

5.3 T839 Power Amplifier PCB

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T839 Parts List (IPN 220-01404-03)

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

| | | |
|-------------|---|--|
| C155 | Component designator changed to %C155. | |
| D101, D105 | Removed from the main PCB and replaced by two 1N4148 diodes (IPN 001-50012-00) placed on the D-range PCB: one soldered between PL101 pins 5 and 7 (cathode), the other between PL101 pins 6 and 8 (cathode). To allow external power meters to read zero and still provide meter overvoltage protection (710978). | |
| D113 | Changed from MR750 (IPN 001-00011-60) to MR2520L (IPN 001-00012-90) to provide overvoltage transient suppression (750087/88/89/90/91/92). | |
| IC204 | Changed from LMC622CM to LM358 (710382). | |
| *L236 | Changed from through-hole link (IPN 051-00640-01) to SMD link (IPN 051-00640-02) (710580). | |
| Q137 | Changed 2N6107 (IPN 000-00030-95) to 2N6107 HI (IPN 000-00030-97) to improve gain (711292). | |
| *R120 | *R120 is no longer fitted to Series I compatible T838s. T838 will not transmit in Tx tail if cyclic keying is disabled and *R120 is fitted. Designator changed to %R120 (760207) | |
| R123, R158 | Changed from 1k resistors (IPN 036-14100-00) to BA592 diodes (IPN 001-10059-20) to allow external power meters to read zero (710978). | |
| *R206 | Changed from 390W (IPN 036-13390-10) to 100W (IPN 036-13100-10) | } 100k thermistor assembly replaced with 10k item; values of associated components changed accordingly (710394/411/447). |
| R207, *R208 | Changed from 47k (IPN 036-15470-10) to 4k7 (IPN 036-14470-10) | |
| R209 | Changed from 1k5 (IPN 036-14150-10) to 390W (IPN 036-13390-10) | |
| R210 | Changed from 4k7 (IPN 036-14470-10) to 390W (IPN 036-13390-10) | |
| *R211 | Changed from 56k (IPN 036-15560-10) to 6k8 (IPN 036-14680-10) | |
| R213 | Changed from 3k9 (IPN 036-14390-00) to 560W (IPN 036-13560-00) | |
| *R215 | Changed from 100k NTC (IPN 045-06100-05) to 10k NTC (IPN 045-05100-02) | |
| R218 | Changed from 390W (IPN 036-13390-10) to 100W (IPN 036-13100-10) | |
| R219 | Changed from 100k NTC (IPN 045-06100-05) to 10k NTC (IPN 045-05100-02) | |
| R220, R222 | Changed from 47k (IPN 036-15470-10) to 4k7 (IPN 036-14470-10) | |
| R224 | Changed from 1k5 (IPN 036-14150-10) to 390W (IPN 036-13390-10) | |
| R228 | Changed from 4k7 (IPN 036-14470-10) to 390W (IPN 036-13390-10) | |
| R229 | Changed from 56k (IPN 036-15560-10) to 6k8 (IPN 036-14680-10) | |
| RV109 | Changed from 2k 10 turn (IPN 044-04200-03) to 2k 15 turn (IPN 044-04200-06) | |

- 258-00010-03 Cooling fan: some T839 PAs may be fitted with a different fan (IPN 258-00010-06). If so, a 100 μ H inductor (IPN 056-00021-02) may be fitted in series in the fan power feed wire with a 10 μ F capacitor (IPN 025-08100-03) fitted in parallel with this inductor (710977).
Fan changed to IPN 258-00010-08 to reduce noise. The extra inductor and capacitor are not required with this fan (711435).
- 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>Note: The T838 and T839 share the same basic design and are built on the same PCB. While most components in this design are common to both products, there are a number of components that are placed in only one product.</p> <p>Because the circuit diagrams for this design cover both products, we have indicated on the diagrams those components which are placed only in the T839 by enclosing them in a labelled box. The circuit reference for each of these components is also prefixed with the "*" character.</p> <p>The "*" character is used in this parts list to indicate components used only in the T839.</p> </div> | | | | | | | |
| C222 | | 015-24470-08 | CAP CER 0805 4N7 10% X7R 50V | C222 | | 015-24470-08 | CAP CER 0805 4N7 10% X7R 50V |
| C223 | | 015-24100-08 | CAP CER 0805 1N 10% X7R 50V | C223 | | 015-24100-08 | CAP CER 0805 1N 10% X7R 50V |
| C224 | | 015-23680-08 | CAP CER 0805 680P 10% X7R 50V | C224 | | 015-23680-08 | CAP CER 0805 680P 10% X7R 50V |
| C225 | | 015-03680-06 | CAP CER 1210 680P NPO200VGRM42 | C225 | | 015-03680-06 | CAP CER 1210 680P NPO200VGRM42 |
| C226 | | 015-23680-08 | CAP CER 0805 680P 10% X7R 50V | C226 | | 015-23680-08 | CAP CER 0805 680P 10% X7R 50V |
| C227 | | 015-03680-06 | CAP CER 1210 680P NPO200VGRM42 | C227 | | 015-03680-06 | CAP CER 1210 680P NPO200VGRM42 |
| C229 | | 015-03680-03 | CAP CER 680P 5% NPO100V GRH111 | C229 | | 015-03680-03 | CAP CER 680P 5% NPO100V GRH111 |
| *C230 | | 015-06100-08 | CAP CER 1206 100N 10% X7R 50V | *C230 | | 015-06100-08 | CAP CER 1206 100N 10% X7R 50V |
| *C231 | | 015-03680-06 | CAP CER 1210 680P NPO200VGRM42 | *C231 | | 015-03680-06 | CAP CER 1210 680P NPO200VGRM42 |
| *C232 | | 015-03680-06 | CAP CER 1210 680P NPO200VGRM42 | *C232 | | 015-03680-06 | CAP CER 1210 680P NPO200VGRM42 |
| *C233 | | 015-06100-08 | CAP CER 1206 100N 10% X7R 50V | *C233 | | 015-06100-08 | CAP CER 1206 100N 10% X7R 50V |
| *C234 | | 014-07470-03 | L) CAP TANT SMD 4U7 35V 20% | *C234 | | 014-07470-03 | L) CAP TANT SMD 4U7 35V 20% |
| *C240 | | 015-03680-03 | CAP CER 680P 5% NPO100V GRH111 | *C240 | | 015-03680-03 | CAP CER 680P 5% NPO100V GRH111 |
| C259 | | 015-23680-08 | CAP CER 0805 680P 10% X7R 50V | C259 | | 015-23680-08 | CAP CER 0805 680P 10% X7R 50V |
| C261 | | 015-24470-08 | CAP CER 0805 4N7 10% X7R 50V | C261 | | 015-24470-08 | CAP CER 0805 4N7 10% X7R 50V |
| C268 | | 029-02220-02 | CAP MICA 5 CASE 22P 5% | C268 | | 029-02220-02 | CAP MICA 5 CASE 22P 5% |
| C270 | | 029-02560-03 | CAP MICA 10 CASE 56P 2% | C270 | | 029-02560-03 | CAP MICA 10 CASE 56P 2% |
| C271 | | 029-02470-03 | CAP MICA 10 CASE 47P 2% | C271 | | 029-02470-03 | CAP MICA 10 CASE 47P 2% |
| C272 | | 029-02560-03 | CAP MICA 10 CASE 56P 2% | C272 | | 029-02560-03 | CAP MICA 10 CASE 56P 2% |
| C273 | | 029-02220-02 | CAP MICA 5 CASE 22P 5% | C273 | | 029-02220-02 | CAP MICA 5 CASE 22P 5% |
| C294 | | 015-23680-08 | CAP CER 0805 680P 10% X7R 50V | C294 | | 015-23680-08 | CAP CER 0805 680P 10% X7R 50V |
| C295 | | 015-24470-08 | CAP CER 0805 4N7 10% X7R 50V | C295 | | 015-24470-08 | CAP CER 0805 4N7 10% X7R 50V |
| C297 | | 015-23680-08 | CAP CER 0805 680P 10% X7R 50V | C297 | | 015-23680-08 | CAP CER 0805 680P 10% X7R 50V |
| C298 | | 015-24470-08 | CAP CER 0805 4N7 10% X7R 50V | C298 | | 015-24470-08 | CAP CER 0805 4N7 10% X7R 50V |
| *C101 | | 015-23680-08 | CAP CER 0805 680P 10% X7R 50V | D101 | | 001-10000-70 | (S) DIODE SMD BAV70 D-SW SOT23 |
| *C103 | | 015-23680-08 | CAP CER 0805 680P 10% X7R 50V | D103 | | 008-00013-32 | (S) LED 3 RED LO CURRENT NO MTG |
| *C105 | | 015-23680-08 | CAP CER 0805 680P 10% X7R 50V | D105 | | 001-10000-70 | (S) DIODE SMD BAV70 D-SW SOT23 |
| *C107 | | 015-23680-08 | CAP CER 0805 680P 10% X7R 50V | D107 | | 008-00013-35 | (S) LED 3 GRN LO CURRENT NO MTG |
| *C109 | | 015-23680-08 | CAP CER 0805 680P 10% X7R 50V | D109 | | 008-00013-32 | (S) LED 3 RED LO CURRENT NO MTG |
| *C111 | | 015-23680-08 | CAP CER 0805 680P 10% X7R 50V | D111 | | 001-10000-70 | (S) DIODE SMD BAV70 D-SW SOT23 |
| *C113 | | 015-23680-08 | CAP CER 0805 680P 10% X7R 50V | D113 | | 001-00011-60 | (S) DIODE SR2607 -- USE MR750 |
| *C115 | | 015-23680-08 | CAP CER 0805 680P 10% X7R 50V | D201 | | 001-00013-45 | (S) DIODE SCHTTKY 1SS97/2 |
| *C117 | | 015-23680-08 | CAP CER 0805 680P 10% X7R 50V | D202 | | 001-10000-70 | (S) DIODE SMD BAV70 D-SW SOT23 |
| *C119 | | 015-23680-08 | CAP CER 0805 680P 10% X7R 50V | D203 | | 001-00013-45 | (S) DIODE SCHTTKY 1SS97/2 |
| *C121 | | 015-23680-08 | CAP CER 0805 680P 10% X7R 50V | IC101 | | 002-10003-24 | (S) IC SMD 324 4X O-AMP SO14 |
| *C123 | | 015-23680-08 | CAP CER 0805 680P 10% X7R 50V | IC103 | | 002-10003-24 | (S) IC SMD 324 4X O-AMP SO14 |
| *C124 | | 015-23680-08 | CAP CER 0805 680P 10% X7R 50V | IC105 | | 002-10003-58 | (S) IC SMD LM358 DUAL O-AMP |
| *C125 | | 015-23680-08 | CAP CER 0805 680P 10% X7R 50V | IC107 | | 002-10003-17 | (S) IC LM317L REG SO-8 100MA |
| *C127 | | 015-23680-08 | CAP CER 0805 680P 10% X7R 50V | IC109 | | 002-10003-17 | (S) IC LM317L REG SO-8 100MA |
| C129 | | 015-23680-08 | CAP CER 0805 680P 10% X7R 50V | #IC201 | 10 | 004-00687-02 | MODULE M68702L 135-160MHZ 60W |
| C131 | | 015-27100-10 | CAP CER 0805 1M+80-20% Y5V 16V | #IC201 | 20 | 004-00687-03 | MODULE M68702H 150-174MHZ 60W |
| C132 | | 015-24100-08 | CAP CER 0805 1N 10% X7R 50V | *#IC202 | 10 | 004-00687-02 | MODULE M68702L 135-160MHZ 60W |
| C133 | | 015-23680-08 | CAP CER 0805 680P 10% X7R 50V | *#IC202 | 20 | 004-00687-03 | MODULE M68702H 150-174MHZ 60W |
| C137 | | 015-23680-08 | CAP CER 0805 680P 10% X7R 50V | *IC203 | | 051-00005-36 | RFPOWER 3DB HYBRID COUPLER |
| C138 | | 015-24470-08 | CAP CER 0805 4N7 10% X7R 50V | IC204 | | 002-10006-62 | (S) IC SMD LMC662CM 2X O-AMP |
| C139 | | 015-23680-08 | CAP CER 0805 680P 10% X7R 50V | *IC205 | | 051-00005-36 | RFPOWER 3DB HYBRID COUPLER |
| C141 | | 014-07100-02 | CAP TANT CHIP 1U0 3.2 X 1.6MM | L101 | | 065-10004-20 | BEAD FE SMD CBD 4.6/3/3-4S2 |
| C143 | | 015-23680-08 | CAP CER 0805 680P 10% X7R 50V | L103 | | 065-10004-20 | BEAD FE SMD CBD 4.6/3/3-4S2 |
| C145 | | 015-23680-08 | CAP CER 0805 680P 10% X7R 50V | L105 | | 065-10004-20 | BEAD FE SMD CBD 4.6/3/3-4S2 |
| C147 | | 015-24470-08 | CAP CER 0805 4N7 10% X7R 50V | *L202 | | 056-14150-02 | (L) IND SMD 1.5UH |
| C149 | | 015-23680-08 | CAP CER 0805 680P 10% X7R 50V | L203 | | 065-10004-20 | BEAD FE SMD CBD 4.6/3/3-4S2 |
| C151 | | 015-23680-08 | CAP CER 0805 680P 10% X7R 50V | *L204 | | 056-14150-02 | (L) IND SMD 1.5UH |
| C153 | | 015-23680-08 | CAP CER 0805 680P 10% X7R 50V | L206 | | 056-14150-02 | (L) IND SMD 1.5UH |
| C155 | | 015-25100-08 | CAP CER 0805 10N 10% X7R 50V | L208 | | 056-14150-02 | (L) IND SMD 1.5UH |
| C159 | | 015-23680-08 | CAP CER 0805 680P 10% X7R 50V | *L211 | | 056-10330-02 | (L) IND SMD 330NH |
| C161 | | 015-23680-08 | CAP CER 0805 680P 10% X7R 50V | L215 | | 052-08340-40 | COIL A/W 4T/4.0MM SMD 0.8MM |
| C162 | | 015-23680-08 | CAP CER 0805 680P 10% X7R 50V | L217 | | 052-08340-40 | COIL A/W 4T/4.0MM SMD 0.8MM |
| C164 | | 015-24470-08 | CAP CER 0805 4N7 10% X7R 50V | L219 | | 052-08340-40 | COIL A/W 4T/4.0MM SMD 0.8MM |
| C165 | | 015-23680-08 | CAP CER 0805 680P 10% X7R 50V | *L223 | | 052-08340-40 | COIL A/W 4T/4.0MM SMD 0.8MM |
| C167 | | 015-24100-08 | CAP CER 0805 1N 10% X7R 50V | *L230 | | 065-10004-20 | BEAD FE SMD CBD 4.6/3/3-4S2 |
| C169 | | 014-07470-03 | L) CAP TANT SMD 4U7 35V 20% | *L231 | | 052-08340-40 | COIL A/W 4T/4.0MM SMD 0.8MM |
| C171 | | 015-24470-08 | CAP CER 0805 4N7 10% X7R 50V | L233 | | 056-10330-02 | (L) IND SMD 330NH |
| C173 | | 015-23680-08 | CAP CER 0805 680P 10% X7R 50V | *L236 | | 051-00640-01 | LNK 65.5 COP STPL C/W SLCN SLV |
| C174 | | 015-23680-08 | CAP CER 0805 680P 10% X7R 50V | L239 | | 056-10330-02 | (L) IND SMD 330NH |
| C176 | | 015-06100-08 | CAP CER 1206 100N 10% X7R 50V | L241 | | 052-08360-20 | COIL A/W 2T/6.0MM SMD 0.8MM |
| C178 | | 015-25100-08 | CAP CER 0805 10N 10% X7R 50V | L243 | | 052-08340-20 | COIL A/W 2T/4.0MM SMD 0.8MM |
| C179 | | 015-06150-08 | CAP CER1206150N10% X7R25VW 25V | L245 | | 052-08345-10 | COIL A/W 1T/4.5MM SMD 0.8MM |
| C180 | | 015-23680-08 | CAP CER 0805 680P 10% X7R 50V | L247 | | 052-08340-20 | COIL A/W 2T/4.0MM SMD 0.8MM |
| C181 | | 015-23100-01 | CAP CER 0805 100P 5% NPO 50V | L248 | | 052-08345-10 | COIL A/W 1T/4.5MM SMD 0.8MM |
| C182 | | 015-24470-08 | CAP CER 0805 4N7 10% X7R 50V | L249 | | 052-08360-20 | COIL A/W 2T/6.0MM SMD 0.8MM |
| C184 | | 015-25100-08 | CAP CER 0805 10N 10% X7R 50V | L264 | | 056-10330-02 | (L) IND SMD 330NH |
| C185 | | 015-23680-08 | CAP CER 0805 680P 10% X7R 50V | LINK1 | | 240-00020-68 | HEADER 2W PCB MTG STD |
| C186 | | 015-23680-08 | CAP CER 0805 680P 10% X7R 50V | LINK2 | | 036-10000-00 | RES M/F 0805 ZERO OHM |
| C187 | | 015-06100-08 | CAP CER 1206 100N 10% X7R 50V | LINK201 | | 240-00020-59 | HEADER 3 W 1 R PCB MTG |
| C188 | | 014-08100-00 | CAP TANT CHIP 10M 16VW +20% | PL101 | | 240-00010-55 | PLUG 15 W D RANGE W/W PNL MT |
| C189 | | 015-25100-08 | CAP CER 0805 10N 10% X7R 50V | *Q101 | | 000-10008-57 | (S) XSTR SMD BCW70 PNP SOT23 SS |
| C190 | | 015-23680-08 | CAP CER 0805 680P 10% X7R 50V | *Q103 | | 000-10008-17 | (S) XSTR SMD BC817-25 NPN SOT23 |
| C192 | | 015-06100-08 | CAP CER 1206 100N 10% X7R 50V | *Q105 | | 000-10008-17 | (S) XSTR SMD BC817-25 NPN SOT23 |
| C193 | | 015-06100-08 | CAP CER 1206 100N 10% X7R 50V | *Q107 | | 000-10008-57 | (S) XSTR SMD BCW70 PNP SOT23 SS |
| C195 | | 014-08100-00 | CAP TANT CHIP 10M 16VW +20% | *Q109 | | 000-10008-69 | (S) XSTR SMD BC869 PNP 1W SOT89 |
| C201 | | 014-07470-03 | L) CAP TANT SMD 4U7 35V 20% | Q111 | | 000-10008-57 | (S) XSTR SMD BCW70 PNP SOT23 SS |
| *C202 | | 015-24470-08 | CAP CER 0805 4N7 10% X7R 50V | Q113 | | 000-10008-48 | (S) XSTR SMD BCW60 NPN SOT23 SS |
| C205 | | 015-06100-08 | CAP CER 1206 100N 10% X7R 50V | Q115 | | 000-10008-57 | (S) XSTR SMD BCW70 PNP SOT23 SS |
| C207 | | 015-06100-08 | CAP CER 1206 100N 10% X7R 50V | Q117 | | 000-10008-17 | (S) XSTR SMD BC817-25 NPN SOT23 |
| *C208 | | 015-23680-08 | CAP CER 0805 680P 10% X7R 50V | Q119 | | 000-10008-48 | (S) XSTR SMD BCW60 NPN SOT23 SS |
| *C209 | | 015-23680-08 | CAP CER 0805 680P 10% X7R 50V | Q121 | | 000-10017-00 | (L) XSTR SMD BF170LT1 SOT23 |
| *C210 | | 015-24470-08 | CAP CER 0805 4N7 10% X7R 50V | Q123 | | 000-10008-57 | (S) XSTR SMD BCW70 PNP SOT23 SS |
| *C212 | | 015-24100-08 | CAP CER 0805 1N 10% X7R 50V | Q125 | | 000-10008-57 | (S) XSTR SMD BCW70 PNP SOT23 SS |
| *C213 | | 015-23680-08 | CAP CER 0805 680P 10% X7R 50V | Q127 | | 000-10008-57 | (S) XSTR SMD BCW70 PNP SOT23 SS |
| C215 | | 015-23680-08 | CAP CER 0805 680P 10% X7R 50V | Q129 | | 000-10008-17 | (S) XSTR SMD BC817-25 NPN SOT23 |
| C216 | | 015-24470-08 | CAP CER 0805 4N7 10% X7R 50V | Q131 | | 000-10017-00 | (L) XSTR SMD BF170LT1 SOT23 |
| *C217 | | 015-03680-06 | CAP CER 1210 680P NPO200VGRM42 | Q133 | | 000-10008-48 | (S) XSTR SMD BCW60 NPN SOT23 SS |
| C218 | | 015-23680-08 | CAP CER 0805 680P 10% X7R 50V | Q135 | | 000-10008-17 | (S) XSTR SMD BC817-25 NPN SOT23 |
| *C219 | | 015-03680-06 | CAP CER 1210 680P NPO200VGRM42 | | | | |
| C220 | | 015-23680-08 | CAP CER 0805 680P 10% X7R 50V | | | | |
| C221 | | 015-06100-08 | CAP CER 1206 100N 10% X7R 50V | | | | |

| IPN | Legend | Description | IPN | Legend | Description |
|-------|--------------|---------------------------------|--------|--------------|---|
| Q136 | 000-10008-17 | (S) XSTR SMD BC817-25 NPN SOT23 | R207 | 036-15470-10 | RES M/F 0805 47K 1% |
| Q137 | 000-00030-95 | (S) XSTR 2N6107 PNP TO220 AF | *R208 | 036-15470-10 | RES M/F 0805 47K 1% |
| Q201 | 000-10008-48 | (S) XSTR SMD BCW60 NPN SOT23 SS | R209 | 036-14150-10 | RES MF 0805 CHIP 1K5 1% |
| R101 | 036-14100-00 | RES M/F 0805 1K 5% | R210 | 036-14470-10 | RES M/F 0805 CHIP 4K7 1% |
| *R102 | 036-16220-00 | RES M/F 0805 220K 5% | *R211 | 036-15560-10 | RES MF 0805 CHIP 56K 1% |
| R103 | 036-15330-00 | RES M/F 0805 33K 5% | R212 | 036-15100-00 | RES M/F 0805 10K 5% |
| R104 | 036-16470-00 | RES M/F 0805 470K 5% | R213 | 036-14390-00 | RES M/F 0805 3K9 5% |
| *R105 | 036-15150-00 | RES M/F 0805 15K 5% | R214 | 036-14470-00 | RES M/F 0805 4K7 5% |
| *R106 | 036-15150-00 | RES M/F 0805 15K 5% | *R215 | | available as sub-assembly only - refer to (20) (045-06100-05) in the mechanical parts list |
| *R107 | 036-14390-00 | RES M/F 0805 3K9 5% | *R216 | 036-03100-02 | RES 100E 1206 200V 250MW RC01 |
| *R108 | 036-14330-00 | RES M/F 0805 3K3 5% | *R217 | 036-03100-02 | RES 100E 1206 200V 250MW RC01 |
| *R109 | 036-15100-00 | RES M/F 0805 10K 5% | R218 | 036-13390-10 | RES MF 0805 CHIP 390E 1% |
| *R111 | 036-14820-00 | RES M/F 0805 8K2 5% | R219 | | available as sub-assembly only - refer to (20) (045-06100-05) in the mechanical parts list |
| *R112 | 036-14680-00 | RES M/F 0805 6K8 5% | R220 | 036-15470-10 | RES M/F 0805 47K 1% |
| *R113 | 036-14100-00 | RES M/F 0805 1K 5% | R222 | 036-15470-10 | RES M/F 0805 47K 1% |
| *R114 | 036-16100-00 | RES M/F 0805 100K 5% | *R223 | 039-05050-00 | RES TO22050E 50W MP850 |
| *R115 | 036-16220-00 | RES M/F 0805 220K 5% | R224 | 036-14150-10 | RES MF 0805 CHIP 1K5 1% |
| *R116 | 045-04470-00 | RES NTC SMD 4K7 5% 20MW | R225 | 030-03120-00 | RES FILM 120E 5% 0.25W 7X2.5 |
| R117 | 036-16220-00 | RES M/F 0805 220K 5% | R228 | 036-14470-10 | RES M/F 0805 CHIP 4K7 1% |
| R118 | 036-15270-00 | RES M/F 0805 27K 5% | R229 | 036-15560-10 | RES MF 0805 CHIP 56K 1% |
| R119 | 036-16470-00 | RES M/F 0805 470K 5% | *R230 | 036-02100-02 | RES 10E 1206 200V 250MW RC01 |
| *R121 | 036-15150-00 | RES M/F 0805 15K 5% | R231 | 030-03120-00 | RES FILM 120E 5% 0.25W 7X2.5 |
| *R122 | 036-14390-00 | RES M/F 0805 3K9 5% | *R232 | 036-02100-02 | RES 10E 1206 200V 250MW RC01 |
| R123 | 036-14100-00 | RES M/F 0805 1K 5% | R237 | 045-04470-00 | RES NTC SMD 4K7 5% 20MW |
| R124 | 036-16100-00 | RES M/F 0805 100K 5% | RV101 | 042-04500-05 | RES PRESET SMD 5K CER 4MM SQ |
| R125 | 036-15100-00 | RES M/F 0805 10K 5% | RV103 | 042-05500-05 | RES PRESET SMD 50K CER 4MM SQ |
| R126 | 036-14100-00 | RES M/F 0805 1K 5% | RV105 | 042-04500-05 | RES PRESET SMD 5K CER 4MM SQ |
| R127 | 036-15100-00 | RES M/F 0805 10K 5% | RV107 | 042-05500-05 | RES PRESET SMD 50K CER 4MM SQ |
| R128 | 036-15220-00 | RES M/F 0805 22K 5% | RV109 | 044-04200-03 | RES PRE 2K 10 TURN PNL MTG |
| R129 | 036-17100-00 | RES M/F 0805 1M 5% | RV113 | 042-06500-05 | RES PRESET SMD 500K CER 4MM SQ |
| R130 | 036-14220-00 | RES M/F 0805 2K2 5% | RV115 | 042-04220-05 | RES PRESET SMD 2K CER 4MM SQ |
| R131 | 036-16180-00 | RES M/F 0805 180K 5% | SK101 | 240-10000-05 | CONN SMD SKT 8W 2R M-MATCH |
| R132 | 036-14100-00 | RES M/F 0805 1K 5% | SK103 | 240-10000-05 | CONN SMD SKT 8W 2R M-MATCH |
| R133 | 036-15100-00 | RES M/F 0805 10K 5% | *SK201 | 240-02100-44 | SKT COAX MINI JACK PCB MT ANG. |
| R134 | 036-13470-00 | RES M/F 0805 470E 5% | | | |
| R135 | 036-13680-00 | RES M/F 0805 680E 5% | | | |
| R136 | 036-15100-00 | RES M/F 0805 10K 5% | | | |
| R137 | 036-13470-00 | RES M/F 0805 470E 5% | | | |
| R138 | 036-15100-00 | RES M/F 0805 10K 5% | | | |
| R141 | 036-15100-00 | RES M/F 0805 10K 5% | | | |
| R142 | 036-15100-00 | RES M/F 0805 10K 5% | | | |
| R143 | 036-15100-00 | RES M/F 0805 10K 5% | | | |
| R144 | 036-15820-00 | RES M/F 0805 82K 5% | | | |
| R145 | 036-15470-00 | RES M/F 0805 47K 5% | | | |
| R146 | 036-14180-00 | RES M/F 0805 1K8 5% | | | |
| R148 | 036-14820-00 | RES M/F 0805 8K2 5% | | | |
| R149 | 036-13470-00 | RES M/F 0805 470E 5% | | | |
| R150 | 036-12220-00 | RES M/F 0805 22E 5% | | | |
| R151 | 036-15100-00 | RES M/F 0805 10K 5% | | | |
| R152 | 036-15100-00 | RES M/F 0805 10K 5% | | | |
| R153 | 036-14680-00 | RES M/F 0805 6K8 5% | | | |
| R154 | 036-14680-00 | RES M/F 0805 6K8 5% | | | |
| R155 | 036-13220-00 | RES M/F 0805 220E 5% | | | |
| R156 | 036-13100-00 | RES M/F 0805 100E 5% | | | |
| R157 | 036-12220-00 | RES M/F 0805 22E 5% | | | |
| R158 | 036-14100-00 | RES M/F 0805 1K 5% | | | |
| R159 | 036-15100-00 | RES M/F 0805 10K 5% | | | |
| R160 | 036-14470-00 | RES M/F 0805 4K7 5% | | | |
| R161 | 036-14100-00 | RES M/F 0805 1K 5% | | | |
| R162 | 036-17100-00 | RES M/F 0805 1M 5% | | | |
| R163 | 036-13680-00 | RES M/F 0805 680E 5% | | | |
| R164 | 036-14220-00 | RES M/F 0805 2K2 5% | | | |
| R165 | 036-14100-00 | RES M/F 0805 1K 5% | | | |
| R166 | 036-13680-00 | RES M/F 0805 680E 5% | | | |
| R168 | 036-15100-10 | RES M/F 0805 10K 1% | | | |
| R169 | 036-14100-00 | RES M/F 0805 1K 5% | | | |
| R170 | 036-14100-00 | RES M/F 0805 1K 5% | | | |
| R171 | 036-14100-00 | RES M/F 0805 1K 5% | | | |
| R172 | 036-15100-10 | RES M/F 0805 10K 1% | | | |
| R173 | 036-13470-00 | RES M/F 0805 470E 5% | | | |
| R174 | 036-13220-00 | RES M/F 0805 220E 5% | | | |
| R175 | 036-16220-00 | RES M/F 0805 220K 5% | | | |
| R176 | 036-15100-00 | RES M/F 0805 10K 5% | | | |
| R177 | 036-14470-00 | RES M/F 0805 4K7 5% | | | |
| R178 | 036-16100-00 | RES M/F 0805 100K 5% | | | |
| R179 | 036-15100-00 | RES M/F 0805 10K 5% | | | |
| R180 | 036-16150-00 | RES M/F 0805 150K 5% | | | |
| R181 | 036-14560-00 | RES M/F 0805 5K6 5% | | | |
| R182 | 036-16100-00 | RES M/F 0805 100K 5% | | | |
| R183 | 036-14470-00 | RES M/F 0805 4K7 5% | | | |
| R184 | 036-14100-00 | RES M/F 0805 1K 5% | | | |
| R185 | 036-03100-02 | RES 100E 1206 200V 250MW RC01 | | | |
| R186 | 036-13100-00 | RES M/F 0805 100E 5% | | | |
| R187 | 036-03150-03 | RES 1218 PWR CHIP 150E 20% 1W | | | |
| R188 | 036-13220-00 | RES M/F 0805 220E 5% | | | |
| R189 | 036-12100-00 | RES M/F 0805 10E 5% | | | |
| R190 | 036-12220-00 | RES M/F 0805 22E 5% | | | |
| R191 | 036-14100-10 | RES M/F 0805 CHIP 1K 1% | | | |
| R192 | 036-13220-10 | RES 0805 220E 1% | | | |
| R193 | 036-12100-00 | RES M/F 0805 10E 5% | | | |
| R194 | 036-03220-03 | RES 1218 PWR CHIP 220E 20% 1W | | | |
| R195 | 036-14220-00 | RES M/F 0805 2K2 5% | | | |
| R196 | 036-13100-00 | RES M/F 0805 100E 5% | | | |
| R197 | 036-10000-00 | RES M/F 0805 ZERO OHM | | | |
| R203 | 036-02100-02 | RES 10E 1206 200V 250MW RC01 | | | |
| R205 | 036-02100-02 | RES 10E 1206 200V 250MW RC01 | | | |
| *R206 | 036-13390-10 | RES MF 0805 CHIP 390E 1% | | | |

T839 Mechanical & Miscellaneous Parts (220-01404-03)

| IPN | Legend | Description | IPN | Legend | Description |
|----------------|--------|---|--------------|--------|--|
| 000-00030-95 | 15 | Q137 | 319-01152-00 | 23 | SHIELD A3M2250 F/THRU MTG |
| 004-00687-02/3 | 18 | #IC201, *#IC202 | 319-01190-01 | 3 | SHIELD WALL HARM. FILTER |
| 012-04100-05 | 35 | CAP F/THRU 1N SUPPR FLTR S-MTG | 319-01201-00 | 41 | SHIELD LID HARM. FILTER |
| 012-04150-01 | 26 | CAP CER F/THRU 1N5 NO LEAD | 319-01202-00 | 4 | SHIELD CONTROL CIRCUIT |
| 039-05050-00 | 11 | *R223 | 319-30064-00 | 17 | SPACER HSINK RF MODULE |
| 045-06100-05 | 20 | ASSY 100K NTC FOR MODULE *R215, R219 | 345-00040-16 | 27 | SCRW M3X20MM P/POZ ST BZ |
| 051-00005-36 | 9 | *IC203, *IC205 | 349-00010-59 | 21 | SCRW 6-32 X 3/8 P/PH T/T ZP |
| 051-00006-02 | | SOLDER SPRING 1.3MM A4M1877 Support for front panel LED solder joints. | 349-00020-07 | 8 | SCRW 4-40 X 5/16 P/POZ T/T BLK |
| 051-00642-01 | 32 | COAX SEMI-RIG N-TYPE EXTN | 349-00020-08 | 7 | SCRW T/T 4-40X3/8 CSK POZI BZ Secure *IC203/205 couplers to heatsink. |
| 065-00010-13 | 25 | BEAD FER 7D 1.9X0.9X3.8 | 349-00020-09 | 13 | SCRW T/T 4-40X3/8 IN P/POZ BLK |
| 201-00030-02 | | WIRE T/C 7/0.2 PVC RED Front panel LEDs. | 349-00020-36 | 47 | LIM)SCREW TT M3X8m PANTORX BLK |
| 201-00030-10 | | WIRE T/C 7/0.2 PVC BLACK Front panel LEDs. | 349-00020-43 | 40 | SCRW T/T M4X12MM P/POZ BZ |
| 201-00050-25 | | AUTO 154 RED 41/0.3 PVC DC+ from D-range PCB. | 349-00020-49 | 38 | SCRW T/T M4X35MM P/POZ BZ |
| 201-00050-26 | | AUTO 154 BLACK 41/0.3 PVC DC- from D-range PCB. | 352-00010-04 | 10 | NUT M2.5 MACH HEX ST BZ |
| 206-00010-11 | | COAX 50 OHM RG316-U PTFE Coax from BNC connector to *SK201. | 352-00010-29 | 46 | NUT M4 NYLOC HEX |
| 219-02591-00 | 22 | LOOM RIBBON 8 WAY FOR PA | 353-00010-10 | 12 | WSHR M3 FLAT 7MMX0.6MM ST BZ |
| 219-02592-00 | | CABLE ASSY RG223/U N TO BNC Exciter/PA connecting cable. | 356-00010-01 | 36 | TAG SOLDER 3MM SHORT M6132/3.2 |
| 220-01402-02 | 2 | PCB T838/9 TEFLON DIRNL COUPLER | 356-00010-03 | 2 | TAG SOLDER 3MM LONG M614/3.2 |
| 220-01404-03 | 1 | PCB T838/9 PA MODULE DESIGN | 356-00010-05 | 19 | TAG SOLDER 4MM LONG M6144/4.2 |
| 240-00010-55 | 24 | PLUG 15 W D RANGE W/W PNL MT PL101 | 357-00010-45 | 39 | CLAMP CABLE 4.8MM P CLIP |
| 240-00100-43 | | PLG COAX MINI PIN CRIMP 1.5D Coax from BNC connector to *SK201. | 360-00010-41 | 44 | BUSH SHORTY BLK |
| 240-02010-54 | | SKT 15W DRANGE PNL MTG 125 C Matching socket for D-range plug PL101. | 362-00010-07 | 14 | GASKET SIL INSULATING TO-220 |
| 240-02100-06 | 31 | SKT COAX N TYPE PNL MTG OP-TER | 362-00010-13 | 16 | BUSH INSULATING 1.1MM TOP HAT |
| 240-02100-17 | 33 | SKT COAX BNC PNL JAC CRP RG316 | 362-00010-33 | 43 | GROMMET LED MTG 3MM |
| 240-04020-62 | | SKT 2 W RECEP SHORTING LINK LINK1 | 365-00100-20 | | LABEL WHITE S/A 28X11MM |
| 240-06010-14 | | CLAMP LATCHING 15 W D RANGE Cover for D-range socket. | 365-01391-01 | | LABEL 30X10.8 T/MARK VOID |
| 240-06010-15 | 29 | BLOCK LATCHING 15W D RANGE | 365-01539-00 | | LABEL WARNING 120W/PWR CLAMP |
| 240-06010-44 | 30 | HOOD CONN UHF & N-TYPE | 369-00010-14 | | TIE CABLE NYLON 100X2.6MM |
| 258-00010-03 | 37 | FAN 12V 119X119X25MM TUBE AX | 399-00010-56 | | BAG PLASTIC 200X250MM |
| 302-05204-00 | 34 | BRKT A3M2314 F/THRU MTG | 400-00020-07 | | SLEEVING 2MM SIL RUBBER |
| 303-23146-00 | 48 | COVER SIDE T838/9 PA | 400-00020-30 | | HEATSHRINK 3MM |
| 308-01007-01 | 45 | HANDLE BASE STATION SERIES II | 410-00010-43 | | PKG T296 AMPAC REF 73-46 |
| 308-13122-02 | 5 | HEATSINK T838/9 PA COMPLETE | | | |
| 308-13125-00 | 6 | HEATSINK T839 COUPLER | | | |
| 316-06651-00 | 42 | PANEL PA 100W REAR DRV SER II | | | |

replace A4 pages D5.3.9/D5.3.10 with A3 pages D5.3.9/D5.3.10

replace A4 pages D5.3.9/D5.3.10 with A3 pages D5.3.9/D5.3.10

T839 Grid Reference Index (IPN 220-01404-03)

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 |
|--|------|---------|--------|------|---------|---------|------|---------|--------|------|---------|
| Note: This grid reference index covers both the T838 and T839 and is reproduced in both PCB Information sections for your convenience. | | | C187 | 1:D3 | 1-K1 | D113 | 1:F7 | 1-Q2 | PL101 | 1:L3 | 1-C2 |
| *C101 | 1:E4 | 1-B8 | C188 | 1:C2 | 1-L1 | D201 | 1:F6 | 2-Q3 | *Q101 | 1:C3 | 1-C9 |
| *C103 | 1:E4 | 1-B9 | C189 | 1:C3 | 1-M1 | D202 | 1:D4 | 2-18 | *Q103 | 1:B3 | 1-E8 |
| *C105 | 1:B3 | 1-D8 | C190 | 1:C3 | 1-N1 | D202 | 1:D4 | 2-18 | *Q105 | 1:C4 | 1-D7 |
| *C107 | 1:B3 | 1-D9 | C192 | 1:B2 | 1-N1 | D203 | 1:E6 | 2-R2 | *Q107 | 1:B5 | 1-F8 |
| *C109 | 1:B3 | 1-D8 | C193 | 1:B2 | 1-P1 | IC101 | 1:D4 | 1-C6 | *Q109 | 1:A5 | 1-G9 |
| *C111 | 1:C4 | 1-D8 | C195 | 1:C2 | 1-Q1 | IC101 | 1:D4 | 1-G0 | Q111 | 1:A3 | 1-J7 |
| *C113 | 1:B5 | 1-F8 | C201 | 1:J7 | 2-L5 | IC101 | 1:D4 | 1-B8 | Q113 | 1:A3 | 1-K6 |
| *C115 | 1:B5 | 1-F8 | *C202 | 1:H3 | 2-B8 | IC101 | 1:D4 | 1-C0 | Q115 | 1:A3 | 1-L7 |
| *C117 | 1:B5 | 1-F9 | *C203 | 1:P7 | 2-C1 | IC101 | 1:D4 | 1-N0 | Q117 | 1:B4 | 1-K8 |
| *C119 | 1:B5 | 1-G8 | *C204 | 1:M6 | 2-E1 | IC103 | 1:C4 | 1-D4 | Q119 | 1:B4 | 1-L6 |
| *C121 | 1:D4 | 1-B6 | C205 | 1:L7 | 2-I5 | IC103 | 1:C4 | 1-J8 | Q121 | 1:B3 | 1-L8 |
| *C123 | 1:D4 | 1-B6 | *C206 | 1:P6 | 2-C1 | IC103 | 1:C4 | 1-F0 | Q123 | 1:E3 | 1-E7 |
| *C124 | 1:E3 | 1-C6 | C207 | 1:K7 | 2-K5 | IC103 | 1:C4 | 1-J5 | Q125 | 1:E3 | 1-F7 |
| *C125 | 1:C4 | 1-D7 | *C208 | 1:H3 | 2-C8 | IC103 | 1:C4 | 1-E3 | Q127 | 1:D3 | 1-G7 |
| *C127 | 1:C4 | 1-D6 | *C209 | 1:C5 | 2-D8 | IC105 | 1:D3 | 1-M0 | Q129 | 1:B4 | 1-L4 |
| C129 | 1:B3 | 1-H5 | *C210 | 1:C5 | 2-E8 | IC105 | 1:D3 | 1-P0 | Q131 | 1:B3 | 1-M5 |
| C131 | 1:B3 | 1-J6 | *C212 | 1:D5 | 2-G9 | IC105 | 1:D3 | 1-G2 | Q133 | 1:D4 | 1-D0 |
| C132 | 1:A3 | 1-K7 | *C213 | 1:D4 | 2-H9 | IC107 | 1:D3 | 1-K1 | Q135 | 1:E2 | 1-H0 |
| C133 | 1:B4 | 1-K8 | C215 | 1:D5 | 2-J8 | IC109 | 1:B2 | 1-N1 | Q136 | 1:E3 | 1-H0 |
| C137 | 1:B2 | 1-K8 | C216 | 1:H6 | 2-B6 | #IC201 | 1:K7 | 2-I4 | Q137 | 1:D2 | 1-J0 |
| C138 | 1:B2 | 1-L8 | *C217 | 1:P3 | 2-E3 | *#IC202 | 1:K4 | 2-I1 | Q201 | 1:D5 | 2-K8 |
| C139 | 1:B4 | 1-M6 | C218 | 1:H5 | 2-C6 | *IC203 | 1:N5 | 2-F2 | R101 | 1:E4 | 1-A8 |
| C141 | 1:B3 | 1-M8 | *C219 | 1:P2 | 2-E3 | IC204 | 1:D5 | 2-H7 | *R102 | 1:E4 | 1-A9 |
| C143 | 1:E3 | 1-E7 | C220 | 1:E5 | 2-D6 | IC204 | 1:D5 | 2-H8 | R103 | 1:E4 | 1-A8 |
| C145 | 1:E3 | 1-F7 | C221 | 1:E5 | 2-N8 | IC204 | 1:D5 | 2-N8 | R104 | 1:E4 | 1-B9 |
| C147 | 1:D3 | 1-F6 | C222 | 1:E5 | 2-E6 | *IC205 | 1:G5 | 2-P2 | *R105 | 1:D4 | 1-C8 |
| C149 | 1:D3 | 1-F7 | C223 | 1:D5 | 2-G7 | L101 | 1:K3 | 1-P3 | *R106 | 1:B3 | 1-C8 |
| C151 | 1:C5 | 1-D5 | C224 | 1:D5 | 2-M8 | L103 | 1:K2 | 1-Q3 | *R107 | 1:C4 | 1-D7 |
| C153 | 1:B5 | 1-D3 | C225 | 1:L6 | 2-I4 | L105 | 1:E2 | 1-K0 | *R108 | 1:B3 | 1-E9 |
| C155 | 1:D3 | 1-G3 | C226 | 1:D4 | 2-H7 | *L201 | 1:P7 | 2-C1 | *R109 | 1:C3 | 1-E9 |
| C159 | 1:B3 | 1-H2 | C227 | 1:K6 | 2-J4 | *L202 | 1:H3 | 2-B8 | *R111 | 1:B5 | 1-E8 |
| C161 | 1:B4 | 1-K4 | C229 | 1:H6 | 2-K4 | L203 | 1:L7 | 2-I6 | *R112 | 1:B5 | 1-E9 |
| C162 | 1:B3 | 1-L4 | *C230 | 1:L4 | 2-I2 | *L204 | 1:C5 | 2-D8 | *R113 | 1:B5 | 1-F9 |
| C164 | 1:B3 | 1-L4 | *C231 | 1:L4 | 2-I1 | L206 | 1:H5 | 2-B7 | *R114 | 1:C4 | 1-A6 |
| C165 | 1:B3 | 1-M4 | *C232 | 1:K4 | 2-J1 | L208 | 1:E5 | 2-D7 | *R115 | 1:C5 | 1-A6 |
| C167 | 1:K3 | 1-P3 | *C233 | 1:K4 | 2-K2 | *L211 | 1:P2 | 2-D3 | *R116 | 1:D4 | 1-A7 |
| C169 | 1:K3 | 1-P3 | *C234 | 1:J4 | 2-L1 | L215 | 1:L7 | 2-I5 | R117 | 1:C4 | 1-A6 |
| C171 | 1:K3 | 1-Q3 | *C240 | 1:H4 | 2-K1 | L217 | 1:J7 | 2-K5 | R118 | 1:D4 | 1-B6 |
| C173 | 1:D4 | 1-B0 | C259 | 1:F7 | 2-Q3 | *L223 | 1:J4 | 2-K2 | R119 | 1:D4 | 1-C7 |
| C174 | 1:E4 | 1-B0 | C261 | 1:F6 | 2-Q4 | *L230 | 1:L4 | 2-I3 | *R120 | 1:E3 | 1-H7 |
| C176 | 1:D4 | 1-E0 | C268 | 1:E6 | 2-S2 | *L231 | 1:L4 | 2-I2 | *R121 | 1:C4 | 1-C7 |
| C178 | 1:C4 | 1-F0 | C270 | 1:D6 | 2-T2 | L233 | 1:F6 | 2-Q3 | *R122 | 1:C4 | 1-D6 |
| C179 | 1:D3 | 1-G2 | C271 | 1:C6 | 2-T2 | *L236 | 1:H6 | 2-M2 | R123 | 1:B4 | 1-H7 |
| C180 | 1:E2 | 1-H0 | C272 | 1:B6 | 2-U2 | L239 | 1:E5 | 2-R2 | R124 | 1:B4 | 1-H8 |
| C181 | 1:D3 | 1-G0 | C273 | 1:B6 | 2-V2 | L241 | 1:D6 | 2-S3 | R125 | 1:B4 | 1-H8 |
| C182 | 1:D3 | 1-H1 | C294 | 1:D6 | 2-R1 | L243 | 1:C6 | 2-T3 | R126 | 1:B3 | 1-H6 |
| C184 | 1:D4 | 1-G0 | C295 | 1:D6 | 2-R1 | L245 | 1:C7 | 2-T2 | R127 | 1:A3 | 1-H7 |
| C185 | 1:D2 | 1-J1 | C297 | 1:C5 | 2-L8 | L247 | 1:C6 | 2-U3 | R128 | 1:A3 | 1-J7 |
| C186 | 1:E2 | 1-J0 | C298 | 1:C6 | 2-L8 | L248 | 1:D7 | 2-U2 | R129 | 1:B4 | 1-J9 |
| | | | D101 | 1:B3 | 1-H5 | L249 | 1:B6 | 2-V3 | R130 | 1:B4 | 1-J8 |
| | | | D101 | 1:B3 | 1-G5 | L264 | 1:C6 | 2-L8 | R131 | 1:A3 | 1-J7 |
| | | | D103 | 1:P7 | 1-K9 | LINK1 | 1:D3 | 1-L0 | R132 | 1:B5 | 1-J8 |
| | | | D105 | 1:C2 | 1-J2 | LINK2 | 1:P6 | 1-D1 | R133 | 1:A3 | 1-K7 |
| | | | D105 | 1:C2 | 1-J2 | LINK201 | 1:D5 | 2-F8 | R134 | 1:B3 | 1-K6 |
| | | | D107 | 1:P7 | 1-K5 | P101 | 1:A5 | 1-R9 | R135 | 1:P7 | 1-K9 |
| | | | D109 | 1:P6 | 1-L5 | P103 | 1:K3 | 1-R0 | R136 | 1:A3 | 1-K7 |
| | | | D111 | 1:C2 | 1-M1 | P105 | 1:K2 | 1-R0 | R137 | 1:B3 | 1-K6 |
| | | | D111 | 1:C2 | 1-M1 | P201 | 1:B6 | 2-V3 | R138 | 1:B4 | 1-L6 |

| <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> |
|---------------|------------|----------------|---------------|------------|----------------|---------------|------------|----------------|---------------|------------|----------------|
| R141 | 1:E3 | 1-C6 | *R223 | 1:F2 | 2-P2 | | | | | | |
| R142 | 1:E3 | 1-E7 | R224 | 1:D4 | 2-G7 | | | | | | |
| R143 | 1:E4 | 1-F6 | R225 | 1:E6 | 2-R3 | | | | | | |
| R144 | 1:D3 | 1-F6 | R228 | 1:E4 | 2-G7 | | | | | | |
| R145 | 1:E4 | 1-F7 | R229 | 1:D4 | 2-H7 | | | | | | |
| R146 | 1:E4 | 1-G7 | *R230 | 1:L4 | 2-I2 | | | | | | |
| R148 | 1:C5 | 1-D5 | R231 | 1:F5 | 2-Q2 | | | | | | |
| R149 | 1:C5 | 1-C4 | *R232 | 1:K4 | 2-K1 | | | | | | |
| R150 | 1:C4 | 1-F0 | R237 | 1:C5 | 2-K8 | | | | | | |
| R151 | 1:B5 | 1-D5 | RV101 | 1:C4 | 1-H8 | | | | | | |
| R152 | 1:B5 | 1-C3 | RV103 | 1:C4 | 1-H6 | | | | | | |
| R153 | 1:C5 | 1-F4 | RV105 | 1:C3 | 1-J5 | | | | | | |
| R154 | 1:C5 | 1-F3 | RV107 | 1:C3 | 1-J3 | | | | | | |
| R155 | 1:D3 | 1-F2 | RV109 | 1:P5 | 1-C2 | | | | | | |
| R156 | 1:D3 | 1-F3 | *RV111 | 1:P5 | 1-D1 | | | | | | |
| R157 | 1:D4 | 1-G0 | RV113 | 1:C3 | 1-D0 | | | | | | |
| R158 | 1:C4 | 1-H3 | RV115 | 1:C3 | 1-K0 | | | | | | |
| R159 | 1:C4 | 1-H4 | SK101 | 1:K3 | 1-A2 | | | | | | |
| R160 | 1:C3 | 1-J5 | SK103 | 1:B4 | 1-B2 | | | | | | |
| R161 | 1:B3 | 1-J3 | *SK201 | 1:N3 | 2-D3 | | | | | | |
| R162 | 1:B3 | 1-K4 | *SK203 | 1:N7 | 2-C1 | | | | | | |
| R163 | 1:P8 | 1-K5 | | | | | | | | | |
| R164 | 1:B3 | 1-K4 | | | | | | | | | |
| R165 | 1:B4 | 1-K4 | | | | | | | | | |
| R166 | 1:P7 | 1-L5 | | | | | | | | | |
| R168 | 1:E4 | 1-A1 | | | | | | | | | |
| R169 | 1:E4 | 1-A0 | | | | | | | | | |
| R170 | 1:D4 | 1-B0 | | | | | | | | | |
| R171 | 1:E4 | 1-B0 | | | | | | | | | |
| R172 | 1:E4 | 1-B0 | | | | | | | | | |
| R173 | 1:P6 | 1-C1 | | | | | | | | | |
| R174 | 1:P6 | 1-C1 | | | | | | | | | |
| R175 | 1:D4 | 1-C0 | | | | | | | | | |
| R176 | 1:D4 | 1-D0 | | | | | | | | | |
| R177 | 1:D4 | 1-D0 | | | | | | | | | |
| R178 | 1:D3 | 1-E1 | | | | | | | | | |
| R179 | 1:D4 | 1-E0 | | | | | | | | | |
| R180 | 1:D4 | 1-E0 | | | | | | | | | |
| R181 | 1:E3 | 1-F2 | | | | | | | | | |
| R182 | 1:D4 | 1-E0 | | | | | | | | | |
| R183 | 1:D4 | 1-F1 | | | | | | | | | |
| R184 | 1:E3 | 1-G1 | | | | | | | | | |
| R185 | 1:E2 | 1-J0 | | | | | | | | | |
| R186 | 1:D2 | 1-H1 | | | | | | | | | |
| R187 | 1:E2 | 1-H0 | | | | | | | | | |
| R188 | 1:D2 | 1-L1 | | | | | | | | | |
| R189 | 1:D2 | 1-L1 | | | | | | | | | |
| R190 | 1:C3 | 1-M1 | | | | | | | | | |
| R191 | 1:B2 | 1-P1 | | | | | | | | | |
| R192 | 1:B2 | 1-P1 | | | | | | | | | |
| R193 | 1:C2 | 1-Q1 | | | | | | | | | |
| R194 | 1:D2 | 1-H0 | | | | | | | | | |
| R195 | 1:D3 | 1-J0 | | | | | | | | | |
| R196 | 1:D3 | 1-J0 | | | | | | | | | |
| R197 | 1:D3 | 1-L1 | | | | | | | | | |
| *R201 | 1:N6 | 2-D1 | | | | | | | | | |
| *R202 | 1:N6 | 2-D1 | | | | | | | | | |
| R203 | 1:L7 | 2-I5 | | | | | | | | | |
| *R204 | 1:N6 | 2-D1 | | | | | | | | | |
| R205 | 1:K7 | 2-K4 | | | | | | | | | |
| *R206 | 1:C5 | 2-E8 | | | | | | | | | |
| R207 | 1:D4 | 2-F8 | | | | | | | | | |
| *R208 | 1:C5 | 2-G9 | | | | | | | | | |
| R209 | 1:D5 | 2-G8 | | | | | | | | | |
| R210 | 1:D5 | 2-G8 | | | | | | | | | |
| *R211 | 1:D4 | 2-H9 | | | | | | | | | |
| R212 | 1:D4 | 2-I8 | | | | | | | | | |
| R213 | 1:D5 | 2-E7 | | | | | | | | | |
| R214 | 1:E4 | 2-J8 | | | | | | | | | |
| *R215 | 1:H3 | 2-B8 | | | | | | | | | |
| *R216 | 1:P6 | 2-E2 | | | | | | | | | |
| *R217 | 1:P6 | 2-E2 | | | | | | | | | |
| R218 | 1:E5 | 2-E7 | | | | | | | | | |
| R219 | 1:H6 | 2-B6 | | | | | | | | | |
| R220 | 1:E5 | 2-F7 | | | | | | | | | |
| R222 | 1:D5 | 2-G7 | | | | | | | | | |