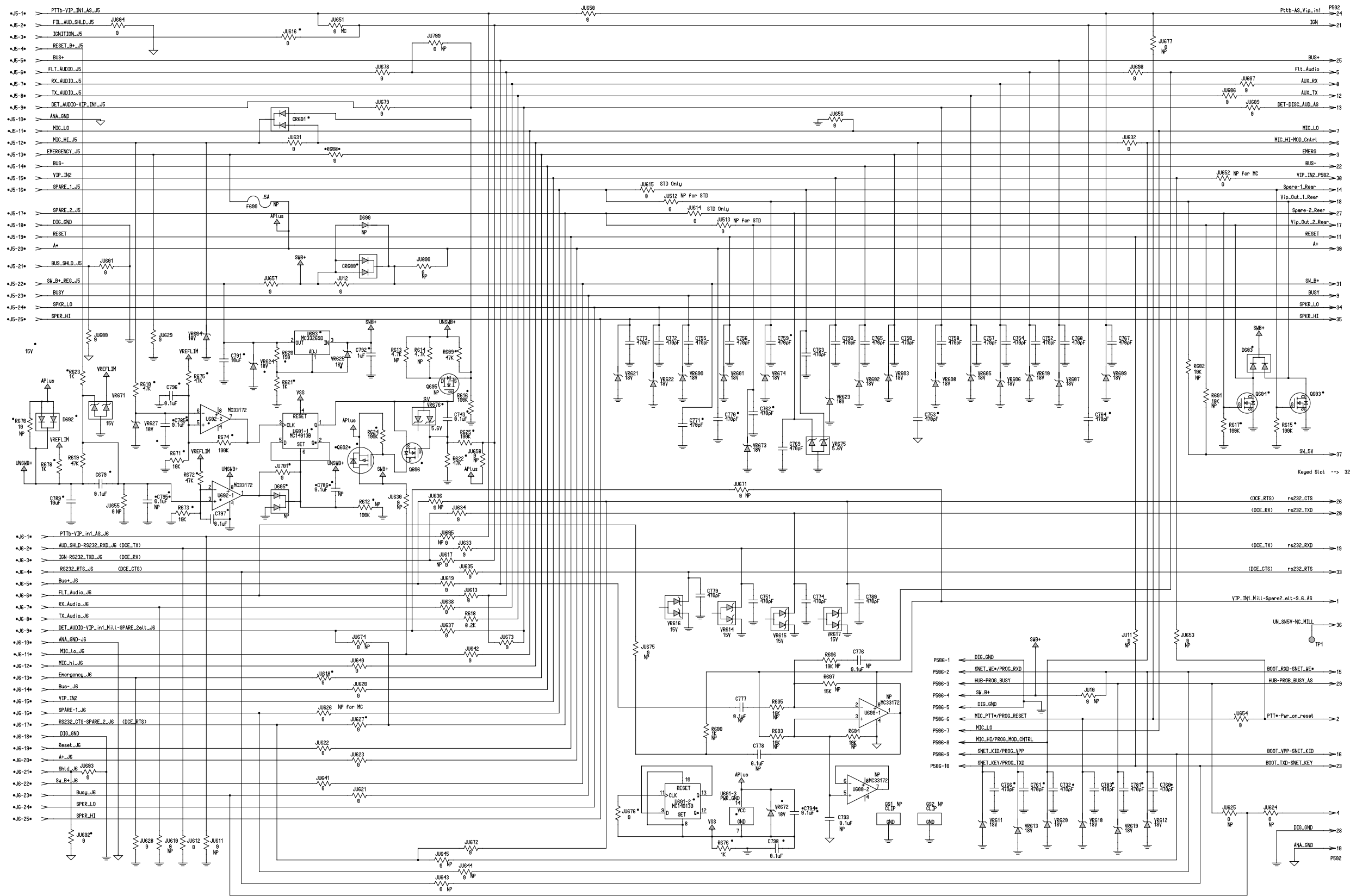


Figure 8-3. HLN6915B Remote Interconnect Board Schematic (for Mid Power only)

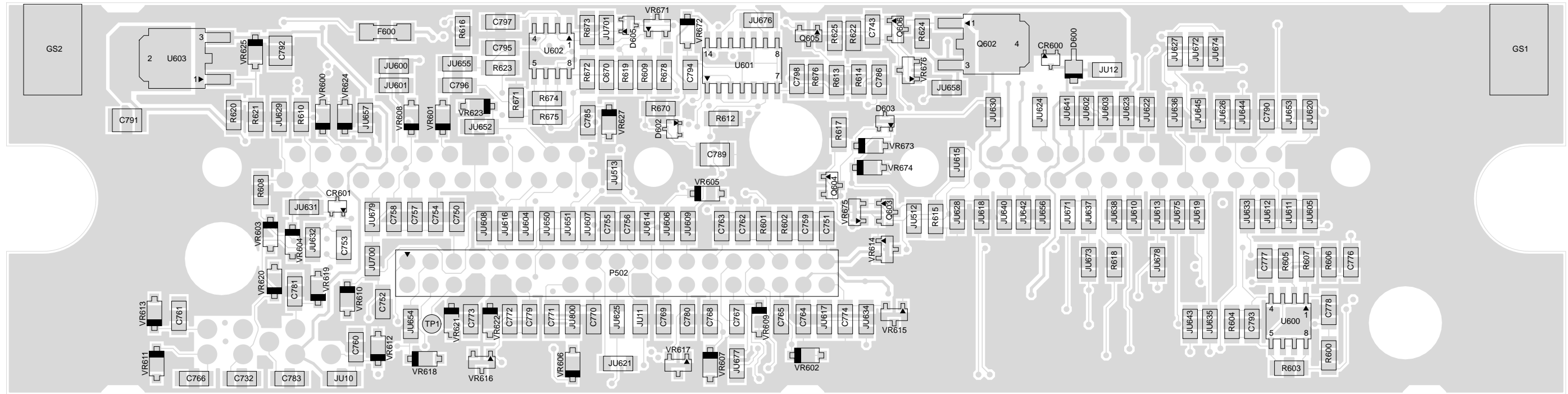


Figure 8-4. HLN6915B Remote Interconnect Board Component Location Diagram (for Mid Power only)

HLN6915B Remote Interconnect Board (W3 Hand-Held Control Head) Parts List

Reference Designator	Motorola Part Number	Description
PCB	8464613H01	PWB,INTFC,INTER-CONN,,4 LAYER
-	1010041C22	SOLDER PASTE
-	1105033S02	RIBBON LABEL LT. PACK LABEL
-	1105033S13	RIBBON LBL
-	5405569Y02	LBL BARCODE APC
-	5405569Y03	LBL BARCODE
HD001	0300139581	SCR MCH 4-40X5/16 PHL-PAN STL
HD002	0300139581	SCR MCH 4-40X5/16 PHL-PAN STL
HD003	0300139581	SCR MCH 4-40X5/16 PHL-PAN STL
HD004	0300139581	SCR MCH 4-40X5/16 PHL-PAN STL
JU512	0611077A01	RES CHIP JUMPER
JU606	0611077A01	RES CHIP JUMPER
JU608	0611077A01	RES CHIP JUMPER
JU613	0611077A01	RES CHIP JUMPER
JU618	0611077A01	RES CHIP JUMPER
JU634	0611077A01	RES CHIP JUMPER
JU633	0611077A01	RES CHIP JUMPER
JU632	0611077A01	RES CHIP JUMPER
JU626	0611077A01	RES CHIP JUMPER
JU623	0611077A01	RES CHIP JUMPER
JU622	0611077A01	RES CHIP JUMPER
JU621	0611077A01	RES CHIP JUMPER
JU620	0611077A01	RES CHIP JUMPER
JU619	0611077A01	RES CHIP JUMPER
R608	0611077A01	RES CHIP JUMPER
JU701	0611077A01	RES CHIP JUMPER
JU679	0611077A01	RES CHIP JUMPER
JU678	0611077A01	RES CHIP JUMPER
JU676	0611077A01	RES CHIP JUMPER
JU673	0611077A01	RES CHIP JUMPER
JU672	0611077A01	RES CHIP JUMPER
JU656	0611077A01	RES CHIP JUMPER
JU654	0611077A01	RES CHIP JUMPER

Reference Designator	Motorola Part Number	Description
JU652	0611077A01	RES CHIP JUMPER
JU650	0611077A01	RES CHIP JUMPER
JU642	0611077A01	RES CHIP JUMPER
JU641	0611077A01	RES CHIP JUMPER
JU640	0611077A01	RES CHIP JUMPER
JU638	0611077A01	RES CHIP JUMPER
JU637	0611077A01	RES CHIP JUMPER
JU635	0611077A01	RES CHIP JUMPER
JU616	0611077A01	RES CHIP JUMPER
JU609	0611077A01	RES CHIP JUMPER
JU607	0611077A01	RES CHIP JUMPER
JU604	0611077A01	RES CHIP JUMPER
JU513	0611077A01	RES CHIP JUMPER
JU602	0611077A01	RES CHIP JUMPER
JU600	0611077A01	RES CHIP JUMPER
R620	0611077A54	RES CHIP 150 5 1/8W
R621	0611077A74	RES CHIP 1000 5 1/8
R623	0611077A74	RES CHIP 1000 5 1/8
R676	0611077A74	RES CHIP 1000 5 1/8
R678	0611077A74	RES CHIP 1000 5 1/8
R618	0611077A96	RES CHIP 8200 5 1/8
R671	0611077A98	RES CHIP 10K 5 1/8W
R673	0611077A98	RES CHIP 10K 5 1/8W
R609	0611077B15	RES CHIP 47K 5 1/8W
R610	0611077B15	RES CHIP 47K 5 1/8W
R622	0611077B15	RES CHIP 47K 5 1/8W
R672	0611077B15	RES CHIP 47K 5 1/8W
R675	0611077B15	RES CHIP 47K 5 1/8W
R619	0611077B15	RES CHIP 47K 5 1/8W
R615	0611077B23	RES CHIP 100K 5 1/8W
R674	0611077B23	RES CHIP 100K 5 1/8W
R625	0611077B23	RES CHIP 100K 5 1/8W
R616	0611077B23	RES CHIP 100K 5 1/8W
R617	0611077B23	RES CHIP 100K 5 1/8W
R624	0611077B23	RES CHIP 100K 5 1/8W
J5	0980159P02	CONNECTOR 25-PIN
J6	0980159P02	CONNECTOR 25-PIN
C789	2108607Y03	10 UF/35V, 1210, Y5V, CERAMIC CAPAC
C791	2108607Y03	10 UF/35V, 1210, Y5V, CERAMIC CAPAC

Reference Designator	Motorola Part Number	Description
C792	2109822S09	CAP CERAMIC CHIP 1UF 20 50V
C732	2113740B65	CAP CHIP REEL CL1 30 470
C750	2113740B65	CAP CHIP REEL CL1 30 470
C753	2113740B65	CAP CHIP REEL CL1 30 470
C752	2113740B65	CAP CHIP REEL CL1 30 470
C751	2113740B65	CAP CHIP REEL CL1 30 470
C754	2113740B65	CAP CHIP REEL CL1 30 470
C756	2113740B65	CAP CHIP REEL CL1 30 470
C758	2113740B65	CAP CHIP REEL CL1 30 470
C779	2113740B65	CAP CHIP REEL CL1 30 470
C774	2113740B65	CAP CHIP REEL CL1 30 470
C773	2113740B65	CAP CHIP REEL CL1 30 470
C772	2113740B65	CAP CHIP REEL CL1 30 470
C771	2113740B65	CAP CHIP REEL CL1 30 470
C770	2113740B65	CAP CHIP REEL CL1 30 470
C769	2113740B65	CAP CHIP REEL CL1 30 470
C768	2113740B65	CAP CHIP REEL CL1 30 470
C767	2113740B65	CAP CHIP REEL CL1 30 470
C790	2113740B65	CAP CHIP REEL CL1 30 470
C783	2113740B65	CAP CHIP REEL CL1 30 470
C781	2113740B65	CAP CHIP REEL CL1 30 470
C780	2113740B65	CAP CHIP REEL CL1 30 470
C766	2113740B65	CAP CHIP REEL CL1 30 470

Reference Designator	Motorola Part Number	Description
C765	2113740B65	CAP CHIP REEL CL1 30 470
C764	2113740B65	CAP CHIP REEL CL1 30 470
C763	2113740B65	CAP CHIP REEL CL1 30 470
C762	2113740B65	CAP CHIP REEL CL1 30 470
C761	2113740B65	CAP CHIP REEL CL1 30 470
C760	2113740B65	CAP CHIP REEL CL1 30 470
C759	2113740B65	CAP CHIP REEL CL1 30 470
C757	2113740B65	CAP CHIP REEL CL1 30 470
C755	2113740B65	CAP CHIP REEL CL1 30 470
C670	2113741N69	CAP CHIP CL2 X7R 10% 100000
C743	2113741N69	CAP CHIP CL2 X7R 10% 100000
C785	2113741N69	CAP CHIP CL2 X7R 10% 100000
C794	2113741N69	CAP CHIP CL2 X7R 10% 100000
C797	2113741N69	CAP CHIP CL2 X7R 10% 100000
C798	2113741N69	CAP CHIP CL2 X7R 10% 100000
C796	2113741N69	CAP CHIP CL2 X7R 10% 100000
P506	2880068M01	HEADER MIC
P502	2885361E01	CONN 38 PIN MALE (RM CH)
CR600	4805218N57	DIODE DUAL
D602	4805218N57	DIODE DUAL
D603	4805218N57	DIODE DUAL
CR601	4805218N57	DIODE DUAL
VR675	4805656W03	DIODE DUAL 5.6V ZENER
VR614	4805656W10	DIODE DUAL 15 VOLT ZENER (GALAXY) I600
VR617	4805656W10	DIODE DUAL 15 VOLT ZENER (GALAXY) I600
VR671	4805656W10	DIODE DUAL 15 VOLT ZENER (GALAXY) I600

Reference Designator	Motorola Part Number	Description
VR616	4805656W10	DIODE DUAL 15 VOLT ZENER (GALAXY) I600
VR615	4805656W10	DIODE DUAL 15 VOLT ZENER (GALAXY) I600
Q602	4813821A09	TSTR P-CH 60V 12A _2955_
VR600	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR602	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR604	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR606	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR608	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR674	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR673	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR672	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR627	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR625	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR624	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR623	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR622	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR621	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR620	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR619	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR618	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR613	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR612	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR611	4813830C31	DIODE 18V 'J3' MMSZ5248BT1

Reference Designator	Motorola Part Number	Description
VR610	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR609	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR607	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR605	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR603	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR601	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
Q603	4885316E17	XSTR,POWER MOSFET 30V,2.5A,SINGLE
Q606	4885316E17	XSTR,POWER MOSFET 30V,2.5A,SINGLE
Q604	4885316E17	XSTR,POWER MOSFET 30V,2.5A,SINGLE
U601	5113806A05	IC FLIP-FLOP,DUAL D
U603	5113816A19	IC ASJ LO DROPOUT POS REG .8A
U602	5113818A06	IC LOW PWR SING SPLY MC33172DR
C776	NOTPLACED	64AM DUMMY PART NUMBER
C777	NOTPLACED	64AM DUMMY PART NUMBER
C778	NOTPLACED	64AM DUMMY PART NUMBER
C786	NOTPLACED	64AM DUMMY PART NUMBER
C793	NOTPLACED	64AM DUMMY PART NUMBER
C795	NOTPLACED	64AM DUMMY PART NUMBER
D600	NOTPLACED	64AM DUMMY PART NUMBER
D605	NOTPLACED	64AM DUMMY PART NUMBER
F600	NOTPLACED	64AM DUMMY PART NUMBER
GS1	NOTPLACED	64AM DUMMY PART NUMBER
GS2	NOTPLACED	64AM DUMMY PART NUMBER
JU10	NOTPLACED	64AM DUMMY PART NUMBER

Reference Designator	Motorola Part Number	Description
JU11	NOTPLACED	64AM DUMMY PART NUMBER
JU12	NOTPLACED	64AM DUMMY PART NUMBER
JU601	NOTPLACED	64AM DUMMY PART NUMBER
JU603	NOTPLACED	64AM DUMMY PART NUMBER
JU605	NOTPLACED	64AM DUMMY PART NUMBER
JU610	NOTPLACED	64AM DUMMY PART NUMBER
JU611	NOTPLACED	64AM DUMMY PART NUMBER
JU612	NOTPLACED	64AM DUMMY PART NUMBER
JU614	NOTPLACED	64AM DUMMY PART NUMBER
JU615	NOTPLACED	64AM DUMMY PART NUMBER
JU617	NOTPLACED	64AM DUMMY PART NUMBER
JU624	NOTPLACED	64AM DUMMY PART NUMBER
JU625	NOTPLACED	64AM DUMMY PART NUMBER
JU627	NOTPLACED	64AM DUMMY PART NUMBER
JU628	NOTPLACED	64AM DUMMY PART NUMBER
JU629	NOTPLACED	64AM DUMMY PART NUMBER
JU630	NOTPLACED	64AM DUMMY PART NUMBER
JU631	NOTPLACED	64AM DUMMY PART NUMBER
JU636	NOTPLACED	64AM DUMMY PART NUMBER
JU643	NOTPLACED	64AM DUMMY PART NUMBER
JU644	NOTPLACED	64AM DUMMY PART NUMBER
JU645	NOTPLACED	64AM DUMMY PART NUMBER
JU651	NOTPLACED	64AM DUMMY PART NUMBER

Reference Designator	Motorola Part Number	Description
JU653	NOTPLACED	64AM DUMMY PART NUMBER
JU655	NOTPLACED	64AM DUMMY PART NUMBER
JU657	NOTPLACED	64AM DUMMY PART NUMBER
JU658	NOTPLACED	64AM DUMMY PART NUMBER
JU671	NOTPLACED	64AM DUMMY PART NUMBER
JU674	NOTPLACED	64AM DUMMY PART NUMBER
JU675	NOTPLACED	64AM DUMMY PART NUMBER
JU677	NOTPLACED	64AM DUMMY PART NUMBER
JU700	NOTPLACED	64AM DUMMY PART NUMBER
JU800	NOTPLACED	64AM DUMMY PART NUMBER
Q605	NOTPLACED	64AM DUMMY PART NUMBER
R600	NOTPLACED	64AM DUMMY PART NUMBER
R601	NOTPLACED	64AM DUMMY PART NUMBER
R602	NOTPLACED	64AM DUMMY PART NUMBER
R603	NOTPLACED	64AM DUMMY PART NUMBER
R604	NOTPLACED	64AM DUMMY PART NUMBER
R605	NOTPLACED	64AM DUMMY PART NUMBER
R606	NOTPLACED	64AM DUMMY PART NUMBER
R607	NOTPLACED	64AM DUMMY PART NUMBER
R612	NOTPLACED	64AM DUMMY PART NUMBER
R613	NOTPLACED	64AM DUMMY PART NUMBER
R614	NOTPLACED	64AM DUMMY PART NUMBER
R670	NOTPLACED	64AM DUMMY PART NUMBER
U600	NOTPLACED	64AM DUMMY PART NO.

8.4 Remote Interconnect Board (High Power Only)

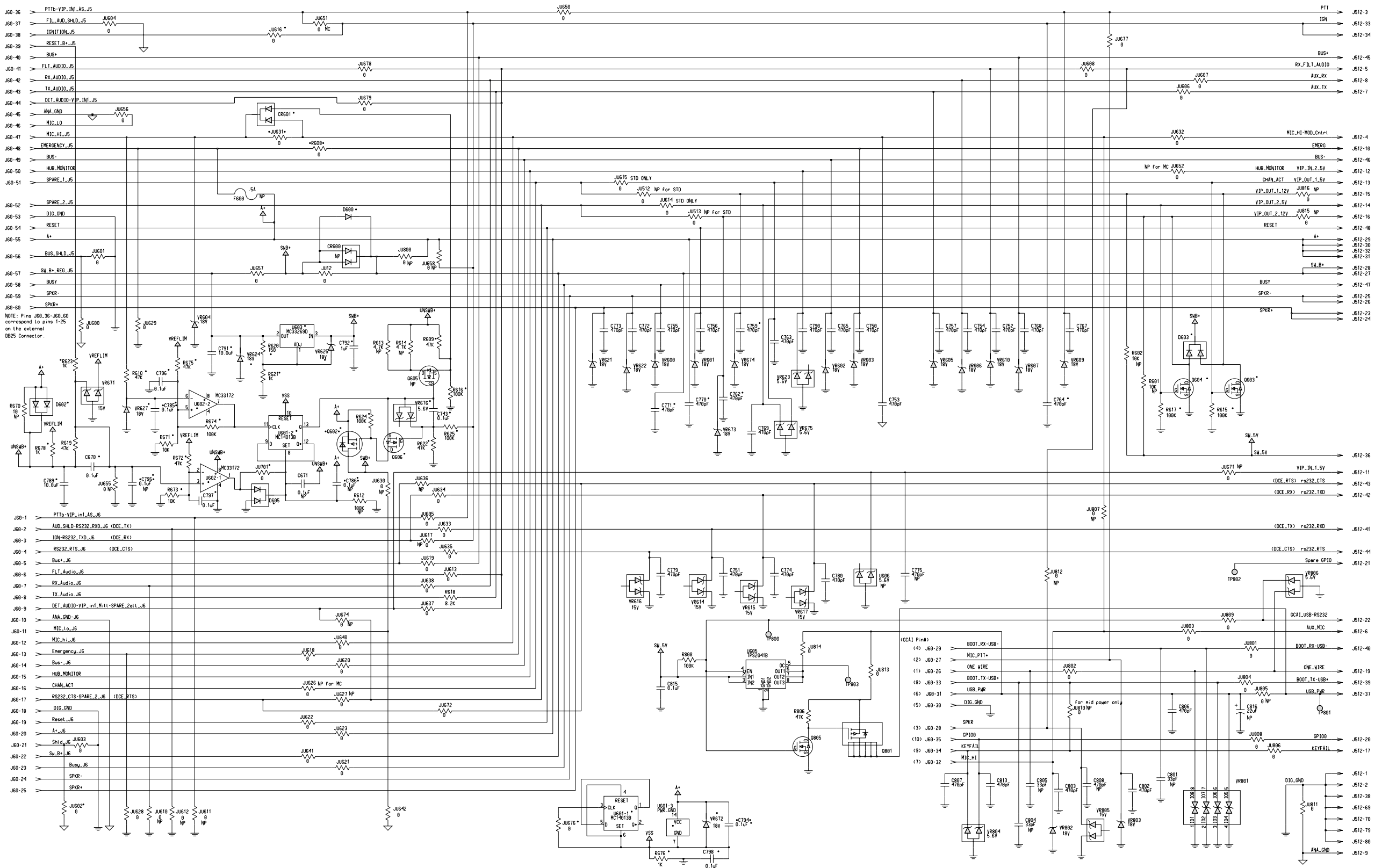


Figure 8-5. HLN6901C, HLN6902C Remote Interconnect Board Schematic (for High Power only)

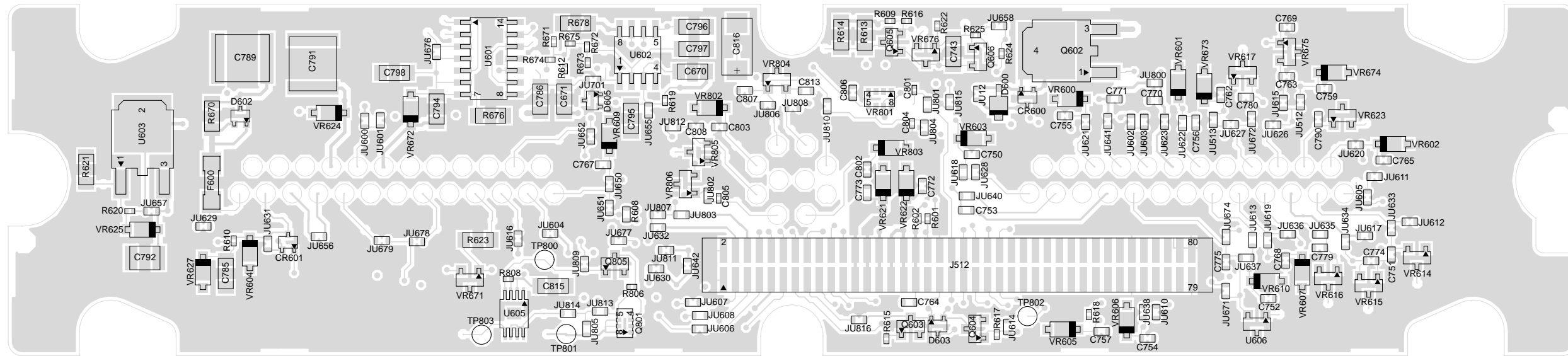


Figure 8-6. HLN6901C, HLN6902C Remote Interconnect Board Component Location Diagram (for High Power only)

**HLN6902C Remote Interconnect Board (Standard)
Parts List**

Reference Designator	Motorola Part Number	Description
PCB	8464334H01	PCB,INTFC,6 LAYER,INTERCONN
-	1085674C03	PASTE/NC-SMQ230
-	1105033S02	RIBBON LABEL LT. PACK LABEL
-	1105033S13	RIBBON LBL
-	5405569Y02	LBL BARCODE APC
-	5405569Y03	LBL BARCODE
JU12	0662057B47	CHIP RES 0 OHMS +.050 OHMS
JU600	0662057B47	CHIP RES 0 OHMS +.050 OHMS
JU601	0662057B47	CHIP RES 0 OHMS +.050 OHMS
JU603	0662057B47	CHIP RES 0 OHMS +.050 OHMS
JU607	0662057B47	CHIP RES 0 OHMS +.050 OHMS
JU613	0662057B47	CHIP RES 0 OHMS +.050 OHMS
JU615	0662057B47	CHIP RES 0 OHMS +.050 OHMS
JU620	0662057B47	CHIP RES 0 OHMS +.050 OHMS
JU622	0662057B47	CHIP RES 0 OHMS +.050 OHMS
JU635	0662057B47	CHIP RES 0 OHMS +.050 OHMS
JU634	0662057B47	CHIP RES 0 OHMS +.050 OHMS
JU633	0662057B47	CHIP RES 0 OHMS +.050 OHMS
JU632	0662057B47	CHIP RES 0 OHMS +.050 OHMS
JU631	0662057B47	CHIP RES 0 OHMS +.050 OHMS
JU629	0662057B47	CHIP RES 0 OHMS +.050 OHMS
JU628	0662057B47	CHIP RES 0 OHMS +.050 OHMS
JU626	0662057B47	CHIP RES 0 OHMS +.050 OHMS

Reference Designator	Motorola Part Number	Description
JU623	0662057B47	CHIP RES 0 OHMS +.050 OHMS
JU657	0662057B47	CHIP RES 0 OHMS +.050 OHMS
JU656	0662057B47	CHIP RES 0 OHMS +.050 OHMS
JU652	0662057B47	CHIP RES 0 OHMS +.050 OHMS
JU650	0662057B47	CHIP RES 0 OHMS +.050 OHMS
JU642	0662057B47	CHIP RES 0 OHMS +.050 OHMS
JU641	0662057B47	CHIP RES 0 OHMS +.050 OHMS
JU640	0662057B47	CHIP RES 0 OHMS +.050 OHMS
JU638	0662057B47	CHIP RES 0 OHMS +.050 OHMS
JU637	0662057B47	CHIP RES 0 OHMS +.050 OHMS
R608	0662057B47	CHIP RES 0 OHMS +.050 OHMS
JU814	0662057B47	CHIP RES 0 OHMS +.050 OHMS
JU813	0662057B47	CHIP RES 0 OHMS +.050 OHMS
JU811	0662057B47	CHIP RES 0 OHMS +.050 OHMS
JU809	0662057B47	CHIP RES 0 OHMS +.050 OHMS
JU808	0662057B47	CHIP RES 0 OHMS +.050 OHMS
JU806	0662057B47	CHIP RES 0 OHMS +.050 OHMS
JU804	0662057B47	CHIP RES 0 OHMS +.050 OHMS
JU803	0662057B47	CHIP RES 0 OHMS +.050 OHMS
JU802	0662057B47	CHIP RES 0 OHMS +.050 OHMS
JU801	0662057B47	CHIP RES 0 OHMS +.050 OHMS
JU679	0662057B47	CHIP RES 0 OHMS +.050 OHMS
JU678	0662057B47	CHIP RES 0 OHMS +.050 OHMS

Reference Designator	Motorola Part Number	Description
JU677	0662057B47	CHIP RES 0 OHMS +.050 OHMS
JU672	0662057B47	CHIP RES 0 OHMS +.050 OHMS
JU621	0662057B47	CHIP RES 0 OHMS +.050 OHMS
JU619	0662057B47	CHIP RES 0 OHMS +.050 OHMS
JU614	0662057B47	CHIP RES 0 OHMS +.050 OHMS
JU608	0662057B47	CHIP RES 0 OHMS +.050 OHMS
JU606	0662057B47	CHIP RES 0 OHMS +.050 OHMS
JU605	0662057B47	CHIP RES 0 OHMS +.050 OHMS
JU604	0662057B47	CHIP RES 0 OHMS +.050 OHMS
R618	0662057M96	RES. CHIP 8200 5% 20X40
R806	0662057N15	RES. CHIP 47K 5% 20X40
R808	0662057N23	RES. CHIP 100K 5% 20X40
J60	0964649H01	CONN,CUST,F,60CONT
C750	2113740F67	CAP CHIP CL1 30 470 5%
C754	2113740F67	CAP CHIP CL1 30 470 5%
C753	2113740F67	CAP CHIP CL1 30 470 5%
C752	2113740F67	CAP CHIP CL1 30 470 5%
C751	2113740F67	CAP CHIP CL1 30 470 5%
C755	2113740F67	CAP CHIP CL1 30 470 5%
C773	2113740F67	CAP CHIP CL1 30 470 5%
C772	2113740F67	CAP CHIP CL1 30 470 5%
C769	2113740F67	CAP CHIP CL1 30 470 5%
C768	2113740F67	CAP CHIP CL1 30 470 5%
C767	2113740F67	CAP CHIP CL1 30 470 5%
C765	2113740F67	CAP CHIP CL1 30 470 5%
C763	2113740F67	CAP CHIP CL1 30 470 5%
C757	2113740F67	CAP CHIP CL1 30 470 5%
C756	2113740F67	CAP CHIP CL1 30 470 5%
C813	2113740F67	CAP CHIP CL1 30 470 5%
C807	2113740F67	CAP CHIP CL1 30 470 5%
C806	2113740F67	CAP CHIP CL1 30 470 5%
C803	2113740F67	CAP CHIP CL1 30 470 5%
C802	2113740F67	CAP CHIP CL1 30 470 5%

Reference Designator	Motorola Part Number	Description
C790	2113740F67	CAP CHIP CL1 30 470 5%
C780	2113740F67	CAP CHIP CL1 30 470 5%
C779	2113740F67	CAP CHIP CL1 30 470 5%
C774	2113740F67	CAP CHIP CL1 30 470 5%
C815	2113741N69	CAP CHIP CL2 X7R 10% 100000
J512	2864447H01	CONN,TERMNL,PLG,80 PIN,KYD
VR623	4805656W03	DIODE DUAL 5.6V ZENER
VR675	4805656W03	DIODE DUAL 5.6V ZENER
VR804	4805656W03	DIODE DUAL 5.6V ZENER
VR806	4805656W03	DIODE DUAL 5.6V ZENER
VR614	4805656W10	DIODE DUAL 15 VOLT ZENER (GALAXY) I600
VR615	4805656W10	DIODE DUAL 15 VOLT ZENER (GALAXY) I600
VR617	4805656W10	DIODE DUAL 15 VOLT ZENER (GALAXY) I600
VR805	4805656W10	DIODE DUAL 15 VOLT ZENER (GALAXY) I600
VR616	4805656W10	DIODE DUAL 15 VOLT ZENER (GALAXY) I600
VR801	4805656W39	QUAD ESD SUPPRES-SOR ARRAY
Q805	4809579E16	TSTR MOSFET N-CHAN TN0200T
VR600	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR601	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR602	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR604	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR606	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR609	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR621	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR673	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR803	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR802	4813830C31	DIODE 18V 'J3' MMSZ5248BT1

Reference Designator	Motorola Part Number	Description
VR674	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR622	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR610	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR607	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR605	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR603	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
Q801	4885844C01	XSTR FET
U605	5164015H50	IC,SW,BIDIRECTIONAL,TPS2041B,SM,SOL
C670	NOTPLACED	64AM DUMMY PART NUMBER
C671	NOTPLACED	64AM DUMMY PART NUMBER
C743	NOTPLACED	64AM DUMMY PART NUMBER
C759	NOTPLACED	64AM DUMMY PART NUMBER
C762	NOTPLACED	64AM DUMMY PART NUMBER
C764	NOTPLACED	64AM DUMMY PART NUMBER
C770	NOTPLACED	64AM DUMMY PART NUMBER
C771	NOTPLACED	64AM DUMMY PART NUMBER
C775	NOTPLACED	64AM DUMMY PART NUMBER
C785	NOTPLACED	64AM DUMMY PART NUMBER
C786	NOTPLACED	64AM DUMMY PART NUMBER
C789	NOTPLACED	64AM DUMMY PART NUMBER
C791	NOTPLACED	64AM DUMMY PART NUMBER
C792	NOTPLACED	64AM DUMMY PART NUMBER
C794	NOTPLACED	64AM DUMMY PART NUMBER

Reference Designator	Motorola Part Number	Description
C795	NOTPLACED	64AM DUMMY PART NUMBER
C796	NOTPLACED	64AM DUMMY PART NUMBER
C797	NOTPLACED	64AM DUMMY PART NUMBER
C798	NOTPLACED	64AM DUMMY PART NUMBER
C801	NOTPLACED	64AM DUMMY PART NUMBER
C804	NOTPLACED	64AM DUMMY PART NUMBER
C805	NOTPLACED	64AM DUMMY PART NUMBER
C808	NOTPLACED	64AM DUMMY PART NUMBER
C816	NOTPLACED	64AM DUMMY PART NUMBER
CR600	NOTPLACED	64AM DUMMY PART NUMBER
CR601	NOTPLACED	64AM DUMMY PART NUMBER
D600	NOTPLACED	64AM DUMMY PART NUMBER
D602	NOTPLACED	64AM DUMMY PART NUMBER
D603	NOTPLACED	64AM DUMMY PART NUMBER
D605	NOTPLACED	64AM DUMMY PART NUMBER
F600	NOTPLACED	64AM DUMMY PART NUMBER
JU512	NOTPLACED	64AM DUMMY PART NUMBER
JU513	NOTPLACED	64AM DUMMY PART NUMBER
JU602	NOTPLACED	64AM DUMMY PART NUMBER
JU610	NOTPLACED	64AM DUMMY PART NUMBER
JU611	NOTPLACED	64AM DUMMY PART NUMBER
JU612	NOTPLACED	64AM DUMMY PART NUMBER
JU616	NOTPLACED	64AM DUMMY PART NUMBER

Reference Designator	Motorola Part Number	Description
JU617	NOTPLACED	64AM DUMMY PART NUMBER
JU618	NOTPLACED	64AM DUMMY PART NUMBER
JU627	NOTPLACED	64AM DUMMY PART NUMBER
JU630	NOTPLACED	64AM DUMMY PART NUMBER
JU636	NOTPLACED	64AM DUMMY PART NUMBER
JU651	NOTPLACED	64AM DUMMY PART NUMBER
JU655	NOTPLACED	64AM DUMMY PART NUMBER
JU658	NOTPLACED	64AM DUMMY PART NUMBER
JU671	NOTPLACED	64AM DUMMY PART NUMBER
JU674	NOTPLACED	64AM DUMMY PART NUMBER
JU676	NOTPLACED	64AM DUMMY PART NUMBER
JU701	NOTPLACED	64AM DUMMY PART NUMBER
JU800	NOTPLACED	64AM DUMMY PART NUMBER
JU805	NOTPLACED	64AM DUMMY PART NUMBER
JU807	NOTPLACED	64AM DUMMY PART NUMBER
JU810	NOTPLACED	64AM DUMMY PART NUMBER
JU812	NOTPLACED	64AM DUMMY PART NUMBER
JU815	NOTPLACED	64AM DUMMY PART NUMBER
JU816	NOTPLACED	64AM DUMMY PART NUMBER
Q602	NOTPLACED	64AM DUMMY PART NUMBER
Q603	NOTPLACED	64AM DUMMY PART NUMBER
Q604	NOTPLACED	64AM DUMMY PART NUMBER
Q605	NOTPLACED	64AM DUMMY PART NUMBER

Reference Designator	Motorola Part Number	Description
Q606	NOTPLACED	64AM DUMMY PART NUMBER
R601	NOTPLACED	64AM DUMMY PART NUMBER
R602	NOTPLACED	64AM DUMMY PART NUMBER
R609	NOTPLACED	64AM DUMMY PART NUMBER
R610	NOTPLACED	64AM DUMMY PART NUMBER
R612	NOTPLACED	64AM DUMMY PART NUMBER
R613	NOTPLACED	64AM DUMMY PART NUMBER
R614	NOTPLACED	64AM DUMMY PART NUMBER
R615	NOTPLACED	64AM DUMMY PART NUMBER
R616	NOTPLACED	64AM DUMMY PART NUMBER
R617	NOTPLACED	64AM DUMMY PART NUMBER
R619	NOTPLACED	64AM DUMMY PART NUMBER
R620	NOTPLACED	64AM DUMMY PART NUMBER
R621	NOTPLACED	64AM DUMMY PART NUMBER
R622	NOTPLACED	64AM DUMMY PART NUMBER
R623	NOTPLACED	64AM DUMMY PART NUMBER
R624	NOTPLACED	64AM DUMMY PART NUMBER
R625	NOTPLACED	64AM DUMMY PART NUMBER
R670	NOTPLACED	64AM DUMMY PART NUMBER
R671	NOTPLACED	64AM DUMMY PART NUMBER
R672	NOTPLACED	64AM DUMMY PART NUMBER
R673	NOTPLACED	64AM DUMMY PART NUMBER
R674	NOTPLACED	64AM DUMMY PART NUMBER

Reference Designator	Motorola Part Number	Description
R675	NOTPLACED	64AM DUMMY PART NUMBER
R676	NOTPLACED	64AM DUMMY PART NUMBER
R678	NOTPLACED	64AM DUMMY PART NUMBER
U601	NOTPLACED	64AM DUMMY PART NUMBER
U602	NOTPLACED	64AM DUMMY PART NUMBER
U603	NOTPLACED	64AM DUMMY PART NUMBER
U606	NOTPLACED	64AM DUMMY PART NUMBER
VR624	NOTPLACED	64AM DUMMY PART NUMBER
VR625	NOTPLACED	64AM DUMMY PART NUMBER
VR627	NOTPLACED	64AM DUMMY PART NUMBER
VR671	NOTPLACED	64AM DUMMY PART NUMBER
VR672	NOTPLACED	64AM DUMMY PART NUMBER
VR676	NOTPLACED	64AM DUMMY PART NUMBER

Reference Designator	Motorola Part Number	Description
JU512	0662057B47	CHIP RES 0 OHMS +/-0.050 OHMS
JU513	0662057B47	CHIP RES 0 OHMS +/-0.050 OHMS
JU600	0662057B47	CHIP RES 0 OHMS +/-0.050 OHMS
JU602	0662057B47	CHIP RES 0 OHMS +/-0.050 OHMS
JU607	0662057B47	CHIP RES 0 OHMS +/-0.050 OHMS
JU613	0662057B47	CHIP RES 0 OHMS +/-0.050 OHMS
JU618	0662057B47	CHIP RES 0 OHMS +/-0.050 OHMS
JU620	0662057B47	CHIP RES 0 OHMS +/-0.050 OHMS
JU622	0662057B47	CHIP RES 0 OHMS +/-0.050 OHMS
JU640	0662057B47	CHIP RES 0 OHMS +/-0.050 OHMS
JU638	0662057B47	CHIP RES 0 OHMS +/-0.050 OHMS
JU637	0662057B47	CHIP RES 0 OHMS +/-0.050 OHMS
JU635	0662057B47	CHIP RES 0 OHMS +/-0.050 OHMS
JU634	0662057B47	CHIP RES 0 OHMS +/-0.050 OHMS
JU633	0662057B47	CHIP RES 0 OHMS +/-0.050 OHMS
JU632	0662057B47	CHIP RES 0 OHMS +/-0.050 OHMS
JU626	0662057B47	CHIP RES 0 OHMS +/-0.050 OHMS
JU623	0662057B47	CHIP RES 0 OHMS +/-0.050 OHMS
JU678	0662057B47	CHIP RES 0 OHMS +/-0.050 OHMS
JU677	0662057B47	CHIP RES 0 OHMS +/-0.050 OHMS
JU676	0662057B47	CHIP RES 0 OHMS +/-0.050 OHMS
JU672	0662057B47	CHIP RES 0 OHMS +/-0.050 OHMS
JU656	0662057B47	CHIP RES 0 OHMS +/-0.050 OHMS

Reference Designator	Motorola Part Number	Description
JU652	0662057B47	CHIP RES 0 OHMS +/-0.050 OHMS
JU650	0662057B47	CHIP RES 0 OHMS +/-0.050 OHMS
JU642	0662057B47	CHIP RES 0 OHMS +/-0.050 OHMS
JU641	0662057B47	CHIP RES 0 OHMS +/-0.050 OHMS
JU809	0662057B47	CHIP RES 0 OHMS +/-0.050 OHMS
JU808	0662057B47	CHIP RES 0 OHMS +/-0.050 OHMS
JU806	0662057B47	CHIP RES 0 OHMS +/-0.050 OHMS
JU804	0662057B47	CHIP RES 0 OHMS +/-0.050 OHMS
JU803	0662057B47	CHIP RES 0 OHMS +/-0.050 OHMS
JU802	0662057B47	CHIP RES 0 OHMS +/-0.050 OHMS
JU801	0662057B47	CHIP RES 0 OHMS +/-0.050 OHMS
JU701	0662057B47	CHIP RES 0 OHMS +/-0.050 OHMS
JU679	0662057B47	CHIP RES 0 OHMS +/-0.050 OHMS
R608	0662057B47	CHIP RES 0 OHMS +/-0.050 OHMS
JU814	0662057B47	CHIP RES 0 OHMS +/-0.050 OHMS
JU813	0662057B47	CHIP RES 0 OHMS +/-0.050 OHMS
JU811	0662057B47	CHIP RES 0 OHMS +/-0.050 OHMS
JU621	0662057B47	CHIP RES 0 OHMS +/-0.050 OHMS
JU619	0662057B47	CHIP RES 0 OHMS +/-0.050 OHMS
JU616	0662057B47	CHIP RES 0 OHMS +/-0.050 OHMS
JU608	0662057B47	CHIP RES 0 OHMS +/-0.050 OHMS
JU606	0662057B47	CHIP RES 0 OHMS +/-0.050 OHMS
JU605	0662057B47	CHIP RES 0 OHMS +/-0.050 OHMS

Reference Designator	Motorola Part Number	Description
JU604	0662057B47	CHIP RES 0 OHMS +/-0.050 OHMS
R620	0662057M54	RES. CHIP 150 5% 20X40
R618	0662057M96	RES. CHIP 8200 5% 20X40
R671	0662057M98	RES. CHIP 10K 5% 20X40
R673	0662057M98	RES. CHIP 10K 5% 20X40
R609	0662057N15	RES. CHIP 47K 5% 20X40
R610	0662057N15	RES. CHIP 47K 5% 20X40
R622	0662057N15	RES. CHIP 47K 5% 20X40
R675	0662057N15	RES. CHIP 47K 5% 20X40
R806	0662057N15	RES. CHIP 47K 5% 20X40
R672	0662057N15	RES. CHIP 47K 5% 20X40
R619	0662057N15	RES. CHIP 47K 5% 20X40
R615	0662057N23	RES. CHIP 100K 5% 20X40
R624	0662057N23	RES. CHIP 100K 5% 20X40
R616	0662057N23	RES. CHIP 100K 5% 20X40
R617	0662057N23	RES. CHIP 100K 5% 20X40
R625	0662057N23	RES. CHIP 100K 5% 20X40
R808	0662057N23	RES. CHIP 100K 5% 20X40
R674	0662057N23	RES. CHIP 100K 5% 20X40
J60	0964649H01	CONN,CUST,F,60CONT
C789	2109822S04	CAP CHIP CER 10UF 35V
C791	2109822S04	CAP CHIP CER 10UF 35V
C792	2109822S09	CAP CERAMIC CHIP 1UF 20 50V
C750	2113740F67	CAP CHIP CL1 +/-30 470 5%
C768	2113740F67	CAP CHIP CL1 +/-30 470 5%
C767	2113740F67	CAP CHIP CL1 +/-30 470 5%
C765	2113740F67	CAP CHIP CL1 +/-30 470 5%
C764	2113740F67	CAP CHIP CL1 +/-30 470 5%
C763	2113740F67	CAP CHIP CL1 +/-30 470 5%

HLN6901C Remote Interconnect Board (W3 Hand-Held Control Head) Parts List

Reference Designator	Motorola Part Number	Description
PCB	8464334H01	PCB,INTFC,6 LAYER,INTERCONN
-	1085674C03	PASTE/NC-SMQ230
-	1105033S02	RIBBON LABEL LT. PACK LABEL
-	1105033S13	RIBBON LBL
-	5405569Y02	LBL BARCODE APC
-	5405569Y03	LBL BARCODE
R621	0611077A74	RES CHIP 1000 5 1/8
R623	0611077A74	RES CHIP 1000 5 1/8
R676	0611077A74	RES CHIP 1000 5 1/8
R678	0611077A74	RES CHIP 1000 5 1/8

Reference Designator	Motorola Part Number	Description
C762	2113740F67	CAP CHIP CL1 +/-30 470 5%
C759	2113740F67	CAP CHIP CL1 +/-30 470 5%
C757	2113740F67	CAP CHIP CL1 +/-30 470 5%
C756	2113740F67	CAP CHIP CL1 +/-30 470 5%
C813	2113740F67	CAP CHIP CL1 +/-30 470 5%
C807	2113740F67	CAP CHIP CL1 +/-30 470 5%
C806	2113740F67	CAP CHIP CL1 +/-30 470 5%
C803	2113740F67	CAP CHIP CL1 +/-30 470 5%
C802	2113740F67	CAP CHIP CL1 +/-30 470 5%
C790	2113740F67	CAP CHIP CL1 +/-30 470 5%
C780	2113740F67	CAP CHIP CL1 +/-30 470 5%
C779	2113740F67	CAP CHIP CL1 +/-30 470 5%
C774	2113740F67	CAP CHIP CL1 +/-30 470 5%
C773	2113740F67	CAP CHIP CL1 +/-30 470 5%
C772	2113740F67	CAP CHIP CL1 +/-30 470 5%
C771	2113740F67	CAP CHIP CL1 +/-30 470 5%
C770	2113740F67	CAP CHIP CL1 +/-30 470 5%
C769	2113740F67	CAP CHIP CL1 +/-30 470 5%
C751	2113740F67	CAP CHIP CL1 +/-30 470 5%
C752	2113740F67	CAP CHIP CL1 +/-30 470 5%
C753	2113740F67	CAP CHIP CL1 +/-30 470 5%
C755	2113740F67	CAP CHIP CL1 +/-30 470 5%
C754	2113740F67	CAP CHIP CL1 +/-30 470 5%

Reference Designator	Motorola Part Number	Description
C670	2113741N69	CAP CHIP CL2 X7R 10% 100000
C743	2113741N69	CAP CHIP CL2 X7R 10% 100000
C794	2113741N69	CAP CHIP CL2 X7R 10% 100000
C815	2113741N69	CAP CHIP CL2 X7R 10% 100000
C798	2113741N69	CAP CHIP CL2 X7R 10% 100000
C797	2113741N69	CAP CHIP CL2 X7R 10% 100000
C796	2113741N69	CAP CHIP CL2 X7R 10% 100000
C785	2113741N69	CAP CHIP CL2 X7R 10% 100000
JU631	2113928H09	CAP,CHIP,1UF,,+10%,-10%,10V-DC,0603
J512	2864447H01	CONN,TERMNL,PLG,80 PIN,KYD
CR601	4805218N57	DIODE DUAL
D603	4805218N57	DIODE DUAL
D602	4805218N57	DIODE DUAL
VR623	4805656W03	DIODE DUAL 5.6V ZENER
VR675	4805656W03	DIODE DUAL 5.6V ZENER
VR806	4805656W03	DIODE DUAL 5.6V ZENER
VR804	4805656W03	DIODE DUAL 5.6V ZENER
VR614	4805656W10	DIODE DUAL 15 VOLT ZENER (GALAXY) I600
VR616	4805656W10	DIODE DUAL 15 VOLT ZENER (GALAXY) I600
VR615	4805656W10	DIODE DUAL 15 VOLT ZENER (GALAXY) I600
VR617	4805656W10	DIODE DUAL 15 VOLT ZENER (GALAXY) I600
VR805	4805656W10	DIODE DUAL 15 VOLT ZENER (GALAXY) I600
VR671	4805656W10	DIODE DUAL 15 VOLT ZENER (GALAXY) I600
VR801	4805656W39	QUAD ESD SUPPRESSOR ARRAY
Q602	4813821A09	TSTR P-CH 60V 12A _2955_
VR600	4813830C31	DIODE 18V 'J3' MMSZ5248BT1

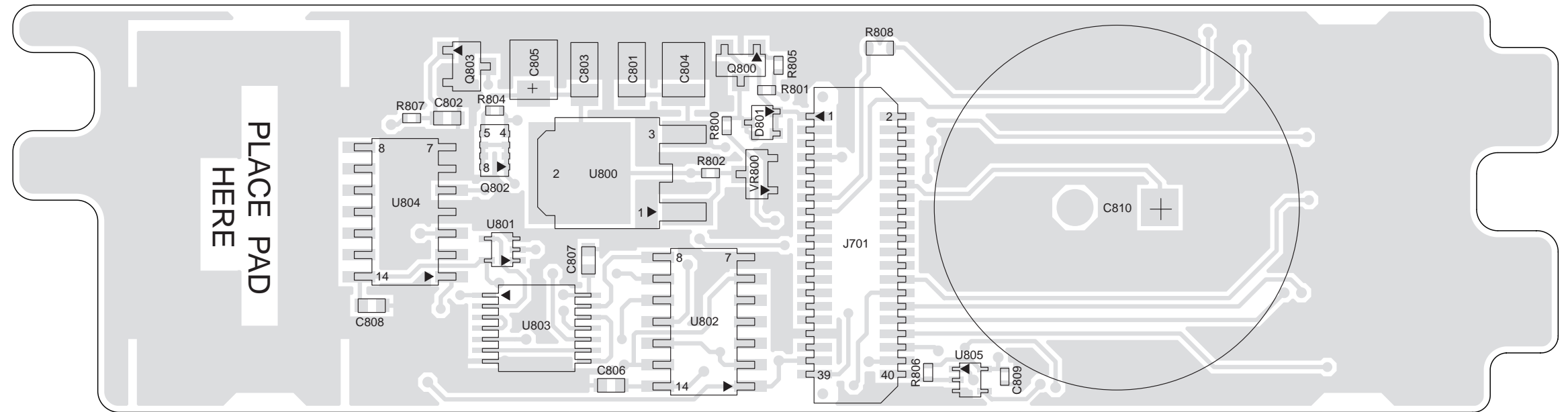
Reference Designator	Motorola Part Number	Description
VR604	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR606	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR609	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR621	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR624	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR803	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR802	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR674	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR673	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR672	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR627	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR625	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR622	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR610	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR607	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR605	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR603	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR601	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
VR602	4813830C31	DIODE 18V 'J3' MMSZ5248BT1
D600	4813833A20	DIODE CHOTTLKY 1A 40V
Q603	4885316E17	XSTR,POWER MOSFET 30V,2.5A,SINGLE
Q604	4885316E17	XSTR,POWER MOSFET 30V,2.5A,SINGLE
Q805	4885316E17	XSTR,POWER MOSFET 30V,2.5A,SINGLE
Q606	4885316E17	XSTR,POWER MOSFET 30V,2.5A,SINGLE

Reference Designator	Motorola Part Number	Description
Q801	4885844C01	XSTR FET
U601	5113806A05	IC FLIP-FLOP,DUAL D
U603	5113816A19	IC ASJ LO DROPOUT POS REG .8A
U602	5113818A06	IC LOW PWR SING SPLY MC33172DR
U605	5164015H50	IC,SW,BIDIREC-TIONAL,TPS2041B,SM,SO I
C671	NOTPLACED	64AM DUMMY PART NUMBER
C775	NOTPLACED	64AM DUMMY PART NUMBER
C786	NOTPLACED	64AM DUMMY PART NUMBER
C795	NOTPLACED	64AM DUMMY PART NUMBER
C801	NOTPLACED	64AM DUMMY PART NUMBER
C804	NOTPLACED	64AM DUMMY PART NUMBER
C805	NOTPLACED	64AM DUMMY PART NUMBER
C808	NOTPLACED	64AM DUMMY PART NUMBER
C816	NOTPLACED	64AM DUMMY PART NUMBER
CR600	NOTPLACED	64AM DUMMY PART NUMBER
D605	NOTPLACED	64AM DUMMY PART NUMBER
F600	NOTPLACED	64AM DUMMY PART NUMBER
JU12	NOTPLACED	64AM DUMMY PART NUMBER
JU601	NOTPLACED	64AM DUMMY PART NUMBER
JU603	NOTPLACED	64AM DUMMY PART NUMBER
JU610	NOTPLACED	64AM DUMMY PART NUMBER
JU611	NOTPLACED	64AM DUMMY PART NUMBER
JU612	NOTPLACED	64AM DUMMY PART NUMBER
JU614	NOTPLACED	64AM DUMMY PART NUMBER

Reference Designator	Motorola Part Number	Description
JU615	NOTPLACED	64AM DUMMY PART NUMBER
JU617	NOTPLACED	64AM DUMMY PART NUMBER
JU627	NOTPLACED	64AM DUMMY PART NUMBER
JU628	NOTPLACED	64AM DUMMY PART NUMBER
JU629	NOTPLACED	64AM DUMMY PART NUMBER
JU630	NOTPLACED	64AM DUMMY PART NUMBER
JU636	NOTPLACED	64AM DUMMY PART NUMBER
JU651	NOTPLACED	64AM DUMMY PART NUMBER
JU655	NOTPLACED	64AM DUMMY PART NUMBER
JU657	NOTPLACED	64AM DUMMY PART NUMBER
JU658	NOTPLACED	64AM DUMMY PART NUMBER
JU671	NOTPLACED	64AM DUMMY PART NUMBER
JU674	NOTPLACED	64AM DUMMY PART NUMBER
JU800	NOTPLACED	64AM DUMMY PART NUMBER
JU805	NOTPLACED	64AM DUMMY PART NUMBER
JU807	NOTPLACED	64AM DUMMY PART NUMBER
JU810	NOTPLACED	64AM DUMMY PART NUMBER
JU812	NOTPLACED	64AM DUMMY PART NUMBER
JU815	NOTPLACED	64AM DUMMY PART NUMBER
JU816	NOTPLACED	64AM DUMMY PART NUMBER
Q605	NOTPLACED	64AM DUMMY PART NUMBER
R601	NOTPLACED	64AM DUMMY PART NUMBER
R602	NOTPLACED	64AM DUMMY PART NUMBER

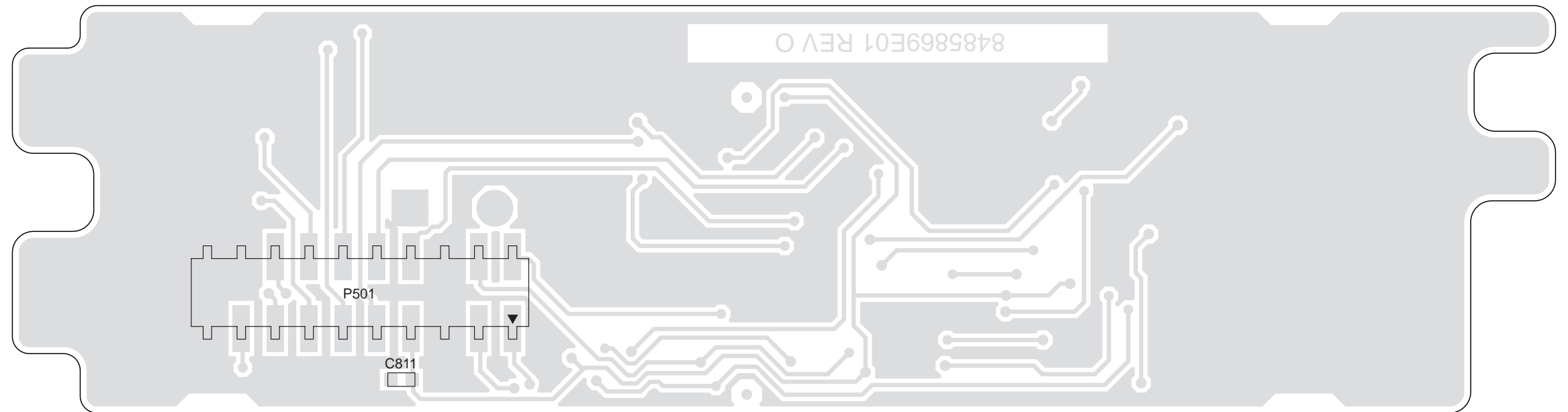
Reference Designator	Motorola Part Number	Description
R612	NOTPLACED	64AM DUMMY PART NUMBER
R613	NOTPLACED	64AM DUMMY PART NUMBER
R614	NOTPLACED	64AM DUMMY PART NUMBER
R670	NOTPLACED	64AM DUMMY PART NUMBER
U606	NOTPLACED	64AM DUMMY PART NUMBER

8.5 Secure Interface Board



MAEPF-27915-O

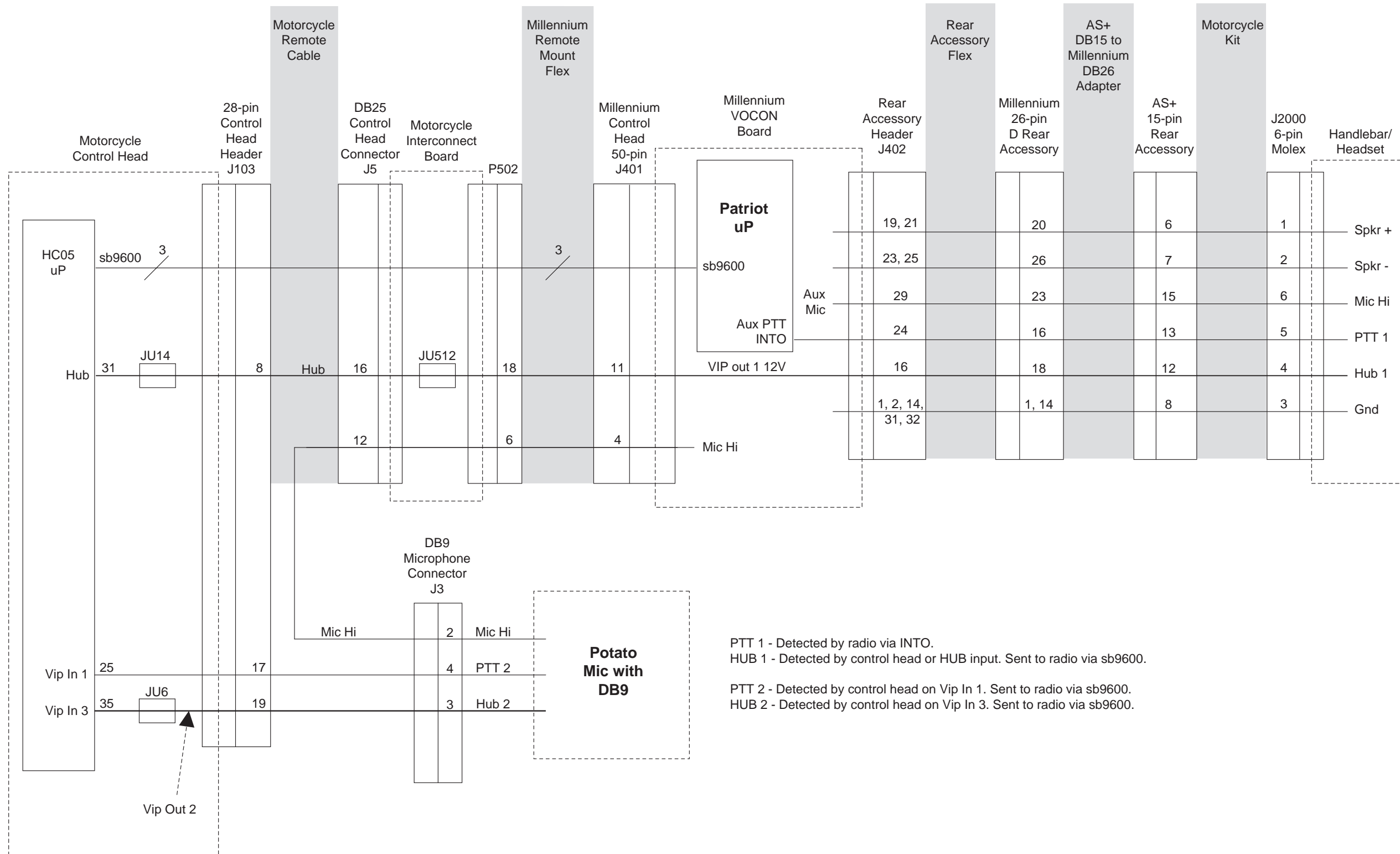
Figure 8-7. Secure Interface Board Component Location Diagram—Side 1



MAEPF-27916-O

Figure 8-8. Secure Interface Board Component Location Diagram—Side 2

8.6 Motorcycle Signal Routing



MAEPF-27906-O

Figure 8-9. Motorcycle Signal-Routing Diagram

Notes

Chapter 9 Flex Cable Pin-Out Lists

9.1 List of Flex Cables

This chapter lists the pin-out assignments for the following flex cables:

- Mid Power Dash (Table 9-1 on page 9-1)
- Mid Power Rear Accessory (Table 9-2 on page 9-1)
- Mid Power Remote (Table 9-3 on page 9-2)
- High Power Remote (Table 9-4 on page 9-3)

9.2 Flex Cables

Table 9-1. Mid Power Dash Flex Cable J103 to P0401 Pin-Out List

Signal	J103 26-Pin (Female)		P0401 50-Pin (Male)
GND	3, 6	<-->	1, 2, 49, 50
SW B+	4	<-->	17
A+	5	<-->	19, 21
VIP OUT 2_5v	7	<-->	14
VIP OUT 1_5v	8	<-->	13
"BOOT_TX / Keyfail	9	<-->	25
BUS -	10	<-->	32
IGN	11	<-->	20
VIP OUT 1_12v	18	<-->	11
VIP OUT 2_12v	19	<-->	12
"OPT_B+ BOOT_SEL VPP"	20	<-->	22
"BOOT_RX / KVL_ATT"	21	<-->	26
BUS +	22	<-->	31
RESET	23	<-->	34
BUSY	25	<-->	33
MIC HI	27	<-->	4
NC	Remaining pins	<-->	Remaining pins

Table 9-2. Mid Power Rear Accessory Flex Cable J2 to P0402 Pin-Out List

Signal	J2 26-Pin (Female)		P0402 32-Pin (Female)
GND	1, 14	<-->	1, 2, 14, 31, 32
BUS+	2	<-->	3
BUS-	3	<-->	5
TX_DCE	4	<-->	7
RX_DCE	5	<-->	9
USB -	6	<-->	13
USB +	7	<-->	11
RESET	8	<-->	4
BUSY	9	<-->	6
RTS_DCE	10	<-->	8
CTS_DCE	11	<-->	10
USB PWR	12	<-->	12
CHAN ACTIVITY	13	<-->	15
Emergency	15	<-->	28
PTT*= AUX PTT	16	<-->	24
ONE WIRE	17	<-->	27
VIP OUT 1	18	<-->	16
VIP OUT 2	19	<-->	17
Spkr +	20	<-->	19, 21
RX_filt_audio	21	<-->	30
MONITOR / HUB	22	<-->	26
Aux_Mic	23	<-->	29
SW B+	24	<-->	20, 22
IGN	25	<-->	18
Spkr -	26	<-->	23, 25

Table 9-3. Mid Power Remote Flex Cable P502 to J0401 Pin-Out List

Signal	P502 38-Pin (Male)		J0401 50-Pin (Male)	Signal
NC	1	<-->	15	VIP_IN_1_5v
NC	2	<-->	NC	NC
EMERG	3	<-->	18	Emergency
NC	4	<-->	NC	NC
FLT Audio	5	<-->	5	RX_FILTER_AUDIO
MIC_HI	6	<-->	4	MIC_HI
MIC_Io=GND	7	<-->	1, 2, 49, 50	GND
RX Audio	8	<-->	8	AUX_RX
BUSY (sb9600)"	9	<-->	33	BUSY (*UARTB_RTS)"
GND	10	<-->	1, 2, 49, 50	GND
RESET (sb9600)"	11	<-->	34	RESET (*UARTB_CTS)"
TX Audio	12	<-->	7	AUX_TX
NC	13	<-->	NC	NC
SPARE_1	14	<-->	13	VIP_OUT_1_5v
prog:RXD (SNET-WE)"	15	<-->	26	Boot RX
prog:VPP (SNET-KID)"	16	<-->	22	OPT_B+ boot_sel"
VIP_OUT_2 (share with SPARE_2)"	17	<-->	12	VIP_OUT_2_12v
VIP_OUT_1 (share with SPARE_1)"	18	<-->	11	VIP_OUT_1_12v
RS232_RXD TX_DCE"	19	<-->	27	UART A_TX (TX_DCE)")"
RS232--TXD RX_DCE"	20	<-->	28	UART A_RX (RX_DCE)")"
IGN	21	<-->	20	Ignition
BUS- (sb9600)"	22	<-->	32	BUS - (*UARTB_RX)"
prog:TXD (SNET-KEY)"	23	<-->	25	Boot TX / Keyfail"
PTTb / AS_VIP_IN_1	24	<-->	3	PTT*
BUS+ (sb9600)"	25	<-->	31	BUS + (*UARTB_TX)"
RS232--CTS RTS_DCE"	26	<-->	29	UART A_CTS (RTS_DCE)")"
SPARE_2	27	<-->	14	VIP_OUT_2_5v
GND	28	<-->	1, 2, 49, 50	GND

Table 9-3. Mid Power Remote Flex Cable P502 to J0401 Pin-Out List (Continued)

Signal	P502 38-Pin (Male)		J0401 50-Pin (Male)	Signal
NC	29	<-->	NC	NC
A+	30	<-->	19, 21	A+
SWB+	31	<-->	17	SW_B+
NOTCH	32	<-->	43	NOTCH
RS232--RTS CTS_DCE"	33	<-->	30	UART A_RTS (CTS_DCE)")"
SPK_LO	34	<-->	10	SPKR -
SPK_HI	35	<-->	9	SPKR +
NC	36	<-->	NC	NC
SW_5v	37	<-->	23	SW 5v (VCC 5)"
VIP_IN_2	38	<-->	16	VIP_IN_2_5v
NC	NC	<-->	6	NC
NC	NC	<-->	24	ONE-wire
NC	NC	<-->	35	sap tx
NC	NC	<-->	36	sap rx
NC	NC	<-->	37	sap dclk
NC	NC	<-->	38	sap fsync
NC	NC	<-->	39	nautilus cs*
NC	NC	<-->	40	nautilus int*
NC	NC	<-->	41	spi mosi
NC	NC	<-->	42	spi miso
NC	NC	<-->	44	spi clk
NC	NC	<-->	45	ssi int*
NC	NC	<-->	46	BUS_PWR_OUT
NC	NC	<-->	47	Future Expansion
NC	NC	<-->	48	Future Expansion

Table 9-4. High Power Remote Flex Cable P0401 to J512 Pin-Out List

Signal	P0401 60-Pin (Male)		J512 80-Pin (Female)
GND	1,2,23,52,59,60	<-->	1,2,9,38,69,70,79,80
PTT	58	<-->	3
MIC_HI	57	<-->	4
RX_FILT_AUDIO	56	<-->	5
AUX_MIC	55	<-->	6
AUX_TX	54	<-->	7
AUX_RX	53	<-->	8
EMERGENCY	51	<-->	10
VIP IN 1 (5V) / NAUT STATUS	50	<-->	11
VIP IN 2 (5V) / NAUT CONF DONE	49	<-->	12
VIP OUT 1 (5V) / NAUT CONFIG	48	<-->	13
VIP OUT 2 (5V) / NAUT RESET	47	<-->	14
VIP OUT 1 (12V)	46	<-->	15
VIP OUT 2 (12V)	45	<-->	16
KEYFAIL	44	<-->	17
BUS_PWR_OUT	43	<-->	18
ONE-WIRE	42	<-->	19
GPIO0	41	<-->	20
SPARE GPIO	40	<-->	21
GCAI_USB-RS232	39	<-->	22
SPK+	37, 38	<-->	23, 24
SPK-	35, 36	<-->	25, 26
SW_B+	33, 34	<-->	27, 28
A+	29, 30, 31, 32	<-->	29, 30, 31, 32
IGNITION	27, 28	<-->	33, 34
OPTB+	26	<-->	35
SW_5V	25	<-->	36
VBUS_PWR_IN	24	<-->	37
BOOT TX-USB+	22	<-->	39
BOOT RX-USB-	21	<-->	40
TX_DCE	20	<-->	41
RX_DCE	19	<-->	42

Table 9-4. High Power Remote Flex Cable P0401 to J512 Pin-Out List (Continued)

Signal	P0401 60-Pin (Male)		J512 80-Pin (Female)
RTS_DCE	18	<-->	43
CTS_DCE	17	<-->	44
BUS+	16	<-->	45
BUS-	15	<-->	46
LH_BUSY	14	<-->	47
LH_RESET	13	<-->	48
SAP-TX (SRDA) PATRIOT	12	<-->	57
SAP-RX (STDA) PATRIOT	11	<-->	58
SAP-DCLK	10	<-->	59
SAP-FSYNC	9	<-->	60
NAUTILUS-CS	8	<-->	61
NAUTILUS-INT	7	<-->	62
SPI-MOSI	6	<-->	63
SPI-MISO	5	<-->	64
SPI-CLK	4	<-->	65
SSI_INT	3	<-->	66
NC	Remaining Pins	<-->	Remaining Pins

Notes

Appendix A Secure Modules

A.1 Universal Crypto Module Kits

The secure modules are designed to digitally encrypt and decrypt voice and ASTRO data in ASTRO Digital XTL 5000 mobile radios. Table A-1 contains the Universal Crypto Module (UCM) kits and their corresponding algorithms for secure-equipped XTL 5000 radios.

Table A-1. UCM Kit Listing

Kit Number	Description
NNTN4006	DES, DES-XL, DES-OFB ENCRYPTION KIT-UCM
NTN9837	DES, DES-XL, DES-OFB WITH DVP-XL ENCRYPTION KIT-UCM
NTN9838	DVI-XL ENCRYPTION KIT-UCM
NTN9839	DVP-XL ENCRYPTION KIT-UCM

A.1.1 Secure Interface Boards

Table A-2 contains the secure interface board kits, which are used in conjunction with the UCM kits. Every secure-equipped radio must contain one of the two secure interface board kits, which is paired with one of the UCM kits. Refer to Chapter 8, Interconnect Boards Schematics, Component Location Diagrams, and Parts Lists for illustrations showing the board component locations.

Table A-2. Secure Interface Board Kits

Kit Number	Description
HLN6876	Secure Interface Board, 3-day key retention
HLN6877	Secure Interface Board, 30-second key retention

NOTE: The secure modules and secure interface boards are NOT serviceable. The information contained in this section is only meant to help determine whether a problem is due to the secure module or the radio itself.

The secure module uses a custom encryption IC and an encryption key variable to perform its encode/decode function. The encryption key variable is loaded into the secure module, via the radio's microphone connector, from a hand-held key-variable loader (KVL). The encryption IC corresponds to the particular encryption algorithm purchased. The encryption algorithms and their corresponding kit numbers are listed in Table A-1.

NOTE: When ordering replacement secure modules, make sure that the kit and board numbers of the module that is ordered are the same as those of the module that is being replaced.

A.2 Circuit Description

The secure module operates from three power supplies (UNSW_B+, SW_B+, and KG_BACKUP). The SW_B+ is turned on and off by the radio's on/off switch. The UNSW_B+ provides power to the secure module as long as the radio battery is in place.

Key variables are loaded into the secure module through connector J0501, pin 14, on the secure interface board. Up to 16 keys (depending on the type of encryption module) can be stored in the module at a time. The key can be infinite key retention or 3 day key retention, depending on how the code plug is setup.

The radio's host processor communicates with the secure module on the Synchronous Secure Interface (SSI) bus. The host processor is the master on this bus, while the secure module is a slave on the bus. The SSI bus consists of four signal lines. A communications failure between the host processor and the secure module will be indicated as an "ERROR 09/10" message on the radio display.

The secure interface board is a module that serves as the interface between the main board and the UCM. It plugs into the main board at 20-pin connector J0501 and interfaces to the UCM at 40-pin connector J0701. The board itself contains the following circuitry:

- Logic shifting between the keyloader and the UCM on the keyfail data line (5 V to 3 V)
- Regulators that supply the encryption SW_B+ and UNSW_B+ voltages
- Three-day key-retention capacitor
- Logic circuitry to generate the UCM chip-select signal needed for communication.

A.3 Troubleshooting Secure Operations

Refer to the *ASTRO Digital XTL 5000 Mobile Radio Basic Service Manual* (6881096C73) for disassembly and reassembly information. A key-variable loader (KVL) and oscilloscope are needed to troubleshoot the secure module.

NOTE: The secure modules and secure interface boards are not serviceable. If either module is found to be defective, it must be replaced.

A.3.1 Error 09/10, Error 09/90

The radio automatically performs a self test on every power-up. Should the radio fail the self tests, the display will show "ERROR 09/10" or "ERROR 09/90" accompanied by a short beep. If the display shows "ERROR 09/10" or "ERROR 09/90," the radio failed the secure power-up tests and the host microcontroller was unable to communicate with the secure module via the SSI bus. Turn the radio off and back on. If the radio still does not pass the self tests, then a problem exists with the secure operations of the radio.

A.3.2 Error S03

"ERROR 03" occurs when the secure interface board is missing, if there is a poor connection, or the secure interface board is defective. Corrective action includes checking for poor connections and replacing the secure interface board.

A.3.3 Keyload

When the keyloading cable is attached to the XTL 5000 radio and "KEYLOADING" is not displayed on the display, the radio has not entered KEYLOAD mode. For troubleshooting a "KEYLOAD" failure, see the associated troubleshooting chart in this manual.

NOTE: A keyloader must be used that has the ability to keyload an XTL 5000 radio. The keyloader must be either a KVL-3000 or later model key-variable loader.

Appendix B Replacement Parts Ordering

B.1 Basic Ordering Information

When ordering replacement parts or equipment information, the complete identification number should be included. This applies to all components, kits, and chassis. If the component part number is not known, the order should include the number of the chassis or kit of which it is a part, and sufficient description of the desired component to identify it.

Crystal orders should specify the crystal type number, crystal and carrier frequency, and the model number in which the part is used.

B.2 Motorola Online

Motorola Online users can access our online catalog at

<https://www.motorola.com/businessonline>

To register for online access, please call 800-814-0601 (for U.S. and Canada Service Centers only). International customers can obtain assistance at <https://businessonline.motorola.com>.

B.3 Mail Orders

Send written orders to the following addresses:

**Replacement Parts/
Test Equipment/Manuals/
Crystal Service Items:**

Motorola Inc.
Radio Products and Services
Division*
Attention: Order Processing
2200 Galvin Drive
Elgin, IL 60123
U.S.A.

Federal Government Orders:

Motorola Inc.
U.S. Federal Government
Markets Division
Attention: Order Processing
7230 Parkway Drive
Landover, MD 21076
U.S.A.

International Orders:

Motorola Inc.
Radio Products and Services
Division*
Attention: Order Processing
2200 Galvin Drive
Elgin, IL 60123
U.S.A.

* The Radio Products and Services Division (RPSD) was formerly known as the Customer Care and Services Division (CCSD) and/or the Accessories and Aftermarket Division (AAD).

B.4 Telephone Orders

Radio Products and Services Division*
(United States and Canada)
7:00 AM to 7:00 PM (Central Standard Time)
Monday through Friday (Chicago, U.S.A.)
1-800-422-4210
1-847-538-8023 (International Orders)

U.S. Federal Government Markets Division (USFGMD)
1-800-826-1913 Federal Government Parts - Credit Cards Only
8:30 AM to 5:00 PM (Eastern Standard Time)

B.5 Fax Orders

Radio Products and Services Division*
(United States and Canada)
1-800-622-6210
847-576-3023 (International)

USFGMD
(Federal Government Orders)
1-800-526-8641 (For Parts and Equipment Purchase Orders)

B.6 Parts Identification

Radio Products and Services Division*
(United States and Canada)
1-800-422-4210, menu 3

B.7 Product Customer Service

Customer Response Center
(Non-technical Issues)
1-800-247-2346
FAX:1-800-247-2347

* The Radio Products and Services Division (RPSD) was formerly known as the Customer Care and Services Division (CCSD) and/or the Accessories and Aftermarket Division (AAD).

Glossary

This glossary contains an alphabetical listing of terms and their definitions that are applicable to ASTRO portable and mobile subscriber radio products.

Term	Definition
A/D	<i>See analog-to-digital conversion.</i>
ABACUS IC	A custom integrated circuit providing a digital receiver intermediate frequency (IF) backend.
ADC	<i>See analog-to-digital converter.</i>
ADDAG	<i>See Analog-to-Digital, Digital-to-Analog and Glue.</i>
ALC	<i>See automatic level control.</i>
analog	Refers to a continuously variable signal or a circuit or device designed to handle such signals. <i>See also digital.</i>
Analog-to-Digital, Digital-to-Analog and Glue	An integrated circuit designed to be an interface between the radio's DSP, which is digital, and the analog transmitter and receiver ICs.
analog-to-digital conversion	Conversion of an instantaneous dc voltage level to a corresponding digital value. <i>See also D/A.</i>
analog-to-digital converter	A device that converts analog signals into digital data. <i>See also DAC.</i>
automatic level control	A circuit in the transmit RF path that controls RF power amplifier output, provides leveling over frequency and voltage, and protects against high VSWR.
band	Frequencies allowed for a specific purpose.
BBP	<i>See baseband interface port.</i>
baseband interface port	Synchronous serial interface to the transceiver board used to transfer transmit and receive audio data.
BGA	<i>See ball grid array.</i>
ball grid array	A type of IC package characterized by solder balls arranged in a grid that are located on the underside of the package.
CODEC	<i>See coder/decoder.</i>
codeplug	A memory chip inside a device that contains various programmable parameters, including frequencies, time-out timer, and so on.

Term	Definition
coder/decoder	A device that encodes or decodes a signal.
CPS	<i>See Customer Programming Software.</i>
Customer Programming Software	Software with a graphical user interface containing the feature set of an ASTRO radio. <i>See also RSS.</i>
D/A	<i>See digital-to-analog conversion.</i>
DAC	<i>See digital-to-analog converter.</i>
default	A pre-defined set of parameters.
digital	Refers to data that is stored or transmitted as a sequence of discrete symbols from a finite set; most commonly this means binary data represented using electronic or electromagnetic signals. <i>See also analog.</i>
digital-to-analog conversion	Conversion of a digital signal to a voltage that is proportional to the input value. <i>See also A/D.</i>
digital-to-analog converter	A device that converts digital data into analog signals. <i>See also ADC.</i>
Digital Private Line	A type of digital communications that utilizes privacy call, as well as memory channel and busy channel lock out to enhance communication efficiency.
digital signal processor	A microcontroller specifically designed for performing the mathematics involved in manipulating analog information, such as sound, that has been converted into a digital form. DSP also implies the use of a data compression technique.
digital signal processor code	Object code executed by the Digital Signal Processor in an ASTRO subscriber radio. The DSP is responsible for computation-intensive tasks, such as decoding ASTRO signaling.
DPL	<i>See Digital Private Line. See also PL.</i>
DSP	<i>See digital signal processor.</i>
DSP code	<i>See digital signal processor code.</i>
DTMF	<i>See dual tone multi-frequency.</i>
dual tone multi-frequency	The system used by touch-tone telephones. DTMF assigns a specific frequency, or tone, to each key so that it can easily be identified by a microprocessor.
EPOT	Electrically Programmable Digital Potentiometer.
EEPROM	<i>See Electrically Erasable Programmable Read-Only Memory.</i>

Term	Definition
Electrically Erasable Programmable Read-Only Memory	A special type of PROM that can be erased by exposing it to an electrical charge. An EEPROM retains its contents even when the power is turned off.
EME	Electromagnetic Emissions.
ESD	Electrostatic Discharge.
FCC	Federal Communications Commission.
FET	Field-Effect Transistor.
firmware	Code executed by an embedded processor such as the Host or DSP in a subscriber radio. This type of code is typically resident in non-volatile memory and as such is more difficult to change than code executed from RAM.
FGU	<i>See frequency generation unit.</i>
flash	A non-volatile memory device similar to an EEPROM. Flash memory can be erased and reprogrammed in blocks instead of one byte at a time.
FLASHcode	A 13-digit code which uniquely identifies the System Software Package and Software Revenue Options that are enabled in a particular subscriber radio. FLASHcodes are only applicable for radios which are upgradeable through the FLASHport process.
FLASHport®	A Motorola term that describes the ability of a radio to change memory. Every FLASHport radio contains a FLASHport EEPROM memory chip that can be software written and rewritten to, again and again.
FMR	<i>See Florida Manual Revision.</i>
Florida Manual Revision	A publication that provides supplemental information for its parent publication before it is revised and reissued.
frequency	Number of times a complete electromagnetic-wave cycle occurs in a fixed unit of time (usually one second).
frequency generation unit	This unit generates ultra-stable, low-phase noise master clock and other derived synchronization clocks that are distributed throughout the communication network.
General-Purpose Input/Output	Pins whose function is programmable.
GPIO	<i>See General-Purpose Input/Output.</i>
host code	Object code executed by the host processor in an ASTRO subscriber radio. The host is responsible for control-oriented tasks such as decoding and responding to user inputs.
IC	<i>See integrated circuit.</i>

Term	Definition
IF	Intermediate Frequency.
IMBE	A sub-band, voice-encoding algorithm used in ASTRO digital voice.
inbound signaling word	Data transmitted on the control channel from a subscriber unit to the central control unit.
integrated circuit	An assembly of interconnected components on a small semiconductor chip, usually made of silicon. One chip can contain millions of microscopic components and perform many functions.
ISW	<i>See inbound signaling word.</i>
key-variable loader	A device used to load encryption keys into a radio.
kHz	<i>See kilohertz.</i>
kilohertz	One thousand cycles per second. Used especially as a radio-frequency unit.
KVL	<i>See key-variable loader.</i>
LCD	<i>See liquid-crystal display.</i>
LED	<i>See light emitting diode.</i>
light emitting diode	An electronic device that lights up when electricity is passed through it.
liquid-crystal display	An LCD uses two sheets of polarizing material with a liquid-crystal solution between them. An electric current passed through the liquid causes the crystals to align so that light cannot pass through them.
LO	Local oscillator.
low-speed handshake	150-baud digital data sent to the radio during trunked operation while receiving audio.
LSH	<i>See low-speed handshake.</i>
Master In Slave Out	SPI data line from a peripheral to the MCU.
Master Out Slave In	SPI data line from the MCU to a peripheral.
MCU	<i>See microcontroller unit.</i>
MDC	Motorola Digital Communications.
MDI	MCU/DSP Interface internal to the Patriot IC.
MHz	<i>See Megahertz.</i>
Megahertz	One million cycles per second. Used especially as a radio-frequency unit.

Term	Definition
microcontroller unit	Also written as μC . A microprocessor that contains RAM and ROM components, as well as communications and programming components and peripherals.
microprocessor core	The central processing unit of the microprocessor and DSP IC and powered by a lower voltage supply than the logic I/O section.
MISO	<i>See Master In Slave Out.</i>
MOSI	<i>See Master Out Slave In.</i>
multiplexer	An electronic device that combines several signals for transmission on some shared medium (e.g., a telephone wire).
MUX	<i>See multiplexer.</i>
NiCd	Nickel-cadmium.
NiMH	Nickel-metal-hydride.
OMPAC	<i>See over-molded pad-array carrier.</i>
open architecture	A controller configuration that utilizes a microprocessor with extended ROM, RAM, and EEPROM.
oscillator	An electronic device that produces alternating electric current and commonly employs tuned circuits and amplifying components.
OSW	<i>See outbound signaling word.</i>
OTAR	<i>See over-the-air rekeying.</i>
outbound signaling word	Data transmitted on the control channel from the central controller to the subscriber unit.
over-molded pad-array carrier	A Motorola custom IC package, distinguished by the presence of solder balls on the bottom pads.
over-the-air rekeying	Allows the dispatcher to remotely reprogram the encryption keys in the radio.
PA	Power amplifier.
paging	One-way communication that alerts the receiver to retrieve a message.
Patriot IC	A dual-core processor that contains an MCU and a DSP in one IC package.
PC Board	Printed Circuit Board. Also referred to as a PCB.
phase-locked loop	A circuit in which an oscillator is kept in phase with a reference, usually after passing through a frequency divider.
PL	<i>See private-line tone squelch.</i>

Term	Definition
PLL	<i>See phase-locked loop.</i>
private-line tone squelch	A continuous sub-audible tone that is transmitted along with the carrier. <i>See also DPL.</i>
Programmable Read-Only Memory	A memory chip on which data can be written only once. Once data has been written onto a PROM, it remains there forever.
PROM	<i>See Programmable Read-Only Memory.</i>
PTT	<i>See Push-to-Talk.</i>
Push-to-Talk	The switch or button usually located on the left side of the radio which, when pressed, causes the radio to transmit. When the PTT is released, the unit returns to receive operation.
radio frequency	The portion of the electromagnetic spectrum between audio sound and infrared light (approximately 10 kHz to 10 GHz).
radio frequency power amplifier	Amplifier having one or more active devices to amplify radio signals.
Radio Interface Box	A service aid used to enable communications between a radio and the programming software.
Radio Service Software	DOS-based software containing the feature set of an ASTRO radio. <i>See also CPS.</i>
random access memory	A type of computer memory that can be accessed randomly; that is, any byte of memory can be accessed without touching the preceding bytes.
RAM	<i>See random access memory.</i>
read-only memory	A type of computer memory on which data has been prerecorded. Once data has been written onto a ROM chip, it cannot be removed and can only be read.
real-time clock	A module that keeps track of elapsed time even when a computer is turned off.
receiver	Electronic device that amplifies RF signals. A receiver separates the audio signal from the RF carrier, amplifies it, and converts it back to the original sound waves.
registers	Short-term data-storage circuits within the microcontroller unit or programmable logic IC.
repeater	Remote transmit/receive facility that re-transmits received signals in order to improve communications range and coverage (conventional operation).
repeater/talkaround	A conventional radio feature that permits communication through a receive/transmit facility, which re-transmits received signals in order to improve communication range and coverage.

Term	Definition
RESET	Reset line: an input to the microcontroller that restarts execution.
RF	<i>See radio frequency.</i>
RF PA	<i>See radio frequency power amplifier.</i>
RIB	<i>See Radio Interface Box.</i>
ROM	<i>See read-only memory.</i>
RPCIC	Regulator/power control IC.
RPT/TA	<i>See repeater/talkaround.</i>
RSS	<i>See Radio Service Software.</i>
RTC	<i>See real-time clock.</i>
RX	Receive.
RX DATA	Recovered digital data line.
SAP	<i>See Serial Audio CODEC Port.</i>
Serial Audio CODEC Port	SSI to and from the GCAP II IC CODEC used to transfer transmit and receive audio data.
Serial Communication Interface Input Line	A full-duplex (receiver/transmitter) asynchronous serial interface.
SCI IN	<i>See Serial Communication Interface Input Line.</i>
Serial Peripheral Interface	How the microcontroller communicates to modules and ICs through the CLOCK and DATA lines.
signal	An electrically transmitted electromagnetic wave.
Signal Qualifier mode	An operating mode in which the radio is muted, but still continues to analyze receive data to determine RX signal type.
softpot	<i>See software potentiometer.</i>
software	Computer programs, procedures, rules, documentation, and data pertaining to the operation of a system.
software potentiometer	A computer-adjustable electronic attenuator.
spectrum	Frequency range within which radiation has specific characteristics.
SPI	<i>See Serial Peripheral Interface.</i>
squelch	Muting of audio circuits when received signal levels fall below a pre-determined value. With carrier squelch, all channel activity that exceeds the radio's preset squelch level can be heard.

Term	Definition
SRAM	<i>See static RAM.</i>
SRIB	Smart Radio Interface Box. <i>See RIB.</i>
SSI	<i>See Synchronous Serial Interface.</i>
Standby mode	An operating mode in which the radio is muted but still continues to monitor data.
static RAM	A type of memory used for volatile, program/data memory that does not need to be refreshed.
Synchronous Serial Interface	DSP interface to peripherals that consists of a clock signal line, a frame synchronization signal line, and a data line.
system central controllers	Main control unit of the trunked dispatch system; handles ISW and OSW messages to and from subscriber units (<i>See ISW and OSW</i>).
system select	The act of selecting the desired operating system with the system-select switch (also, the name given to this switch).
thin small-outline package	A type of dynamic random-access memory (DRAM) package that is commonly used in memory applications.
time-out timer	A timer that limits the length of a transmission.
TOT	<i>See time-out timer.</i>
transceiver	Transmitter-receiver. A device that both transmits and receives analog or digital signals. Also abbreviated as XCVR.
transmitter	Electronic equipment that generates and amplifies an RF carrier signal, modulates the signal, and then radiates it into space.
TSOP	<i>See thin small-outline package.</i>
TX	Transmit.
UART	<i>See also Universal Asynchronous Receiver Transmitter.</i>
UCM	Universal Crypto Module.
UHF	Ultra-High Frequency.
Universal Asynchronous Receiver Transmitter	A microchip with programming that controls a computer's interface to its attached serial devices.
Universal Serial Bus	An external bus standard that supports data transfer rates of 12 Mbps.
Urchin IC	A programmable logic device configured to supply a 2.8 V, 48 kHz square wave at 2% duty cycle and a 2.8 V, 2.4 MHz square wave at 50% duty cycle to the TX modulation DAC using a 16.8 MHz reference input. These clock signals are used by the DAC to convert the digital SSI audio into an analog modulation waveform.

Term	Definition
USB	<i>See Universal Serial Bus.</i>
VCO	<i>See voltage-controlled oscillator.</i>
vector sum excited linear predictive coding	A voice-encoding technique used in ASTRO digital voice.
VHF	Very-High Frequency.
VIP	Vehicle Interface Port.
VOCON	<i>See vocoder/controller.</i>
vocoder	An electronic device for synthesizing speech by implementing a compression algorithm particular to voice. <i>See also voice encoder.</i>
vocoder/controller	A PC board that contains an ASTRO radio's microcontroller, DSP, memory, audio and power functions, and interface support circuitry.
voice encoder	The DSP-based system for digitally processing analog signals, and includes the capabilities of performing voice compression algorithms or voice encoding. <i>See also vocoder.</i>
voltage-controlled oscillator	An oscillator in which the frequency of oscillation can be varied by changing a control voltage.

Notes

Index

Numerics

1st local oscillator (LO)	
136-174 MHz band	3-49
380-470 MHz band	3-52
450-520 MHz band	3-57
700-800 MHz band	3-61
2nd local oscillator (LO)	
136-174 MHz band	3-21
380-470 MHz band	3-23
450-520 MHz band	3-24
700-800 MHz band	3-26
700-800 MHz radio specifications	xlvii

A

ABACUS III IC	
2nd LO, receiver back-end	
136-174 MHz band	3-21
380-470 MHz band	3-23
450-520 MHz band	3-24
700-800 MHz band	3-26
receiver back-end	
136-174 MHz band	3-20
380-470 MHz band	3-22
450-520 MHz band	3-23
700-800 MHz band	3-25
sampling clock oscillator, receiver back-end	
136-174 MHz band	3-21
380-470 MHz band	3-23
450-520 MHz band	3-24
700-800 MHz band	3-26
amplifier, power, troubleshooting	
136-174 MHz band	4-34
380-470 MHz band	4-35
450-520 MHz band	4-35
700-800 MHz band	4-35
analog mode of operation	2-12
antenna switch	
136-174 MHz band	3-29
380-470 MHz band	3-34
450-520 MHz band	3-39
700-800 MHz band	3-43
assembly	
control-head	2-2
RF board	3-1
ASTRO mode of operation	2-13
attenuator	
step (136-174 MHz band)	3-14
switchable (380-470 MHz band)	3-16
switchable (450-520 MHz band)	3-18

B

B+ power routing, controller	3-65
back-end receiver section	
136-174 MHz band	
ABACUS III IC	3-20
IF	3-20

overview	2-8
380-470 MHz band	
ABACUS III IC	3-22
IF filter	3-22
overview	2-9
theory of operation	3-21
450-520 MHz band	
ABACUS III IC	3-23
IF filter	3-23
theory of operation	3-23
700-800 MHz band	
ABACUS III IC	3-25
IF filter	3-25
overview	2-9
theory of operation	3-24
bias tables, standard	4-28
board layouts, listing	7-1

C

chart, model	
mobile	
700-800 MHz	xlii
UHF Range 1	xxxiv, xxxvi
UHF Range 2	xxxix
VHF	xxix, xxxi
motorcycle	
700-800 MHz	xli
UHF Range 1	xxxii, xxxiii
UHF Range 2	xxxviii
VHF	xxviii
charts	
troubleshooting	
introduction	5-1
list	5-1
circuit protection, transmitter	2-10
component	
location diagrams listing	
interconnect boards	8-1
main board	7-1
parts list	
main board	
136-174 MHz band	7-47, 7-60
380-470 MHz band	7-105, 7-120
450-520 MHz band	7-163
700-800 MHz band	7-207
remote interconnect board	
motorcycle	8-5
standard	8-4, 8-19
W3 hand-held control head	8-7, 8-11, 8-17
table	7-1
control-head assembly	
description	2-2
ignition sense circuits	2-7
power supplies	2-7
vehicle interface ports	
connections	
input	2-6
output	2-6
dash-mount configuration	2-2
DEK interface with radio	2-7
description	2-2
remote-mount	

plus DEK configuration	2-4
standard configuration	2-2
W3 configuration	2-4
VIP input connections	2-6
controller	
analog mode of operation	2-12
ASTRO mode of operation	2-13
components and circuitry	2-13
daughtercard module	3-64
DC power distribution	3-65
DSP system clock	3-68
encryption voltages	3-66
external bus serial communications	3-71
MCU system clock	3-68
power-up/power-down sequence	3-68
receive audio	3-72
reset circuits	3-67
SPI bus	3-71
theory of operation	3-62
copyrights	
computer software	ii
document	ii

D

daughtercard module	
overview	2-13
theory of operation	3-64
troubleshooting	4-2
DC power distribution	
136-174 MHz band	3-13
380-470 MHz band	3-12
450-520 MHz band	3-12
700-800 MHz band	3-13
introduction	3-12
DSP system clock	3-68

E

encryption	
errors	
09/10	A-2
09/90	A-2
keyload failure	A-2
S03	A-2
self-test	A-2
secure	
interface board	
kits	A-1
schematics	8-20
module circuit description	A-2
universal crypto module kits	A-1
voltages, controller	3-66
errors	
09/10	A-2
09/90	A-2
operational codes	4-5
power-up self-check	4-3
S03	A-2
external bus serial communications, controller	3-71

F

filter	
harmonic	
136-174 MHz band	3-29
380-470 MHz band	3-34
450-520 MHz band	3-39
700-800 MHz band	3-43
highpass, receiver front-end (380-470 MHz band) .. 3-16	
highpass, receiver front-end (450-520 MHz band) .. 3-17	
loop	
136-174 MHz band	3-48
380-470 MHz band	3-52
450-520 MHz band	3-56
700-800 MHz band	3-60
preselector, receiver front-end	
136-174 MHz band	3-14
380-470 MHz band	3-16
450-520 MHz band	3-18
700-800 MHz band	3-19
receiver back-end IF	
380-470 MHz band	3-22
450-520 MHz band	3-23
700-800 MHz band	3-25
firmware, reflashing	3-76
flash programming	3-75
flex cables pin-out assignments	9-1
flowcharts, troubleshooting	5-14
136-174MHz band	
low or no RX injection signal	5-21
low or no TX injection signal	5-22
no output power and IDC	5-26
no output power at TX mode	5-25
poor RX sensitivity or no RX audio	5-15
RX back-end-poor SINAD or no audio	5-18
RX IF-poor SINAD or no audio	5-17
TX or RX VCO unlock (Fail 001)	5-23
380-470 MHz and 450-520 MHz bands	
low or no RX injection signal	5-35
low or no TX injection signal	5-36
no 16.8 MHz reference oscillator frequency	5-27
no TX audio	5-37
poor RX sensitivity or no RX audio	5-28
RFPA power control-no VGBIAS	5-45
RFPA-no or low TX power output	5-40
RX back-end-poor SINAD or no audio	5-32
RX IF-poor SINAD or no audio	5-30
TX or RX VCO unlock (Fail 001)	5-38
700-800 MHz band	
low or no RX injection signal	5-53
low or no TX injection signal	5-54
no 16.8 MHz reference	5-46
no TX audio	5-55
poor RX sensitivity or no RX audio	5-47
RFPA power control-no K9.1V	5-63
RFPA power control-no or low TX RFPA_CNTRL 5-65	
RFPA power control-no VGBIAS	5-64
RFPA-no or low TX power output	5-58
RX back-end-poor SINAD or no audio	5-50
RX IF-poor SINAD or no audio	5-49
TX or RX VCO unlock (Fail 001)	5-56
frequency generation unit (FGU)	

-
- 136-174 MHz band
 - charge pump bias 3-48
 - description 2-10
 - lock detect 3-48
 - loop filter 3-48
 - LV Frac-N synthesizer 3-46
 - modulation 3-47
 - prescaler feedback 3-49
 - receiver injection 3-49
 - receiver VCOs 3-49
 - reference oscillator 3-46
 - superfilter 3-47
 - transmitter injection 3-48
 - transmitter VCOs 3-49
 - voltage multiplier 3-47
 - 380-470 MHz band
 - charge pump bias 3-52
 - description 2-11
 - lock detect 3-52
 - loop filter 3-52
 - LV Frac-N synthesizer 3-50
 - modulation 3-51
 - prescaler feedback 3-53
 - receiver injection 3-52
 - receiver VCOs 3-53
 - reference oscillator 3-50
 - superfilter 3-51
 - transmitter injection 3-52
 - transmitter VCOs 3-53
 - voltage multiplier 3-51
 - 450-520 MHz band
 - charge pump bias 3-56
 - lock detect 3-56
 - loop filter 3-56
 - LV Frac-N synthesizer 3-55
 - modulation 3-56
 - prescaler feedback 3-58
 - receiver injection 3-57
 - receiver VCOs 3-57
 - reference oscillator 3-55
 - superfilter 3-56
 - transmitter injection 3-57
 - transmitter VCOs 3-57
 - voltage multiplier 3-55
 - 700-800 MHz band
 - charge pump bias 3-60
 - description 2-11
 - lock detect 3-60
 - loop filter 3-60
 - LV Frac-N synthesizer 3-59
 - modulation 3-60
 - prescaler feedback 3-62
 - receiver injection 3-61
 - receiver VCOs 3-62
 - reference oscillator 3-59
 - superfilter 3-60
 - transmitter injection 3-61
 - transmitter VCOs 3-61
 - voltage multiplier 3-59
 - description 3-45
 - theory of operation
 - 136-174 MHz band 3-45
 - 380-470 MHz band 3-49
 - 450-520 MHz band 3-54
 - 700-800 MHz band 3-58
 - front-end receiver section
 - 136-174 MHz band
 - low-noise amplifier (LNA) 3-14
 - mixer 3-15
 - overview 2-8
 - PIN diode switches 3-14
 - preselector filters 3-14
 - step attenuator 3-14
 - theory of operation 3-13
 - 380-470 MHz band
 - first low-noise amplifier 3-16
 - highpass filter 3-16
 - image filter 3-16
 - low-noise amplifier (LNA) 3-16
 - mixer 3-16
 - overview 2-8
 - preselector filters 3-16
 - switchable attenuator 3-16
 - theory of operation 3-15
 - 450-520 MHz band
 - first low-noise amplifier 3-17
 - highpass filter 3-17
 - image filter 3-18
 - low-noise amplifier (LNA) 3-18
 - mixer 3-18
 - preselector filters 3-18
 - switchable attenuator 3-18
 - theory of operation 3-17
 - 700-800 MHz band
 - low-noise amplifier (LNA) 3-19
 - mixer 3-20
 - overview 2-9
 - preselector filters 3-19
 - theory of operation 3-19
 - functional blocks, radio 2-1
- ## G
- glossary of terms Glossary-1
- ## H
- handling precautions 4-1
 - harmonic filter
 - 136-174 MHz band 3-29
 - 380-470 MHz band 3-34
 - 450-520 MHz band 3-39
 - 700-800 MHz band 3-43
 - highpass filter, receiver front-end
 - 380-470 MHz band 3-16
 - 450-520 MHz band 3-17
- ## I
- IF
 - filter
 - receiver back-end
 - 380-470 MHz band 3-22
 - 450-520 MHz band 3-23
 - 700-800 MHz band 3-25
 - receiver back-end (136-174 MHz band) 3-20
 - receiver section, overview 2-8

- ignition sense circuits, control-head assembly 2-7
 - image filter, receiver front-end (380-470 MHz band) 3-16
 - image filter, receiver front-end (450-520 MHz band) 3-18
 - interconnect board
 - remote
 - board layout 8-3, 8-10, 8-14
 - schematic 8-2, 8-9, 8-13
 - W3 hand-held 8-1
 - interface board, secure 8-20
 - introduction, manual 1-1
- J**
- jumper configuration, board ID 5-13
- K**
- keyload failure A-2
 - kits, universal crypto module (UCM) A-1
- L**
- list
 - component location diagrams
 - interconnect boards 8-1
 - main board 7-1
 - flex cables 9-1
 - schematics
 - interconnect boards 8-1
 - main board 7-1
 - troubleshooting charts 5-1
 - waveforms 6-1
 - local oscillator
 - 1st
 - 136-174 MHz band 3-49
 - 380-470 MHz band 3-52
 - 450-520 MHz band 3-57
 - 700-800 MHz band 3-61
 - 2nd
 - 136-174 MHz band 3-21
 - 380-470 MHz band 3-23
 - 450-520 MHz band 3-24
 - 700-800 MHz band 3-26
 - low-noise amplifier (LNA), receiver front-end
 - 136-174 MHz band 3-14
 - 380-470 MHz band 3-16
 - 450-520 MHz band 3-18
 - 700-800 MHz band 3-19
 - low-noise amplifier, first, receiver front-end, 380-470 MHz band 3-16
 - low-noise amplifier, first, receiver front-end, 450-520 MHz band 3-17
- M**
- main board
 - 136-174 MHz band
 - major sections 3-1
 - theory of operation
 - FGU 3-45
 - power distribution 3-13
 - receiver front-end 3-13
 - RFPA 3-26, 3-28
 - transmitter 3-26
 - troubleshooting 4-5
 - 380-470 MHz band
 - major sections 3-6
 - theory of operation
 - FGU 3-49
 - power distribution 3-12
 - receiver back-end 3-21
 - receiver front-end 3-15
 - RFPA 3-31, 3-33
 - transmitter 3-31
 - troubleshooting 4-11
 - 450-520 MHz band
 - major sections 3-6
 - theory of operation
 - FGU 3-54
 - power distribution 3-12
 - receiver back-end 3-23
 - receiver front-end 3-17
 - RFPA 3-37
 - transmitter 3-37
 - troubleshooting 4-17
 - 700-800 MHz band
 - major sections 3-10
 - theory of operation
 - FGU 3-58
 - power distribution 3-13
 - receiver back-end 3-24
 - receiver front-end 3-19
 - RFPA 3-41
 - transmitter 3-41
 - troubleshooting 4-22
 - flash programming 3-75
 - receive audio 3-72
 - reflash firmware 3-76
 - RS-232 USB bus 3-69
 - theory of operation
 - controller 3-62
 - power distribution 3-12
 - receiver 3-13
 - transmitter 3-26
 - transmit audio 3-74
- manual
- introduction 1-1
 - notations 1-1
 - organization 1-1
 - revisions ii
- MCU system clock 3-68
- mixer, receiver front-end
- 136-174 MHz band 3-15
 - 380-470 MHz band 3-16
 - 450-520 MHz band 3-18
 - 700-800 MHz band 3-20
- mobile model chart
- 700-800 MHz xlii
 - UHF Range 1 xxxiv, xxxvi
 - UHF Range 2 xxxix
 - VHF xxix, xxxi
- mode
- analog 2-12
 - ASTRO 2-13
- model chart

-
- mobile
 - 700-800 MHz xlii
 - UHF Range 1xxxiv, xxxvi
 - UHF Range 2 xxxix
 - VHF xxix, xxxi
 - motorcycle
 - 700-800 MHz xli
 - UHF Range 1xxxii, xxxiii
 - UHF Range 2xxxviii
 - VHFxxviii
 - model numbering scheme xxvii
 - motorcycle
 - model chart
 - 700-800 MHz xli
 - UHF Range 1xxxii, xxxiii
 - UHF Range 2xxxviii
 - VHFxxviii
 - signal-routing diagram 8-21
- N**
- notations, manual 1-1
- O**
- ON (output network)
 - 136-174 MHz band
 - antenna switch 3-29
 - harmonic filter 3-29
 - power detector 3-29
 - theory of operation 3-29
 - 380-470 MHz band
 - antenna switch 3-34
 - harmonic filter 3-34
 - power detector 3-35
 - theory of operation 3-34
 - 450-520 MHz band
 - antenna switch 3-39
 - harmonic filter 3-39
 - power detector 3-39
 - theory of operation 3-38
 - 700-800 MHz band
 - antenna switch 3-43
 - harmonic filter 3-43
 - power detector 3-43
 - theory of operation 3-42
 - transmitter 2-10
 - operational error codes 4-5
 - ordering replacement parts B-1
 - organization, manual 1-1
 - oscillator, local
 - 1st
 - 136-174 MHz band 3-49
 - 380-470 MHz band 3-52
 - 450-520 MHz band 3-57
 - 700-800 MHz band 3-61
 - 2nd
 - 136-174 MHz band 3-21
 - 380-470 MHz band 3-23
 - 450-520 MHz band 3-24
 - 700-800 MHz band 3-26
 - oscillator, reference
 - 136-174 MHz band 3-46
 - 380-470 MHz band 3-50
 - 450-520 MHz band 3-55
 - 700-800 MHz band 3-59
 - out-of-lock condition, VCO 4-7
 - overview, radio 2-1
- P**
- parts
 - list
 - main board
 - 136-174 MHz band 7-47, 7-60
 - 380-470 MHz band 7-105, 7-120
 - 450-520 MHz band 7-163
 - 700-800 MHz band 7-207
 - remote interconnect board
 - motorcycle 8-5
 - standard 8-4, 8-19
 - W3 hand-held control head 8-7, 8-11, 8-17
 - lists table 7-1
 - ordering replacement B-1
 - replacement and substitution 4-1
 - PIN diode switches (136-174 MHz band) 3-14
 - pin-out assignments, flex cables 9-1
 - power amplifier
 - 136-174 MHz
 - theory of operation 3-26, 3-28
 - troubleshooting 4-34
 - 380-470 MHz
 - theory of operation 3-31, 3-33
 - troubleshooting 4-35
 - 450-520 MHz
 - theory of operation 3-37
 - troubleshooting 4-35
 - 700-800 MHz
 - theory of operation 3-41
 - troubleshooting 4-35
 - description 2-10
 - power control
 - theory of operation
 - 136-174 MHz band 3-30
 - 380-470 MHz band 3-35
 - 450-520 MHz band 3-39
 - 700-800 MHz band 3-43
 - transmitter 2-10
 - power detector, ON
 - 136-174 MHz band 3-29
 - 380-470 MHz band 3-35
 - 450-520 MHz band 3-39
 - 700-800 MHz band 3-43
 - power distribution
 - controller 3-65
 - DC
 - 136-174 MHz band 3-13
 - 380-470 MHz band 3-12
 - 450-520 MHz band 3-12
 - 700-800 MHz band 3-13
 - introduction 3-12
 - power routing, controller B+ 3-65
 - power supplies, control-head assembly 2-7
 - power-up self-check errors 4-3
 - power-up/power-down sequence, controller 3-68
 - precautions

handling	4-1	receive audio, controller	3-72
heat-related	4-2	receiver	
preselector filters, receiver front-end		136-174 MHz band	
136-174 MHz band	3-14	back-end	
380-470 MHz band	3-16	ABACUS III IC	3-20
450-520 MHz band	3-18	description	2-8
700-800 MHz band	3-19	IF	3-20
programming flash	3-75	introduction	3-20
publications, related	xxii	front-end	
		description	2-8
		introduction	3-13
		low-noise amplifier (LNA)	3-14
		mixer	3-15
		PIN diode switches	3-14
		preselector filters	3-14
		step attenuator	3-14
		troubleshooting	4-33
		radios	2-8
		380-470 MHz band	
		back-end	
		ABACUS III IC	3-22
		description	2-9
		IF filter	3-22
		introduction	3-21
		front-end	
		description	2-8
		first low-noise amplifier (LNA)	3-16
		highpass filter	3-16
		image filter	3-16
		introduction	3-15
		low-noise amplifier (LNA)	3-16
		mixer	3-16
		preselector filters	3-16
		switchable attenuator	3-16
		troubleshooting	4-33
		IF section, description	2-8
		radios	2-8
		450-520 MHz band	
		back-end	
		ABACUS III IC	3-23
		IF filter	3-23
		introduction	3-23
		front-end	
		first low-noise amplifier (LNA)	3-17
		highpass filter	3-17
		image filter	3-18
		introduction	3-17
		low-noise amplifier (LNA)	3-18
		mixer	3-18
		preselector filters	3-18
		switchable attenuator	3-18
		troubleshooting	4-34
		700-800 MHz band	
		back-end	
		ABACUS III IC	3-25
		description	2-9
		IF filter	3-25
		introduction	3-24
		front-end	3-19
		description	2-9
R			
radio			
136-174 MHz band			
back-end receiver	2-8		
DC power distribution	3-13		
frequency generation unit	2-10		
front-end receiver section	2-8		
receiver	2-8		
transmitter	2-9		
380-470 MHz band			
back-end receiver section	2-9		
DC power distribution	3-12		
frequency generation unit	2-11		
front-end receiver section	2-8		
IF receiver section	2-8		
receiver	2-8		
transmitter	2-9		
450-520 MHz band			
DC power distribution	3-12		
700-800 MHz band			
back-end receiver section	2-9		
DC power distribution	3-13		
frequency generation unit	2-11		
front-end receiver section	2-9		
receiver	2-9		
transmitter	2-10		
control-head assembly	2-2		
controller			
B+ power routing	3-65		
DSP system clock	3-68		
MCU system clock	3-68		
power-up/power-down sequence	3-68		
serial peripheral interface (SPI) bus	3-71		
theory of operation	3-62		
daughtercard module theory of operation	3-64		
functional blocks	2-1		
overview	2-1		
power amplifier assembly	2-10		
power-up/power-down sequence	3-68		
RF board			
receiver back-end circuitry	3-20		
theory of operation	3-1		
specifications			
700-800 MHz	xlvii		
UHF Range 1	xlv		
UHF Range 2	xlvi		
VHF	xliv		
troubleshooting			
precautions			
handling	4-1		
heat-related	4-2		
procedures	4-1		
waveforms	6-2		

- low-noise amplifier (LNA) 3-19
 - mixer 3-20
 - preselector filters 3-19
 - troubleshooting 4-34
 - radios 2-9
 - back-end, introduction 3-20
 - front-end, introduction 3-13
 - primary components 2-8
 - reflashing firmware 3-76
 - related publications xxii
 - remote interconnect board
 - layout 8-3, 8-10, 8-14
 - schematic 8-2, 8-9, 8-13
 - troubleshooting 8-1
 - replacement parts, ordering B-1
 - reset circuits, controller 3-67
 - RF board theory of operation 3-1
 - RF exposure compliance information ii
 - RFPA
 - 136-174 MHz band
 - driver stage 3-27, 3-28
 - final stage 3-27, 3-29
 - first stage 3-27, 3-28
 - theory of operation 3-26, 3-28
 - 380-470 MHz band
 - driver stage 3-32, 3-33
 - final stage 3-32, 3-34
 - first stage 3-32, 3-33
 - theory of operation 3-31, 3-33
 - 450-520 MHz band
 - driver stage 3-38
 - final stage 3-38
 - first stage 3-37
 - theory of operation 3-37
 - 700-800 MHz band
 - driver stage 3-42
 - final stage 3-42
 - first stage 3-42
 - theory of operation 3-41
 - stages, transmitter 2-10
 - rigid circuit boards, troubleshooting 4-2
 - RS-232 USB bus 3-69
- S**
- safety information, product ii
 - sampling clock oscillator, ABACUS III IC
 - 136-174 MHz band 3-21
 - 380-470 MHz band 3-23
 - 450-520 MHz band 3-24
 - 700-800 MHz 3-26
 - SB9600 serial communications 3-71
 - schematics
 - listing
 - interconnect boards 8-1
 - main board 7-1
 - main board layouts
 - 700-800 MHz (HUF4017A) 7-174
 - listing 7-1
 - UHF Range 1 (HUE4039A) 7-72
 - UHF Range 2 (HUE4040A) 7-132
 - VHF (HUD4022A) 7-3
 - secure
 - interface board
 - board layouts 8-20
 - kits A-1
 - operations
 - errors A-2
 - keyload failure A-2
 - signal tracing procedures 4-3
 - signal-routing diagram, motorcycle 8-21
 - specifications, radio
 - 700-800 MHz xlvii
 - UHF Range 1 xlv
 - UHF Range 2 xlvi
 - VHF xlv
 - SPI bus, controller 3-71
 - standard bias tables 4-28
 - step attenuator (136-174 MHz band) 3-14
- T**
- terms, glossary of Glossary-1
 - test points, troubleshooting 5-12
 - theory of operation
 - 136-174 MHz band
 - frequency generation unit (FGU)
 - charge pump bias 3-48
 - introduction 3-45
 - lock detect 3-48
 - loop filter 3-48
 - LV Frac-N synthesizer 3-46
 - modulation 3-47
 - prescaler feedback 3-49
 - receiver injection 3-49
 - receiver VCOs 3-49
 - reference oscillator 3-46
 - superfilter 3-47
 - transmitter injection 3-48
 - transmitter VCOs 3-49
 - voltage multiplier 3-47
 - major board sections 3-1
 - receiver
 - back-end 3-20
 - front-end 3-13
 - transmitter
 - introduction 3-26
 - ON (output network) 3-29
 - power control 3-30
 - power control loop 3-30
 - protection mechanisms 3-31
 - RFPA 3-26, 3-28
 - 380-470 MHz band
 - frequency generation unit (FGU)
 - charge pump bias 3-52
 - introduction 3-49
 - lock detect 3-52
 - loop filter 3-52
 - LV Frac-N synthesizer 3-50
 - modulation 3-51
 - prescaler feedback 3-53
 - receiver injection 3-52
 - receiver VCOs 3-53
 - reference oscillator 3-50
 - superfilter 3-51

transmitter injection	3-52	back-end	3-24
transmitter VCOs	3-53	front-end	3-19
voltage multiplier	3-51	transmitter	
major board sections	3-6	ON (output network)	3-42
receiver		power control	3-43
back-end	3-21	power control loop	3-44
front-end	3-15	protection mechanisms	3-45
transmitter		RFPA	3-41
introduction	3-31	control head	
ON (output network)	3-34	W4, W5, W7	2-2
power control	3-35	controller	
power control loop	3-36	description	3-62
protection mechanisms	3-37	DSP system clock	3-68
RFPA	3-31, 3-33	MCU system clock	3-68
450-520 MHz band		power-up/power-down sequence	3-68
frequency generation unit (FGU)		serial peripheral interface (SPI) bus	3-71
charge pump bias	3-56	daughtercard module	3-64
introduction	3-54	receive audio	3-72
lock detect	3-56	RF board description	3-1
loop filter	3-56	trademark information	ii
LV Frac-N synthesizer	3-55	transmit audio, main board	3-74
modulation	3-56	transmitter	
prescaler feedback	3-58	136-174 MHz band	
receiver injection	3-57	50-Watt	
receiver VCOs	3-57	ON (output network)	
reference oscillator	3-55	antenna switch	3-29
superfilter	3-56	harmonic filter	3-29
transmitter injection	3-57	introduction	3-29
transmitter VCOs	3-57	power detector	3-29
voltage multiplier	3-55	power control	3-30
major board sections	3-6	RFPA	
receiver		driver stage	3-27, 3-28
back-end	3-23	final stage	3-27, 3-29
front-end	3-17	first stage	3-27, 3-28
transmitter		introduction	3-26, 3-28
introduction	3-37	components	2-9
ON (output network)	3-38	power control	
power control	3-39	power control loop	3-30
power control loop	3-40	protection mechanisms	3-31
protection mechanisms	3-41	theory of operation	3-26
RFPA	3-37	380-470 MHz band	
700-800 MHz band		40-Watt	
frequency generation unit (FGU)		ON (output network)	
charge pump bias	3-60	antenna switch	3-34
introduction	3-58	harmonic filter	3-34
lock detect	3-60	introduction	3-34
loop filter	3-60	power detector	3-35
LV Frac-N synthesizer	3-59	power control	3-35
modulation	3-60	RFPA	
prescaler feedback	3-62	driver stage	3-32, 3-33
receiver injection	3-61	final stage	3-32, 3-34
receiver VCOs	3-62	first stage	3-32, 3-33
reference oscillator	3-59	introduction	3-31, 3-33
superfilter	3-60	components	2-9
transmitter injection	3-61	power control	
transmitter VCOs	3-61	power control loop	3-36
voltage multiplier	3-59	protection mechanisms	3-37
introduction	3-41	theory of operation	3-31
major board sections	3-10	450-520 MHz band	
receiver		45-Watt	
		ON (output network)	

antenna switch	3-39	no TX audio	5-37
harmonic filter	3-39	poor RX sensitivity or no RX audio	5-28
introduction	3-38	RFPA power control-no VGBIAS	5-45
power detector	3-39	RFPA-no or low TX power output	5-40
power control	3-39	RX back-end-poor SINAD or no audio	5-32
RFPA		RX IF-poor SINAD or no audio	5-30
driver stage	3-38	TX or RX VCO unlock (Fail 001)	5-38
final stage	3-38	700-800 MHz band	
first stage	3-37	low or no RX injection signal	5-53
introduction	3-37	low or no TX injection signal	5-54
power control		no 16.8 MHz reference oscillator frequency .	5-46
power control loop	3-40	no TX audio	5-55
protection mechanisms	3-41	poor RX sensitivity or no RX audio	5-47
theory of operation	3-37	RFPA power control-no K9.1V	5-63
700-800 MHz band		RFPA power control-no or low TX RFPA_CNTRL	
35-Watt		5-65	
ON (output network)		RFPA power control-no VGBIAS	5-64
antenna switch	3-43	RFPA-no or low TX power output	5-58
harmonic filter	3-43	RX back-end-poor SINAD or no audio	5-50
power detector	3-43	RX IF-poor SINAD or no audio	5-49
RFPA		TX or RX VCO unlock (Fail 001)	5-56
driver stage	3-42	operational error codes	4-5
final stage	3-42	parts replacement and substitution	4-1
first stage	3-42	power-up self-check errors	4-3
introduction	3-41	precautions	
components	2-10	handling	4-1
power control		heat-related	4-2
power control loop	3-44	procedures	
protection mechanisms	3-45	136-174 MHz band	
theory of operation	3-41	main board	4-5
circuit protection	2-10	power amplifier	4-34
description	3-26	receiver front-end	4-33
ON (output network)	2-10	380-470 MHz band	
power control	2-10	main board	4-11
primary components	2-9	power amplifier	4-35
RFPA	2-10	receiver front-end	4-33
troubleshooting		450-520 MHz band	
board ID jumper configuration	5-13	main board	4-17
charts		power amplifier	4-35
introduction	5-1	receiver front-end	4-34
list	5-1	700-800 MHz band	
daughtercard module	4-2	main board	4-22
FGU troubleshootong aids		power amplifier	4-35
136-174 MHz band	4-7	receiver front-end	4-34
380-470 MHz band	4-13	signal tracing	4-3
450-520 MHz band	4-19	standard bias tables	4-28
700-800 MHz band	4-24	voltage measurement procedures	4-3
flowcharts		remote interconnect board	
136-174 MHz band		layout	8-3, 8-10, 8-14
low or no RX injection signal	5-21	schematic	8-2, 8-9, 8-13
low or no TX injection signal	5-22	rigid circuit boards	4-2
no output power and IDC	5-26	schematics	
no output power at TX mode	5-25	main board	
poor RX sensitivity or no RX audio	5-15	700-800 MHz (HUF4017A)	7-174
RX back-end-poor SINAD or no audio	5-18	listing	7-1
RX IF-poor SINAD or no audio	5-17	UHF Range 1 (HUE4039A)	7-72
TX or RX VCO unlock (Fail 001)	5-23	UHF Range 2 (HUE4040A)	7-132
380-470 MHz and 450-520 MHz bands		VHF (HUD4022A)	7-3
low or no RX injection signal	5-35	remote interconnect board	8-2, 8-9, 8-13
low or no TX injection signal	5-36	secure operations	
no 16.8 MHz reference oscillator frequency .	5-27	errors	A-2

keyload failure	A-2	dash-mount control-head configuration	2-2
table	5-3	DEK interface with radio	2-7
test points	5-12	description	2-2
waveforms	6-2	remote-mount	
		control-head configuration	2-2
		plus DEK configuration	2-4
		W3 control-head configuration	2-4
		VIP input connections	2-6
		VHF radio specifications	xliv
		voltage-controlled oscillator (VCO) assembly	
		out-of-lock condition	4-7
U		W	
UHF Range 1 radio specifications	xlv	W3 hand-held interconnect board	8-1
UHF Range 2 radio specifications	xlvi	warranty information	xxiii
universal crypto module (UCM) kits	A-1	waveforms	
		listing	6-1
		troubleshooting	6-2
V			
VCO (voltage-controlled oscillator assembly)			
out-of-lock condition	4-7		
vehicle interface ports			
connections			
input	2-6		
output	2-6		



Motorola, Inc.
8000 West Sunrise Boulevard
Ft. Lauderdale, FL 33322

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6881096C74-B