

# DJ-X2E/DJ-X2T

## Service Manual

### CONTENTS

#### SPECIFICATIONS

- 1) GENERAL ..... 2
- 2) RECEIVER ..... 2

#### CIRCUIT DESCRIPTION

- 1) Receiver ..... 3-5
- 2) M38224M6M(E:XA0728, T:XA0729) ..... 6
- 3) Terminal function of CPU ..... 7

#### SEMICONDUCTOR DATA

- 1) NJM2070M (XA0210) ..... 8
- 2) uPD3140GS-E1 (XA0312) ..... 8-9
- 3) TC4W53FU (XA0348) ..... 9
- 4) S-80730SL-AT (XA00356) ..... 10
- 5) M5222FP-600C (XA0385) ..... 10
- 6) XC62SPR332MR (XA0519) ..... 11
- 7) NJM2904V (XA0573) ..... 11
- 8) MB88347LPFV-G-BND-EF (XA0599) ..... 12
- 9) TK11816M (XA0665) ..... 13
- 10) TTK10931V (XA0666) ..... 13

- 11) TA4101FTE12L (XA0667) ..... 14
- 12) S-80829ALNP-EAS-T2 (XA0668) ..... 14
- 13) BR24C64F-E2 (XA0669) ..... 15
- 14) uPC2757T-E3 (XA0743) ..... 16
- 15) Transistor, Diode, and LED Outline Drawings ..... 17
- 16) LCD Connection ..... 18

#### EXPLODED VIEW

- 1) Front View ..... 19
- 2) Rear View ..... 20

#### PARTS LIST

- CPU Unit ..... 21
- MAIN Unit ..... 21-25

#### ADJUSTMENT

- 1) Entering and releasing the adjustment mode ..... 26
- 2) Adjustment ..... 26-27

#### PC BOARD VIEW ..... 28-29

#### SCHEMATIC DIAGRAM ..... 30-31

#### BLOCK DIAGRAM ..... 32



# SPECIFICATIONS

## 1) GENERAL

|                     |  |
|---------------------|--|
| Receiving coverage  | E : 0.522 ~ 999.995MHz<br>T : 0.530 ~ 823.995MHz<br>850.000 ~ 868.995MHz<br>895.000 ~ 999.995MHz |
| Wave type           | FM, WFM, AM  |
| Ant. impedance      | 50Ω  |
| Ant. terminal       | SMA  |
| Supply voltage      | DC 3.8V (Internal lithium-ion battery)<br>DC 4.5V (when using EDH-27)                            |
| Ground              | Negative ground  |
| Current consumption | Reception : approx. 80 mA<br>Battery save (1 : 4) : approx.25mA                                  |
| Temperature range   | -10 ~ +60°C (14 ~ 140°F)   |
| Frequency stability | ±5 ppm (-10 ~ +60°C) (+14 ~ +140°F)  |
| Dimension           | 58 (W) × 90 (H) × 15 (D) mm (without projections)<br>(2.28(W) × 3.54(H) × 0.59(D) in.)           |
| Weight              | Approx. 85g (Lithium-ion battery inclusive)<br>(Approx. 3oz.)                                    |

## 2) RECEIVER

|             |  |
|-------------|--|
| System      | Triple-conversion superheterodyne  |
| First I.F.  | 248.45MHz  |
| Second I.F. | 38.85MHz   |
| Third I.F.  | 450kHz   |
| Sensitivity | AM/FM -6dB/12kHz or over, -60dB/30kHz or less<br>WFM -6dB/150kHz or over   |
| Selectivity | FM/WFM 12dB SINAD, AM 10dB S/N   |
| typ.        | FM : 30 ~ 108 0.63uV (-4dBu)<br>136 ~ 222 0.40uV (-8dBu)<br>222 ~ 470 0.50uV (-6dBu)<br>470 ~ 770 0.56uV (-5dBu)<br>770 ~ 1000 0.71uV (-3dBu)<br>WFM : 76 ~ 108 3.20uV (10dBu)<br>175 ~ 222 2.20uV (7dBu)<br>470 ~ 770 3.20uV (10dBu)<br>AM : 0.5 ~ 1.62 7.10uV (17dBu)<br>1.62 ~ 30 1.40uV (3dBu)<br>108 ~ 136 2.00uV (6dBu)<br>222 ~ 330 1.80uV (5dBu) |

# CIRCUIT DESCRIPTION

## 1) Receiver

### 1. Receiver system : Triple Superheterodyne Conversion

1st IF. : 248.45MHz  
2nd IF. : 38.85MHz  
3rd IF. : 450KHz

### 2. Front End

0.5 ~ 29.995MHz

The signal from the antenna is switched by the band switch (D109), passed through the low-pass filter and amplified by RF amplifier Q109. Then the signal is fed to the 1st mixer IC103 via the band switch D115.

30 ~ 136.995MHz

The signal from the antenna is switched by the band switch (D128), passed through the low-pass filter and amplified by RF amplifier Q111. Then the signal is fed to the 1st mixer IC103 via the band switch D112.

137 ~ 222.995MHz

The signal from the antenna is switched by the band switch (D116), passed through the low-pass filter and amplified by RF amplifier Q116. Then the signal is fed to the 1st mixer IC103 via the band switches D107 and D129.

223 ~ 367.995MHz

The signal from the antenna is switched by the band switch (D132), passed through the low-pass filter and amplified by RF amplifier Q118. Then the signal is fed to the 1st mixer IC103 via the band switches D107 and D129.

368 ~ 469.995MHz

The signal from the antenna is switched by the band switch (D122), passed through the low-pass filter and amplified by RF amplifiers Q123 and Q138. Then the signal is fed to the 1st mixer IC103 via the band switch D134.

470 ~ 999.995MHz

The signal from the antenna is switched by the band switch (D133), passed through the low-pass filter and amplified by RF amplifier Q126. Then the signal is fed to the 1st mixer IC103 via the band switch D120.

### 3. Mixer

The 1st Mixer

The input signal and 1st local signal generate sum and difference frequencies in the mixer IC103. SAW filter FL101 selects the signal of 248.45MHz and eliminates the adjacent channel signals.

The 2nd Mixer

The input signal and the 2nd local signal generate sum and difference frequencies in the mixer IC104. Then the signals are divided into the receiving sides of FM/AM and WFM at D113 and D114.

#### FM/AM

In the receiving side of FM/AM the signal of 38.85MHz is selected by crystal filter XF101. Then the signal is amplified at the 1st IF amplifier Q112 after eliminating the adjacent channel signal.

#### WFM

In the receiving side of WFM the signal of 38.85MHz is selected by band-pass filter. Then the signal is amplified at the 1st IF amplifier Q112 after eliminating the adjacent channel signal.

### 4. IF

#### FM/AM

The amplified signal at the 1st IF amplifier Q112 is led to the demodulator pin 24 of IC105. The signal of 12.8MHz from the reference buffer output of IC101 is multiplied by 3 in Q133. Then the signal is mixed with the signal of pin 1 of IC105 in the mixer circuit inside of IC105 and converted into the 2nd IF signal of 450kHz. The converted 2nd IF signal is output from pin 3 of IC105.

#### FM

The output signal from pin 3 of IC105 is led to pin 7 of IC105 after eliminating the adjacent channel signal at the ceramic filter FL103. The input 2nd IF signal to pin 7 of IC105 is demodulated at the limiter amplifier and quadrature detector circuits inside of IC105, then output from pin 12 of IC105 as an AF signal.

#### AM

The output signal from pin 3 of IC105 is led to the pin 5 of IC105 after eliminating the adjacent channel signal at the ceramic filter FL103. The 2nd IF signal input to pin 5 of IC105 is AM-demodulated inside of IC and output from pin 13 of IC105 as an AF signal. The 1st IF amplifier Q112 is controlled by reverse AGC at AGC amplifier Q117 to get better audio output even though the input is changed, and the gain is controlled.

#### WFM

The output signal from pin 3 of IC105 is led to pin 7 of IC105. The input 2nd IF signal to pin 7 of IC105 is demodulated at the limiter amplifier and quadrature detector circuits inside of IC, then output from pin 12 of IC105 as an AF signal.

### 5. Squelch

The AF signal got from pin 12 of IC105 is fed to pin 19 of IC105. The input signal is output from pin 21 of IC105 passing through the noise filter amplifier and rectifier circuits inside of IC. The rectified signal is added to the A/D port of the microcomputer IC1. Judging the signal, the microcomputer controls ON/OFF of the audio output.

## 6. Audio

### FM/AM/WFM

The selection of receiving audio output signal between FM/WFM and AM is performed at IC106. The volume of output audio signal is adjusted at the electronic volume IC108 via the AF amplifier Q120. After converting the impedance of the signal whose volume is adjusted at Q124, the signal is input to pin 2 of audio power amplifier IC110 and output from pin 6 to drive a speaker, etc.

## 7. VCO

### The 1st Local

The VCO for the 1st local consists of the Colpitts oscillator. D106, D108 and L105 determine the frequency, and they are oscillated at the transistor Q103. The oscillated signal is added to pin 2 of PLL-IC101 through the butter amplifiers Q105 and Q134.

### The 2nd Local

The VCO for the 2nd local consists of the Colpitts oscillator. D110, D111 and L113 determine the frequency, and they are oscillated at the transistor Q110. The oscillated signal is added to pin 19 of PLL-IC101 through the butter amplifier Q135.

## 8. PLL

PLL-IC101 is used to control the oscillation frequency of VCO. The micro-computer IC1 sends the signal with serial data to control IC101. The 12.8 MHz reference frequency of IC101 oscillates the crystal oscillator X101 at the inside circuit.

### The 1st Local

Using the control signal from IC1, IC101 compares the divided value of the added signal to pin 2 of IC101 with the divided value of 12.8 MHz reference frequency inside IC101. When the phase difference is occurred, IC101 outputs the pulse signal from pin 8 and converts into DC voltage at the active filter Q107 and Q108. Then it is fed to the cathode of the VCO vari-cap diodes of D106 and D108 to reduce the phase difference. This brings the stable oscillation at the desired frequency.

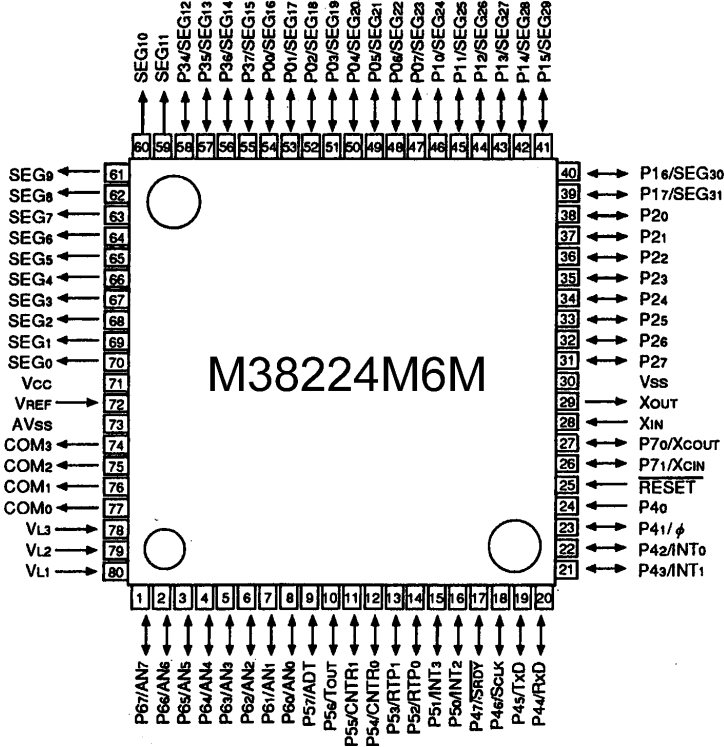
### The 2nd Local

Using the control signal from IC1, IC101 compares the divided value of the added signal to pin 19 of IC101 with the divided value of 12.8 MHz reference frequency inside IC101. When the phase difference is occurred, IC101 outputs the pulse signal from the charge pump output pin 13 and converts into DC voltage at the inside circuit for the active filter. Then it is fed to the cathode of the VCO vari-cap diodes of D110 and D111 to reduce the phase difference. This brings the stable oscillation at the desired frequency.

2) M38224M6M (E:XA0728, T:XA0729)

CPU

Terminal Connection  
(TOP VIEW)



### 3) Terminal function of CPU

| No. | Terminal | Signal  | I/O | Description      |
|-----|----------|---------|-----|------------------|
| 1   | AN7      | BP      |     | NC               |
| 2   | AN6      | BATT    | I   | Battery input    |
| 3   | P65      | PCNT    | O   |                  |
| 4   | AN4      | SMT     | I   | S-meter input    |
| 5   | AN3      | SQL     | I   | Squelch input    |
| 6   | P62      | AFPC    | O   | AF power supply  |
| 7   | P61      | BND3    | O   | Band3 SW         |
| 8   | P60      | BND2    | O   | Band2 SW         |
| 9   | P57      | RC      | O   | RX SW            |
| 10  | P56      | BND4    | O   | Band4 SW         |
| 11  | P55      | BND5    | O   | Band5 SW         |
| 12  | P54      | BND1    | O   | Band1 SW         |
| 13  | P53      | DATA/UL | I/O | Data/Unlock      |
| 14  | P52      | STB2    | O   | DAC strobe       |
| 15  | P51      | CLK     | O   | Clock            |
| 16  | P50      | STB1    | O   | PLL strobe       |
| 17  | P47      | ATT     | O   | ATT SW           |
| 18  | P46      | P2C     | O   | PLL 2ch SW       |
| 19  | TXD      | CTX     | O   | Clone TX         |
| 20  | RXD      | CRX     | I   | Clone RX         |
| 21  | P43      | BEEP    | O   | Beep output      |
| 22  | INT0     | BU      | I   | Backup interrupt |
| 23  | P41      | UP      | I   | Key input        |
| 24  | P40      | DOWN    | I   | Key input        |
| 25  | RESET    | RESET   | I   | Reset interrupt  |
| 26  | P71      | SDA     | I/O | EEPROM data      |
| 27  | P70      | SCK     | O   | EEPROM clock     |
| 28  | XIN      | XIN     | I   | Clock input      |
| 29  | XOUT     | XOUT    | O   | Clock output     |
| 30  | VSS      | GND     |     |                  |
| 31  | P27      | KEY8    | I   | Key input        |
| 32  | P26      | KEY7    | I   | Key input        |
| 33  | P25      | KEY6    | I   | Key input        |
| 34  | P24      | KEY5    | I   | Key input        |
| 35  | P23      | KEY4    | I   | Key input        |
| 36  | P22      | KEY3    | I   | Key input        |
| 37  | P21      | KEY2    | I   | Key input        |
| 38  | P20      | KEY1    | I   | Key input        |
| 39  | P17      | BND6    | O   | Band6 SW         |
| 40  | P16      | PLL     | O   | PLL power supply |

| No. | Terminal | Signal | I/O | Description         |
|-----|----------|--------|-----|---------------------|
| 41  | P15      | P1C    | O   | PLL 1ch SW          |
| 42  | P14      | DBC    | O   | Doubler SW          |
| 43  | P13      | ASW    | O   | Whip antenna SW     |
| 44  | SEG26    | SEG26  | O   |                     |
| 45  | SEG25    | SEG25  | O   |                     |
| 46  | SEG24    | SEG24  | O   |                     |
| 47  | SEG23    | SEG23  | O   |                     |
| 48  | SEG22    | SEG22  | O   |                     |
| 49  | P05      | SCT    | O   | Secret SW           |
| 50  | SEG20    | SEG20  | O   |                     |
| 51  | SEG19    | SEG19  | O   |                     |
| 52  | P02      | EAR    | O   | Earphone antenna SW |
| 53  | SEG17    | SEG17  | O   |                     |
| 54  | SEG16    | SEG16  | O   |                     |
| 55  | SEG15    | SEG15  | O   |                     |
| 56  | SEG14    | SEG14  | O   |                     |
| 57  | SEG13    | SEG13  | O   |                     |
| 58  | SEG12    | SEG12  | O   |                     |
| 59  | SEG11    | SEG11  | O   |                     |
| 60  | SEG10    | SEG10  | O   |                     |
| 61  | SEG9     | SEG9   | O   |                     |
| 62  | SEG8     | SEG8   | O   |                     |
| 63  | SEG7     | SEG7   | O   |                     |
| 64  | SEG6     | SEG6   | O   |                     |
| 65  | SEG5     | SEG5   | O   |                     |
| 66  | SEG4     | SEG4   | O   |                     |
| 67  | SEG3     | SEG3   | O   |                     |
| 68  | SEG2     | SEG2   | O   |                     |
| 69  | SEG1     | SEG1   | O   |                     |
| 70  | SEG0     | SEG0   | O   |                     |
| 71  | VCC      | VDD    |     |                     |
| 72  | VREF     | VDD    |     |                     |
| 73  | AVSS     | GND    |     |                     |
| 74  | COM3     | COM3   | O   |                     |
| 75  | COM2     | COM2   | O   |                     |
| 76  | COM1     | COM1   | O   |                     |
| 77  | COM0     | COM0   | O   |                     |
| 78  | VL3      | VL3    | I   |                     |
| 79  | VL2      | VL2    | I   |                     |
| 80  | VL1      | VL1    | I   |                     |

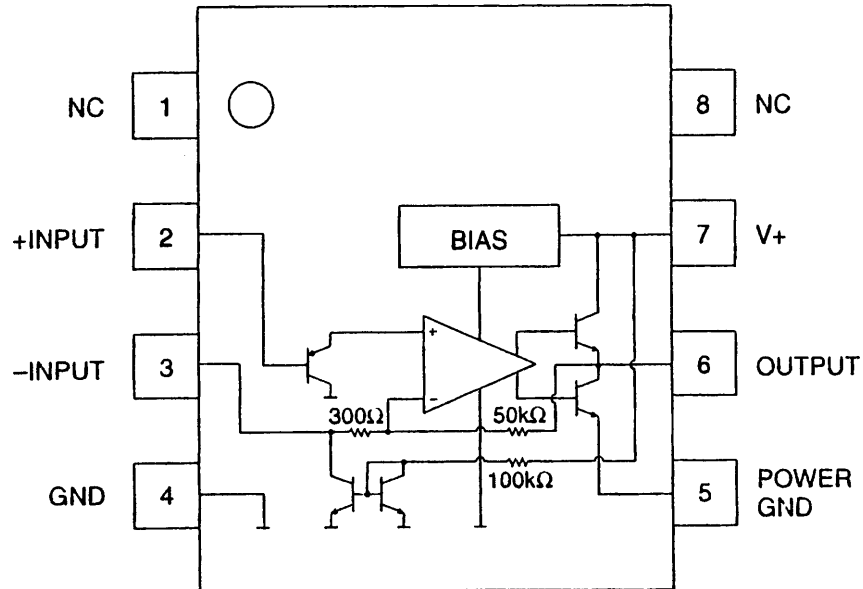


# SEMICONDUCTOR DATA

## 1) NJM2070M (XA0210)

### Low Voltage Power Amplifier

### Block Diagram



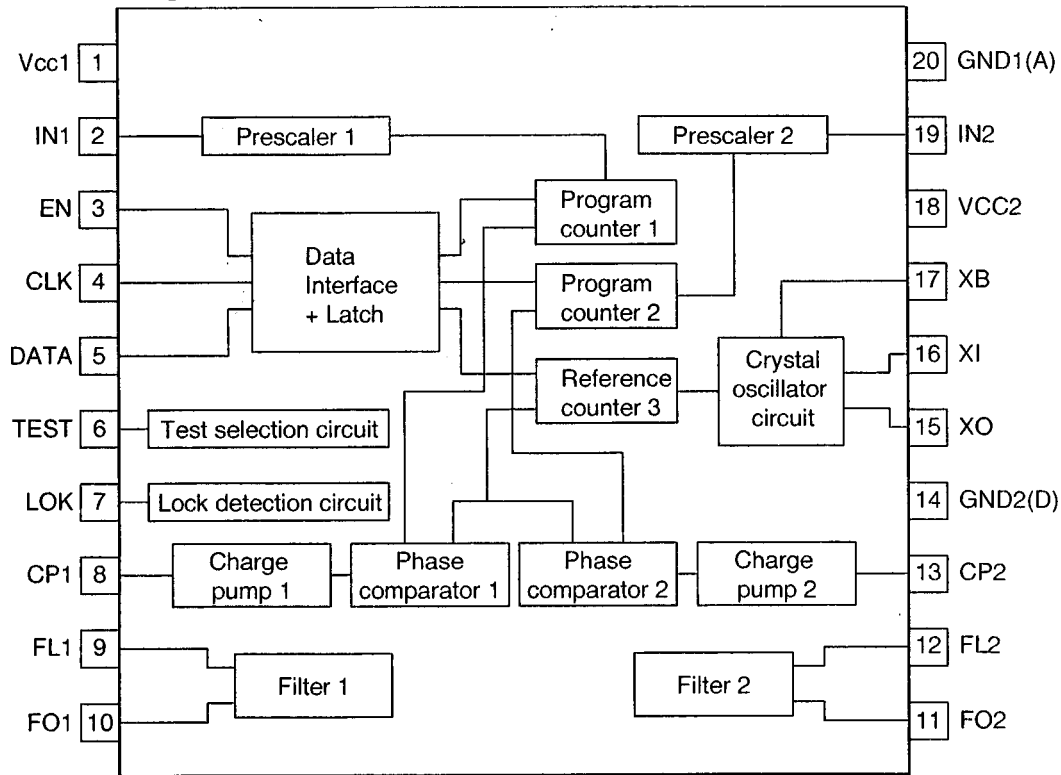
## 2) $\mu$ PD3140GS-E1 (XA0312)

80 ~ 550MHz Dual PLL Synthesizer

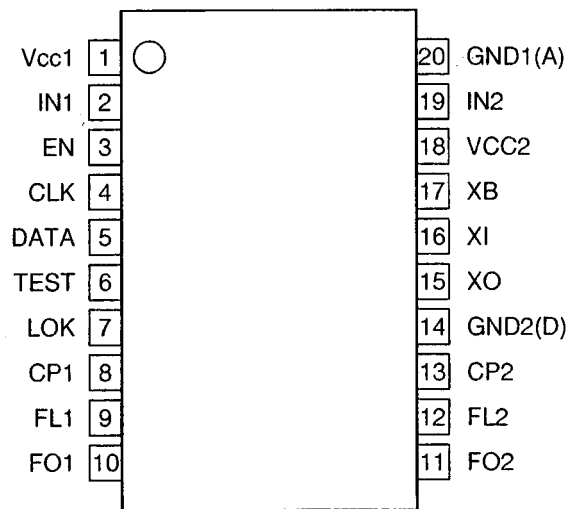
### Specifications

|                      |   |
|----------------------|---|
| Operating frequency: | 200 ~ 400MHz ( $V_{in}=-12 \sim -0\text{dBm}$ , pin 2 and 19 input)<br>80 ~ 550MHz ( $V_{in}=-8 \sim -0\text{dBm}$ , pin 2 and 19 input)  |
| Consumption current: | 2.7 ~ 4.1mA ( $V_{cc}=1.8\text{V}$ while 1 channel is used)<br>4.3 ~ 6.6mA ( $V_{cc}=1.8\text{V}$ while both channels are used)<br>0 ~ 10 $\mu$ A ( $V_{cc}=1.8\text{V}$ in power save mode)<br>3.5 ~ 5.3mA ( $V_{cc}=5\text{V}$ while 1 channel is used)<br>5.6 ~ 8.6mA ( $V_{cc}=5\text{V}$ while both channels are used) |
| Operating voltage:   | 1.8 ~ 5.5V  |

### Block Diagram

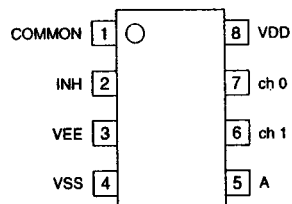


### Terminal Connection

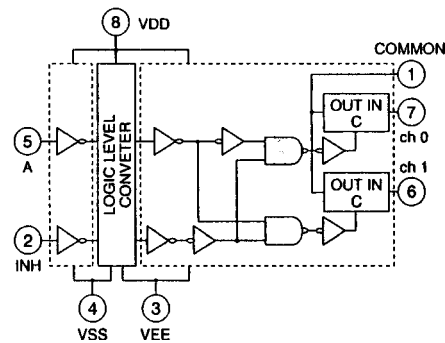


### 3) TC4W53FU (XA0348)

#### Pin Assignment

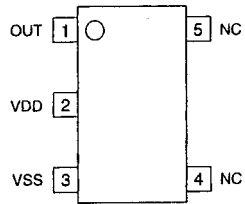


#### Block Diagram

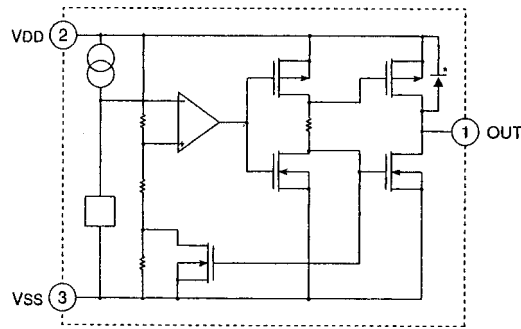


#### 4) S-80730SL-AT (XA0356)

Pin Assignment

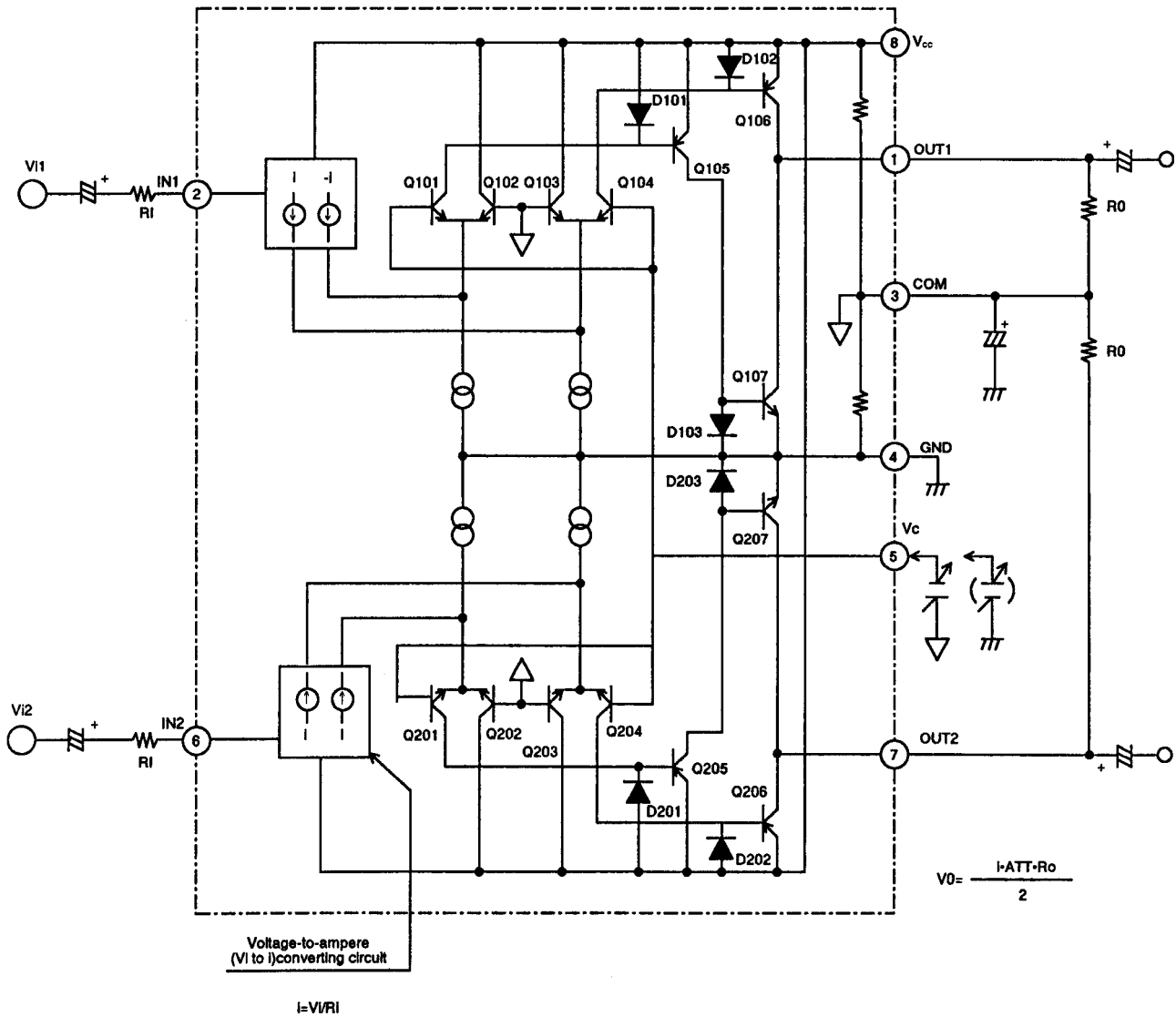


Block Diagram



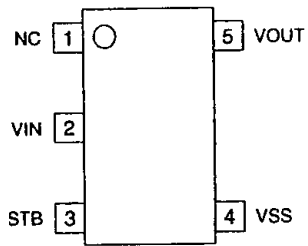
#### 5) M5222FP-600C (XA0385)

Electronic Volume

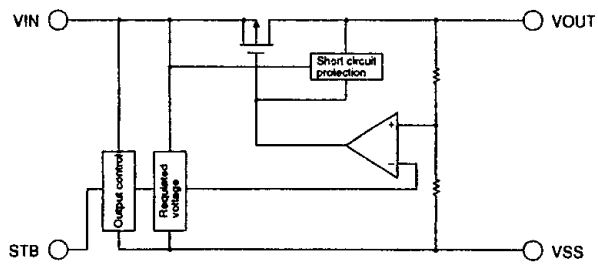


**6) XC62SPR332MR (XA0519)**

**Pin Assignment**

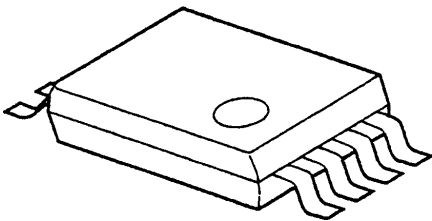


**Block Diagram**

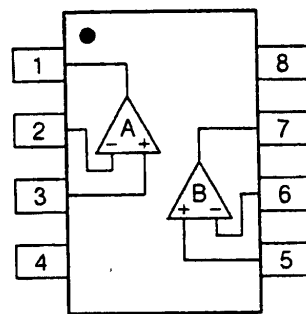


**7) NJM2904V (XA0573)**

Dual Single Supply Operational Amplifier



(Top View)

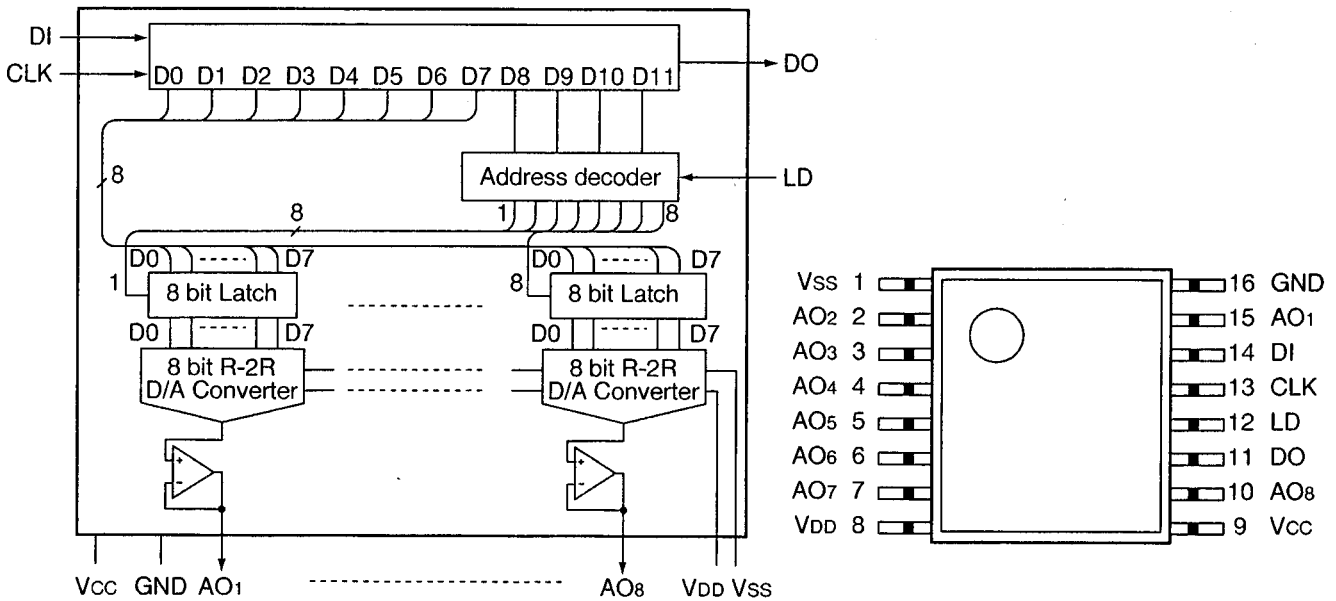


- 1: A OUTPUT
- 2: A - INPUT
- 3: A + INPUT
- 4: GND
- 5: B + INPUT
- 6: B - INPUT
- 7: B OUTPUT
- 8: V+

## 8) MB88347LPFV-G-BND-EF (XA0599)

D/A converter for digital tuning

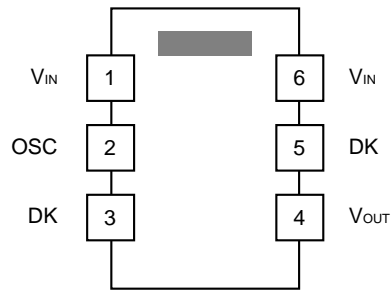
### Block Diagram



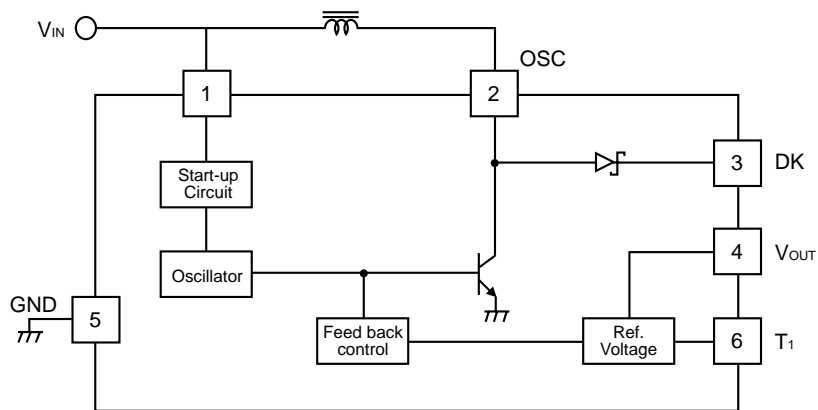
| Pin No.                                | Name   | I/O | Descriptions  |
|--|--|-----|---|
| 14                                     | DI   | I   | Serial data input terminal. Input 12 bit serial data. (Do not leave it open.)   |
| 11                                     | DO   | O   | The MSB bit data of 12 bit shift register is output at the falling edge of CLK.   |
| 13                                     | CLK  | I   | Shift clock input terminal. The input signal of DI terminal is input to 12 bit shift register at the rising edge of clock shift. (Do not leave it open.)              |
| 12                                     | LD   | I   | When LD terminal is "High", the value of shift register is loaded in decoder and D/A output register. (Do not leave it open. Fix to "Low" when no data is transited.) |
| 15<br>2<br>3<br>4<br>5<br>6<br>7<br>10 | AO1<br>AO2<br>AO3<br>AO4<br>AO5<br>AO6<br>AO7<br>AO8 | O   | 8 bit D/A converter output terminal with operational amplifier.   |
| 9                                      | Vcc  | -   | MCU interface, power supply terminal of operational amplifier.  |
| 16                                     | GND  | -   | MCU interface, ground terminal of operational amplifier.  |
| 8                                      | VDD  | -   | Reference power supply (High) input terminal of D/A converter.  |
| 1                                      | VSS  | -   | Reference power supply (Low) input terminal of D/A converter.   |

## 9) TK11816M (XA0665)

Pin Assignment

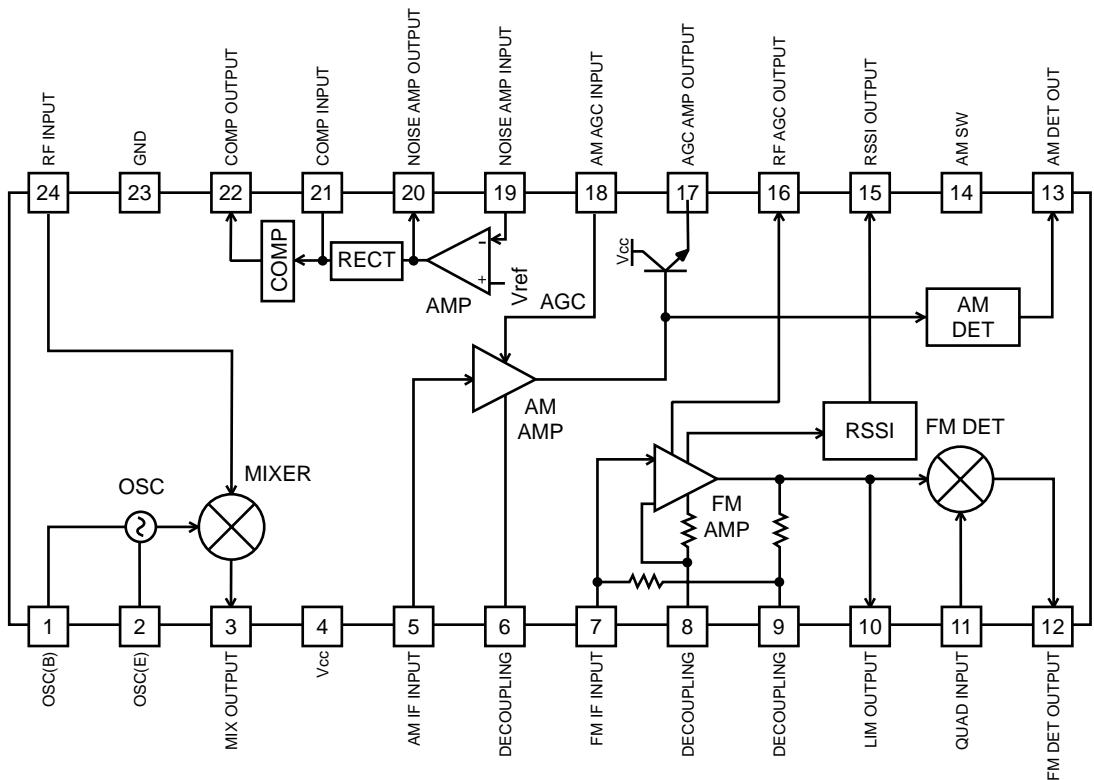


Block Diagram



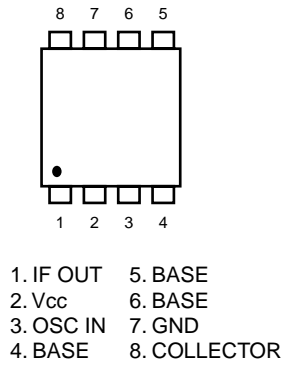
## 10) TK10931V (XA0666)

Pin Assignment / BLOCK Diagram (Top View)

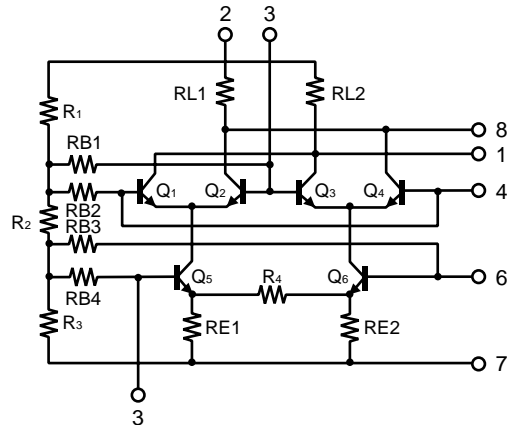


## 11) TA4101F TE12L (XA0667)

Pin Assignment

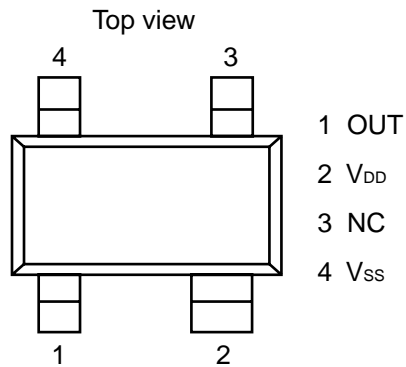


Block Diagram

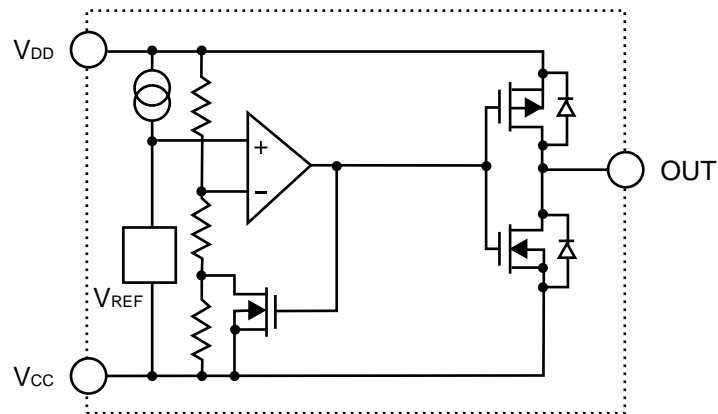


## 12) S-80829ALNP-EAS-T2 (XA0668)

Pin Assignment

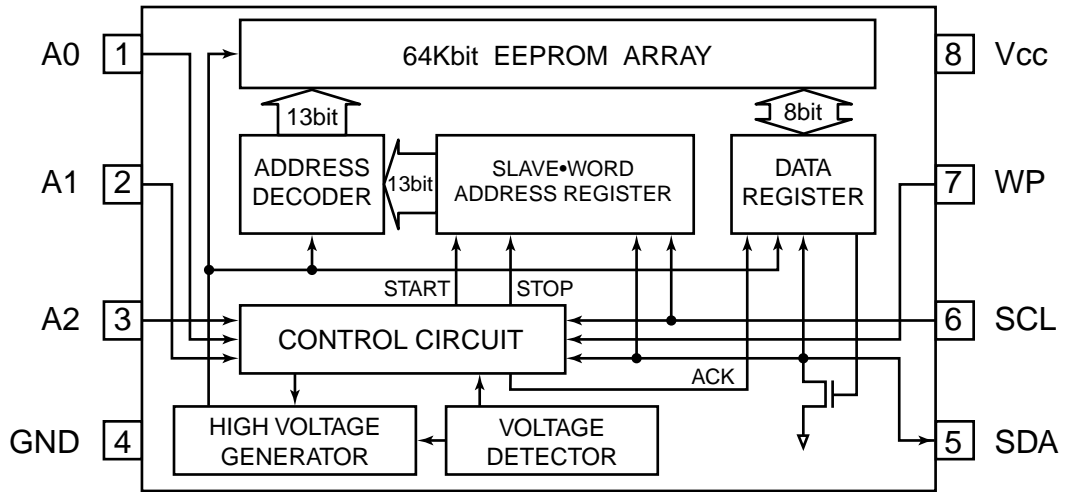


Block Diagram

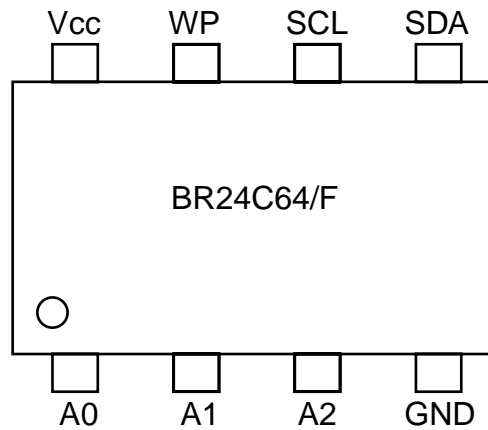


### 13) BR24C64F-E2 (XA0669)

#### Block Diagram



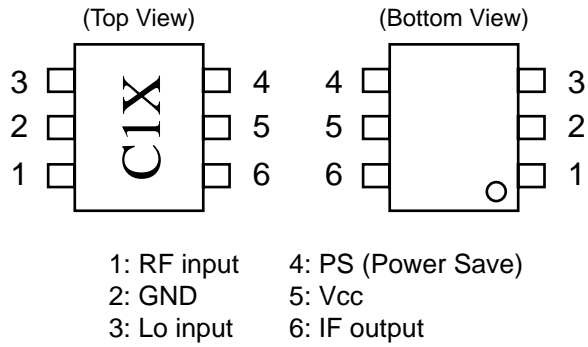
#### Pin Assignment



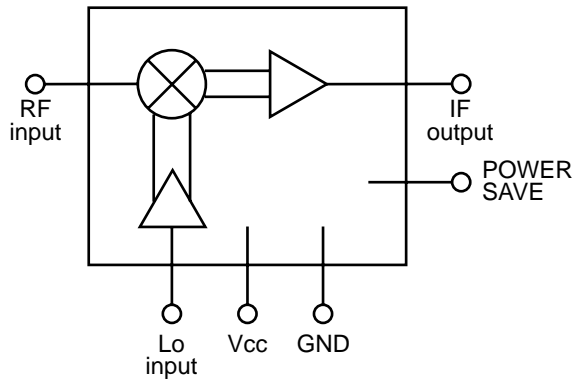


## 14) uPC2757T-E3 (XA0743)

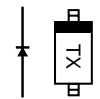
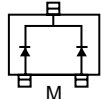
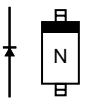
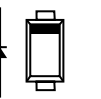

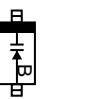
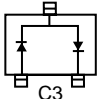
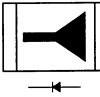
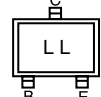
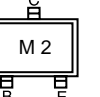



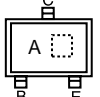
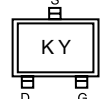
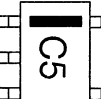
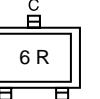
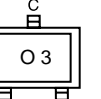
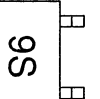
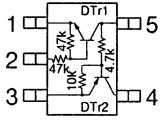
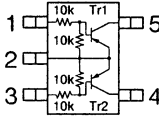
### Terminal Connection



### Block Diagram

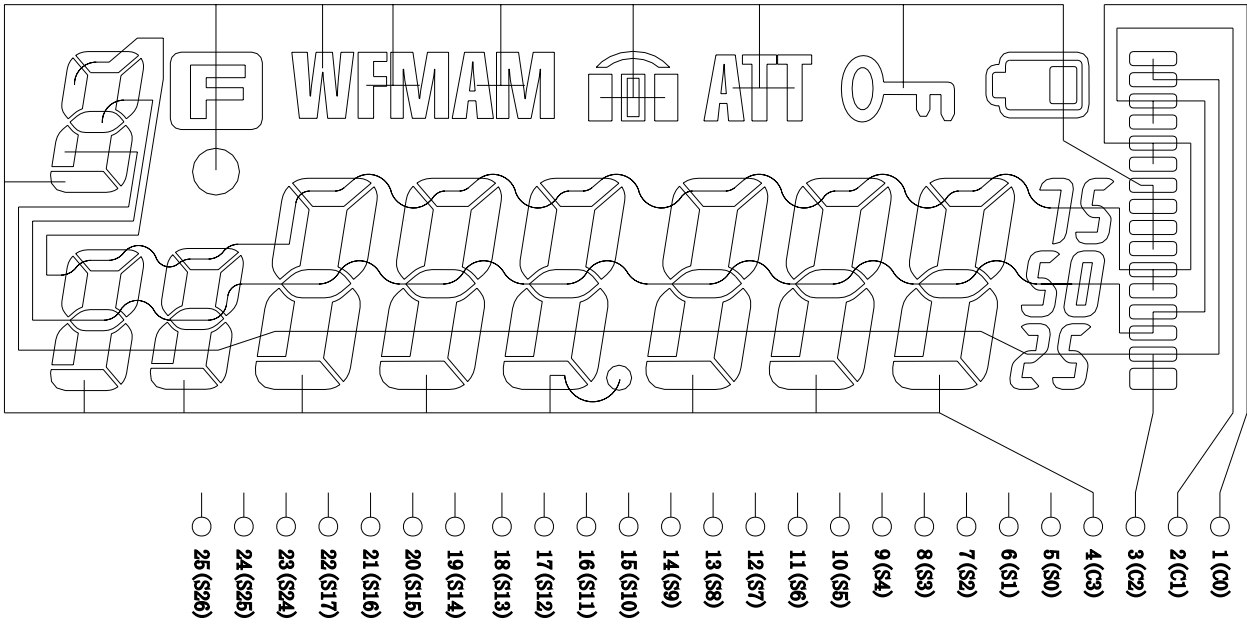


## 15) Transistor, Diode and LED Outline Drawings

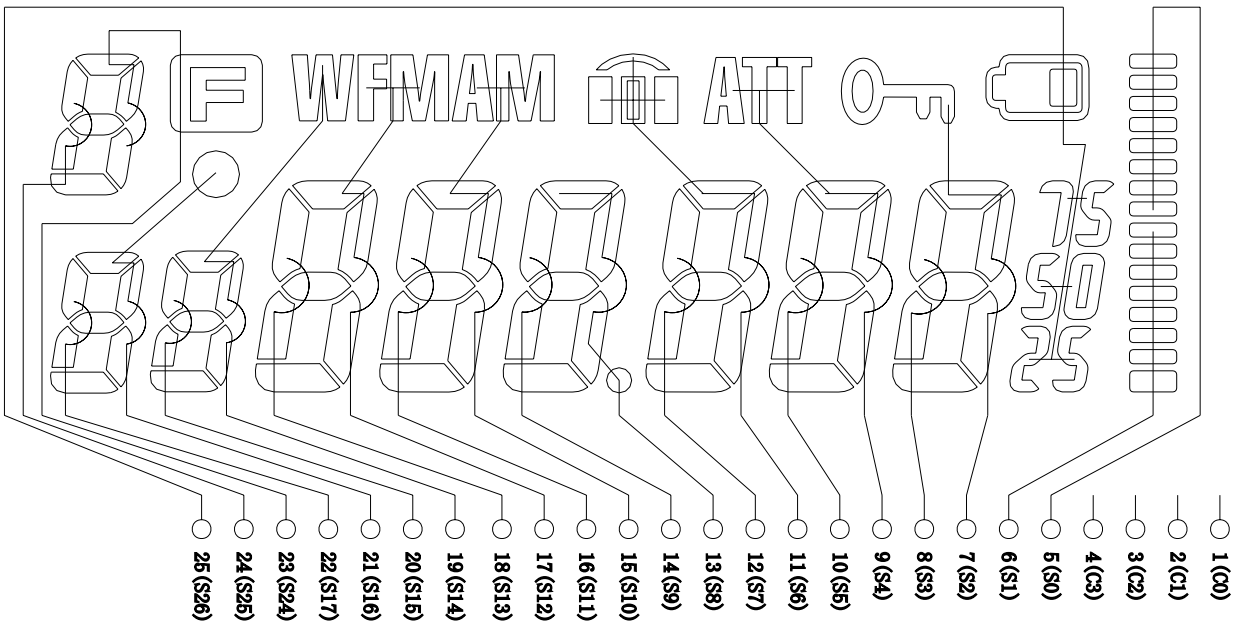
|   |   |   |   |  |   |   |
|---|---|---|---|--|---|---|
| 1SV308(TPH3)<br>XD0339  | DAN235E-TL<br>XD0320  | MA2S357-TX<br>XD0337  | ISS390 TE61<br>XD0342   | MA2S30400L<br>XD0312   | MA2S728-TX<br>XD0315  | ISS362 TE85L<br>XD0338  |
|  |  |  |  |  |  |  |
| SML-310MT86<br>XD0036   | 2SC4738BL(TE85R)<br>XT0181  | 2SC5066FT-Y(TE85L)<br>XT0180  | 2SD2216R-TX<br>XT0135   | 2SJ144Y(TE85R)<br>XE0019   | 2SC5096FT-O(TE85L)<br>XT0182  | 2SC4618TL<br>XT0172   |
|  |  |  |  |  |  |  |
| 2SK881Y(TE85R)<br>XE0036  | UMC5N TR<br>XU0152  | UN911H TX<br>XU0092   | DTC143TE TL<br>XU0196   | XP1111-TX<br>XU0171  |   |   |
|  |  |  |  |  |   |   |
|   |  |   |   |  |   |   |

# 16) LCD connection

## LCD Common

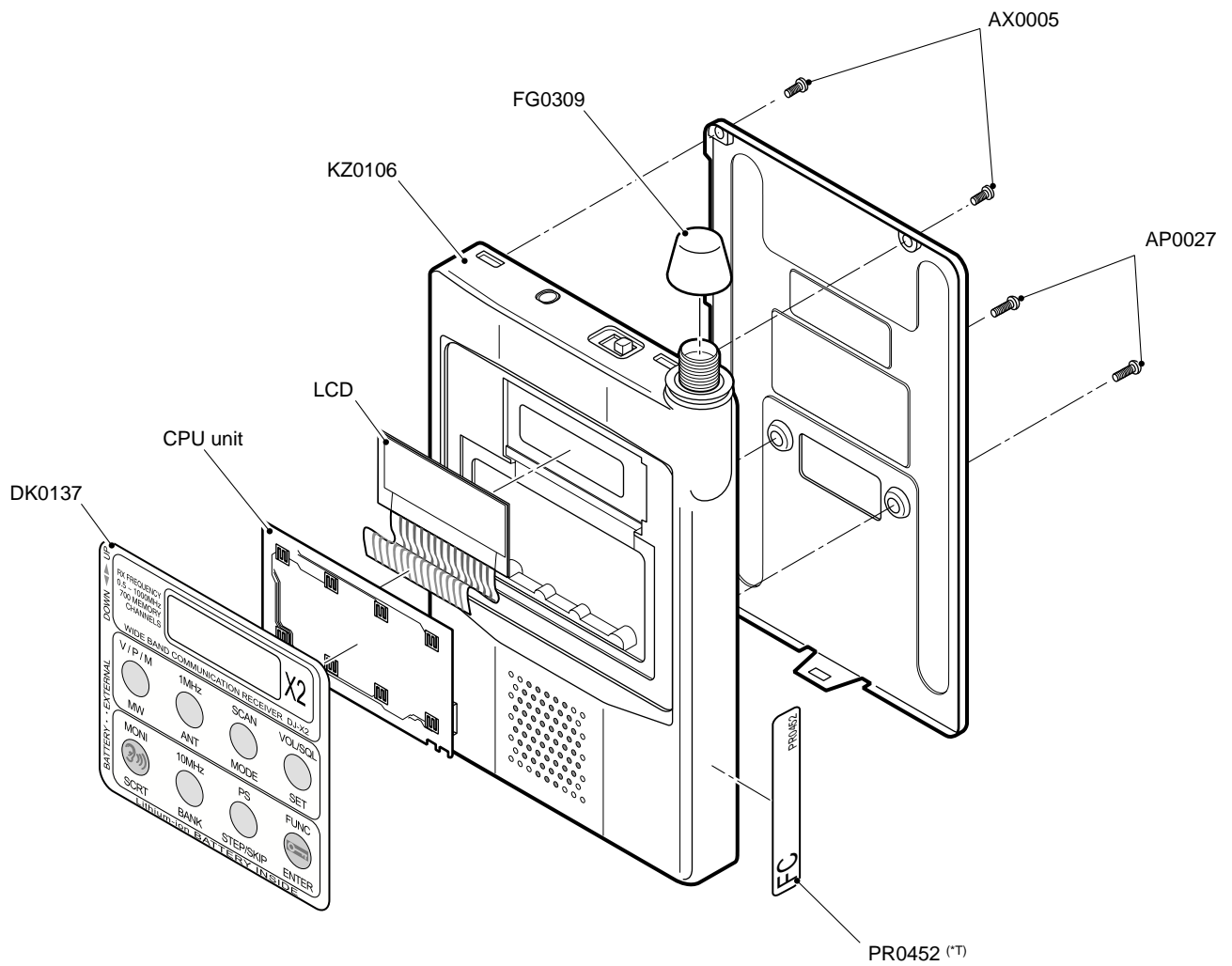


## LCD Segment

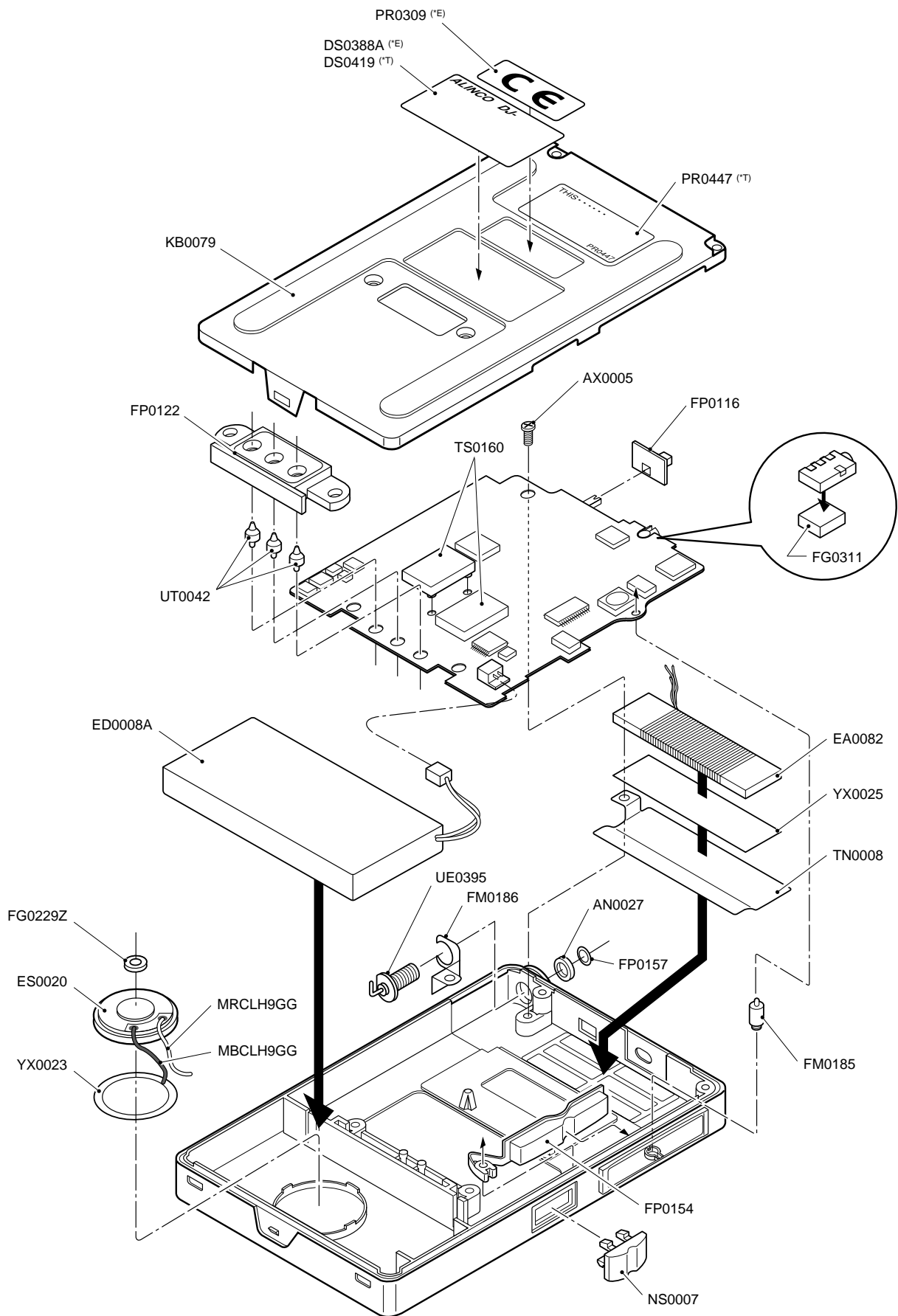


# EXPLODED VIEW

## 1) Front View



## 2) Rear View



# PARTS LIST

| Ref. No.         | Parts No. | Description | Parts Name        | X2 | Ref. No. | Parts No. | Description | Parts Name        | X2 |
|------------------|-----------|-------------|-------------------|----|----------|-----------|-------------|-------------------|----|
| <b>CPU Unit</b>  |           |             |                   |    |          |           |             |                   |    |
|                  | YX0004    |             | TAPE              |    | C118     | CU3547    | Chip C.     | GRM36B103K16PT    |    |
| C1               | CU3535    | Chip C.     | GRM36B102K50PT    |    | C119     | CS0396    | Chip Tantal | TMCP1D104MTR      |    |
| C2               | CU3111    | Chip C.     | C1608JB1C104KT-N  |    | C120     | CU3501    | Chip C.     | GRM36CK0R5C50PT   |    |
| C3               | CU3111    | Chip C.     | C1608JB1C104KT-N  |    | C121     | CU3547    | Chip C.     | GRM36B103K16PT    |    |
| C300             | CS0403    | Chip Tantal | TMCP1D224MTR      |    | C122     | CS0408    | Chip Tantal | 6MCM156MATER      |    |
| C4               | CU3547    | Chip C.     | GRM36B103K16PT    |    | C123     | CU3523    | Chip C.     | GRM36CH101J50PT   |    |
| C5               | CU3517    | Chip C.     | GRM36CH330J50PT   |    | C124     | CU3535    | Chip C.     | GRM36B102K50PT    |    |
| C6               | CU3517    | Chip C.     | GRM36CH330J50PT   |    | C125     | CS0397    | Chip Tantal | TMCP1C105MTR      |    |
| C7               | CS0398    | Chip Tantal | TMCP0J225MTR      |    | C126     | CU3535    | Chip C.     | GRM36B102K50PT    |    |
| C8               | CU3111    | Chip C.     | C1608JB1C104KT-N  |    | C127     | CS0396    | Chip Tantal | TMCP1D104MTR      |    |
| C9               | CS0398    | Chip Tantal | TMCP0J225MTR      |    | C128     | CS0397    | Chip Tantal | TMCP1C105MTR      |    |
| CN1              | UE0403    | Connector   | AXK5S3024         |    | C129     | CU3535    | Chip C.     | GRM36B102K50PT    |    |
| D1               | XD0315    | Diode       | MA2S728-TX        |    | C130     | CU3111    | ChipC.      | C1608JB1C104KT-N  |    |
| IC1              | XA0729    | IC          | M38224M6M-142HP   | E  | C131     | CU3111    | ChipC.      | C1608JB1C104KT-N  |    |
| IC1              | XA0728    | IC          | M38224M6M-141HP   | T  | C132     | CU3547    | Chip C.     | GRM36B103K16PT    |    |
| IC2              | XA0356    | IC          | S-80730SL-AT-T1   |    | C133     | CU3547    | Chip C.     | GRM36B103K16PT    |    |
| IC3              | XA0669    | IC          | BR24C64F-E2       |    | C134     | CU3111    | ChipC.      | C1608JB1C104KT-N  |    |
| L1               | QC0507    | Coil        | LK16081R0K-T      |    | C135     | CS0397    | ChipTantal  | TMCP1C105MTR      |    |
| Q1               | XU0152    | Transistor  | UMC5NTR           |    | C136     | CU3111    | ChipC.      | C1608JB1C104KT-N  |    |
| R1               | RK3542    | Cihp R.     | ERJ2GEJ222X       |    | C137     | CU3111    | ChipC.      | C1608JB1C104KT-N  |    |
| R13              | RK3550    | Cihp R.     | ERJ2GEJ103X       |    | C138     | CU3531    | Chip C.     | GRM36B471K50PT    |    |
| R14              | RK3538    | Cihp R.     | ERJ2GEJ102X       |    | C139     | CU3547    | Chip C.     | GRM36B103K16PT    |    |
| R15              | RK3559    | Cihp R.     | ERJ2GEJ563X       |    | C140     | CU3503    | Chip C.     | GRM36CK020C50PT   |    |
| R16              | RK3526    | Cihp R.     | ERJ2GEJ101X       |    | C141     | CU3503    | Chip C.     | GRM36CK020C50PT   |    |
| R17              | RK3562    | Cihp R.     | ERJ2GEJ104X       |    | C142     | CU3503    | Chip C.     | GRM36CK020C50PT   |    |
| R18              | RK3538    | Cihp R.     | ERJ2GEJ102X       |    | C143     | CU3535    | Chip C.     | GRM36B102K50PT    |    |
| R19              | RA0009    | Cihp R.     | EXBV8V102JV       |    | C144     | CU3535    | Chip C.     | GRM36B102K50PT    |    |
| R20              | RK3562    | Cihp R.     | ERJ2GEJ104X       |    | C145     | CU3111    | Chip C.     | C1608JB1C104KT-N  |    |
| R21              | RK3562    | Cihp R.     | ERJ2GEJ104X       |    | C146     | CU3505    | Chip C.     | GRM36CH040C50PT   |    |
| R22              | RA0009    | Cihp R.     | EXBV8V102JV       |    | C147     | CU3523    | Chip C.     | GRM36CH101J50PT   |    |
| R23              | RK3562    | Cihp R.     | ERJ2GEJ104X       |    | C148     | CU3527    | Chip C.     | GRM36CH221J25PT   |    |
| R24              | RK3562    | Cihp R.     | ERJ2GEJ104X       |    | C149     | CU3527    | Chip C.     | GRM36CH221J25PT   |    |
| R25              | RK3562    | Cihp R.     | ERJ2GEJ104X       |    | C150     | CU3523    | Chip C.     | GRM36CH101J50PT   |    |
| R26              | RA0008    | Cihp R.     | EXBV4V102JV       |    | C151     | CU3535    | Chip C.     | GRM36B102K50PT    |    |
| R3               | RK3558    | Cihp R.     | ERJ2GEJ473X       |    | C152     | CU3501    | Chip C.     | GRM36CK0R5C50PT   |    |
| R4               | RK3558    | Cihp R.     | ERJ2GEJ473X       |    | C153     | CU3111    | Chip C.     | C1608JB1C104KT-N  |    |
| R6               | RK3558    | Cihp R.     | ERJ2GEJ473X       |    | C154     | CU3111    | Chip C.     | C1608JB1C104KT-N  |    |
| R7               | RK3558    | Cihp R.     | ERJ2GEJ473X       |    | C155     | CU3535    | Chip C.     | GRM36B102K50PT    |    |
| R8               | RK3558    | Cihp R.     | ERJ2GEJ473X       |    | C156     | CU3509    | Chip C.     | GRM36CH080D50PT   |    |
| X1               | XQ0132    | Crystal     | CSA309/4.1943MHz  |    | C157     | CS0411    | Chip Tantal | 4MCM226MATER      |    |
|                  |           |             |                   |    | C158     | CU3527    | ChipC.      | GRM36CH221J25PT   |    |
| <b>MAIN Unit</b> |           |             |                   |    |          |           |             |                   |    |
|                  | UT0042    |             | JYUDENTANSI XH662 | 3  | C159     | CS0397    | Chip Tantal | TMCP1C105MTR      |    |
|                  | TS0160    |             | VCO CASE          | 2  | C160     | CU3527    | Chip C.     | GRM36CH221J25PT   |    |
| C101             | CU3111    | Chip C.     | C1608JB1C104KT-N  |    | C161     | CU3502    | Chip C.     | GRM36CK010C50PT   |    |
| C102             | CU3111    | Chip C.     | C1608JB1C104KT-N  |    | C162     | CU3535    | Chip C.     | GRM36B102K50PT    |    |
| C103             | CU3111    | Chip C.     | C1608JB1C104KT-N  |    | C163     | CU3503    | Chip C.     | GRM36CK020C50PT   |    |
| C104             | CU3515    | Chip C.     | GRM36CH220J50PT   |    | C164     | CU3514    | Chip C.     | GRM36CH180J50PT   |    |
| C105             | CU3535    | Chip C.     | GRM36B102K50PT    |    | C165     | CU3011    | Chip C.     | C1608CH1H100DT-AS |    |
| C106             | CU3111    | Chip C.     | C1608JB1C104KT-N  |    | C166     | CU3535    | Chip C.     | GRM36B102K50PT    |    |
| C107             | CU3506    | Chip C.     | GRM36CH050C50PT   |    | C167     | CU3547    | Chip C.     | GRM36B103K16PT    |    |
| C108             | CU3535    | Chip C.     | GRM36B102K50PT    |    | C168     | CU3111    | Chip C.     | C1608JB1C104KT-N  |    |
| C109             | CS0411    | Chip Tantal | 4MCM226MATER      |    | C169     | CU3547    | Chip C.     | GRM36B103K16PT    |    |
| C110             | CU3535    | Chip C.     | GRM36B102K50PT    |    | C170     | CU3547    | Chip C.     | GRM36B103K16PT    |    |
| C111             | CU3512    | Chip C.     | GRM36CH120J50PT   |    | C171     | CU3547    | Chip C.     | GRM36B103K16PT    |    |
| C112             | CU3503    | Chip C.     | GRM36CK020C50PT   |    | C172     | CU3547    | Chip C.     | GRM36B103K16PT    |    |
| C113             | CU3111    | Chip C.     | C1608JB1C104KT-N  |    | C173     | CU3547    | Chip C.     | GRM36B103K16PT    |    |
| C114             | CU3547    | Chip C.     | GRM36B103K16PT    |    | C174     | CU3021    | Chip C.     | C1608CH1H680JT-AS |    |
| C115             | CU3511    | Chip C.     | GRM36CH100D50PT   |    | C175     | CU3021    | Chip C.     | C1608CH1H680JT-AS |    |
| C116             | CU3523    | Chip C.     | GRM36CH101J50PT   |    | C176     | CU3516    | Chip C.     | GRM36CH270J50PT   |    |
| C117             | CU3511    | Chip C.     | GRM36CH100D50PT   |    | C177     | CU3547    | Chip C.     | GRM36B103K16PT    |    |
|                  |           |             |                   |    | C178     | CU3509    | Chip C.     | GRM36CH080D50PT   |    |

| Ref. No. | Parts No. | Description | Parts Name        | X2 |
|----------|-----------|-------------|-------------------|----|
| C179     | CU3502    | Chip C.     | GRM36CK010C50PT   |    |
| C180     | CU3517    | Chip C.     | GRM36CH330J50PT   |    |
| C181     | CU3020    | Chip C.     | C1608CH1H560JT-AS |    |
| C182     | CU3517    | Chip C.     | GRM36CH330J50PT   |    |
| C183     | CU3547    | Chip C.     | GRM36B103K16PT    |    |
| C184     | CU3551    | Chip C.     | GRM36B223K16PT    |    |
| C185     | CU3535    | Chip C.     | GRM36B102K50PT    |    |
| C186     | CU3535    | Chip C.     | GRM36T            |    |
| C187     | CU3535    | Chip C.     | GRM36B102K50PT    |    |
| C188     | CU3523    | Chip C.     | GRM36CH101J50PT   |    |
| C189     | CU3523    | Chip C.     | GRM36CH101J50PT   |    |
| C190     | CU3111    | Chip C.     | C1608JB1C104KT-N  |    |
| C191     | CU3547    | Chip C.     | GRM36B103K16PT    |    |
| C192     | CU3535    | Chip C.     | GRM36B102K50PT    |    |
| C193     | CS0404    | Chip Tantal | 6MCM106MATER      |    |
| C194     | CU3013    | Chip C.     | C1608CH1H150JT-AS |    |
| C196     | CU3535    | Chip C.     | GRM36B102K50PT    |    |
| C197     | CU3551    | Chip C.     | GRM36B223K16PT    |    |
| C198     | CU3551    | Chip C.     | GRM36B223K16PT    |    |
| C199     | CU3535    | Chip C.     | GRM36B102K50PT    |    |
| C200     | CU3535    | Chip C.     | GRM36B102K50PT    |    |
| C201     | CU3535    | Chip C.     | GRM36B102K50PT    |    |
| C202     | CU3509    | Chip C.     | GRM36CH080D50PT   |    |
| C203     | CU3509    | Chip C.     | GRM36CH080D50PT   |    |
| C204     | CU3518    | Chip C.     | GRM36CH390J50PT   |    |
| C205     | CU3512    | Chip C.     | GRM36CH120J50PT   |    |
| C206     | CU3033    | Chip C.     | C1608JB1H681KT-AS |    |
| C207     | CU3516    | Chip C.     | GRM36CH270J50PT   |    |
| C208     | CU3020    | Chip C.     | C1608CH1H560JT-AS |    |
| C209     | CU3516    | Chip C.     | GRM36CH270J50PT   |    |
| C210     | CU3547    | Chip C.     | GRM36B103K16PT    |    |
| C211     | CU3535    | Chip C.     | GRM36B102K50PT    |    |
| C212     | CU3111    | Chip C.     | C1608JB1C104KT-N  |    |
| C213     | CU3111    | Chip C.     | C1608JB1C104KT-N  |    |
| C214     | CU3111    | Chip C.     | C1608JB1C104KT-N  |    |
| C215     | CU3511    | Chip C.     | GRM36CH100D50PT   |    |
| C216     | CU3535    | Chip C.     | GRM36B102K50PT    |    |
| C217     | CU3547    | Chip C.     | GRM36B103K16PT    |    |
| C218     | CU3535    | Chip C.     | GRM36B102K50PT    |    |
| C219     | CS0411    | Chip Tantal | 4MCM226MATER      |    |
| C220     | CU3535    | Chip C.     | GRM36B102K50PT    |    |
| C221     | CU3111    | Chip C.     | C1608JB1C104KT-N  |    |
| C222     | CU3019    | Chip C.     | C1608CH1H470JT-AS |    |
| C223     | CU3535    | Chip C.     | GRM36B102K50PT    |    |
| C224     | CU3506    | Chip C.     | GRM36CH050C50PT   |    |
| C225     | CU3506    | Chip C.     | GRM36CH050C50PT   |    |
| C226     | CU3535    | Chip C.     | GRM36B102K50PT    |    |
| C227     | CS0408    | Chip Tantal | 6MCM156MATER      |    |
| C228     | CU3547    | Chip C.     | GRM36B103K16PT    |    |
| C229     | CU3547    | Chip C.     | GRM36B103K16PT    |    |
| C230     | CU3547    | Chip C.     | GRM36B103K16PT    |    |
| C231     | CU3547    | Chip C.     | GRM36B103K16PT    |    |
| C232     | CU3111    | Chip C.     | C1608JB1C104KT-N  |    |
| C233     | CS0408    | Chip Tantal | 6MCM156MATER      |    |
| C234     | CU3514    | Chip C.     | GRM36CH180J50PT   |    |
| C235     | CU3517    | Chip C.     | GRM36CH330J50PT   |    |
| C236     | CU3514    | Chip C.     | GRM36CH180J50PT   |    |
| C237     | CU3111    | Chip C.     | C1608JB1C104KT-N  |    |
| C238     | CU3531    | Chip C.     | GRM36B471K50PT    |    |
| C239     | CS0408    | Chip Tantal | 6MCM156MATER      |    |
| C240     | CU3531    | Chip C.     | GRM36B471K50PT    |    |

| Ref. No. | Parts No. | Description  | Parts Name        | X2 |
|----------|-----------|--------------|-------------------|----|
| C241     | CU3111    | Chip C.      | C1608JB1C104KT-N  |    |
| C242     | CS0396    | Chip Tantal  | TMCP1D104MTR      |    |
| C243     | CU3531    | Chip C.      | GRM36B471K50PT    |    |
| C244     | CS0398    | Chip Tantal  | TMCP0J225MTR      |    |
| C245     | CU3511    | Chip C.      | GRM36CH100D50PT   |    |
| C246     | CU3535    | Chip C.      | GRM36B102K50PT    |    |
| C247     | CU3503    | Chip C.      | GRM36CK020C50PT   |    |
| C248     | CU3503    | Chip C.      | GRM36CK020C50PT   |    |
| C249     | CU3535    | Chip C.      | GRM36B102K50PT    |    |
| C250     | CU3008    | Chip C.      | C1608CH1H070CT-A  |    |
| C251     | CS0397    | Chip Tantal  | TMCP1C105MTR      |    |
| C252     | CU3111    | Chip C.      | C1608JB1C104KT-N  |    |
| C253     | CU3514    | Chip C.      | GRM36CH180J50PT   |    |
| C254     | CU3517    | Chip C.      | GRM36CH330J50PT   |    |
| C255     | CU3515    | Chip C.      | GRM36CH220J50PT   |    |
| C256     | CU3551    | Chip C.      | GRM36B223K16PT    |    |
| C257     | CS0414    | Chip Tantal  | 6MCM476MBTER      |    |
| C258     | CU3111    | Chip C.      | C1608JB1C104KT-N  |    |
| C259     | CU3111    | Chip C.      | C1608JB1C104KT-N  |    |
| C260     | CU3535    | Chip C.      | GRM36B102K50PT    |    |
| C261     | CU3547    | Chip C.      | GRM36B103K16PT    |    |
| C262     | CU3111    | Chip C.      | C1608JB1C104KT-N  |    |
| C264     | CS0411    | Chip Tantal  | 4MCM226MATER      |    |
| C265     | CU3111    | Chip C.      | C1608JB1C104KT-N  |    |
| C266     | CU3518    | Chip C.      | GRM36CH390J50PT   |    |
| C267     | CU3547    | Chip C.      | GRM36B103K16PT    |    |
| C268     | CU3535    | Chip C.      | GRM36B102K50PT    |    |
| C269     | CS0412    | Chip Tantal. | 16MCM156MBTER     |    |
| C270     | CU3535    | Chip C.      | GRM36B102K50PT    |    |
| C271     | CS0414    | Chip Tantal  | 6MCM476MBTER      |    |
| C272     | CU3531    | Chip C.      | GRM36B471K50PT    |    |
| C273     | CU3531    | Chip C.      | GRM36B471K50PT    |    |
| C274     | CU3535    | Chip C.      | GRM36B102K50PT    |    |
| C275     | CU3531    | Chip C.      | GRM36B471K50PT    |    |
| C276     | CS0414    | Chip Tantal  | 6MCM476MBTER      |    |
| C277     | CS0413    | Chip Tantal  | 6MCM107MCTER      |    |
| C278     | CU3535    | Chip C.      | GRM36B102K50PT    |    |
| C279     | CU3531    | Chip C.      | GRM36B471K50PT    |    |
| C280     | CU3511    | Chip C.      | GRM36CH100D50PT   |    |
| C281     | CU3505    | Chip C.      | GRM36CH040C50PT   |    |
| C282     | CU3505    | Chip C.      | GRM36CH040C50PT   |    |
| C283     | CU3007    | Chip C.      | C1608CH1H060CT-A  |    |
| C284     | CU3547    | Chip C.      | GRM36B103K16PT    |    |
| C285     | CU3535    | Chip C.      | GRM36B102K50PT    |    |
| C286     | CU3547    | Chip C.      | GRM36B103K16PT    |    |
| C287     | CU3547    | Chip C.      | GRM36B103K16PT    |    |
| C288     | CU3111    | Chip C.      | C1608JB1C104KT-N  |    |
| C289     | CS0413    | Chip Tantal  | 6MCM107MCTER      |    |
| C290     | CU3535    | Chip C.      | GRM36B102K50PT    |    |
| C291     | CU3111    | Chip C.      | C1608JB1C104KT-N  |    |
| C292     | CU3547    | Chip C.      | GRM36B103K16PT    |    |
| C293     | CU3547    | Chip C.      | GRM36B103K16PT    |    |
| C294     | CU3512    | Chip C.      | GRM36CH120J50PT   |    |
| C295     | CU3515    | Chip C.      | GRM36CH220J50PT   |    |
| C296     | CU3021    | Chip C.      | C1608CH1H680JT-AS |    |
| C297     | CU3111    | Chip C.      | C1608JB1C104KT-N  |    |
| C298     | CU3535    | Chip C.      | GRM36B102K50PT    |    |
| C299     | CU3531    | Chip C.      | GRM36B471K50PT    |    |
| C301     | CU3515    | Chip C.      | GRM36CH220J50PT   |    |
| C302     | CU3535    | Chip C.      | GRM36B102K50PT    |    |
| C303     | CU3518    | Chip C.      | GRM36CH390J50PT   |    |

| Ref. No. | Parts No. | Description | Parts Name           | X2 |
|----------|-----------|-------------|----------------------|----|
| C304     | CU3535    | Chip C.     | GRM36B102K50PT       |    |
| C305     | CU3505    | Chip C.     | GRM36CH040C50PT      |    |
| C306     | CU3506    | Chip C.     | GRM36CH050C50PT      |    |
| C307     | CU3111    | Chip C.     | C1608JB1C104KT-N     |    |
| C308     | CU3535    | Chip C.     | GRM36B102K50PT       |    |
| C309     | CU3523    | Chip C.     | GRM36CH101J50PT      |    |
| C310     | CU3535    | Chip C.     | GRM36B102K50PT       |    |
| CN101    | UE0396    | Connector   | AXK6S30645P          |    |
| CN102    | UE0320    | Connector   | PI28B02M             |    |
| D101     | XD0339    | Diode       | 1SV308               |    |
| D102     | XD0339    | Diode       | 1SV308               |    |
| D103     | XD0320    | Diode       | DAN235E-TL           |    |
| D104     | XD0338    | Diode       | 1SS362               |    |
| D105     | XD0320    | Diode       | DAN235E-TL           |    |
| D106     | XD0337    | Diode       | MA2S357              |    |
| D107     | XD0320    | Diode       | DAN235E-TL           |    |
| D108     | XD0337    | Diode       | MA2S357              |    |
| D109     | XD0339    | Diode       | 1SV308               |    |
| D110     | XD0312    | Diode       | MA2S30400L           |    |
| D111     | XD0312    | Diode       | MA2S30400L           |    |
| D112     | XD0342    | Diode       | 1SS390               |    |
| D113     | XD0320    | Diode       | DAN235E-TL           |    |
| D114     | XD0320    | Diode       | DAN235E-TL           |    |
| D115     | XD0339    | Diode       | 1SV308               |    |
| D116     | XD0339    | Diode       | 1SV308               |    |
| D117     | XD0320    | Diode       | DAN235E-TL           |    |
| D118     | XD0320    | Diode       | DAN235E-TL           |    |
| D119     | XL0036    | LED         | SML-310MTT86         |    |
| D120     | XD0339    | Diode       | 1SV308               |    |
| D121     | XD0320    | Diode       | DAN235E-TL           |    |
| D122     | XD0339    | Diode       | 1SV308               |    |
| D123     | XD0320    | Diode       | DAN235E-TL           |    |
| D124     | XD0339    | Diode       | 1SV308               |    |
| D125     | XD0339    | Diode       | 1SV308               |    |
| D126     | XD0339    | Diode       | 1SV308               |    |
| D127     | XD0339    | Diode       | 1SV308               |    |
| D128     | XD0342    | Diode       | 1SS390               |    |
| D129     | XD0339    | Diode       | 1SV308               |    |
| D130     | XD0339    | Diode       | 1SV308               |    |
| D132     | XD0339    | Diode       | 1SV308               |    |
| D133     | XD0339    | Diode       | 1SV308               |    |
| D134     | XD0339    | Diode       | 1SV308               |    |
| D135     | XD0342    | Diode       | 1SS390               |    |
| D136     | XD0342    | Diode       | 1SS390               |    |
| D137     | XD0338    | Diode       | 1SS362               |    |
| FL101    | XC0071    | Filter      | WF477A               |    |
| FL103    | XC0075    | Filter      | CFUCG450E            |    |
| IC101    | XA0312    | IC          | UPD3140GS-E1         |    |
| IC102    | XA0599    | IC          | MB88347LPFV-G-BND-EF |    |
| IC103    | XA0743    | IC          | uPC2757T             |    |
| IC104    | XA0743    | IC          | uPC2757T             |    |
| IC105    | XA0666    | IC          | TK10931V             |    |
| IC106    | XA0348    | IC          | TC4W53FU(TE12)       |    |
| IC107    | XA0667    | IC          | TA4101F              |    |
| IC108    | XA0385    | IC          | M5222FP-600C         |    |
| IC109    | XA0665    | IC          | TK11816MTL           |    |
| IC110    | XA0210    | IC          | NJM2070M T1          |    |
| IC111    | XA0573    | IC          | NJM2904V-TE1         |    |
| IC112    | XA0519    | IC          | XC62SPR332MR         |    |
| IC113    | XA0668    | IC          | S-80829ALNP          |    |
| JK101    | UJ0044Z   | Jack        | HSJ1621-019011       |    |

| Ref. No. | Parts No. | Description | Parts Name     | X2 |
|----------|-----------|-------------|----------------|----|
| L101     | QC0560    | Coil        | LL1608-FH8N2J  |    |
| L102     | QC0564    | Coil        | LL1608-FH18NJ  |    |
| L103     | QH0007    | Coil        | 5CDM 658AN     |    |
| L105     | QC0586    | Coil        | LQW1608A15NJ00 |    |
| L106     | QC0510    | Coil        | LK1608330M-T   |    |
| L107     | QC0600    | Coil        | LQW1608AR22J00 |    |
| L108     | QC0600    | Coil        | LQW1608AR22J00 |    |
| L109     | QC0600    | Coil        | LQW1608AR22J00 |    |
| L110     | QC0569    | Coil        | LL1608-FH47NJ  |    |
| L111     | QC0506    | Coil        | LK1608R56K-T   |    |
| L112     | QC0570    | Coil        | LL1608-FH56NJ  |    |
| L113     | QC0590    | Coil        | LQW1608A33NJ00 |    |
| L114     | QC0633    | Coil        | MLF1608AR18K-T |    |
| L115     | QC0596    | Coil        | LQW1608AR10J00 |    |
| L116     | QC0596    | Coil        | LQW1608AR10J00 |    |
| L117     | QC0571    | Coil        | LL1608-FH68NJ  |    |
| L118     | QC0600    | Coil        | LQW1608AR22J00 |    |
| L119     | QC0597    | Coil        | LQW1608AR12J00 |    |
| L120     | QC0600    | Coil        | LQW1608AR22J00 |    |
| L121     | QC0568    | Coil        | LL1608-FH39NJ  |    |
| L122     | QC0596    | Coil        | LQW1608AR10J00 |    |
| 123      | QC0596    | Coil        | LQW1608AR10J00 |    |
| L124     | QC0507    | Coil        | LK16081R0K-T   |    |
| L125     | QC0566    | Coil        | LL1608-FH27NJ  |    |
| L126     | QC0589    | Coil        | LQW1608A27NJ00 |    |
| L127     | QC0586    | Coil        | LQW1608A15NJ00 |    |
| L128     | QC0589    | Coil        | LQW1608A27NJ00 |    |
| L129     | QC0564    | Coil        | LL1608-FH18NJ  |    |
| L130     | QC0593    | Coil        | LQW1608A56NJ00 |    |
| L131     | QC0593    | Coil        | LQW1608A56NJ00 |    |
| L132     | QC0586    | Coil        | LQW1608A15NJ00 |    |
| L133     | QC0583    | Coil        | LQW1608A8N2D00 |    |
| L134     | QC0586    | Coil        | LQW1608A15NJ00 |    |
| L135     | QC0562    | Coil        | LL1608-FH12NJ  |    |
| L136     | QC0593    | Coil        | LQW1608A56NJ00 |    |
| L137     | QC0593    | Coil        | LQW1608A56NJ00 |    |
| L138     | QC0497    | Coil        | LQH4N102K04    |    |
| L139     | QC0497    | Coil        | LQH4N102K04    |    |
| L140     | QC0581    | Coil        | LQW1608A5N6D00 |    |
| L141     | QC0579    | Coil        | LQW1608A3N9D00 |    |
| L142     | QC0581    | Coil        | LQW1608A5N6D00 |    |
| L143     | QC0587    | Coil        | LQW1608A18NJ00 |    |
| L144     | QC0585    | Coil        | LQW1608A12NJ00 |    |
| L145     | QC0585    | Coil        | LQW1608A12NJ00 |    |
| L146     | QC0555    | Coil        | LL1608-FH3N3S  |    |
| L147     | QC0573    | Coil        | LL1608-FHR10J  |    |
| L148     | QC0562    | Coil        | LL1608-FH12NJ  |    |
| L149     | QC0507    | Coil        | LK16081R0K-T   |    |
| L150     | QC0507    | Coil        | LK16081R0K-T   |    |
| L151     | QC0507    | Coil        | LK16081R0K-T   |    |
| L152     | QC0507    | Coil        | LK16081R0K-T   |    |
| L153     | QC0506    | Coil        | LK1608R56K-T   |    |
| L154     | QC0560    | Coil        | LL1608-FH8N2J  |    |
| L155     | QC0564    | Coil        | LL1608-FH18NJ  |    |
| L156     | QC0555    | Coil        | LL1608-FH3N3S  |    |
| L157     | QC0560    | Coil        | LL1608-FH8N2J  |    |
| LCD1     | EL0048    | LCD         | LCD XH757      |    |
| Q101     | XT0180    | Transistor  | 2SC5066FT-Y    |    |
| Q102     | XU0196    | Transistor  | DTC143TE       |    |
| Q103     | XT0180    | Transistor  | 2SC5066FT-Y    |    |
| Q104     | XU0092    | Transistor  | UN911H-TX      |    |



| Ref. No. | Parts No. | Description | Parts Name      | X2 | Ref. No. | Parts No. | Description | Parts Name   | X2 |
|----------|-----------|-------------|-----------------|----|----------|-----------|-------------|--------------|----|
| Q105     | XT0180    | Transistor  | 2SC5066FT-Y     |    | R125     | RK3542    | CihpR.      | ERJ2GEJ222X  |    |
| Q106     | XU0196    | Transistor  | DTC143TE        |    | R126     | RK3542    | CihpR.      | ERJ2GEJ222X  |    |
| Q107     | XT0181    | Transistor  | 2SC4738-BL      |    | R127     | RK3526    | CihpR.      | ERJ2GEJ101X  |    |
| Q108     | XT0181    | Transistor  | 2SC4738-BL      |    | R128     | RK3550    | CihpR.      | ERJ2GEJ103X  |    |
| Q109     | XT0180    | Transistor  | 2SC5066FT-Y     |    | R129     | RK3542    | CihpR.      | ERJ2GEJ222X  |    |
| Q110     | XT0180    | Transistor  | 2SC5066FT-Y     |    | R130     | RK3550    | CihpR.      | ERJ2GEJ103X  |    |
| Q111     | XT0172    | Transistor  | 2SC4618TLP      |    | R131     | RK3540    | CihpR.      | ERJ2GEJ152X  |    |
| Q112     | XT0181    | Transistor  | 2SC4738-BL      |    | R132     | RK3530    | CihpR.      | ERJ2GEJ221X  |    |
| Q113     | XU0171    | Transistor  | XP1111-TX       |    | R133     | RK3550    | CihpR.      | ERJ2GEJ103X  |    |
| Q114     | XU0171    | Transistor  | XP1111-TX       |    | R134     | RK3542    | CihpR.      | ERJ2GEJ222X  |    |
| Q115     | XU0171    | Transistor  | XP1111-TX       |    | R135     | RK3522    | CihpR.      | ERJ2GEJ470X  |    |
| Q116     | XT0180    | Transistor  | 2SC5066FT-Y     |    | R136     | RK3542    | CihpR.      | ERJ2GEJ222X  |    |
| Q117     | XT0135    | Transistor  | 2SD2216R-TX     |    | R137     | RK3538    | CihpR.      | ERJ2GEJ102X  |    |
| Q118     | XT0180    | Transistor  | 2SC5066FT-Y     |    | R138     | RK3546    | CihpR.      | ERJ2GEJ472X  |    |
| Q119     | XU0092    | Transistor  | UN911H-TX       |    | R139     | RK3522    | CihpR.      | ERJ2GEJ470X  |    |
| Q120     | XT0135    | Transistor  | 2SD2216R-TX     |    | R140     | RK3522    | CihpR.      | ERJ2GEJ470X  |    |
| Q121     | XU0092    | Transistor  | UN911H-TX       |    | R141     | RK3542    | CihpR.      | ERJ2GEJ222X  |    |
| Q122     | XU0196    | Transistor  | DTC143TE        |    | R142     | RK3526    | CihpR.      | ERJ2GEJ101X  |    |
| Q123     | XT0182    | Transistor  | 2SC5096FT-O     |    | R143     | RK3562    | CihpR.      | ERJ2GEJ104X  |    |
| Q124     | XT0135    | Transistor  | 2SD2216R-TX     |    | R144     | RK3562    | CihpR.      | ERJ2GEJ104X  |    |
| Q125     | XU0152    | Transistor  | UMC5NTR         |    | R145     | RK3570    | CihpR.      | ERJ2GEJ474X  |    |
| Q126     | XT0182    | Transistor  | 2SC5096FT-O     |    | R146     | RK3550    | CihpR.      | ERJ2GEJ103X  |    |
| Q127     | XU0171    | Transistor  | XP1111-TX       |    | R147     | RK3530    | CihpR.      | ERJ2GEJ221X  |    |
| Q128     | XU0171    | Transistor  | XP1111-TX       |    | R148     | RK3522    | CihpR.      | ERJ2GEJ470X  |    |
| Q129     | XU0171    | Transistor  | XP1111-TX       |    | R149     | RK3550    | CihpR.      | ERJ2GEJ103X  |    |
| Q130     | XU0171    | Transistor  | XP1111-TX       |    | R150     | RK3542    | CihpR.      | ERJ2GEJ222X  |    |
| Q131     | XU0171    | Transistor  | XP1111-TX       |    | R151     | RK3032    | CihpR.      | MCR03EZHJ331 |    |
| Q132     | XT0135    | Transistor  | 2SD2216R-TX     |    | R152     | RK3522    | CihpR.      | ERJ2GEJ470X  |    |
| Q133     | XT0180    | Transistor  | 2SC5066FT-Y     |    | R153     | RK3550    | CihpR.      | ERJ2GEJ103X  |    |
| Q134     | XT0180    | Transistor  | 2SC5066FT-Y     |    | R154     | RK3522    | CihpR.      | ERJ2GEJ470X  |    |
| Q135     | XT0180    | Transistor  | 2SC5066FT-Y     |    | R155     | RK3542    | CihpR.      | ERJ2GEJ222X  |    |
| Q136     | XU0196    | Transistor  | DTC143TE        |    | R156     | RK3542    | CihpR.      | ERJ2GEJ222X  |    |
| Q137     | XU0152    | Transistor  | UMC5NTR         |    | R157     | RK3546    | CihpR.      | ERJ2GEJ472X  |    |
| Q138     | XT0180    | Transistor  | 2SC5066FT-Y     |    | R158     | RK3559    | CihpR.      | ERJ2GEJ563X  |    |
| Q139     | XT0135    | Transistor  | 2SD2216R-TX     |    | R159     | RK3554    | CihpR.      | ERJ2GEJ223X  |    |
| Q140     | XE0036    | FET         | 2SK881-Y(TE85R) |    | R160     | RK3550    | CihpR.      | ERJ2GEJ103X  |    |
| Q141     | XE0019    | FET         | 2SJ144Y TE85R   |    | R161     | RK3550    | Cihp R.     | ERJ2GEJ103X  |    |
| R101     | RK3542    | Cihp R.     | ERJ2GEJ222X     |    | R162     | RK3522    | Cihp R.     | ERJ2GEJ470X  |    |
| R102     | RK3522    | Cihp R.     | ERJ2GEJ470X     |    | R163     | RK3566    | Cihp R.     | ERJ2GEJ224X  |    |
| R103     | RK3542    | Cihp R.     | ERJ2GEJ222X     |    | R164     | RK3554    | Cihp R.     | ERJ2GEJ223X  |    |
| R104     | RK3542    | Cihp R.     | ERJ2GEJ222X     |    | R165     | RK3558    | Cihp R.     | ERJ2GEJ473X  |    |
| R105     | RK3562    | Cihp R.     | ERJ2GEJ104X     |    | R166     | RK3542    | Cihp R.     | ERJ2GEJ222X  |    |
| R106     | RK3021    | Cihp R.     | MCR03EZHJ390    |    | R167     | RK3542    | Cihp R.     | ERJ2GEJ222X  |    |
| R107     | RK3021    | Cihp R.     | MCR03EZHJ390    |    | R168     | RK3538    | Cihp R.     | ERJ2GEJ102X  |    |
| R108     | RK3546    | Cihp R.     | ERJ2GEJ472X     |    | R169     | RK3538    | Cihp R.     | ERJ2GEJ102X  |    |
| R109     | RK3522    | Cihp R.     | ERJ2GEJ470X     |    | R170     | RK3542    | Cihp R.     | ERJ2GEJ222X  |    |
| R110     | RK3542    | Cihp R.     | ERJ2GEJ222X     |    | R171     | RK3556    | Cihp R.     | ERJ2GEJ333X  |    |
| R111     | RK3562    | Cihp R.     | ERJ2GEJ104X     |    | R172     | RK3550    | Cihp R.     | ERJ2GEJ103X  |    |
| R112     | RK3522    | Cihp R.     | ERJ2GEJ470X     |    | R173     | RK3071    | Cihp R.     | MCR03EZHJ564 |    |
| R113     | RK3542    | Cihp R.     | ERJ2GEJ222X     |    | R174     | RK3555    | Cihp R.     | ERJ2GEJ273X  |    |
| R114     | RK3530    | Cihp R.     | ERJ2GEJ221X     |    | R175     | RK3566    | Cihp R.     | ERJ2GEJ224X  |    |
| R115     | RK3014    | Cihp R.     | MCR03EZHJ100    |    | R176     | RK3550    | Cihp R.     | ERJ2GEJ103X  |    |
| R116     | RK3522    | Cihp R.     | ERJ2GEJ470X     |    | R177     | RK3550    | Cihp R.     | ERJ2GEJ103X  |    |
| R117     | RK3550    | Cihp R.     | ERJ2GEJ103X     |    | R178     | RK3550    | Cihp R.     | ERJ2GEJ103X  |    |
| R118     | RK3542    | Cihp R.     | ERJ2GEJ222X     |    | R179     | RK3546    | Cihp R.     | ERJ2GEJ472X  |    |
| R119     | RK3542    | Cihp R.     | ERJ2GEJ222X     |    | R180     | RK3542    | Cihp R.     | ERJ2GEJ222X  |    |
| R120     | RK3542    | Cihp R.     | ERJ2GEJ222X     |    | R181     | RK3526    | Cihp R.     | ERJ2GEJ101X  |    |
| R121     | RK3562    | Cihp R.     | ERJ2GEJ104X     |    | R182     | RK3522    | Cihp R.     | ERJ2GEJ470X  |    |
| R122     | RK3048    | Cihp R.     | MCR03EZHJ682    |    | R183     | RK3542    | Cihp R.     | ERJ2GEJ222X  |    |
| R123     | RK3556    | Cihp R.     | ERJ2GEJ333X     |    | R184     | RK3542    | Cihp R.     | ERJ2GEJ222X  |    |
| R124     | RK3542    | Cihp R.     | ERJ2GEJ222X     |    | R185     | RK3559    | Cihp R.     | ERJ2GEJ563X  |    |

| Ref. No. | Parts No. | Description | Parts Name   | X2 |
|----------|-----------|-------------|--------------|----|
| R186     | RK3550    | Cihp R.     | ERJ2GEJ103X  |    |
| R187     | RK3053    | Cihp R.     | MCR03EZJH183 |    |
| R188     | RK3538    | Cihp R.     | ERJ2GEJ102X  |    |
| R189     | RK3554    | Cihp R.     | ERJ2GEJ223X  |    |
| R190     | RK3554    | Cihp R.     | ERJ2GEJ223X  |    |
| R191     | RK3528    | Cihp R.     | ERJ2GEJ151X  |    |
| R192     | RK3554    | Cihp R.     | ERJ2GEJ223X  |    |
| R193     | RK3542    | Cihp R.     | ERJ2GEJ222X  |    |
| R194     | RK3570    | Cihp R.     | ERJ2GEJ474X  |    |
| R195     | RK3554    | Cihp R.     | ERJ2GEJ223X  |    |
| R196     | RK3542    | Cihp R.     | ERJ2GEJ222X  |    |
| R197     | RK3550    | Cihp R.     | ERJ2GEJ103X  |    |
| R198     | RK3546    | Cihp R.     | ERJ2GEJ472X  |    |
| R199     | RK3550    | Cihp R.     | ERJ2GEJ103X  |    |
| R200     | RK3522    | Cihp R.     | ERJ2GEJ470X  |    |
| R201     | RK3558    | Cihp R.     | ERJ2GEJ473X  |    |
| R202     | RK3562    | Cihp R.     | ERJ2GEJ104X  |    |
| R203     | RK3542    | Cihp R.     | ERJ2GEJ222X  |    |
| R204     | RK3559    | Cihp R.     | ERJ2GEJ563X  |    |
| R205     | RK3559    | Cihp R.     | ERJ2GEJ563X  |    |
| R206     | RK3559    | Cihp R.     | ERJ2GEJ563X  |    |
| R207     | RK3574    | Cihp R.     | ERJ2GEJ105X  |    |
| R208     | RK3034    | Cihp R.     | MCR03EZJH471 |    |
| R209     | RK3550    | Cihp R.     | ERJ2GEJ103X  |    |
| R210     | RK3052    | Cihp R.     | MCR03EZJH153 |    |
| R211     | RK3014    | Cihp R.     | MCR03EZJH100 |    |
| R212     | RK3538    | Cihp R.     | ERJ2GEJ102X  |    |
| R213     | RK3556    | Cihp R.     | ERJ2GEJ333X  |    |
| R214     | RK3570    | Cihp R.     | ERJ2GEJ474X  |    |
| R215     | RK3558    | Cihp R.     | ERJ2GEJ473X  |    |
| R216     | RK3554    | Cihp R.     | ERJ2GEJ223X  |    |
| R217     | RK3550    | Cihp R.     | ERJ2GEJ103X  |    |
| R218     | RK3550    | Cihp R.     | ERJ2GEJ103X  |    |
| R219     | RK3060    | Cihp R.     | MCR03EZJH683 |    |
| R221     | RK3550    | Cihp R.     | ERJ2GEJ103X  |    |
| R222     | RK3542    | Cihp R.     | ERJ2GEJ222X  |    |
| R223     | RK3052    | Cihp R.     | MCR03EZJH153 |    |
| R224     | RK3542    | Cihp R.     | ERJ2GEJ222X  |    |
| R225     | RK3522    | Cihp R.     | ERJ2GEJ470X  |    |
| R226     | RK3542    | Cihp R.     | ERJ2GEJ222X  |    |
| R227     | RK3574    | Cihp R.     | ERJ2GEJ105X  |    |
| R228     | RK3018    | Cihp R.     | MCR03EZJH220 |    |
| R229     | RK3556    | Cihp R.     | ERJ2GEJ333X  |    |
| R230     | RK3550    | Cihp R.     | ERJ2GEJ103X  |    |
| R231     | RK3566    | Cihp R.     | ERJ2GEJ224X  |    |
| R232     | RK3568    | Cihp R.     | ERJ2GEJ334X  |    |
| R233     | RK3562    | Cihp R.     | ERJ2GEJ104X  |    |
| R234     | RK3556    | Cihp R.     | ERJ2GEJ333X  |    |
| R235     | RK3568    | Cihp R.     | ERJ2GEJ334X  |    |
| R236     | RK3546    | Cihp R.     | ERJ2GEJ472X  |    |
| R237     | RK3546    | Cihp R.     | ERJ2GEJ472X  |    |
| R238     | RK3522    | Cihp R.     | ERJ2GEJ470X  |    |
| R239     | RK3568    | Cihp R.     | ERJ2GEJ334X  |    |
| R240     | RK3550    | Cihp R.     | ERJ2GEJ103X  |    |
| R241     | RK3562    | Cihp R.     | ERJ2GEJ104X  |    |
| R242     | RK3550    | Cihp R.     | ERJ2GEJ103X  |    |
| R243     | RK3542    | Cihp R.     | ERJ2GEJ222X  |    |
| R244     | RK3550    | Cihp R.     | ERJ2GEJ103X  |    |
| R245     | RK3538    | Cihp R.     | ERJ2GEJ102X  |    |
| R246     | RK3562    | Cihp R.     | ERJ2GEJ104X  |    |
| R247     | RK3526    | Cihp R.     | ERJ2GEJ101X  |    |
| R248     | RK3554    | Cihp R.     | ERJ2GEJ223X  |    |
| R249     | RK3542    | Cihp R.     | ERJ2GEJ222X  |    |
| R250     | RK3546    | Cihp R.     | ERJ2GEJ472X  |    |
| R251     | RK3542    | Cihp R.     | ERJ2GEJ222X  |    |
| R252     | RK3558    | Cihp R.     | ERJ2GEJ473X  |    |

| Ref. No. | Parts No. | Description | Parts Name      | X2  |
|----------|-----------|-------------|-----------------|-----|
| R253     | RK3522    | Cihp R.     | ERJ2GEJ470X     |     |
| R254     | RK3550    | Cihp R.     | ERJ2GEJ103X     |     |
| R255     | RK3574    | Cihp R.     | ERJ2GEJ105X     |     |
| R256     | RK3562    | Cihp R.     | ERJ2GEJ104X     |     |
| R257     | RK3530    | Cihp R.     | ERJ2GEJ221X     |     |
| R258     | RK3562    | Cihp R.     | ERJ2GEJ104X     |     |
| R259     | RK3530    | Cihp R.     | ERJ2GEJ221X     |     |
| SW101    | UU0019    | Switch      | SKQLLC          |     |
| SW102    | UU0019    | Switch      | SKQLLC          |     |
| SW103    | US0021    | Switch      | SSSS812-B-2A    |     |
| SW104    | US0022    | Switch      | HSW1060-01-010  |     |
| TC101    | CT0037    | Trimmer     | CTZ2S-10A-W2    |     |
| X101     | XQ0123    | Crystal     | 12.8MHz         |     |
| XF101    | XF0047    | Filter      | 38.85MHz        |     |
|          | UP0405    | PCB         | DJX2 INTEGRATED | 0.5 |

#### Mechanical Parts

| Parts No. | Description | Parts Name         | Ver |
|-----------|-------------|--------------------|-----|
| KB0079    |             | Rear Case          |     |
| DK0137    |             | Panel              |     |
| FP0116    |             | Power switch       |     |
| FP0122    |             | Terminal base      |     |
| ED0008A   |             | Li-ion Battery     |     |
| ES0020    |             | Speaker            |     |
| MRCKH9GG  |             | Wire #28RH1-095-H1 |     |
| MBCKH9GG  |             | Wire #28BH1-095-H1 |     |
| YX0023    |             | SP tape P88        |     |
| FG0229Z   |             | Mic Cushion        |     |
| AX0005    |             | OP 1.7*5.5 Ni3     | 3   |
| AP0027    |             | P 2*8 Ni           | 2   |
| FG0311    |             | BA Cushion         |     |
| YX0025    |             | BA tape            |     |
| EA0082    |             | Bar Antenna        |     |
| KZ0106    |             | Front Case Assy    |     |
| FP0154    |             | PTT knob           |     |
| NS0007    |             | Slide knob         |     |
| FM0185    |             | Strut              |     |
| FM0186    |             | Antenna earth      |     |
| UE0395    |             | Antenna connector  |     |
| FP0157    |             | AT connector sheet |     |
| TN0008    |             | Antenna shield     |     |
| AN0027    |             | Antenna nut        |     |

#### Packing Parts

| Parts No. | Description | Parts Name              | Ver |
|-----------|-------------|-------------------------|-----|
| EDH27     |             | Drycall Case EDH-27     |     |
| EDC76     |             | Wall charger EDC-76Z    | T   |
| EDC77     |             | Wall charger EDC-77Z    | E   |
| EA81      |             | Antenna                 |     |
| FG0309    |             | Antenna Cap             |     |
| EME18     |             | Earphone (EZ0005)       |     |
| PR0435    |             | Quick Manual label      |     |
| PS0340    |             | Instruction Manual      |     |
| PH0009A   |             | Warranty                | T   |
| DS0419    |             | Spec.sheet DJ-X2T       | T   |
| DS0388A   |             | Spec.sheet DJ-X2E       | E   |
| PR0447    |             | FCC Warning label       | T   |
| PR0309    |             | CE label                | E   |
| HK0495    |             | Item Carton DJ-X2       |     |
| HU0154    |             | Fixture                 |     |
| HM0192    |             | Carton 10pcs            |     |
| HU0155    |             | Fixture 10pcs           |     |
| HP0006    |             | Protection Bag 5*90*170 |     |
| HP0016    |             | Protection Bag 5*75*90  |     |
| PR0452    |             | FCC homeuse label       |     |
| PT0004A   |             | Serial No.for Carton    |     |
| PR0453    |             | T label for Carton      | T   |

# ADJUSTMENT

## 1) Entering and releasing the adjustment mode

DJ-X2 adjusts various items in the adjustment mode.

1. Press FUNC key more than 1 sec. (The key is locked.)
2. Press PS, 10MHz, MONI, V/P/M, 1MHz, SCAN, VOL/SQL and MONI with the keyboard.
3. "FrEq" is indicated and the unit enters the adjustment mode.
4. Press FUNC key to settle the adjustment when finished, then go back to the normal mode.

## 2) Adjustment

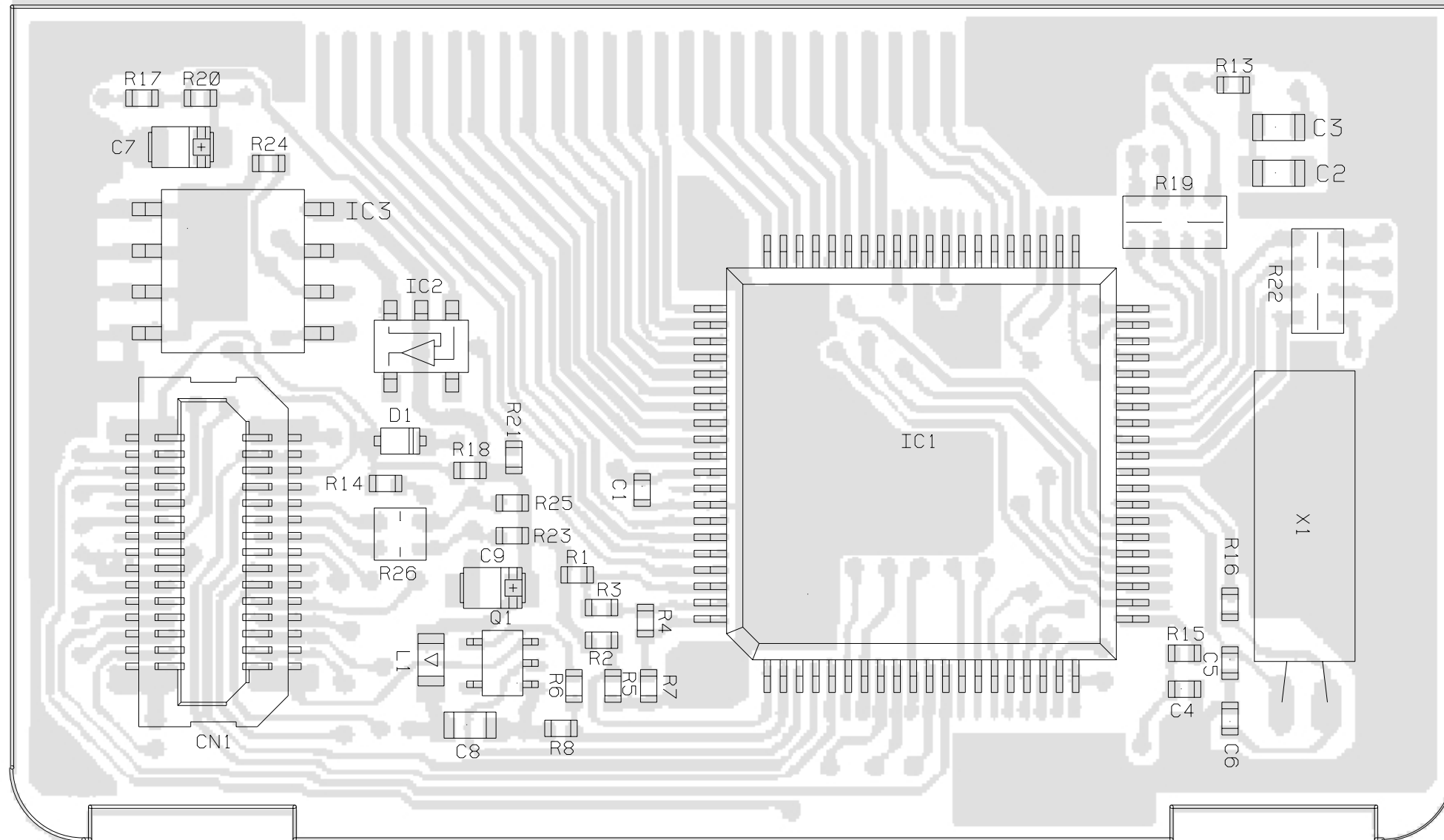
| No. | Display | Items                       | Points    |
|-----|---------|-----------------------------|-----------|
| 1   | FrEq    | Reference frequency         | TC101     |
| 2   | FrEq    | AF output                   | L103      |
| 3   | 1 n 1   | BP1 squelch level 1 setting | V/P/M key |
| 4   | 1 n F   | BP1 squelch level 5 setting | V/P/M key |
| 5   | 2 n 1   | BP2 squelch level 1 setting | V/P/M key |
| 6   | 2 n F   | BP2 squelch level 5 setting | V/P/M key |
| 7   | 3 n 1   | BP3 squelch level 1 setting | V/P/M key |
| 8   | 3 n F   | BP3 squelch level 5 setting | V/P/M key |
| 9   | 4 n 1   | BP4 squelch level 1 setting | V/P/M key |
| 10  | 4 n F   | BP4 squelch level 5 setting | V/P/M key |
| 11  | 5 n 1   | BP5 squelch level 1 setting | V/P/M key |
| 12  | 5 n F   | BP5 squelch level 5 setting | V/P/M key |
| 13  | 6 n 1   | BP6 squelch level 1 setting | V/P/M key |
| 14  | 6 n F   | BP6 squelch level 5 setting | V/P/M key |
| 15  | 3 S 1   | BP3 S-meter level 1 setting | V/P/M key |
| 16  | 3 S F   | BP3 S-meter level 5 setting | V/P/M key |
| 17  | n 1     | WFM squelch level 1 setting | V/P/M key |
| 18  | n F     | WFM squelch level 5 setting | V/P/M key |
| 19  | S 1     | WFM S-meter level 1 setting | V/P/M key |
| 20  | S F     | WFM S-meter level 5 setting | V/P/M key |

The display can be changed using UP/DOWN key.

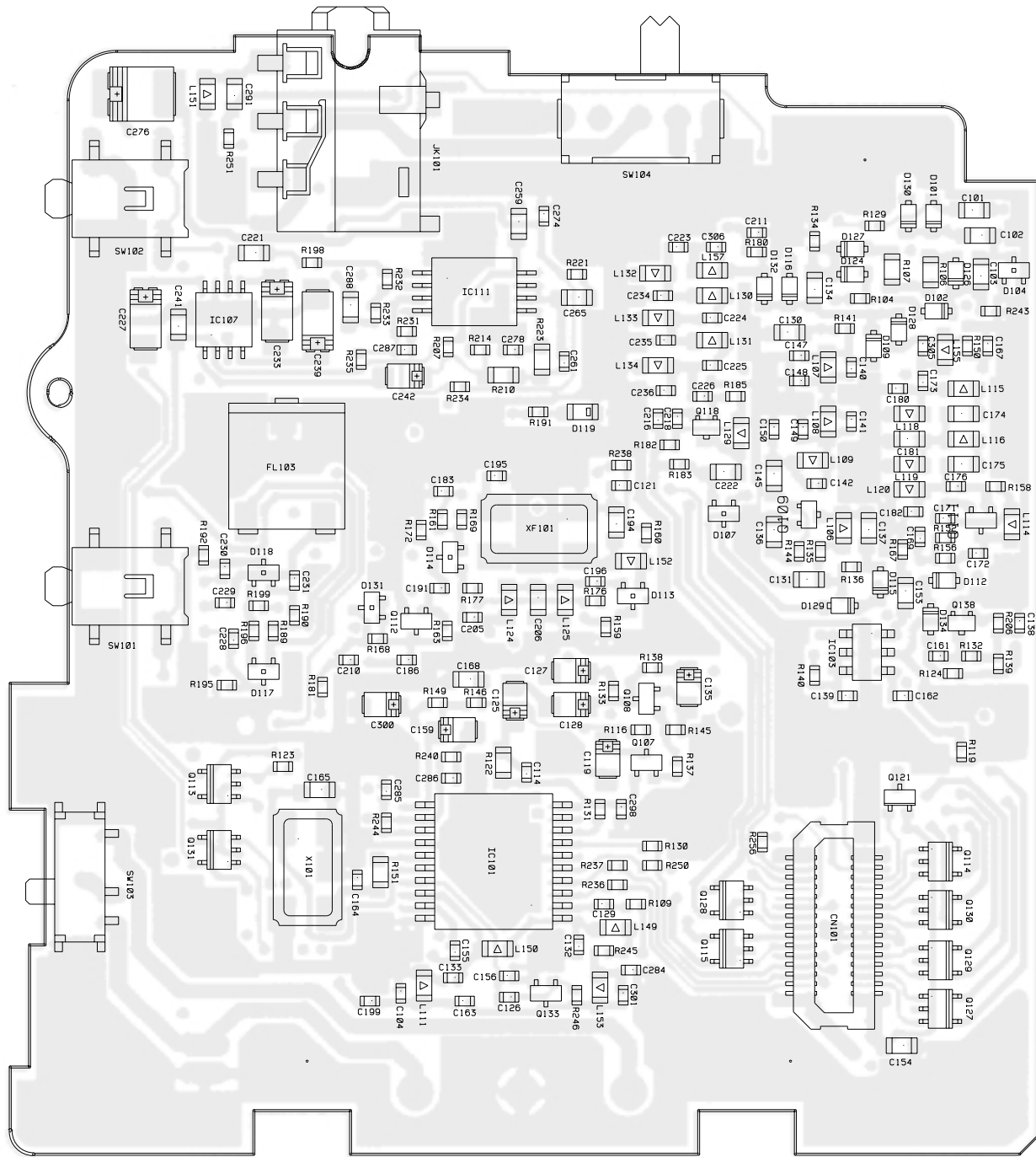
| NO | Item                | Condition  | Adjustment  |              |   | Spec                |  |
|----|---------------------|--|---|--------------|---|---------------------|--|
|    |                     |  | Disp  | Part         | Method  |                     |  |
| 1  | Reference frequency | f=142.60   | FrEq  | TC101        | f=391.05                                      | 391.05MHz<br>±100Hz |  |
| 2  | AF output           | f=142.60<br>Output:30dBμ<br>Mod:1kHz<br>Dev:3.5kHz     | FrEq  | L103         | AF level<br>max                               |                     |  |
| 3  | Squelch             | f=14.1MHz<br>Output:-11dBμ<br>Mod:1kHz<br>Dev:3.5kHz   | 1 n 1   | V/P/M<br>key | Press FUNC<br>key to finish.<br>A beep sounds |                     |  |
| 4  |                     | f=14.1MHz<br>Output:-5dBμ<br>Mod:1kHz<br>Dev:3.5kHz    | 1 n F   |              |   |                     |  |
| 5  |                     | f=109.15MHz<br>Output:-8dBμ<br>Mod:1kHz<br>Dev:3.5kHz  | 2 n 1   |              |   |                     |  |
| 6  |                     | f=109.15MHz<br>Output:-2dBμ<br>Mod:1kHz<br>Dev:3.5kHz  | 2 n F   |              |   |                     |  |
| 7  |                     | f=145.13MHz<br>Output:-11dBμ<br>Mod:1kHz<br>Dev:3.5kHz | 3 n 1   |              |   |                     |  |
| 8  |                     | f=145.13MHz<br>Output:-5dBμ<br>Mod:1kHz<br>Dev:3.5kHz  | 3 n F   |              |   |                     |  |
| 9  |                     | f=290.15MHz<br>Output:-10dBμ<br>Mod:1kHz<br>Dev:3.5kHz | 4 n 1   |              |   |                     |  |
| 10 |                     | f=290.15MHz<br>Output:-5dBμ<br>Mod:1kHz<br>Dev:3.5kHz  | 4 n F   |              |   |                     |  |
| 11 |                     | f=435.13MHz<br>Output:-9dBμ<br>Mod:1kHz<br>Dev:3.5kHz  | 5 n 1   |              |   |                     |  |
| 12 |                     | f=435.13MHz<br>Output:-3dBμ<br>Mod:1kHz<br>Dev:3.5kHz  | 5 n F   |              |   |                     |  |
| 13 |                     | f=797.10MHz<br>Output:-6dBμ<br>Mod:1kHz<br>Dev:3.5kHz  | 6 n 1   |              |   |                     |  |
| 14 |                     | f=797.10MHz<br>Output:0dBμ<br>Mod:1kHz<br>Dev:3.5kHz   | 6 n F   |              |   |                     |  |
| 15 |                     | S meter  | f=145.13MHz<br>Output:-5dBμ<br>Mod:1kHz<br>Dev:3.5kHz |              |   | 3 S 1               |  |
| 16 |                     |  | f=145.13MHz<br>Output:15dBμ<br>Mod:1kHz<br>Dev:3.5kHz |              |   | 3 S 5               |  |
| 17 | Squelch<br>(WFM)    | f=90.50MHz<br>Output:7dBμ<br>Mod:1kHz<br>Dev:22.5kHz   | n 1   |              |   |                     |  |
| 18 |                     | f=90.50MHz<br>Output:16dBμ<br>Mod:1kHz<br>Dev:22.5kHz  | n 5   |              |   |                     |  |
| 19 | S meter<br>(WFM)    | f=90.50MHz<br>Output:12dBμ<br>Mod:1kHz<br>Dev:22.5kHz  | S 1   |              |   |                     |  |
| 20 |                     | f=90.50MHz<br>Output:19dBμ<br>Mod:1kHz<br>Dev:22.5kHz  | S F   |              |   |                     |  |

# PC BOARD VIEW

## 1) CPU Unit Side A

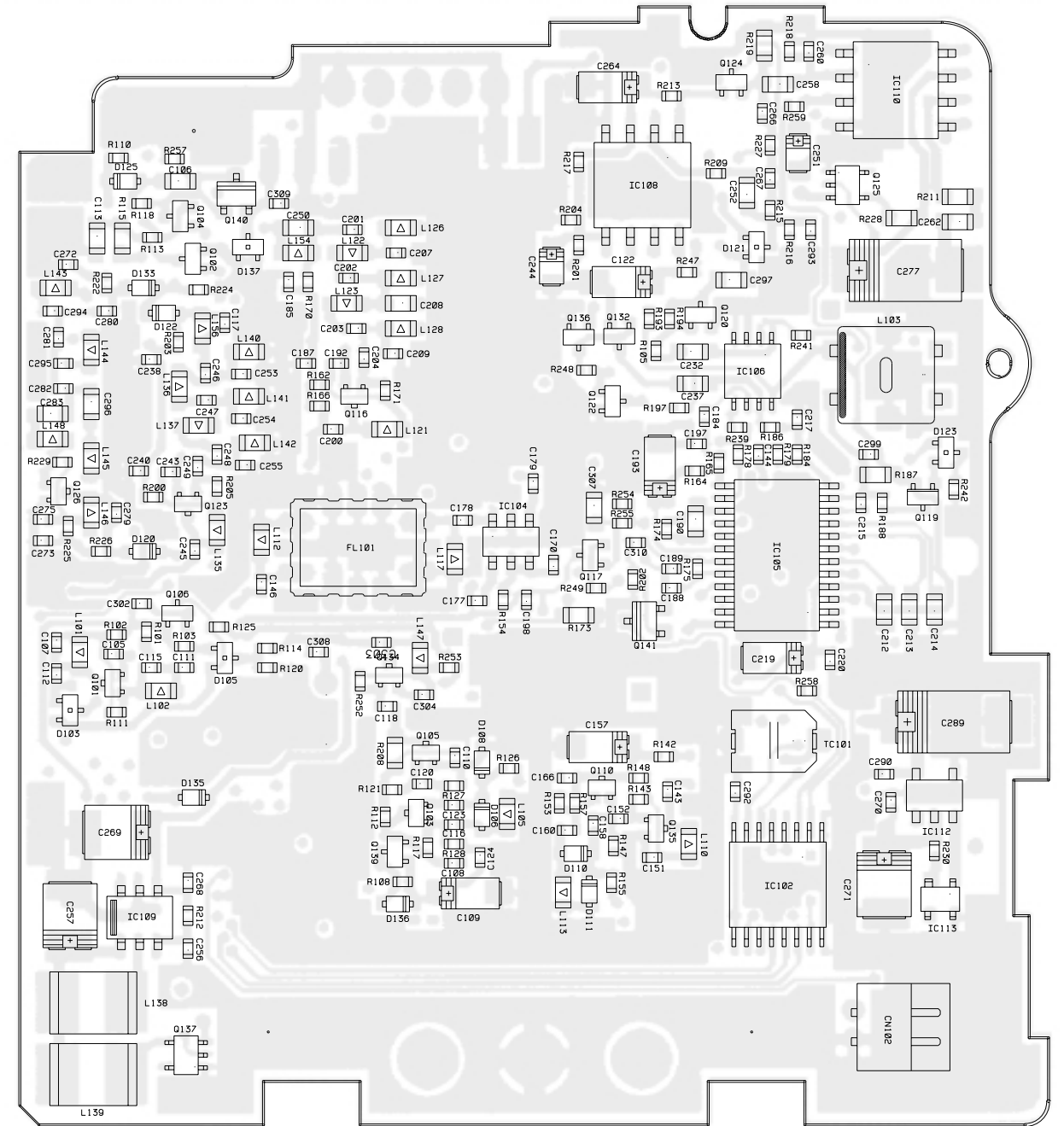


2) MAIN Unit Side A



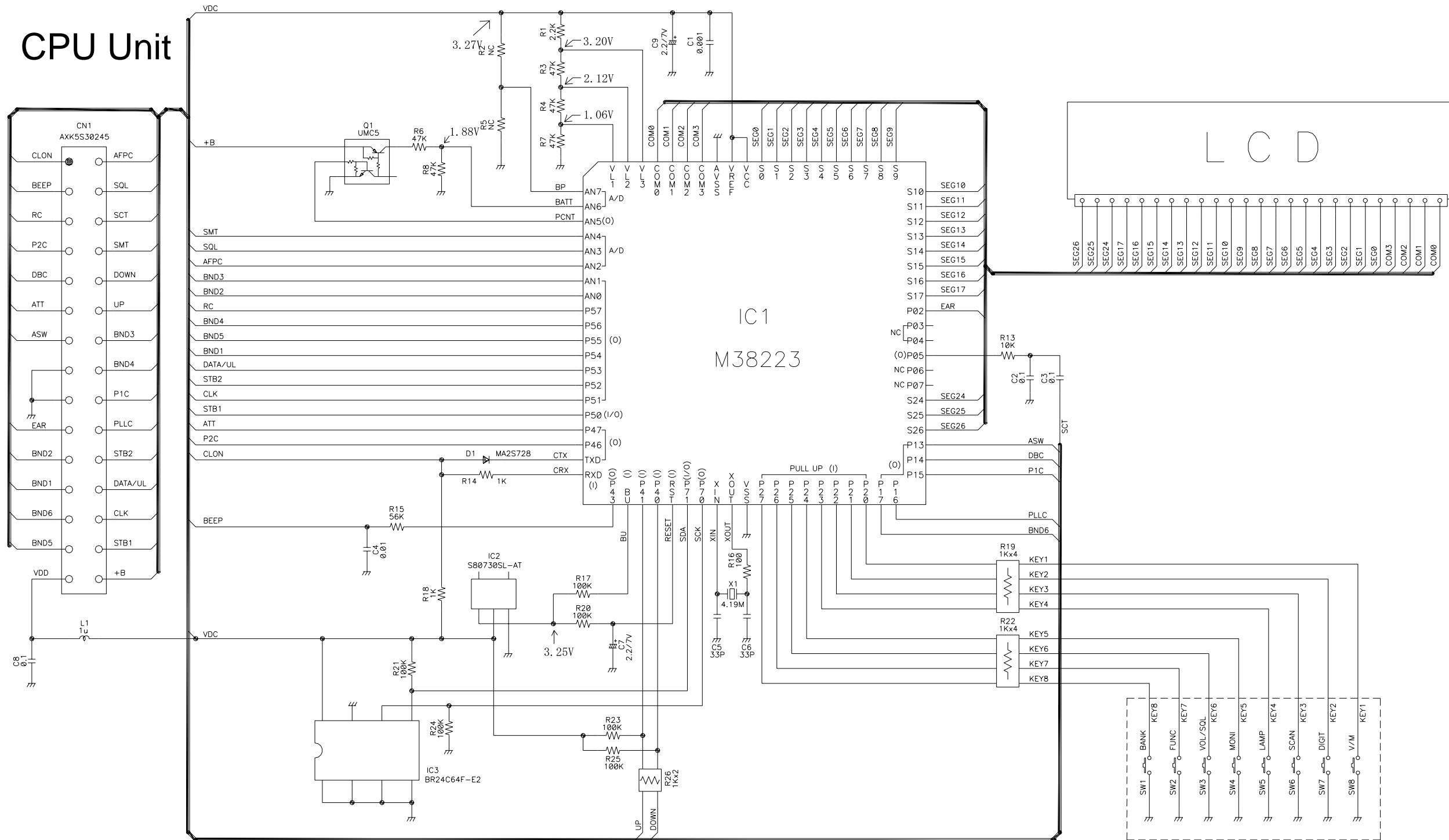
TP108

3) MAIN Unit Side B (UPO 400 1/1)



# SCHMATIC DIAGRAM

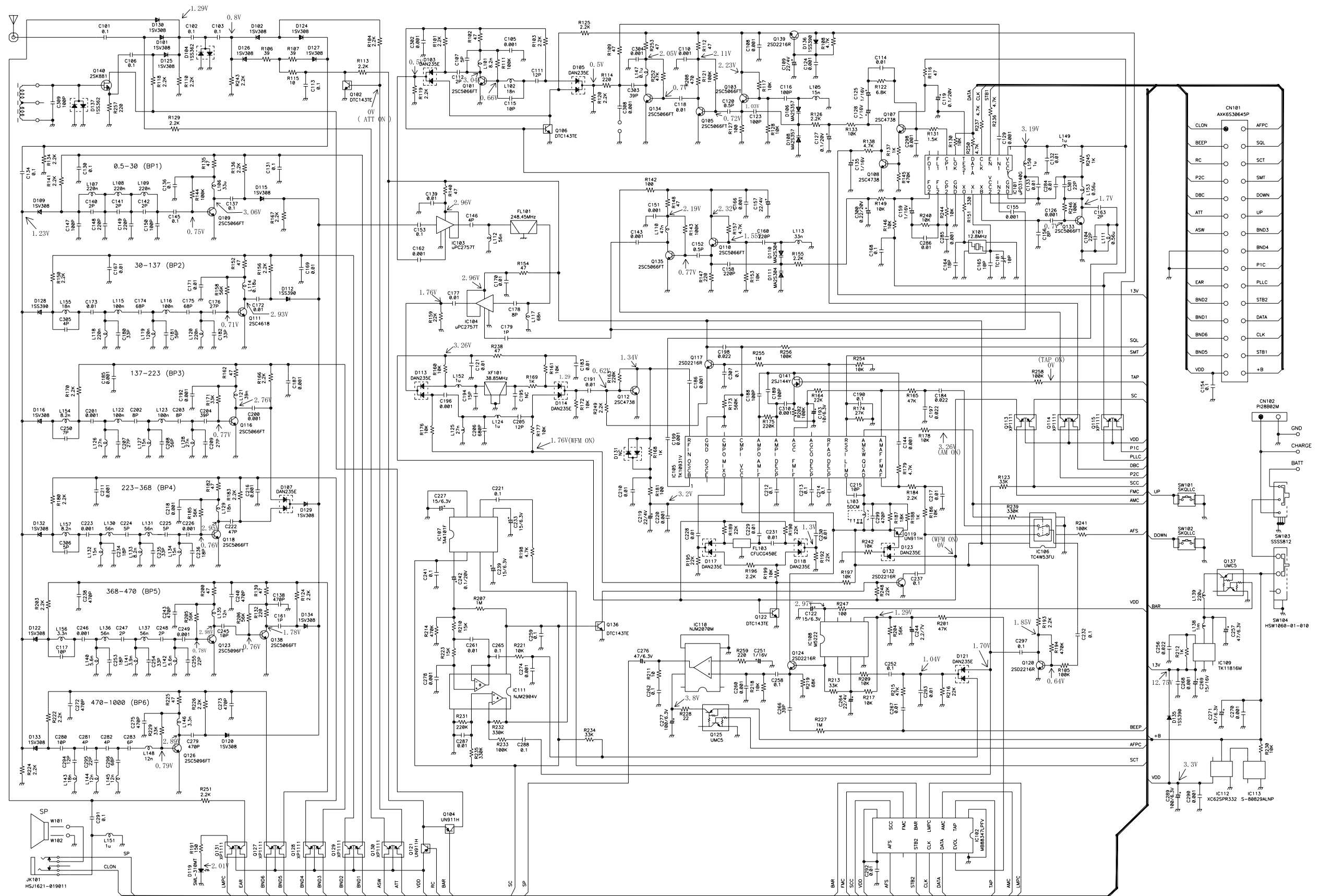
## 1) CPU Unit



|          | IC1             |
|----------|-----------------|
| X2 , X2E | M38224M6M-141HP |
| X2T      | M38224M6M-142HP |

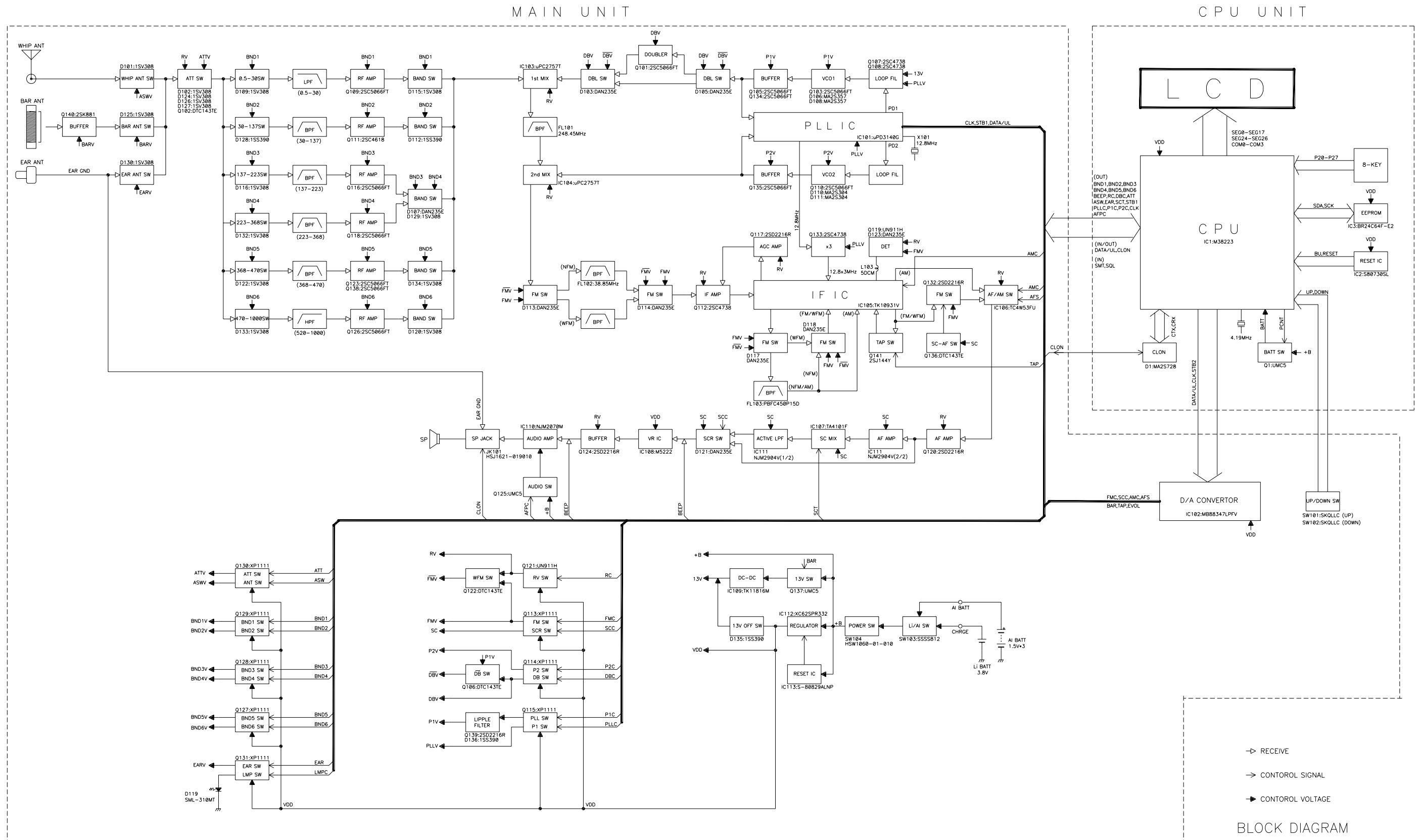
# 2) MAIN Unit

## MAIN Unit





# BLOCK DIAGRAM







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