

**Transceiver Adjustments/Tune-Up Procedure**

There are no user accessible adjustments or tuning in this portable cellular transceiver. All necessary adjustments and tuning are performed during manufacture of the product. Any adjustments or tuning after service or repair are done as part of that process as special equipment is required to perform such adjustments.

**Parts List**

Part lists information follows:

| Reference Symbol                             | Part Number                | Description              |
|--|----------------------------|--------------------------|
| U302   | RFR6000                    | RF RECEIVER              |
| U403   | RFT6100                    | TX-BASEBAND RF CONVERTER |
| U301   | RFL6000                    | RF LNA                   |
| U101   | PM6000                     | POWER MANAGEMENT UNIT    |
| FIL305                                       | UX1880L406                 | USPCS DUPLEXER           |
| FIL302                                       | SF25-0881M5UB01            | CDMA RX RF SAW           |
| FIL301                                       | SF25-1960M5UB01            | PCS RX RF SAW            |
| FIL304                                       | B9000                      | GPS RX RF SAW            |
| FIL401                                       | B7759                      | PCS TX FULLBAND SAW      |
| FIL402                                       | B7748                      | CDMA TX RF SAW           |
| U402   | CX77105                    | CDMA PAM                 |
| U401   | CX77107                    | PCS PAM                  |
| U304   | MQK300B1G75R6              | VCO                      |
| U303   | KT21P-DCV28A-19.200M-T     | VC-TCXO                  |
| U202   | ISP1102                    | USB TRANSCEIVER          |
| Y101   | SM14J                      | SLEEP XTAL(32.768KHz)    |
| U106   | NCP345SNT1                 | OVER VOLTAGE PROTECTION  |
| F101   | FCC20162ADTP               | FUSE                     |
| D124   | AVLC5S02050P / 50pF        | VARISTOR                 |
| U205   | CSPEMI201A                 | ESD FILTER               |
| U206   | CSPEMI204                  | ESD FILTER               |
| S101,S102,S103,S104,S105                     | CSPESD304                  | ESD FILTER               |
| U406,U407                                    | UMC5N                      | TRANSISTOR(NPN,PNP)      |
| Q102   | KTA1001                    | TRANSISTOR               |
| Q101,Q104                                    | Si2305DS                   | POWER FET                |
| U103   | PSR05                      | TVS DIODE(ESD)           |
| D104   | KDR730E                    | SCHOTTKY DIODE           |
| D118   | KDS160                     | SWITCHING DIODE          |
| D101   | 1N5819HW                   | SCHOTTKY DIODE           |
| U110   | MS-156(02)                 | RF SWITCH CONN           |
| A301   | Pb-S-1/2H(0.15t),Ni3+Au0.2 | CONTACT-PLATE ANT        |
| J102   | 54722-0307                 | FPCB CONN(30PIN)         |
| J104   | 3987522K03                 | BATT CONN                |
| E301,E302,E303,E304,E310,E401,E402,E403,E404 | HB-1M1005-601JT / 600      | BEAD(600 OHM)            |
| R120   | RLC32 R150 FTP / 0.15Ω     | LOW RESISTOR             |
| TH101,TH401                                  | ECTH 100505 103F 3435FT    | THERMISTOR               |
| CT401  | 278M1002106MR / 10uF(10V)  | TANTAL CAPACITOR         |
| CT101  | TLM1C226TSSR / 22uF(16V)   | TANTAL CAPACITOR         |
| CT204  | TPM0J106PSSR / 10uF(6.3V)  | TANTAL CAPACITOR         |
| CT405  | TPM1A475PSSR / 4.7uF(10V)  | TANTAL CAPACITOR         |
| C357   | GJ221BF50J106ZD01L / 10uF  | CAPACITOR                |
| C457   | GRP1555C1HR50CZ01E / 0.5pF | CAPACITOR                |
| C433,C313                                    | GRP1555C1H1R5CZ01E / 1.5p  | CAPACITOR                |
| C320,C334,C335,C423,C424                     | GRP1555C1H6R0DZ01E / 6pF   | CAPACITOR                |
| C321,C322,C416                               | GRP1555C1H100JZ01E /10pF   | CAPACITOR                |
| C323,C425                                    | GRP1555C1H120JZ01E / 12pF  | CAPACITOR                |
| C269,C270                                    | GRP1555C1H270JZ01E / 27pF  | CAPACITOR                |
| C106,C107                                    | GRP1555C1H300JZ01E / 30pF  | CAPACITOR                |
| C309   | GRP1555C1H330JZ01E / 33pF  | CAPACITOR                |

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| C306,C341,C342,C343,C344,C346,C348,C350,C351,C352,C359,C360,C438,C439,C440,C441,C443,C444,C447,C448,C449,C451                          | GRP1555C1H470JZ01E / 47pF    | CAPACITOR |
| C324   | GRP1555C1H820JZ01E / 82pF    | CAPACITOR |
| C130,C310,C311,C315,C316,C317,C319,C338,C412   | GRP1555C1H101JD01E / 100pF   | CAPACITOR |
| C435,C436  | GRP1556C1E201JD01E / 200pF   | CAPACITOR |
| C340,C356  | GRP155R71H102KA01E / 1000pF  | CAPACITOR |
| C430   | GRP155R71H222KA01E / 2.2nF   | CAPACITOR |
| C113,C426  | GRP155R71E472KA01E / 4700pF  | CAPACITOR |
| C442   | GRP155R71E562KA01E / 5600pF  | CAPACITOR |
| C140,C227,C232,C354,C355,C407,C411,C417,C418,C427,C432   | GRP155R71C103KA01E / 0.01uF  | CAPACITOR |
| C103,C114,C117,C120,C124,C125,C127,C128,C228,C305,C314,C318,C333,C336,C339,C345,C347,C349,C353,C361,C408,C420,C434,C437,C445,C446,C450 | GRP155F51C104ZA01E / 0.1uF   | CAPACITOR |
| C358   | GRP155F51A474ZD02E / 0.47uF  | CAPACITOR |
| C170,C171  | GRP155F50J105ZD02E / 1uF     | CAPACITOR |
| C431   | GRM188R71C683KA01D / 0.068uF | CAPACITOR |
| C428   | GRM188R71C823KC01D / 0.082uF | CAPACITOR |
| C122   | GRM188R61C105KA12D / 1uF     | CAPACITOR |
| C119,C121  | GRM219F51C105ZA01L / 1uF     | CAPACITOR |
| C111,C112,C406,C410,C415,C419  | GRM21BF51C225ZA01L / 2.2uF   | CAPACITOR |
| C115,C116,C118   | GRM21BF51A475ZA01L / 4.7uF   | CAPACITOR |
| C131   | GRM21BR60J106KE19L / 10uF    | CAPACITOR |
| C141,C302,C303,C332,C337,C413,C429,C458,C459,C498,C499   | OPEN                         | CAPACITOR |
| L321   | HK10051N5S / 1.5nH           | INDUCTOR  |
| L308,L317,L318   | HK10052N7S / 2.7nH           | INDUCTOR  |
| L414   | HK10053N3S / 3.3nH           | INDUCTOR  |
| L311,L314,L316   | HK10054N7S / 4.7nH           | INDUCTOR  |
| L403   | HK1005 6N8J / 6.8nH          | INDUCTOR  |
| L319,L320  | HK10058N2J-T / 8.2nH         | INDUCTOR  |
| L313,L315,L406   | HK1005 10NJ / 10nH           | INDUCTOR  |
| L309   | HK100518NJ-T / 18nH          | INDUCTOR  |
| L310,L312  | HK100582NJ / 82nH            | INDUCTOR  |
| L100   | HK1608 82NJ-T / 82nH         | INDUCTOR  |
| L401,L402  | OPEN                         | INDUCTOR  |
| R108,R109,R119,R142,R218,R237,R311,R316,R400,R403,R406,R456,C362   | MCR01MZSJ000 / 0             | RESISTOR  |
| R313,R430  | MCR01MZSJ 100 / 10           | RESISTOR  |
| R304,R305  | MCR01MZSJ240 / 24            | RESISTOR  |

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| R223,R224                     | MCR01MZSJ 330 / 33           | RESISTOR                 |
| R306,R309,R314,R428           | MCR01MZSJ 101 / 100          | RESISTOR                 |
| R312                          | MCR01MZSJ 201 / 200          | RESISTOR                 |
| R115                          | MCR01MZSJ 331 / 330          | RESISTOR                 |
| R318,R417                     | MCR01MZSJ 102 / 1K           | RESISTOR                 |
| R225                          | MCR01MZSJ 152 / 1.5K         | RESISTOR                 |
| R419                          | MCR01MZSJ 182 / 1.8K         | RESISTOR                 |
| R421                          | MCR01MZSJ 222 / 2.2K         | RESISTOR                 |
| R420                          | MCR01MZSJ 392 / 3.9K         | RESISTOR                 |
| R129,R244                     | MCR01MZSJ 103 / 10K          | RESISTOR                 |
| R170,R171                     | MCR01MZSF12R0 / 12 (1%)      | RESISTOR                 |
| R422                          | MCR01MZSF 4701 / 4.7K (1%)   | RESISTOR                 |
| R303,R307,R308                | MCR01MZSF5761 / 5.76k(1%)    | RESISTOR                 |
| R411                          | MCR01MZSF1002 / 10K(1%)      | RESISTOR                 |
| R310,R429                     | MCR01MZSF1132 / 11.3k(1%)    | RESISTOR                 |
| R131                          | MCR01MZSF2202 / 22K(1%)      | RESISTOR                 |
| R130,R412                     | MCR01MZSF1003 / 100K(1%)     | RESISTOR                 |
| R111                          | MCR10EZHJ 000 / 0            | RESISTOR                 |
| R106,R107,R143,R238,R239,R418 | OPEN                         | RESISTOR                 |
|                               |                              | SHIELD CASE RX           |
|                               |                              | SHIELD CASE TX           |
|                               |                              | SHIELD CASE TCXO         |
|                               |                              | SHIELD CASE VCO          |
| U201                          | MSM6050                      | MOBILE STATION MODEM     |
| U200                          | EZFD836TF10C                 | TRIPLEXER                |
| FIL306                        | 856087                       | CDMA DUPLEXER            |
| Y201                          | CSTCW48MOX12058-R0           | RESONATOR                |
| U209                          | M6MGB/T64BM17WG(6416)        | FLASH MEMORY             |
| U604                          | MA4S713                      | SCHOTTKY DIODE           |
| U605                          | TC75S51FU                    | OP AMP(PRISM800)         |
| Q501,Q502                     | 2SK1830                      | NMOS FET                 |
| U208                          | CSPEMI202A                   | ESD FILTER               |
| U104,U109                     | CSPEMI306A                   | ESD FILTER               |
| D123,D125,V201                | AVLC5S02050P / 50pF          | VARISTOR                 |
| S203                          | AVL14K02200                  | VARISTOR                 |
| D120,D122                     | AVL18S03300LC120 / 120pF     | VARISTOR                 |
| Q201                          | KRA304E                      | TRANSISTOR(PNP)          |
| Q103,Q105                     | KRC404E                      | TRANSISTOR(NPN)          |
| Q202                          | 2SJ347                       | MOS FET                  |
| D106                          | SML-521MUW                   | INDICATOR LED(RED-GREEN) |
| D121                          | 1SS355                       | DIODE                    |
| D119                          | KDR730E                      | SCHOTTKY DIODE           |
| J103                          | LGK1509-0601RC               | EAR JACK                 |
| J101                          | 1006-0024-306(KAE)           | I/O CONNECTOR(24PIN)     |
| J108                          | DL-B20P2970                  | DIRECT BTB CONN(20PIN)   |
| U207                          | SMQS-8532P-25T0              | BUZZER                   |
| SW101,SW102,SW103,SW104       | EVQP3A02K                    | TACT SWITCH              |
| E100,E101,E201,E203           | HB-1M1005-601JT / 600        | BEAD(600 OHM)            |
| CT201                         | TPM0J106PSSR / 10uF(6.3V)    | TANTAL CAPACITOR         |
| CT203                         | 292D226X06R3P2T / 22uF(6.3V) | TANTAL CAPACITOR         |

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| C644   | GRP1555C1H100JZ01E / 10pF   | CAPACITOR     |
| C645,C646  | GRP1555C1H270JZ01E / 27pF   | CAPACITOR     |
| C501   | GRP1555C1H390JZ01E / 39pF   | CAPACITOR     |
| C300,C602,C642   | GRP1555C1H101JD01E / 100pF  | CAPACITOR     |
| C257,C643,C649,C647  | GRP155R71H102KA01E / 1000pF | CAPACITOR     |
| C209,C212  | GRP155R71E472KA01E / 4700pF | CAPACITOR     |
| C214,C216,C217,C240,C241,C242,C243,C245,C247,C249,C252,C254  | GRP155R71C103KA01E / 0.01uF | CAPACITOR     |
| C101,C102,C201,C203,C204,C205,C206,C207,C208,C210,C211,C213,C220,C234,C244,C246,C248,C250,C251,C253,C256,C258,C648 | GRP155F51C104ZA01E / 0.1uF  | CAPACITOR     |
| C215   | GRM188F51A684ZC01D / 0.68uF | CAPACITOR     |
| C202   | GRM21BF51C225ZA01L / 2.2uF  | CAPACITOR     |
| C218,C219,C235,C301,C312,C325,C601,C603,C604,C650  | OPEN                        | CAPACITOR     |
| L605   | HK100522NJ/22nH             | INDUCTOR      |
| L501,L502  | HK100547NJ / 47nH           | INDUCTOR      |
| L614   | HK100582NJ / 82nH           | INDUCTOR      |
| R211,R212,R213,R235,R317,R624,C326,C327  | MCR01MZSJ000 / 0            | RESISTOR      |
| R229   | MCR01MZSJ 100 / 10          | RESISTOR      |
| R117,R216,R210   | MCR01MZSJ 101 / 100         | RESISTOR      |
| R116   | MCR01MZSJ 201 / 200         | RESISTOR      |
| R209,R220  | MCR01MZSJ 102 / 1K          | RESISTOR      |
| R221   | MCR01MZSJ 202 / 2K          | RESISTOR      |
| R202,R203  | MCR01MZSJ 222 / 2.2K        | RESISTOR      |
| R110,R114,R227   | MCR01MZSJ 103 / 10K         | RESISTOR      |
| R234   | MCR01MZSJ 333 / 33K         | RESISTOR      |
| R208,R222  | MCR01MZSJ 513 / 51K         | RESISTOR      |
| R219   | MCR01MZSJ 104 / 100K        | RESISTOR      |
| R204,R207  | MCR01MZSJ 244 / 240K        | RESISTOR      |
| R615   | MCR01MZSF51R0 / 51(1%)      | RESISTOR      |
| R616   | MCR01MZSF2700 / 270(1%)     | RESISTOR      |
| R301   | MCR01MZSF 8200 / 820(1%)    | RESISTOR      |
| R302,R501,R617,R623  | MCR01MZSF 1001 / 1K(1%)     | RESISTOR      |
| R205,R206  | MCR01MZSF5761 / 5.76k(1%)   | RESISTOR      |
| R620   | MCR01MZSF1002 / 10K(1%)     | RESISTOR      |
| R502   | MCR01MZSF1132 / 11.3k(1%)   | RESISTOR      |
| R621   | MCR01MZSF1502 / 15K(1%)     | RESISTOR      |
| R619   | MCR01MZSF2202 / 22K(1%)     | RESISTOR      |
| R618   | MCR01MZSF4702 / 47K(1%)     | RESISTOR      |
| R503,R625  | MCR01MZSF1003 / 100K(1%)    | RESISTOR      |
| R622   | MCR01MZSF 1203 / 120K(1%)   | RESISTOR      |
| R201,R217,R228   | OPEN                        | RESISTOR      |
| D6,D8,D9,D10,D108,D109,D111,D115   | BL-HB336G-TRB(BIN:K,L4H)    | BLUE CHIP LED |
| R121   | MCR01MZSJ 273 / 27K         | RESISTOR      |
| C129   | GRP1555C1H100JZ01E /10pF    | CAPACITOR     |

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| U107 | A3212ELH | MAGNETIC HALL IC |
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