

## 5.2 T858 Power Amplifier PCB

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## T858 Parts List (IPN 220-01141-01)

### How To Use This Parts List

The components listed in this parts list are divided into two main types: those with a circuit reference (e.g. C2, D1, R121, etc.) and those without (miscellaneous and mechanical).

Those with a circuit reference are grouped in alphabetical order and then in numerical order within each group. Each component entry comprises three or four columns: the circuit reference, variant (if applicable), IPN and description. A number in the variant column indicates that this is a variant component which is fitted only to the product type listed. Static sensitive devices are indicated by an (S) at the start of the description column.

The miscellaneous and mechanical section lists the variant and common parts in IPN order. Where possible, a number in the legend column indicates their position in the mechanical assembly drawing.

The Parts List Amendments box below lists component changes that took place after the parts list and diagrams in this section were compiled. These changes (e.g. value changes, added/deleted components, etc.) are listed by circuit reference in alphanumeric order and supersede the information given in the parts list or diagrams. Components without circuit references are listed in IPN order.

### Parts List Amendments

C6	100n mylar capacitor (IPN 022-56100-10) and 10Ω resistor (IPN 030-52100-20) - no circuit references - added in series across C6 to inhibit power control instabilities (710813).
C33, C52 & C58	(Low Band) changed from 8p2 (029-01820-02) to 10p (89/06-341). (Mid Band) changed from 3p3 (015-01330-02) to 3p9 Case Mica type (89/08-460).
C62	(Low Band) changed from 3p3 (015-01330-02) to 3p9 (89/07-411).
C63 & C65	(Low Band) changed from 10p (029-02100-01) to 12p (89/07-411).
C66	(Low Band) changed from 4p7 (029-01470-02) to 5p6 (89/07-411).
C70	(Low Band) changed from 3p9 (015-01390-02) to 4p7 (89/07-411).
C80 & C86	150p deleted. To prevent 800kHz instability (94/05-234).
D3	Changed from MR750/SR2607 (IPN 001-00011-60) to MR2520L (IPN 001-00012-90) to provide overvoltage transient suppression (750087/88/89/90/91/92).
L1	(Low Band) changed from 1T/3.0mm (052-08330-10) to 1T/4.0mm. To meet rated power (90/10-534).
L14, L15 & L23	Inductor Tait No.545 added. To remove heat sources from PCB (89/08-438).
L27 & L31	Changed from 1.5T/6.0mm (052-08160-15) to 2.5T/6.0mm. To reduce heating in base ferrite beads (89/10-568).
L42	(Low Band) changed from 1T/3.0mm (052-08330-10) to 1T/4.0mm (89/07-411).
L45	(Low Band) changed from 2T/3.5mm (052-08335-20) to 2T/4.5mm (89/07-411).
L46	(Low Band) changed from 2T/4.0mm (052-08330-10) to 2T/4.5mm (89/07-411).
L47	(Low Band) changed from 2T/3.5mm (052-08335-20) to 2T/4.0mm (89/07-411).
R1 & R3	(Low Band) changed from 270e (030-03270-00) to 150e. To reduce power into the driver (90/07-341).
R2	(Low Band) changed from 18e (030-02180-00) to 39e. To reduce power into the driver (90/07-341).
R11	Changed from 100e (030-03100-00) to SOT (Min value 22e). To reduce gain in drive stage (96/07-7104).
R47	Changed from 100k (036-16100-00) to 47k. To improve control range of forward power alarm (89/09-506).
R67	Changed from 4k7 (036-14470-00) to 10k (89/06-341).
R93	Change from 10k (036-15100-00) to 4k7. To raise limits of reverse power alarm switching point (3/10/89).
R99	2k7 added in series with RV63 (89/06-341).
R100	4k7 added in series with RV63 (89/06-341).

**Parts List Amendments - Continued**

349-00020-36      The two M3x8 Torx screws which secure the module into the rack frame have been replaced by M3x8 Pozidriv screws (IPN 349-00020-55) (750101/2/3/5/6).

Ref	Var	IPN	Description	Ref	Var	IPN	Description
<div style="border: 1px solid black; padding: 5px;"> <p><b>Note</b></p> <p>LOW = 400-440MHZ                      MID = 440-480MHZ                      HI = 480-520MHZ</p> </div>				C92		015-25100-08	CAP CER 0805 CHIP 10N 10% X7R 50V
C1		015-02120-02	CAP CER HIQ 1210 CHIP 12P 5% NPO 200V	C93		015-23150-01	CAP CER 0805 CHIP 150P 5% NPO 50V
C2		015-02180-02	CAP CER HIQ 1210 CHIP 18P 5% NPO 200V	C95		015-06100-08	CAP CER 1206 CHIP 100N 10% X7R 50V
C3		015-02220-02	CAP CER HIQ 1210 CHIP 22P 5% NPO 200V	C96		015-23150-01	CAP CER 0805 CHIP 150P 5% NPO 50V
C6		015-03100-02	CAP CER HIQ 1210 CHIP 100P 5% NPO 200V	C97		015-23150-01	CAP CER 0805 CHIP 150P 5% NPO 50V
C7		015-02150-02	CAP CER HIQ 1210 CHIP 15P 5% NPO 200V	C98		015-24470-08	CAP CER 0805 CHIP 4N7 10% X7R 50V
CV8		028-02200-01	CAP TRIM 4/20P N750 TOP ADJ RED MUR TZ	C99		015-23150-01	CAP CER 0805 CHIP 150P 5% NPO 50V
C11		015-02220-02	CAP CER HIQ 1210 CHIP 22P 5% NPO 200V	C100		015-23150-01	CAP CER 0805 CHIP 150P 5% NPO 50V
C12		015-02180-02	CAP CER HIQ 1210 CHIP 18P 5% NPO 200V	C101		015-25100-08	CAP CER 0805 CHIP 10N 10% X7R 50V
C15		015-03100-02	CAP CER HIQ 1210 CHIP 100P 5% NPO 200V	C102		015-23150-01	CAP CER 0805 CHIP 150P 5% NPO 50V
C16		015-24470-08	CAP CER 0805 CHIP 4N7 10% X7R 50V	C103		015-23150-01	CAP CER 0805 CHIP 150P 5% NPO 50V
C17		020-07470-04	CAP ELECT RADL 4M7 25V 20% 8X13MM SOLID	C104		015-24470-08	CAP CER 0805 CHIP 4N7 10% X7R 50V
C18		015-24470-08	CAP CER 0805 CHIP 4N7 10% X7R 50V	C105		015-23150-01	CAP CER 0805 CHIP 150P 5% NPO 50V
C19		020-07470-04	CAP ELECT RADL 4M7 25V 20% 8X13MM SOLID	C106		015-23150-01	CAP CER 0805 CHIP 150P 5% NPO 50V
C20		015-03100-02	CAP CER HIQ 1210 CHIP 100P 5% NPO 200V	C107		015-06100-08	CAP CER 1206 CHIP 100N 10% X7R 50V
C22		015-02680-02	CAP CER HIQ 1210 CHIP 68P 5% NPO 200V	C108		015-23150-01	CAP CER 0805 CHIP 150P 5% NPO 50V
C23		029-02270-02	CAP MICA 5MM CASE 27P 5%	C109		015-23150-01	CAP CER 0805 CHIP 150P 5% NPO 50V
C24		029-02330-02	CAP MICA 5MM CASE 33P 5%	C110		015-01470-02	CAP CER HIQ 1210 CHIP 4P7 5% NPO 200V
*C27	LOW	029-02330-02	CAP MICA 5MM CASE 33P 5%	C111		015-23150-01	CAP CER 0805 CHIP 150P 5% NPO 50V
*C27	MID	029-02270-02	CAP MICA 5MM CASE 27P 5%	C112		015-23150-01	CAP CER 0805 CHIP 150P 5% NPO 50V
*C27	HI	029-02270-02	CAP MICA 5MM CASE 27P 5%	C113		015-23150-01	CAP CER 0805 CHIP 150P 5% NPO 50V
*C28	LOW	029-02330-02	CAP MICA 5MM CASE 33P 5%	D1		001-00013-45	(S) DIODE SCHOTTKY 1SS97/2
*C28	MID	029-02330-02	CAP MICA 5MM CASE 33P 5%	D2		001-00013-45	(S) DIODE SCHOTTKY 1SS97/2
*C28	HI	029-02220-02	CAP MICA 5MM CASE 22P 5%	D3		001-00011-60	(S) DIODE SR2607 6A/30V
C29		029-03100-02	CAP MICA 5MM CASE 100P 5%	D5		008-00013-32	(S) LED 3MM RED LO CURRENT NO MTG
CV32		028-02100-03	CAP TRIM 2/10P JOHNSON 187-0106-175	D6		001-10000-70	(S) DIODE SMD BAV70 DUAL SW SOT-23 COMCTH
*C33	LOW	029-02100-02	CAP MICA 5MM CASE 10P 5%	D10		008-00013-35	(S) LED 3MM GREEN LO CURRENT NO MTG
*C33	MID	029-01390-02	CAP MICA 5MM CASE 3P9 5%	D11		008-00013-32	(S) LED 3MM RED LO CURRENT NO MTG
*C33	HI		NOT FITTED	D13		001-10000-70	(S) DIODE SMD BAV70 DUAL SW SOT-23 COMCTH
CV34		028-02100-03	CAP TRIM 2/10P JOHNSON 187-0106-175	D17		001-10000-70	(S) DIODE SMD BAV70 DUAL SW SOT-23 COMCTH
CV35		028-02100-03	CAP TRIM 2/10P JOHNSON 187-0106-175	IC1		002-10003-24	(S) IC SMD 324 QUAD OP AMP SO14
C36		029-02270-02	CAP MICA 5MM CASE 27P 5%	IC2		002-00014-62	(S) IC 317L 100MA REG 3 TERMINAL TO-92
C37		029-02270-02	CAP MICA 5MM CASE 27P 5%	IC3		002-10003-58	(S) IC SMD LM358 DUAL OP AMP
C40		029-02270-02	CAP MICA 5MM CASE 27P 5%	*L1	LOW	052-08340-10	COIL A/W 1T/4.0MM SMD 0.8MM WIRE
C41		029-02270-02	CAP MICA 5MM CASE 27P 5%	*L1	MID	052-08330-10	COIL A/W 1T/3.0MM SMD 0.8MM WIRE
*C42	LOW	029-02330-02	CAP MICA 5MM CASE 33P 5%	*L1	HI	052-08330-10	COIL A/W 1T/3.0MM SMD 0.8MM WIRE
*C42	MID	029-02270-02	CAP MICA 5MM CASE 27P 5%	L2		052-08160-25	COIL A/W 2.5T/6.0MM HOR 0.8MM WIRE
*C42	HI	029-02220-02	CAP MICA 5MM CASE 22P 5%	L3		065-00010-04	BEAD FERRITE F8 4X2X5MM
*C43	LOW	029-02330-02	CAP MICA 5MM CASE 33P 5%	L5		065-00010-04	BEAD FERRITE F8 4X2X5MM
*C43	MID	029-02330-02	CAP MICA 5MM CASE 33P 5%	L6		052-08160-25	COIL A/W 2.5T/6.0MM HOR 0.8MM WIRE
*C43	HI	029-02270-02	CAP MICA 5MM CASE 27P 5%	L7		052-08160-25	COIL A/W 2.5T/6.0MM HOR 0.8MM WIRE
C45		015-03100-02	CAP CER HIQ 1210 CHIP 100P 5% NPO 200V	L8		065-00010-04	BEAD FERRITE F8 4X2X5MM
C46		015-03100-02	CAP CER HIQ 1210 CHIP 100P 5% NPO 200V	L11		065-00010-04	BEAD FERRITE F8 4X2X5MM
*C47	LOW	029-02330-02	CAP MICA 5MM CASE 33P 5%	L12		065-00010-04	BEAD FERRITE F8 4X2X5MM
*C47	MID	029-02270-02	CAP MICA 5MM CASE 27P 5%	L13		052-08160-15	COIL A/W 1.5T/6.0MM HOR 0.8MM WIRE
*C47	HI	029-02220-02	CAP MICA 5MM CASE 22P 5%	L14		051-00005-45	COIL IND 18MM FORMED COPPER STRIP
*C49	LOW	029-02330-02	CAP MICA 5MM CASE 33P 5%	L15		051-00005-45	COIL IND 18MM FORMED COPPER STRIP
*C49	MID	029-02330-02	CAP MICA 5MM CASE 33P 5%	L16		065-00010-04	BEAD FERRITE F8 4X2X5MM
*C49	HI	029-02270-02	CAP MICA 5MM CASE 27P 5%	L17		065-00010-04	BEAD FERRITE F8 4X2X5MM
C50		029-03100-02	CAP MICA 5MM CASE 100P 5%	L18		051-00005-53	COIL TAIT NO 553 A/W 10MM LINK T858/9
CV51		028-02100-03	CAP TRIM 2/10P JOHNSON 187-0106-175	L19		051-00005-39	COUPLER WIRELINE TAIT COIL DWG NO 539
*C52	LOW	029-02100-02	CAP MICA 5MM CASE 10P 5%	L21		052-08160-15	COIL A/W 1.5T/6.0MM HOR 0.8MM WIRE
*C52	MID	029-01390-02	CAP MICA 5MM CASE 3P9 5%	L22		065-00010-04	BEAD FERRITE F8 4X2X5MM
*C52	HI		NOT FITTED	L23		051-00005-45	COIL IND 18MM FORMED COPPER STRIP
C54		015-24470-08	CAP CER 0805 CHIP 4N7 10% X7R 50V	L25		052-08330-10	COIL A/W 1T/3.0MM SMD 0.8MM WIRE
C55		020-07470-04	CAP ELECT RADL 4M7 25V 20% 8X13MM SOLID	L26		052-08330-10	COIL A/W 1T/3.0MM SMD 0.8MM WIRE
C56		029-03100-02	CAP MICA 5MM CASE 100P 5%	L27		052-08160-25	COIL A/W 2.5T/6.0MM HOR 0.8MM WIRE
CV57		028-02100-03	CAP TRIM 2/10P JOHNSON 187-0106-175	L28		065-00010-04	BEAD FERRITE F8 4X2X5MM
*C58	LOW	029-02100-02	CAP MICA 5MM CASE 10P 5%	L31		052-08160-25	COIL A/W 2.5T/6.0MM HOR 0.8MM WIRE
*C58	MID	029-01390-02	CAP MICA 5MM CASE 3P9 5%	L32		065-00010-04	BEAD FERRITE F8 4X2X5MM
*C58	HI		NOT FITTED	L35		051-00005-53	COIL TAIT NO 553 A/W 10MM LINK T858/9
C60		015-23150-01	CAP CER 0805 CHIP 150P 5% NPO 50V	L36		065-00010-04	BEAD FERRITE F8 4X2X5MM
C61		015-24470-08	CAP CER 0805 CHIP 4N7 10% X7R 50V	L37		065-00010-04	BEAD FERRITE F8 4X2X5MM
*C62	LOW	015-01390-02	CAP CER HIQ 1210 CHIP 3P9 5% NPO 200V	L38		051-00005-53	COIL TAIT NO 553 A/W 10MM LINK T858/9
*C62	MID	015-01330-02	CAP CER HIQ 1210 CHIP 3P3 5% NPO 200V	L39		051-00005-39	COUPLER WIRELINE TAIT COIL DWG NO 539
*C62	HI	015-01330-02	CAP CER HIQ 1210 CHIP 3P3 5% NPO 200V	L41		056-00021-04	IND FXD 330NH AXIAL
*C63	LOW	029-02120-01	CAP MICA 10MM CASE 12P 5%	*L42	LOW	052-08340-10	COIL A/W 1T/4.0MM SMD 0.8MM WIRE
*C63	MID	029-02100-01	CAP MICA 10MM CASE 10P 10%	*L42	MID	052-08330-10	COIL A/W 1T/3.0MM SMD 0.8MM WIRE
*C63	HI	029-02100-01	CAP MICA 10MM CASE 10P 10%	*L42	HI	052-08330-10	COIL A/W 1T/3.0MM SMD 0.8MM WIRE
*C65	LOW	029-02120-01	CAP MICA 10MM CASE 12P 5%	L43		052-08335-10	COIL A/W 1T/3.5MM SMD 0.8MM WIRE
*C65	MID	029-02100-01	CAP MICA 10MM CASE 10P 10%	*L45	LOW	052-08345-20	COIL A/W 2T/4.5MM SMD 0.8MM WIRE
*C65	HI	029-02100-01	CAP MICA 10MM CASE 10P 10%	*L45	MID	052-08335-20	COIL A/W 2T/3.5MM SMD 0.8MM WIRE
*C66	LOW	029-01560-02	CAP MICA 5MM CASE 5P6 5%	*L45	HI	052-08335-20	COIL A/W 2T/3.5MM SMD 0.8MM WIRE
*C66	MID	029-01470-02	CAP MICA 5MM CASE 4P7 5%	*L46	LOW	052-08345-20	COIL A/W 2T/4.5MM SMD 0.8MM WIRE
*C66	HI	029-01470-02	CAP MICA 5MM CASE 4P7 5%	*L46	MID	052-08340-20	COIL A/W 2T/4.0MM SMD 0.8MM WIRE
C67		015-21220-01	CAP CER 0805 CHIP 2P2 +/-0.25P NPO 50V	*L46	HI	052-08340-20	COIL A/W 2T/4.0MM SMD 0.8MM WIRE
C68		015-21220-01	CAP CER 0805 CHIP 2P2 +/-0.25P NPO 50V	*L47	LOW	052-08340-20	COIL A/W 2T/4.0MM SMD 0.8MM WIRE
*C70	LOW	015-21470-01	CAP CER 0805 CHIP 4P7 +/-0.25P NPO 50V	*L47	MID	052-08335-20	COIL A/W 2T/3.5MM SMD 0.8MM WIRE
*C70	MID	015-21390-01	CAP CER 0805 CHIP 3P9 +/-0.25P NPO 50V	*L47	HI	052-08335-20	COIL A/W 2T/3.5MM SMD 0.8MM WIRE
*C70	HI	015-21390-01	CAP CER 0805 CHIP 3P9 +/-0.25P NPO 50V	L49		056-00021-04	IND FXD 330NH AXIAL
C72		015-24470-08	CAP CER 0805 CHIP 4N7 10% X7R 50V	L51		056-00021-04	IND FXD 330NH AXIAL
C73		015-23150-01	CAP CER 0805 CHIP 150P 5% NPO 50V	L52		051-00005-53	COIL TAIT NO 553 A/W 10MM LINK T858/9
C76		015-24470-08	CAP CER 0805 CHIP 4N7 10% X7R 50V	Q1		000-00022-70	(S) XSTR SD1134 NPN STUD MTG UHF PWR 2W
C77		015-23150-01	CAP CER 0805 CHIP 150P 5% NPO 50V	Q3		000-00022-75	(S) XSTR SD1433 NPN STUD MTG UHF PWR 10W
C78		015-23150-01	CAP CER 0805 CHIP 150P 5% NPO 50V	Q4		000-00022-80	(S) XSTR SD1488 NPN 6FL UHF PWR 40W
C81		015-23150-01	CAP CER 0805 CHIP 150P 5% NPO 50V	Q6		000-00022-80	(S) XSTR SD1488 NPN 6FL UHF PWR 40W
C84		015-24470-08	CAP CER 0805 CHIP 4N7 10% X7R 50V	Q7		000-00022-80	(S) XSTR SD1488 NPN 6FL UHF PWR 40W
C85		015-23150-01	CAP CER 0805 CHIP 150P 5% NPO 50V	Q10		000-00020-70	(S) XSTR BS170 JFET TO-92 SMALL SIG
C87		015-23150-01	CAP CER 0805 CHIP 150P 5% NPO 50V	Q11		000-10008-17	(S) XSTR SMD BC817-25 NPN SOT-23 AF LO PWR
C90		015-06100-08	CAP CER 1206 CHIP 100N 10% X7R 50V	Q12		000-00020-70	(S) XSTR BS170 JFET TO-92 SMALL SIG
C91		025-08100-02	CAP TANT BEAD 10M 10% 16V	Q13		000-10008-17	(S) XSTR SMD BC817-25 NPN SOT-23 AF LO PWR
				Q15		000-10008-17	(S) XSTR SMD BC817-25 NPN SOT-23 AF LO PWR
				Q16		000-00030-95	(S) XSTR 2N6107 PNP TO-220 AF PWR

Ref	Var	IPN	Description	Ref	Var	IPN	Description
*R1	LOW	032-33150-02	RES M/F PWR 150E 5% 1W 8X2.5MM 12MML/S				
*R1	MID	030-03270-00	RES FILM 270E 5% 0.25W 7X2.5MM				
*R1	HI	030-03470-00	RES FILM 470E 5% 0.25W 7X2.5MM				
*R2	LOW	032-32390-02	RES M/F PWR 39E 5% 1W 8X2.5MM 12MML/S				
*R2	MID	030-02180-00	RES FILM 18E 5% 0.25W 7X2.5				
*R2	HI	030-02120-00	RES FILM 12E 5% 0.25W 7X2.5W				
*R3	LOW	030-03150-00	RES FILM 150E 5% 0.25W 7X2.5MM				
*R3	MID	030-03270-00	RES FILM 270E 5% 0.25W 7X2.5MM				
*R3	HI	030-03470-00	RES FILM 470E 5% 0.25W 7X2.5MM				
R7		030-02100-00	RES FILM 10E 5% 0.25W 7X2.5MM				
R8		032-33100-00	RES M/F PWR 100E 5% 1W 10X4MM				
R11		030-03100-00	RES FILM 100E 5% 0.25W 7X2.5MM				
R30		030-03100-00	RES FILM 100E 5% 0.25W 7X2.5MM				
R31		030-03100-00	RES FILM 100E 5% 0.25W 7X2.5MM				
R32		030-02820-00	RES FILM 82E 5% 0.25W 7X2.5MM				
R33		030-02820-00	RES FILM 82E 5% 0.25W 7X2.5MM				
R36		036-13680-00	RES M/F 0805 CHIP 680E 5%				
R38		036-17100-00	RES M/F 0805 CHIP 1M 5%				
R39		036-16100-00	RES M/F 0805 CHIP 100K 5%				
R42		036-15100-00	RES M/F 0805 CHIP 10K 5%				
RV43		042-05470-09	RES PRESET 50K CERMET 9.5MM SQ FLAT				
R44		036-14470-00	RES M/F 0805 CHIP 4K7 5%				
R47		036-15470-00	RES M/F 0805 CHIP 47K 5%				
RV48		042-04500-08	RES PRESET 5K CERMET 9.5MM SQ FLAT				
R49		036-13680-00	RES M/F 0805 CHIP 680E 5%				
R50		036-13680-00	RES M/F 0805 CHIP 680E 5%				
RV52		042-04500-08	RES PRESET 5K CERMET 9.5MM SQ FLAT				
R55		036-17100-00	RES M/F 0805 CHIP 1M 5%				
R56		036-15100-00	RES M/F 0805 CHIP 10K 5%				
RV57		042-05470-09	RES PRESET 50K CERMET 9.5MM SQ FLAT				
R58		036-14470-00	RES M/F 0805 CHIP 4K7 5%				
R61		036-13220-00	RES M/F 0805 CHIP 220E 5%				
R62		036-14100-00	RES M/F 0805 CHIP 1K 5%				
RV63		044-04200-03	RES PRESET MULTITURN 2K 10T PNL MTG				
R64		036-14470-00	RES M/F 0805 CHIP 4K7 5%				
R67		036-15100-00	RES M/F 0805 CHIP 10K 5%				
R68		036-14470-00	RES M/F 0805 CHIP 4K7 5%				
RV69		042-04220-02	RES PRESET 2K CERMET 9.5MM SQ FLAT				
R72		045-04470-01	RES NTC 4K7 20% 5MM DISC				
R73		036-16220-00	RES M/F 0805 CHIP 220K 5%				
RV74		042-05100-10	RES PRESET 10K CERMET 9.5MM SQ FLAT				
R77		036-14220-00	RES M/F 0805 CHIP 2K2 5%				
R78		036-14100-00	RES M/F 0805 CHIP 1K 5%				
R80		036-13100-00	RES M/F 0805 CHIP 100E 5%				
R81		036-14100-00	RES M/F 0805 CHIP 1K 5%				
R82		036-14470-00	RES M/F 0805 CHIP 4K7 5%				
R83		036-14100-00	RES M/F 0805 CHIP 1K 5%				
R84		036-14470-00	RES M/F 0805 CHIP 4K7 5%				
R85		036-14100-00	RES M/F 0805 CHIP 1K 5%				
R86		036-14100-00	RES M/F 0805 CHIP 1K 5%				
R87		036-15100-00	RES M/F 0805 CHIP 10K 5%				
R88		036-15100-00	RES M/F 0805 CHIP 10K 5%				
R89		039-02500-01	DUMMY LOAD 50E 1% 10W TO-220 NIKKOHM				
R90		039-02500-01	DUMMY LOAD 50E 1% 10W TO-220 NIKKOHM				
R91		039-02500-01	DUMMY LOAD 50E 1% 10W TO-220 NIKKOHM				
R92		036-14100-00	RES M/F 0805 CHIP 1K 5%				
R93		036-15100-00	RES M/F 0805 CHIP 10K 5%				
R94		036-14100-00	RES M/F 0805 CHIP 1K 5%				
R95		036-14100-00	RES M/F 0805 CHIP 1K 5%				
R96		036-14100-00	RES M/F 0805 CHIP 1K 5%				
R97		036-14100-00	RES M/F 0805 CHIP 1K 5%				
R98		036-12100-00	RES M/F 0805 CHIP 10E 5%				
R99		036-14270-00	RES M/F 0805 CHIP 2K7 5%				
R100		036-14470-00	RES M/F 0805 CHIP 4K7 5%				
SK1		240-02100-44	SKT COAX MINI JACK PCB MTG ANGLED				



## T858 Mechanical &amp; Miscellaneous Parts (220-01141-01)

IPN	Legend	Description	IPN	Legend	Description
065-00010-20		BEAD FERRITE BALUN 4B1 PHILIPS Placed on DC+ power cables.	349-00020-07	6	SCRW 4-40 X 5/16 P/POZ T/T BLK
070-01001-00	22	D-RANGE 15 WAY COMPL T800	349-00020-09	11	SCRW T/T 4-40X3/8 IN P/POZ BLK
070-02003-00		LED RED COMPL T800 PA "High Rev/Low Fwd Power" LEDs - D11/D5	349-00020-36	37	LIM)SCREW TT M3X8m PANTORX BLK
070-02004-00		LED GREEN COMPL T800 PA "Supply" LED - D10	349-00020-50	21	SCRW T/T 4-40x5/8 P/POZ BLK
201-00030-01		WIRE T/C 7/0.2 PVC BROWN Forward power alarm.	352-00010-29	34	NUT M4 NYLOC HEX
201-00030-03		WIRE T/C 7/0.2 PVC ORANGE Reverse power meter.	352-00010-35	15	NUT 8-32 UNC HEX XSTR MTG
201-00030-04		WIRE T/C 7/0.2 PVC YEL Reverse power.	353-00010-10	10	WSHR M3 FLAT 7MMx0.6MM ST BZ
201-00030-05		WIRE T/C 7/0.2 PVC GRN Forward power meter.	353-00010-24	33	WSHR M4x8mm Flat
201-00030-06		WIRE T/C 7/0.2 PVC BLUE Tx-Key.	356-00010-01	18	TAG SOLDER 3MM SHORT M6132/3.2
201-00030-07		WIRE T/C 7/0.2 PVC VIOLET Reverse power alarm.	356-00010-03	5	TAG SOLDER 3MM LONG M614/3.2
201-00030-09		WIRE T/C 7/0.2 PVC WHITE Temperature sense.	360-00010-41	36	BUSH SHORTY BLK
201-00030-10		WIRE T/C 7/0.2 PVC BLACK Forward power.	362-00010-07	7	GASKET SIL INSULATING TO-220
201-00050-12		AUTO 152 RED 28/0.3 PVC DC+ from D-range PCB.	362-00010-13	9	BUSH INSULATING 1.1MM TOP HAT
201-00050-20		AUTO 152 BLACK 28/0.3 PVC DC- from D-range PCB.	362-00010-33	35	GROMMET LED MTG 3MM
219-02592-00		CABLE ASSY RG223/U N TO BNC Exciter/PA connecting cable.	365-00100-20		LABEL WHITE S/A 28X11MM
219-02599-00		CABLE ASSY PA INPUT REAR DRIVE RF input cable/connector assembly.	365-01540-00		LABEL PA TYPE APPL/SERIAL NO
220-01141-01	1	PCB T858 50W PA	369-00010-14		TIE CABLE NYLON 100*2.6MM
220-01152-00	2	PCB T858/859 DIRNL COUPLER	399-00010-51		BAG PLASTIC 75*100MM
240-02100-06	25	SKT COAX N TYPE PNL MTG OP-TER	400-00020-09		SLEEVING 3MM SIL RUBBER
240-02100-17	27	SKT COAX BNC PNL JAC CRP RG316 Part of 219-02599-00 sub-assembly.	410-01081-01		CRT T800 SERIES II
240-06010-15	24	BLOCK LATCHING 15W D RANGE			
303-23117-00	38	COVER SIDE COMPL A2M2223			
303-23120-00	28	COVER A3M2288 HOLE BLANKING			
303-50005-00	30	CONTACT A4M2311 SPRING EARTH			
308-01007-01	32	HANDLE BASE STATION SERIES II			
308-13085-01	4	HSINK DIECAST T858 50W PA			
308-13086-00	19	HSINK A3M2271 2MM W/LINE PA			
316-06617-00	31	PNL PA NO INP DRV SER II SNGL			
316-85018-00	26	PIN A4M1397 COAX CONDUCTOR			
319-01147-00	3	SHIELD A3M2224 WALL T859 PA			
319-01148-00	29	SHIELD A3M2225 LID T859 PA			
319-30033-00	13	SPACER A4M1339 UHF PA			
345-00040-16	23	SCRW M3X20MM P/POZ ST BZ			

**Note**

The following electrical components are also included in the mechanical assembly drawing to help identify certain mechanical components.

000-00022-70	14	(S) XSTR SD1134 NPN STUD MTG UHF PWR 2W - Q1
000-00022-75	16	(S) XSTR SD1433 NPN STUD MTG UHF PWR 10W - Q3
000-00022-80	17	(S) XSTR SD1488 NPN 6LFL UHF PWR 40W - Q4, Q6, Q7
000-00030-95	8	(S) XSTR 2N6107 PNP TO-220 AF PWR Q16
039-02500-01	12	DUMMY LOAD 50E 1% 10W TO-220 NIKKOHM - R90, R91
051-00005-39	20	COUPLER WIRELINE TAIT COIL DWG NO 539 - L19, L39



**replace A4 pages D5.2.9/D5.2.10 with A3 pages D5.2.9/D5.2.10**

**replace A4 pages D5.2.9/D5.2.10 with A3 pages D5.2.9/D5.2.10**

## T858 Grid Reference Index (IPN 220-01141-01)

**How To Use This Grid Reference Index**

The first digit in the PCB layout reference is a "1" or "2", indicating the top or bottom side layout respectively, and the last two characters give the location of the component on that diagram.

The first digit in the circuit diagram reference is the sheet number, and the last two characters give the location of the component on that sheet.

Device	PCB	Circuit	Device	PCB	Circuit	Device	PCB	Circuit	Device	PCB	Circuit
C1	1:Q9	1-C7	C85	1:V9	2-C5	L16	1:S4	1-D3	R30	1:G9	1-M4
C2	1:Q9	1-C6	C86	1:V5	2-F4	L17	1:S3	1-D3	R31	1:E7	1-N5
C3	1:R9	1-C6	C87	1:S2	2-G3	L18	1:R3	1-D2	R32	1:D6	1-Q4
C6	1:S8	1-D7	C90	1:V7	2-K5	L19	1:N6	1-F3	R33	1:D6	1-Q4
C7	1:Q7	1-E7	C91	1:W8	2-N5	L21	1:P5	1-C1	R36	1:W9	2-C6
CV8	1:R7	1-E7	C92	1:U5	2-N5	L22	1:P6	1-C1	R38	1:V5	2-E7
C11	1:R6	1-A1	C93	1:U5	2-N5	L23	1:K4	1-K2	R39	1:V5	2-E6
C12	1:Q6	1-A1	C95	1:V5	2-H1	L25	1:M3	1-F2	R42	1:V5	2-F7
C15	1:S5	1-B2	C96	1:U5	2-N3	L26	1:M9	1-F4	RV43	1:V1	2-G7
C16	1:S5	1-C3	C97	1:K10	1-J1	L27	1:L9	1-G4	R44	1:U4	2-H6
C17	1:T6	1-C3	C98	1:L10	1-J1	L28	1:M9	1-G4	R47	1:V4	2-F6
C18	1:S2	1-D3	C99	1:U5	2-M2	L31	1:M3	1-G2	RV48	1:W1	2-F6
C19	1:T3	1-D3	C100	1:T5	2-N4	L32	1:M2	1-G1	R49	1:W10	2-C6
C20	1:S3	1-E3	C101	1:V3	2-P2	L35	1:J7	1-J4	R50	1:W8	2-D6
C22	1:Q5	1-B2	C102	1:U8	2-Q5	L36	1:J6	1-J4	RV52	1:T1	2-F5
C23	1:Q5	1-C2	C103	1:U8	2-Q4	L37	1:J5	1-J3	R55	1:V5	2-E4
C24	1:R5	1-C2	C104	1:U7	2-R6	L38	1:J4	1-J3	R56	1:V5	2-F4
*C27	1:Q3	1-D2	C105	1:T9	2-R5	L39	1:H6	1-L4	RV57	1:S1	2-F4
*C28	1:R3	1-D2	C106	1:T8	2-R5	L41	1:F9	1-N4	R58	1:U5	2-H5
C29	1:P3	1-E2	C107	1:U4	2-H8	*L42	1:D7	1-P4	R61	1:V8	2-L5
CV32	1:P2	1-E2	C108	1:T4	2-J7	L43	1:C6	1-Q4	R62	1:V8	2-L5
*C33	1:P3	1-F2	C109	1:T4	2-J4	*L45	1:C8	1-P5	RV63	1:V6	2-M5
CV34	1:M4	1-G2	C110	1:G3	1-L3	*L46	1:C9	1-P5	R64	1:T5	2-N5
CV35	1:M8	1-G5	C111	1:W10	2-A7	*L47	1:B8	1-Q5	R67	1:V3	2-M4
C36	1:L8	1-G4	C112	1:V9	2-B5	L49	1:F6	1-M6	R68	1:U4	2-L3
C37	1:L8	1-H4	C113	1:V3	2-N4	L51	1:L10	1-J1	RV69	1:V2	2-M3
C40	1:L4	1-G2	D1	1:F6	1-M5	L52	1:C7	1-P4	R72	1:K10	1-H1
C41	1:L3	1-H2	D2	1:E9	1-N4	PL1	1:G5	2-A3	R73	1:U4	2-N2
*C42	1:K4	1-J2	D3	1:T2	2-A2			2-A2	RV74	1:W2	2-P2
*C43	1:K3	1-J2	D5	1:W9	2-C7			2-A2	R77	1:U6	2-P6
C45	1:K4	1-J3	D6	1:U2	2-G6			2-A2	R78	1:U8	2-Q5
C46	1:K7	1-J4			2-G6			2-A3	R80	1:U8	2-Q6
*C47	1:K8	1-J4	D10	1:W10	2-C5			2-A8	R81	1:V4	2-D7
*C49	1:K8	1-J4	D11	1:W9	2-D5			2-A8	R82	1:V4	2-D7
C50	1:H8	1-K5	D13	1:R2	2-F3			2-A1	R83	1:V5	2-D4
CV51	1:H8	1-L4			2-F3			2-A1	R84	1:V5	2-D5
*C52	1:J8	1-K4	D17	1:V3	2-N4			2-A1	R85	1:U4	2-F4
C54	1:K6	1-K3			2-M4			2-A1	R86	1:U4	2-G7
C55	1:K6	1-K3	IC1	1:U5	2-H1			2-A0	R87	1:T4	2-J7
C56	1:H4	1-L2			2-F7			2-A5	R88	1:T5	2-J4
CV57	1:H3	1-L2			2-E5			2-A3	R89	1:N10	1-F3
*C58	1:J3	1-K2			2-N5			2-A7	R90	1:G1	1-M3
C60	1:E9	1-N4			2-N3	Q1	1:Q8	1-D7	R91	1:F1	1-M3
C61	1:F9	1-N4	IC2	1:V8	2-K5	Q3	1:Q6	1-B2	R92	1:S1	2-D3
*C62	See Note	1-P4	IC3	1:T4	2-J8	Q4	1:Q4	1-D2	R93	1:U1	2-F6
*C63	1:C9	1-P5			2-H7	Q6	1:K8	1-H5	R94	1:U2	2-F8
*C65	1:C9	1-Q5			2-H4	Q7	1:K4	1-H2	R95	1:U4	2-M2
*C66	1:B8	1-Q4	* L1	1:R9	1-C6	Q10	1:V10	2-B7	R96	1:T4	2-K7
C67	See Note	1-P4	L2	1:P8	1-D6	Q11	1:V10	2-D7	R97	1:T5	2-K5
C68	1:D7	1-P4	L3	1:P9	1-D5	Q12	1:V9	2-C5	R98	1:W8	2-M5
*C70	1:D6	1-Q4	L5	1:T8	1-D8	Q13	1:V9	2-D5	R99	1:W7	2-M5
C72	1:E6	1-M6	L6	1:R7	1-D7	Q15	1:U8	2-Q5	R100	1:W7	2-M5
C73	1:F6	1-M5	L7	1:P7	1-E6	Q16	1:T10	2-R5	SK1	1:R10	1-A7
C76	1:V10	2-B7	L8	1:P8	1-E6	*R1	1:R10	1-B6			
C77	1:V10	2-C7	L11	1:T7	1-B4	*R2	1:R10	1-B7			
C78	1:U10	2-D6	L12	1:S5	1-B3	*R3	1:R9	1-B6			
C80	1:V5	2-F7	L13	1:R5	1-B2	R7	1:R8	1-C6			
C81	1:U2	2-G6	L14	1:Q3	1-E2	R8	1:S7	1-D7			
C84	1:V9	2-C5	L15	1:K8	1-K5	R11	1:R6	1-F7			

**Note:**  
\*C62 & C67 are mounted on the Directional Coupler PCB (220-01152-00).



## T858 Parts List (IPN 220-01423-02)

### How To Use This Parts List

The components listed in this parts list are divided into two main types: those with a circuit reference (e.g. C2, D1, R121, etc.) and those without (miscellaneous and mechanical).

Those with a circuit reference are grouped in alphabetical order and then in numerical order within each group. Each component entry comprises three or four columns: the circuit reference, variant (if applicable), IPN and description. A number in the variant column indicates that this is a variant component which is fitted only to the product type listed. Static sensitive devices are indicated by an (S) at the start of the description column.

The miscellaneous and mechanical section lists the variant and common parts in IPN order. Where possible, a number in the legend column indicates their position in the mechanical assembly drawing.

The Parts List Amendments box below lists component changes that took place after the parts list and diagrams in this section were compiled. These changes (e.g. value changes, added/deleted components, etc.) are listed by circuit reference in alphanumeric order and supersede the information given in the parts list or diagrams. Components without circuit references are listed in IPN order.

### Parts List Amendments

C188	Deleted - not required for circuit performance (711141).
D113	Changed from MR750/SR2607 (IPN 001-00011-60) to MR2520L (IPN 001-00012-90) to provide overvoltage transient suppression (750087/88/89/90/91/92).
R146	Changed from 6k8 (IPN 036-14680-10) to 10k (IPN 036-15100-10)
R154	Changed from 6k8 (IPN 036-14680-10) to 4k7 (IPN 036-14470-10)
R195	Changed to a variant component with values as listed below to decrease the control voltage of #IC210 to prevent Q216 being overdriven - circuit reference changed to #R195 (710991/92). T858-10-XXXX: value unchanged at 2k2 (IPN 036-14220-00) T858-20-XXXX: changed from 2k2 (IPN 036-14220-00) to 2k4 (IPN 036-14240-10) T858-30-XXXX: changed from 2k2 (IPN 036-14220-00) to 2k4 (IPN 036-14240-10)
R196	Changed from 100Ω (IPN 036-13100-10) to 150Ω (IPN 036-13150-10) to decrease the control voltage of #IC210 to prevent Q216 being overdriven (710991/92).
R226	Changed from 30Ω (IPN 036-02030-10) to 27Ω (IPN 036-03127-10) to increase #IC210 input drive (710993).
R227, R230	Changed from 180Ω (IPN 036-03180-10) to 240Ω (IPN 036-03224-10) to increase #IC210 input drive (710993).
N-type connector	The N-type connector (IPN 240-02100-06), hood (IPN 240-06010-44) and semi-rigid coax (IPN 051-00641-01) have been replaced by a single sub-assembly (IPN 219-02709-00) (711022).
349-00020-36	The two M3x8 Torx screws which secure the module into the rack frame have been replaced by M3x8 Pozidriv screws (IPN 349-00020-55) (750101/2/3/5/6).

**Parts List Amendments - Continued**

This page is provided for entering future amendments to the parts list.

Ref	Var	IPN	Description	Ref	Var	IPN	Description
%C101		015-23100-01	CAP CER 0805 100P 5% NPO 50V	#C251	30	029-01750-02	CAP MICA 5 CASE 7P5 5%
%C103		015-23100-01	CAP CER 0805 100P 5% NPO 50V	#C252	10	029-02470-02	CAP MICA 5 CASE 47P 5%
%C105		015-23100-01	CAP CER 0805 100P 5% NPO 50V	#C252	20	029-02390-02	CAP MICA 5 CASE 39P 5%
%C107		015-23100-01	CAP CER 0805 100P 5% NPO 50V	#C252	30	029-02360-02	CAP MICA 5 CASE 36P 5%
%C109		015-23100-01	CAP CER 0805 100P 5% NPO 50V	#C253	10	029-02560-02	CAP MICA 5 CASE 56P 5%
%C111		015-23100-01	CAP CER 0805 100P 5% NPO 50V	#C253	20	029-02390-02	CAP MICA 5 CASE 39P 5%
%C113		015-23100-01	CAP CER 0805 100P 5% NPO 50V	#C253	30	029-02360-02	CAP MICA 5 CASE 36P 5%
%C115		015-23100-01	CAP CER 0805 100P 5% NPO 50V	#C254	10	029-01390-02	CAP MICA 5 CASE 3P9 5%
%C117		015-23100-01	CAP CER 0805 100P 5% NPO 50V	#C254	20	029-01470-02	CAP MICA 5 CASE 4P7 5%
%C119		015-23100-01	CAP CER 0805 100P 5% NPO 50V	#C254	30	029-01470-02	CAP MICA 5 CASE 4P7 5%
%C121		015-23100-01	CAP CER 0805 100P 5% NPO 50V	#C256	10	029-02390-02	CAP MICA 5 CASE 39P 5%
%C123		015-23100-01	CAP CER 0805 100P 5% NPO 50V	#C256	20	029-02330-02	CAP MICA 5 CASE 33P 5%
C124		015-23100-01	CAP CER 0805 100P 5% NPO 50V	#C256	30	029-02240-02	L) CAP MICA 5 CASE 24P 5%
%C125		015-23100-01	CAP CER 0805 100P 5% NPO 50V	#C257	10	029-02390-02	CAP MICA 5 CASE 39P 5%
%C127		015-23100-01	CAP CER 0805 100P 5% NPO 50V	#C257	20	029-02330-02	CAP MICA 5 CASE 33P 5%
C129		015-23100-01	CAP CER 0805 100P 5% NPO 50V	#C257	30	029-02240-02	L) CAP MICA 5 CASE 24P 5%
C131		015-27100-10	CAP CER 0805 1M+80-20% Y5V 16V	C258		015-03100-02	CAP CER HIQ1210 100P 5%NPO200V
C132		015-24100-08	CAP CER 0805 1N 10% X7R 50V	C259		015-06100-08	CAP CER 1206 100N 10% X7R 50V
C133		015-23100-01	CAP CER 0805 100P 5% NPO 50V	C272		014-07470-04	CAP TANT SMD 4U7 50V 20%
%C134		015-06100-08	CAP CER 1206 100N 10% X7R 50V	C275		015-24470-08	CAP CER 0805 4N7 10% X7R 50V
%C135		014-18220-02	L)CAP TANT SMD 22U 20% 35V	C276		015-23150-01	CAP CER 0805 150P 5% NPO 50V
C137		015-23100-01	CAP CER 0805 100P 5% NPO 50V	#C277	10	029-02120-01	CAP MICA 10 CASE 12P 5%
C138		015-24470-08	CAP CER 0805 4N7 10% X7R 50V	#C277	20	029-02100-01	CAP MICA 10 CASE 10P 10%
C139		015-23100-01	CAP CER 0805 100P 5% NPO 50V	#C277	30	029-02100-01	CAP MICA 10 CASE 10P 10%
C141		015-23100-01	CAP CER 0805 100P 5% NPO 50V	#C278	10	029-02120-01	CAP MICA 10 CASE 12P 5%
C143		015-23100-01	CAP CER 0805 100P 5% NPO 50V	#C278	20	029-02100-01	CAP MICA 10 CASE 10P 10%
C145		015-23100-01	CAP CER 0805 100P 5% NPO 50V	#C278	30	029-02100-01	CAP MICA 10 CASE 10P 10%
C146		015-23100-01	CAP CER 0805 100P 5% NPO 50V	#C280	10	029-01560-02	CAP MICA 5 CASE 5P6 5%
C147		015-25220-08	CAP CER 0805 22N 10% X7R 50V	#C280	20	029-01470-02	CAP MICA 5 CASE 4P7 5%
C148		015-23100-01	CAP CER 0805 100P 5% NPO 50V	#C280	30	029-01470-02	CAP MICA 5 CASE 4P7 5%
C149		015-23100-01	CAP CER 0805 100P 5% NPO 50V	C282		015-21220-01	CAP CER 0805 2P2+-1/4P NPO 50V
C150		015-23100-01	CAP CER 0805 100P 5% NPO 50V	#C283	10	015-21470-01	CAP CER 0805 4P7+-1/4P NPO 50V
C151		015-23100-01	CAP CER 0805 100P 5% NPO 50V	#C283	20	015-21390-01	CAP CER 0805 3P9+-1/4P NPO 50V
C153		015-23100-01	CAP CER 0805 100P 5% NPO 50V	#C283	30	015-21390-01	CAP CER 0805 3P9+-1/4P NPO 50V
C154		015-23100-01	CAP CER 0805 100P 5% NPO 50V	C284		015-23150-01	CAP CER 0805 150P 5% NPO 50V
C155		015-25680-08	CAP CER 0805 68N 10% X7R 50V	#C285	10	015-01390-02	CAP CER HIQ1210 3P9 5% NPO200V
C159		015-23100-01	CAP CER 0805 100P 5% NPO 50V	#C285	20	015-01330-02	CAP CER HIQ1210 3P3 5% NPO200V
C161		015-23100-01	CAP CER 0805 100P 5% NPO 50V	#C285	30	015-01330-02	CAP CER HIQ1210 3P3 5% NPO200V
C162		015-23100-01	CAP CER 0805 100P 5% NPO 50V	C286		015-21220-01	CAP CER 0805 2P2+-1/4P NPO 50V
C164		015-24470-08	CAP CER 0805 4N7 10% X7R 50V	C287		015-24470-08	CAP CER 0805 4N7 10% X7R 50V
C165		015-23100-01	CAP CER 0805 100P 5% NPO 50V	C291		015-23100-01	CAP CER 0805 100P 5% NPO 50V
C167		015-24100-08	CAP CER 0805 1N 10% X7R 50V	C292		015-06100-08	CAP CER 1206 100N 10% X7R 50V
C169		014-18220-02	L)CAP TANT SMD 22U 20% 35V	#CV255	10	029-02120-02	CAP MICA 5 CASE 12P 5%
C170		014-18220-02	L)CAP TANT SMD 22U 20% 35V	#CV255	20	029-01750-02	CAP MICA 5 CASE 7P5 5%
C171		015-24470-08	CAP CER 0805 4N7 10% X7R 50V	#CV255	30	029-01680-02	CAP MICA 5 CASE 6P8 5%
C172		015-23100-01	CAP CER 0805 100P 5% NPO 50V	D101		001-10000-70	S) DIODE SMD BAV70 D-SW SOT23
C173		015-23100-01	CAP CER 0805 100P 5% NPO 50V	D105		001-10000-70	S) DIODE SMD BAV70 D-SW SOT23
C174		015-23100-01	CAP CER 0805 100P 5% NPO 50V	#D110		001-10000-70	S) DIODE SMD BAV70 D-SW SOT23
C176		015-26100-08	CAP CER 0805 100N 10% X7R 50V	D113		001-00011-60	S) DIODE MR750 OR SR2607
C177		014-07100-02	CAP TANT CHIP 1U0 3.2 X 1.6MM	%D115		001-10000-70	S) DIODE SMD BAV70 D-SW SOT23
C178		015-25100-08	CAP CER 0805 10N 10% X7R 50V	D205		001-10066-00	DIODE SCHOTTKY HSMS2815
C179		015-26100-08	CAP CER 0805 100N 10% X7R 50V	D206		001-10066-00	DIODE SCHOTTKY HSMS2815
C180		015-23100-01	CAP CER 0805 100P 5% NPO 50V	IC101		002-10003-24	S) IC SMD 324 4X O-AMP SO14
C181		015-23100-01	CAP CER 0805 100P 5% NPO 50V	IC103		002-10003-24	S) IC SMD 324 4X O-AMP SO14
C182		015-24470-08	CAP CER 0805 4N7 10% X7R 50V	IC105		002-10006-62	S)IC SMD LMC662CM 2X O-AMP
C183		015-23100-01	CAP CER 0805 100P 5% NPO 50V	IC107		002-12951-00	IC SMD LP2951CM ADJ VLTGE REG
C184		015-25100-08	CAP CER 0805 10N 10% X7R 50V	IC109		002-10003-17	(S) IC LM317L REG SO-8 100MA
C185		015-23100-01	CAP CER 0805 100P 5% NPO 50V	IC200		002-10003-58	S) IC SMD LM358 DUAL O-AMP
C186		015-23100-01	CAP CER 0805 100P 5% NPO 50V	#IC210	10	004-00687-62	MODULE M68762L 400-450MHZ 30W
C187		015-26100-08	CAP CER 0805 100N 10% X7R 50V	#IC210	20	004-00687-61	MODULE M68762H 440-490MHZ 30W
C188		014-07100-02	CAP TANT CHIP 1U0 3.2 X 1.6MM	#IC210	30	004-00687-63	MODULE M68762SH 470-520MHZ 30W
C189		015-25100-08	CAP CER 0805 10N 10% X7R 50V	L101		065-10004-20	BEAD FE SMD CBD 4.6/3/3-4S2
C190		015-26100-08	CAP CER 0805 100N 10% X7R 50V	L103		065-10004-20	BEAD FE SMD CBD 4.6/3/3-4S2
C191		015-23100-01	CAP CER 0805 100P 5% NPO 50V	L105		065-10004-20	BEAD FE SMD CBD 4.6/3/3-4S2
C192		015-06100-08	CAP CER 1206 100N 10% X7R 50V	L200		056-10330-02	(L) IND SMD 330NH
C193		015-06100-08	CAP CER 1206 100N 10% X7R 50V	L201		056-10330-02	(L) IND SMD 330NH
C194		015-06100-08	CAP CER 1206 100N 10% X7R 50V	L202		056-10330-02	(L) IND SMD 330NH
C195		014-08100-00	CAP TANT CHIP 10M 16VW +20%	L205		056-10330-02	(L) IND SMD 330NH
C196		014-07470-03	L) CAP TANT SMD 4U7 35V 20%	L207		065-10004-20	BEAD FE SMD CBD 4.6/3/3-4S2
C197		015-22470-01	CAP CER 0805 47P 5% NPO 50V	L209		052-08340-40	COIL A/W 4T/4.0MM SMD 0.8MM
C198		015-25100-08	CAP CER 0805 10N 10% X7R 50V	L210		052-08340-40	COIL A/W 4T/4.0MM SMD 0.8MM
C200		015-23100-01	CAP CER 0805 100P 5% NPO 50V	L211		065-10004-20	BEAD FE SMD CBD 4.6/3/3-4S2
C201		015-24100-08	CAP CER 0805 1N 10% X7R 50V	L212		052-08340-40	COIL A/W 4T/4.0MM SMD 0.8MM
C202		015-24470-08	CAP CER 0805 4N7 10% X7R 50V	%L213		056-10330-02	(L) IND SMD 330NH
C203		015-23100-01	CAP CER 0805 100P 5% NPO 50V	L235		051-00005-60	IND HAIRPIN 10MM TALL T859
C204		015-23100-01	CAP CER 0805 100P 5% NPO 50V	#L236	10	052-08340-10	COIL A/W 1T/4.0MM SMD 0.8MM
C205		015-24470-08	CAP CER 0805 4N7 10% X7R 50V	#L236	20	052-08340-10	COIL A/W 1T/4.0MM SMD 0.8MM
C206		015-23100-01	CAP CER 0805 100P 5% NPO 50V	#L236	30	052-08330-10	COIL A/W 1T/3.0MM SMD 0.8MM
C207		015-23100-01	CAP CER 0805 100P 5% NPO 50V	L237		052-08340-50	COIL A/W 5T/4.0MM SMD 0.8MM
C208		015-24470-08	CAP CER 0805 4N7 10% X7R 50V	L238		065-10009-20	BEAD FER SMD BDS 3/3/8.9-4S2
C211		014-07470-04	CAP TANT SMD 4U7 50V 20%	L239		052-08340-50	COIL A/W 5T/4.0MM SMD 0.8MM
C212		015-23100-01	CAP CER 0805 100P 5% NPO 50V	L240		051-00653-00	FLAT STRIP INDUCTOR
C213		015-03100-06	CAP CER 1210 100P NPO500VGRM42	L253		056-10330-02	(L) IND SMD 330NH
C215		015-23100-01	CAP CER 0805 100P 5% NPO 50V	#L254	10	052-08340-20	COIL A/W 2T/4.0MM SMD 0.8MM
C216		015-24100-08	CAP CER 0805 1N 10% X7R 50V	#L254	20	052-08335-20	COIL A/W 2T/3.5MM SMD 0.8MM
C220		015-06100-08	CAP CER 1206 100N 10% X7R 50V	#L254	30	052-08335-20	COIL A/W 2T/3.5MM SMD 0.8MM
C221		015-03100-06	CAP CER 1210 100P NPO500VGRM42	#L255	10	052-08345-20	COIL A/W 2T/4.5MM SMD 0.8MM
C222		015-03100-06	CAP CER 1210 100P NPO500VGRM42	#L255	20	052-08340-20	COIL A/W 2T/4.0MM SMD 0.8MM
C223		015-06100-08	CAP CER 1206 100N 10% X7R 50V	#L255	30	052-08340-20	COIL A/W 2T/4.0MM SMD 0.8MM
C224		014-07470-04	CAP TANT SMD 4U7 50V 20%	#L256	10	052-08335-20	COIL A/W 2T/3.5MM SMD 0.8MM
C225		015-06100-08	CAP CER 1206 100N 10% X7R 50V	#L256	20	052-08335-20	COIL A/W 2T/3.5MM SMD 0.8MM
C226		015-03100-06	CAP CER 1210 100P NPO500VGRM42	#L256	30	052-08335-20	COIL A/W 2T/3.5MM SMD 0.8MM
C227		015-23100-01	CAP CER 0805 100P 5% NPO 50V	L257		056-10330-02	(L) IND SMD 330NH
C228		015-03100-02	CAP CER HIQ1210 100P 5%NPO200V	#L258	10	052-08325-10	COIL A/W 1T/2.5MM SMD 0.8MM
C249		015-03100-03	CAP CER 100P 5% NPO500V GRH111				
C250		029-03100-02	CAP MICA 5 CASE 100P 5%				
#C251	10	029-01000-02	CAP MICA 5 CASE 10P 5%				
#C251	20	029-01750-02	CAP MICA 5 CASE 7P5 5%				

Ref	Var	IPN	Description	Ref	Var	IPN	Description
#L258	20	052-08320-10	COIL A/W 1T/2.0MM SMD 0.8MM	R164		036-14220-00	RES M/F 0805 2K2 5%
#L258	30	052-08320-10	COIL A/W 1T/2.0MM SMD 0.8MM	R165		036-14100-10	RES M/F 0805 1K 1%
L259		051-00005-53	COIL TAIT NO553 A/W 10MM LINK	R166		036-13680-00	RES M/F 0805 680E 5%
L260		052-08335-10	COIL A/W 1T/3.5MM SMD 0.8MM	R167		036-14220-00	RES M/F 0805 2K2 5%
LINK102		036-10000-00	RES M/F 0805 ZERO OHM	R168		036-15100-10	RES M/F 0805 10K 1%
P200		356-00010-26	PIN TRACK HARWIN FOR 1.6MM PCB	R169		036-14100-10	RES M/F 0805 1K 1%
P201		356-00010-26	PIN TRACK HARWIN FOR 1.6MM PCB	R170		036-14100-10	RES M/F 0805 1K 1%
PL101		070-01001-00	D-RANGE 15 WAY COMPL T800	R171		036-14100-10	RES M/F 0805 1K 1%
PL110		240-00021-03	LIM) HEADER 2X7 WAY SMD	R172		036-15100-10	RES M/F 0805 10K 1%
%Q101		000-10008-57	S) XSTR SMD BCW70 PNP SOT23 SS	R173		036-13470-00	RES M/F 0805 470E 5%
%Q103		000-10008-17	S) XSTR SMD BC817-25 NPN SOT23	R174		036-13220-00	RES M/F 0805 220E 5%
%Q105		000-10008-17	S) XSTR SMD BC817-25 NPN SOT23	R175		036-16220-00	RES M/F 0805 220K 5%
%Q107		000-10008-57	S) XSTR SMD BCW70 PNP SOT23 SS	R176		036-15100-10	RES M/F 0805 10K 1%
%Q109		000-10008-69	S) XSTR SMD BC869 PNP 1W SOT89	R177		036-14470-10	RES M/F 0805 4K7 1%
Q111		000-10008-57	S) XSTR SMD BCW70 PNP SOT23 SS	R178		036-16100-00	RES M/F 0805 100K 5%
Q113		000-10008-48	S) XSTR SMD BCW60 NPN SOT23 SS	R179		036-15100-10	RES M/F 0805 10K 1%
Q115		000-10008-57	S) XSTR SMD BCW70 PNP SOT23 SS	R180		036-16150-00	RES M/F 0805 150K 5%
Q117		000-10008-17	S) XSTR SMD BC817-25 NPN SOT23	R181		036-14560-00	RES M/F 0805 5K6 5%
Q119		000-10008-48	S) XSTR SMD BCW60 NPN SOT23 SS	R182		036-16100-00	RES M/F 0805 100K 5%
Q121		000-10017-00	LS) XSTR SMD BF170LT1 SOT23	R183		036-14470-10	RES M/F 0805 4K7 1%
Q123		000-10008-57	S) XSTR SMD BCW70 PNP SOT23 SS	R184		036-14220-00	RES M/F 0805 2K2 5%
Q125		000-10008-57	S) XSTR SMD BCW70 PNP SOT23 SS	R185		036-03100-02	RES 100E 1206 200V 250MW RCO1
Q127		000-10008-57	S) XSTR SMD BCW70 PNP SOT23 SS	R186		036-13100-10	RES M/F 0805 100E 1%
Q129		000-10008-17	S) XSTR SMD BC817-25 NPN SOT23	R187		036-03180-10	RES 180R 1W SMD 2512
Q131		000-10017-00	LS) XSTR SMD BF170LT1 SOT23	R188		036-16100-00	RES M/F 0805 100K 5%
Q133		000-10008-48	S) XSTR SMD BCW60 NPN SOT23 SS	R189		036-12220-00	RES M/F 0805 22E 5%
Q135		000-10008-17	S) XSTR SMD BC817-25 NPN SOT23	R190		036-14150-00	RES M/F 0805 1K5 5%
Q136		000-10008-17	S) XSTR SMD BC817-25 NPN SOT23	R191		036-14100-10	RES M/F 0805 1K 1%
Q137		000-00030-95	S) XSTR 2N6107 PNP TO220 AF	R192		036-13220-00	RES M/F 0805 220E 5%
Q200		000-10008-48	S) XSTR SMD BCW60 NPN SOT23 SS	R193		036-12100-00	RES M/F 0805 10E 5%
Q216		000-00006-58	S)XSTR MRF658 UHF 65W 6FL	R194		036-03180-10	RES 180R 1W SMD 2512
R101		036-14100-10	RES M/F 0805 1K 1%	R195		036-14220-00	RES M/F 0805 2K2 5%
%R102		036-16220-00	RES M/F 0805 220K 5%	R196		036-13100-10	RES M/F 0805 100E 1%
R103		036-15330-00	RES M/F 0805 33K 5%	R198		036-14100-10	RES M/F 0805 1K 1%
R104		036-16470-00	RES M/F 0805 470K 5%	R200		036-14470-10	RES M/F 0805 4K7 1%
%R105		036-15150-00	RES M/F 0805 15K 5%	R201		036-14680-10	RES M/F 0805 6K8 1%
%R106		036-15150-00	RES M/F 0805 15K 5%	R202		036-13390-00	RES M/F 0805 390E 5%
%R107		036-14390-10	RES M/F 0805 3K9 1%	R203		036-14470-10	RES M/F 0805 4K7 1%
%R108		036-14330-10	RES M/F 0805 3K3 1%	R204		036-13390-00	RES M/F 0805 390E 5%
%R109		036-15100-10	RES M/F 0805 10K 1%	R205		036-13100-10	RES M/F 0805 100E 1%
%R111		036-14820-10	RES M/F 0805 8K2 1%	R207		036-15100-10	RES M/F 0805 10K 1%
%R112		036-14680-10	RES M/F 0805 6K8 1%	R209		036-14470-10	RES M/F 0805 4K7 1%
%R113		036-14100-10	RES M/F 0805 1K 1%	R210		045-04470-00	RES NTC SMD 4K7 5% 20MW
%R114		036-16100-00	RES M/F 0805 100K 5%	R211		036-13560-00	RES M/F 0805 560E 5%
%R115		036-16220-00	RES M/F 0805 220K 5%	R215		045-05100-02	RES NTC 10K 2% Metal tagged
%R116		045-04470-00	RES NTC SMD 4K7 5% 20MW	R223		036-11330-00	RES M/F 0805 3E3 5%
R117		036-16220-00	RES M/F 0805 220K 5%	R224		036-11330-00	RES M/F 0805 3E3 5%
R118		036-15270-00	RES M/F 0805 27K 5%	R225		036-11330-00	RES M/F 0805 3E3 5%
R119		036-16470-00	RES M/F 0805 470K 5%	R226		036-02030-10	RES 30E 1W SMD 2512
%R120		036-10000-00	RES M/F 0805 ZERO OHM	R227		036-03180-10	RES 180R 1W SMD 2512
%R121		036-15150-00	RES M/F 0805 15K 5%	R230		036-03180-10	RES 180R 1W SMD 2512
%R122		036-14390-10	RES M/F 0805 3K9 1%	R235		036-13100-10	RES M/F 0805 100E 1%
R123		036-14100-10	RES M/F 0805 1K 1%	R236		036-13100-10	RES M/F 0805 100E 1%
R124		036-16100-00	RES M/F 0805 100K 5%	R237		036-03100-02	RES 100E 1206 200V 250MW RCO1
R125		036-15100-10	RES M/F 0805 10K 1%	R238		036-03100-02	RES 100E 1206 200V 250MW RCO1
R126		036-14100-10	RES M/F 0805 1K 1%	R245		036-02030-10	RES 30E 1W SMD 2512
R127		036-15100-10	RES M/F 0805 10K 1%	R247		036-11330-00	RES M/F 0805 3E3 5%
R128		036-15220-00	RES M/F 0805 22K 5%	RV101		042-04500-05	RES PRESET SMD 5K CER 4MM SQ
R129		036-17100-10	RES M/F 0805 1M 1%	RV103		042-05500-05	RES PRESET SMD 50K CER 4MM SQ
R130		036-14220-00	RES M/F 0805 2K2 5%	RV105		042-04500-05	RES PRESET SMD 5K CER 4MM SQ
R131		036-16180-00	RES M/F 0805 180K 5%	RV107		042-05500-05	RES PRESET SMD 50K CER 4MM SQ
R132		036-14100-10	RES M/F 0805 1K 1%	RV109		044-04200-06	RES PRE MULT 2K 15T PNL MTG
R133		036-15100-10	RES M/F 0805 10K 1%	*RV111		044-04200-02	RES PRE MULT 2K VERT CER 10MM
R134		036-13470-00	RES M/F 0805 470E 5%	RV113		042-06500-05	RES PRESET SMD 500K CER 4MM SQ
R135		036-13680-00	RES M/F 0805 680E 5%	RV115		042-05200-05	RES PRESET SMD 20K CER 4MM SQ
R136		036-15100-10	RES M/F 0805 10K 1%	SK101		240-10000-05	CONN SMD SKT 8W 2R M-MATCH
R137		036-13470-00	RES M/F 0805 470E 5%	SK103		240-10000-05	CONN SMD SKT 8W 2R M-MATCH
R138		036-15100-10	RES M/F 0805 10K 1%	SK201		240-02100-44	SKT COAX MINI JACK PCB MT ANG.
%R139		036-10000-00	RES M/F 0805 ZERO OHM				
%R140		036-10000-00	RES M/F 0805 ZERO OHM				
R141		036-15100-10	RES M/F 0805 10K 1%				
R142		036-15100-10	RES M/F 0805 10K 1%				
R143		036-15100-10	RES M/F 0805 10K 1%				
R144		036-15220-00	RES M/F 0805 22K 5%				
R145		036-15470-10	RES M/F 0805 47K 1%				
R146		036-14680-10	RES M/F 0805 6K8 1%				
%R147		036-10000-00	RES M/F 0805 ZERO OHM				
R148		036-14820-10	RES M/F 0805 8K2 1%				
R149		036-13470-00	RES M/F 0805 470E 5%				
R150		036-12220-00	RES M/F 0805 22E 5%				
R151		036-15100-10	RES M/F 0805 10K 1%				
R152		036-15100-10	RES M/F 0805 10K 1%				
R153		036-14680-10	RES M/F 0805 6K8 1%				
R154		036-14680-10	RES M/F 0805 6K8 1%				
R155		036-13220-00	RES M/F 0805 220E 5%				
R156		036-13100-10	RES M/F 0805 100E 1%				
R157		036-12220-00	RES M/F 0805 22E 5%				
R158		036-14100-10	RES M/F 0805 1K 1%				
R159		036-15100-10	RES M/F 0805 10K 1%				
R160		036-14470-10	RES M/F 0805 4K7 1%				
R161		036-14100-10	RES M/F 0805 1K 1%				
R162		036-17100-10	RES M/F 0805 1M 1%				
R163		036-13680-00	RES M/F 0805 680E 5%				





## T858 Mechanical &amp; Miscellaneous Parts (220-01423-02)

IPN	Legend	Description	IPN	Legend	Description												
008-00014-79		S)LED 3MM RED WITH WIRE	356-00010-26		PIN TRACK HARWIN FOR 1.6MM PCB												
008-00014-80		S)LED 3MM GREEN WITH WIRE	360-00010-41	32	BUSH SHORTY BLK												
051-00641-01	2	COAX T859 SEMI-RIG N-TYPE EXTN	362-00010-07	33	GASKET SIL INSULATING TO-220												
070-01001-00	3	D-RANGE 15 WAY COMPL T800 PL101	362-00010-13	34	BUSH INSULATING 1.1MM TOP HAT												
201-00050-25		AUTO 154 RED 41/0.3 PVC DC+ from D-range PCB.	362-00010-33	35	GROMMET LED MTG 3MM												
201-00050-26		AUTO 154 BLACK 41/0.3 PVC DC- from D-range PCB.	365-01538-00		LABEL WARNING 60W/PWR CLAMP												
219-02591-01	4	LOOM RIBBON 8 WAY FOR T839PA	399-00010-51		BAG PLASTIC 75X100MM												
219-02599-00		CABLE ASSY PA INPUT REAR DRIVE	<div style="border: 1px solid black; padding: 5px;"> <p><b>Note</b></p> <p>The following electrical components are also included in the mechanical assembly drawing.</p> <table border="0"> <tr> <td>000-00006-58</td> <td>37</td> <td>S)XSTR MRF658 UHF 65W 6FL Q216</td> </tr> <tr> <td>000-00030-95</td> <td>11</td> <td>S) XSTR 2N6107 PNP TO220 AF Q137</td> </tr> <tr> <td>004-00687-XX</td> <td>36</td> <td>#IC210</td> </tr> <tr> <td>045-05100-02</td> <td>1</td> <td>RES NTC 10K 2% METAL TAGGED R215</td> </tr> </table> </div>			000-00006-58	37	S)XSTR MRF658 UHF 65W 6FL Q216	000-00030-95	11	S) XSTR 2N6107 PNP TO220 AF Q137	004-00687-XX	36	#IC210	045-05100-02	1	RES NTC 10K 2% METAL TAGGED R215
000-00006-58	37	S)XSTR MRF658 UHF 65W 6FL Q216															
000-00030-95	11	S) XSTR 2N6107 PNP TO220 AF Q137															
004-00687-XX	36	#IC210															
045-05100-02	1	RES NTC 10K 2% METAL TAGGED R215															
219-02612-00		RG316 CABLE ASSY T869PA BNC to SK201 cable assembly with connectors.															
219-02639-00		CABLE ASSEMBLY RG223/U N TO BNC Exciter/PA connecting cable assembly.															
219-02709-00		T858/T859 N-TYPE CONNECTOR SUB															
220-01423-02	5	PCB T858 PA SERIES II															
220-01442-03	6	PCB T858SII DRNL COUPLER															
240-02100-06	7	SKT COAX N TYPE PNL MTG OP-TER															
240-02100-17	8	SKT COAX BNC PNL JAC CRP RG316															
240-06010-15	9	BLOCK LATCHING 15W D RANGE															
240-06010-44	10	HOOD CONN UHF & N-TYPE															
303-23120-00	12	COVER A3M2288 HOLE BLANKING															
303-23146-00	13	COVER SIDE T869 PA															
308-01007-01	14	HANDLE BASE STATION SERIES II															
308-13131-02	15	HEATSINK T859 PA DRILLED DCST															
316-06617-00	16	PNL PA NO INP DRV SER II SNGL															
319-01190-01	17	SHIELD WALL HARM. FILTER 869PA															
319-01201-00	18	SHIELD LID HARM. FILTER 869PA															
319-01202-00	19	SHIELD T869PA CONTROL CIRCUIT															
319-30061-00	20	SPACER PLATE T889 WIRELINE															
319-30064-00	21	SPACER HSINK RF MODULE 869PA															
345-00040-16	22	SCRW M3X20MM P/POZ ST BZ															
349-00010-59	23	SCRW 6-32 * 3/8 P/PH T/T ZP															
349-00020-07	24	SCRW 4-40 X 5/16 P/POZ T/T BLK															
349-00020-09	25	SCRW T/T 4-40X3/8 IN P/POZ BLK															
349-00020-36	26	SCREW TT M3X8m PANTORX BLK															
352-00010-29	27	NUT M4 NYLOC HEX															
353-00010-10	28	WSHR M3 FLAT 7MM*0.6MM ST BZ															
353-00010-24		WSHR M4x8MM FLAT Fits under M4 Nyloc nut securing handle.															
356-00010-01	29	TAG SOLDER 3MM SHORT M6132/3.2															
356-00010-03	30	TAG SOLDER 3MM LONG M614/3.2															
356-00010-05	31	TAG SOLDER 4MM LONG M6144/4.2															

**replace A4 pages D5.2.23/D5.2.24 with A3 pages D5.2.23/D5.2.24**

**replace A4 pages D5.2.23/D5.2.24 with A3 pages D5.2.23/D5.2.24**

## T858 Grid Reference Index (IPN 220-01423-02)

**How To Use This Grid Reference Index**

The first digit in the PCB layout reference is a "1" or "2", indicating the top or bottom side layout respectively, and the last two characters give the location of the component on that diagram.

The first digit in the circuit diagram reference is the sheet number, and the last two characters give the location of the component on that sheet.

Device	PCB	Circuit	Device	PCB	Circuit	Device	PCB	Circuit	Device	PCB	Circuit
%C101	1:D5	1-B8	C187	1:F2	1-J1	#CV255	1:H8	2-L5	#L255	1:C8	2-Q4
%C103	1:D5	1-B9	C188	1:E2	1-J1				#L256	1:A8	2-R4
%C105	1:B5	1-C8	C189	1:D2	1-L1	D101	1:C4	1-G4	L257	1:E9	2-K0
%C107	1:B5	1-D9	C190	1:D2	1-M1	D101	1:C4	1-G5	#L258	1:D7	2-P3
%C109	1:B5	1-D8	C191	1:F2	1-K0	D103	1:V9	1-K9	L259	1:D7	2-Q3
%C111	1:B6	1-D8	C192	1:B1	1-N1	D105	1:C3	1-J2	L260	1:C7	2-Q3
%C113	1:B5	1-F8	C193	1:B1	1-Q0	D105	1:C3	1-J2			
%C115	1:B5	1-F8	C194	1:G1	1-Q1	D107	1:V9	1-K5	LINK102	1:V7	1-C1
%C117	1:B5	1-F9	C195	1:C1	1-Q0	D109	1:V8	1-L5			
%C119	1:A5	1-F8	C196	1:F4	1-M1	%D110	1:F5	1-F5	P101	1:A6	1-R9
%C121	1:C4	1-B6	C197	1:F3	1-N1	%D110	1:F5	1-F5	P103	1:P3	1-R0
%C123	1:D6	1-B6	C198	1:E3	1-N0	D113	1:J4	1-R2	P105	1:R3	1-R0
C124	1:F2	1-C6	C200	1:F3	2-J9	%D115	1:E5	1-G3	P200	1:F7	2-N4
%C125	1:C5	1-D7	C201	1:E3	2-H8	%D115	1:E5	1-G3	P201	1:E9	2-P3
%C127	1:C6	1-D6	C202	1:M4	2-E7	D205	1:G7	2-H1	P202	1:J6	2-J5
C129	1:B4	1-H5	C203	1:M4	2-E7	D206	1:E9	2-K0	P203	1:L6	2-J5
C131	1:B4	1-J6	C204	1:F2	2-F7						
C132	1:B4	1-K7	C205	1:E2	2-F7	IC101	1:D5	1-B6	PL101	2:Q5	3-K3
C133	1:F5	1-K8	C206	1:F3	2-L7	IC101	1:D5	1-N0	PL110	1:C2	3-H2
%C134	1:A5	1-M9	C207	1:B6	2-M7	IC101	1:D5	1-B8			
%C135	1:A6	1-M9	C208	1:C6	2-N7	IC101	1:D5	1-C1	%Q101	1:B5	1-C9
C137	1:F5	1-K8	C211	1:U9	2-B3	IC101	1:D5	1-F0	%Q103	1:B6	1-E8
C138	1:A3	1-L8	C212	1:B2	2-H7	IC103	1:E5	1-D3	%Q105	1:C6	1-D7
C139	1:B4	1-M6	C213	1:S8	2-B3	IC103	1:E5	1-H8	%Q107	1:B5	1-F8
C141	1:B3	1-L8	C215	1:D6	2-N7	IC103	1:E5	1-F0	%Q109	1:A5	1-G9
C143	1:D2	1-E7	C216	1:C6	2-P7	IC103	1:E5	1-J5	Q111	1:B3	1-J7
C145	1:D2	1-E7	C220	1:R7	2-C5	IC103	1:E5	1-D4	Q113	1:B4	1-K6
C146	1:B2	1-C5	C221	1:R6	2-D5	IC105	1:E3	1-F2	Q115	1:B4	1-L7
C147	1:D3	1-F6	C222	1:R6	2-E5	IC105	1:E3	1-N0	Q117	1:F5	1-K8
C148	1:F6	1-B5	C223	1:Q7	2-F5	IC105	1:E3	1-P0	Q119	1:B4	1-L6
C149	1:C3	1-F7	C224	1:Q7	2-F5	IC107	1:E2	1-K1	Q121	1:A3	1-L8
C150	1:E6	1-B3	C225	1:S7	2-C3	IC109	1:B1	1-P1	Q123	1:D2	1-E7
C151	1:E6	1-D5	C226	1:S6	2-C3	IC200	1:E3	2-J7	Q125	1:D3	1-F7
C153	1:E5	1-D3	C227	1:T8	2-B2	IC200	1:E3	2-R1	Q127	1:C4	1-G7
C154	1:B1	1-C3	C228	1:T7	2-B2	IC200	1:E3	2-P1	Q129	1:F4	1-L4
C155	1:D3	1-G3	C249	1:N6	2-F5	#IC210	1:R5	2-C2	Q131	1:B3	1-M4
C159	1:C3	1-H2	C250	1:H7	2-M5				Q133	1:C4	1-D0
C161	1:E4	1-L4	#C251	1:L6	2-G5	L101	1:Q4	1-P3	Q135	1:F1	1-H0
C162	1:F4	1-L4	#C252	1:J7	2-J5	%L102	1:A5	1-M9	Q136	1:F1	1-G0
C164	1:B2	1-L4	#C253	1:J6	2-K5	L103	1:Q3	1-Q3	Q137	1:D2	1-J0
C165	1:B3	1-M4	#C254	1:H6	2-L5	L105	1:F2	1-K0	Q200	1:F3	2-L8
C167	1:Q4	1-P3	#C256	1:K6	2-H5	L200	1:M4	2-E7	Q216	1:K6	2-J5
C169	1:Q3	1-P3	#C257	1:K7	2-H5	L201	1:F2	2-F7			
C170	1:Q4	1-Q3	C258	1:H5	2-J4	L202	1:B6	2-N8	R101	1:D5	1-A8
C171	1:Q4	1-Q3	C259	1:H4	2-L4	L205	1:D6	2-P8	%R102	1:D5	1-A9
C172	1:D4	1-A0	C272	1:H4	2-L4	L207	1:S7	2-C5	R103	1:D5	1-A8
C173	1:D4	1-B0	C275	1:F7	2-J2	L209	1:R6	2-D5	R104	1:D5	1-B9
C174	1:D4	1-B0	C276	1:F7	2-J1	L210	1:Q6	2-E5	%R105	1:D5	1-C8
C176	1:D3	1-E0	#C277	1:C9	2-Q4	L211	1:S7	2-C3	%R106	1:B5	1-C8
C177	1:E4	1-J5	#C278	1:B8	2-R4	L212	1:S6	2-C3	%R107	1:B6	1-D7
C178	1:E5	1-E0	#C280	1:A7	2-R3	%L213	1:T8	2-B2	%R108	1:B5	1-D9
C179	1:D3	1-G2	C282	1:D7	2-Q3	L235	1:J6	2-K5	%R109	1:B5	1-E9
C180	1:F1	1-H0	#C283	1:D7	2-R3	#L236	1:M6	2-G5	%R111	1:B5	1-E8
C181	1:F1	1-G0	C284	1:E9	2-K0	L237	1:L7	2-G5	%R112	1:B5	1-E9
C182	1:D1	1-H1	#C285	2:D8	2-P3	L238	1:L8	2-G4	%R113	1:A5	1-F9
C183	1:B2	1-E2	C286	2:D7	2-Q3	L239	1:J4	2-K4	%R114	1:C5	1-A6
C184	1:C5	1-G0	C287	1:F9	2-L0	L240	2:	2-L5	%R115	1:E6	1-A6
C185	1:E2	1-H1	C291	1:D3	2-Q1	L253	1:F7	2-J2	%R116	1:C5	1-A7
C186	1:E2	1-J0	C292	1:E3	2-R1	#L254	1:D9	2-Q4	R117	1:D6	1-A6

<u>Device</u>	<u>PCB</u>	<u>Circuit</u>	<u>Device</u>	<u>PCB</u>	<u>Circuit</u>	<u>Device</u>	<u>PCB</u>	<u>Circuit</u>	<u>Device</u>	<u>PCB</u>	<u>Circuit</u>
R118	1:C4	1-B6	R194	1:E1	1-H0						
R119	1:C5	1-C7	R195	1:E1	1-J0						
%R120	1:F2	1-H7	R196	1:F1	1-J0						
%R121	1:C5	1-C7	R198	1:D1	1-B4						
%R122	1:C6	1-C6	R200	1:D3	2-H9						
R123	1:F5	1-G7	R201	1:F3	2-J8						
R124	1:F4	1-H8	R202	1:F3	2-H8						
R125	1:E5	1-H8	R203	1:D3	2-G8						
R126	1:B4	1-H6	R204	1:F3	2-H8						
R127	1:B3	1-H7	R205	1:D3	2-G7						
R128	1:B3	1-J7	R207	1:F3	2-K8						
R129	1:F5	1-J9	R209	1:F3	2-K7						
R130	1:F4	1-J8	R210	1:B6	2-M7						
R131	1:B4	1-J7	R211	1:D3	2-G7						
R132	1:F5	1-J8	R215	2:	2-D7						
R133	1:B4	1-K7	R223	1:R8	2-C4						
R134	1:B4	1-K6	R224	1:Q8	2-F4						
R135	1:V8	1-K9	R225	1:S7	2-C3						
R136	1:C4	1-K7	R226	1:T6	2-C2						
R137	1:B4	1-K6	R227	1:T7	2-B1						
R138	1:B4	1-L6	R230	1:T6	2-C1						
%R139	1:A5	1-M9	R235	1:E7	2-L1						
%R140	1:F5	1-E5	R236	1:G9	2-J0						
R141	1:D2	1-C6	R237	1:D6	2-R3						
R142	1:D2	1-E7	R238	1:D6	2-R3						
R143	1:D2	1-E6	R245	1:H4	2-K4						
R144	1:D4	1-F6	R247	1:H4	2-L3						
R145	1:D3	1-F7									
R146	1:C4	1-G7	RV101	1:C4	1-G8						
%R147	1:E6	1-G4	RV103	1:C4	1-G6						
R148	1:F5	1-B5	RV105	1:C3	1-J5						
R149	1:E5	1-B3	RV107	1:C2	1-J3						
R150	1:E5	1-F0	RV109	1:V6	1-C2						
R151	1:F6	1-C5	*RV111	1:V6	1-C2						
R152	1:E5	1-C3	RV113	1:C3	1-D1						
R153	1:E4	1-F4	RV115	1:C2	1-L1						
R154	1:E4	1-E3									
R155	1:E4	1-F2	SK101	1:Q4	3-K2						
R156	1:D3	1-F3	SK103	1:A4	3-H3						
R157	1:C5	1-F0	SK201	1:S8	2-A2						
R158	1:C3	1-H3									
R159	1:E4	1-H4									
R160	1:E4	1-J5									
R161	1:B3	1-J3									
R162	1:E4	1-K4									
R163	1:V9	1-K5									
R164	1:E4	1-K4									
R165	1:E4	1-K4									
R166	1:V7	1-L5									
R167	1:E4	1-G1									
R168	1:D4	1-A1									
R169	1:D4	1-A0									
R170	1:D4	1-B1									
R171	1:D4	1-B0									
R172	1:D4	1-B1									
R173	1:V7	1-C1									
R174	1:V7	1-C1									
R175	1:D5	1-C0									
R176	1:C5	1-C0									
R177	1:C4	1-D0									
R178	1:C3	1-D1									
R179	1:C3	1-E0									
R180	1:C3	1-E0									
R181	1:E4	1-E2									
R182	1:D3	1-E0									
R183	1:D3	1-E1									
R184	1:E4	1-G1									
R185	1:E1	1-H0									
R186	1:E2	1-H1									
R187	1:F1	1-H0									
R188	1:D2	1-L1									
R189	1:E3	1-N1									
R190	1:E2	1-L0									
R191	1:B1	1-P0									
R192	1:B1	1-P1									
R193	1:C1	1-Q1									