

**Project Name : XA-1500**

Part List

DOCUMENT NO :

V3.0

| NO | PART NAME      | PART NUMBER                   | Ref No    | Q'TY |
|----|----------------|-------------------------------|-----------|------|
| 1  | pcb            | Fr4 /4layer /0.8t             |           | 1    |
| 2  | VCO Mod.       | KFMSV0447UA                   | U11       | 1    |
| 3  | PLL IC         | TB31202FN                     | U12       | 1    |
| 4  | PA MosFET      | NE5500479A                    | Q56       | 1    |
| 5  | MD RF TR       | 2SC5754                       | Q57       | 1    |
| 6  | LNA/MIX/BUFF   | AT32032                       | Q50,51,58 | 3    |
| 7  | IF IC          | TA31136FN                     | U10       | 1    |
| 8  | IF AMP         | KTC3880S                      | Q52       | 1    |
| 9  | Regulator      | MAS9160ASM -T                 | U18,19    | 2    |
| 10 | FET            | SI2335D3                      | Q19       | 1    |
| 11 | SAW filter     | CQSF465A(SS-38)               | F10       | 1    |
| 12 | 1st IF filter  | CQ21T07A (Dip type)           | F11       | 1    |
| 13 | 2nd IF filter  | LTWC450G                      | F12       | 1    |
| 14 | X`TAL UNIT     | NX4025DA 21.25M(+ -<br>10ppm) | X11       | 1    |
| 15 | Audio Amp      | NJM2770                       | U14       | 1    |
| 16 | Audio Amp      | KIA324                        | U13       | 3    |
| 17 | SW TR          | KRC110S                       | Q54,63,64 | 3    |
| 18 | PIN DIODE      | 1SS356TW                      | D10,11    | 2    |
| 19 | Discriminator  | JTBM450C24                    | X10       | 1    |
| 20 | Modem(En/DECO) | CMX808A                       | U16       | 1    |
| 22 | SW TR          | KRC104S                       | Q55       | 1    |
| 24 | SW TR          | KRA101S                       | Q65       | 1    |
| 29 | dual diode     | KDS226                        | D12       | 2    |
| 30 | MCU            | TMP87CM21CDF                  | U22       | 1    |
| 31 | Voice Recorder | ISD1810                       | U17       | 1    |
| 32 | X`TAL UNIT     | 4.000MHz(20pF+ -              | X12       | 1    |

|    |                  |                                   |         |   |
|----|------------------|-----------------------------------|---------|---|
|    |                  | 30/30ppm)                         |         |   |
| 33 | Back light       | HSMR - C191                       | LD1     | 1 |
| 34 | Charger LED      | HSMF - C165                       | LD2     | 1 |
| 36 | DIODE            | KDS160                            | D17     | 1 |
| 37 | Tact SW          | SKTS - 1113                       | SW1,2,3 | 3 |
| 38 | Tact SW          | SKTS - 1187M - 3                  | SW5,6   | 2 |
| 39 | Tact SW          | SKTS - 1157                       | SW4     | 1 |
| 40 | (Li-Ion) Battery | 3.7V 600mA HS101                  | BA1     | 1 |
| 42 | Charger IC       | BQ24012                           | U20     | 1 |
| 43 | DC JACK          | POWER JACK, SKJS - 038            | J15     | 1 |
| 44 | Audio SW IC      | HC4016                            | U1      | 1 |
| 45 | Antenna          | 465MHz, Helical<br>(4pi,40mm,16T) | ANT1    | 1 |
| 46 | Ear Jack         | SKJS - 2517S, 2.5Φ SMT 4<br>pole  | EJ1     | 1 |
| 47 | LCD              | GS - 32789 - 0 - TFHW             | U21     | 1 |
| 48 | MIC              | MIC, 40+ - 2dB HM060 -<br>HM3PZ   | M1      | 1 |
| 49 | EEPROM           | AT24C02                           | U23     | 1 |
| 50 | Speaker          | NR023 - 40205A                    | SP1     | 1 |
| 51 | Trimmer          | ECRJA006A11(6PF)                  | VC1     | 1 |
| 52 | VAR              | EVM1D(10k)                        | VR1     | 1 |
| 53 | CAP              | 1.5p                              | C21     | 1 |
| 54 | CAP              | 2p                                | C86     | 1 |
| 55 | CAP              | 4p                                | C57     | 1 |
| 55 | CAP              | 4.7p                              | C70     | 1 |

|    |     |      |                                                                                                             |    |
|----|-----|------|-------------------------------------------------------------------------------------------------------------|----|
| 56 | CAP | 5p   | C84                                                                                                         | 1  |
| 56 | CAP | 6p   | C23, C71                                                                                                    | 2  |
| 57 | CAP | 7p   | C51                                                                                                         | 1  |
| 59 | CAP | 10p  | CC72, C75, C78                                                                                              | 3  |
| 60 | CAP | 12p  | C16, C91                                                                                                    | 2  |
| 61 | CAP | 20p  | C149, C150, c156                                                                                            | 3  |
| 62 | CAP | 39p  | C15                                                                                                         | 1  |
| 63 | CAP | 47p  | C92, C93, C94, c50,<br>c81                                                                                  | 5  |
| 64 | CAP | 56p  | C90                                                                                                         | 1  |
| 65 | CAP | 82p  | C63                                                                                                         | 1  |
| 66 | CAP | 100p | c2, C52, C53, C54,<br>C55, C56, C60, C62,<br>C68, C73, C74, C76,<br>C79, C80, C82, C85,<br>C132, C157, C164 | 19 |
| 67 | CAP | 470p | C110                                                                                                        | 1  |
| 68 | CAP | 1n   | C1, C22, C61                                                                                                | 3  |
| 69 | CAP | 4.7n | C18                                                                                                         | 1  |
| 69 | CAP | 6.8n | C65                                                                                                         | 1  |
| 70 | CAP | 10n  | C87, C102, C145,<br>C146                                                                                    | 4  |
| 71 | CAP | 33n  | C17                                                                                                         | 1  |
| 72 | CAP | 100n | C6, C7, C8, C10,<br>C11, C13, C19, C67,<br>C77, C89, C104,                                                  | 22 |

|    |     |                  |                                                                           |   |
|----|-----|------------------|---------------------------------------------------------------------------|---|
|    |     |                  | C119, C120, C131,<br>C133, C134, C136,<br>C138, C147, C151,<br>C153, C154 |   |
| 73 | CAP | 220n             | C3, c4, c5, C9,<br>c135,<br>C139, C141, C144                              | 8 |
| 74 | CAP | 1μ               | C88, C140, C142                                                           | 3 |
| 77 | IND | 5.6nH            | L53, L62                                                                  | 2 |
| 77 | IND | 5.6nH(coil type) | L1                                                                        | 1 |
| 79 | IND | 8.2nH            | L52, L63                                                                  | 2 |
| 79 | IND | 8.2nH            | L61                                                                       | 1 |
| 79 | IND | 10nH             | L65                                                                       | 1 |
| 81 | IND | 15nH             | L67                                                                       | 1 |
| 82 | IND | 18nH             | L2,50,59,64                                                               | 4 |
| 82 | IND | 22nH             | L63,66,67                                                                 | 3 |
| 84 | IND | 39nH             | L57,58                                                                    | 2 |
| 86 | IND | 180nH            | L51                                                                       | 1 |
| 87 | IND | 2.2μH            | L56, L60                                                                  | 2 |
| 89 | IND | 22nH             | L66                                                                       | 1 |
| 90 | RES | 10               | R2, R3,R67, R70,<br>R93                                                   | 5 |
| 92 | RES | 100              | R5,R52, R56, R135,<br>R136, R137, R138,<br>R139, R183                     | 9 |
| 93 | RES | 330              | R18                                                                       | 1 |

|     |     |      |                                                                                             |    |
|-----|-----|------|---------------------------------------------------------------------------------------------|----|
| 94  | RES | 470  | R1                                                                                          | 1  |
| 95  | RES | 1k   | R10, R54,R61,R124,<br>R125,R166,R181,<br>R182                                               | 8  |
| 96  | RES | 1.2k | R9                                                                                          | 1  |
| 97  | RES | 2k   | R175                                                                                        | 1  |
| 98  | RES | 2.2k | R58, R76, R96, R174                                                                         | 4  |
| 99  | RES | 3.3k | R7,169                                                                                      | 2  |
| 100 | RES | 3.9k | R64                                                                                         | 1  |
| 101 | RES | 4.7k | R71,R176                                                                                    | 2  |
| 102 | RES | 6.8k | R59, R69                                                                                    | 2  |
| 103 | RES | 10k  | R4,R11, R15,R27,<br>R38, R53, R60, R62,<br>R65, R66,R75, R77,<br>R78, R79, R109             | 15 |
| 104 | RES | 12k  | R51                                                                                         | 1  |
| 105 | RES | 20k  | R122                                                                                        | 1  |
| 106 | RES | 22k  | R173                                                                                        | 1  |
| 107 | RES | 47k  | R12,R110,R126,R146<br>, R148, R152, R154,<br>R157, R158, R159,<br>R160, R161, R163,<br>R164 | 14 |
| 108 | RES | 51k  | R167                                                                                        | 1  |
| 109 | RES | 82k  | R8, R13, R14, R86,<br>R149, R162                                                            | 6  |

|     |            |      |                                                                                                            |    |
|-----|------------|------|------------------------------------------------------------------------------------------------------------|----|
| 110 | RES        | 100k | R6, R17,R24, R57,<br>R87, R130,<br>R131,R132, R133,<br>R134, R140, R141,<br>R142,R143, R147,<br>R168, R177 | 17 |
| 111 | RES        | 120k | R127                                                                                                       | 1  |
| 112 | RES        | 1M   | R129                                                                                                       | 1  |
| 113 | RES        | 1.2M | R102, R108                                                                                                 | 2  |
| 113 | RES        | 2.2M | R16                                                                                                        | 1  |
| 115 | Tantal CAP | 1u   | TC15                                                                                                       | 1  |
| 116 | Tantal CAP | 4.7u | TC5                                                                                                        | 1  |
| 117 | Tantal CAP | 10u  | TC1, TC2, TC10,<br>TC11, TC18, TC19                                                                        | 6  |
| 118 | Tantal CAP | 47u  | TC3, TC13                                                                                                  | 2  |