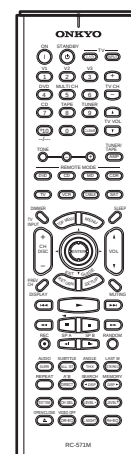
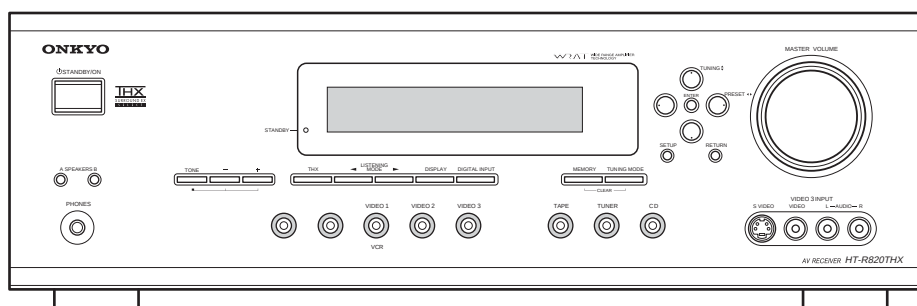


# ONKYO SERVICE MANUAL

## AV RECEIVER MODEL HT-R820THX



RC-571M

**Black model**

|      |               |
|------|---------------|
| BMDC | 120V AC, 60Hz |
|------|---------------|

### SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK  ON THE SCHEMATIC DIAGRAM AND IN THE PARTS LIST ARE CRITICAL FOR RISK OF FIRE AND ELECTRIC SHOCK. REPLACE THESE COMPONENTS WITH ONKYO PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL.

MAKE LEAKAGE-CURRENT OR RESISTANCE MEASUREMENTS TO DETERMINE THAT EXPOSED PARTS ARE ACCEPTABLY INSULATED FROM THE SUPPLY CIRCUIT BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

## SPECIFICATIONS

### Amplifier Section

|                                         |                                                                  |
|-----------------------------------------|------------------------------------------------------------------|
| <b>Power output:</b>                    | 130 W (8 $\Omega$ , 20 Hz-20 kHz, FTC)                           |
| <b>All channels:</b>                    | 2 x 260 W (3 $\Omega$ , front)                                   |
| <b>Dynamic power:</b>                   | 2 x 200 W (4 $\Omega$ , front)<br>2 x 150 W (8 $\Omega$ , front) |
| <b>THD (total harmonic distortion):</b> | 0.08% (rated power)                                              |
| <b>Damping factor:</b>                  | 60 (front, 1 kHz, 8 $\Omega$ )                                   |
| <b>Input sensitivity and impedance:</b> | 200 mV/47 k $\Omega$ (LINE)                                      |
| <b>Output level and impedance:</b>      | 200 mV/470 $\Omega$ (REC OUT)                                    |
| <b>Frequency response:</b>              | 10 Hz-100 kHz/+1 dB,<br>-3 dB (Direct mode)                      |
| <b>Tone control:</b>                    | $\pm$ 12 dB, 50 Hz (BASS)<br>$\pm$ 12 dB, 20,000 Hz (TREBLE)     |
| <b>S/N ratio (Direct mode):</b>         | 100 dB (CD, IHF-A)                                               |
| <b>Speaker impedance:</b>               | 8 $\Omega$ ~                                                     |

### Video Section

|                                                       |                                                                                                                                                                                |
|-------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Input sensitivity, output level and impedance:</b> | 1.0 Vp-p/75 $\Omega$<br>(component and S-Video Y)<br>0.7 Vp-p/75 $\Omega$<br>(component PB/CB, PR/CR)<br>0.28 Vp-p/75 $\Omega$ (S-Video C)<br>1.0 Vp-p/75 $\Omega$ (composite) |
| <b>Component video frequency response:</b>            | 5 Hz-50 MHz                                                                                                                                                                    |

### Tuner Section

#### ■ FM

|                                |                                                                                                      |
|--------------------------------|------------------------------------------------------------------------------------------------------|
| <b>Tuning frequency range:</b> | 87.5-107.9 MHz                                                                                       |
| <b>Usable sensitivity:</b>     | FM STEREO 17.2 dBf, 2.0 $\mu$ V (75 $\Omega$ IHF)<br>FM MONO 11.2 dBf, 1.0 $\mu$ V (75 $\Omega$ IHF) |
| <b>S/N ratio:</b>              | FM STEREO 70 dB (IHF-A)<br>FM MONO 76 dB (IHF-A)                                                     |
| <b>THD:</b>                    | FM STEREO 0.3% (1 kHz)<br>FM MONO 0.2% (1 kHz)                                                       |
| <b>FM stereo separation:</b>   | 45 dB at 1 kHz                                                                                       |

#### ■ AM

|                                |              |
|--------------------------------|--------------|
| <b>Tuning frequency range:</b> | 530-1710 kHz |
| <b>Usable sensitivity:</b>     | 30 $\mu$ V   |
| <b>S/N ratio:</b>              | 40 dB        |
| <b>THD:</b>                    | 0.7%         |

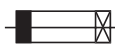
### General

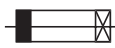
|                                    |                                                      |
|------------------------------------|------------------------------------------------------|
| <b>Power supply:</b>               | AC 120 V, 60 Hz                                      |
| <b>Power consumption:</b>          | 6.6 A                                                |
| <b>Standby power consumption:</b>  | 2.5 W                                                |
| <b>Dimensions</b>                  |                                                      |
| <b>(W x H x D):</b>                | 17-1/8" x 5-7/8" x 14-13/16"<br>(435 x 150 x 376 mm) |
| <b>Weight:</b>                     | 22.5 lbs. (10.2 kg)                                  |
| <b>■ Video Inputs</b>              |                                                      |
| <b>Component video inputs:</b>     | 2 (DVD, Video 1/2/3)                                 |
| <b>S-Video inputs:</b>             | 4 (DVD, Video 1-3)                                   |
| <b>Video inputs:</b>               | 4 (DVD, Video 1-3)                                   |
| <b>■ Video Outputs</b>             |                                                      |
| <b>Component video outputs:</b>    | 1 (Component Video Out)                              |
| <b>S-Video outputs:</b>            | 2 (Video 1 Out, Monitor Out)                         |
| <b>Video outputs:</b>              | 2 (Video 1 Out, Monitor Out)                         |
| <b>■ Audio Inputs</b>              |                                                      |
| <b>Digital inputs:</b>             | 4 (Optical 1-3, Coaxial)                             |
| <b>Analog inputs:</b>              | 6 (CD, Tape, DVD, Video 1-3)                         |
| <b>Multichannel analog inputs:</b> | 5.1 ch (Front L/R, Center, Surround L/R, Subwoofer)  |
| <b>■ Audio Outputs</b>             |                                                      |
| <b>Analog outputs:</b>             | 2 (Tape Out, Video 1 Out)                            |
| <b>Subwoofer pre out:</b>          | 1                                                    |
| <b>Speaker outputs:</b>            | 6+2                                                  |
| <b>Phones:</b>                     | 1                                                    |

Specifications and features are subject to change without notice.

## SERVICE PROCEDURES

### 1. Replacing the fuses

 This symbol located near the fuse indicates that the fuse used is show operating type, For continued protection against fire hazard, replace with same type fuse, For fuse rating, refer to the marking adjacent to the symbol.

 Ce symbole indique que le fusible utilise est e lent. Pour une protection permanente, n'utiliser que des fusibles de meme type. Ce demier est indique la qu le present symbol est appose.

| REF NO.            | PART NO. | DESCRIPTION | REMARKS |
|--------------------|----------|-------------|---------|
| F6901, F6902       | 252199   | 10A-UL      | ⚠       |
| F6901, F6902       | 252100   | 10A-EAK     | ⚠       |
| F6901 or, F6902 or | 252307   | 10A-TL250V  | ⚠       |
| F901               | 252198   | 8A-UL       | ⚠       |
| F901 or            | 252261   | 8A-T/UL-ST2 | ⚠       |
| F903               | 252164   | 5A-UL/T-237 | ⚠       |
| F903 or            | 252258   | 5A-T/UL-ST2 | ⚠       |

### 2. Safety-check out

After correcting the original service problem perform the following safety check before releasing the set to the customer  
Connect the insulating-resistance tester between the plug of power supply cord and terminal GND on the back panel.  
Specifications: More than 10Mohm at 500V

### 3. To initialize the unit

This device employs a microprocessor to perform various functions and operations. If interference generated by an external power supply, radio wave, or other electrical source results in accident which causes the specified operations and functions to operate abnormally.

To perform a result, please follow the procedure below.

1. Press and the hold down the VIDEO 1 button, then press the STANDBY/ON button when the unit is Power On.
2. After "Clear" is displayed, the preset memory and each mode stored in the memory, are initialized and will return to the factory settings.

### 4. To check version of microprocessor

<Note>

Main microprocessor Q7008 only.

1. Press and the hold down the DISPLAY button , then press the STANDBY/ON button when the unit is Power ON.  
Version is displayed on FL display only for 3 seconds.

<ex.>

Ver. 075 (04809a)

2. Press the STANDBY/ON button to Power Off.

### 5. Memory backup

The HT-R820THX uses a battery-less memory backup system in order to retain radio presets and other settings when it's unplugged or in the case of a power failure. Although no batteries are required, the HT-R820THX must be plugged into an AC outlet in order to charge the backup system.

Once it has been charged, the HT-R820THX will retain the settings for several weeks, although this depends on the environment and will be shorter in humid climates.

### 6. Changing the AM band step

1. Necessary to change as follows.

R7003 Change to 10 kohms. Refer to <Fig-1>

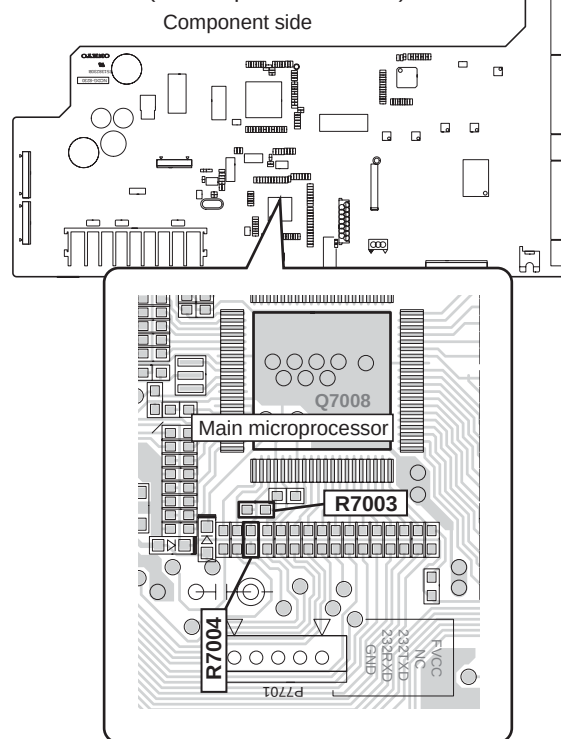
R7004 Change to 10 kohms. Refer to <Fig-1>

2. To select.

Press and hold down the TUNER button , then press the MEMORY button.

<Fig-1>

NADG-8230 (Pre-amplifier PC board)



## OPERATION CHECK-1

### DC VOLTAGE DETECTION PROTECTORS

#### <Note1>

In test mode " Test 4-20 " to " Test 4-31 ", DC voltage is outputted from DSP IC a pre-amplifier section, and it is inputted into a power amplifier circuit.

Therefore an external input is unnecessary in check.

#### <Note2>

Don't connect speakers or any load.

Don't short speaker terminals.

1. Set the unit to test mode " Test-4-00 " .

1-1. Press and the hold down the CD button , then press the STANDBY/ON button when the unit is Power On.

Test -  blinks

1-2. Press the VIDEO 3 button, while the " Test - \_ " is shown.

Unit will be in the state of " Test-4-00 " .

Test - 4-00

2. Repeat and press SPEAKERS B to the " Test-4-20 " is shown.

Test - 4-20

3. Check that the " Protect OK " is shown and speaker relays are turn Off.

Protect OK

If a circuit is failure, the " Protect NG " is shown.

Protect NG

4. Check about the " Test 4-21 " to " Test 4-31 " one by one.

Refer to <Fig-1> about the operation method.

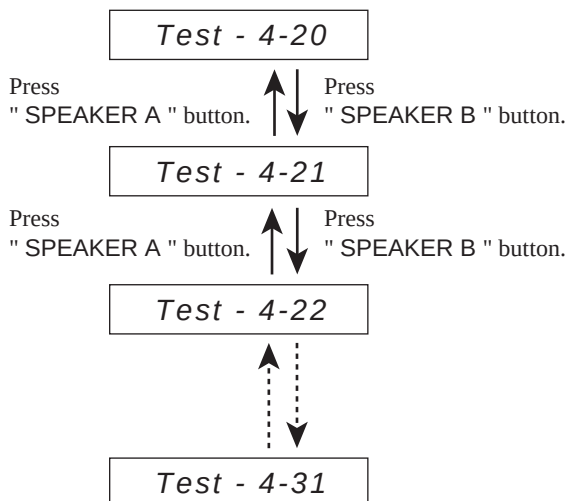
5. Press the STANDBY/ON to power Off. (Exit the test mode.)

#### <Fig-1>

##### Operation method

Press on " SPEAKER B " button ---> Next step

Press on " SPEAKER A " button ---> Return



##### Details of TEST MODE 4-20 to 4-31

| TEST MODE | DSP output ch. | DSP output voltage |
|-----------|----------------|--------------------|
| 4-20      | FL             | +DC                |
| 4-21      | FR             | - DC               |
| 4-22      | C              | +DC                |
| 4-23      | SL             | +DC                |
| 4-24      | SR             | - DC               |
| 4-25      | SB             | +DC                |
| 4-26      | FL             | - DC               |
| 4-27      | FR             | +DC                |
| 4-28      | C              | - DC               |
| 4-29      | SL             | +DC                |
| 4-30      | SR             | - DC               |
| 4-31      | SB             | +DC                |

MASTER VOLUME = MAX.

## OPERATION CHECK-2

### CURRENT DETECTION PROTECTORS

#### <Note1>

In test mode " *Test 4-32* ", the pulse waveform is outputted from DSP IC on the pre-amplifier section, and it is inputted into a power amplifier circuit. Refer to <Fig-1>.

Therefore an external input is unnecessary in check.

#### <Note2>

Don't connect speakers or any load.

Don't short speaker terminals.

Don't check two or more channels simultaneously.

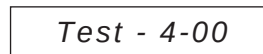
1. Set the unit to test mode " *Test-4-00* " .

1-1. Press and the hold down the CD button , then press the STANDBY/ON button when the unit is Power On.

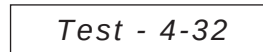


1-2. Press the VIDEO 3 button, while the " *Test - \_* " is shown.

Unit will be in the state of " *Test-4-00* " .



2. Repeat and press SPEAKERS B to the " *Test-4-32* " is shown.



3. Connect the road resistor 3 ohms to the speaker terminal.

4. Check that the " *Protect* " is not shown.

5. Connect the road resistor 1.5 ohms to the speaker terminal.

6. Check that the " *Protect* " is shown, and speaker relays are turn off.

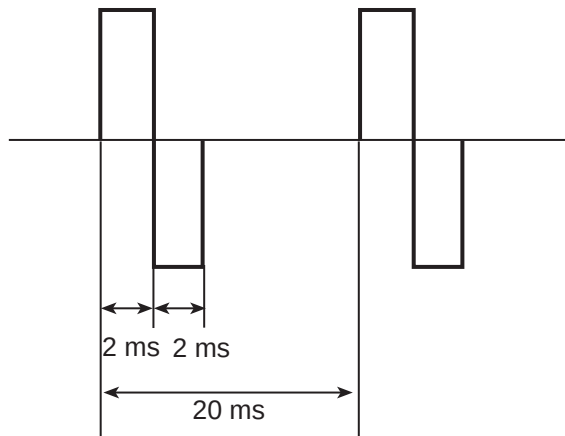


7. Check about the FL, FR, C, SL, SR and SB channel one by one.

8. Press the STANDBY/ON to power Off. (Exit the test mode)

#### <Fig-1>

The output waveform from DSP IC in the test mode 4-32.



#### Details of TEST MODE 4-32

| TEST MODE | DSP output ch. | DSP output voltage |
|-----------|----------------|--------------------|
| 4-32      | ALL            | Max.               |

MASTER VOLUME = 54

## OPERATION CHECK-3

### OUTPUT LEVEL & THERMAL DETECTION

#### <Regarding the power supply system of this unit>

##### Function

##### 1. High-voltage mode

Usually, the power supply supplies high voltage to the power amplifier circuit when the relay (RL6901) is turned On.

##### 2. Low-voltage mode

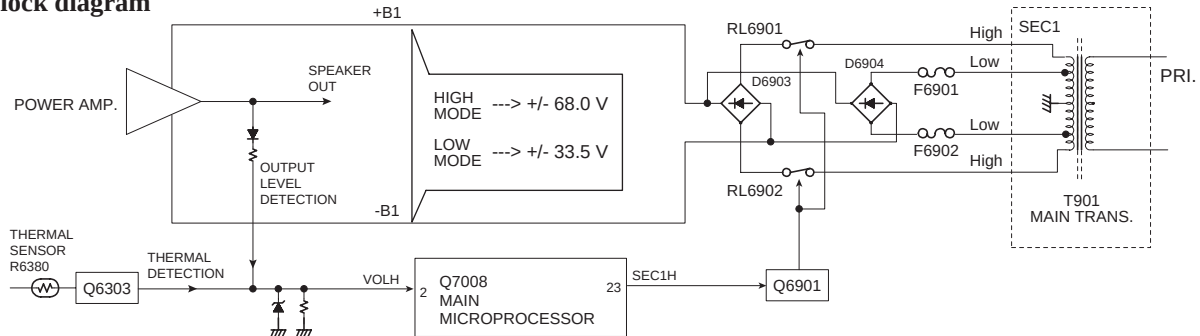
When as follows, a power supply changes to the state of supplying low voltage when the relay (RL6901) is turned Off.

- (1) Excessive output signal is continuously outputted from power amplifier.
- (2) Temperature of a heat sink over 80 degrees.

##### Purpose

1. The loss which power amplifier generates is decreased. As a result, the miniaturization of a heat sink is realized.
2. Corresponds to a safety standard.

##### Block diagram



##### Necessity of operation check

May not notice the fuse (F6901, F6902) broken in the case of repair.

Because the power supply is continuing supplying voltage from the High side of SEC1 at high-voltage mode.

When a power supply Circuit changes to low voltage mode, amplifier does not operate.

Therefore, it is very important to check operation of this power supply system containing a fuse.

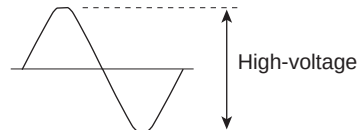
#### <Procedure>

##### <Note>

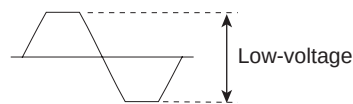
Don't connect speakers or any load.

Don't short speaker terminals.

- (1) Set the unit is Multi channel input state.
- (2) Set the master volume into the minimum.
- (3) Apply sine wave signal to MULTI CHANNEL INPUT (FL+FR+C+SL) terminals.
- (4) Connect an oscilloscope to speaker terminal of FL channel.
- (5) Adjust master volume so that the wave form of speaker output may become distortion about 5%.



- (6) Check that the RL6901 is turned off after about 5 seconds.  
And the power supply changes to low-voltage mode.



- (7) Adjust the master volume so that output voltage may become half.



- (8) Check that the RL6901 is turned On after 2 to 3 minutes.  
And the power supply returns to high-voltage mode.

## OPERATION CHECK-4

### OUTPUT LEVEL & THERMAL DETECTION

#### <Operation check of microprocessor by test mode>

The following is the procedure of checking detection operation of a microprocessor in false, by using test mode.

#### Output level detection

1. Set the unit to test mode " *Test-3-3* "

1-1. Press and the hold down the CD button , then press the STANDBY/ON button when the unit is Power On.

*Test - \_*

1-2. Press the VIDEO 2 button, while the " *Test - \_* " is shown.

Unit will be in the state of " *Test-3-00* ".

*Test - 3-00*

1-3. Repeat and press SPEAKERS B button to the " *Test-3-3* " is shown.

*Test - 3-03*

2. Apply signal (sine wave 1kHz, -1.5dBV) to MULTI CHANNEL (FL, FR, SL, SR, C) terminal, each channel.

3. Check that FM STEREO indicator is shown.

*Test - 3-03*

FM STEREO

FM STEREO

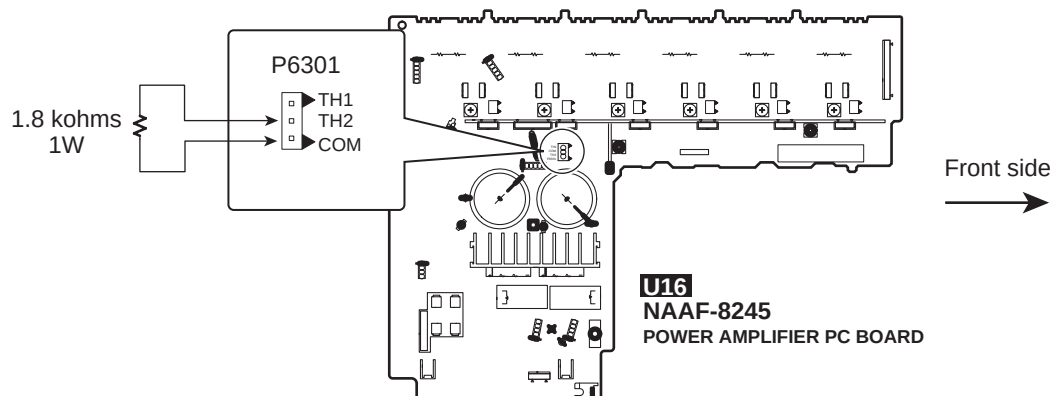
4. Press the STANDBY/ON button to power Off. (Exit from the test mode.)

#### Thermal detection

1. Set the unit to test mode " *Test-3-3* "

Refer to the clause of " Output level detection ".

2. Connect the resistor 1.8kohms /1W between " HT2 " and " COM " terminals of P6301.



3. Check that FM STEREO indicator is shown.

*Test - 3-03*

MEMORY

MEMORY

4. Press the STANDBY/ON button to power Off. (Exit the test mode.)

## OPERATION CHECK-5

### DSP DEBUG MODE

#### <Regarding the DSP debug mode>

In this test mode, the check with normal communication of a microcomputer and the data of DSP and DIR is possible. This information is a help to find the cause of failure.

#### How to go in DSP debug mode?

1. Press and hold down the DISPLAY button, then press the STANDBY button when the unit is power On.

<Ex.>

Ver. 075 (04809a)

2. Press the DISPLAY button, while the "Version 02415A" is shown.

DSP Debug Mode



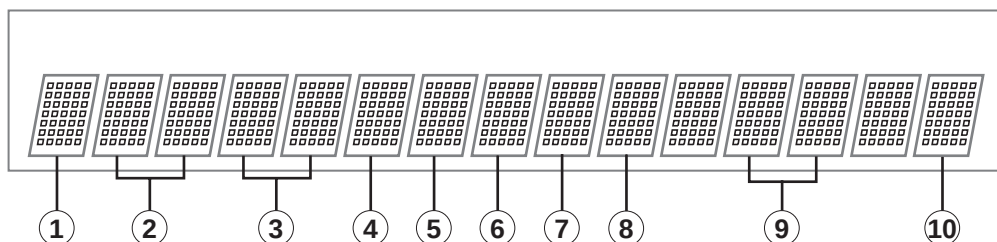
E1A48K010o 23 o

#### How to Exit

Press STANDBY/ON button to power Off.

#### <Explanation of each parameter>

Details of display



#### DIR

- ① UNLOCK  
E = UNLOCK  
= LOCK
- ② Digital Selector  
D = DIGITAL  
A = ANALOG  
1 = COAX  
2 = OPT1  
3 = OPT2  
4 = Others
- ③ Sampling Frequency  
96 = 96kHz  
48 = 48kHz  
44 = 44kHz  
32 = 32kHz  
= Not detect
- ④ Pre Emphasis  
K = OFF  
e = ON
- ⑤ DIR Status  
0 = PCM/ANALOG  
2 = DTS CD  
5 = DD/DTS/AAC

#### MEMORY/DOWNLOAD

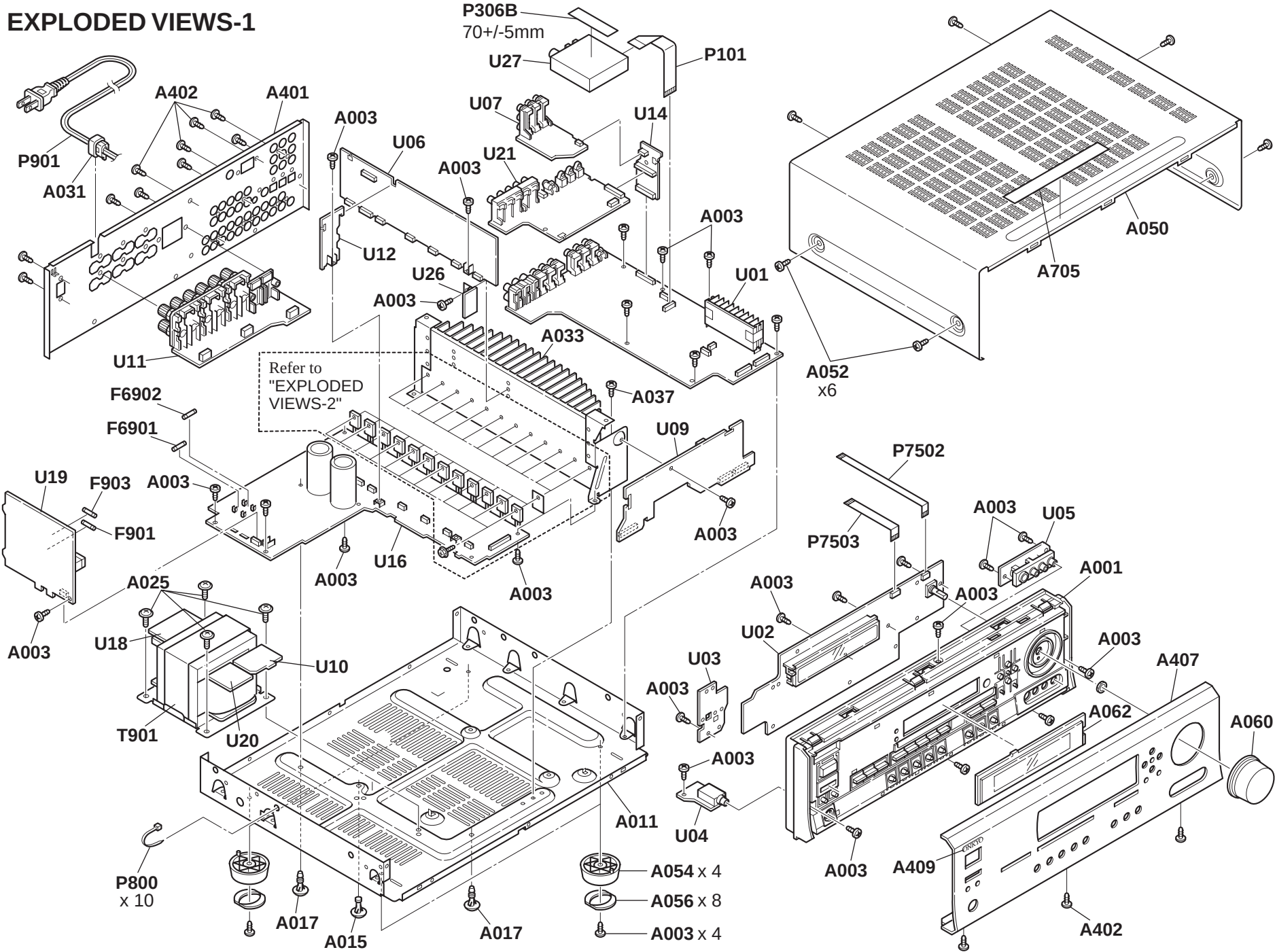
- ⑥ AUTOBOOT DSP AB CODE  
0 = DTS NEO:6  
1 = DD PCM  
2 = DTS-ES  
3 = AAC  
4 = SIG  
5 = COS  
6 = DTS96/24  
7 = PL2FS
- ⑦ AUTOBOOT DSP C CODE  
0 = PL2X (Except DTS 96/24)  
1 = DTS 96/24  
2 = NEO6  
3 = T-D
- ⑧ AUTOBOOT Status  
O = Autoboot is complete  
X = Autoboot is going on

#### DSP

- ⑨ DSP Detect Format  
[IEC61937]  
00 = Null  
01 = Dolby Digital  
03 = Pause  
04 = MPEG1 L1  
05 = MPEG1 L23/MPEG2 w/o  
06 = MPEG2 w/o  
07 = MPEG2 AAC  
0B = DTS1  
0C = DTS2  
0D = DTS3  
1B = MPEG2 AAC1  
1C = MPEG2 AAC2  
  
[Except IEC61937]  
20: Silent  
21: DTS LD  
22: DTS CD  
23: PCM
- ⑩ DSP Decode  
0 = Decode OK  
X = Decode NG  
- = Analog in

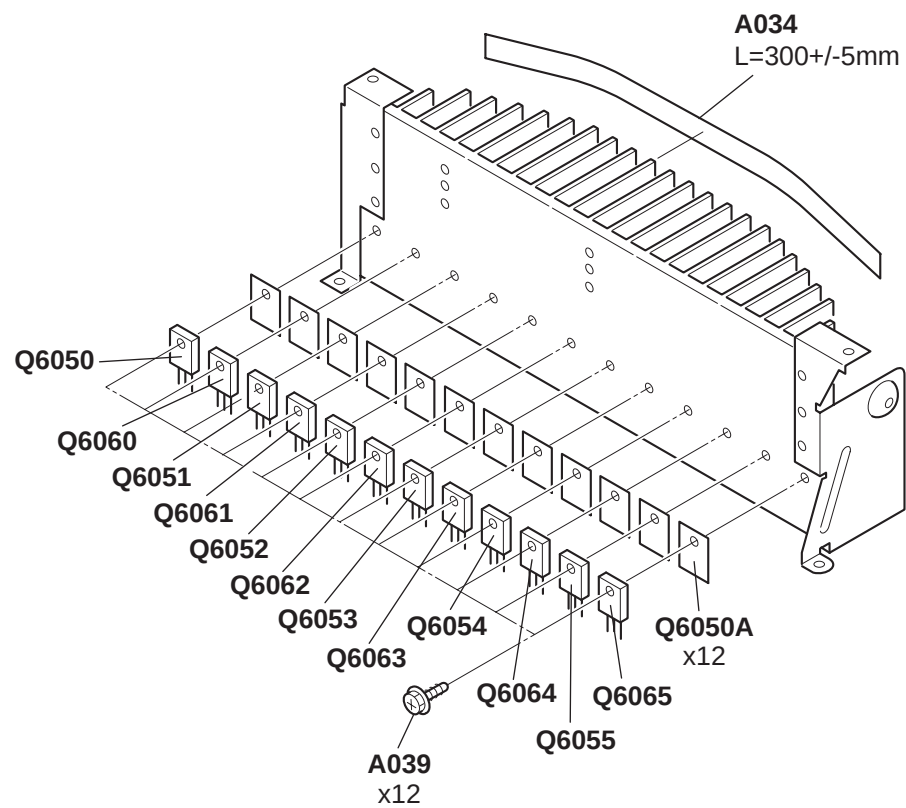


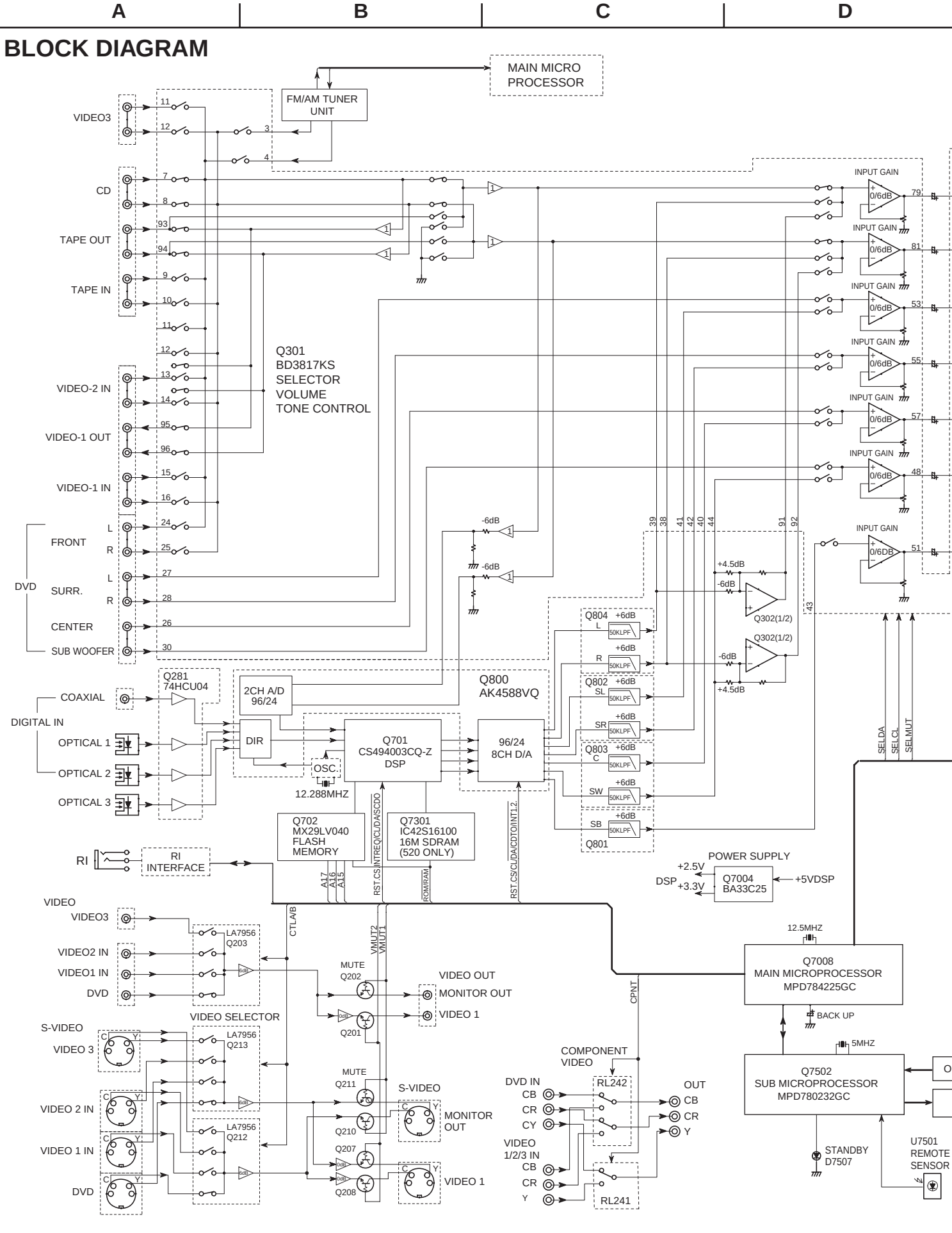
EXPLODED VIEWS-1



## EXPLODED VIEWS-2

### POWER TRANSISTOR SECTION



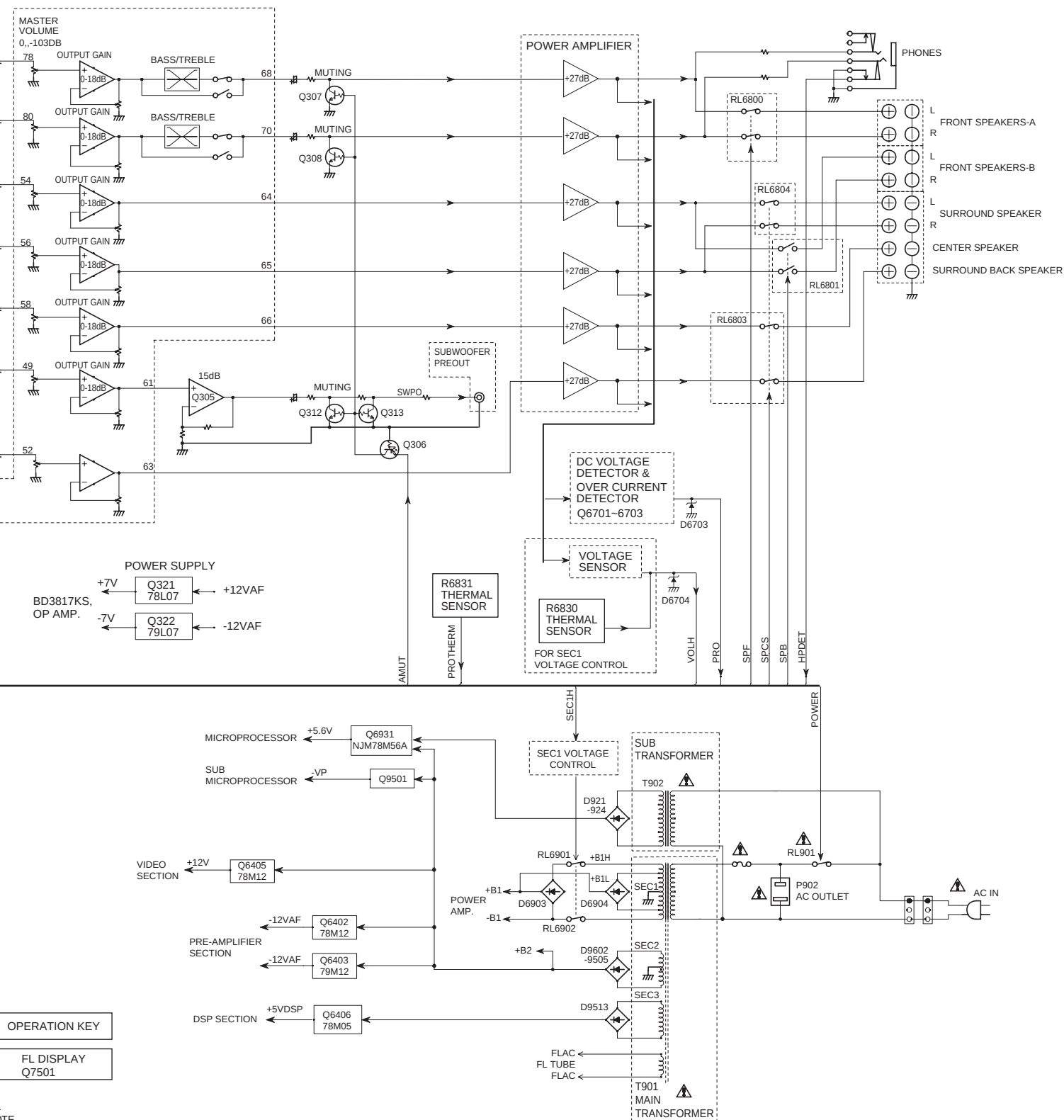


E

F

G

H



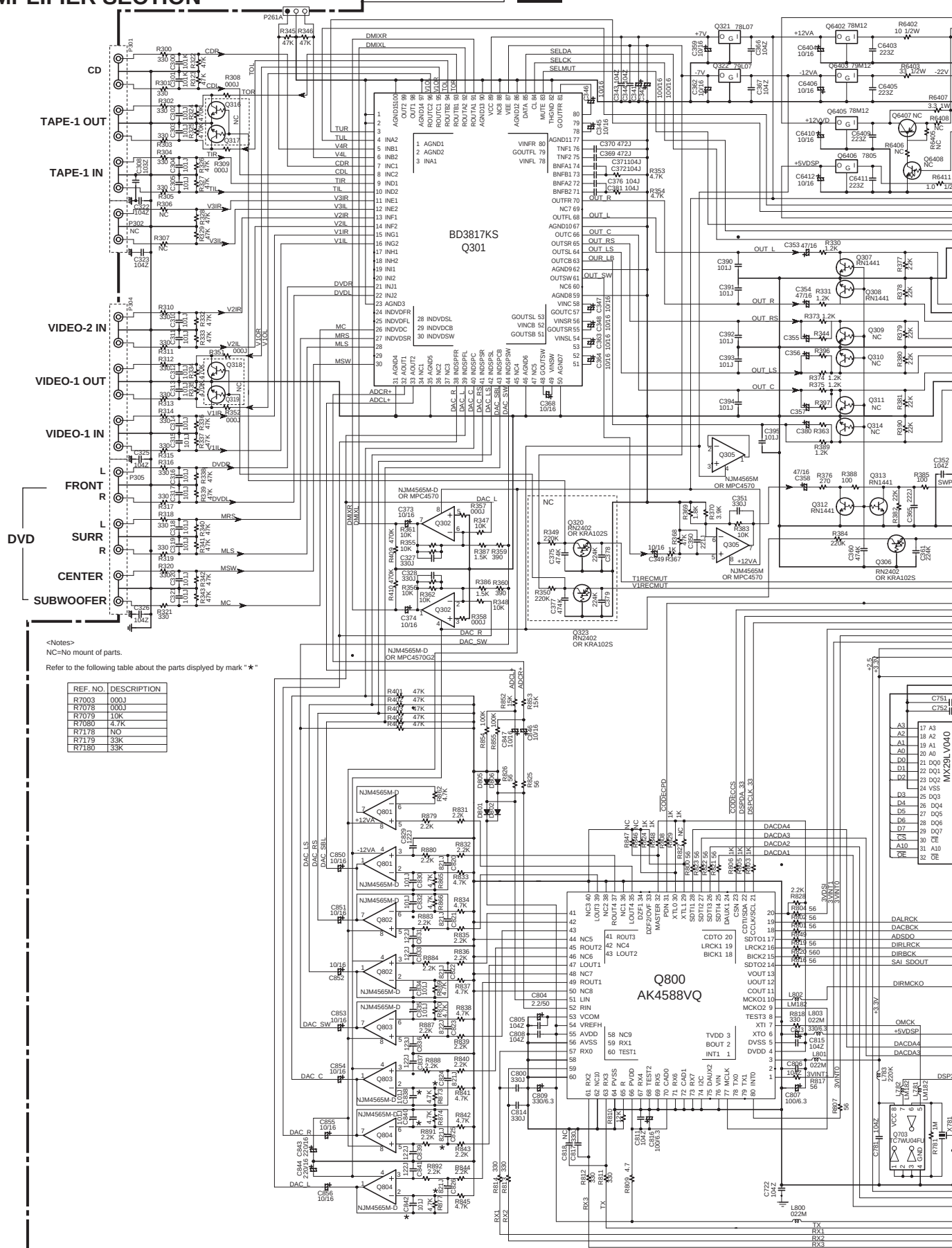
## SCHEMATIC DIAGRAMS-1

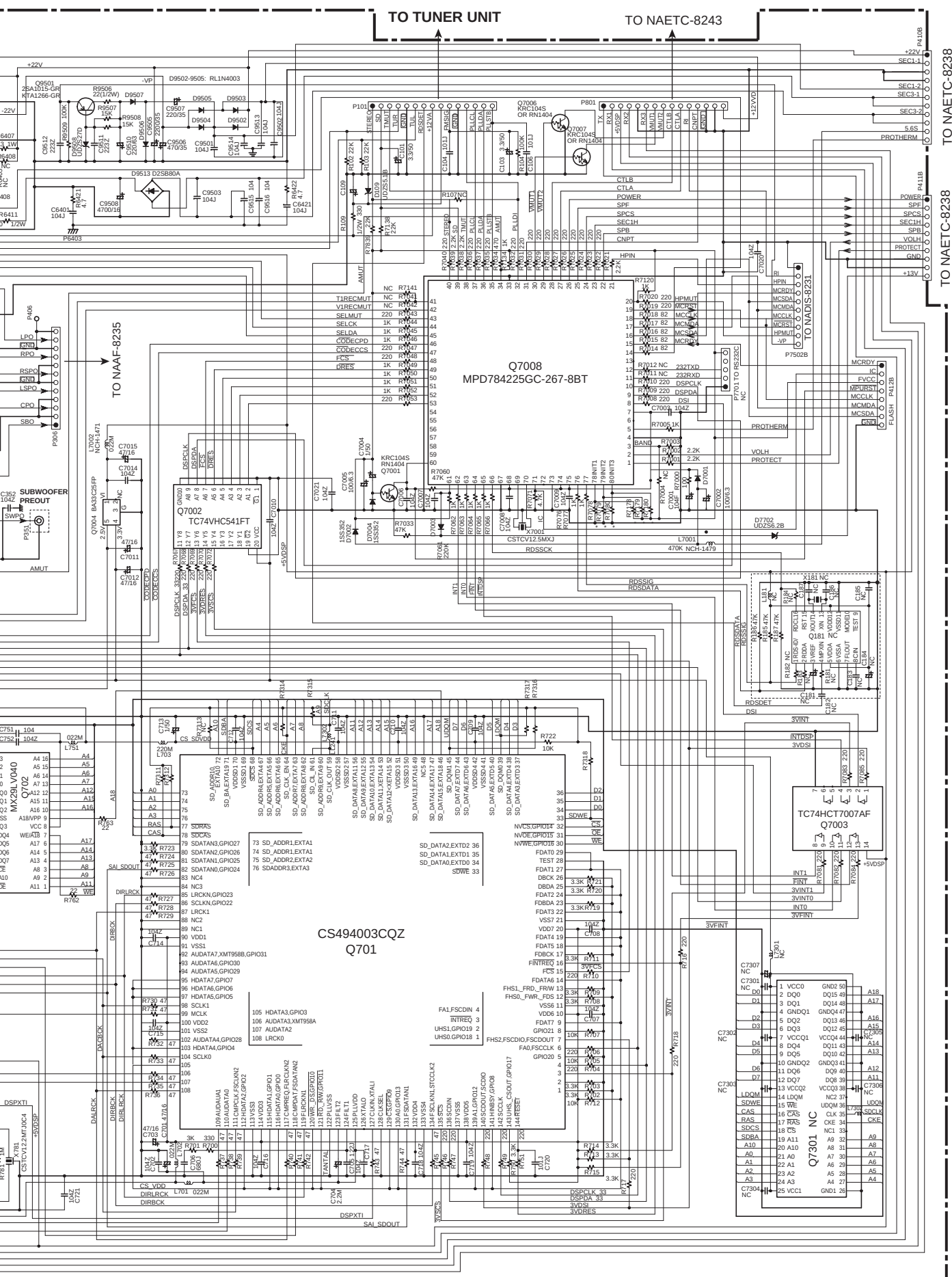
## PRE-AMPLIFIER SECTION

TO NAETC-8234

NADG-8230

U01 PRE-AMPLIFIER PC BOARD







SCHEMATIC DIAGRAMS-2  
DISPLAY SECTION

NADIS-8231  
**U02** DISPLAY PC BOARD

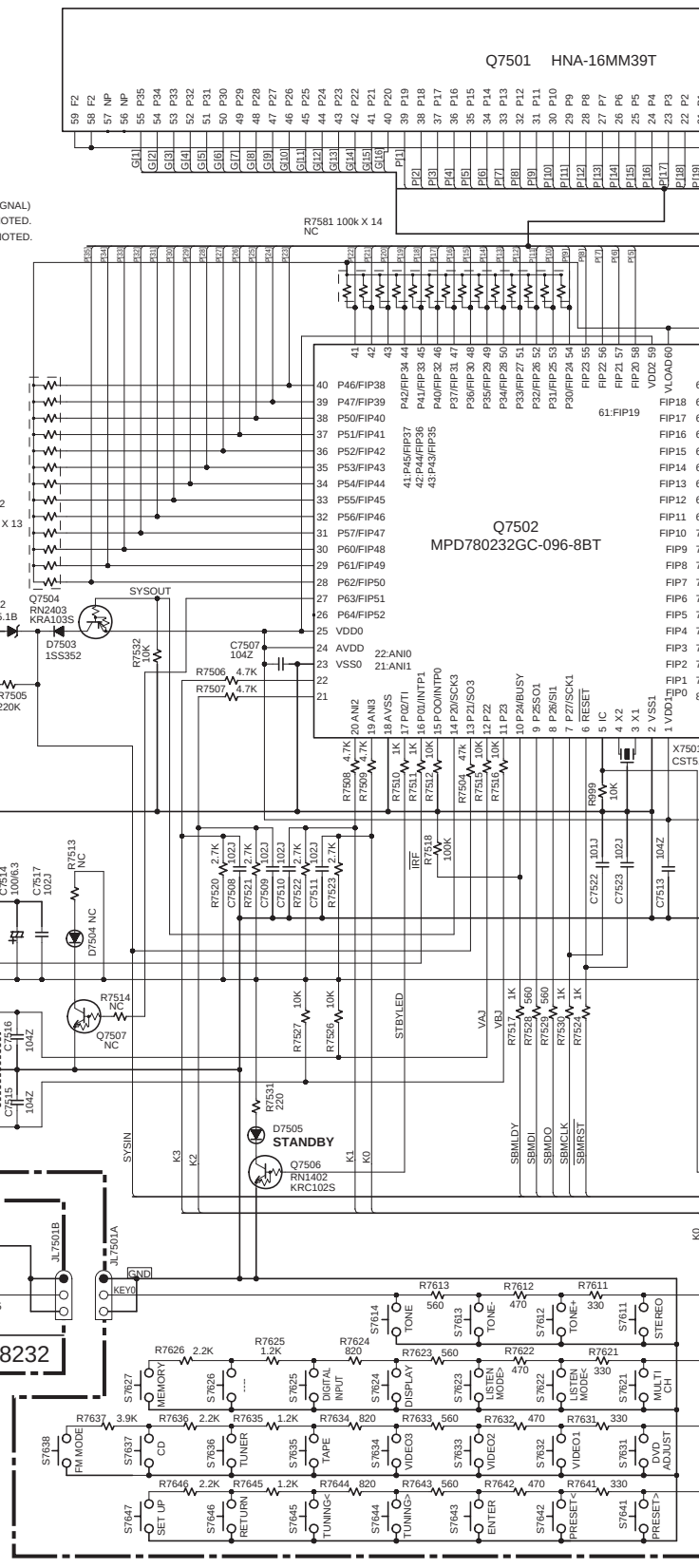
- NOTE
- THE COMPONENTS IDENTIFIED BY MARK  ARE CRITICAL FOR SAFETY. REPLACE ONLY WITH PART NUMBER SPECIFIED.
  - VOLTAGE (MEASURED WITH VOLTMETER)  IS DC VOLTAGE. (NO INPUT SIGNAL).
  - ALL PNP TRANSISTORS ARE EQUIVALENT TO 2SA1015-GR UNLESS OTHERWISE NOTED.
  - ALL NPN TRANSISTORS ARE EQUIVALENT TO 2SC1815-GR UNLESS OTHERWISE NOTED.
  - ALL DIODES ARE EQUIVALENT TO 1SS133 UNLESS OTHERWISE NOTED.
  - ELECTROLYTIC CAPACITORS (  ) ARE IN u F/WV.
  - ALL CAPACITORS ARE IN pF/50WV UNLESS OTHERWISE NOTED.  
EX) 030> 3pF 330> 33pF 331> 330pF 333> 0.033uF
  - ALL RESISTORS ARE IN OHMS 1/4WATTS UNLESS OTHERWISE NOTED.
  - THE THICK LINES ON PC BOARD ARE THE PRINTING SIDE OF THE PARTS.  
EX)  PRINTING SIDE
  - CIRCUIT IS SUBJECT TO CHANGE FOR IMPROVEMENT.
  -  IS DC VOLTAGE, AT NO INPUT SIGNAL.

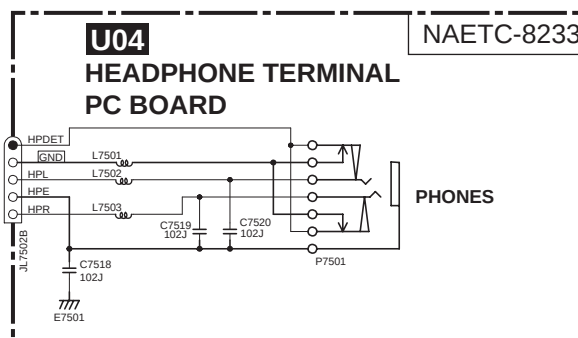
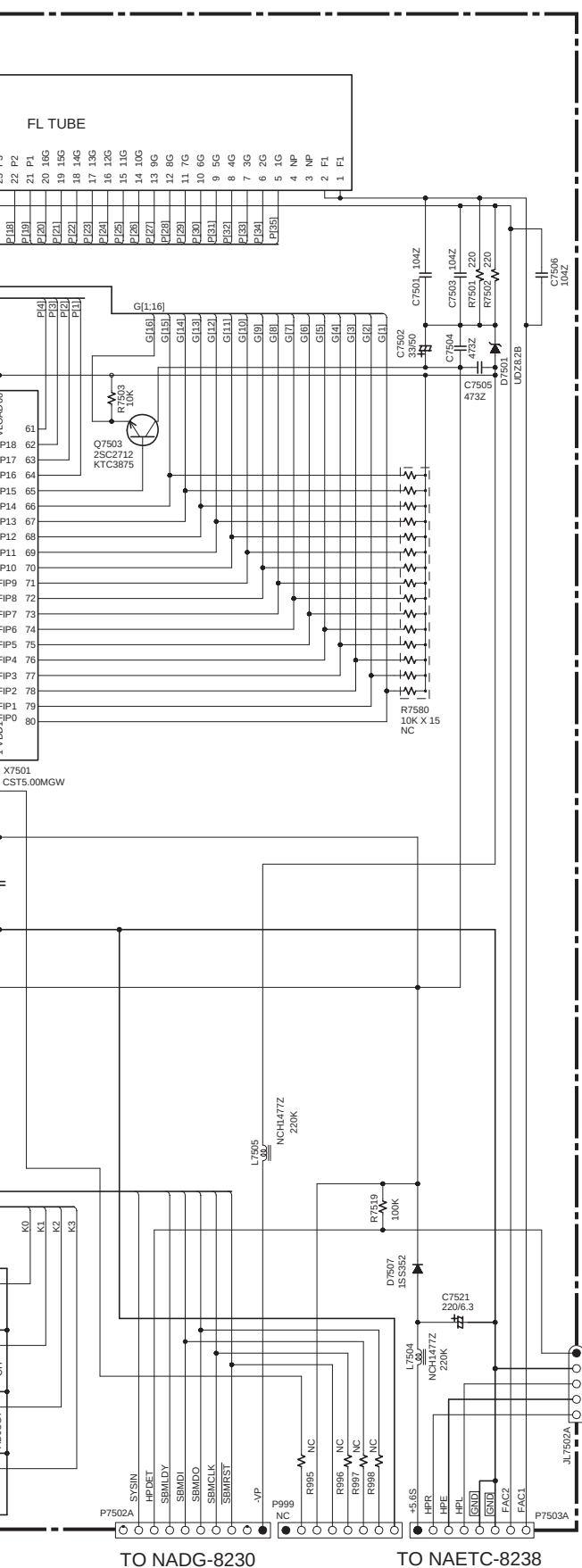
<Notes>  
NC=No mount of parts.

MASTER VOLUME

**U03**  
OPERATION SWITCH  
PC BOARD

NASW-8232



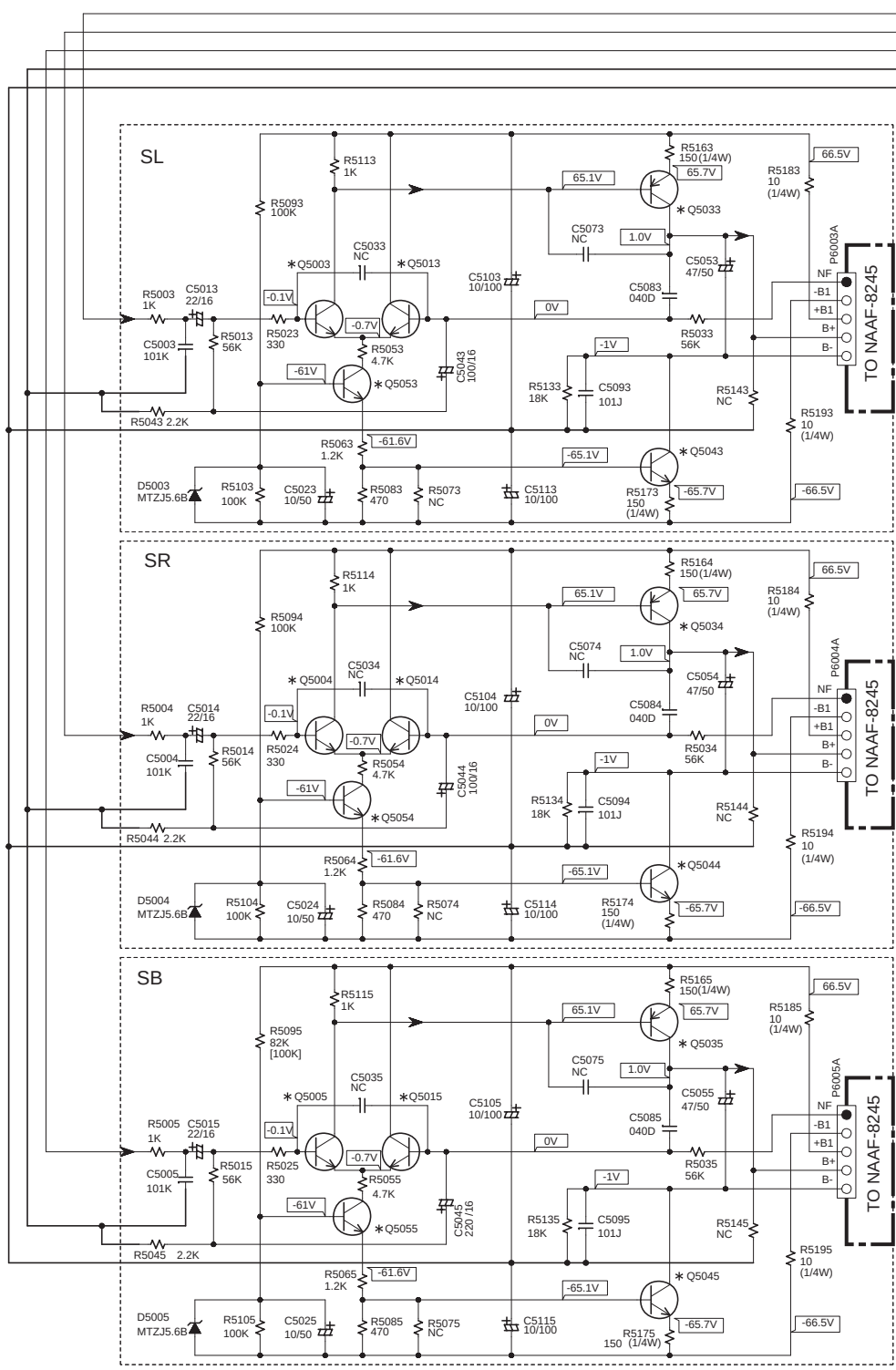




A B C D

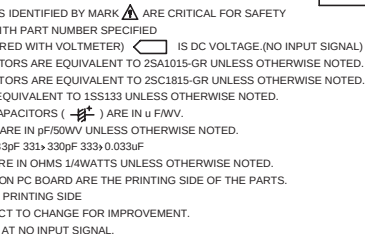
SCHEMATIC DIAGRAMS-3  
DRIVER AMPLIFIER SECTION

NAAF-8235  
**U06** DRIVER AMPLIFIER PC BOARD



**NOTE**

- THE COMPONENTS IDENTIFIED BY AN \* ARE TO BE REPLACED ONLY WITH PARTS IDENTICAL TO THE ORIGINAL.
- VOLTAGE (MEASURED WITH RESPECT TO GROUND) IS INDICATED IN VOLTAGE BOXES.
- ALL PNP TRANSISTORS ARE IDENTIFIED BY A P IN THE PART NUMBER.
- ALL NPN TRANSISTORS ARE IDENTIFIED BY AN N IN THE PART NUMBER.
- ALL DIODES ARE EQUIVALENT TO THE ORIGINAL.
- ELECTROLYTIC CAPACITORS ARE IDENTIFIED BY A POLARITY SYMBOL.
- ALL CAPACITORS ARE IN PICO FARADS (PF) UNLESS OTHERWISE SPECIFIED.
- EX) 030 = 30PF, 330 = 330PF, 33 = 33PF.
- ALL RESISTORS ARE IN OHMS UNLESS OTHERWISE SPECIFIED.
- THE THICK LINES ON THE PCB ARE FOR THE PRINTING OF THE CIRCUIT.
- CIRCUIT IS SUBJECT TO CHANGE WITHOUT NOTICE.
- / IS DC VOLTAGE, AT NO LOAD.



A

B

C

D

SCHEMATIC DIAGRAMS-4

SPEAKER TERMINAL & POWER SUPPLY SECTION

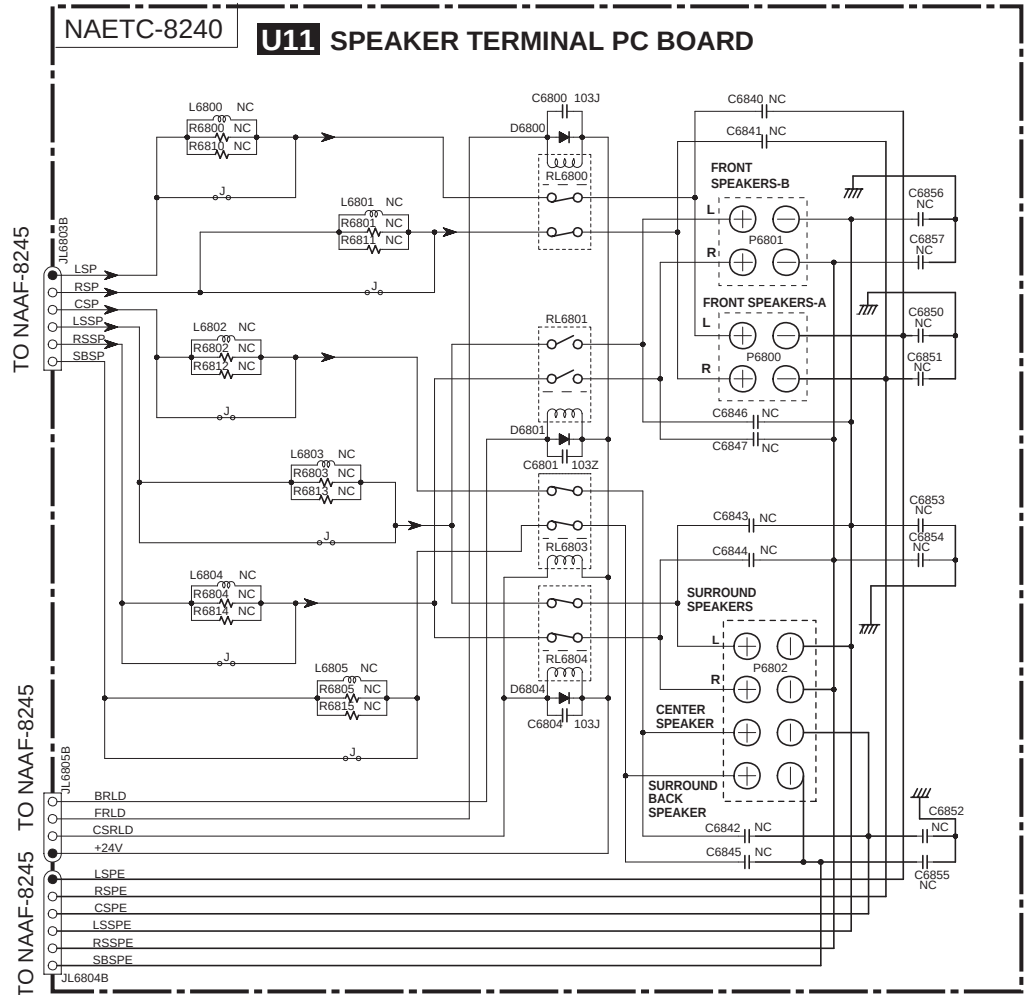
1

2

3

4

5

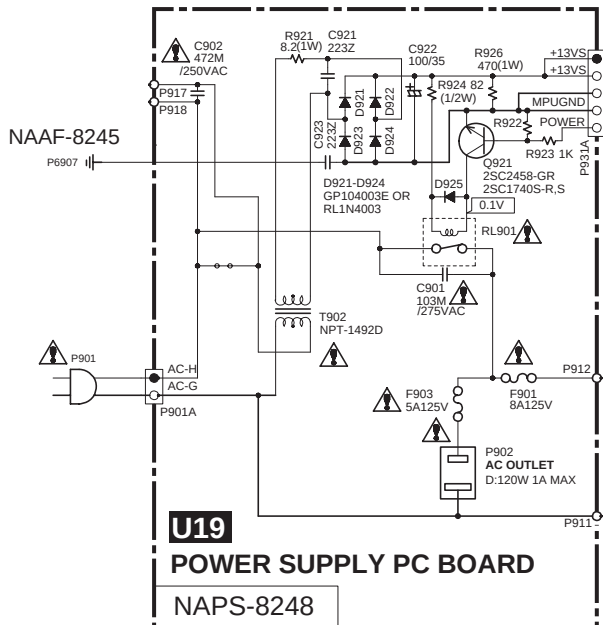


**CAUTION**  
FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH FUSE OF SAME TYPE AND RATING INDICATED.

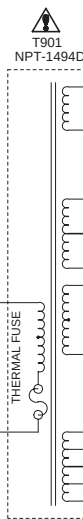
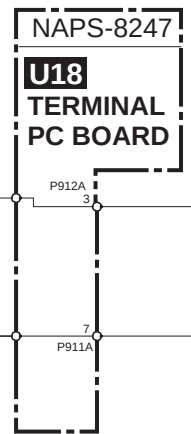
**ATTENTION**  
AFIN D'ASSURER UNE PROTECTION PERMANENTE CONTRE LES RISQUES D'INCENDIE, REMPLACER UNIQUEMENT PAR UN FUSIBLE DE MEME TYPE ET CALIBRAGE COMME INDIQUE.

THIS SYMBOL LOCATED NEAR THE FUSE INDICATES THAT THE FUSE USED IS SLOW OPERATING TYPE FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE WITH SAME TYPE FUSE. FOR FUSE RATING REFER TO THE MARKING ADJACENT TO THE SYMBOL.

CE SYMBOLE INDIQUE QUE LE FUSIBLE UTILISE EST E LENT. POUR UNE PROTECTION PERMANENTE, N'UTILISER QUE DES FUSIBLES DE MEME TYPE. CE DERNIER EST INDIQUE LA QU LE PRESENT SYMBOL EST APPOSE.



TO NNAF-8245



E

F

G

H

## NOTE

- THE COMPONENTS IDENTIFIED BY MARK  ARE CRITICAL FOR SAFETY. REPLACE ONLY WITH PART NUMBER SPECIFIED.
- VOLTAGE (MEASURED WITH VOLTMETER)  IS DC VOLTAGE (NO INPUT SIGNAL).
- ALL PNP TRANSISTORS ARE EQUIVALENT TO 2SA1015-GR UNLESS OTHERWISE NOTED.
- ALL NPN TRANSISTORS ARE EQUIVALENT TO 2SC1815-GR UNLESS OTHERWISE NOTED.
- ALL DIODES ARE EQUIVALENT TO 1SS133 UNLESS OTHERWISE NOTED.
- ELECTROLYTIC CAPACITORS (  ) ARE IN  $\mu$ F/VV.
- ALL CAPACITORS ARE IN pF/50V/VV UNLESS OTHERWISE NOTED.  
EX) 030 $\times$  3pF 330 $\times$  33pF 331 $\times$  330pF 333 $\times$  0.033 $\mu$ F
- ALL RESISTORS ARE IN OHMS 1/4WATTS UNLESS OTHERWISE NOTED.
- THE THICK LINES ON PC BOARD ARE THE PRINTING SIDE OF THE PARTS.  
EX)  PRINTING SIDE
- CIRCUIT IS SUBJECT TO CHANGE FOR IMPROVEMENT.
- / IS DC VOLTAGE, AT NO INPUT SIGNAL.

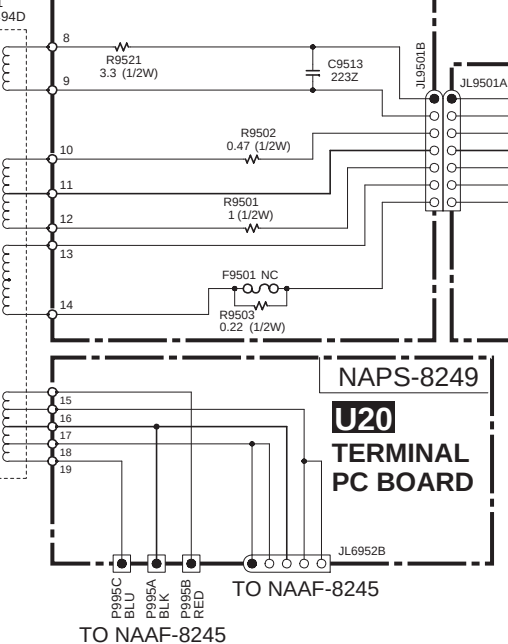
&lt;Notes&gt;

NC=No mount of parts.

## NAETC-8239

## U10

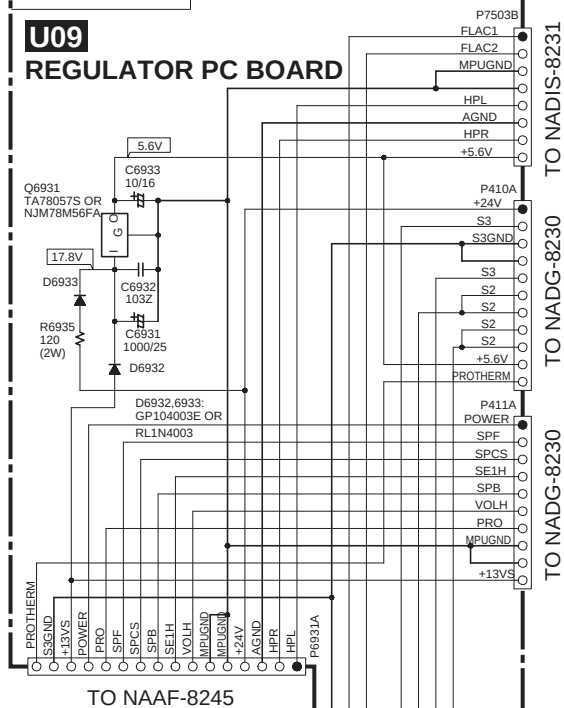
## TERMINAL PC BOARD



## NAETC-8238

## U09

## REGULATOR PC BOARD



A

B

C

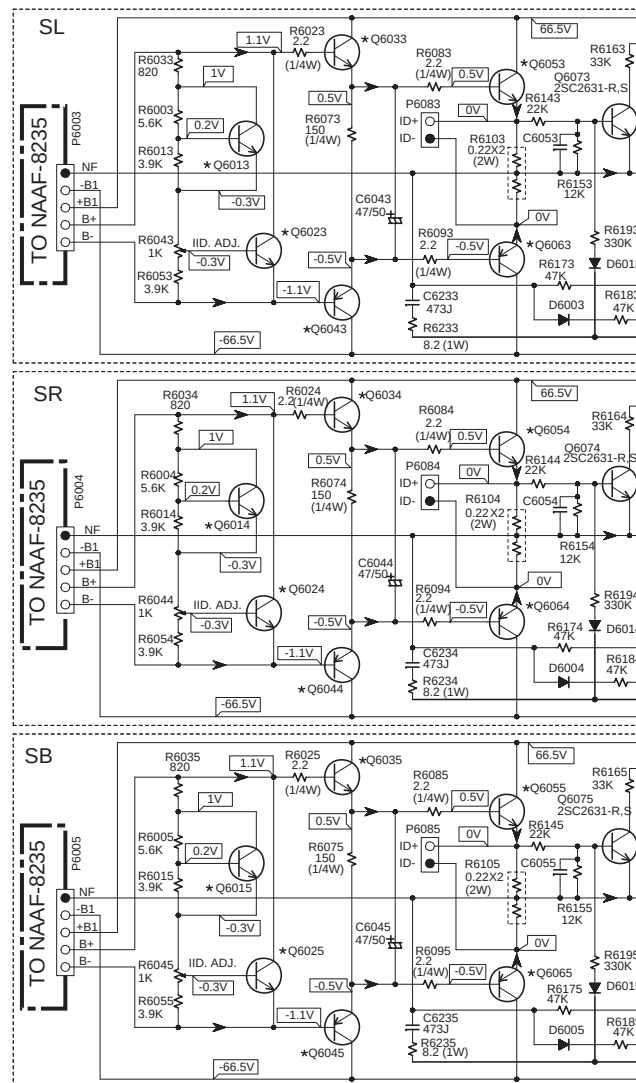
D

## SCHEMATIC DIAGRAMS-5

## POWER AMPLIFIER SECTION

NAAF-8245

## U16 POWER AMPLIFIER PC BOARD



Refer to the following table about the parts displayed by mark " \* ".

| REF. NO.         | DESCRIPTION                                  |
|------------------|----------------------------------------------|
| Q6010-6015       | 2SC1740S-R,S                                 |
| Q6020-6025       | 2SC1740S-R,S                                 |
| Q6030-6032       | KTD2061-Y OR 2SC5171                         |
| Q6033-6035       | KTD2061-Y OR 2SC5171                         |
| Q6040-6042       | KTB1369-Y OR 2SA1930                         |
| Q6043-6045       | KTB1369-Y OR 2SA1930                         |
| Q6050-6051       | 2SC5242-O,R OR MN150S-Y,P,O                  |
| Q6052-6055       | 2SC5242-O,R OR MN150S-Y,P,O                  |
| Q6060-6061       | 2SA1962-O,R OR MP150S-Y,P,O                  |
| Q6062-6065       | 2SA1962-O,R OR MP150S-Y,P,O                  |
| Q6601-6603,Q6901 | KTC3199-GR,2SC1740S-R,S,2SC2458-GR           |
| Q6701,6702       | KTC3200-BL,GR OR 2SC1775A-E,F OR 2SC1845-E,F |
| Q6303,6313       | KTA1267-GR OR 2SA933S-R,S                    |

TO NAPS-8248

TO NAPS-8248

TO NAAF-8249

TO NAPS-8249

E

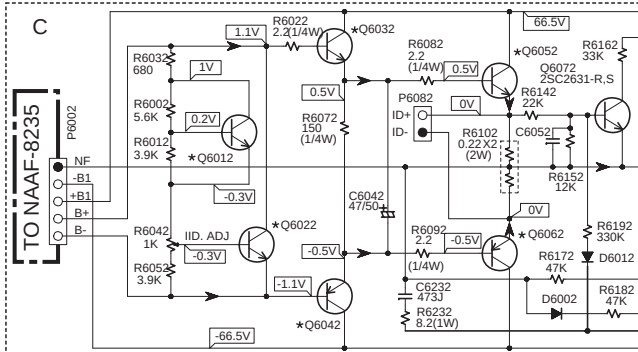
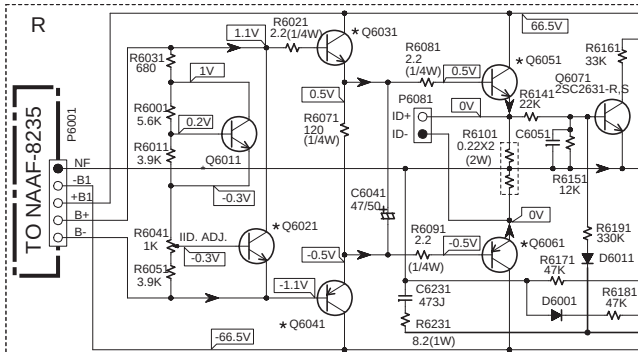
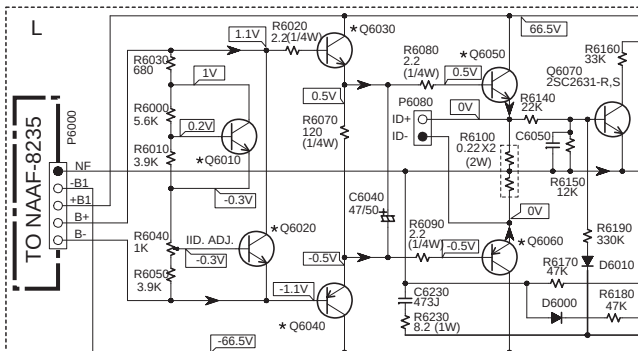
F

G

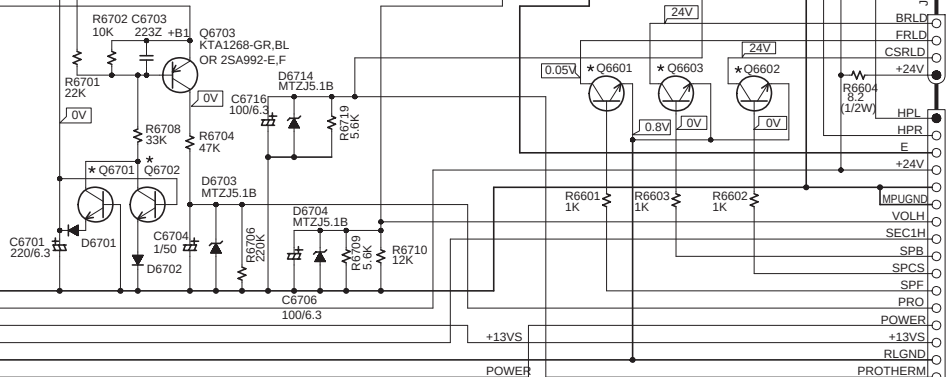
H

## NOTE

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- ALL NPN TRANSISTORS ARE EQUIVALENT TO 2SC1815-GR UNLESS OTHERWISE NOTED.
- ALL DIODES ARE EQUIVALENT TO 1SS133 UNLESS OTHERWISE NOTED.
- ELECTROLYTIC CAPACITORS (  ) ARE IN u F/W.
- ALL CAPACITORS ARE IN pF/50V UNLESS OTHERWISE NOTED.
- EX) 030u 3pF 330u 33pF 331u 330pF 333u 0.033uF
- ALL RESISTORS ARE IN OHMS 1/4WATTS UNLESS OTHERWISE NOTED.
- THE THICK LINES ON PC BOARD ARE THE PRINTING SIDE OF THE PARTS.
- EX)  PRINTING SIDE
- CIRCUIT IS SUBJECT TO CHANGE FOR IMPROVEMENT.
-  IS DC VOLTAGE, AT NO INPUT SIGNAL.

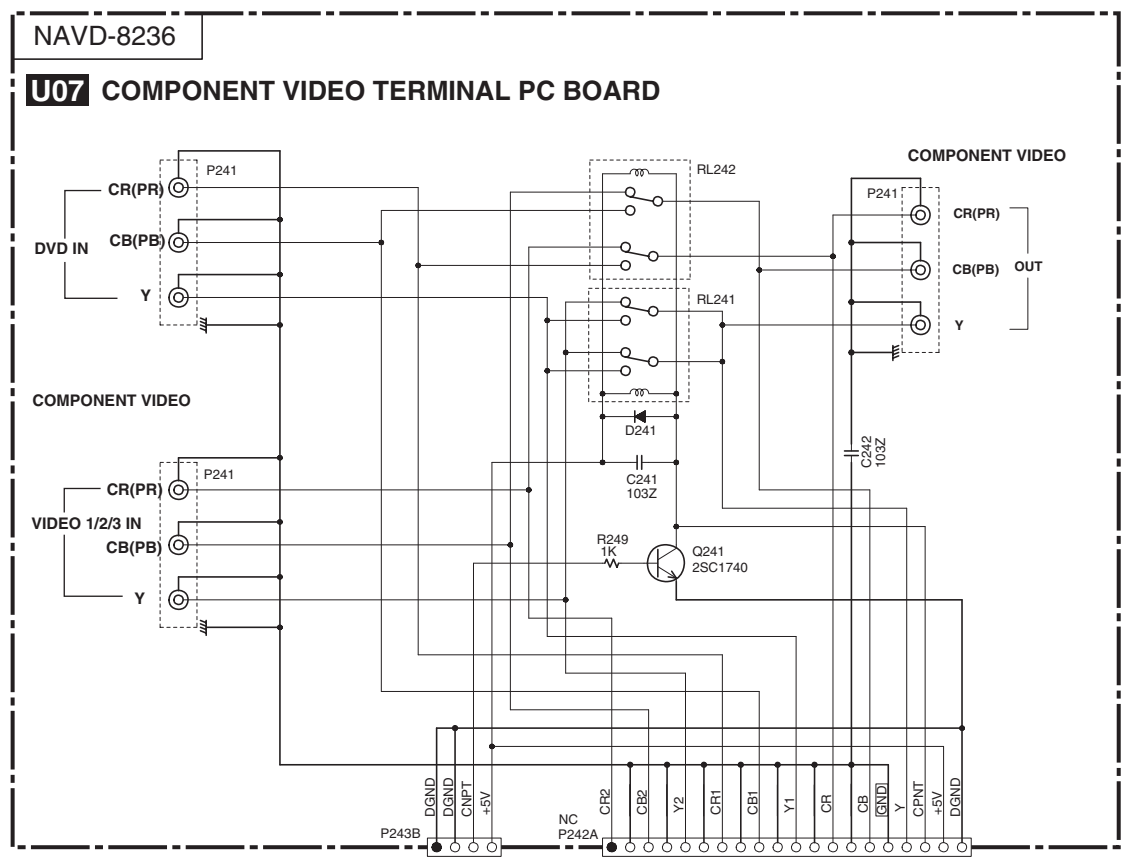


<Notes>  
NC=No moune of pares.



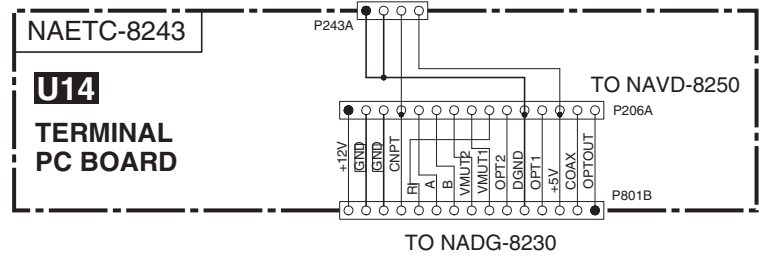
SCHEMATIC DIAGRAMS-6  
VIDEO SECTION

1

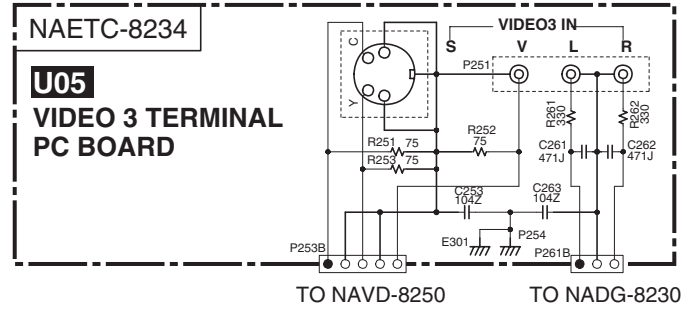


2

3



4



- <Notes>  
NC=No moune of pares.
- NOTE**
- THE COMPONENTS IDENTIFIED BY MARK ARE CRITICAL FOR SAFETY REPLACE ONLY WITH PART NUMBER SPECIFIED
  - VOLTAGE (MEASURED WITH VOLTMETER) IS DC VOLTAGE.(NO INPUT SIGNAL)
  - ALL PNP TRANSISTORS ARE EQUIVALENT TO 2SA1015-GR UNLESS OTHERWISE NOTED.
  - ALL NPN TRANSISTORS ARE EQUIVALENT TO 2SC1815-GR UNLESS OTHERWISE NOTED.
  - ALL DIODES ARE EQUIVALENT TO 1SS133 UNLESS OTHERWISE NOTED.
  - ELECTROLYTIC CAPACITORS ( ) ARE IN u F/WV.
  - ALL CAPACITORS ARE IN pF/50WV UNLESS OTHERWISE NOTED.  
EX) 030> 3pF 330> 33pF 331> 330pF 333> 0.033uF
  - ALL RESISTORS ARE IN OHMS 1/4WATTS UNLESS OTHERWISE NOTED.
  - THE THICK LINES ON PC BOARD ARE THE PRINTING SIDE OF THE PARTS.  
EX) PRINTING SIDE
  - CIRCUIT IS SUBJECT TO CHANGE FOR IMPROVEMENT.
  - IS DC VOLTAGE, AT NO INPUT SIGNAL.

5

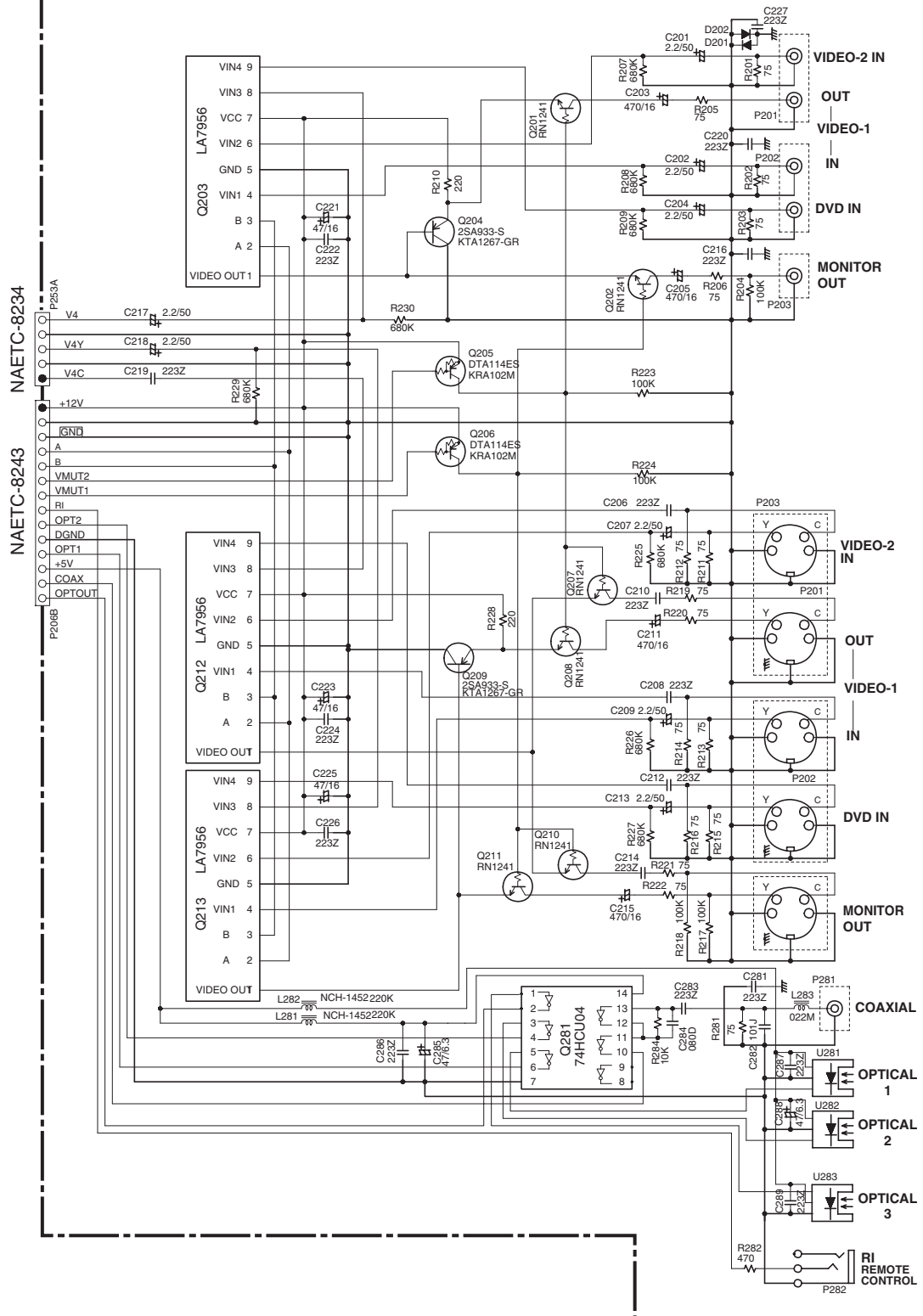
E

F

G

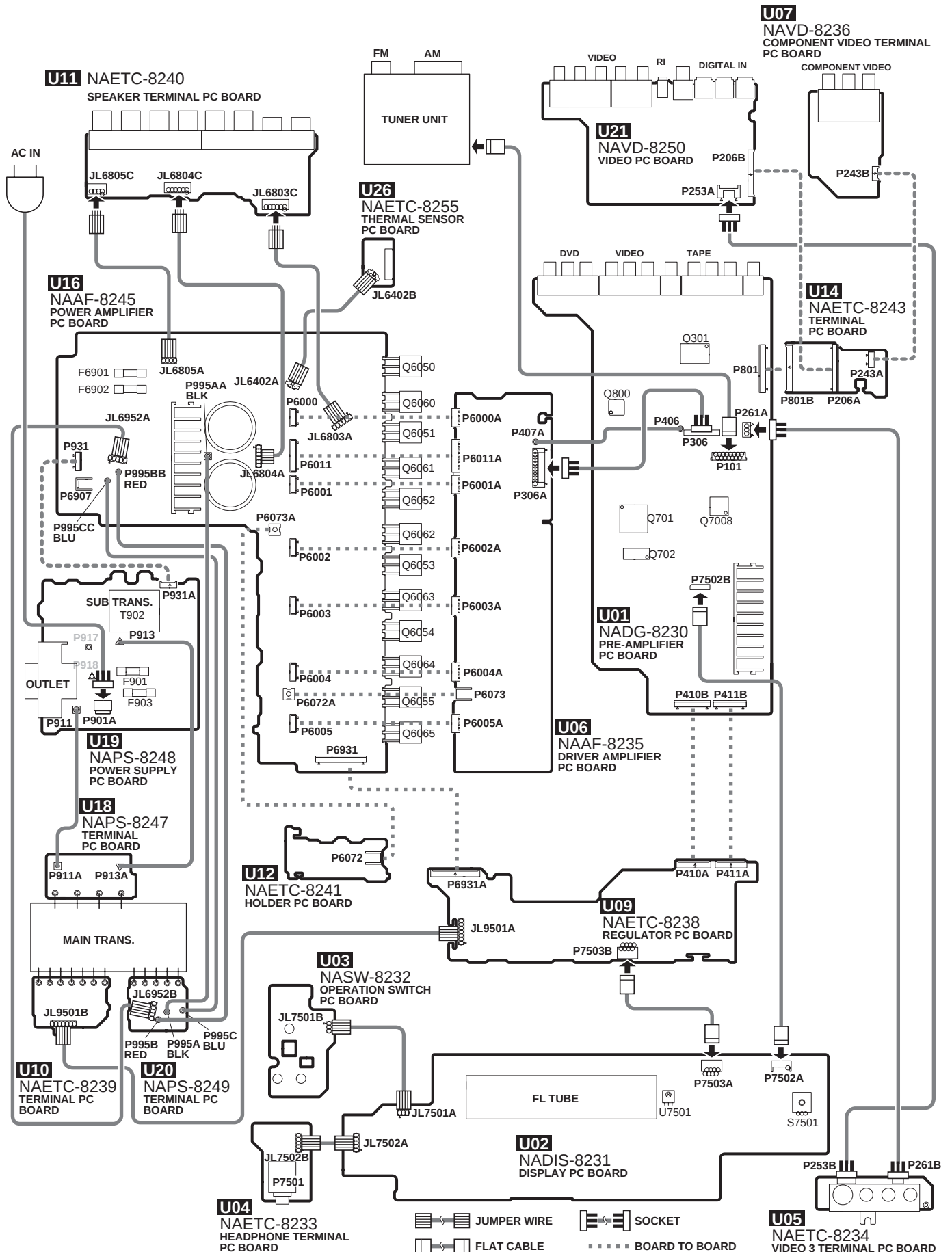
H

NAVD-8250

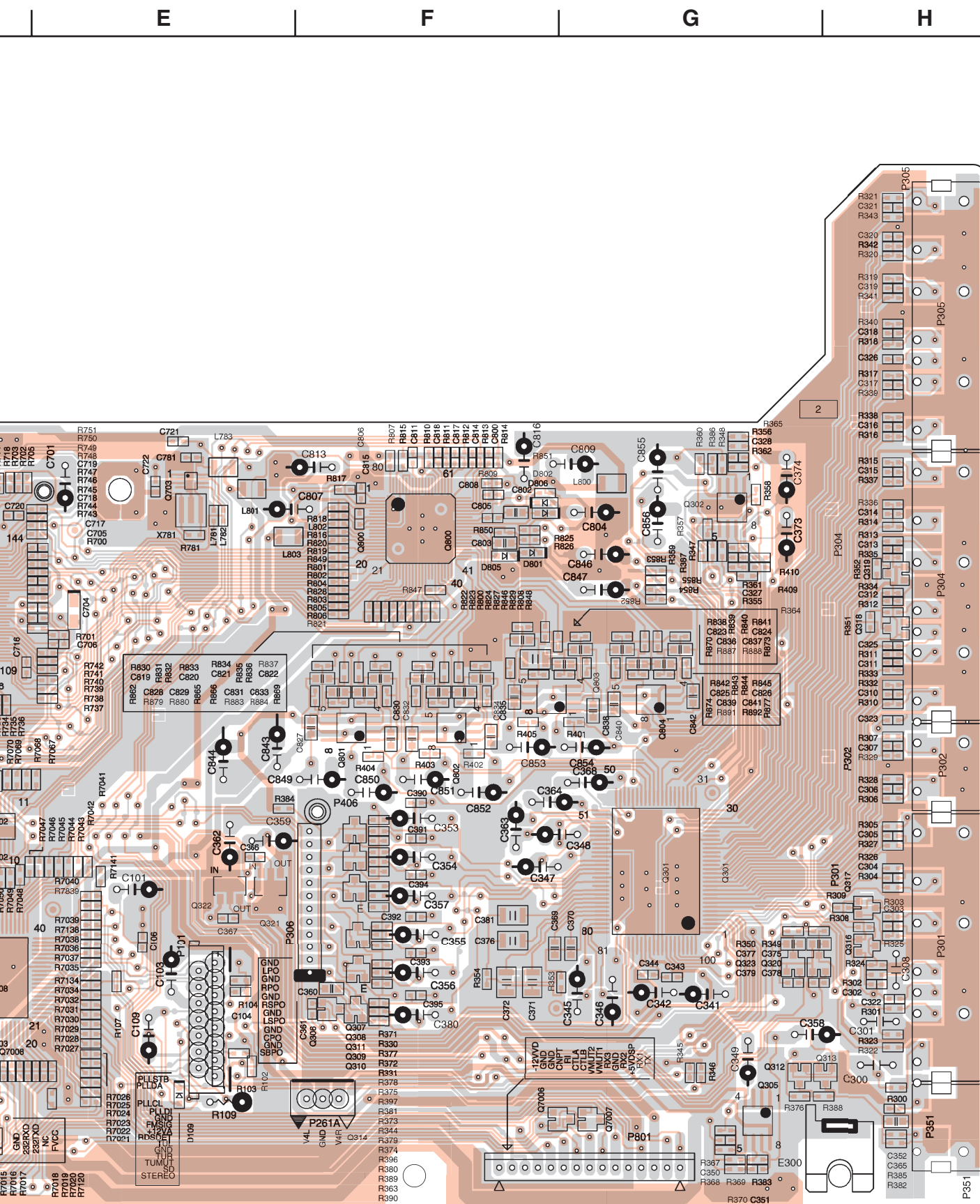
**U21****VIDEO PC BOARD**



## PC BOARD CONNECTION DIAGRAM



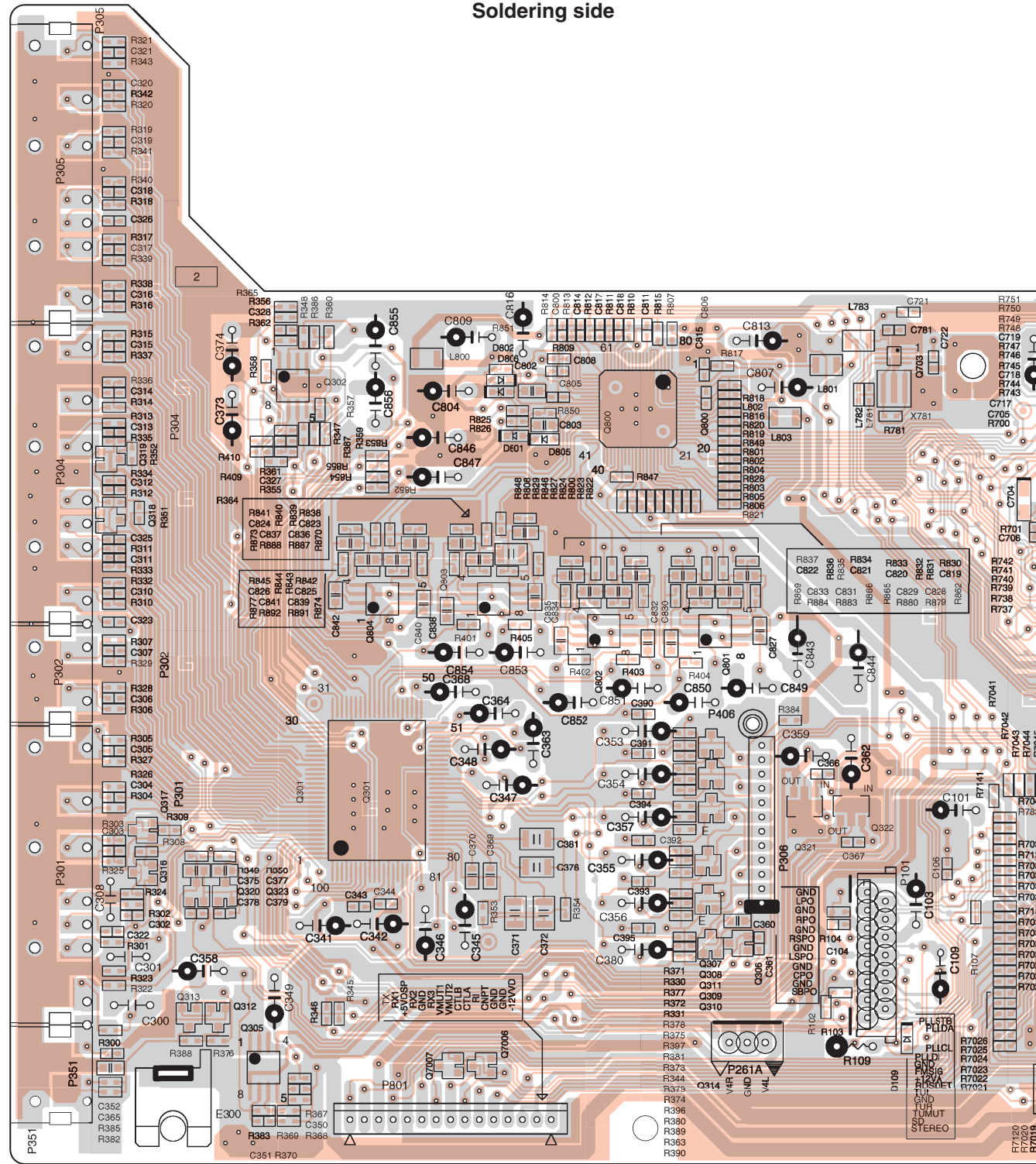
## U01 PREAMPLIFIER PC BOARD (NADG-8230)



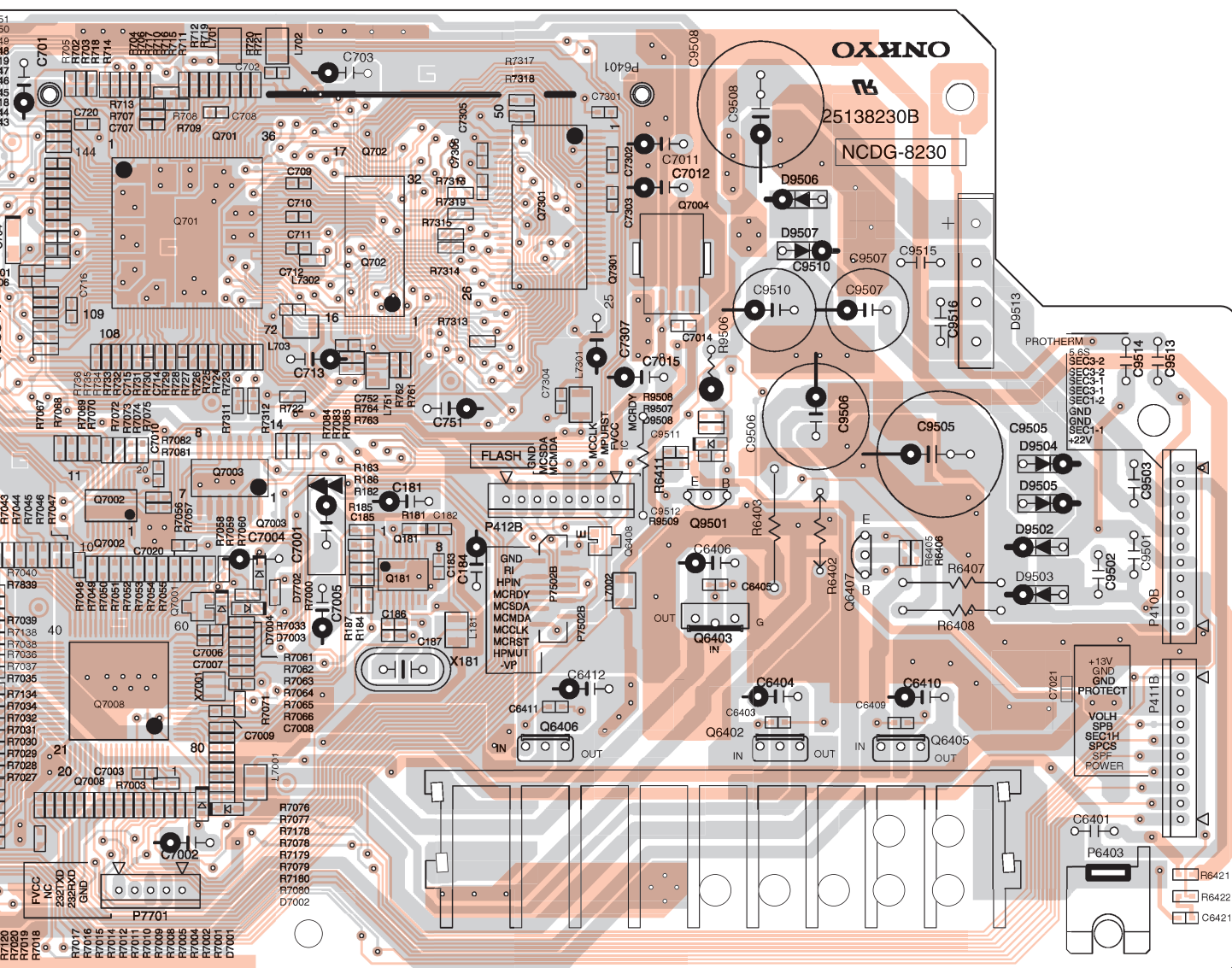
PRINTED CIRCUIT BOARD VIEWS-2

U01 PREAMPLIFIER PC BOARD (NADG-8230)

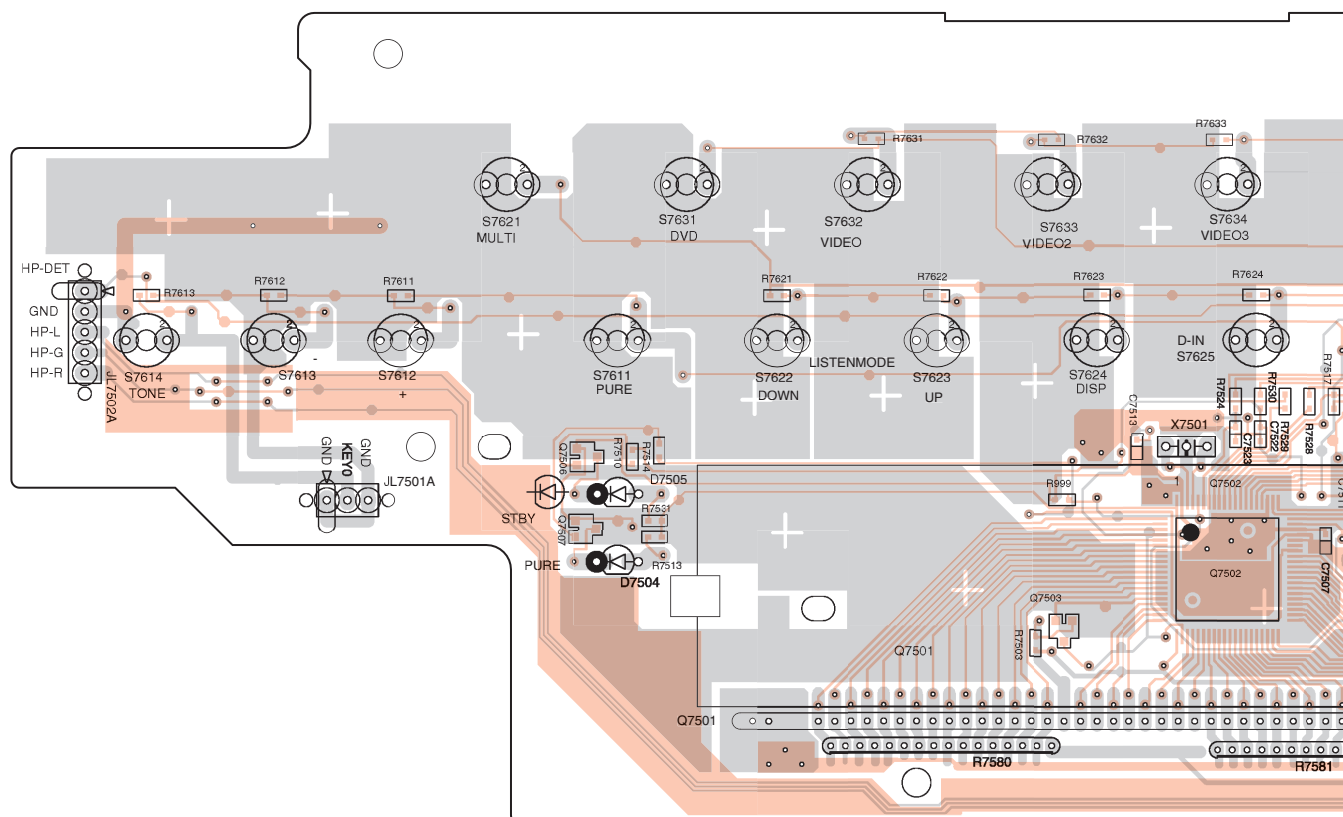
Soldering side

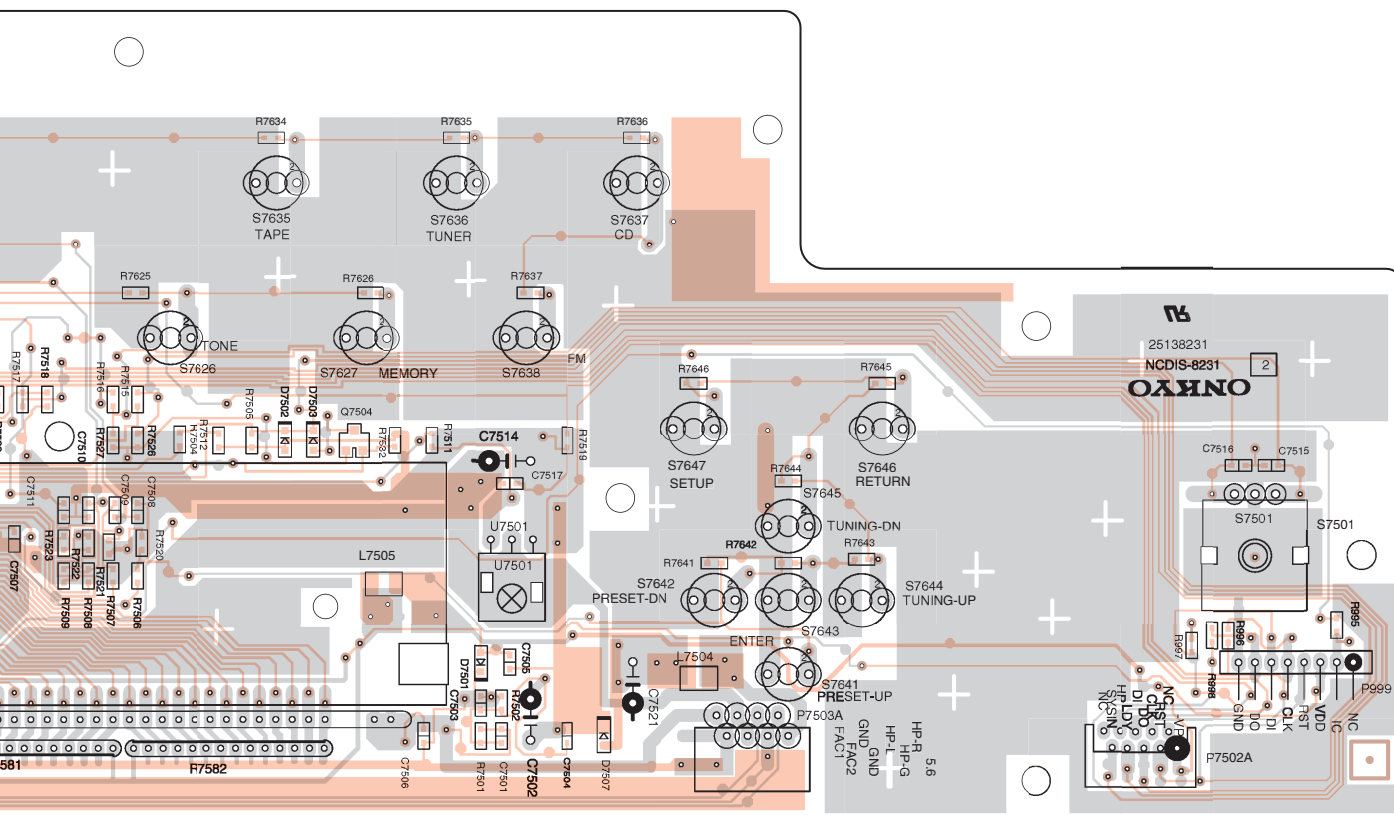
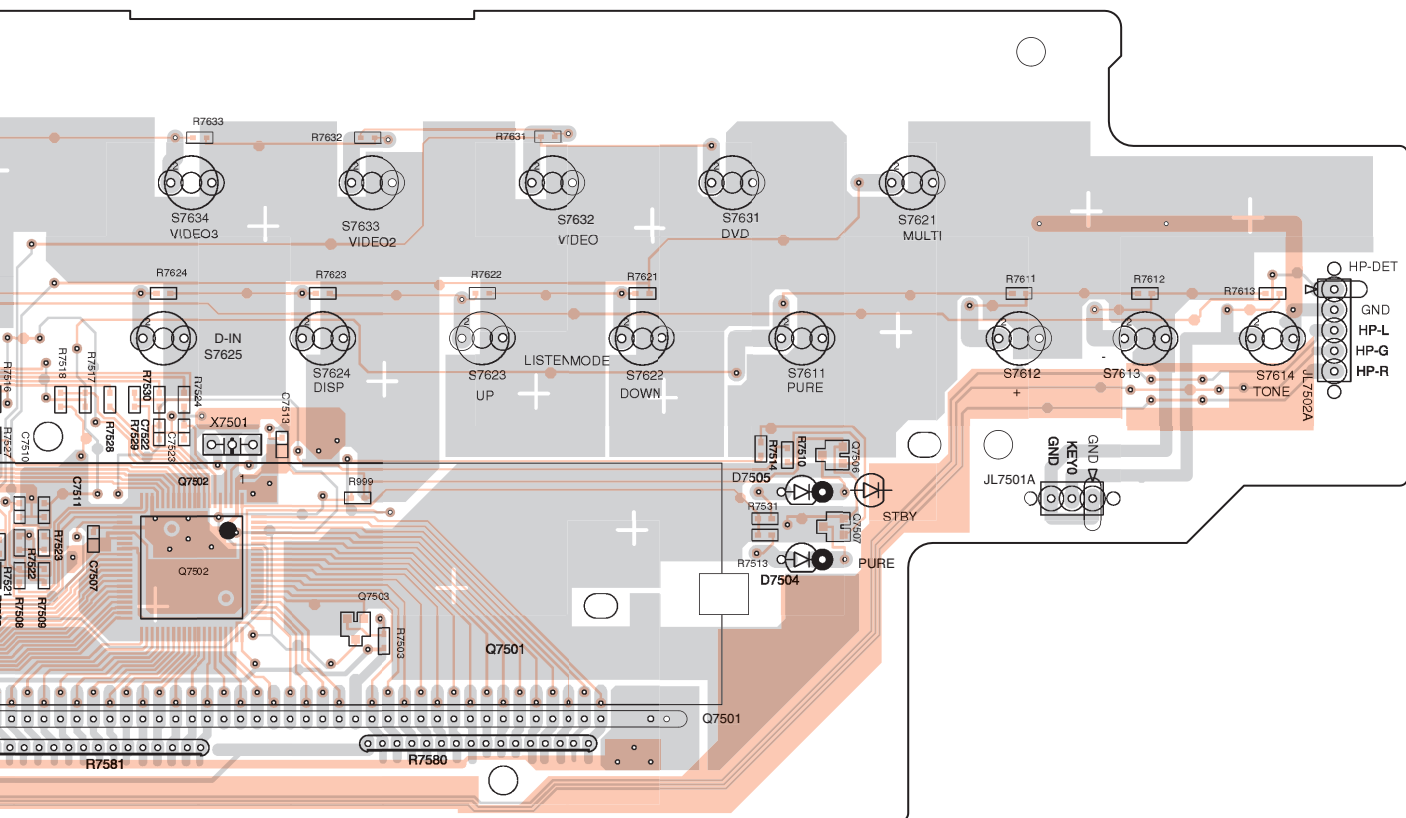






### Component side





5

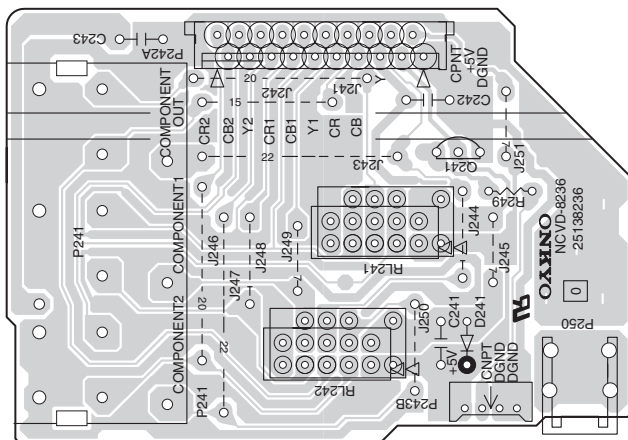




# PRINTED CIRCUIT BOARD VIEWS-6

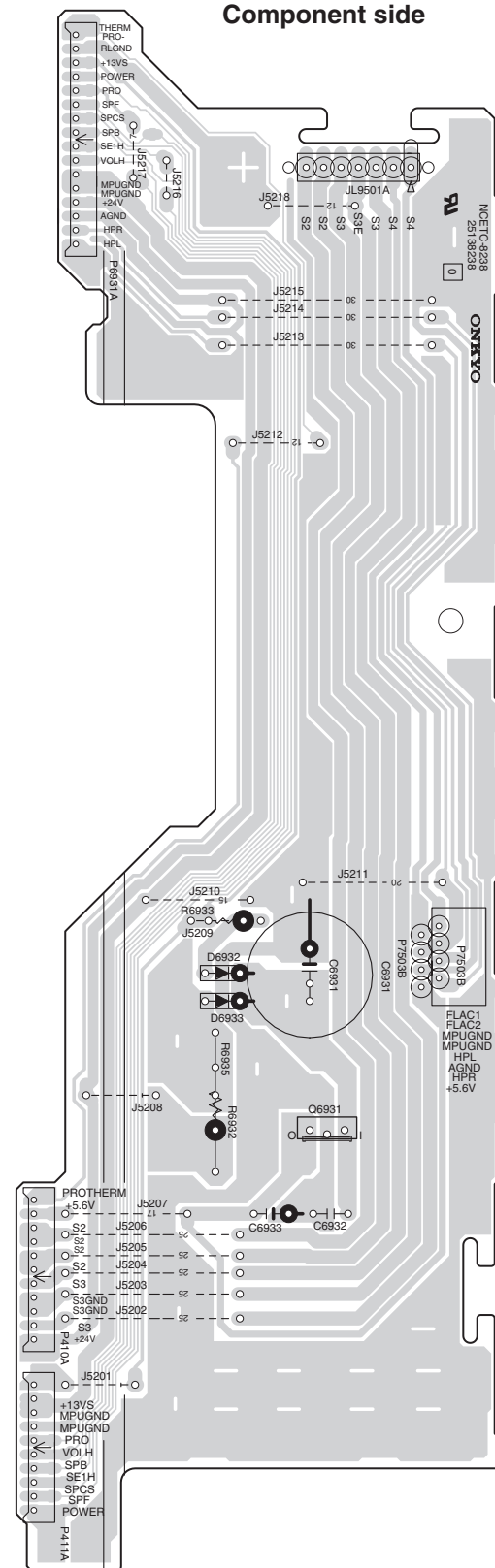
## U07 COMPONENT VIDEO TERMINAL PC BOARD (NAVD-8236)

Component side



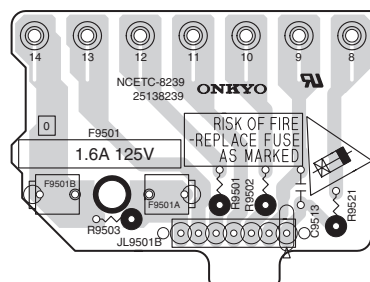
## U09 REGULATOR PC BOARD (NAETC-8238)

Component side



## U10 TERMINAL PC BOARD (NAETC-8239)

Component side



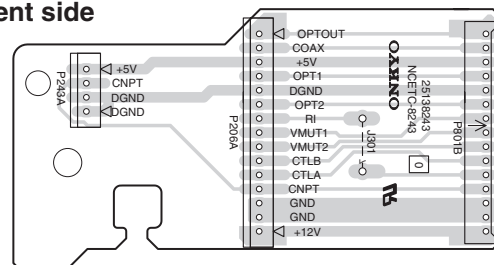
## U12 HOLDER PC BOARD (NAETC-8241)

Component side



## U14 TERMINAL PC BOARD (NAETC-8243)

Component side

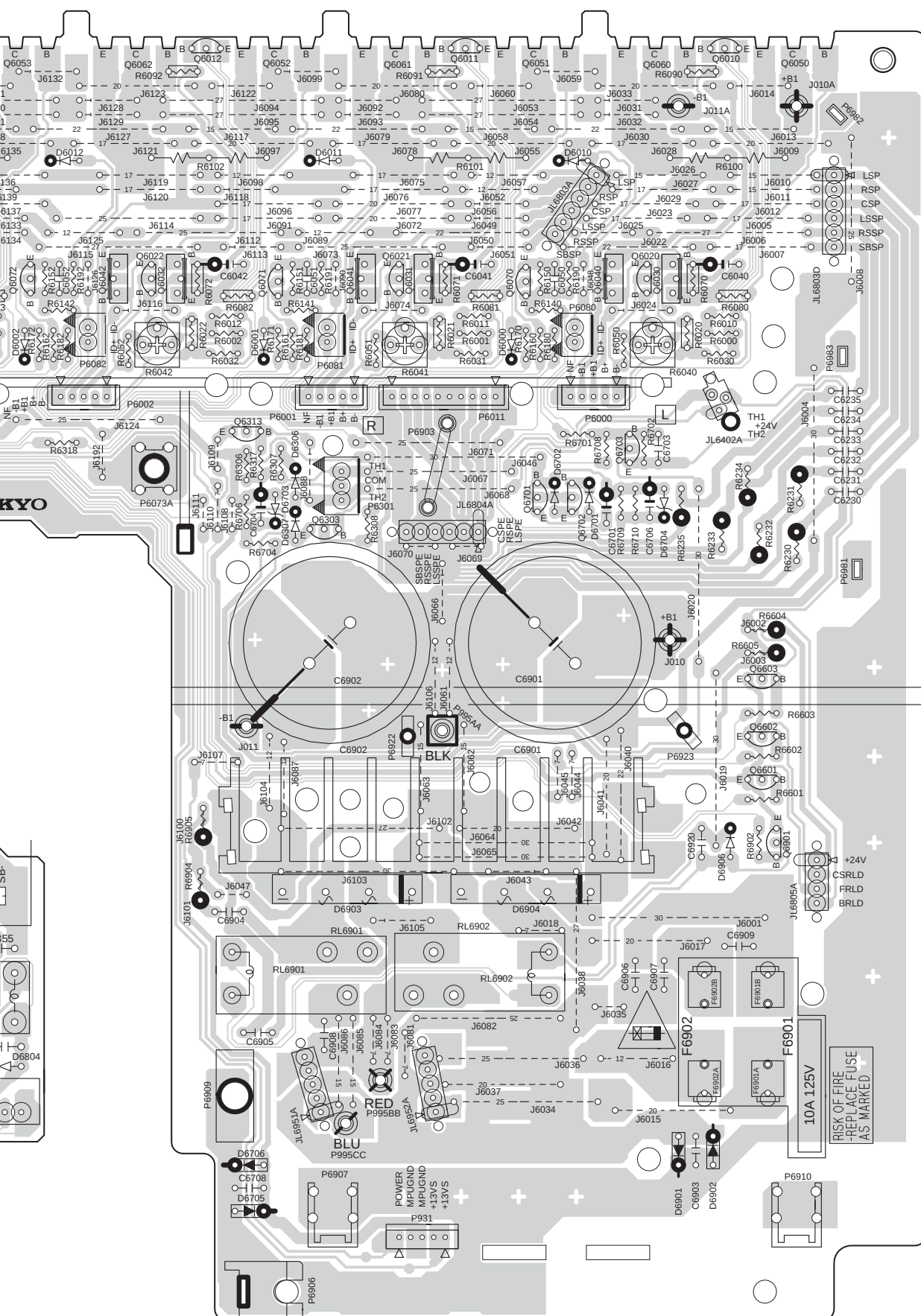


## U16 POWER AMPLIFIER PC BOARD (NAAF-824)

5



245)



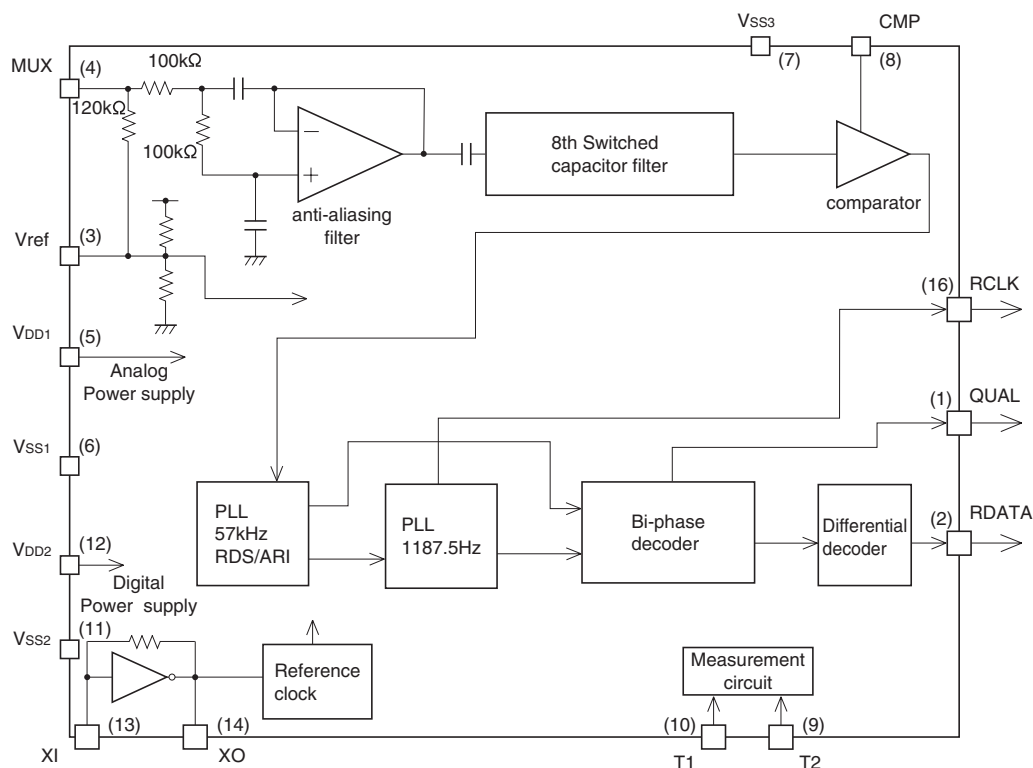




## IC BLOCK DIAGRAM AND TERMINAL DESCRIPTIONS-1

**Q181: BU1924FS (RDS decoder)-1**

### BLOCK DIAGRAM



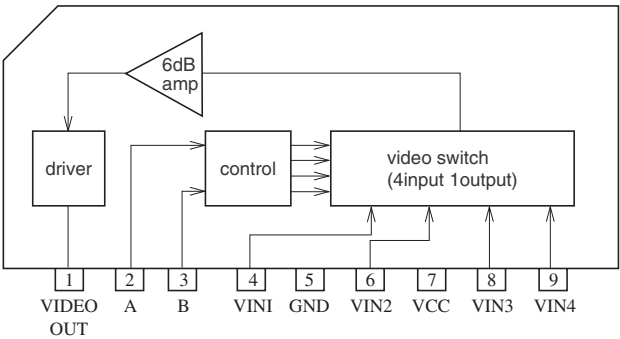
## TERMINAL DESCRIPTION

| Pin No. | Pin name         | Description                                    |
|---------|------------------|------------------------------------------------|
| 1       | QUAL             | Output terminal of demodulator quality signal. |
| 2       | RDATA            | Output terminal of demodulator data.           |
| 3       | Vref             | Input terminal of reference voltage.           |
| 4       | MUX              | Input terminal of composite signal.            |
| 5       | V <sub>DD1</sub> | Analog power supply.                           |
| 6       | V <sub>SS1</sub> | Analog power supply.                           |
| 7       | V <sub>SS3</sub> | Ground.                                        |
| 8       | CMP              | Input terminal of comparator.                  |
| 9       | T2               | Input terminal for test mode.                  |
| 10      | T1               | Input terminal for test mode.                  |
| 11      | V <sub>SS2</sub> | Digital power supply.                          |
| 12      | V <sub>DD2</sub> | Digital power supply.                          |
| 13      | XI               | Connect to oscillator.                         |
| 14      | XO               | Connect to oscillator.                         |
| 15      | (N.C.)           | ---                                            |
| 16      | RCLK             | Output terminal of demodulator clock.          |

IC BLOCK DIAGRAM AND TERMINAL DESCRIPTIONS-2

Q212,213: LA7956 (Video switch)

BLOCK DIAGRAM



TRUTH TABLE

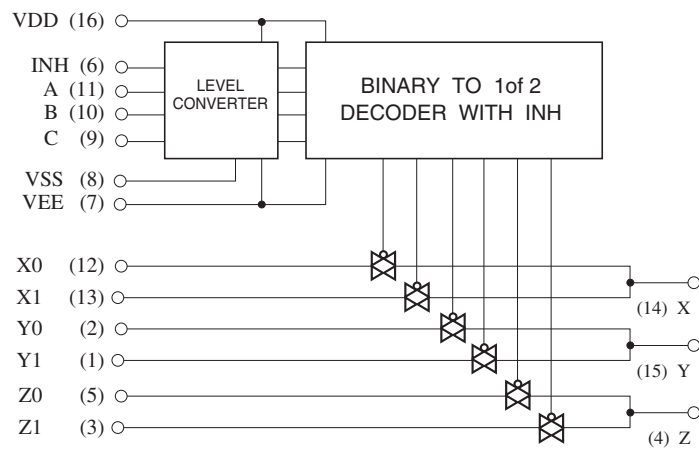
| S2<br>(Pin 2) | S3<br>(Pin 3) | Vin1<br>(Pin 4) | Vin2<br>(Pin 6) | Vin3<br>(Pin 8) | Vin4<br>(Pin 9) |
|---------------|---------------|-----------------|-----------------|-----------------|-----------------|
| H             | H             | ON              | OFF             | OFF             | OFF             |
| L             | H             | OFF             | ON              | OFF             | OFF             |
| H             | L             | OFF             | OFF             | ON              | OFF             |
| L             | L             | OFF             | OFF             | OFF             | ON              |



## IC BLOCK DIAGRAM AND TERMINAL DESCRIPTIONS-3

Q291: BU4053B (Triple 2- channel analog multiplexer/ demultiplexer)

### BLOCK DIAGRAM



### TRUTH TABLE

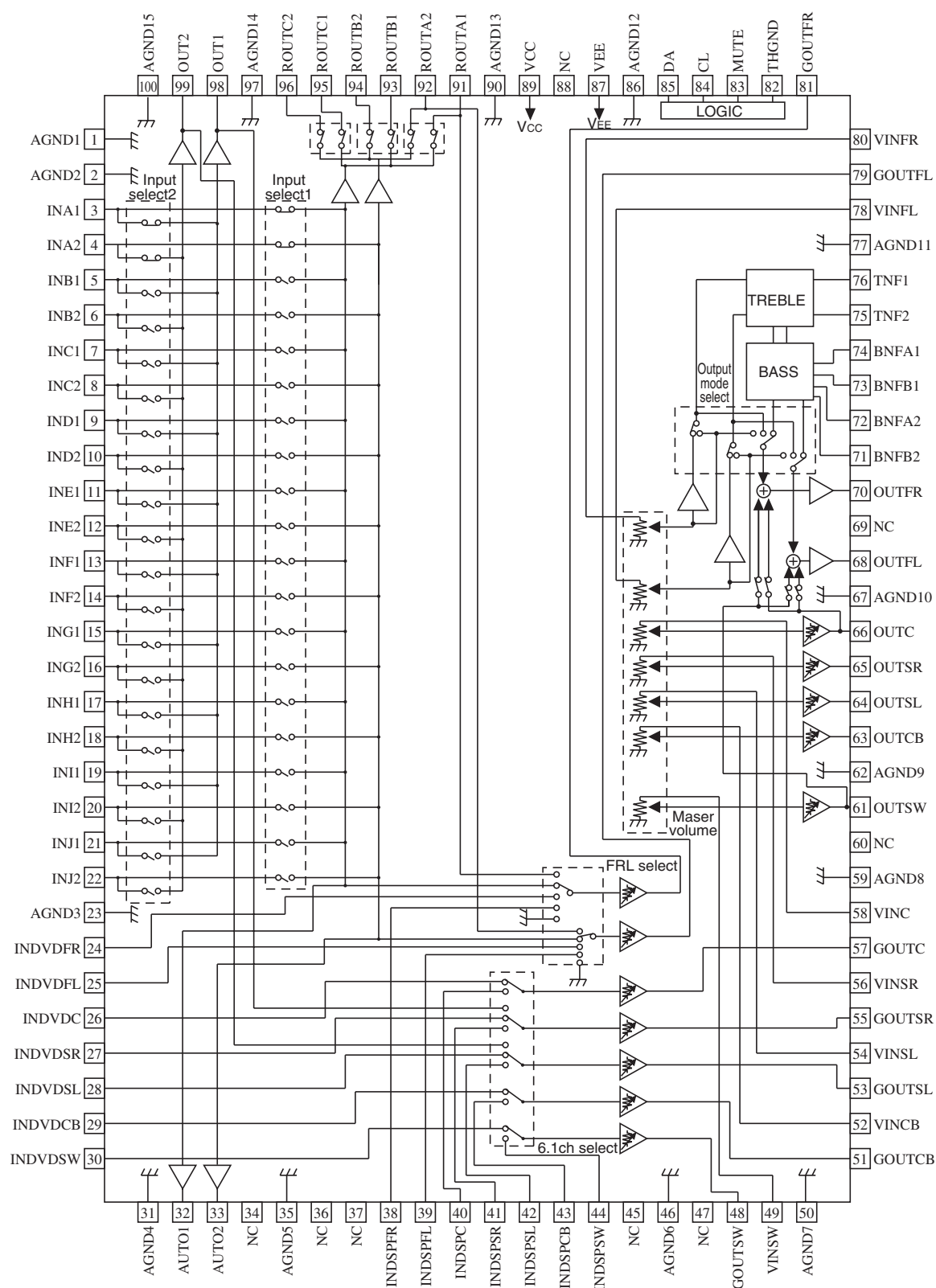
| INH | A | B | C | ON SWITCH                                    |
|-----|---|---|---|----------------------------------------------|
| L   | L | L | L | X <sub>0</sub> Y <sub>0</sub> Z <sub>0</sub> |
| L   | H | L | L | X <sub>1</sub> Y <sub>0</sub> Z <sub>0</sub> |
| L   | L | H | L | X <sub>0</sub> Y <sub>1</sub> Z <sub>0</sub> |
| L   | H | H | L | X <sub>1</sub> Y <sub>1</sub> Z <sub>0</sub> |
| L   | L | L | H | X <sub>0</sub> Y <sub>0</sub> Z <sub>1</sub> |
| L   | H | L | H | X <sub>1</sub> Y <sub>0</sub> Z <sub>1</sub> |
| L   | L | H | H | X <sub>0</sub> Y <sub>1</sub> Z <sub>1</sub> |
| L   | H | H | H | X <sub>1</sub> Y <sub>1</sub> Z <sub>1</sub> |
| H   | X | X | X | NONE                                         |

X:Irrelevant

# IC BLOCK DIAGRAM AND TERMINAL DESCRIPTIONS-4

Q301: BD3817KS (7ch Volume with 10ch input selector)-1

## BLOCK DIAGRAM



# IC BLOCK DIAGRAM AND TERMINAL DESCRIPTIONS-5

## Q301: BD3817KS (7ch Volume with 10ch input selector)-2

### TERMINAL DESCRIPTION

| Pin No. | Pin Name | Description             |
|---------|----------|-------------------------|
| 1       | AGND1    | Analog ground terminal  |
| 2       | AGND2    | Analog ground terminal  |
| 3       | INA1     | 1ch input terminal A    |
| 4       | INA2     | 2ch input terminal A    |
| 5       | INB1     | 1ch input terminal B    |
| 6       | INB2     | 2ch input terminal B    |
| 7       | INC1     | 1ch input terminal C    |
| 8       | INC2     | 2ch input terminal C    |
| 9       | IND1     | 1ch input terminal D    |
| 10      | IND2     | 2ch input terminal D    |
| 11      | INE1     | 1ch input terminal E    |
| 12      | INE2     | 2ch input terminal E    |
| 13      | INF1     | 1ch input terminal F    |
| 14      | INF2     | 2ch input terminal F    |
| 15      | ING1     | 1ch input terminal G    |
| 16      | ING2     | 2ch input terminal G    |
| 17      | INH1     | 1ch input terminal H    |
| 18      | INH2     | 2ch input terminal H    |
| 19      | INI1     | 1ch input terminal I    |
| 20      | INI2     | 2ch input terminal I    |
| 21      | INJ1     | 1ch input terminal J    |
| 22      | INJ2     | 2ch input terminal J    |
| 23      | AGND3    | Analog ground terminal  |
| 24      | INDVDFR  | FRch DVD input terminal |
| 25      | INDVDL   | FLch DVD input terminal |
| 26      | INDVDC   | Cch DVD input terminal  |
| 27      | INDVDSR  | SRch DVD input terminal |
| 28      | INDVDSL  | SLch DVD input terminal |
| 29      | INDVDCB  | CBch DVD input terminal |
| 30      | INDVDSW  | SWch DVD input terminal |
| 31      | AGND4    | Analog ground terminal  |
| 32      | AOUT1    | 1ch A/D output terminal |
| 33      | AOUT2    | 2ch A/D output terminal |
| 34      | NC       | Non-connected terminal  |
| 35      | AGND5    | Analog ground terminal  |
| 36      | NC       | Non-connected terminal  |
| 37      | NC       | Non-connected terminal  |
| 38      | INDSPFR  | FRch DSP input terminal |
| 39      | INDSPFL  | FLch DSP input terminal |
| 40      | INDSPC   | Cch DSP input terminal  |
| 41      | INDSPSR  | SRch DSP input terminal |
| 42      | INDSPSL  | SLch DSP input terminal |
| 43      | INDSPCB  | CBch DSP input terminal |

| Pin No. | Pin name | Description                          |
|---------|----------|--------------------------------------|
| 44      | INDSPSW  | SWch DSP input terminal              |
| 45      | NC       | Non-connected terminal               |
| 46      | AGND6    | Analog ground terminal               |
| 47      | NC       | Non-connected terminal               |
| 48      | GOUTSW   | SWch input gain output terminal      |
| 49      | VINSW    | SWch volume input terminal           |
| 50      | AGND7    | Analog ground terminal               |
| 51      | GOUTCB   | CBch input gain output terminal      |
| 52      | VINCB    | CBch volume input terminal           |
| 53      | GOUTSL   | SLch input gain output terminal      |
| 54      | VINSL    | SLch volume input terminal           |
| 55      | GOUTSR   | SRch input gain output terminal      |
| 56      | VINSR    | SRch volume input terminal           |
| 57      | GOUTC    | Cch input gain output terminal       |
| 58      | VINC     | Cch volume input terminal            |
| 59      | AGND8    | Analog ground terminal               |
| 60      | NC       | Non-connected terminal               |
| 61      | OUTSW    | SWch output terminal                 |
| 62      | AGND9    | Analog ground terminal               |
| 63      | OUTCB    | CBch output terminal                 |
| 64      | OUTSL    | SLch output terminal                 |
| 65      | OUTSR    | SRch output terminal                 |
| 66      | OUTC     | Cch output terminal                  |
| 67      | AGND10   | Analog ground terminal               |
| 68      | OUTFL    | FLch output terminal                 |
| 69      | NC       | Non-connected terminal               |
| 70      | OUTFR    | FRch output terminal                 |
| 71      | BNFB2    | 2ch bass filter terminal B           |
| 72      | BNFA2    | 2ch bass filter terminal A           |
| 73      | BNFB1    | 1ch bass filter terminal B           |
| 74      | BNFA1    | 1ch bass filter terminal A           |
| 75      | TNF2     | 2ch treble filter terminal           |
| 76      | TNF1     | 1ch treble filter terminal           |
| 77      | AGND11   | Analog ground terminal               |
| 78      | VINFL    | FLch volume input terminal           |
| 79      | GOUTFL   | FLch input gain output terminal      |
| 80      | VINFR    | FRch volume input terminal           |
| 81      | GOUTFR   | FRch input gain output terminal      |
| 82      | THGND    | Comparator ground terminal           |
| 83      | MUTE     | Mute terminal                        |
| 84      | CL       | Serial clock input terminal          |
| 85      | DA       | Serial data and latch input terminal |
| 86      | AGND12   | Analog ground terminal               |

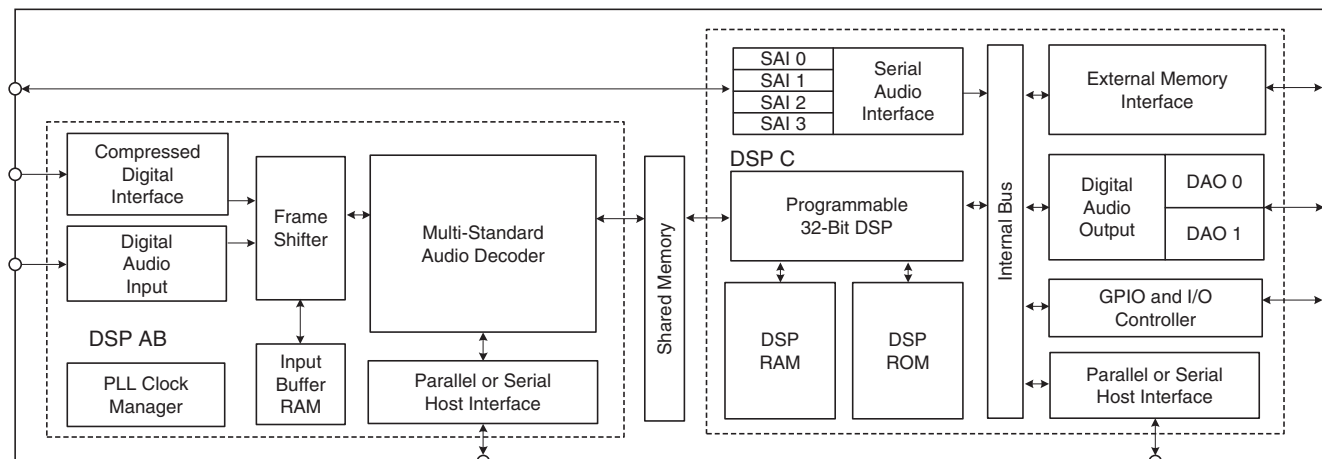
**IC BLOCK DIAGRAM AND TERMINAL DESCRIPTIONS-6****Q301: BD3817KS (7ch Volume with 10ch input selector)-3****TERMINAL DESCRIPTION**

| Pin No. | Pin Name | Description                         |
|---------|----------|-------------------------------------|
| 87      | VEE      | (-)Power supply terminal            |
| 88      | NC       | Non-connected terminal              |
| 89      | VCC      | (+)Power supply terminal            |
| 90      | AGND13   | Analog ground terminal              |
| 91      | ROUTA1   | 1ch REC input and output terminal A |
| 92      | ROUTA2   | 2ch REC input and output terminal A |
| 93      | ROUTB1   | 1ch REC output terminal B           |
| 94      | ROUTB2   | 2ch REC output terminal B           |
| 95      | ROUTC1   | 1ch REC output terminal C           |
| 96      | ROUTC2   | 2ch REC output terminal C           |
| 97      | OUT1     | 1ch output terminal                 |
| 98      | OUT2     | 2ch output terminal                 |
| 99      | AGND14   | Analog ground terminal              |
| 100     | AGND15   | Analog ground terminal              |

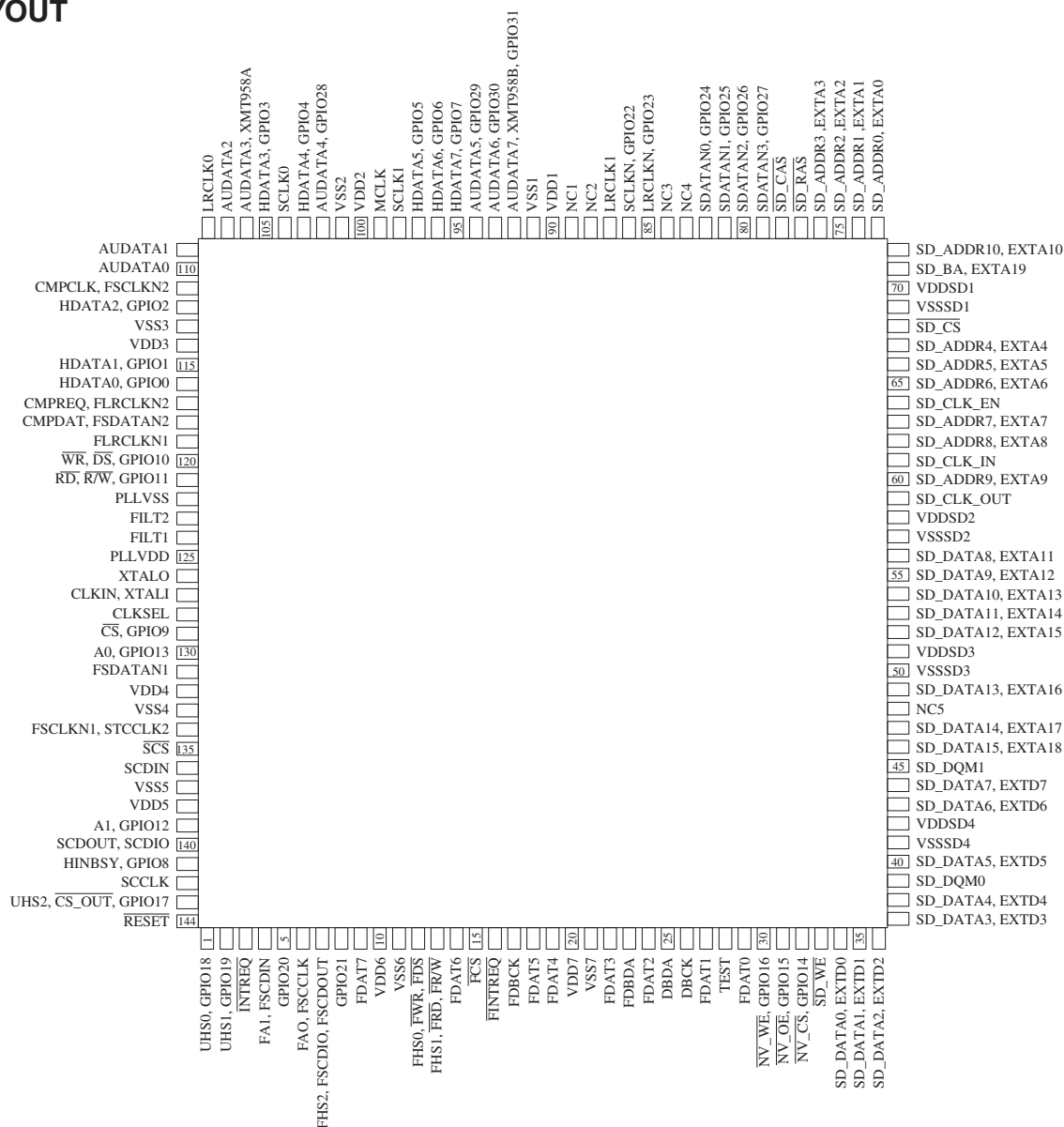
## IC BLOCK DIAGRAM AND TERMINAL DESCRIPTIONS-7

## Q701: CS494003CQZ (Multi-Standard Audio Decoder)-1

### BLOCK DIAGRAM



## PIN LAYOUT



# IC BLOCK DIAGRAM AND TERMINAL DESCRIPTIONS-8

## Q701: CS494003CQZ (Multi-Standard Audio Decoder)-2

### TERMINAL DESCRIPTION

#### FILT1 - Phase-Locked Loop Filter

Connects to an external filter for the on-chip phase-locked loop.

#### FILT2 - Phase Locked Loop Filter

Connects to an external filter for the on-chip phase-locked loop.

#### CLKIN, XTALI - External Clock Input/Crystal Oscillator Input

CS494003 clock input. This pin accepts an external clock input signal that is used to drive the internal core logic. When in internal clock mode (CLKSEL == VSS), this input is connected to the internal PLL from which all internal clocks are derived. When in external clock mode (CLKSEL == VDD), this input is connected to the DSP clock. Alternatively, a 12.288 mHz crystal oscillator can be connected between XTALI and XTALO. *INPUT*

#### XTALO - Crystal Oscillator Output

Crystal oscillator output. *OUTPUT*

#### CLKSEL - DSP Clock Select

This pin selects the internal source clock. When CLKSEL is low, CLKIN is connected to the internal PLL from which all internal clocks are derived. When CLKSEL is high, the PLL is bypassed and the external clock directly drives all input logic. *INPUT*

#### FDAT0~FDAT7 - DSPAB Bidirectional Data Bus

In parallel host mode, these pins provide a bidirectional data bus to DSPAB. These pins have an internal pull-up. *BIDIRECTIONAL - Default: INPUT*

#### FA0, FSCCLK - Host Parallel Address Bit Zero or Serial Control Port Clock

In parallel host mode, this pin serves as one of two address input pins used to select one of four parallel registers. In serial host mode, this pin serves as the serial control clock signal, specifically as the SPI clock input. *INPUT*

#### FA1, FSCDIN - Host Address Bit One or SPI Serial Control Data Input

In parallel host mode, this pin serves as one of two address input pins used to select one of four parallel registers. In SPI serial host mode, this pin serves as the data input. *INPUT*

#### FHS1, $\overline{\text{FRD}}$ , $\overline{\text{FR}/\overline{\text{W}}}$ - Mode Select Bit 1 or Host Parallel Output Enable or Host Parallel $\overline{\text{R}/\overline{\text{W}}}$

DSPAB control port mode select bit 1. This bit is one of 3 control port select bits that are sampled on the rising edge of  $\overline{\text{RESET}}$  to determine the control port mode of DSPAB. In Intel parallel host mode, this pin serves as the active-low data bus enable input. In Motorola parallel host mode, this pin serves as the read-high/write-low control input signal. In serial host mode, this pin can serve as the external memory active-low data-enable output signal. *BIDIRECTIONAL - Default: INPUT*

#### FHS0, $\overline{\text{FWR}}$ , $\overline{\text{FDS}}$ - Mode Select Bit 0 or Host Write Strobe or Host Data Strobe

DSPAB control port mode select bit 0. This bit is one of 3 control port select bits that are sampled on the rising edge of  $\overline{\text{RESET}}$  to determine the control port mode of DSPAB. In Intel parallel host mode, this pin serves as the active-low data-write-input strobe. In Motorola parallel host mode, this pin serves as the active-low data-strobe-input signal. In serial host mode, this pin can serve as the external-memory active-low write-enable output signal. *BIDIRECTIONAL - Default: INPUT*

#### $\overline{\text{FCS}}$ - Host Parallel Chip Select, Host Serial SPI Chip Select

In parallel host mode, this pin serves as the active-low chip-select input signal. In serial host SPI mode, this pin is used as the active-low chip-select input signal. *INPUT*

#### FHS2, FSCDIO, FSCDOUT - Mode Select Bit 2 or Serial Control Port Data Input and Output, Parallel Port Type Select

DSPAB control port mode select bit 2. This bit is one of 3 control port select bits that are sampled on the rising edge of  $\overline{\text{RESET}}$  to determine the control port mode of DSPAB. In SPI mode this pin serves as the data output pin. In parallel host mode, this pin is sampled at the rising edge of  $\overline{\text{RESET}}$  to configure the parallel host mode as an Intel type bus or as a Motorola type bus. *BIDIRECTIONAL - Default: INPUT*

#### $\overline{\text{FINTREQ}}$ - Control Port Interrupt Request

Open-drain interrupt-request output. This pin is driven low to indicate that the DSP has outgoing control data that should be read by the host. *OPEN DRAIN I/O - Requires 3.3K Ohm Pull-Up*

#### FSCLKN1, STCLK2 - PCM Audio Input Bit Clock

Digital-audio bit clock input. FSCLKN1 operates asynchronously from all other DSPAB clocks. In master mode, FSCLKN1 is derived from DSPAB's internal clock generator. The active edge of FSCLKN1 can be programmed by the DSP. *BIDIRECTIONAL - Default: INPUT*

# IC BLOCK DIAGRAM AND TERMINAL DESCRIPTIONS-9

## Q701: CS494003CQZ (Multi-Standard Audio Decoder)-3

### TERMINAL DESCRIPTION

#### FLRCLKN1 - PCM Audio Input Sample Rate Clock

Digital-audio frame clock input. FLRCLKN1 typically is run at the sampling frequency. FLRCLKN1 operates asynchronously from all other DSPAB clocks. The polarity of FLRCLKN1 for a particular subframe can be programmed by the DSP.

*BIDIRECTIONAL - Default: INPUT*

#### FSDATAN1 - PCM Audio Data Input One

Digital-audio data input that can accept from one compressed line or 2 channels of PCM data. FSDATAN1 can be sampled with either edge of FSCLKN1, depending on how FSCLKN1 has been configured. *INPUT*

#### CMPCLK, FSCLKN2 - PCM Audio Input Bit Clock

Digital-audio bit clock input. FSCLKN2 operates asynchronously from all other DSPAB clocks. The active edge of FSCLKN2 can be programmed by the DSP.

*BIDIRECTIONAL - Default: INPUT*

#### COMPDAT, FSDATAN2 - PCM Audio Data Input Number Two

Digital-audio data input that can accept either one compressed line or 2 channels of PCM data. FSDATAN2 can be sampled with either edge of FSCLKN2, depending on how FSCLKN2 has been configured.

*BIDIRECTIONAL - Default: INPUT*

#### FDBCK - Reserved

This pin is reserved and should be pulled up with an external 3.3k resistor. *INPUT*

#### FDBDA - Reserved

This pin is reserved and should be pulled up with an external 3.3k resistor.

*BIDIRECTIONAL - Default: INPUT*

#### PLLVDD - PLL Supply Voltage

2.5 V PLL supply.

#### PLLVSS - PLL Ground Voltage

PLL ground.

#### $\overline{\text{RESET}}$ - Master Reset Input

Asynchronous active-low master reset input. Reset should be low at power-up to initialize the DSP and to guarantee that the device is not active during initial power-on stabilization periods. At the rising edge of reset the host interface mode of DSPAB is selected contingent on the state of the FHS0, FHS1, and FHS2 pins. At the rising edge of reset the host interface mode of DSPC is selected contingent on the state of the UHS0, UHS1, and UHS2 pins. If reset is low all bidirectional pins are high-Z inputs. *INPUT*

#### TEST - Reserved

This should be tied low for normal operation. *INPUT*

#### MCLK - Audio Master Clock

Bidirectional master audio clock. As an output, MCLK provides a low jitter oversampling clock.

MCLK supports all standard oversampling frequencies. *BIDIRECTIONAL - Default: INPUT*

#### SCLK0 - Audio Output Bit Clock

Bidirectional digital-audio output bit clock for AUDATA0, AUDATA1, AUDATA2, and AUDATA3.

As an output, SCLK0 can provide 32 Fs, 64 Fs, 128 Fs, 256 Fs, or 512 Fs frequencies and is synchronous to MCLK. As an input, SCLK0 is independent of MCLK.

*BIDIRECTIONAL - Default: INPUT*

#### SCLK1 - Audio Output Bit Clock

Bidirectional digital-audio output bit clock for AUDATA4, AUDATA5, AUDATA6, and AUDATA7.

As an output, SCLK1 can provide 32 Fs, 64 Fs, 128 Fs, 256 Fs, or 512 Fs frequencies and is synchronous to MCLK. As an input, SCLK1 is independent of MCLK.

*BIDIRECTIONAL - Default: INPUT*

#### LRCLK0 - Audio Output Sample Rate Clock

Bidirectional digital-audio output frame clock for AUDATA0, AUDATA1, AUDATA2, and AUDATA3. As an output, LRCLK0 can provide all standard output sample rates up to 192 kHz and is synchronous to MCLK. As an input, LRCLK0 is independent of MCLK.

*BIDIRECTIONAL - Default: INPUT*



# IC BLOCK DIAGRAM AND TERMINAL DESCRIPTIONS-10

## Q701: CS494003CQZ (Multi-Standard Audio Decoder)-4

### TERMINAL DESCRIPTION

#### LRCLK1 - Audio Output Sample Rate Clock

Bidirectional digital-audio output frame clock for AUDATA4, AUDATA5, AUDATA6, and AUDATA7. As an output, LRCLK1 can provide all standard output sample rates up to 192 kHz and is synchronous to MCLK. As an input, LRCLK1 is independent of MCLK.

*BIDIRECTIONAL - Default: INPUT*

#### AUDATA0 - Digital Audio Output 0

PCM digital-audio data output. *OUTPUT*

#### AUDATA1 - Digital Audio Output 1

PCM digital-audio data output. *OUTPUT*

#### AUDATA2 - Digital Audio Output 2

PCM digital-audio data output. *OUTPUT*

#### AUDATA3, XMT958A - Digital Audio Output 3, S/PDIF Transmitter

CMOS level output that outputs a biphasic-mark encoded (S/PDIF) IEC60958 signal or digital audio data which is capable of carrying two channels of PCM digital audio. *OUTPUT*

#### AUDATA4, GPIO28 - Digital Audio Output 4, General Purpose I/O

PCM digital-audio data output. This pin can act as a general-purpose input or output that can be individually configured and controlled by DSPC.

*BIDIRECTIONAL - Default: OUTPUT*

#### AUDATA5, GPIO29 - Digital Audio Output 5, General Purpose I/O

PCM digital-audio data output. This pin can act as a general-purpose input or output that can be individually configured and controlled by DSPC.

*BIDIRECTIONAL - Default: OUTPUT*

#### AUDATA6, GPIO30 - Digital Audio Output 6, General Purpose I/O

PCM digital-audio data output. This pin can act as a general-purpose input or output that can be individually configured and controlled by DSPC.

*BIDIRECTIONAL - Default: OUTPUT*

#### AUDATA7, XMT958B, GPIO3 - Digital Audio Output 7, S/PDIF Transmitter, General Purpose I/O

CMOS level output that contains a biphasic-mark encoded (S/PDIF) IEC60958 signal or digital audio data which is capable of carrying two channels of PCM digital audio. This pin can also act as a general-purpose input or output that can be individually configured and controlled by DSPC.

*BIDIRECTIONAL - Default: OUTPUT*

#### DBCK - Debug Clock

Must be tied high to 3.3k ohm resistor. *INPUT*

#### DBDA - Debug Data

Must be tied high to 3.3k ohm resistor. *BIDIRECTIONAL - Default: INPUT*

#### SCLKN, GPIO22 - PCM Audio Input Bit Clock, General Purpose I/O

Digital-audio bit clock that is an input. SCLKN operates asynchronously from all other DSPAB clocks. The active edge of SCLKN can be programmed by the DSP. This pin can act as a general-purpose input or output that can be individually configured and controlled by DSPC.

*BIDIRECTIONAL - Default: INPUT*

#### LRCLKN, GPIO23 - PCM Audio Input Sample Rate Clock, General Purpose I/O

Digital-audio frame clock input. LRCLKN operates asynchronously from all other DSPAB clocks. The polarity of LRCLKN for a particular subframe can be programmed by the DSP. This pin can act as a general-purpose input or output that can be individually configured and controlled by DSPC.

*BIDIRECTIONAL - Default: INPUT*

#### SDATAN0, GPIO24 - PCM Audio Input Data, General Purpose I/O

Digital-audio PCM data input. This pin can act as a general-purpose input or output that can be individually configured and controlled by DSPC.

*BIDIRECTIONAL - Default: INPUT*

# IC BLOCK DIAGRAM AND TERMINAL DESCRIPTIONS-11

## Q701: CS494003CQZ (Multi-Standard Audio Decoder)-5

### TERMINAL DESCRIPTION

SDATAN1, GPIO25 - PCM Audio Input Data, General Purpose I/O

Digital-audio PCM data input. This pin can act as a general-purpose input or output that can be individually configured and controlled by DSPC.  
*BIDIRECTIONAL - Default: INPUT*

SDATAN2, GPIO26 - PCM Audio Input Data, General Purpose I/O

Digital-audio PCM data input. This pin can act as a general-purpose input or output that can be individually configured and controlled by DSPC.  
*BIDIRECTIONAL - Default: INPUT*

SDATAN3, GPIO27 - PCM Audio Input Data, General Purpose I/O

Digital-audio PCM data input. This pin can act as a general-purpose input or output that can be individually configured and controlled by DSPC.  
*BIDIRECTIONAL - Default: INPUT*

$\overline{\text{SCS}}$  - Host Serial SPI Chip Select

SPI mode active-low chip-select input signal. *INPUT*

SCCLK - Serial Control Port Clock

This pin serves as the serial SPI clock input. *INPUT*

SCDIN - SPI Serial Control Data Input

In SPI mode this pin serves as the data input pin. *INPUT*

SCDOUT, SCDIO - Serial Control Port Data Input and Output

In SPI mode this pin serves as the data output pin. *BIDIRECTIONAL - Default: OUTPUT in SPI mode*

INTREQ - Control Port Interrupt Request

Open-drain interrupt-request output. This pin is driven low to indicate that DSPC has outgoing control data and should be serviced by the host.  
*OPEN DRAIN I/O - Requires 3.3K Ohm Pull-Up*

HDATA1~HDATA7, GPIO1~GPIO7 - DSPC Bidirectional Data Bus, General Purpose I/O

HDATA0, GPIO0

In parallel host mode, these pins provide a bidirectional data bus. These pins can also act as general purpose input or output pins that can be individually configured and controlled by DSPC. These pins have an internal pull-up. *BIDIRECTIONAL - Default: INPUT*

A0, GPIO13 - Host Parallel Address Bit 0, General Purpose I/O

In parallel host mode, this pin serves as the LS Bit of a two bit address input used to select one of four parallel registers. This pin can act as a general-purpose input or output that can be individually configured and controlled by DSPC. *BIDIRECTIONAL - Default: INPUT*

A1, GPIO12 - Host Address Bit 1, General Purpose I/O

In parallel host mode, this pin serves as the MS Bit of a two bit address input used to select one of four parallel registers. This pin can act as a general-purpose input or output that can be individually configured and controlled by DSPC. *BIDIRECTIONAL - Default: INPUT*

$\overline{\text{RD}}$ ,  $\text{R}\overline{\text{W}}$ , GPIO11 - Host Parallel Output Enable, Host Parallel  $\text{R}\overline{\text{W}}$ , General Purpose I/O

In Intel parallel host mode, this pin serves as the active-low data bus enable input. In Motorola parallel host mode, this pin serves as the read-high/write-low control input signal. This pin can act as a general-purpose input or output that can be individually configured and controlled by DSPC. This pin has an internal pull-up. *BIDIRECTIONAL - Default: INPUT*

$\overline{\text{WR}}$ ,  $\overline{\text{DS}}$ , GPIO10 - Host Write Strobe, Host Data Strobe, General Purpose I/O

In Intel parallel host mode, this pin serves as the active-low data bus enable input. In Motorola parallel host mode, this pin serves as the read-high/write-low control input signal. In serial host mode, this pin can serve as a general purpose input or output bit. This pin can act as a general-purpose input or output that can be individually configured and controlled by DSPC. This pin has an internal pull-up.  
*BIDIRECTIONAL - Default: INPUT*

$\overline{\text{CS}}$ , GPIO9 - Host Parallel Chip Select, General Purpose I/O

In parallel host mode, this pin serves as the active-low chip-select input signal. This pin can act as a general-purpose input or output that can be individually configured and controlled by DSPC. This pin has an internal pull-up. *BIDIRECTIONAL - Default: INPUT*

HINBSY, GPIO8 - Input Host Message Status, General Purpose I/O

This pin indicates that serial or parallel communication data written to the DSP has not been read yet. This pin can act as a general-purpose input or output that can be individually configured and controlled by DSPC. This pin has an internal pull-up. *BIDIRECTIONAL - Default: OUTPUT*

SD\_DATA8~SD\_DATA15, EXTA11~EXTA18 - SDRAM Data Bus, SRAM External Address Bus

SDRAM data bus 15:8. SRAM external address bus 18:11. *OUTPUT*

## IC BLOCK DIAGRAM AND TERMINAL DESCRIPTIONS-12

### Q701: CS494003CQZ (Multi-Standard Audio Decoder)-6

#### TERMINAL DESCRIPTION

SD\_DATA0~SD\_DATA7, EXT D0~EXT D7 - SDRAM Data Bus, SRAM External Data Bus  
SDRAM data bus 7:0. SRAM external data bus 7:0. *BIDIRECTIONAL - Default: INPUT*

SD\_ADDR0~SD\_ADDR10, EXT A0~EXT A10 - SDRAM Address Bus, SRAM External Address Bus  
SDRAM address bus 10:0. SRAM external address bus 10:0. *OUTPUT*

SD\_CLK\_OUT - SDRAM Clock Output  
SDRAM clock output. *OUTPUT*

SD\_CLK\_IN - SDRAM Re-timing Clock Input  
SDRAM re-timing clock input. *INPUT*

SD\_CLK\_EN - SDRAM Clock Enable  
SDRAM clock enable. *OUTPUT*

SD\_BA, EXT A19 - SDRAM Bank Address Select, SRAM External Address Bus  
SDRAM bank address select. SRAM external address bus 19. *OUTPUT*

$\overline{\text{SD\_CS}}$  - SDRAM Chip Select  
SDRAM chip select. *OUTPUT*

$\overline{\text{SD\_RAS}}$  - SDRAM Row Address Strobe  
SDRAM row address strobe. *OUTPUT*

$\overline{\text{SD\_CAS}}$  - SDRAM Column Address Strobe  
SDRAM column address strobe. *OUTPUT*

$\overline{\text{SD\_WE}}$  - SDRAM Write Enable  
SDRAM write enable. *OUTPUT*

SD\_DQM1 - SDRAM Data Mask 1  
SDRAM data mask 1. *OUTPUT*

SD\_DQM0 - SDRAM Data Mask 2  
SDRAM data mask 0. *OUTPUT*

$\overline{\text{NV\_CS}}$ , GPIO14 - SRAM Chip Select, General Purpose I/O  
SRAM/FLASH chip select. This pin can act as a general-purpose input or output that can be individually configured and controlled by DSPC.  
*BIDIRECTIONAL - Default: OUTPUT*

$\overline{\text{NV\_OE}}$ , GPIO15 - SRAM Output Enable, General Purpose I/O  
SRAM/FLASH output enable. This pin can act as a general-purpose input or output that can be individually configured and controlled by DSPC.  
*BIDIRECTIONAL - Default: OUTPUT*

$\overline{\text{NV\_WE}}$ , GPIO16 - SRAM Write Enable, General Purpose I/O  
SRAM/FLASH write enable. This pin can act as a general-purpose input or output that can be individually configured and controlled by DSPC.  
*BIDIRECTIONAL - Default: OUTPUT*

UHS2, CS\_OUT, GPIO17 - Mode Select Bit 2, External Serial Memory Chip Select, General Purpose I/O  
DSPC control port mode select bit 2. This pin is sampled at the rising edge of  $\overline{\text{RESET}}$  and is one of three pins used to select the control port mode.  
In serial control port mode, this pin can serve as an output to provide the chip-select for a serial EEPROM. This pin can act as a general-purpose input or output that can be individually configured and controlled by DSPC.  
*BIDIRECTIONAL - Default: INPUT*

## IC BLOCK DIAGRAM AND TERMINAL DESCRIPTIONS-13

### Q701: CS494003CQZ (Multi-Standard Audio Decoder)-7

#### TERMINAL DESCRIPTION

UHS0, GPIO18 - Mode Select Bit 0, General Purpose I/O

DSPC control port mode select bit 0. This pin is sampled at the rising edge of  $\overline{\text{RESET}}$  and is one of three pins used to select the control port mode.

This pin can act as a general-purpose input or output that can be individually configured and controlled by DSPC.

*BIDIRECTIONAL - Default: INPUT*

UHS1, GPIO19 - Mode Select Bit 1, General Purpose I/O

DSPC control port mode select bit 1. This pin is sampled at the rising edge of  $\overline{\text{RESET}}$  and is one of three pins used to select the control port mode.

This pin can act as a general-purpose input or output that can be individually configured and controlled by DSPC.

*BIDIRECTIONAL - Default: INPUT*

GPIO20 - General Purpose I/O

This pin can act as a general-purpose input or output that can be individually configured and controlled by DSPC. This pin has an internal pull-up.

*BIDIRECTIONAL - Default: INPUT*

GPIO21 - General Purpose I/O

This pin can act as a general-purpose input or output that can be individually configured and controlled by DSPC. This pin has an internal pull-up.

*BIDIRECTIONAL - Default: INPUT*

VDD[7:1] - 2.5V Supply Voltage

2.5V supply voltage.

VSS - 2.5V Ground

2.5V ground.

NC[5:1] - No Connect

Recommended tie to ground.

VDDSD[4:1] - 3.3V SDRAM/SRAM/EPROM Interface Supply

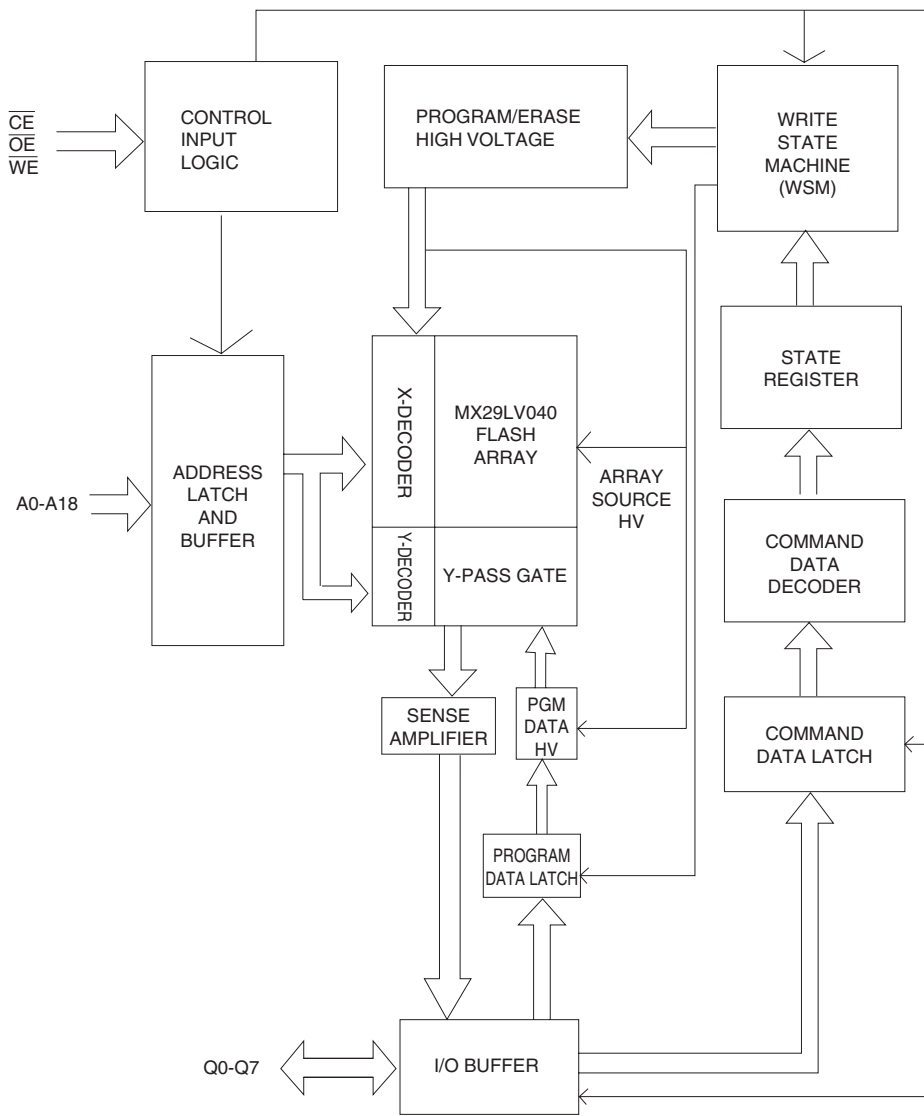
3.3V SDRAM/SRAM/EPROM supply.

VSSSD - 3.3V SDRAM/SRAM/EPROM Interface Ground

3.3V ground.

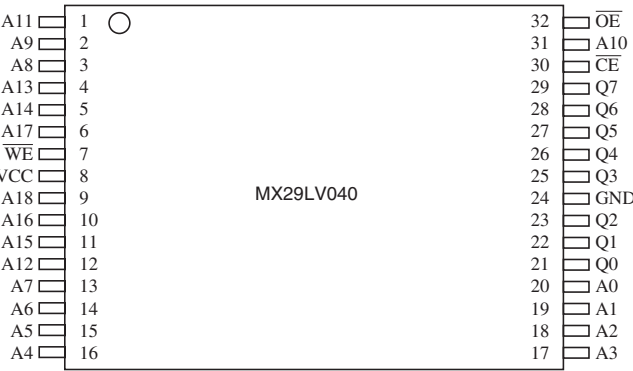
IC BLOCK DIAGRAM AND TERMINAL DESCRIPTIONS-14

Q702: MX29LV040 (4M-Bit CMOS Single Voltage 3V Only Equal Sector Flash Memory)  
BLOCK DIAGRAM



PIN LAYOUT

32 TSOP (Standard Type) (8mm x 20mm)



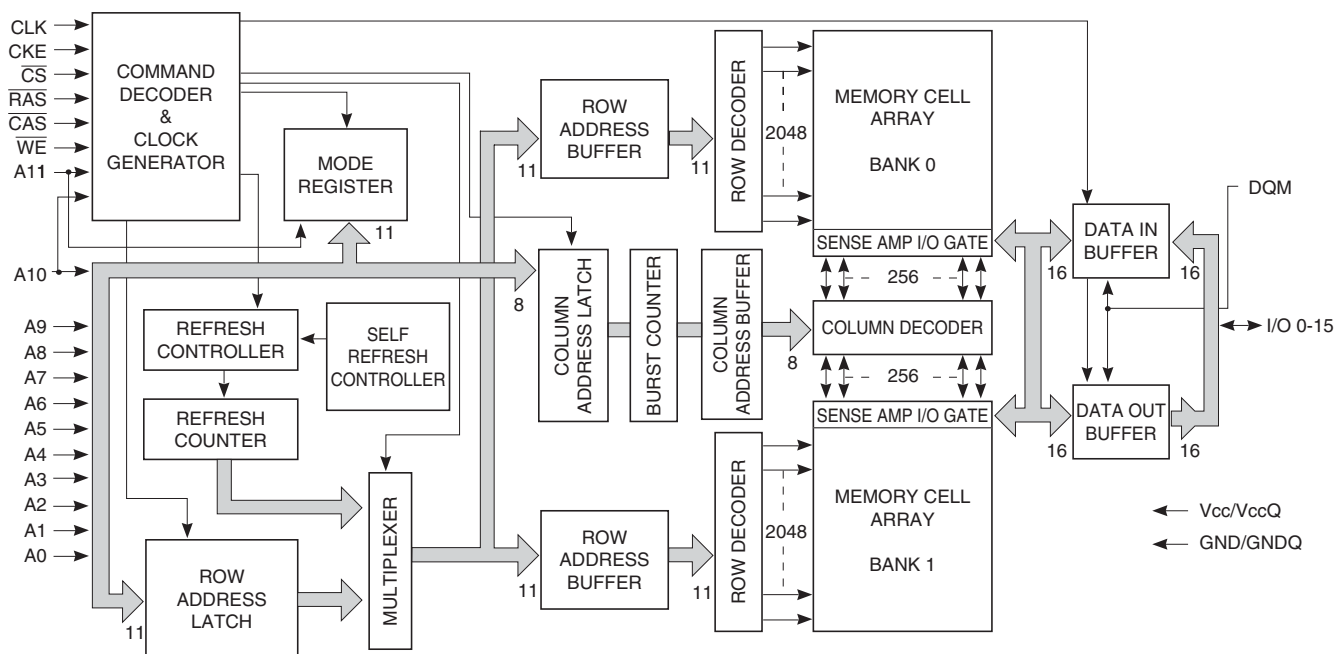
TERMINAL DESCRIPTION

| Pin Name        | Description               |
|-----------------|---------------------------|
| A0~A18          | Address Input             |
| Q0~Q7           | Data Input/Output         |
| $\overline{CE}$ | Chip Enable Input         |
| $\overline{WE}$ | Write Enable Input        |
| $\overline{OE}$ | Output Enable Input       |
| GND             | Ground Pin                |
| VCC             | +3.0V single power supply |

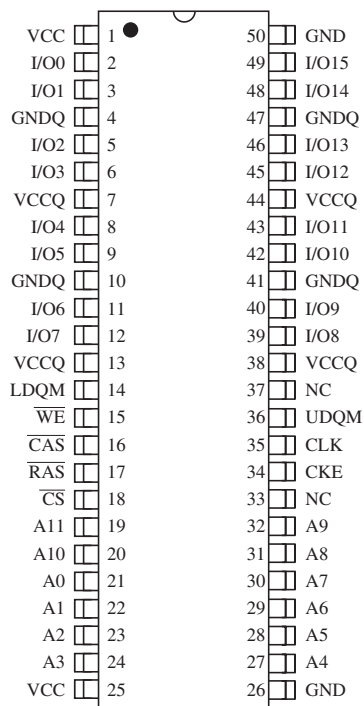
# IC BLOCK DIAGRAM AND TERMINAL DESCRIPTIONS-15

## Q7301: IC42S16100 (16-Mbit Synchronous Dynamic RAM)-1

### BLOCK DIAGRAM



### PIN LAYOUT



## IC BLOCK DIAGRAM AND TERMINAL DESCRIPTIONS-16

### Q7301: IC42S16100 (16-Mbit Synchronous Dynamic RAM)-2

#### TERMINAL DESCRIPTION

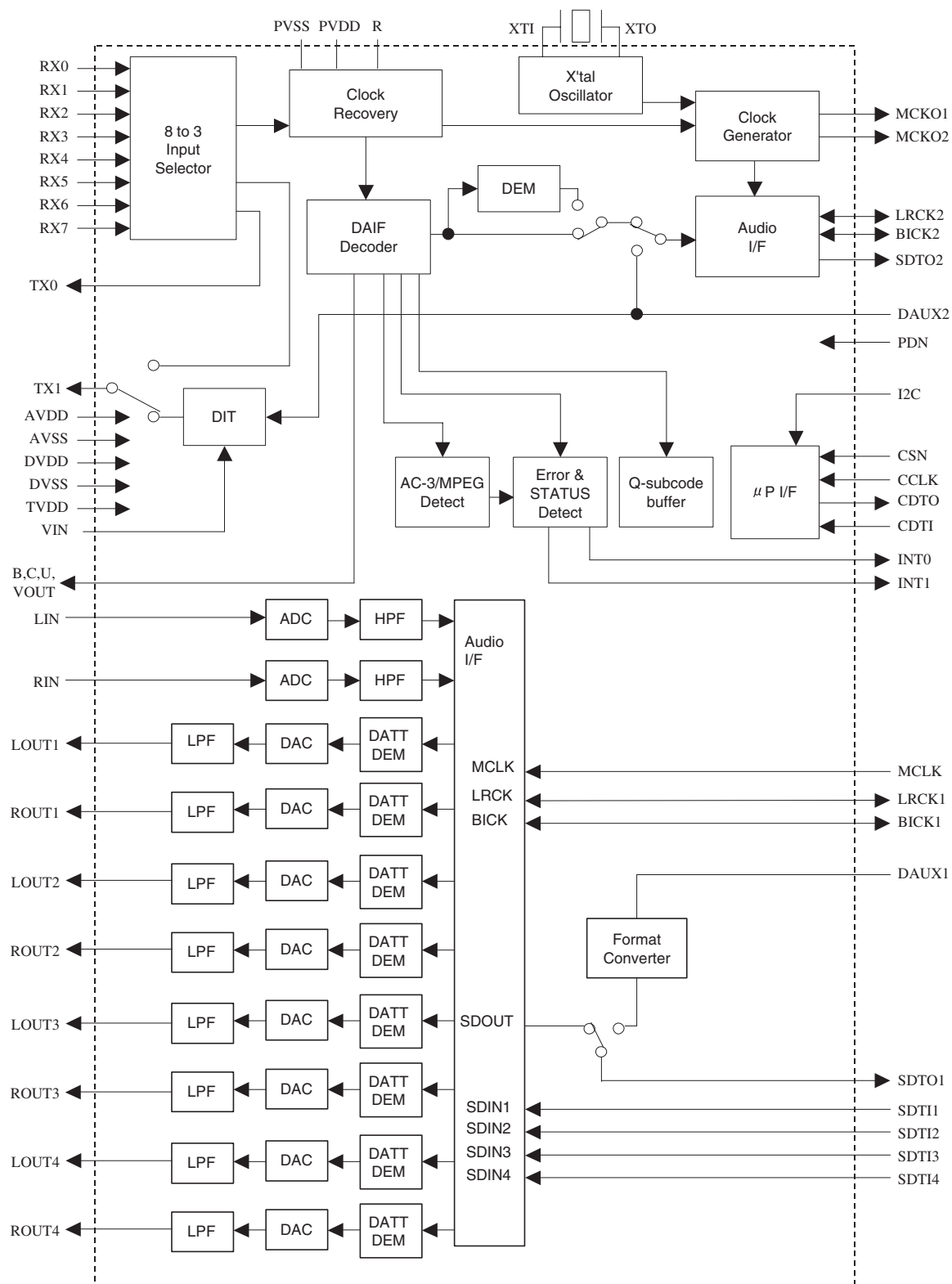
| Pin No.                                                           | Pin name                | Function (In Detail)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-------------------------------------------------------------------|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 20 to 24<br>27 to 32                                              | A0-A10                  | A0 to A10 are address inputs. A0-A10 are used as row address inputs during active command input and A0-A7 as column address inputs during read or write command input. A10 is also used to determine the precharge mode during other commands. If A10 is LOW during precharge command, the bank selected by A11 is precharged, but if A10 is HIGH, both banks will be precharged. When A10 is HIGH in read or write command cycle, the precharge starts automatically after the burst access.<br>These signals become part of the OP CODE during mode register set command input.                                               |
| 19                                                                | A11                     | A11 is the bank selection signal. When A11 is LOW, bank 0 is selected and when high, bank 1 is selected. This signal becomes part of the OP CODE during mode register set command input.                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 16                                                                | $\overline{\text{CAS}}$ | $\overline{\text{CAS}}$ , in conjunction with the $\overline{\text{RAS}}$ and $\overline{\text{WE}}$ , forms the device command. See the "Command Truth Table" item for details on device commands.                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 34                                                                | CKE                     | The CKE input determines whether the CLK input is enabled within the device.<br>When is CKE HIGH, the next rising edge of the CLK signal will be valid, and when LOW, invalid. When CKE is LOW, the device will be in either the power-down mode, the clock suspend mode, or the self refresh mode. The CKE is an asynchronous input.                                                                                                                                                                                                                                                                                           |
| 35                                                                | CLK                     | CLK is the master clock input for this device. Except for CKE, all inputs to this device are acquired in synchronization with the rising edge of this pin.                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 18                                                                | $\overline{\text{CS}}$  | The $\overline{\text{CS}}$ input determines whether command input is enabled within the device.<br>Command input is enabled when $\overline{\text{CS}}$ is LOW, and disabled with $\overline{\text{CS}}$ is HIGH. The device remains in the previous state when $\overline{\text{CS}}$ is HIGH.                                                                                                                                                                                                                                                                                                                                 |
| 2, 3, 5, 6, 8, 9,<br>11, 12, 39, 40,<br>42, 43, 45, 46,<br>48, 49 | I/O0<br>to<br>I/O15     | I/O0 to I/O15 are I/O pins. I/O through these pins can be controlled in byte units using the LDQM and UDQM pins.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 14, 36                                                            | LDQM,<br>UDQM           | LDQM and UDQM control the lower and upper bytes of the I/O buffers. In read mode, LDQM and UDQM control the output buffer. When LDQM or UDQM is LOW, the corresponding buffer byte is enabled, and when HIGH, disabled. The outputs go to the HIGH impedance state when LDQM/UDQM is HIGH. This function corresponds to $\overline{\text{OE}}$ in conventional DRAMs. In write mode, LDQM and UDQM control the input buffer.<br>When LDQM or UDQM is LOW, the corresponding buffer byte is enabled, and data can be written to the device. When LDQM or UDQM is HIGH, input data is masked and cannot be written to the device. |
| 17                                                                | $\overline{\text{RAS}}$ | $\overline{\text{RAS}}$ , in conjunction with $\overline{\text{CAS}}$ and $\overline{\text{WE}}$ , forms the device command. See the "Command Truth Table" item for details on device commands.                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 15                                                                | $\overline{\text{WE}}$  | $\overline{\text{WE}}$ , in conjunction with $\overline{\text{RAS}}$ and $\overline{\text{CAS}}$ , forms the device command. See the "Command Truth Table" item for details on device commands.                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 7, 13, 38, 44                                                     | VccQ                    | VccQ is the output buffer power supply.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 1, 25                                                             | Vcc                     | Vcc is the device internal power supply.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 4, 10, 41, 47                                                     | GNDQ                    | GNDQ is the output buffer ground.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 26, 50                                                            | GND                     | GND is the device internal ground.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |



# IC BLOCK DIAGRAM AND TERMINAL DESCRIPTIONS-17

## Q800: AK4588VQ (2/8-Channel Audio CODEC with DIR)-1

### BLOCK DIAGRAM



## IC BLOCK DIAGRAM AND TERMINAL DESCRIPTIONS-18

### Q800: AK4588VQ (2/8-Channel Audio CODEC with DIR)-2

#### TERMINAL DESCRIPTION

| No. | Pin Name | I/O | Function                                                                 |
|-----|----------|-----|--------------------------------------------------------------------------|
| 1   | INT1     | O   | Interrupt 1 Pin                                                          |
| 2   | BOUT     | O   | Block-Start Output Pin for Receiver Input<br>"H" during first 40 frames. |
| 3   | TVDD     | -   | Output Buffer Power Supply Pin, 2.7V ~ 5.5V                              |
| 4   | DVDD     | -   | Digital Power Supply Pin, 3.3V                                           |
| 5   | DVSS     | -   | Digital Ground Pin                                                       |
| 6   | XTO      | O   | X'tal Output Pin                                                         |
| 7   | XTI      | I   | X'tal Input Pin                                                          |
| 8   | TEST3    | I   | Test 3 Pin<br>This pin should be connected to DVSS.                      |
| 9   | MCKO2    | O   | Master Clock Output 2 Pin                                                |
| 10  | MCKO1    | O   | Master Clock Output 1 Pin                                                |
| 11  | COOUT    | O   | C-bit Output Pin for Receiver Input                                      |
| 12  | UOUT     | O   | U-bit Output Pin for Receiver Input                                      |
| 13  | VOOUT    | O   | V-bit Output Pin for Receiver Input                                      |
| 14  | SDTO2    | O   | Audio Serial Data Output Pin (DIR/DIT part)                              |
| 15  | BICK2    | I/O | Audio Serial Data Clock Pin (DIR/DIT part)                               |
| 16  | LRCK2    | I/O | Channel Clock Pin (DIR/DIT part)                                         |
| 17  | SDTO1    | O   | Audio Serial Data Output Pin (ADC/DAC part)                              |
| 18  | BICK1    | I/O | Audio Serial Data Clock Pin (ADC/DAC part)                               |
| 19  | LRCK1    | I/O | Input Channel Clock Pin                                                  |
| 20  | CDTO     | O   | Control Data Output Pin in Serial Mode, I2C= "L".                        |
| 21  | CCLK     | I   | Control Data Clock Pin in Serial Mode, I2C= "L"                          |
|     | SCL      | I   | Control Data Clock Pin in Serial Mode, I2C= "H"                          |
| 22  | CDTI     | I   | Control Data Input Pin in Serial Mode, I2C= "L".                         |
|     | SDA      | I/O | Control Data Pin in Serial Mode, I2C= "H".                               |
| 23  | CSN      | I   | Chip Select Pin in Serial Mode, I2C="L".                                 |
|     |          | I   | This pin should be connected to DVSS, I2C="H".                           |
| 24  | DAUX1    | I   | AUX Audio Serial Data Input Pin (ADC/DAC part)                           |
| 25  | SDTI4    | I   | DAC4 Audio Serial Data Input Pin                                         |
| 26  | SDTI3    | I   | DAC3 Audio Serial Data Input Pin                                         |
| 27  | SDTI2    | I   | DAC2 Audio Serial Data Input Pin                                         |
| 28  | SDTI1    | I   | DAC1 Audio Serial Data Input Pin                                         |
| 29  | XTL1     | I   | X'tal Frequency Select 0 Pin                                             |
| 30  | XTL0     | I   | X'tal Frequency Select 1 Pin                                             |

# IC BLOCK DIAGRAM AND TERMINAL DESCRIPTIONS-19

## Q800: AK4588VQ (2/8-Channel Audio CODEC with DIR)-3

### TERMINAL DESCRIPTION

| No. | Pin Name | I/O | Function                                                                                                                                                                                                                                                            |
|-----|----------|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 31  | PDN      | I   | Power-Down Mode Pin<br>When "L", the AK4588 is powered-down, all output pin goes "L", all registers are reset.<br>When CAD1/0 pins are changed, the AK4588 should be reset by PDN pin.                                                                              |
| 32  | MASTER   | I   | Master Mode Select Pin<br>"H": Master mode, "L": Slave mode                                                                                                                                                                                                         |
| 33  | DZF2     | O   | Zero Input Detect 2 Pin<br>When the input data of the group 1 follow total 8192 LRCK cycles with "0" input data, this pin goes to "H". And when RSTN bit is "0", PWDAN bit is "0", this pin goes to "H". It always is in "L" when P/S is "H".                       |
|     | OVF      | O   | Analog Input Overflow Detect Pin<br>This pin goes to "H" if the analog input of Lch or Rch overflows.                                                                                                                                                               |
| 34  | DZF1     | O   | Zero Input Detect 1 Pin<br>When the input data of the group 1 follow total 8192 LRCK cycles with "0" input data, this pin goes to "H". And when RSTN bit is "0", PWDAN bit is "0", this pin goes to "H".<br>Output is selected by setting DZFE pin when P/S is "H". |
| 35  | LOUT4    | O   | DAC4 Lch Analog Output Pin                                                                                                                                                                                                                                          |
| 36  | NC       | -   | No Connect<br>No internal bonding.                                                                                                                                                                                                                                  |
| 37  | ROUT4    | O   | DAC4 Rch Analog Output Pin                                                                                                                                                                                                                                          |
| 38  | NC       | -   | No Connect<br>No internal bonding.                                                                                                                                                                                                                                  |
| 39  | LOUT3    | O   | DAC3 Lch Analog Output Pin                                                                                                                                                                                                                                          |
| 40  | NC       | -   | No Connect<br>No internal bonding.                                                                                                                                                                                                                                  |
| 41  | ROUT3    | O   | DAC3 Rch Analog Output Pin                                                                                                                                                                                                                                          |
| 42  | NC       | -   | No Connect<br>No internal bonding.                                                                                                                                                                                                                                  |
| 43  | LOUT2    | O   | DAC2 Lch Analog Output Pin                                                                                                                                                                                                                                          |
| 44  | NC       | -   | No Connect<br>No internal bonding.                                                                                                                                                                                                                                  |
| 45  | ROUT2    | O   | DAC2 Rch Analog Output Pin                                                                                                                                                                                                                                          |
| 46  | NC       | -   | No Connect<br>No internal bonding.                                                                                                                                                                                                                                  |
| 47  | LOUT1    | O   | DAC1 Lch Analog Output Pin                                                                                                                                                                                                                                          |
| 48  | NC       | -   | No Connect<br>No internal bonding.                                                                                                                                                                                                                                  |
| 49  | ROUT1    | O   | DAC1 Rch Analog Output Pin                                                                                                                                                                                                                                          |
| 50  | NC       | -   | No Connect<br>No internal bonding.                                                                                                                                                                                                                                  |
| 51  | LIN      | I   | Lch Analog Input Pin                                                                                                                                                                                                                                                |
| 52  | RIN      | I   | Rch Analog Input Pin                                                                                                                                                                                                                                                |
| 53  | VCOM     | -   | Common Voltage Output Pin<br>2.2 $\mu$ F capacitor should be connected to PVSS externally.                                                                                                                                                                          |
| 54  | VREFH    | -   | Positive Voltage Reference Input Pin, AVDD                                                                                                                                                                                                                          |

## IC BLOCK DIAGRAM AND TERMINAL DESCRIPTIONS-20

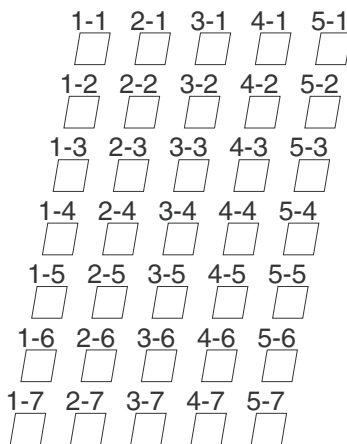
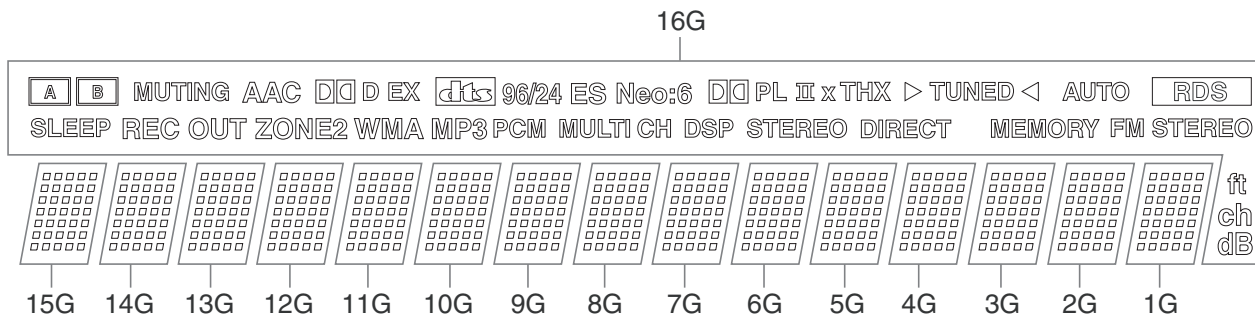
### Q800: AK4588VQ (2/8-Channel Audio CODEC with DIR)-4

#### TERMINAL DESCRIPTION

| No. | Pin Name | I/O | Function                                                                                                                                                                   |
|-----|----------|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 55  | AVDD     | -   | Analog Power Supply Pin, 4.5V~5.5V                                                                                                                                         |
| 56  | AVSS     | -   | Analog Ground Pin, 0V                                                                                                                                                      |
| 57  | RX0      | I   | Receiver Channel 0 Pin (Internal biased pin)<br>This channel is default in serial mode.                                                                                    |
| 58  | NC       | -   | No Connect<br>This pin should be connected to PVSS.                                                                                                                        |
| 59  | RX1      | I   | Receiver Channel 1 Pin (Internal biased pin)                                                                                                                               |
| 60  | TEST1    | I   | Test 1 Pin<br>This pin should be connected to PVSS.                                                                                                                        |
| 61  | RX2      | I   | Receiver Channel 2 Pin (Internal biased pin)                                                                                                                               |
| 62  | NC       | -   | No Connect<br>This pin should be connected to PVSS.                                                                                                                        |
| 63  | RX3      | I   | Receiver Channel 3 Pin (Internal biased pin)                                                                                                                               |
| 64  | PVSS     | -   | PLL Ground pin                                                                                                                                                             |
| 65  | R        | -   | External Resistor Pin<br>12k $\Omega$ +/-1% resistor should be connected to PVSS externally.                                                                               |
| 66  | PVDD     | -   | PLL Power supply pin, 5.0V                                                                                                                                                 |
| 67  | RX4      | I   | Receiver Channel 4 Pin (Internal biased pin)                                                                                                                               |
| 68  | TEST2    | I   | Test 2 Pin<br>This pin should be connected to PVSS.                                                                                                                        |
| 69  | RX5      | I   | Receiver Channel 5 Pin (Internal biased pin)                                                                                                                               |
| 70  | CAD0     | I   | Chip Address 0 Pin (ADC/DAC part)                                                                                                                                          |
| 71  | RX6      | I   | Receiver Channel 6 Pin (Internal biased pin)                                                                                                                               |
| 72  | CAD1     | I   | Chip Address 1 Pin (ADC/DAC part)                                                                                                                                          |
| 73  | RX7      | I   | Receiver Channel 7 Pin (Internal biased pin)                                                                                                                               |
| 74  | I2C      | I   | Control Mode Select Pin.<br>"L": 4-wire Serial, "H": I <sup>2</sup> C Bus                                                                                                  |
| 75  | DAUX2    | I   | Auxiliary Audio Data Input Pin (DIR/DIT part)                                                                                                                              |
| 76  | VIN      | I   | V-bit Input Pin for Transmitter Output                                                                                                                                     |
| 77  | MCLK     | I   | Master Clock Input Pin                                                                                                                                                     |
| 78  | TX0      | O   | Transmit Channel (Through Data) Output 0 Pin                                                                                                                               |
| 79  | TX1      | O   | Transmit Channel Output1 pin<br>When TX bit = "0", Transmit Channel (Through Data) Output 1 Pin.<br>When TX bit = "1", Transmit Channel (DAUX2 Data) Output Pin (Default). |
| 80  | INT0     | O   | Interrupt 0 Pin                                                                                                                                                            |

## FL TUBE VIEW

## Q7501: HNA-16SM10T

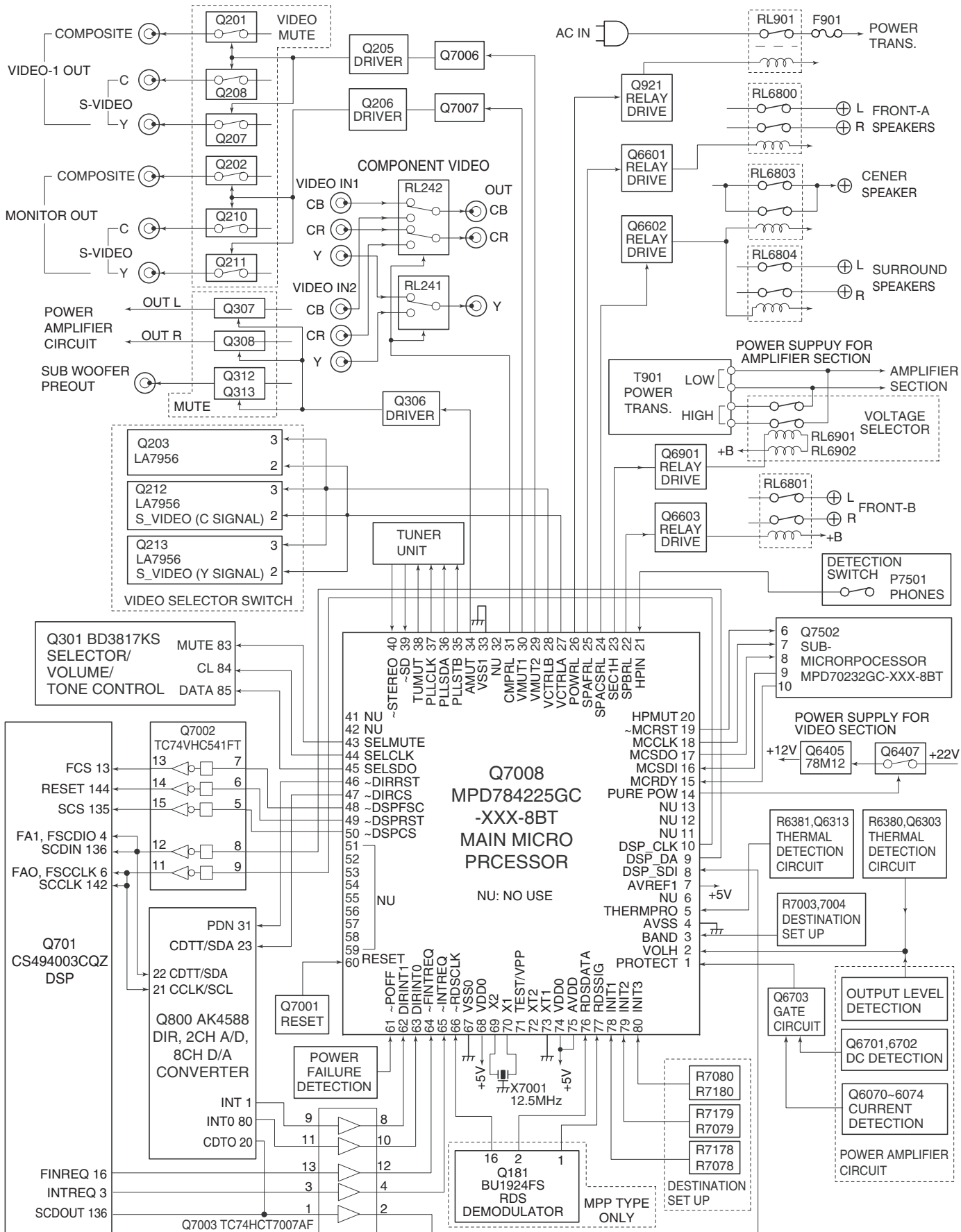


(1G-15G)

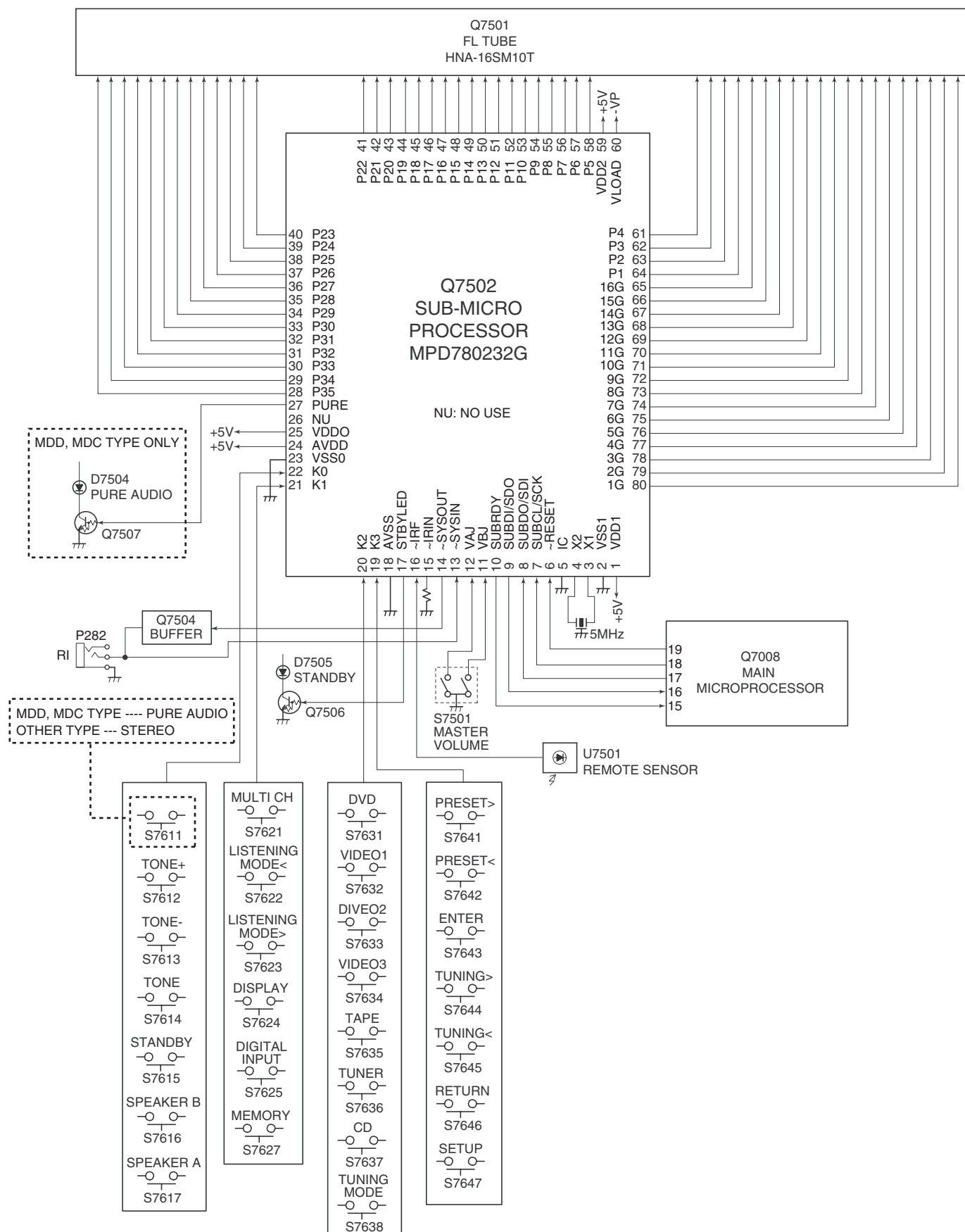
|     | 16G      | 15G-1G |
|-----|----------|--------|
| P1  | A        | 1-1    |
| P2  | B        | 2-1    |
| P3  | SLEEP    | 3-1    |
| P4  | MUTING   | 4-1    |
| P5  | REC OUT  | 5-1    |
| P6  | ZONE2    | 1-2    |
| P7  | DIC      | 2-2    |
| P8  | D        | 3-2    |
| P9  | dfs      | 4-2    |
| P10 | ES       | 5-2    |
| P11 | AAC      | 1-3    |
| P12 | MP3      | 2-3    |
| P13 | PCM      | 3-3    |
| P14 | Neo:6    | 4-3    |
| P15 | DDPL     | 5-3    |
| P16 | II       | 1-4    |
| P17 | MULTI CH | 2-4    |
| P18 | DSP      | 3-4    |

|     | 16G       | 15G-1G |
|-----|-----------|--------|
| P19 | STEREO    | 4-4    |
| P20 | DIRECT    | 5-4    |
| P21 | -         | 1-5    |
| P22 | ▶ ◀       | 2-5    |
| P23 | TUNED     | 3-5    |
| P24 | MEMORY    | 4-5    |
| P25 | AUTO      | 5-5    |
| P26 | FM STEREO | 1-6    |
| P27 | RDS       | 2-6    |
| P28 | ft        | 3-6    |
| P29 | ch        | 4-6    |
| P30 | dB        | 5-6    |
| P31 | THX       | 1-7    |
| P32 | EX        | 2-7    |
| P33 | 96/24     | 3-7    |
| P34 | X         | 4-7    |
| P35 | WMA       | 5-7    |

## MICROPROCESSOR CONNECTION DIAGRAMS-1



## MICROPROCESSOR CONNECTION DIAGRAMS-2





## MICROPROCESSOR TERMINAL DESCRIPTIONS-1

### Q7008:MPD784225GC-XXX-8BT(MAIN MICROPROCESSOR)

| No. | Pin name | I/O | Description                                                                  |
|-----|----------|-----|------------------------------------------------------------------------------|
| 1   | PROTECT  | I   | Current detection and DC voltage detection input terminal.                   |
| 2   | VOLH     | I   | Thermal detection and power amplifier output level detection input terminal. |
| 3   | BAND     | I   | Input terminal for destination setup.                                        |
| 4   | AVSS     | I   | Ground terminal.                                                             |
| 5   | THERMPRO | I   | Thermal detection input terminal.                                            |
| 6   | NU       | O   | Not used.                                                                    |
| 7   | AVREF1   | I   | Ground terminal for A/D converter.                                           |
| 8   | DSPSDI   | I   | Serial data input terminal from DSP and DIR/CODEC.                           |
| 9   | DSPSDO   | O   | Serial data output terminal to DSP and DIR/CODEC.                            |
| 10  | DSPCLK   | O   | Serial clock output terminal to DSP and DIR/CODEC.                           |
| 11  | NU       | O   | Not used.                                                                    |
| 12  | NU       | O   | Not used.                                                                    |
| 13  | NU       | O   | Not used.                                                                    |
| 14  | PUREPOW  | O   | Power supply control terminal of video circuit for Pure audio mode.          |
| 15  | MCRDY    | I   | Data ready detection input terminal from the sub microprocessor.             |
| 16  | MCSDI    | I   | Data input terminal from the sub microprocessor.                             |
| 17  | MCSDO    | O   | Data output terminal to the sub microprocessor.                              |
| 18  | MCCLK    | O   | Serial clock output terminal to the sub microprocessor.                      |
| 19  | ~MCRST   | O   | Reset signal output terminal to the sub microprocessor.                      |
| 20  | HPMUT    | O   | Muting control output terminal for headphone amplifier. Not used.            |
| 21  | HPIN     | I   | Input terminal to detect the connection of headphone.                        |
| 22  | SPBRL    | O   | Speaker relay control output terminal for front-B.                           |
| 23  | SEC1H    | O   | Control output terminal for power supply voltage of power amplifier.         |
| 24  | SPAC SRL | O   | Speaker relay control output terminal for center and surround channels.      |
| 25  | SPAFRL   | O   | Speaker relay control output terminal for front-A channels.                  |
| 26  | POWRL    | O   | Power source relay control output terminal.                                  |
| 27  | VCTRLA   | O   | Control signal-A output terminal for the video selector switch.              |
| 28  | VCTRLB   | O   | Control signal-B output terminal for the video selector switch.              |
| 29  | ~VMUT2   | O   | Muting control-2 output terminal for the video section.                      |
| 30  | ~VMUT1   | O   | Muting control-1 output terminal for the video section.                      |
| 31  | CMPRL    | O   | Control output terminal of component video selector.                         |
| 32  | PLLSDI   | I   | PL serial data input terminal.                                               |
| 33  | VSS1     | I   | Ground terminal.                                                             |
| 34  | AMUT     | O   | Audio muting control output terminal.                                        |
| 35  | PLLSTB   | O   | Strobe signal output terminal to PLL IC.                                     |
| 36  | PLLSDO   | O   | Serial data output terminal to PLL IC.                                       |
| 37  | PLLCLK   | O   | Serial clock output terminal to PLL IC.                                      |
| 38  | TUMUT    | O   | Muting control output terminal for the tuner section.                        |

| No. | Pin name | I/O | Description                                                               |
|-----|----------|-----|---------------------------------------------------------------------------|
| 39  | ~SD      | I   | Broadcast detection input terminal more than a muting level.              |
| 40  | ~STEREO  | I   | FM stereo broadcast detection input terminal.                             |
| 41  | NU       | --- | No used.                                                                  |
| 42  | NU       | --- | No used.                                                                  |
| 43  | SELMUT   | O   | Muting control output terminal to selector/ volume/ tone IC BD3817.       |
| 44  | SELCLK   | O   | Serial clock output terminal to selector/ volume/ tone IC BD3817.         |
| 45  | SELSDO   | O   | Serial data output terminal to selector/ volume/ tone IC BD3817.          |
| 46  | ~DIRRST  | O   | Reset output terminal for DIR/CODEC.                                      |
| 47  | ~DIRCS   | O   | Chip select output terminal for DIR/ CODEC.                               |
| 48  | ~DSPFCS  | O   | Chip select output terminal for DSP IC.                                   |
| 49  | ~DSPRST  | O   | Reset output terminal for DSP IC.                                         |
| 50  | ~DSPCS   | O   | Chip select output terminal for DSP IC.                                   |
| 51  | NU       | --- | Not used.                                                                 |
| 52  | NU       | --- | Not used.                                                                 |
| 53  | NU       | --- | Not used.                                                                 |
| 54  | NU       | --- | Not used.                                                                 |
| 55  | NU       | --- | Not used.                                                                 |
| 56  | NU       | --- | Not used.                                                                 |
| 57  | NU       | --- | Not used.                                                                 |
| 58  | NU       | --- | Not used.                                                                 |
| 59  | NU       | --- | Not used.                                                                 |
| 60  | RESET    | I   | System reset input terminal.                                              |
| 61  | ~POFF    | O   | Power failure detection input terminal.                                   |
| 62  | DIRINT1  | I   | Interrupt input terminal from DIR/ CODEC.                                 |
| 63  | DIRINT0  | O   | Interrupt input terminal from DIR/ CODEC.                                 |
| 64  | ~FINTREQ | I   | Interrupt request input terminal from DSP IC.                             |
| 65  | ~INTREQ  | I   | Interrupt request input terminal from DSP IC.                             |
| 66  | ~RDSCLK  | I   | RDS clock input terminal (European model only)                            |
| 67  | VSS0     | I   | Ground terminal.                                                          |
| 68  | VDD0     | I   | Power supply terminal +5V.                                                |
| 69  | X2       | O   | Connect the ceramic oscillator 12.5MHz.                                   |
| 70  | X1       | I   | Connect the ceramic oscillator 12.5MHz.                                   |
| 71  | TEST/VPP | I   | Test terminal. Not used.                                                  |
| 72  | XT2      | O   | Not used.                                                                 |
| 73  | XT1      | I   | Not used.                                                                 |
| 74  | VDD0     | I   | Power supply terminal +5V.                                                |
| 75  | AVDD     | I   | Power supply terminal for A/D converter +5V.                              |
| 76  | RDSDATA  | I   | Data input terminal of RDS broadcast (European model only)                |
| 77  | RDSSIG   | I   | Input terminal to check the signal of RDS broadcast (European model only) |
| 78  | INIT1    | I   | Input terminal-1 for destination setup.                                   |
| 79  | INIT2    | I   | Input terminal-2 for destination setup.                                   |
| 80  | INIT3    | I   | Input terminal-3 for destination setup.                                   |

## MICROPROCESSOR TERMINAL DESCRIPTIONS-2

### Q7502:MPD780232GC-030-8BT(SUB MICROPROCESSOR)

| No. | Pin name  | I/O | Description                                                           |
|-----|-----------|-----|-----------------------------------------------------------------------|
| 1   | VDD1      | I   | Power supply terminal. Connect to 5V.                                 |
| 2   | VSS1      | I   | Ground terminal.                                                      |
| 3   | X1        | I   | X'tal input terminal.                                                 |
| 4   | X2        | O   | X'tal input terminal.                                                 |
| 5   | IC        | I   | Connect to ground. Not used.                                          |
| 6   | ~RESET    | I   | System reset signal input terminal.                                   |
| 7   | SUBCL/SCK | I   | Clock input terminal to transmit the signal from main microprocessor. |
| 8   | SUBDO/SDI | I   | Data input terminal to transmit the signal from main microprocessor.  |
| 9   | SUBDI/SDO | O   | Data output terminal to transmit the signal to main microprocessor.   |
| 10  | SUBRDY    | O   | Data ready output terminal to transmit to the main microprocessor.    |
| 11  | VBJ       | I   | Pulse input terminal from the rotary encoder of volume.               |
| 12  | VAJ       | I   | Pulse input terminal from the rotary encoder of volume.               |
| 13  | ~SYSIN    | I   | System code input terminal.                                           |
| 14  | ~SYSOUT   | O   | System code output terminal.                                          |
| 15  | ~IRIN     | I   | Not used.                                                             |
| 16  | ~IRF      | I   | Signal input terminal from the remote controller.                     |
| 17  | STBYLED   | O   | Standby LED control output terminal.                                  |
| 18  | AVSS      | I   | Ground terminal for A/D converter.                                    |
| 19  | K3        | I   | Operation key connection terminal-3.                                  |
| 20  | K2        | I   | Operation key connection terminal-2.                                  |
| 21  | K1        | I   | Operation key connection terminal-1.                                  |
| 22  | K0        | I   | Operation key connection terminal-0.                                  |
| 23  | VSS0      | I   | Ground terminal.                                                      |
| 24  | AVDD      | I   | Power supply terminal for A/D converter.                              |
| 25  | VDDO      | I   | Power supply terminal. Connect to +5V.                                |
| 26  | NU        | --- | Not used.                                                             |
| 27  | PURE      | O   | PURE AUDIO LED control output terminal.                               |
| 28  | P35       | O   | Segment output terminal of P35.                                       |
| 29  | P34       | O   | Segment output terminal of P34.                                       |
| 30  | P33       | O   | Segment output terminal of P33.                                       |
| 31  | P32       | O   | Segment output terminal of P32.                                       |
| 32  | P31       | O   | Segment output terminal of P31.                                       |
| 33  | P30       | O   | Segment output terminal of P30.                                       |
| 34  | P29       | O   | Segment output terminal of P29.                                       |
| 35  | P28       | O   | Segment output terminal of P28.                                       |
| 36  | P27       | O   | Segment output terminal of P27.                                       |
| 37  | P26       | O   | Segment output terminal of P26.                                       |
| 38  | P25       | O   | Segment output terminal of P25.                                       |
| 39  | P24       | O   | Segment output terminal of P24.                                       |
| 40  | P23       | O   | Segment output terminal of P23.                                       |

| No. | Pin name | I/O | Description                                      |
|-----|----------|-----|--------------------------------------------------|
| 41  | P22      | O   | Segment output terminal of P22.                  |
| 42  | P21      | O   | Segment output terminal of P21.                  |
| 43  | P20      | O   | Segment output terminal of P20.                  |
| 44  | P19      | O   | Segment output terminal of P19.                  |
| 45  | P18      | O   | Segment output terminal of P18.                  |
| 46  | P17      | O   | Segment output terminal of P17.                  |
| 47  | P16      | O   | Segment output terminal of P16.                  |
| 48  | P15      | O   | Segment output terminal of P15.                  |
| 49  | P14      | O   | Segment output terminal of P14.                  |
| 50  | P13      | O   | Segment output terminal of P13.                  |
| 51  | P12      | O   | Segment output terminal of P12.                  |
| 52  | P11      | O   | Segment output terminal of P11.                  |
| 53  | P10      | O   | Segment output terminal of P10.                  |
| 54  | P9       | O   | Segment output terminal of P9.                   |
| 55  | P8       | O   | Segment output terminal of P8.                   |
| 56  | P7       | O   | Segment output terminal of P7.                   |
| 57  | P6       | O   | Segment output terminal of P6.                   |
| 58  | P5       | O   | Segment output terminal of P5.                   |
| 59  | VDD2     | I   | Power supply terminal. Connect to +5V.           |
| 60  | VLOAD    | I   | Negative power supply terminal of FL controller. |
| 61  | P4       | O   | Segment output terminal of P4.                   |
| 62  | P3       | O   | Segment output terminal of P3.                   |
| 63  | P2       | O   | Segment output terminal of P2.                   |
| 64  | P1       | O   | Segment output terminal of P1.                   |
| 65  | 16G      | O   | Grid output terminal of 16G.                     |
| 66  | 15G      | O   | Grid output terminal of 15G.                     |
| 67  | 14G      | O   | Grid output terminal of 14G.                     |
| 68  | 13G      | O   | Grid output terminal of 13G.                     |
| 69  | 12G      | O   | Grid output terminal of 12G.                     |
| 70  | 11G      | O   | Grid output terminal of 11G.                     |
| 71  | 10G      | O   | Grid output terminal of 10G.                     |
| 72  | 9G       | O   | Grid output terminal of 9G.                      |
| 73  | 8G       | O   | Grid output terminal of 8G.                      |
| 74  | 7G       | O   | Grid output terminal of 7G.                      |
| 75  | 6G       | O   | Grid output terminal of 6G.                      |
| 76  | 5G       | O   | Grid output terminal of 5G.                      |
| 77  | 4G       | O   | Grid output terminal of 4G.                      |
| 78  | 3G       | O   | Grid output terminal of 3G.                      |
| 79  | 2G       | O   | Grid output terminal of 2G.                      |
| 80  | 1G       | O   | Grid output terminal of 1G.                      |

# ADJUSTMENT PROCEDURES

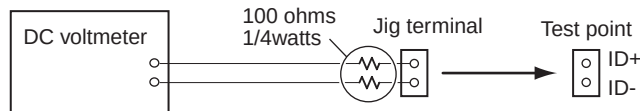
## IDLING CURRENT

**<Note>**

No load and No signal

Refer to <Fig-1> about location of test points and the adjustment points.

1. Before Idling adjustment, turn the trimming resistors R6040, R6041, R6042, R6043, R6044 and R6045 to counter clockwise.
2. Connect the DC voltmeter to test point P6080,P6081, P6082, P6083, P6084 and P6085.  
Connect 100-ohm resistance near the terminal of the two poles of a Jig terminal.



3. Connect the AC power cord to wall outlet.
4. Press the STANDBY/ON button to power On.
5. Adjust the trimming resistors as following procedure immediately after a power On.

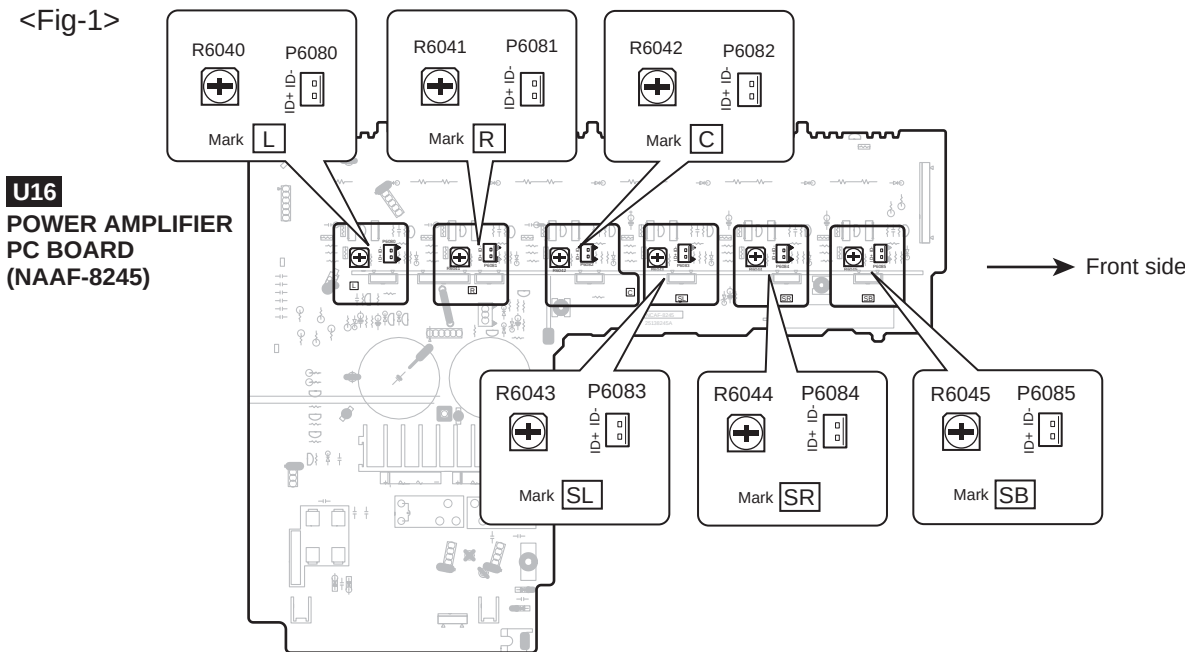
| Channel        | Mark | Trimming resistor<br>(Adjustment point) | Test point<br>(Measuring point) | Adjustment value |
|----------------|------|-----------------------------------------|---------------------------------|------------------|
| Left           | L    | R6040                                   | P6080                           | 2.5 mV           |
| Right          | R    | R6041                                   | P6081                           | 2.5 mV           |
| Center         | C    | R6042                                   | P6082                           | 2.5 mV           |
| Surround Left  | SL   | R6043                                   | P6083                           | 1.5 mV           |
| Surround Right | SR   | R6044                                   | P6084                           | 1.5 mV           |
| Surround Back  | SB   | R6045                                   | P6085                           | 1.5 mV           |

6. Wait for 4 to 5 minutes. (Heat running)
7. Re-adjust the trimming resistors as following procedure.

| Channel                                            | Adjustment point    | State                | Adjustment value | Specifications<br>(* In a stable state) |
|----------------------------------------------------|---------------------|----------------------|------------------|-----------------------------------------|
| Left, Right,<br>Center                             | R6040, R6041, R6042 | In case below 7 mV → | 7 mV             | 10 +/- 3 mV                             |
|                                                    |                     | In case 7 - 9 mV →   | Not adjust       |                                         |
|                                                    |                     | In case over 9 mV →  | 9 mV             |                                         |
| Surround Left,<br>Surround Right,<br>Surround Back | R6043, R6044, R6045 | In case below 4 mV → | 4 mV             | 7 +/- 3 mV                              |
|                                                    |                     | In case 4 - 6 mV →   | Not adjust       |                                         |
|                                                    |                     | In case over 6 mV →  | 6 mV             |                                         |

8. Disconnect the DC voltmeter.
9. Press the STANDBY/ON button to power Off.
10. Disconnect the AC power cord.

\* Idling current are stabilized in about 10 minutes after a power supply On.



HT-R820THX

NOTE : THE COMPONENTS IDENTIFIED BY THE MARK  
! ARE CRITICAL FOR RISK OF FIRE AND  
ELECTRIC SHOCK. REPLACE ONLY WITH PART  
NUMBER SPECIFIED.

**EXPLODED VIEW PARTS LIST**

|    | REF. NO. | NAME       | DESCRIPTION        | QTY | PART NO.  | REMARKS |
|----|----------|------------|--------------------|-----|-----------|---------|
| EV | A001     | F BRACKET  | (B)AS              | 1   | 27111360  |         |
| EV | A003     | SCREW      | 3TTB+8B(CU)        | 32  | 801612    |         |
| EV | A011     | CHASSIS    | ---                | 1   | 27100443A |         |
| EV | A015     | HOLDER     | KGPS-10RF          | 1   | 27190813  |         |
| EV | A017     | HOLDER     | KGLS-10RT          | 2   | 27190428A |         |
| EV | A025     | SCREW      | 4TTC+8C(BC)        | 4   | 830440089 |         |
| EV | A031     | BUSHING    | S-RELIEF #2271     | 1   | 27300750  | !       |
| EV | A033     | HEAT SINK  | AS.                | 1   | 27160546  |         |
| EV | A034     | TAPE       | TAPE(CLOTH-16U)    | 1   | 29110083  |         |
| EV | A037     | SCREW      | 3TTB+8B(CU)SR      | 1   | 801618    |         |
| EV | A039     | SCREW      | 3SMH10W.SW+15B(CU) | 12  | 801606    |         |
| EV | A041     | CUSHION    | ---                | 1   | 28141613  |         |
| EV | A050     | COVER      | ---                | 1   | 28184831  |         |
| EV | A052     | SCREW      | 3TTB+8B(BC)        | 6   | 838430088 |         |
| EV | A053     | LABEL      | (COVER)            | 1   | 29362772  |         |
| EV | A054     | LEG        | LEG                | 4   | 27175319B |         |
| EV | A056     | CUSHION    | ---                | 8   | 28141494  |         |
| EV | A060     | KNOB       | (VOL)AS            | 1   | 28326197  |         |
| EV | A062     | CLEAR PLT  | ---                | 1   | 28192025B |         |
| EV | A401     | REAR PANEL | ---                | 1   | 27123308  |         |
| EV | A402     | SCREW      | 3TTB+8B(BC)        | 31  | 838430088 |         |
| EV | A407     | F PANEL    | ---                | 1   | 27212676A |         |

|    |          |           |              |      |          |   |
|----|----------|-----------|--------------|------|----------|---|
| EV | A409     | BADGE     | BADGE        | 1    | 28135244 |   |
| EV | A705     | LABEL     | HOOKUP-ONKYO | 1    | 29363194 |   |
| EV | Q6050    | TR        | 2SC5242-O    | 1    | 2202843  | ! |
| EV | Q6050 or | TR        | 2SC5242-R    | ( 1) | 2202842  | ! |
| EV | Q6050 or | TR        | MN150S-Y     | ( 1) | 2203684  | ! |
| EV | Q6050 or | TR        | MN150S-P     | ( 1) | 2203686  | ! |
| EV | Q6050 or | TR        | MN150S-O     | ( 1) | 2203683  | ! |
| EV | Q6050A   | ISO SHEET | AC238        | 12   | 223024   |   |
| EV | Q6051    | TR        | 2SC5242-O    | 1    | 2202843  | ! |
| EV | Q6051 or | TR        | 2SC5242-R    | ( 1) | 2202842  | ! |
| EV | Q6051 or | TR        | MN150S-Y     | ( 1) | 2203684  | ! |
| EV | Q6051 or | TR        | MN150S-P     | ( 1) | 2203686  | ! |
| EV | Q6051 or | TR        | MN150S-O     | ( 1) | 2203683  | ! |
| EV | Q6052 or | TR        | MN150S-Y     | 1    | 2203684  | ! |
| EV | Q6052 or | TR        | MN150S-P     | ( 1) | 2203686  | ! |
| EV | Q6052 or | TR        | MN150S-O     | ( 1) | 2203683  | ! |
| EV | Q6052 or | TR        | 2SC5242-O    | ( 1) | 2202843  | ! |
| EV | Q6052 or | TR        | 2SC5242-R    | ( 1) | 2202842  | ! |
| EV | Q6053 or | TR        | MN150S-Y     | 1    | 2203684  | ! |
| EV | Q6053 or | TR        | MN150S-P     | ( 1) | 2203686  | ! |
| EV | Q6053 or | TR        | MN150S-O     | ( 1) | 2203683  | ! |

|    |          |    |           |      |         |   |
|----|----------|----|-----------|------|---------|---|
| EV | Q6053 or | TR | 2SC5242-O | ( 1) | 2202843 | ! |
| EV | Q6053 or | TR | 2SC5242-R | ( 1) | 2202842 | ! |
| EV | Q6054 or | TR | MN150S-Y  | 1    | 2203684 | ! |
| EV | Q6054 or | TR | MN150S-P  | ( 1) | 2203686 | ! |
| EV | Q6054 or | TR | MN150S-O  | ( 1) | 2203683 | ! |
| EV | Q6054 or | TR | 2SC5242-O | ( 1) | 2202843 | ! |
| EV | Q6054 or | TR | 2SC5242-R | ( 1) | 2202842 | ! |
| EV | Q6055 or | TR | MN150S-Y  | 1    | 2203684 | ! |
| EV | Q6055 or | TR | MN150S-P  | ( 1) | 2203686 | ! |
| EV | Q6055 or | TR | MN150S-O  | ( 1) | 2203683 | ! |
| EV | Q6055 or | TR | 2SC5242-O | ( 1) | 2202843 | ! |
| EV | Q6055 or | TR | 2SC5242-R | ( 1) | 2202842 | ! |
| EV | Q6060    | TR | 2SA1962-O | 1    | 2202833 | ! |
| EV | Q6060 or | TR | 2SA1962-R | ( 1) | 2202832 | ! |
| EV | Q6060 or | TR | MP150S-Y  | ( 1) | 2203694 | ! |
| EV | Q6060 or | TR | MP150S-P  | ( 1) | 2203696 | ! |
| EV | Q6060 or | TR | MP150S-O  | ( 1) | 2203693 | ! |
| EV | Q6061    | TR | 2SA1962-O | 1    | 2202833 | ! |
| EV | Q6061 or | TR | 2SA1962-R | ( 1) | 2202832 | ! |
| EV | Q6061 or | TR | MP150S-Y  | ( 1) | 2203694 | ! |
| EV | Q6061 or | TR | MP150S-P  | ( 1) | 2203696 | ! |
| EV | Q6061 or | TR | MP150S-O  | ( 1) | 2203693 | ! |
| EV | Q6062 or | TR | MP150S-Y  | 1    | 2203694 | ! |
| EV | Q6062 or | TR | MP150S-P  | ( 1) | 2203696 | ! |
| EV | Q6062 or | TR | MP150S-O  | ( 1) | 2203693 | ! |
| EV | Q6062 or | TR | 2SA1962-O | ( 1) | 2202833 | ! |
| EV | Q6062 or | TR | 2SA1962-R | ( 1) | 2202832 | ! |
| EV | Q6063 or | TR | MP150S-Y  | 1    | 2203694 | ! |
| EV | Q6063 or | TR | MP150S-P  | ( 1) | 2203696 | ! |
| EV | Q6063 or | TR | MP150S-O  | ( 1) | 2203693 | ! |
| EV | Q6063 or | TR | 2SA1962-O | ( 1) | 2202833 | ! |

|    |                                                                                                 |         |             |      |         |   |
|----|-------------------------------------------------------------------------------------------------|---------|-------------|------|---------|---|
| EV | Q6063 or                                                                                        | TR      | 2SA1962-R   | ( 1) | 2202832 | ! |
| EV | Q6064 or                                                                                        | TR      | MP150S-Y    | 1    | 2203694 | ! |
| EV | Q6064 or                                                                                        | TR      | MP150S-P    | ( 1) | 2203696 | ! |
| EV | Q6064 or                                                                                        | TR      | MP150S-O    | ( 1) | 2203693 | ! |
| EV | Q6064 or                                                                                        | TR      | 2SA1962-O   | ( 1) | 2202833 | ! |
| EV | Q6064 or                                                                                        | TR      | 2SA1962-R   | ( 1) | 2202832 | ! |
| EV | Q6065 or                                                                                        | TR      | MP150S-Y    | 1    | 2203694 | ! |
| EV | Q6065 or                                                                                        | TR      | MP150S-P    | ( 1) | 2203696 | ! |
| EV | Q6065 or                                                                                        | TR      | MP150S-O    | ( 1) | 2203693 | ! |
| EV | Q6065 or                                                                                        | TR      | 2SA1962-O   | ( 1) | 2202833 | ! |
| EV | Q6065 or                                                                                        | TR      | 2SA1962-R   | ( 1) | 2202832 | ! |
| EV | <Notes>                                                                                         |         |             |      |         |   |
| EV | When replacement the following the transistor,made from the same HFE rank as the original type. |         |             |      |         |   |
| EV | Q6050 - Q6055, Q6060 - Q6065                                                                    |         |             |      |         |   |
| EV | T901                                                                                            | P TRANS | NPT-1494D   | 1    | 2301744 | ! |
| EV | F6901                                                                                           | FUSE    | 10A-UL      | 1    | 252199  | ! |
| EV | F6902                                                                                           | FUSE    | 10A-UL      | 1    | 252199  | ! |
| EV | F901                                                                                            | FUSE    | 8A-UL       | 1    | 252198  | ! |
| EV | F901 or                                                                                         | FUSE    | 8A-T/UL-ST2 | ( 1) | 252261  | ! |
| EV | F903                                                                                            | FUSE    | 5A-UL/T-237 | 1    | 252164  | ! |



|    |         |                                         |                 |      |             |   |
|----|---------|-----------------------------------------|-----------------|------|-------------|---|
| EV | F903 or | FUSE                                    | 5A-T/UL-ST2     | ( 1) | 252258      | ! |
| EV | P101    | FFC                                     | NCFC7-151512    | 1    | 2047151512  |   |
| EV | P306B   | TAPE                                    | TAPE(CLOTH-16U) | (1)  | 29110083    |   |
| EV | P7502   | FFC                                     | NCFC5-102012    | 1    | 2045102012  |   |
| EV | P7503   | FFC                                     | NCFC7-081012    | 1    | 2047081012  |   |
| EV | P800    | WIRE TIE                                | BSK-1           | 10   | 260208      |   |
| EV | P901    | AC CORD                                 | AS-UC-2         | 1    | 253332HIT   | ! |
| EV | P901 or | AC CORD                                 | AS-UC-2         | ( 1) | 253333VOL   | ! |
| EV | P901 or | AC CORD                                 | AS-UC-2         | ( 1) | 253368LTK   | ! |
| EV | U01     | PRE-AMPLIFIER PC board ass'y            | NADG-8230-1G    | 1    | 1B016530-1G |   |
| EV | U02     | DISPLAY PC board ass'y                  | NADIS-8231-1G   | 1    | 1B016531-1G |   |
| EV | U03     | OPERATION SWITCH PC board ass'y         | NASW-8232-1G    | 1    | 1B016532-1G |   |
| EV | U04     | HEADPHONE TERMINAL PC board ass'y       | NAETC-8233-1G   | 1    | 1B016533-1G |   |
| EV | U05     | VIDEO3 TERMINAL PC board ass'y          | NAETC-8234-1G   | 1    | 1B016534-1G |   |
| EV | U06     | DRIVER AMPLIFIER PC board ass'y         | NAAF-8235-1E    | 1    | 1B016535-1E |   |
| EV | U07     | COMPONENT VIDEO TERMINAL PC board ass'y | NAVD-8236-1E    | 1    | 1B016536-1E |   |
| EV | U09     | REGULATOR PC board ass'y                | NAETC-8238-1E   | 1    | 1B016538-1E |   |
| EV | U10     | TERMINAL PC board ass'y                 | NAETC-8239-1E   | 1    | 1B016539-1E |   |
| EV | U11     | SPEAKER TERMINAL PC board ass'y         | NAETC-8240-1E   | 1    | 1B016540-1E |   |
| EV | U12     | HOLDER PC board ass'y                   | NAETC-8241-1E   | 1    | 1B016541-1E |   |
| EV | U14     | TERMINAL PC board ass'y                 | NAETC-8243-1E   | 1    | 1B016543-1E |   |
| EV | U16     | POWER AMPLIFIER PC board ass'y          | NAAF-8245-1L    | 1    | 1B016545-1L |   |
| EV | U18     | TERMINAL PC board ass'y                 | NAPS-8247-1L    | 1    | 1B016547-1L |   |
| EV | U19     | POWER SUPPLY PC board ass'y             | NAPS-8248-1L    | 1    | 1B016548-1L |   |
| EV | U20     | TERMINAL PC board ass'y                 | NAPS-8249-1L    | 1    | 1B016549-1L |   |
| EV | U21     | VIDEO PC board ass'y                    | NAVD-8250-1L    | 1    | 1B016550-1L |   |
| EV | U26     | THERMAL SENSOR PC board ass'y           | NAETC-8255-1L   | 1    | 1B016555-1L |   |
| EV | U27     | TUNER UNIT                              | FAE385-A02F     | 1    | 240146      |   |
| EV | U27 or  | TUNER UNIT                              | ENG06501QR      | ( 1) | 240138A     |   |
| EV | U27 or  | TUNER UNIT                              | TFCE1U114B      | ( 1) | 240134A     |   |

HT-R820THX

## PC BOARD PARTS LIST

|            |                                              |
|------------|----------------------------------------------|
| <b>U01</b> | PRE-AMPLIFIER PC BOARD (NADG-8230-1G)        |
| <b>U02</b> | DISPLAY PC BOARD (NADIS-8231-1G)             |
| <b>U03</b> | OPERATION SWITCH PC BOARD (NASW-8232-1G)     |
| <b>U04</b> | HEAD PHONE TERMINAL PC BOARD (NAETC-8233-1G) |
| <b>U05</b> | VIDEO3 TERMINAL PC BOARD (NAETC-8234-1G)     |

<Notes> Indicate the parts on the PC board ass'y of U02-U04 collectively. Not dividing into each PC board ass'y.

|      | REF. NO. | NAME      | DESCRIPTION       | QTY  | PART NO.     | REMARKS |
|------|----------|-----------|-------------------|------|--------------|---------|
| PCB1 | U7501    | REMO SENS | PIC-37043TH2      | 1    | 241336       |         |
| PCB1 | Q301     | IC        | BD3817KS          | 1    | 22242117R3   |         |
| PCB1 | Q302     | IC        | NJM4565M-D        | 1    | 22241383R2   |         |
| PCB1 | Q302 or  | IC        | MPC4570G2-T1(MST) | ( 1) | 22240489R1NE |         |
| PCB1 | Q302 or  | IC        | NJM4565M          | ( 1) | 22240581R2   |         |
| PCB1 | Q302 or  | IC        | HA17558A          | ( 1) | 22242126R2   |         |
| PCB1 | Q305     | IC        | NJM4565M-D        | 1    | 22241383R2   |         |
| PCB1 | Q305 or  | IC        | MPC4570G2-T1(MST) | ( 1) | 22240489R1NE |         |
| PCB1 | Q305 or  | IC        | NJM4565M          | ( 1) | 22240581R2   |         |

|      |          |               |                       |      |                 |
|------|----------|---------------|-----------------------|------|-----------------|
| PCB1 | Q305 or  | IC            | HA17558A              | ( 1) | 22242126R2      |
| PCB1 | Q306     | TR            | RN2402                | 1    | 2214530R2       |
| PCB1 | Q306 or  | TR            | KRA102S               | ( 1) | 2216220R2       |
| PCB1 | Q307     | TR            | RN1441                | 1    | 2215410R2       |
| PCB1 | Q308     | TR            | RN1441                | 1    | 2215410R2       |
| PCB1 | Q312     | TR            | RN1441                | 1    | 2215410R2       |
| PCB1 | Q313     | TR            | RN1441                | 1    | 2215410R2       |
| PCB1 | Q321     | IC(REGULATOR) | 78L07(SMT)            | 1    | 222780073R2     |
| PCB1 | Q322     | IC(REGULATOR) | 79L07(SMT)            | 1    | 222790073R2     |
| PCB1 | Q701     | IC            | CS494003CQZ           | 1    | 22242039R3      |
| PCB1 | Q702     | IC (DSP ROM)  | MX29LV040TC-90 (0140) | 1    | 222W0002R301406 |
| PCB1 | Q703     | IC            | TC7WU04FU             | 1    | 22240935R2      |
| PCB1 | Q800     | IC            | AK4588VQ              | 1    | 22242118R3      |
| PCB1 | Q801     | IC            | NJM4565M-D            | 1    | 22241383R2      |
| PCB1 | Q801 or  | IC            | MPC4570G2-T1(MST)     | ( 1) | 22240489R1NE    |
| PCB1 | Q801 or  | IC            | NJM4565M              | ( 1) | 22240581R2      |
| PCB1 | Q801 or  | IC            | HA17558A              | ( 1) | 22242126R2      |
| PCB1 | Q802     | IC            | NJM4565M-D            | 1    | 22241383R2      |
| PCB1 | Q802 or  | IC            | MPC4570G2-T1(MST)     | ( 1) | 22240489R1NE    |
| PCB1 | Q802 or  | IC            | NJM4565M              | ( 1) | 22240581R2      |
| PCB1 | Q802 or  | IC            | HA17558A              | ( 1) | 22242126R2      |
| PCB1 | Q803     | IC            | NJM4565M-D            | 1    | 22241383R2      |
| PCB1 | Q803 or  | IC            | MPC4570G2-T1(MST)     | ( 1) | 22240489R1NE    |
| PCB1 | Q803 or  | IC            | NJM4565M              | ( 1) | 22240581R2      |
| PCB1 | Q803 or  | IC            | HA17558A              | ( 1) | 22242126R2      |
| PCB1 | Q804     | IC            | NJM4565M-D            | 1    | 22241383R2      |
| PCB1 | Q804 or  | IC            | MPC4570G2-T1(MST)     | ( 1) | 22240489R1NE    |
| PCB1 | Q804 or  | IC            | NJM4565M              | ( 1) | 22240581R2      |
| PCB1 | Q804 or  | IC            | HA17558A              | ( 1) | 22242126R2      |
| PCB1 | Q6402    | IC(REGURATOR) | 7812HF(TA7812S)       | 1    | 222780124TOS    |
| PCB1 | Q6402 or | IC(REGULATOR) | 78M12HF               | ( 1) | 222780125       |

|      |          |               |                   |      |               |
|------|----------|---------------|-------------------|------|---------------|
| PCB1 | Q6402A   | SCREW         | 3P+10FN(BC)       | 1    | 82143010      |
| PCB1 | Q6402B   | HEAT SINK     | RAD-183           | 1    | 27160526      |
| PCB1 | Q6402C   | TAPE          | TAPE(CLOTH-16U)   | 1    | 29110083      |
| PCB1 | Q6403    | IC(REGURATOR) | 79012HF(TA79012S) | 1    | 222790124TOS  |
| PCB1 | Q6403 or | IC(REGULATOR) | 79M12HF           | ( 1) | 222790125     |
| PCB1 | Q6405    | IC(REGURATOR) | 7812HF(TA7812S)   | 1    | 222780124TOS  |
| PCB1 | Q6405 or | IC(REGULATOR) | 78M12HF           | ( 1) | 222780125     |
| PCB1 | Q6405A   | SCREW         | 3P+10FN(BC)       | 1    | 82143010      |
| PCB1 | Q6406    | IC(REGURATOR) | TA4805S           | 1    | 222780059TOS  |
| PCB1 | Q6406 or | IC(REGULATOR) | MPC2905HF         | ( 1) | 22278005DNE   |
| PCB1 | Q6406A   | SCREW         | 3P+10FN(BC)       | 1    | 82143010      |
| PCB1 | Q7001    | TR            | RN1404            | 1    | 2214490R2     |
| PCB1 | Q7001 or | TR            | KRC104S           | ( 1) | 2216210R2     |
| PCB1 | Q7002    | IC            | TC74VHC541FT      | 1    | 22274541ER2TO |
| PCB1 | Q7003    | IC            | TC74HCT7007AF     | 1    | 222740077R2TO |
| PCB1 | Q7004    | IC            | BA33C25FP         | 1    | 22241778R2    |
| PCB1 | Q7004A   | HEAT SINK     | RAD-202           | 1    | 27160552      |
| PCB1 | Q7006    | TR            | RN1404            | 1    | 2214490R2     |
| PCB1 | Q7006 or | TR            | KRC104S           | ( 1) | 2216210R2     |
| PCB1 | Q7007    | TR            | RN1404            | 1    | 2214490R2     |

|      |          |                          |                     |      |             |
|------|----------|--------------------------|---------------------|------|-------------|
| PCB1 | Q7007 or | TR                       | KRC104S             | ( 1) | 2216210R2   |
| PCB1 | Q7008    | IC (MAIN MICROPROCESSOR) | MPD784225GC-267-8BT | 1    | 22242195R3  |
| PCB1 | Q7301    | IC                       | IC42S16100          | 1    | 22242123R3  |
| PCB1 | Q7301 or | IC                       | IC42S16100          | ( 1) | 22242123R2  |
| PCB1 | Q7301 or | IC                       | K4S161622H-UC60     | ( 1) | 22242152R2  |
| PCB1 | Q7301 or | IC                       | K4S161622H-UC60     | ( 1) | 22242152R3  |
| PCB1 | Q7501    | FL TUBE                  | HNA-16SM10T         | 1    | 212249A     |
| PCB1 | Q7501A   | HOLDER                   | (FL)                | 1    | 27191222A   |
| PCB1 | Q7502    | IC (SUB MICROPROCESSOR)  | MPD780232GC-096-8BT | 1    | 22242116R3  |
| PCB1 | Q7503    | TR                       | KTC3875-GR          | 1    | 2216175R2   |
| PCB1 | Q7503 or | TR                       | 2SC2712-GR          | ( 1) | 2213145R2   |
| PCB1 | Q7504    | TR                       | KRA103S             | 1    | 2216230R2   |
| PCB1 | Q7504 or | TR                       | RN2403              | ( 1) | 2214540R2   |
| PCB1 | Q7506    | TR                       | KRC102S             | 1    | 2216190R2   |
| PCB1 | Q7506 or | TR                       | RN1402              | ( 1) | 2214470R2   |
| PCB1 | Q9501    | TR                       | 2SA1015-GR          | 1    | 2211455     |
| PCB1 | D109     | ZENER D                  | UDZS5.1B            | 1    | 224550510R2 |
| PCB1 | D109 or  | ZENER D                  | UDZ5.1B             | ( 1) | 224490510R2 |
| PCB1 | D109 or  | ZENER D                  | HZU5.1B             | ( 1) | 224660514R2 |
| PCB1 | D801     | C-DIODE                  | 1SS352              | 1    | 223234R2    |
| PCB1 | D801 or  | C-DIODE                  | 1SS355              | ( 1) | 223269R2    |
| PCB1 | D802     | C-DIODE                  | 1SS352              | 1    | 223234R2    |
| PCB1 | D802 or  | C-DIODE                  | 1SS355              | ( 1) | 223269R2    |
| PCB1 | D805     | C-DIODE                  | 1SS352              | 1    | 223234R2    |
| PCB1 | D805 or  | C-DIODE                  | 1SS355              | ( 1) | 223269R2    |
| PCB1 | D806     | C-DIODE                  | 1SS352              | 1    | 223234R2    |
| PCB1 | D806 or  | C-DIODE                  | 1SS355              | ( 1) | 223269R2    |
| PCB1 | D7001    | C-DIODE                  | 1SS352              | 1    | 223234R2    |
| PCB1 | D7001 or | C-DIODE                  | 1SS355              | ( 1) | 223269R2    |
| PCB1 | D7002    | C-DIODE                  | 1SS352              | 1    | 223234R2    |
| PCB1 | D7002 or | C-DIODE                  | 1SS355              | ( 1) | 223269R2    |

|      |          |         |             |      |             |
|------|----------|---------|-------------|------|-------------|
| PCB1 | D7003    | C-DIODE | 1SS352      | 1    | 223234R2    |
| PCB1 | D7003 or | C-DIODE | 1SS355      | ( 1) | 223269R2    |
| PCB1 | D7004    | C-DIODE | 1SS352      | 1    | 223234R2    |
| PCB1 | D7004 or | C-DIODE | 1SS355      | ( 1) | 223269R2    |
| PCB1 | D7501    | ZENER D | UDZS8.2B    | 1    | 224550820R2 |
| PCB1 | D7501 or | ZENER D | UDZ8.2B     | ( 1) | 224490820R2 |
| PCB1 | D7501 or | ZENER D | HZU8.2B     | ( 1) | 224660824R2 |
| PCB1 | D7502    | ZENER D | UDZS5.1B    | 1    | 224550510R2 |
| PCB1 | D7502 or | ZENER D | UDZ5.1B     | ( 1) | 224490510R2 |
| PCB1 | D7502 or | ZENER D | HZU5.1B     | ( 1) | 224660514R2 |
| PCB1 | D7503    | C-DIODE | 1SS355      | 1    | 223269R2    |
| PCB1 | D7503 or | C-DIODE | 1SS352      | ( 1) | 223234R2    |
| PCB1 | D7505    | LED     | SLR-56VRTB7 | 1    | 225431      |
| PCB1 | D7505 or | LED     | SEL4110R    | ( 1) | 225290      |
| PCB1 | D7507    | C-DIODE | 1SS352      | 1    | 223234R2    |
| PCB1 | D7507 or | C-DIODE | 1SS355      | ( 1) | 223269R2    |
| PCB1 | D7702    | ZENER D | UDZS6.2B    | 1    | 224550620R2 |
| PCB1 | D7702 or | ZENER D | UDZ6.2B     | ( 1) | 224490620R2 |
| PCB1 | D7702 or | ZENER D | HZU6.2B     | ( 1) | 224660624R2 |
| PCB1 | D9502    | DIODE   | RL1N4003    | 1    | 22380260    |

|      |          |            |               |      |              |
|------|----------|------------|---------------|------|--------------|
| PCB1 | D9502 or | DIODE      | GP104003E     | ( 1) | 22380035     |
| PCB1 | D9503    | DIODE      | RL1N4003      | 1    | 22380260     |
| PCB1 | D9503 or | DIODE      | GP104003E     | ( 1) | 22380035     |
| PCB1 | D9504    | DIODE      | RL1N4003      | 1    | 22380260     |
| PCB1 | D9504 or | DIODE      | GP104003E     | ( 1) | 22380035     |
| PCB1 | D9505    | DIODE      | RL1N4003      | 1    | 22380260     |
| PCB1 | D9505 or | DIODE      | GP104003E     | ( 1) | 22380035     |
| PCB1 | D9506    | DIODE      | RL1N4003      | 1    | 22380260     |
| PCB1 | D9506 or | DIODE      | GP104003E     | ( 1) | 22380035     |
| PCB1 | D9507    | DIODE      | RL1N4003      | 1    | 22380260     |
| PCB1 | D9507 or | DIODE      | GP104003E     | ( 1) | 22380035     |
| PCB1 | D9508    | ZENER D    | UDZS27B       | 1    | 224552700R2  |
| PCB1 | D9508 or | ZENER D    | UDZ27B        | ( 1) | 224492700R2  |
| PCB1 | D9508 or | ZENER D    | HZU27B        | ( 1) | 224662704R2  |
| PCB1 | D9513    | DIODE      | D2SB80A       | 1    | 22380341F    |
| PCB1 | L701     | CHOKE COIL | NCH-1471      | 1    | 231237M022R2 |
| PCB1 | L702     | CHOKE COIL | NCH-1471      | 1    | 231237M022R2 |
| PCB1 | L703     | CHOKE COIL | NCH-1477      | 1    | 231237K220R2 |
| PCB1 | L751     | CHOKE COIL | NCH-1471      | 1    | 231237M022R2 |
| PCB1 | L751 or  | CHOKE COIL | NCH-1587-022K | ( 1) | 233533K022R2 |
| PCB1 | L781     | EMIFIL     | BK1608LM182-T | 1    | 230958R1     |
| PCB1 | L782     | EMIFIL     | BK1608LM182-T | 1    | 230958R1     |
| PCB1 | L783     | CHOKE COIL | NCH-1477      | 1    | 231237K220R2 |
| PCB1 | L800     | CHOKE COIL | NCH-1471      | 1    | 231237M022R2 |
| PCB1 | L800 or  | CHOKE COIL | NCH-1587-022K | ( 1) | 233533K022R2 |
| PCB1 | L801     | CHOKE COIL | NCH-1471      | 1    | 231237M022R2 |
| PCB1 | L801 or  | CHOKE COIL | NCH-1587-022K | ( 1) | 233533K022R2 |
| PCB1 | L802     | EMIFIL     | BK1608LM182-T | 1    | 230958R1     |
| PCB1 | L803     | CHOKE COIL | NCH-1471      | 1    | 231237M022R2 |
| PCB1 | L803 or  | CHOKE COIL | NCH-1587-022K | ( 1) | 233533K022R2 |
| PCB1 | L7001    | CHOKE COIL | NCH-1479      | 1    | 231237K470R2 |



|      |          |            |                   |      |              |
|------|----------|------------|-------------------|------|--------------|
| PCB1 | L7002    | CHOKE COIL | NCH-1471          | 1    | 231237M022R2 |
| PCB1 | L7002 or | CHOKE COIL | NCH-1587-022K     | ( 1) | 233533K022R2 |
| PCB1 | L7301    | CHOKE COIL | NCH-1471          | 1    | 231237M022R2 |
| PCB1 | L7301 or | CHOKE COIL | NCH-1587-022K     | ( 1) | 233533K022R2 |
| PCB1 | L7302    | EMIFIL     | BK1608LL241-T     | 1    | 230959R1     |
| PCB1 | L7501    | CHOKE COIL | NCH-1471          | 1    | 231237M022R2 |
| PCB1 | L7501 or | CHOKE COIL | NCH-1587-022K     | ( 1) | 233533K022R2 |
| PCB1 | L7502    | CHOKE COIL | NCH-1471          | 1    | 231237M022R2 |
| PCB1 | L7502 or | CHOKE COIL | NCH-1587-022K     | ( 1) | 233533K022R2 |
| PCB1 | L7503    | CHOKE COIL | NCH-1471          | 1    | 231237M022R2 |
| PCB1 | L7503 or | CHOKE COIL | NCH-1587-022K     | ( 1) | 233533K022R2 |
| PCB1 | L7504    | CHOKE COIL | NCH-1477          | 1    | 231237K220R2 |
| PCB1 | L7505    | CHOKE COIL | NCH-1477          | 1    | 231237K220R2 |
| PCB1 | X781     | CERA LOCK  | CSTCV12.2MTJ0C4   | 1    | 3010324R2    |
| PCB1 | X7001    | CERA LOCK  | CSTCE12M5G52-R0   | 1    | 3010361R2    |
| PCB1 | X7501    | CERA LOCK  | CST5.00MGW        | 1    | 3010242      |
| PCB1 | C101     | ELECT C    | CE04W50V3.3M(SC)  | 1    | 394780337    |
| PCB1 | C101 or  | VR C       | CE04W50V-3.3M(VR) | ( 1) | 394680337    |
| PCB1 | C103     | ELECT C    | CE04W50V3.3M(SC)  | 1    | 394780337    |
| PCB1 | C103 or  | VR C       | CE04W50V-3.3M(VR) | ( 1) | 394680337    |

|      |         |          |                   |      |             |
|------|---------|----------|-------------------|------|-------------|
| PCB1 | C104    | C-CERA C | CC725CH1H-101J1   | 1    | 342101014R1 |
| PCB1 | C106    | C-CERA C | CC725CH1H-101J1   | 1    | 342101014R1 |
| PCB1 | C109    | ELECT C  | CE04W50V100M(SC)  | 1    | 394781017   |
| PCB1 | C109 or | VR C     | CE04W50V-100M(VR) | ( 1) | 394681017   |
| PCB1 | C253    | C-CERA C | CK725F1E-104Z1    | 1    | 332161040R1 |
| PCB1 | C261    | C-CERA C | CC725CH1H-101J1   | 1    | 342101014R1 |
| PCB1 | C262    | C-CERA C | CC725CH1H-101J1   | 1    | 342101014R1 |
| PCB1 | C263    | C-CERA C | CK725F1E-104Z1    | 1    | 332161040R1 |
| PCB1 | C300    | TF C     | ECQ-B50V-101K     | 1    | 374721015   |
| PCB1 | C301    | TF C     | ECQ-B50V-101K     | 1    | 374721015   |
| PCB1 | C302    | C-CERA C | CC725CH1H-101J1   | 1    | 342101014R1 |
| PCB1 | C303    | C-CERA C | CC725CH1H-101J1   | 1    | 342101014R1 |
| PCB1 | C304    | C-CERA C | CC725CH1H-101J1   | 1    | 342101014R1 |
| PCB1 | C305    | C-CERA C | CC725CH1H-101J1   | 1    | 342101014R1 |
| PCB1 | C308    | CERA C   | CK45F50V-103Z     | 1    | 335621030   |
| PCB1 | C310    | C-CERA C | CC725CH1H-101J1   | 1    | 342101014R1 |
| PCB1 | C311    | C-CERA C | CC725CH1H-101J1   | 1    | 342101014R1 |
| PCB1 | C312    | C-CERA C | CC725CH1H-101J1   | 1    | 342101014R1 |
| PCB1 | C313    | C-CERA C | CC725CH1H-101J1   | 1    | 342101014R1 |
| PCB1 | C314    | C-CERA C | CC725CH1H-101J1   | 1    | 342101014R1 |
| PCB1 | C315    | C-CERA C | CC725CH1H-101J1   | 1    | 342101014R1 |
| PCB1 | C316    | C-CERA C | CC725CH1H-101J1   | 1    | 342101014R1 |
| PCB1 | C317    | C-CERA C | CC725CH1H-101J1   | 1    | 342101014R1 |
| PCB1 | C318    | C-CERA C | CC725CH1H-101J1   | 1    | 342101014R1 |
| PCB1 | C319    | C-CERA C | CC725CH1H-101J1   | 1    | 342101014R1 |
| PCB1 | C320    | C-CERA C | CC725CH1H-101J1   | 1    | 342101014R1 |
| PCB1 | C321    | C-CERA C | CC725CH1H-101J1   | 1    | 342101014R1 |
| PCB1 | C322    | C-CERA C | CK725F1E-104Z1    | 1    | 332161040R1 |
| PCB1 | C323    | C-CERA C | CK725F1E-104Z1    | 1    | 332161040R1 |
| PCB1 | C325    | C-CERA C | CK725F1E-104Z1    | 1    | 332161040R1 |
| PCB1 | C326    | C-CERA C | CK725F1E-104Z1    | 1    | 332161040R1 |

|      |         |          |                   |      |             |
|------|---------|----------|-------------------|------|-------------|
| PCB1 | C327    | C-CERA C | CC725CH1H-330J1   | 1    | 342103304R1 |
| PCB1 | C328    | C-CERA C | CC725CH1H-330J1   | 1    | 342103304R1 |
| PCB1 | C341    | ELECT C  | CE04W16V100M(SC)  | 1    | 394741017   |
| PCB1 | C341 or | VR C     | CE04W16V-100M(VR) | ( 1) | 394641017   |
| PCB1 | C342    | ELECT C  | CE04W16V100M(SC)  | 1    | 394741017   |
| PCB1 | C342 or | VR C     | CE04W16V-100M(VR) | ( 1) | 394641017   |
| PCB1 | C343    | C-CERA C | CK725F1E-104Z1    | 1    | 332161040R1 |
| PCB1 | C344    | C-CERA C | CK725F1E-104Z1    | 1    | 332161040R1 |
| PCB1 | C345    | VX C     | CE04W16V-10M(VX)  | 1    | 393341007   |
| PCB1 | C346    | VX C     | CE04W16V-10M(VX)  | 1    | 393341007   |
| PCB1 | C347    | VX C     | CE04W16V-10M(VX)  | 1    | 393341007   |
| PCB1 | C348    | VX C     | CE04W16V-10M(VX)  | 1    | 393341007   |
| PCB1 | C349    | VX C     | CE04W16V-10M(VX)  | 1    | 393341007   |
| PCB1 | C350    | C-CERA C | CC725CH1H-221J1   | 1    | 342102214R1 |
| PCB1 | C351    | C-CERA C | CC725CH1H-330J1   | 1    | 342103304R1 |
| PCB1 | C352    | C-CERA C | CK725F1E-104Z1    | 1    | 332161040R1 |
| PCB1 | C353    | VX C     | CE04W16V-47M(VX)  | 1    | 393344707   |
| PCB1 | C354    | VX C     | CE04W16V-47M(VX)  | 1    | 393344707   |
| PCB1 | C358    | VX C     | CE04W16V-47M(VX)  | 1    | 393344707   |
| PCB1 | C359    | ELECT C  | CE04W16V10M(SC)   | 1    | 394741007   |

|      |         |             |                  |      |             |
|------|---------|-------------|------------------|------|-------------|
| PCB1 | C359 or | VR C        | CE04W16V-10M(VR) | ( 1) | 394641007   |
| PCB1 | C360    | C-CERA C    | CK732B1C-474K    | 1    | 337394745R1 |
| PCB1 | C361    | C-CERA C    | CK725B1A-224K1   | 1    | 332132245R1 |
| PCB1 | C362    | ELECT C     | CE04W16V10M(SC)  | 1    | 394741007   |
| PCB1 | C362 or | VR C        | CE04W16V-10M(VR) | ( 1) | 394641007   |
| PCB1 | C363    | VX C        | CE04W16V-10M(VX) | 1    | 393341007   |
| PCB1 | C364    | VX C        | CE04W16V-10M(VX) | 1    | 393341007   |
| PCB1 | C365    | C-FILM C    | ECHU50V-222J     | 1    | 373022224R2 |
| PCB1 | C366    | C-CERA C    | CK725F1E-104Z1   | 1    | 332161040R1 |
| PCB1 | C367    | C-CERA C    | CK725F1E-104Z1   | 1    | 332161040R1 |
| PCB1 | C368    | VX C        | CE04W16V-10M(VX) | 1    | 393341007   |
| PCB1 | C369    | C-FILM C    | ECHU16V-472J     | 1    | 373044724R2 |
| PCB1 | C370    | C-FILM C    | ECHU16V-472J     | 1    | 373044724R2 |
| PCB1 | C371    | C-FILM C    | ECHU16V-104J     | 1    | 373041044R2 |
| PCB1 | C372    | C-FILM C    | ECHU16V-104J     | 1    | 373041044R2 |
| PCB1 | C373    | VX C        | CE04W16V-10M(VX) | 1    | 393341007   |
| PCB1 | C374    | VX C        | CE04W16V-10M(VX) | 1    | 393341007   |
| PCB1 | C376    | C-FILM C    | ECHU16V-104J     | 1    | 373041044R2 |
| PCB1 | C381    | C-FILM C    | ECHU16V-104J     | 1    | 373041044R2 |
| PCB1 | C390    | C-CERA C    | CC725CH1H-101J1  | 1    | 342101014R1 |
| PCB1 | C391    | C-CERA C    | CC725CH1H-101J1  | 1    | 342101014R1 |
| PCB1 | C392    | C-CERA C    | CC725CH1H-101J1  | 1    | 342101014R1 |
| PCB1 | C393    | C-CERA C    | CC725CH1H-101J1  | 1    | 342101014R1 |
| PCB1 | C394    | C-CERA C    | CC725CH1H-101J1  | 1    | 342101014R1 |
| PCB1 | C395    | C-CERA C    | CC725CH1H-101J1  | 1    | 342101014R1 |
| PCB1 | C701    | ELECT C     | CE04W16V47M(SC)  | 1    | 394744707   |
| PCB1 | C701 or | VR C        | CE04W16V-47M(VR) | ( 1) | 394644707   |
| PCB1 | C702    | C-CERA C    | CK725F1E-104Z1   | 1    | 332161040R1 |
| PCB1 | C703    | ELECT C     | CE04W16V47M(SC)  | 1    | 394744707   |
| PCB1 | C703 or | VR C        | CE04W16V-47M(VR) | ( 1) | 394644707   |
| PCB1 | C704    | CHIP TANTAL | CS772SB1C-2.2M   | 1    | 395640227R2 |

|      |      |          |                 |   |             |
|------|------|----------|-----------------|---|-------------|
| PCB1 | C705 | C-CERA C | CC732CH1H-122J  | 1 | 347341224R2 |
| PCB1 | C706 | C-CERA C | CC725CH1H-680J1 | 1 | 342106804R1 |
| PCB1 | C707 | C-CERA C | CK725F1E-104Z1  | 1 | 332161040R1 |
| PCB1 | C708 | C-CERA C | CK725F1E-104Z1  | 1 | 332161040R1 |
| PCB1 | C709 | C-CERA C | CK725F1E-104Z1  | 1 | 332161040R1 |
| PCB1 | C710 | C-CERA C | CK725F1E-104Z1  | 1 | 332161040R1 |
| PCB1 | C711 | C-CERA C | CK725F1E-104Z1  | 1 | 332161040R1 |
| PCB1 | C712 | C-CERA C | CK725F1E-104Z1  | 1 | 332161040R1 |
| PCB1 | C713 | TF C     | ECQ-V50V-104J   | 1 | 374721044   |
| PCB1 | C714 | C-CERA C | CK725F1E-104Z1  | 1 | 332161040R1 |
| PCB1 | C715 | C-CERA C | CK725F1E-104Z1  | 1 | 332161040R1 |
| PCB1 | C716 | C-CERA C | CK725F1E-104Z1  | 1 | 332161040R1 |
| PCB1 | C717 | C-CERA C | CK725F1E-104Z1  | 1 | 332161040R1 |
| PCB1 | C718 | C-CERA C | CK725F1E-104Z1  | 1 | 332161040R1 |
| PCB1 | C719 | C-CERA C | CK725F1E-104Z1  | 1 | 332161040R1 |
| PCB1 | C720 | C-CERA C | CC725CH1H-101J1 | 1 | 342101014R1 |
| PCB1 | C721 | C-CERA C | CK725F1E-104Z1  | 1 | 332161040R1 |
| PCB1 | C722 | C-CERA C | CK725F1E-104Z1  | 1 | 332161040R1 |
| PCB1 | C751 | TF C     | ECQ-V50V-104J   | 1 | 374721044   |
| PCB1 | C752 | C-CERA C | CK725F1E-104Z1  | 1 | 332161040R1 |

|      |         |          |                    |      |             |
|------|---------|----------|--------------------|------|-------------|
| PCB1 | C781    | C-CERA C | CK725F1E-104Z1     | 1    | 332161040R1 |
| PCB1 | C800    | C-CERA C | CC725CH1H-330J1    | 1    | 342103304R1 |
| PCB1 | C804    | VX C     | CE04W50V-2.2M(VX)  | 1    | 393380227   |
| PCB1 | C805    | C-CERA C | CK725F1E-104Z1     | 1    | 332161040R1 |
| PCB1 | C806    | C-CERA C | CK725F1E-104Z1     | 1    | 332161040R1 |
| PCB1 | C807    | ELECT C  | CE04W6.3V100M(SC)  | 1    | 394721017   |
| PCB1 | C807 or | VR C     | CE04W6.3V-100M(VR) | ( 1) | 394621017   |
| PCB1 | C808    | C-CERA C | CK725F1E-104Z1     | 1    | 332161040R1 |
| PCB1 | C809    | ELECT C  | CE04W6.3V330M(SC)  | 1    | 394723317   |
| PCB1 | C809 or | VR C     | CE04W6.3V-330M(VR) | ( 1) | 394623317   |
| PCB1 | C811    | C-CERA C | CK725F1E-104Z1     | 1    | 332161040R1 |
| PCB1 | C813    | ELECT C  | CE04W6.3V330M(SC)  | 1    | 394723317   |
| PCB1 | C813 or | VR C     | CE04W6.3V-330M(VR) | ( 1) | 394623317   |
| PCB1 | C814    | C-CERA C | CC725CH1H-330J1    | 1    | 342103304R1 |
| PCB1 | C815    | C-CERA C | CK725F1E-104Z1     | 1    | 332161040R1 |
| PCB1 | C816    | ELECT C  | CE04W6.3V100M(SC)  | 1    | 394721017   |
| PCB1 | C816 or | VR C     | CE04W6.3V-100M(VR) | ( 1) | 394621017   |
| PCB1 | C817    | C-CERA C | CC725CH1H-330J1    | 1    | 342103304R1 |
| PCB1 | C818    | C-CERA C | CC725CH1H-330J1    | 1    | 342103304R1 |
| PCB1 | C820    | C-FILM C | ECHU50V-821J       | 1    | 373028214R2 |
| PCB1 | C821    | C-FILM C | ECHU50V-821J       | 1    | 373028214R2 |
| PCB1 | C822    | C-FILM C | ECHU50V-821J       | 1    | 373028214R2 |
| PCB1 | C823    | C-FILM C | ECHU16V-822J       | 1    | 373048224R2 |
| PCB1 | C824    | C-FILM C | ECHU50V-821J       | 1    | 373028214R2 |
| PCB1 | C825    | C-FILM C | ECHU50V-821J       | 1    | 373028214R2 |
| PCB1 | C826    | C-FILM C | ECHU50V-821J       | 1    | 373028214R2 |
| PCB1 | C829    | C-FILM C | ECHU50V-122J       | 1    | 373021224R2 |
| PCB1 | C830    | C-FILM C | ECHU50V-101J       | 1    | 373021014R2 |
| PCB1 | C831    | C-FILM C | ECHU50V-122J       | 1    | 373021224R2 |
| PCB1 | C832    | C-FILM C | ECHU50V-101J       | 1    | 373021014R2 |
| PCB1 | C833    | C-FILM C | ECHU50V-122J       | 1    | 373021224R2 |

|      |         |          |                   |      |             |
|------|---------|----------|-------------------|------|-------------|
| PCB1 | C834    | C-FILM C | ECHU50V-101J      | 1    | 373021014R2 |
| PCB1 | C835    | C-FILM C | ECHU50V-101J      | 1    | 373021014R2 |
| PCB1 | C836    | C-FILM C | ECHU16V-123J      | 1    | 373041234R2 |
| PCB1 | C837    | C-FILM C | ECHU50V-122J      | 1    | 373021224R2 |
| PCB1 | C838    | C-FILM C | ECHU50V-101J      | 1    | 373021014R2 |
| PCB1 | C839    | C-FILM C | ECHU50V-122J      | 1    | 373021224R2 |
| PCB1 | C840    | C-FILM C | ECHU50V-101J      | 1    | 373021014R2 |
| PCB1 | C841    | C-FILM C | ECHU50V-122J      | 1    | 373021224R2 |
| PCB1 | C842    | C-FILM C | ECHU50V-101J      | 1    | 373021014R2 |
| PCB1 | C843    | ELECT C  | CE04W16V220M(SC)  | 1    | 394742217   |
| PCB1 | C843 or | VR C     | CE04W16V-220M(VR) | ( 1) | 394642217   |
| PCB1 | C844    | ELECT C  | CE04W16V220M(SC)  | 1    | 394742217   |
| PCB1 | C844 or | VR C     | CE04W16V-220M(VR) | ( 1) | 394642217   |
| PCB1 | C846    | VX C     | CE04W16V-10M(VX)  | 1    | 393341007   |
| PCB1 | C847    | VX C     | CE04W16V-10M(VX)  | 1    | 393341007   |
| PCB1 | C850    | VX C     | CE04W16V-10M(VX)  | 1    | 393341007   |
| PCB1 | C851    | VX C     | CE04W16V-10M(VX)  | 1    | 393341007   |
| PCB1 | C852    | VX C     | CE04W16V-10M(VX)  | 1    | 393341007   |
| PCB1 | C853    | VX C     | CE04W16V-47M(VX)  | 1    | 393344707   |
| PCB1 | C854    | VX C     | CE04W16V-10M(VX)  | 1    | 393341007   |

|      |          |          |                    |      |             |
|------|----------|----------|--------------------|------|-------------|
| PCB1 | C855     | VX C     | CE04W16V-10M(VX)   | 1    | 393341007   |
| PCB1 | C856     | VX C     | CE04W16V-10M(VX)   | 1    | 393341007   |
| PCB1 | C6401    | TF C     | ECQ-V50V-104J      | 1    | 374721044   |
| PCB1 | C6403    | C-CERA C | CK725F1H-223Z1     | 1    | 332152230R1 |
| PCB1 | C6404    | ELECT C  | CE04W16V10M(SC)    | 1    | 394741007   |
| PCB1 | C6404 or | VR C     | CE04W16V-10M(VR)   | ( 1) | 394641007   |
| PCB1 | C6405    | C-CERA C | CK725F1H-223Z1     | 1    | 332152230R1 |
| PCB1 | C6406    | ELECT C  | CE04W16V10M(SC)    | 1    | 394741007   |
| PCB1 | C6406 or | VR C     | CE04W16V-10M(VR)   | ( 1) | 394641007   |
| PCB1 | C6409    | C-CERA C | CK725F1H-223Z1     | 1    | 332152230R1 |
| PCB1 | C6410    | ELECT C  | CE04W16V10M(SC)    | 1    | 394741007   |
| PCB1 | C6410 or | VR C     | CE04W16V-10M(VR)   | ( 1) | 394641007   |
| PCB1 | C6411    | C-CERA C | CK725F1H-223Z1     | 1    | 332152230R1 |
| PCB1 | C6412    | ELECT C  | CE04W16V330M(SC)   | 1    | 394743317   |
| PCB1 | C6412 or | VR C     | CE04W16V-330M(VR)  | ( 1) | 394643317   |
| PCB1 | C6412 or | VX C     | CE04W16V-330M(VX)  | ( 1) | 393343317   |
| PCB1 | C6421    | C-CERA C | CK725F1E-104Z1     | 1    | 332161040R1 |
| PCB1 | C7001    | EDL C    | DX-5R5L104         | 1    | 3000078     |
| PCB1 | C7001 or | EDL C    | FMC0H104Z          | ( 1) | 3000120     |
| PCB1 | C7001 or | EDL C    | SCDA5R5104A        | ( 1) | 3000121     |
| PCB1 | C7002    | ELECT C  | CE04W6.3V100M(SC)  | 1    | 394721017   |
| PCB1 | C7002 or | VR C     | CE04W6.3V-100M(VR) | ( 1) | 394621017   |
| PCB1 | C7003    | C-CERA C | CK725F1E-104Z1     | 1    | 332161040R1 |
| PCB1 | C7004    | ELECT C  | CE04W50V-1M(SC)    | 1    | 394780107   |
| PCB1 | C7004 or | VR C     | CE04W50V-1M(VR)    | ( 1) | 394680107   |
| PCB1 | C7005    | ELECT C  | CE04W6.3V100M(SC)  | 1    | 394721017   |
| PCB1 | C7005 or | VR C     | CE04W6.3V-100M(VR) | ( 1) | 394621017   |
| PCB1 | C7006    | C-CERA C | CK725F1E-104Z1     | 1    | 332161040R1 |
| PCB1 | C7007    | C-CERA C | CK725F1E-104Z1     | 1    | 332161040R1 |
| PCB1 | C7008    | C-CERA C | CK725F1E-104Z1     | 1    | 332161040R1 |
| PCB1 | C7009    | C-CERA C | CK725F1E-104Z1     | 1    | 332161040R1 |



|      |          |          |                    |      |             |
|------|----------|----------|--------------------|------|-------------|
| PCB1 | C7010    | C-CERA C | CK725F1E-104Z1     | 1    | 332161040R1 |
| PCB1 | C7011    | ELECT C  | CE04W16V47M(SC)    | 1    | 394744707   |
| PCB1 | C7011 or | VR C     | CE04W16V-47M(VR)   | ( 1) | 394644707   |
| PCB1 | C7012    | ELECT C  | CE04W16V47M(SC)    | 1    | 394744707   |
| PCB1 | C7012 or | VR C     | CE04W16V-47M(VR)   | ( 1) | 394644707   |
| PCB1 | C7015    | ELECT C  | CE04W16V47M(SC)    | 1    | 394744707   |
| PCB1 | C7015 or | VR C     | CE04W16V-47M(VR)   | ( 1) | 394644707   |
| PCB1 | C7020    | C-CERA C | CK725F1E-104Z1     | 1    | 332161040R1 |
| PCB1 | C7020    | C-CERA C | CK725F1E-104Z1     | 1    | 332161040R1 |
| PCB1 | C7021    | C-CERA C | CK725F1E-104Z1     | 1    | 332161040R1 |
| PCB1 | C7021    | C-CERA C | CK725F1E-104Z1     | 1    | 332161040R1 |
| PCB1 | C7301    | C-CERA C | CK725F1E-104Z1     | 1    | 332161040R1 |
| PCB1 | C7302    | C-CERA C | CK725F1E-104Z1     | 1    | 332161040R1 |
| PCB1 | C7303    | C-CERA C | CK725F1E-104Z1     | 1    | 332161040R1 |
| PCB1 | C7304    | C-CERA C | CK725F1E-104Z1     | 1    | 332161040R1 |
| PCB1 | C7305    | C-CERA C | CK725F1E-104Z1     | 1    | 332161040R1 |
| PCB1 | C7306    | C-CERA C | CK725F1E-104Z1     | 1    | 332161040R1 |
| PCB1 | C7307    | ELECT C  | CE04W6.3V100M(SC)  | 1    | 394721017   |
| PCB1 | C7307 or | VR C     | CE04W6.3V-100M(VR) | ( 1) | 394621017   |
| PCB1 | C7501    | C-CERA C | CK725F1E-104Z1     | 1    | 332161040R1 |

|      |          |          |                    |      |             |
|------|----------|----------|--------------------|------|-------------|
| PCB1 | C7502    | ELECT C  | CE04W50V-33M       | 1    | 355783309   |
| PCB1 | C7503    | C-CERA C | CK725F1E-104Z1     | 1    | 332161040R1 |
| PCB1 | C7504    | C-CERA C | CK725F1H-473Z1     | 1    | 332154730R1 |
| PCB1 | C7505    | C-CERA C | CK725F1H-473Z1     | 1    | 332154730R1 |
| PCB1 | C7506    | C-CERA C | CK725F1E-104Z1     | 1    | 332161040R1 |
| PCB1 | C7507    | C-CERA C | CK725F1E-104Z1     | 1    | 332161040R1 |
| PCB1 | C7508    | C-CERA C | CC725CH1E-102J1    | 1    | 342111024R1 |
| PCB1 | C7509    | C-CERA C | CC725CH1E-102J1    | 1    | 342111024R1 |
| PCB1 | C7510    | C-CERA C | CC725CH1E-102J1    | 1    | 342111024R1 |
| PCB1 | C7511    | C-CERA C | CC725CH1E-102J1    | 1    | 342111024R1 |
| PCB1 | C7513    | C-CERA C | CK725F1E-104Z1     | 1    | 332161040R1 |
| PCB1 | C7514    | ELECT C  | CE04W6.3V-100M(S)  | 1    | 353721019   |
| PCB1 | C7515    | C-CERA C | CK725F1E-104Z1     | 1    | 332161040R1 |
| PCB1 | C7516    | C-CERA C | CK725F1E-104Z1     | 1    | 332161040R1 |
| PCB1 | C7517    | C-CERA C | CC725CH1E-102J1    | 1    | 342111024R1 |
| PCB1 | C7518    | C-CERA C | CC725CH1E-102J1    | 1    | 342111024R1 |
| PCB1 | C7519    | C-CERA C | CC725CH1E-102J1    | 1    | 342111024R1 |
| PCB1 | C7520    | C-CERA C | CC725CH1E-102J1    | 1    | 342111024R1 |
| PCB1 | C7521    | ELECT C  | CE04W6.3V-220M     | 1    | 355722219   |
| PCB1 | C7522    | C-CERA C | CC725CH1H-101J1    | 1    | 342101014R1 |
| PCB1 | C7523    | C-CERA C | CC725CH1E-102J1    | 1    | 342111024R1 |
| PCB1 | C9501    | TF C     | ECQ-V50V-104J      | 1    | 374721044   |
| PCB1 | C9503    | TF C     | ECQ-V50V-104J      | 1    | 374721044   |
| PCB1 | C9505    | ELECT C  | CE04W35V2200M(SC)  | 1    | 394762227S  |
| PCB1 | C9505 or | VR C     | CE04W35V-2200M(VR) | ( 1) | 394662227S  |
| PCB1 | C9506    | ELECT C  | CE04W35V470M(SC)   | 1    | 394764717   |
| PCB1 | C9506 or | VR C     | CE04W35V-470M(VR)  | ( 1) | 394664717   |
| PCB1 | C9507    | ELECT C  | CE04W35V220M(SC)   | 1    | 394762217   |
| PCB1 | C9507 or | VR C     | CE04W35V-220M(VR)  | ( 1) | 394662217   |
| PCB1 | C9508    | ELECT C  | CE04W16V4700M(SC)  | 1    | 394744727S  |
| PCB1 | C9508 or | VR C     | CE04W16V-4700M(VR) | ( 1) | 394644727S  |

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|------|-------|------------|-------------------|---|-------------|
| PCB1 | C9510 | VR C       | CE04W63V-220M(VR) | 1 | 394672217   |
| PCB1 | C9511 | C-CERA C   | CK725F1H-223Z1    | 1 | 332152230R1 |
| PCB1 | C9512 | C-CERA C   | CK725F1H-223Z1    | 1 | 332152230R1 |
| PCB1 | C9513 | TF C       | ECQ-V50V-104J     | 1 | 374721044   |
| PCB1 | C9514 | TF C       | ECQ-V50V-104J     | 1 | 374721044   |
| PCB1 | C9515 | TF C       | ECQ-V50V-104J     | 1 | 374721044   |
| PCB1 | C9516 | TF C       | ECQ-V50V-104J     | 1 | 374721044   |
| PCB1 | R102  | C-CARBON R | RN72K1J-223JE     | 1 | 435032234R1 |
| PCB1 | R103  | C-CARBON R | RN72K1J-223JE     | 1 | 435032234R1 |
| PCB1 | R104  | C-CARBON R | RN72K1J-104JE     | 1 | 435031044R1 |
| PCB1 | R109  | METAL O R  | RS1/2WBJ-330      | 1 | 443523314   |
| PCB1 | R185  | C-CARBON R | RN72K1J-473JE     | 1 | 435034734R1 |
| PCB1 | R186  | C-CARBON R | RN72K1J-473JE     | 1 | 435034734R1 |
| PCB1 | R187  | C-CARBON R | RN72K1J-473JE     | 1 | 435034734R1 |
| PCB1 | R251  | C-CARBON R | RN72K1J-750JE     | 1 | 435037504R1 |
| PCB1 | R252  | C-CARBON R | RN72K1J-750JE     | 1 | 435037504R1 |
| PCB1 | R253  | C-CARBON R | RN72K1J-750JE     | 1 | 435037504R1 |
| PCB1 | R261  | C-CARBON R | RN72K1J-331JE     | 1 | 435033314R1 |
| PCB1 | R262  | C-CARBON R | RN72K1J-331JE     | 1 | 435033314R1 |
| PCB1 | R300  | C-CARBON R | RN72K1J-331JE     | 1 | 435033314R1 |

|      |      |            |               |   |             |
|------|------|------------|---------------|---|-------------|
| PCB1 | R301 | C-CARBON R | RN72K1J-331JE | 1 | 435033314R1 |
| PCB1 | R302 | C-CARBON R | RN72K1J-331JE | 1 | 435033314R1 |
| PCB1 | R303 | C-CARBON R | RN72K1J-331JE | 1 | 435033314R1 |
| PCB1 | R304 | C-CARBON R | RN72K1J-331JE | 1 | 435033314R1 |
| PCB1 | R305 | C-CARBON R | RN72K1J-331JE | 1 | 435033314R1 |
| PCB1 | R308 | C-CARBON R | RN72K1J-000JE | 1 | 435030004R1 |
| PCB1 | R309 | C-CARBON R | RN72K1J-000JE | 1 | 435030004R1 |
| PCB1 | R310 | C-CARBON R | RN72K1J-331JE | 1 | 435033314R1 |
| PCB1 | R311 | C-CARBON R | RN72K1J-331JE | 1 | 435033314R1 |
| PCB1 | R312 | C-CARBON R | RN72K1J-331JE | 1 | 435033314R1 |
| PCB1 | R313 | C-CARBON R | RN72K1J-331JE | 1 | 435033314R1 |
| PCB1 | R314 | C-CARBON R | RN72K1J-331JE | 1 | 435033314R1 |
| PCB1 | R315 | C-CARBON R | RN72K1J-331JE | 1 | 435033314R1 |
| PCB1 | R316 | C-CARBON R | RN72K1J-331JE | 1 | 435033314R1 |
| PCB1 | R317 | C-CARBON R | RN72K1J-331JE | 1 | 435033314R1 |
| PCB1 | R318 | C-CARBON R | RN72K1J-331JE | 1 | 435033314R1 |
| PCB1 | R319 | C-CARBON R | RN72K1J-331JE | 1 | 435033314R1 |
| PCB1 | R320 | C-CARBON R | RN72K1J-331JE | 1 | 435033314R1 |
| PCB1 | R321 | C-CARBON R | RN72K1J-331JE | 1 | 435033314R1 |
| PCB1 | R322 | C-CARBON R | RN72K1J-473JE | 1 | 435034734R1 |
| PCB1 | R323 | C-CARBON R | RN72K1J-473JE | 1 | 435034734R1 |
| PCB1 | R324 | C-CARBON R | RN72K1J-474JE | 1 | 435034744R1 |
| PCB1 | R325 | C-CARBON R | RN72K1J-474JE | 1 | 435034744R1 |
| PCB1 | R326 | C-CARBON R | RN72K1J-473JE | 1 | 435034734R1 |
| PCB1 | R327 | C-CARBON R | RN72K1J-473JE | 1 | 435034734R1 |
| PCB1 | R328 | C-CARBON R | RN72K1J-473JE | 1 | 435034734R1 |
| PCB1 | R329 | C-CARBON R | RN72K1J-473JE | 1 | 435034734R1 |
| PCB1 | R330 | C-CARBON R | RN72K1J-122JE | 1 | 435031224R1 |
| PCB1 | R331 | C-CARBON R | RN72K1J-122JE | 1 | 435031224R1 |
| PCB1 | R332 | C-CARBON R | RN72K1J-473JE | 1 | 435034734R1 |
| PCB1 | R333 | C-CARBON R | RN72K1J-473JE | 1 | 435034734R1 |

|      |      |            |               |   |             |
|------|------|------------|---------------|---|-------------|
| PCB1 | R334 | C-CARBON R | RN72K1J-474JE | 1 | 435034744R1 |
| PCB1 | R335 | C-CARBON R | RN72K1J-474JE | 1 | 435034744R1 |
| PCB1 | R336 | C-CARBON R | RN72K1J-473JE | 1 | 435034734R1 |
| PCB1 | R337 | C-CARBON R | RN72K1J-473JE | 1 | 435034734R1 |
| PCB1 | R338 | C-CARBON R | RN72K1J-473JE | 1 | 435034734R1 |
| PCB1 | R339 | C-CARBON R | RN72K1J-473JE | 1 | 435034734R1 |
| PCB1 | R340 | C-CARBON R | RN72K1J-473JE | 1 | 435034734R1 |
| PCB1 | R341 | C-CARBON R | RN72K1J-473JE | 1 | 435034734R1 |
| PCB1 | R342 | C-CARBON R | RN72K1J-473JE | 1 | 435034734R1 |
| PCB1 | R343 | C-CARBON R | RN72K1J-473JE | 1 | 435034734R1 |
| PCB1 | R345 | C-CARBON R | RN72K1J-473JE | 1 | 435034734R1 |
| PCB1 | R346 | C-CARBON R | RN72K1J-473JE | 1 | 435034734R1 |
| PCB1 | R347 | C-CARBON R | RN72K1J-103JE | 1 | 435031034R1 |
| PCB1 | R348 | C-CARBON R | RN72K1J-103JE | 1 | 435031034R1 |
| PCB1 | R351 | C-CARBON R | RN72K1J-000JE | 1 | 435030004R1 |
| PCB1 | R352 | C-CARBON R | RN72K1J-000JE | 1 | 435030004R1 |
| PCB1 | R353 | C-CARBON R | RN72K1J-472JE | 1 | 435034724R1 |
| PCB1 | R354 | C-CARBON R | RN72K1J-472JE | 1 | 435034724R1 |
| PCB1 | R355 | C-CARBON R | RN72K1J-103JE | 1 | 435031034R1 |
| PCB1 | R356 | C-CARBON R | RN72K1J-103JE | 1 | 435031034R1 |

|      |      |            |               |   |             |
|------|------|------------|---------------|---|-------------|
| PCB1 | R357 | C-CARBON R | RN72K1J-000JE | 1 | 435030004R1 |
| PCB1 | R358 | C-CARBON R | RN72K1J-000JE | 1 | 435030004R1 |
| PCB1 | R359 | C-CARBON R | RN72K1J-391JE | 1 | 435033914R1 |
| PCB1 | R360 | C-CARBON R | RN72K1J-391JE | 1 | 435033914R1 |
| PCB1 | R361 | C-CARBON R | RN72K1J-103JE | 1 | 435031034R1 |
| PCB1 | R362 | C-CARBON R | RN72K1J-103JE | 1 | 435031034R1 |
| PCB1 | R367 | C-CARBON R | RN72K1J-102JE | 1 | 435031024R1 |
| PCB1 | R368 | C-CARBON R | RN72K1J-473JE | 1 | 435034734R1 |
| PCB1 | R369 | C-CARBON R | RN72K1J-182JE | 1 | 435031824R1 |
| PCB1 | R370 | C-CARBON R | RN72K1J-392JE | 1 | 435033924R1 |
| PCB1 | R373 | C-CARBON R | RN72K1J-122JE | 1 | 435031224R1 |
| PCB1 | R374 | C-CARBON R | RN72K1J-122JE | 1 | 435031224R1 |
| PCB1 | R375 | C-CARBON R | RN72K1J-122JE | 1 | 435031224R1 |
| PCB1 | R376 | C-CARBON R | RN72K1J-271JE | 1 | 435032714R1 |
| PCB1 | R377 | C-CARBON R | RN72K1J-223JE | 1 | 435032234R1 |
| PCB1 | R378 | C-CARBON R | RN72K1J-223JE | 1 | 435032234R1 |
| PCB1 | R379 | C-CARBON R | RN72K1J-223JE | 1 | 435032234R1 |
| PCB1 | R380 | C-CARBON R | RN72K1J-223JE | 1 | 435032234R1 |
| PCB1 | R381 | C-CARBON R | RN72K1J-223JE | 1 | 435032234R1 |
| PCB1 | R382 | C-CARBON R | RN72K1J-223JE | 1 | 435032234R1 |
| PCB1 | R383 | C-CARBON R | RN72K1J-103JE | 1 | 435031034R1 |
| PCB1 | R384 | C-CARBON R | RN72K1J-224JE | 1 | 435032244R1 |
| PCB1 | R385 | C-CARBON R | RN72K1J-101JE | 1 | 435031014R1 |
| PCB1 | R386 | C-CARBON R | RN72K1J-152JE | 1 | 435031524R1 |
| PCB1 | R387 | C-CARBON R | RN72K1J-152JE | 1 | 435031524R1 |
| PCB1 | R388 | C-CARBON R | RN72K1J-101JE | 1 | 435031014R1 |
| PCB1 | R389 | C-CARBON R | RN72K1J-122JE | 1 | 435031224R1 |
| PCB1 | R390 | C-CARBON R | RN72K1J-223JE | 1 | 435032234R1 |
| PCB1 | R401 | C-CARBON R | RN72K1J-473JE | 1 | 435034734R1 |
| PCB1 | R402 | C-CARBON R | RN72K1J-473JE | 1 | 435034734R1 |
| PCB1 | R403 | C-CARBON R | RN72K1J-473JE | 1 | 435034734R1 |

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|------|------|------------|---------------|---|-------------|
| PCB1 | R404 | C-CARBON R | RN72K1J-473JE | 1 | 435034734R1 |
| PCB1 | R405 | C-CARBON R | RN72K1J-473JE | 1 | 435034734R1 |
| PCB1 | R409 | C-CARBON R | RN72K1J-474JE | 1 | 435034744R1 |
| PCB1 | R410 | C-CARBON R | RN72K1J-474JE | 1 | 435034744R1 |
| PCB1 | R700 | C-CARBON R | RN72K1J-331JE | 1 | 435033314R1 |
| PCB1 | R701 | C-CARBON R | RN72K1J-272JE | 1 | 435032724R1 |
| PCB1 | R702 | C-CARBON R | RN72K1J-332JE | 1 | 435033324R1 |
| PCB1 | R703 | C-CARBON R | RN72K1J-332JE | 1 | 435033324R1 |
| PCB1 | R704 | C-CARBON R | RN72K1J-221JE | 1 | 435032214R1 |
| PCB1 | R705 | C-CARBON R | RN72K1J-103JE | 1 | 435031034R1 |
| PCB1 | R706 | C-CARBON R | RN72K1J-221JE | 1 | 435032214R1 |
| PCB1 | R707 | C-CARBON R | RN72K1J-103JE | 1 | 435031034R1 |
| PCB1 | R708 | C-CARBON R | RN72K1J-332JE | 1 | 435033324R1 |
| PCB1 | R709 | C-CARBON R | RN72K1J-332JE | 1 | 435033324R1 |
| PCB1 | R710 | C-CARBON R | RN72K1J-221JE | 1 | 435032214R1 |
| PCB1 | R711 | C-CARBON R | RN72K1J-332JE | 1 | 435033324R1 |
| PCB1 | R712 | C-CARBON R | RN72K1J-103JE | 1 | 435031034R1 |
| PCB1 | R713 | C-CARBON R | RN72K1J-332JE | 1 | 435033324R1 |
| PCB1 | R714 | C-CARBON R | RN72K1J-332JE | 1 | 435033324R1 |
| PCB1 | R715 | C-CARBON R | RN72K1J-332JE | 1 | 435033324R1 |

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|------|------|------------|---------------|---|-------------|
| PCB1 | R716 | C-CARBON R | RN72K1J-221JE | 1 | 435032214R1 |
| PCB1 | R717 | C-CARBON R | RN72K1J-221JE | 1 | 435032214R1 |
| PCB1 | R718 | C-CARBON R | RN72K1J-221JE | 1 | 435032214R1 |
| PCB1 | R719 | C-CARBON R | RN72K1J-332JE | 1 | 435033324R1 |
| PCB1 | R720 | C-CARBON R | RN72K1J-332JE | 1 | 435033324R1 |
| PCB1 | R721 | C-CARBON R | RN72K1J-332JE | 1 | 435033324R1 |
| PCB1 | R722 | C-CARBON R | RN72K1J-000JE | 1 | 435030004R1 |
| PCB1 | R723 | C-CARBON R | RN72K1J-332JE | 1 | 435033324R1 |
| PCB1 | R724 | C-CARBON R | RN72K1J-470JE | 1 | 435034704R1 |
| PCB1 | R725 | C-CARBON R | RN72K1J-470JE | 1 | 435034704R1 |
| PCB1 | R726 | C-CARBON R | RN72K1J-470JE | 1 | 435034704R1 |
| PCB1 | R727 | C-CARBON R | RN72K1J-470JE | 1 | 435034704R1 |
| PCB1 | R728 | C-CARBON R | RN72K1J-470JE | 1 | 435034704R1 |
| PCB1 | R729 | C-CARBON R | RN72K1J-470JE | 1 | 435034704R1 |
| PCB1 | R730 | C-CARBON R | RN72K1J-470JE | 1 | 435034704R1 |
| PCB1 | R731 | C-CARBON R | RN72K1J-470JE | 1 | 435034704R1 |
| PCB1 | R732 | C-CARBON R | RN72K1J-470JE | 1 | 435034704R1 |
| PCB1 | R733 | C-CARBON R | RN72K1J-470JE | 1 | 435034704R1 |
| PCB1 | R734 | C-CARBON R | RN72K1J-470JE | 1 | 435034704R1 |
| PCB1 | R735 | C-CARBON R | RN72K1J-470JE | 1 | 435034704R1 |
| PCB1 | R736 | C-CARBON R | RN72K1J-470JE | 1 | 435034704R1 |
| PCB1 | R737 | C-CARBON R | RN72K1J-470JE | 1 | 435034704R1 |
| PCB1 | R738 | C-CARBON R | RN72K1J-470JE | 1 | 435034704R1 |
| PCB1 | R739 | C-CARBON R | RN72K1J-470JE | 1 | 435034704R1 |
| PCB1 | R740 | C-CARBON R | RN72K1J-470JE | 1 | 435034704R1 |
| PCB1 | R741 | C-CARBON R | RN72K1J-470JE | 1 | 435034704R1 |
| PCB1 | R742 | C-CARBON R | RN72K1J-470JE | 1 | 435034704R1 |
| PCB1 | R743 | C-CARBON R | RN72K1J-470JE | 1 | 435034704R1 |
| PCB1 | R744 | C-CARBON R | RN72K1J-470JE | 1 | 435034704R1 |
| PCB1 | R745 | C-CARBON R | RN72K1J-470JE | 1 | 435034704R1 |
| PCB1 | R746 | C-CARBON R | RN72K1J-221JE | 1 | 435032214R1 |



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|------|------|------------|---------------|---|-------------|
| PCB1 | R747 | C-CARBON R | RN72K1J-221JE | 1 | 435032214R1 |
| PCB1 | R748 | C-CARBON R | RN72K1J-221JE | 1 | 435032214R1 |
| PCB1 | R749 | C-CARBON R | RN72K1J-221JE | 1 | 435032214R1 |
| PCB1 | R750 | C-CARBON R | RN72K1J-332JE | 1 | 435033324R1 |
| PCB1 | R751 | C-CARBON R | RN72K1J-221JE | 1 | 435032214R1 |
| PCB1 | R762 | C-CARBON R | RN72K1J-220JE | 1 | 435032204R1 |
| PCB1 | R763 | C-CARBON R | RN72K1J-220JE | 1 | 435032204R1 |
| PCB1 | R781 | C-CARBON R | RN72K1J-105JE | 1 | 435031054R1 |
| PCB1 | R800 | C-CARBON R | RN72K1J-560JE | 1 | 435035604R1 |
| PCB1 | R801 | C-CARBON R | RN72K1J-560JE | 1 | 435035604R1 |
| PCB1 | R802 | C-CARBON R | RN72K1J-560JE | 1 | 435035604R1 |
| PCB1 | R803 | C-CARBON R | RN72K1J-102JE | 1 | 435031024R1 |
| PCB1 | R804 | C-CARBON R | RN72K1J-560JE | 1 | 435035604R1 |
| PCB1 | R805 | C-CARBON R | RN72K1J-102JE | 1 | 435031024R1 |
| PCB1 | R806 | C-CARBON R | RN72K1J-102JE | 1 | 435031024R1 |
| PCB1 | R807 | C-CARBON R | RN72K1J-560JE | 1 | 435035604R1 |
| PCB1 | R808 | C-CARBON R | RN72K1J-102JE | 1 | 435031024R1 |
| PCB1 | R809 | C-CARBON R | RN72K1J-047JE | 1 | 435030474R1 |
| PCB1 | R810 | C-CARBON R | RN72K1J-123JE | 1 | 435031234R1 |
| PCB1 | R811 | C-CARBON R | RN72K1J-331JE | 1 | 435033314R1 |

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|------|------|------------|---------------|---|-------------|
| PCB1 | R812 | C-CARBON R | RN72K1J-331JE | 1 | 435033314R1 |
| PCB1 | R813 | C-CARBON R | RN72K1J-331JE | 1 | 435033314R1 |
| PCB1 | R814 | C-CARBON R | RN72K1J-331JE | 1 | 435033314R1 |
| PCB1 | R816 | C-CARBON R | RN72K1J-560JE | 1 | 435035604R1 |
| PCB1 | R817 | C-CARBON R | RN72K1J-560JE | 1 | 435035604R1 |
| PCB1 | R818 | C-CARBON R | RN72K1J-331JE | 1 | 435033314R1 |
| PCB1 | R819 | C-CARBON R | RN72K1J-560JE | 1 | 435035604R1 |
| PCB1 | R820 | C-CARBON R | RN72K1J-561JE | 1 | 435035614R1 |
| PCB1 | R821 | C-CARBON R | RN72K1J-560JE | 1 | 435035604R1 |
| PCB1 | R822 | C-CARBON R | RN72K1J-560JE | 1 | 435035604R1 |
| PCB1 | R823 | C-CARBON R | RN72K1J-560JE | 1 | 435035604R1 |
| PCB1 | R824 | C-CARBON R | RN72K1J-102JE | 1 | 435031024R1 |
| PCB1 | R825 | C-CARBON R | RN72K1J-560JE | 1 | 435035604R1 |
| PCB1 | R826 | C-CARBON R | RN72K1J-560JE | 1 | 435035604R1 |
| PCB1 | R828 | C-CARBON R | RN72K1J-222JE | 1 | 435032224R1 |
| PCB1 | R829 | C-CARBON R | RN72K1J-102JE | 1 | 435031024R1 |
| PCB1 | R831 | C-CARBON R | RN72K1J-222JE | 1 | 435032224R1 |
| PCB1 | R832 | C-CARBON R | RN72K1J-222JE | 1 | 435032224R1 |
| PCB1 | R833 | C-CARBON R | RN72K1J-472JE | 1 | 435034724R1 |
| PCB1 | R834 | C-CARBON R | RN72K1J-472JE | 1 | 435034724R1 |
| PCB1 | R835 | C-CARBON R | RN72K1J-222JE | 1 | 435032224R1 |
| PCB1 | R836 | C-CARBON R | RN72K1J-222JE | 1 | 435032224R1 |
| PCB1 | R837 | C-CARBON R | RN72K1J-472JE | 1 | 435034724R1 |
| PCB1 | R838 | C-CARBON R | RN72K1J-472JE | 1 | 435034724R1 |
| PCB1 | R839 | C-CARBON R | RN72K1J-222JE | 1 | 435032224R1 |
| PCB1 | R840 | C-CARBON R | RN72K1J-222JE | 1 | 435032224R1 |
| PCB1 | R841 | C-CARBON R | RN72K1J-472JE | 1 | 435034724R1 |
| PCB1 | R842 | C-CARBON R | RN72K1J-472JE | 1 | 435034724R1 |
| PCB1 | R843 | C-CARBON R | RN72K1J-222JE | 1 | 435032224R1 |
| PCB1 | R844 | C-CARBON R | RN72K1J-222JE | 1 | 435032224R1 |
| PCB1 | R845 | C-CARBON R | RN72K1J-472JE | 1 | 435034724R1 |

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|------|------|------------|---------------|---|-------------|
| PCB1 | R848 | C-CARBON R | RN72K1J-102JE | 1 | 435031024R1 |
| PCB1 | R849 | C-CARBON R | RN72K1J-560JE | 1 | 435035604R1 |
| PCB1 | R852 | C-CARBON R | RN72K1J-153JE | 1 | 435031534R1 |
| PCB1 | R853 | C-CARBON R | RN72K1J-153JE | 1 | 435031534R1 |
| PCB1 | R854 | C-CARBON R | RN72K1J-104JE | 1 | 435031044R1 |
| PCB1 | R855 | C-CARBON R | RN72K1J-104JE | 1 | 435031044R1 |
| PCB1 | R862 | C-CARBON R | RN72K1J-472JE | 1 | 435034724R1 |
| PCB1 | R865 | C-CARBON R | RN72K1J-472JE | 1 | 435034724R1 |
| PCB1 | R866 | C-CARBON R | RN72K1J-472JE | 1 | 435034724R1 |
| PCB1 | R869 | C-CARBON R | RN72K1J-472JE | 1 | 435034724R1 |
| PCB1 | R870 | C-CARBON R | RN72K1J-472JE | 1 | 435034724R1 |
| PCB1 | R873 | C-CARBON R | RN72K1J-472JE | 1 | 435034724R1 |
| PCB1 | R874 | C-CARBON R | RN72K1J-472JE | 1 | 435034724R1 |
| PCB1 | R877 | C-CARBON R | RN72K1J-472JE | 1 | 435034724R1 |
| PCB1 | R879 | C-CARBON R | RN72K1J-222JE | 1 | 435032224R1 |
| PCB1 | R880 | C-CARBON R | RN72K1J-222JE | 1 | 435032224R1 |
| PCB1 | R883 | C-CARBON R | RN72K1J-222JE | 1 | 435032224R1 |
| PCB1 | R884 | C-CARBON R | RN72K1J-222JE | 1 | 435032224R1 |
| PCB1 | R887 | C-CARBON R | RN72K1J-222JE | 1 | 435032224R1 |
| PCB1 | R888 | C-CARBON R | RN72K1J-222JE | 1 | 435032224R1 |

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|------|-------|------------|---------------|---|-------------|
| PCB1 | R891  | C-CARBON R | RN72K1J-222JE | 1 | 435032224R1 |
| PCB1 | R892  | C-CARBON R | RN72K1J-222JE | 1 | 435032224R1 |
| PCB1 | R999  | C-CARBON R | RN72K1J-000JE | 1 | 435030004R1 |
| PCB1 | R6402 | METAL O R  | RS1/2WBJ-10   | 1 | 442521004F  |
| PCB1 | R6403 | METAL O R  | RS2WBJ-150    | 1 | 442721514F  |
| PCB1 | R6407 | METAL R    | RNU1WCJ-3.3   | 1 | 452630334F  |
| PCB1 | R6411 | METAL R    | RNU1WCJ-1     | 1 | 452630104F  |
| PCB1 | R6421 | C-CARBON R | RN72K1J-047JE | 1 | 435030474R1 |
| PCB1 | R6422 | C-CARBON R | RN72K1J-047JE | 1 | 435030474R1 |
| PCB1 | R7000 | C-CARBON R | RN72K1J-101JE | 1 | 435031014R1 |
| PCB1 | R7001 | C-CARBON R | RN72K1J-222JE | 1 | 435032224R1 |
| PCB1 | R7002 | C-CARBON R | RN72K1J-222JE | 1 | 435032224R1 |
| PCB1 | R7003 | C-CARBON R | RN72K1J-000JE | 1 | 435030004R1 |
| PCB1 | R7005 | C-CARBON R | RN72K1J-102JE | 1 | 435031024R1 |
| PCB1 | R7008 | C-CARBON R | RN72K1J-221JE | 1 | 435032214R1 |
| PCB1 | R7009 | C-CARBON R | RN72K1J-221JE | 1 | 435032214R1 |
| PCB1 | R7010 | C-CARBON R | RN72K1J-221JE | 1 | 435032214R1 |
| PCB1 | R7014 | C-CARBON R | RN72K1J-820JE | 1 | 435038204R1 |
| PCB1 | R7015 | C-CARBON R | RN72K1J-820JE | 1 | 435038204R1 |
| PCB1 | R7016 | C-CARBON R | RN72K1J-820JE | 1 | 435038204R1 |
| PCB1 | R7017 | C-CARBON R | RN72K1J-820JE | 1 | 435038204R1 |
| PCB1 | R7018 | C-CARBON R | RN72K1J-820JE | 1 | 435038204R1 |
| PCB1 | R7019 | C-CARBON R | RN72K1J-221JE | 1 | 435032214R1 |
| PCB1 | R7020 | C-CARBON R | RN72K1J-221JE | 1 | 435032214R1 |
| PCB1 | R7021 | C-CARBON R | RN72K1J-222JE | 1 | 435032224R1 |
| PCB1 | R7022 | C-CARBON R | RN72K1J-221JE | 1 | 435032214R1 |
| PCB1 | R7023 | C-CARBON R | RN72K1J-221JE | 1 | 435032214R1 |
| PCB1 | R7024 | C-CARBON R | RN72K1J-221JE | 1 | 435032214R1 |
| PCB1 | R7025 | C-CARBON R | RN72K1J-221JE | 1 | 435032214R1 |
| PCB1 | R7026 | C-CARBON R | RN72K1J-221JE | 1 | 435032214R1 |
| PCB1 | R7027 | C-CARBON R | RN72K1J-221JE | 1 | 435032214R1 |

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|------|-------|------------|---------------|---|-------------|--|
| PCB1 | R7028 | C-CARBON R | RN72K1J-221JE | 1 | 435032214R1 |  |
| PCB1 | R7029 | C-CARBON R | RN72K1J-221JE | 1 | 435032214R1 |  |
| PCB1 | R7030 | C-CARBON R | RN72K1J-221JE | 1 | 435032214R1 |  |
| PCB1 | R7031 | C-CARBON R | RN72K1J-221JE | 1 | 435032214R1 |  |
| PCB1 | R7032 | C-CARBON R | RN72K1J-221JE | 1 | 435032214R1 |  |
| PCB1 | R7033 | C-CARBON R | RN72K1J-473JE | 1 | 435034734R1 |  |
| PCB1 | R7034 | C-CARBON R | RN72K1J-471JE | 1 | 435034714R1 |  |
| PCB1 | R7035 | C-CARBON R | RN72K1J-221JE | 1 | 435032214R1 |  |
| PCB1 | R7036 | C-CARBON R | RN72K1J-221JE | 1 | 435032214R1 |  |
| PCB1 | R7037 | C-CARBON R | RN72K1J-221JE | 1 | 435032214R1 |  |
| PCB1 | R7038 | C-CARBON R | RN72K1J-222JE | 1 | 435032224R1 |  |
| PCB1 | R7039 | C-CARBON R | RN72K1J-222JE | 1 | 435032224R1 |  |
| PCB1 | R7040 | C-CARBON R | RN72K1J-221JE | 1 | 435032214R1 |  |
| PCB1 | R7043 | C-CARBON R | RN72K1J-221JE | 1 | 435032214R1 |  |
| PCB1 | R7044 | C-CARBON R | RN72K1J-102JE | 1 | 435031024R1 |  |
| PCB1 | R7045 | C-CARBON R | RN72K1J-102JE | 1 | 435031024R1 |  |
| PCB1 | R7046 | C-CARBON R | RN72K1J-102JE | 1 | 435031024R1 |  |
| PCB1 | R7047 | C-CARBON R | RN72K1J-221JE | 1 | 435032214R1 |  |
| PCB1 | R7048 | C-CARBON R | RN72K1J-221JE | 1 | 435032214R1 |  |
| PCB1 | R7049 | C-CARBON R | RN72K1J-102JE | 1 | 435031024R1 |  |

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|------|-------|------------|---------------|---|-------------|
| PCB1 | R7050 | C-CARBON R | RN72K1J-102JE | 1 | 435031024R1 |
| PCB1 | R7051 | C-CARBON R | RN72K1J-102JE | 1 | 435031024R1 |
| PCB1 | R7052 | C-CARBON R | RN72K1J-102JE | 1 | 435031024R1 |
| PCB1 | R7053 | C-CARBON R | RN72K1J-221JE | 1 | 435032214R1 |
| PCB1 | R7060 | C-CARBON R | RN72K1J-473JE | 1 | 435034734R1 |
| PCB1 | R7061 | C-CARBON R | RN72K1J-224JE | 1 | 435032244R1 |
| PCB1 | R7062 | C-CARBON R | RN72K1J-102JE | 1 | 435031024R1 |
| PCB1 | R7063 | C-CARBON R | RN72K1J-102JE | 1 | 435031024R1 |
| PCB1 | R7064 | C-CARBON R | RN72K1J-102JE | 1 | 435031024R1 |
| PCB1 | R7065 | C-CARBON R | RN72K1J-102JE | 1 | 435031024R1 |
| PCB1 | R7066 | C-CARBON R | RN72K1J-102JE | 1 | 435031024R1 |
| PCB1 | R7067 | C-CARBON R | RN72K1J-221JE | 1 | 435032214R1 |
| PCB1 | R7068 | C-CARBON R | RN72K1J-221JE | 1 | 435032214R1 |
| PCB1 | R7069 | C-CARBON R | RN72K1J-221JE | 1 | 435032214R1 |
| PCB1 | R7070 | C-CARBON R | RN72K1J-221JE | 1 | 435032214R1 |
| PCB1 | R7071 | C-CARBON R | RN72K1J-472JE | 1 | 435034724R1 |
| PCB1 | R7072 | C-CARBON R | RN72K1J-221JE | 1 | 435032214R1 |
| PCB1 | R7076 | C-CARBON R | RN72K1J-102JE | 1 | 435031024R1 |
| PCB1 | R7077 | C-CARBON R | RN72K1J-102JE | 1 | 435031024R1 |
| PCB1 | R7078 | C-CARBON R | RN72K1J-000JE | 1 | 435030004R1 |
| PCB1 | R7079 | C-CARBON R | RN72K1J-103JE | 1 | 435031034R1 |
| PCB1 | R7080 | C-CARBON R | RN72K1J-472JE | 1 | 435034724R1 |
| PCB1 | R7081 | C-CARBON R | RN72K1J-221JE | 1 | 435032214R1 |
| PCB1 | R7082 | C-CARBON R | RN72K1J-221JE | 1 | 435032214R1 |
| PCB1 | R7083 | C-CARBON R | RN72K1J-221JE | 1 | 435032214R1 |
| PCB1 | R7084 | C-CARBON R | RN72K1J-221JE | 1 | 435032214R1 |
| PCB1 | R7085 | C-CARBON R | RN72K1J-221JE | 1 | 435032214R1 |
| PCB1 | R7120 | C-CARBON R | RN72K1J-102JE | 1 | 435031024R1 |
| PCB1 | R7134 | C-CARBON R | RN72K1J-102JE | 1 | 435031024R1 |
| PCB1 | R7138 | C-CARBON R | RN72K1J-223JE | 1 | 435032234R1 |
| PCB1 | R7179 | C-CARBON R | RN72K1J-333JE | 1 | 435033334R1 |

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| PCB1 | R7180 | C-CARBON R | RN72K1J-333JE | 1 | 435033334R1 |
| PCB1 | R7319 | C-CARBON R | RN72K1J-680JE | 1 | 435036804R1 |
| PCB1 | R7501 | C-CARBON R | RN72K1J-221JE | 1 | 435032214R1 |
| PCB1 | R7502 | C-CARBON R | RN72K1J-221JE | 1 | 435032214R1 |
| PCB1 | R7503 | C-CARBON R | RN72K1J-103JE | 1 | 435031034R1 |
| PCB1 | R7504 | C-CARBON R | RN72K1J-473JE | 1 | 435034734R1 |
| PCB1 | R7505 | C-CARBON R | RN72K1J-224JE | 1 | 435032244R1 |
| PCB1 | R7506 | C-CARBON R | RN72K1J-472JE | 1 | 435034724R1 |
| PCB1 | R7507 | C-CARBON R | RN72K1J-472JE | 1 | 435034724R1 |
| PCB1 | R7508 | C-CARBON R | RN72K1J-472JE | 1 | 435034724R1 |
| PCB1 | R7509 | C-CARBON R | RN72K1J-472JE | 1 | 435034724R1 |
| PCB1 | R7510 | C-CARBON R | RN72K1J-102JE | 1 | 435031024R1 |
| PCB1 | R7511 | C-CARBON R | RN72K1J-102JE | 1 | 435031024R1 |
| PCB1 | R7512 | C-CARBON R | RN72K1J-103JE | 1 | 435031034R1 |
| PCB1 | R7515 | C-CARBON R | RN72K1J-103JE | 1 | 435031034R1 |
| PCB1 | R7516 | C-CARBON R | RN72K1J-103JE | 1 | 435031034R1 |
| PCB1 | R7517 | C-CARBON R | RN72K1J-102JE | 1 | 435031024R1 |
| PCB1 | R7518 | C-CARBON R | RN72K1J-104JE | 1 | 435031044R1 |
| PCB1 | R7519 | C-CARBON R | RN72K1J-104JE | 1 | 435031044R1 |
| PCB1 | R7520 | C-CARBON R | RN72K1J-272JE | 1 | 435032724R1 |

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|------|-------|------------|---------------|---|-------------|
| PCB1 | R7521 | C-CARBON R | RN72K1J-272JE | 1 | 435032724R1 |
| PCB1 | R7522 | C-CARBON R | RN72K1J-272JE | 1 | 435032724R1 |
| PCB1 | R7523 | C-CARBON R | RN72K1J-272JE | 1 | 435032724R1 |
| PCB1 | R7524 | C-CARBON R | RN72K1J-102JE | 1 | 435031024R1 |
| PCB1 | R7526 | C-CARBON R | RN72K1J-103JE | 1 | 435031034R1 |
| PCB1 | R7527 | C-CARBON R | RN72K1J-103JE | 1 | 435031034R1 |
| PCB1 | R7528 | C-CARBON R | RN72K1J-561JE | 1 | 435035614R1 |
| PCB1 | R7529 | C-CARBON R | RN72K1J-561JE | 1 | 435035614R1 |
| PCB1 | R7530 | C-CARBON R | RN72K1J-102JE | 1 | 435031024R1 |
| PCB1 | R7531 | C-CARBON R | RN72K1J-391JE | 1 | 435033914R1 |
| PCB1 | R7532 | C-CARBON R | RN72K1J-103JE | 1 | 435031034R1 |
| PCB1 | R7611 | C-CARBON R | RN72K1J-331JE | 1 | 435033314R1 |
| PCB1 | R7612 | C-CARBON R | RN72K1J-471JE | 1 | 435034714R1 |
| PCB1 | R7613 | C-CARBON R | RN72K1J-561JE | 1 | 435035614R1 |
| PCB1 | R7615 | C-CARBON R | RN72K1J-821JE | 1 | 435038214R1 |
| PCB1 | R7616 | C-CARBON R | RN72K1J-122JE | 1 | 435031224R1 |
| PCB1 | R7617 | C-CARBON R | RN72K1J-222JE | 1 | 435032224R1 |
| PCB1 | R7621 | C-CARBON R | RN72K1J-331JE | 1 | 435033314R1 |
| PCB1 | R7622 | C-CARBON R | RN72K1J-471JE | 1 | 435034714R1 |
| PCB1 | R7623 | C-CARBON R | RN72K1J-561JE | 1 | 435035614R1 |
| PCB1 | R7624 | C-CARBON R | RN72K1J-821JE | 1 | 435038214R1 |
| PCB1 | R7625 | C-CARBON R | RN72K1J-122JE | 1 | 435031224R1 |
| PCB1 | R7626 | C-CARBON R | RN72K1J-222JE | 1 | 435032224R1 |
| PCB1 | R7631 | C-CARBON R | RN72K1J-331JE | 1 | 435033314R1 |
| PCB1 | R7632 | C-CARBON R | RN72K1J-471JE | 1 | 435034714R1 |
| PCB1 | R7633 | C-CARBON R | RN72K1J-561JE | 1 | 435035614R1 |
| PCB1 | R7634 | C-CARBON R | RN72K1J-821JE | 1 | 435038214R1 |
| PCB1 | R7635 | C-CARBON R | RN72K1J-122JE | 1 | 435031224R1 |
| PCB1 | R7636 | C-CARBON R | RN72K1J-222JE | 1 | 435032224R1 |
| PCB1 | R7637 | C-CARBON R | RN72K1J-392JE | 1 | 435033924R1 |
| PCB1 | R7641 | C-CARBON R | RN72K1J-331JE | 1 | 435033314R1 |



|      |          |            |               |      |             |
|------|----------|------------|---------------|------|-------------|
| PCB1 | R7642    | C-CARBON R | RN72K1J-471JE | 1    | 435034714R1 |
| PCB1 | R7643    | C-CARBON R | RN72K1J-561JE | 1    | 435035614R1 |
| PCB1 | R7644    | C-CARBON R | RN72K1J-821JE | 1    | 435038214R1 |
| PCB1 | R7645    | C-CARBON R | RN72K1J-122JE | 1    | 435031224R1 |
| PCB1 | R7646    | C-CARBON R | RN72K1J-222JE | 1    | 435032224R1 |
| PCB1 | R7839    | C-CARBON R | RN72K1J-223JE | 1    | 435032234R1 |
| PCB1 | R9506    | METAL O R  | RS1/2WBJ-22   | 1    | 443522204   |
| PCB1 | R9507    | C-CARBON R | RN72K1J-153JE | 1    | 435031534R1 |
| PCB1 | R9508    | C-CARBON R | RN72K1J-153JE | 1    | 435031534R1 |
| PCB1 | R9509    | C-CARBON R | RN72K1J-104JE | 1    | 435031044R1 |
| PCB1 | S7501    | R ENCODE   | EC12E2425     | 1    | 25065655    |
| PCB1 | S7611    | PUSH SW    | NPS-111-S681  | 1    | 25035718    |
| PCB1 | S7611 or | PUSH SW    | NPS-111-S677  | ( 1) | 25035714    |
| PCB1 | S7612    | PUSH SW    | NPS-111-S681  | 1    | 25035718    |
| PCB1 | S7612 or | PUSH SW    | NPS-111-S677  | ( 1) | 25035714    |
| PCB1 | S7613    | PUSH SW    | NPS-111-S681  | 1    | 25035718    |
| PCB1 | S7613 or | PUSH SW    | NPS-111-S677  | ( 1) | 25035714    |
| PCB1 | S7614    | PUSH SW    | NPS-111-S681  | 1    | 25035718    |
| PCB1 | S7614 or | PUSH SW    | NPS-111-S677  | ( 1) | 25035714    |
| PCB1 | S7615    | PUSH SW    | NPS-111-S681  | 1    | 25035718    |

|      |          |         |              |      |          |
|------|----------|---------|--------------|------|----------|
| PCB1 | S7615 or | PUSH SW | NPS-111-S677 | ( 1) | 25035714 |
| PCB1 | S7616    | PUSH SW | NPS-111-S681 | 1    | 25035718 |
| PCB1 | S7616 or | PUSH SW | NPS-111-S677 | ( 1) | 25035714 |
| PCB1 | S7617    | PUSH SW | NPS-111-S681 | 1    | 25035718 |
| PCB1 | S7617 or | PUSH SW | NPS-111-S677 | ( 1) | 25035714 |
| PCB1 | S7621    | PUSH SW | NPS-111-S681 | 1    | 25035718 |
| PCB1 | S7621 or | PUSH SW | NPS-111-S677 | ( 1) | 25035714 |
| PCB1 | S7622    | PUSH SW | NPS-111-S681 | 1    | 25035718 |
| PCB1 | S7622 or | PUSH SW | NPS-111-S677 | ( 1) | 25035714 |
| PCB1 | S7623    | PUSH SW | NPS-111-S681 | 1    | 25035718 |
| PCB1 | S7623 or | PUSH SW | NPS-111-S677 | ( 1) | 25035714 |
| PCB1 | S7624    | PUSH SW | NPS-111-S681 | 1    | 25035718 |
| PCB1 | S7624 or | PUSH SW | NPS-111-S677 | ( 1) | 25035714 |
| PCB1 | S7625    | PUSH SW | NPS-111-S681 | 1    | 25035718 |
| PCB1 | S7625 or | PUSH SW | NPS-111-S677 | ( 1) | 25035714 |
| PCB1 | S7627    | PUSH SW | NPS-111-S681 | 1    | 25035718 |
| PCB1 | S7627 or | PUSH SW | NPS-111-S677 | ( 1) | 25035714 |
| PCB1 | S7631    | PUSH SW | NPS-111-S681 | 1    | 25035718 |
| PCB1 | S7631 or | PUSH SW | NPS-111-S677 | ( 1) | 25035714 |
| PCB1 | S7632    | PUSH SW | NPS-111-S681 | 1    | 25035718 |
| PCB1 | S7632 or | PUSH SW | NPS-111-S677 | ( 1) | 25035714 |
| PCB1 | S7633    | PUSH SW | NPS-111-S681 | 1    | 25035718 |
| PCB1 | S7633 or | PUSH SW | NPS-111-S677 | ( 1) | 25035714 |
| PCB1 | S7634    | PUSH SW | NPS-111-S681 | 1    | 25035718 |
| PCB1 | S7634 or | PUSH SW | NPS-111-S677 | ( 1) | 25035714 |
| PCB1 | S7635    | PUSH SW | NPS-111-S681 | 1    | 25035718 |
| PCB1 | S7635 or | PUSH SW | NPS-111-S677 | ( 1) | 25035714 |
| PCB1 | S7636    | PUSH SW | NPS-111-S681 | 1    | 25035718 |
| PCB1 | S7636 or | PUSH SW | NPS-111-S677 | ( 1) | 25035714 |
| PCB1 | S7637    | PUSH SW | NPS-111-S681 | 1    | 25035718 |
| PCB1 | S7637 or | PUSH SW | NPS-111-S677 | ( 1) | 25035714 |

|      |          |           |              |      |              |
|------|----------|-----------|--------------|------|--------------|
| PCB1 | S7638    | PUSH SW   | NPS-111-S681 | 1    | 25035718     |
| PCB1 | S7638 or | PUSH SW   | NPS-111-S677 | ( 1) | 25035714     |
| PCB1 | S7641    | PUSH SW   | NPS-111-S681 | 1    | 25035718     |
| PCB1 | S7641 or | PUSH SW   | NPS-111-S677 | ( 1) | 25035714     |
| PCB1 | S7642    | PUSH SW   | NPS-111-S681 | 1    | 25035718     |
| PCB1 | S7642 or | PUSH SW   | NPS-111-S677 | ( 1) | 25035714     |
| PCB1 | S7643    | PUSH SW   | NPS-111-S681 | 1    | 25035718     |
| PCB1 | S7643 or | PUSH SW   | NPS-111-S677 | ( 1) | 25035714     |
| PCB1 | S7644    | PUSH SW   | NPS-111-S681 | 1    | 25035718     |
| PCB1 | S7644 or | PUSH SW   | NPS-111-S677 | ( 1) | 25035714     |
| PCB1 | S7645    | PUSH SW   | NPS-111-S681 | 1    | 25035718     |
| PCB1 | S7645 or | PUSH SW   | NPS-111-S677 | ( 1) | 25035714     |
| PCB1 | S7646    | PUSH SW   | NPS-111-S681 | 1    | 25035718     |
| PCB1 | S7646 or | PUSH SW   | NPS-111-S677 | ( 1) | 25035714     |
| PCB1 | S7647    | PUSH SW   | NPS-111-S681 | 1    | 25035718     |
| PCB1 | S7647 or | PUSH SW   | NPS-111-S677 | ( 1) | 25035714     |
| PCB1 | P101     | SOCKET    | NSCT-15P2108 | 1    | 25052211     |
| PCB1 | P101 or  | SOCKET    | NSCT-15P1811 | ( 1) | 25052024     |
| PCB1 | P251     | PIN JACK  | NPJ-7PDB477  | 1    | 25045680     |
| PCB1 | P253B    | SOCKET AS | NSAS-10P0787 | 1    | 2009990578UL |

|      |          |           |                  |      |              |
|------|----------|-----------|------------------|------|--------------|
| PCB1 | P261A    | PLUG      | NPLG-3P117       | 1    | 25055133     |
| PCB1 | P261B    | SOCKET AS | NSAS-6P0675      | 1    | 2009990513UL |
| PCB1 | P301     | PIN JACK  | NPJ-6PDRW386     | 1    | 25045571     |
| PCB1 | P301 or  | JACK      | NPJ-6PDBL159     | ( 1) | 25045300     |
| PCB1 | P301 or  | PIN JACK  | NPJ-6PDWWWRRR561 | ( 1) | 25045779     |
| PCB1 | P304     | PIN JACK  | NPJ-6PDRW386     | 1    | 25045571     |
| PCB1 | P304 or  | JACK      | NPJ-6PDBL159     | ( 1) | 25045300     |
| PCB1 | P304 or  | PIN JACK  | NPJ-6PDWWWRRR561 | ( 1) | 25045779     |
| PCB1 | P305     | PIN JACK  | NPJ-6PWRLGGP493  | 1    | 25045697     |
| PCB1 | P305 or  | PIN JACK  | NPJ-6PDWLGREP562 | ( 1) | 25045780     |
| PCB1 | P306     | SOCKET AS | NSAS-26P1207     | 1    | 2009990825UL |
| PCB1 | P351     | PIN JACK  | NPJ-1PDP510      | 1    | 25045720     |
| PCB1 | P351 or  | PIN JACK  | NPJ-1PDP555      | ( 1) | 25045773     |
| PCB1 | P410B    | PLUG      | NPLG-11P663      | 1    | 25055707     |
| PCB1 | P411B    | PLUG      | NPLG-10P662      | 1    | 25055706     |
| PCB1 | P412B    | PLUG      | NPLG-8P660       | 1    | 25055704     |
| PCB1 | P801     | PLUG      | NPLG-15P667      | 1    | 25055711     |
| PCB1 | P6401    | BUS BAR   | BBL75            | 1    | 27141774     |
| PCB1 | P6403    | RETAINER  | KANAGU           | 1    | 27141059     |
| PCB1 | P7501    | ST JACK   | YKB21-5005       | 1    | 25045724     |
| PCB1 | P7501 or | ST JACK   | MSJ-064-05A SR   | ( 1) | 25045783     |
| PCB1 | P7502A   | SOCKET    | NSCT-10P1679     | 1    | 25051892     |
| PCB1 | P7502Aor | SOCKET    | NSCT-10P2428     | ( 1) | 25052531     |
| PCB1 | P7502B   | SOCKET    | NSCT-10P2473     | 1    | 25052576R2   |
| PCB1 | P7503A   | SOCKET    | NSCT-8P2138      | 1    | 25052241     |
| PCB1 | P7503Aor | SOCKET    | NSCT-8P1841      | ( 1) | 25052054     |
| PCB1 | P7503Aor | SOCKET    | NSCT-8P1639      | ( 1) | 25051852     |
| PCB1 | JL7501A  | WIRE HOL  | NSCT-3P894       | 1    | 25051107     |
| PCB1 | JL7501B  | WIRE HOL  | NSCT-3P894       | 1    | 25051107     |
| PCB1 | JL7502A  | WIRE HOL  | NSCT-5P896       | 1    | 25051109     |
| PCB1 | JL7502B  | WIRE HOL  | NSCT-5P896       | 1    | 25051109     |

|      |       |          |        |   |          |  |
|------|-------|----------|--------|---|----------|--|
| PCB1 | E300  | RETAINER | KANAGU | 1 | 27141059 |  |
| PCB1 | E301  | RETAINER | (S)    | 1 | 27141931 |  |
| PCB1 | E7501 | RETAINER | KANAGU | 1 | 27141059 |  |

|            |                                                  |
|------------|--------------------------------------------------|
| <b>U06</b> | DRIVER AMPLIFIER PC BOARD (NAAF-8235-1E)         |
| <b>U07</b> | COMPONENT VIDEO TERMINAL PC BOARD (NAVD-8236-1E) |
| <b>U09</b> | REGULATOR PC BOARD (NAETC-8238-1E)               |
| <b>U10</b> | TERMINAL PC BOARD (NAETC-8239-1E)                |
| <b>U11</b> | SPEAKER TERMINAL PC BOARD (NAETC-8240-1E)        |
| <b>U12</b> | HOLDER PC BOARD (NAETC-8241-1E)                  |
| <b>U14</b> | TERMINAL PC BOARD (NAETC-8243-1E)                |

**<Notes>** Indicate the parts on the PC board ass'y of U02-U04 collectively. Not dividing into each PC board ass'y.

|      | REF. NO. | NAME | DESCRIPTION | QT'Y | PART NO. | REMARKS |
|------|----------|------|-------------|------|----------|---------|
| PCB2 | Q241     | TR   | KTC3199-GR  | 1    | 2215864  |         |
| PCB2 | Q241 or  | TR   | 2SC1740S-R  | ( 1) | 2213284  |         |
| PCB2 | Q241 or  | TR   | 2SC1740S-S  | ( 1) | 2213285  |         |
| PCB2 | Q241 or  | TR   | 2SC2458-GR  | ( 1) | 2212115  |         |
| PCB2 | Q5000    | TR   | KTC3200-BL  | 1    | 2215896  |         |
| PCB2 | Q5000 or | TR   | 2SC1775A-E  | ( 1) | 2210755  |         |

|      |          |    |            |      |         |
|------|----------|----|------------|------|---------|
| PCB2 | Q5000 or | TR | 2SC1775A-F | ( 1) | 2210756 |
| PCB2 | Q5000 or | TR | 2SC1845-E  | ( 1) | 2211733 |
| PCB2 | Q5000 or | TR | 2SC2240-BL | ( 1) | 2211406 |
| PCB2 | Q5001    | TR | KTC3200-BL | 1    | 2215896 |
| PCB2 | Q5001 or | TR | 2SC1775A-E | ( 1) | 2210755 |
| PCB2 | Q5001 or | TR | 2SC1775A-F | ( 1) | 2210756 |
| PCB2 | Q5001 or | TR | 2SC1845-E  | ( 1) | 2211733 |
| PCB2 | Q5001 or | TR | 2SC2240-BL | ( 1) | 2211406 |
| PCB2 | Q5002    | TR | KTC3200-BL | 1    | 2215896 |
| PCB2 | Q5002 or | TR | 2SC1775A-E | ( 1) | 2210755 |
| PCB2 | Q5002 or | TR | 2SC1775A-F | ( 1) | 2210756 |
| PCB2 | Q5002 or | TR | 2SC1845-E  | ( 1) | 2211733 |
| PCB2 | Q5002 or | TR | 2SC2240-BL | ( 1) | 2211406 |
| PCB2 | Q5003    | TR | KTC3200-BL | 1    | 2215896 |
| PCB2 | Q5003 or | TR | 2SC1775A-E | ( 1) | 2210755 |
| PCB2 | Q5003 or | TR | 2SC1775A-F | ( 1) | 2210756 |
| PCB2 | Q5003 or | TR | 2SC1845-E  | ( 1) | 2211733 |
| PCB2 | Q5003 or | TR | 2SC2240-BL | ( 1) | 2211406 |
| PCB2 | Q5004    | TR | KTC3200-BL | 1    | 2215896 |
| PCB2 | Q5004 or | TR | 2SC1775A-E | ( 1) | 2210755 |
| PCB2 | Q5004 or | TR | 2SC1775A-F | ( 1) | 2210756 |
| PCB2 | Q5004 or | TR | 2SC1845-E  | ( 1) | 2211733 |
| PCB2 | Q5004 or | TR | 2SC2240-BL | ( 1) | 2211406 |
| PCB2 | Q5005    | TR | KTC3200-BL | 1    | 2215896 |
| PCB2 | Q5005 or | TR | 2SC1775A-E | ( 1) | 2210755 |
| PCB2 | Q5005 or | TR | 2SC1775A-F | ( 1) | 2210756 |
| PCB2 | Q5005 or | TR | 2SC1845-E  | ( 1) | 2211733 |
| PCB2 | Q5005 or | TR | 2SC2240-BL | ( 1) | 2211406 |
| PCB2 | Q5010    | TR | KTC3200-BL | 1    | 2215896 |
| PCB2 | Q5010 or | TR | 2SC1775A-E | ( 1) | 2210755 |
| PCB2 | Q5010 or | TR | 2SC1775A-F | ( 1) | 2210756 |

|      |          |    |            |      |         |
|------|----------|----|------------|------|---------|
| PCB2 | Q5010 or | TR | 2SC1845-E  | ( 1) | 2211733 |
| PCB2 | Q5010 or | TR | 2SC2240-BL | ( 1) | 2211406 |
| PCB2 | Q5011    | TR | KTC3200-BL | 1    | 2215896 |
| PCB2 | Q5011 or | TR | 2SC1775A-E | ( 1) | 2210755 |
| PCB2 | Q5011 or | TR | 2SC1775A-F | ( 1) | 2210756 |
| PCB2 | Q5011 or | TR | 2SC1845-E  | ( 1) | 2211733 |
| PCB2 | Q5011 or | TR | 2SC2240-BL | ( 1) | 2211406 |
| PCB2 | Q5012    | TR | KTC3200-BL | 1    | 2215896 |
| PCB2 | Q5012 or | TR | 2SC1775A-E | ( 1) | 2210755 |
| PCB2 | Q5012 or | TR | 2SC1775A-F | ( 1) | 2210756 |
| PCB2 | Q5012 or | TR | 2SC1845-E  | ( 1) | 2211733 |
| PCB2 | Q5012 or | TR | 2SC2240-BL | ( 1) | 2211406 |
| PCB2 | Q5013    | TR | KTC3200-BL | 1    | 2215896 |
| PCB2 | Q5013 or | TR | 2SC1775A-E | ( 1) | 2210755 |
| PCB2 | Q5013 or | TR | 2SC1775A-F | ( 1) | 2210756 |
| PCB2 | Q5013 or | TR | 2SC1845-E  | ( 1) | 2211733 |
| PCB2 | Q5013 or | TR | 2SC2240-BL | ( 1) | 2211406 |
| PCB2 | Q5014    | TR | KTC3200-BL | 1    | 2215896 |
| PCB2 | Q5014 or | TR | 2SC1775A-E | ( 1) | 2210755 |
| PCB2 | Q5014 or | TR | 2SC1775A-F | ( 1) | 2210756 |

|      |          |    |                |      |         |
|------|----------|----|----------------|------|---------|
| PCB2 | Q5014 or | TR | 2SC1845-E      | ( 1) | 2211733 |
| PCB2 | Q5014 or | TR | 2SC2240-BL     | ( 1) | 2211406 |
| PCB2 | Q5015    | TR | KTC3200-BL     | 1    | 2215896 |
| PCB2 | Q5015 or | TR | 2SC1775A-E     | ( 1) | 2210755 |
| PCB2 | Q5015 or | TR | 2SC1775A-F     | ( 1) | 2210756 |
| PCB2 | Q5015 or | TR | 2SC1845-E      | ( 1) | 2211733 |
| PCB2 | Q5015 or | TR | 2SC2240-BL     | ( 1) | 2211406 |
| PCB2 | Q5030    | TR | 2SA949-Y(ONK)  | 1    | 2211359 |
| PCB2 | Q5030 or | TR | 2SA949-O(ONK)  | ( 1) | 2211358 |
| PCB2 | Q5031    | TR | 2SA949-Y(ONK)  | 1    | 2211359 |
| PCB2 | Q5031 or | TR | 2SA949-O(ONK)  | ( 1) | 2211358 |
| PCB2 | Q5032    | TR | 2SA949-Y(ONK)  | 1    | 2211359 |
| PCB2 | Q5032 or | TR | 2SA949-O(ONK)  | ( 1) | 2211358 |
| PCB2 | Q5033    | TR | 2SA949-Y(ONK)  | 1    | 2211359 |
| PCB2 | Q5033 or | TR | 2SA949-O(ONK)  | ( 1) | 2211358 |
| PCB2 | Q5034    | TR | 2SA949-Y(ONK)  | 1    | 2211359 |
| PCB2 | Q5034 or | TR | 2SA949-O(ONK)  | ( 1) | 2211358 |
| PCB2 | Q5035    | TR | 2SA949-Y(ONK)  | 1    | 2211359 |
| PCB2 | Q5035 or | TR | 2SA949-O(ONK)  | ( 1) | 2211358 |
| PCB2 | Q5040    | TR | 2SC2229-Y(ONK) | 1    | 2211639 |
| PCB2 | Q5040 or | TR | 2SC2229-O(ONK) | ( 1) | 2211638 |
| PCB2 | Q5041    | TR | 2SC2229-Y(ONK) | 1    | 2211639 |
| PCB2 | Q5041 or | TR | 2SC2229-O(ONK) | ( 1) | 2211638 |
| PCB2 | Q5042    | TR | 2SC2229-Y(ONK) | 1    | 2211639 |
| PCB2 | Q5042 or | TR | 2SC2229-O(ONK) | ( 1) | 2211638 |
| PCB2 | Q5043    | TR | 2SC2229-Y(ONK) | 1    | 2211639 |
| PCB2 | Q5043 or | TR | 2SC2229-O(ONK) | ( 1) | 2211638 |
| PCB2 | Q5044    | TR | 2SC2229-Y(ONK) | 1    | 2211639 |
| PCB2 | Q5044 or | TR | 2SC2229-O(ONK) | ( 1) | 2211638 |
| PCB2 | Q5045    | TR | 2SC2229-Y(ONK) | 1    | 2211639 |
| PCB2 | Q5045 or | TR | 2SC2229-O(ONK) | ( 1) | 2211638 |



|      |          |    |            |      |         |
|------|----------|----|------------|------|---------|
| PCB2 | Q5050    | TR | KTC3200-BL | 1    | 2215896 |
| PCB2 | Q5050 or | TR | KTC3200-GR | ( 1) | 2215895 |
| PCB2 | Q5050 or | TR | 2SC1775A-E | ( 1) | 2210755 |
| PCB2 | Q5050 or | TR | 2SC1775A-F | ( 1) | 2210756 |
| PCB2 | Q5050 or | TR | 2SC1845-E  | ( 1) | 2211733 |
| PCB2 | Q5050 or | TR | 2SC1845-F  | ( 1) | 2211732 |
| PCB2 | Q5051    | TR | KTC3200-BL | 1    | 2215896 |
| PCB2 | Q5051 or | TR | KTC3200-GR | ( 1) | 2215895 |
| PCB2 | Q5051 or | TR | 2SC1775A-E | ( 1) | 2210755 |
| PCB2 | Q5051 or | TR | 2SC1775A-F | ( 1) | 2210756 |
| PCB2 | Q5051 or | TR | 2SC1845-E  | ( 1) | 2211733 |
| PCB2 | Q5051 or | TR | 2SC1845-F  | ( 1) | 2211732 |
| PCB2 | Q5052    | TR | KTC3200-BL | 1    | 2215896 |
| PCB2 | Q5052 or | TR | KTC3200-GR | ( 1) | 2215895 |
| PCB2 | Q5052 or | TR | 2SC1775A-E | ( 1) | 2210755 |
| PCB2 | Q5052 or | TR | 2SC1775A-F | ( 1) | 2210756 |
| PCB2 | Q5052 or | TR | 2SC1845-E  | ( 1) | 2211733 |
| PCB2 | Q5052 or | TR | 2SC1845-F  | ( 1) | 2211732 |
| PCB2 | Q5053    | TR | KTC3200-BL | 1    | 2215896 |
| PCB2 | Q5053 or | TR | KTC3200-GR | ( 1) | 2215895 |

|      |          |               |                   |      |              |
|------|----------|---------------|-------------------|------|--------------|
| PCB2 | Q5053 or | TR            | 2SC1775A-E        | ( 1) | 2210755      |
| PCB2 | Q5053 or | TR            | 2SC1775A-F        | ( 1) | 2210756      |
| PCB2 | Q5053 or | TR            | 2SC1845-E         | ( 1) | 2211733      |
| PCB2 | Q5053 or | TR            | 2SC1845-F         | ( 1) | 2211732      |
| PCB2 | Q5054    | TR            | KTC3200-BL        | 1    | 2215896      |
| PCB2 | Q5054 or | TR            | KTC3200-GR        | ( 1) | 2215895      |
| PCB2 | Q5054 or | TR            | 2SC1775A-E        | ( 1) | 2210755      |
| PCB2 | Q5054 or | TR            | 2SC1775A-F        | ( 1) | 2210756      |
| PCB2 | Q5054 or | TR            | 2SC1845-E         | ( 1) | 2211733      |
| PCB2 | Q5054 or | TR            | 2SC1845-F         | ( 1) | 2211732      |
| PCB2 | Q5055    | TR            | KTC3200-BL        | 1    | 2215896      |
| PCB2 | Q5055 or | TR            | KTC3200-GR        | ( 1) | 2215895      |
| PCB2 | Q5055 or | TR            | 2SC1775A-E        | ( 1) | 2210755      |
| PCB2 | Q5055 or | TR            | 2SC1775A-F        | ( 1) | 2210756      |
| PCB2 | Q5055 or | TR            | 2SC1845-E         | ( 1) | 2211733      |
| PCB2 | Q5055 or | TR            | 2SC1845-F         | ( 1) | 2211732      |
| PCB2 | Q6931    | IC(REGULATOR) | 78M56(NJM78M56FA) | 1    | 222780565JRC |
| PCB2 | Q6931 or | IC(REGURATOR) | 78057HF(TA78057S) | ( 1) | 222780574TOS |
| PCB2 | D241     | DIODE         | 1SS133            | 1    | 223163       |
| PCB2 | D241 or  | DIODE         | 1SS270A           | ( 1) | 223205       |
| PCB2 | D241 or  | DIODE         | 1N4148M           | ( 1) | 223273       |
| PCB2 | D5000    | ZENER D       | MTZJ5.6B          | 1    | 224470562    |
| PCB2 | D5000 or | ZENER D       | DZ-5.6BSB         | ( 1) | 224850562    |
| PCB2 | D5001    | ZENER D       | MTZJ5.6B          | 1    | 224470562    |
| PCB2 | D5001 or | ZENER D       | DZ-5.6BSB         | ( 1) | 224850562    |
| PCB2 | D5002    | ZENER D       | MTZJ5.6B          | 1    | 224470562    |
| PCB2 | D5002 or | ZENER D       | DZ-5.6BSB         | ( 1) | 224850562    |
| PCB2 | D5003    | ZENER D       | MTZJ5.6B          | 1    | 224470562    |
| PCB2 | D5003 or | ZENER D       | DZ-5.6BSB         | ( 1) | 224850562    |
| PCB2 | D5004    | ZENER D       | MTZJ5.6B          | 1    | 224470562    |
| PCB2 | D5004 or | ZENER D       | DZ-5.6BSB         | ( 1) | 224850562    |

|      |          |         |               |      |           |
|------|----------|---------|---------------|------|-----------|
| PCB2 | D5005    | ZENER D | MTZJ5.6B      | 1    | 224470562 |
| PCB2 | D5005 or | ZENER D | DZ-5.6BSB     | ( 1) | 224850562 |
| PCB2 | D6800    | DIODE   | 1SS133        | 1    | 223163    |
| PCB2 | D6800 or | DIODE   | 1SS270A       | ( 1) | 223205    |
| PCB2 | D6800 or | DIODE   | WG713A        | ( 1) | 223222    |
| PCB2 | D6800 or | DIODE   | 1N4148M       | ( 1) | 223273    |
| PCB2 | D6801    | DIODE   | 1SS133        | 1    | 223163    |
| PCB2 | D6801 or | DIODE   | 1SS270A       | ( 1) | 223205    |
| PCB2 | D6801 or | DIODE   | WG713A        | ( 1) | 223222    |
| PCB2 | D6801 or | DIODE   | 1N4148M       | ( 1) | 223273    |
| PCB2 | D6804    | DIODE   | 1SS133        | 1    | 223163    |
| PCB2 | D6804 or | DIODE   | 1SS270A       | ( 1) | 223205    |
| PCB2 | D6804 or | DIODE   | WG713A        | ( 1) | 223222    |
| PCB2 | D6804 or | DIODE   | 1N4148M       | ( 1) | 223273    |
| PCB2 | D6932    | DIODE   | RL1N4003      | 1    | 22380260  |
| PCB2 | D6932 or | DIODE   | GP104003E     | ( 1) | 22380035  |
| PCB2 | D6933    | DIODE   | RL1N4003      | 1    | 22380260  |
| PCB2 | D6933 or | DIODE   | GP104003E     | ( 1) | 22380035  |
| PCB2 | C241     | CERA C  | CK45F50V-103Z | 1    | 335621030 |
| PCB2 | C5000    | TF C    | ECQ-B50V-101K | 1    | 374721015 |

|      |          |        |                   |       |           |  |
|------|----------|--------|-------------------|-------|-----------|--|
| PCB2 | C5001    | TF C   | ECQ-B50V-101K     | 1     | 374721015 |  |
| PCB2 | C5002    | TF C   | ECQ-B50V-101K     | 1     | 374721015 |  |
| PCB2 | C5003    | TF C   | ECQ-B50V-101K     | 1     | 374721015 |  |
| PCB2 | C5004    | TF C   | ECQ-B50V-101K     | 1     | 374721015 |  |
| PCB2 | C5005    | TF C   | ECQ-B50V-101K     | 1     | 374721015 |  |
| PCB2 | C5010    | VX C   | CE04W16V-47M(VX)  | 1     | 393344707 |  |
| PCB2 | C5011    | VX C   | CE04W16V-47M(VX)  | 1     | 393344707 |  |
| PCB2 | C5012    | VX C   | CE04W16V-22M(VX)  | 1     | 393342207 |  |
| PCB2 | C5013    | VX C   | CE04W16V-22M(VX)  | 1     | 393342207 |  |
| PCB2 | C5014    | VX C   | CE04W16V-22M(VX)  | 1     | 393342207 |  |
| PCB2 | C5015    | VX C   | CE04W16V-22M(VX)  | 1     | 393342207 |  |
| PCB2 | C5020    | VR C   | CE04W50V-10M(VR)  | 1     | 394681007 |  |
| PCB2 | C5021    | VR C   | CE04W50V-10M(VR)  | 1     | 394681007 |  |
| PCB2 | C5022    | VR C   | CE04W50V-10M(VR)  | 1     | 394681007 |  |
| PCB2 | C5023    | VR C   | CE04W50V-10M(VR)  | 1     | 394681007 |  |
| PCB2 | C5024    | VR C   | CE04W50V-10M(VR)  | 1     | 394681007 |  |
| PCB2 | C5025    | VR C   | CE04W50V-10M(VR)  | 1     | 394681007 |  |
| PCB2 | C5040    | VX C   | CE04W16V-220M(VX) | 1     | 393342217 |  |
| PCB2 | C5041    | VX C   | CE04W16V-220M(VX) | 1     | 393342217 |  |
| PCB2 | C5042    | VX C   | CE04W16V-100M(VX) | 1     | 393341017 |  |
| PCB2 | C5043    | VX C   | CE04W16V-100M(VX) | 1     | 393341017 |  |
| PCB2 | C5044    | VX C   | CE04W16V-100M(VX) | 1     | 393341017 |  |
| PCB2 | C5045    | VX C   | CE04W16V-100M(VX) | 1     | 393341017 |  |
| PCB2 | C5050    | VR C   | CE04W50V-47M(VR)  | 1     | 394684707 |  |
| PCB2 | C5051    | VR C   | CE04W50V-47M(VR)  | 1     | 394684707 |  |
| PCB2 | C5052    | VR C   | CE04W50V-47M(VR)  | 1     | 394684707 |  |
| PCB2 | C5053    | VR C   | CE04W50V-47M(VR)  | 1     | 394684707 |  |
| PCB2 | C5054    | VR C   | CE04W50V-47M(VR)  | 1     | 394684707 |  |
| PCB2 | C5055    | VR C   | CE04W50V-47M(VR)  | 1     | 394684707 |  |
| PCB2 | C5080    | CERA C | CC45SL50V-040D    | 1     | 345020402 |  |
| PCB2 | C5080 or | CERA C | CC45SL50V-040C    | ( 1 ) | 345020401 |  |

|      |          |        |                   |      |           |
|------|----------|--------|-------------------|------|-----------|
| PCB2 | C5081    | CERA C | CC45SL50V-040D    | 1    | 345020402 |
| PCB2 | C5081 or | CERA C | CC45SL50V-040C    | ( 1) | 345020401 |
| PCB2 | C5082    | CERA C | CC45SL50V-040D    | 1    | 345020402 |
| PCB2 | C5082 or | CERA C | CC45SL50V-040C    | ( 1) | 345020401 |
| PCB2 | C5083    | CERA C | CC45SL50V-040D    | 1    | 345020402 |
| PCB2 | C5083 or | CERA C | CC45SL50V-040C    | ( 1) | 345020401 |
| PCB2 | C5084    | CERA C | CC45SL50V-040D    | 1    | 345020402 |
| PCB2 | C5084 or | CERA C | CC45SL50V-040C    | ( 1) | 345020401 |
| PCB2 | C5085    | CERA C | CC45SL50V-040D    | 1    | 345020402 |
| PCB2 | C5085 or | CERA C | CC45SL50V-040C    | ( 1) | 345020401 |
| PCB2 | C5090    | CERA C | CC45SL50V-101J    | 1    | 345021014 |
| PCB2 | C5091    | CERA C | CC45SL50V-101J    | 1    | 345021014 |
| PCB2 | C5092    | CERA C | CC45SL50V-101J    | 1    | 345021014 |
| PCB2 | C5093    | CERA C | CC45SL50V-101J    | 1    | 345021014 |
| PCB2 | C5094    | CERA C | CC45SL50V-101J    | 1    | 345021014 |
| PCB2 | C5095    | CERA C | CC45SL50V-101J    | 1    | 345021014 |
| PCB2 | C5100    | VR C   | CE04W100V-10M(VR) | 1    | 394691007 |
| PCB2 | C5101    | VR C   | CE04W100V-10M(VR) | 1    | 394691007 |
| PCB2 | C5102    | VR C   | CE04W100V-10M(VR) | 1    | 394691007 |
| PCB2 | C5103    | VR C   | CE04W100V-10M(VR) | 1    | 394691007 |

|      |          |          |                    |      |            |
|------|----------|----------|--------------------|------|------------|
| PCB2 | C5104    | VR C     | CE04W100V-10M(VR)  | 1    | 394691007  |
| PCB2 | C5105    | VR C     | CE04W100V-10M(VR)  | 1    | 394691007  |
| PCB2 | C5110    | VR C     | CE04W100V-10M(VR)  | 1    | 394691007  |
| PCB2 | C5111    | VR C     | CE04W100V-10M(VR)  | 1    | 394691007  |
| PCB2 | C5112    | VR C     | CE04W100V-10M(VR)  | 1    | 394691007  |
| PCB2 | C5113    | VR C     | CE04W100V-10M(VR)  | 1    | 394691007  |
| PCB2 | C5114    | VR C     | CE04W100V-10M(VR)  | 1    | 394691007  |
| PCB2 | C5115    | VR C     | CE04W100V-10M(VR)  | 1    | 394691007  |
| PCB2 | C6800    | TF C     | ECQ-B50V-103J      | 1    | 374721034  |
| PCB2 | C6801    | CERA C   | CK45F50V-103Z      | 1    | 335621030  |
| PCB2 | C6804    | TF C     | ECQ-B50V-103J      | 1    | 374721034  |
| PCB2 | C6931    | VR C     | CE04W25V-1000M(VR) | 1    | 394651027S |
| PCB2 | C6931 or | ELECT C  | CE04W25V1000M(SC)  | ( 1) | 394751027S |
| PCB2 | C6932    | CERA C   | CK45F50V-103Z      | 1    | 335621030  |
| PCB2 | C6933    | VR C     | CE04W16V-10M(VR)   | 1    | 394641007  |
| PCB2 | C6933 or | ELECT C  | CE04W16V10M(SC)    | ( 1) | 394741007  |
| PCB2 | C9513    | CERA C   | CK45F50V-223Z      | 1    | 335622230  |
| PCB2 | R249     | CARBON R | R16J-1K            | 1    | 417341024  |
| PCB2 | R5000    | CARBON R | R16J-1K            | 1    | 417341024  |
| PCB2 | R5001    | CARBON R | R16J-1K            | 1    | 417341024  |
| PCB2 | R5002    | CARBON R | R16J-1K            | 1    | 417341024  |
| PCB2 | R5003    | CARBON R | R16J-1K            | 1    | 417341024  |
| PCB2 | R5004    | CARBON R | R16J-1K            | 1    | 417341024  |
| PCB2 | R5005    | CARBON R | R16J-1K            | 1    | 417341024  |
| PCB2 | R5010    | CARBON R | R16J-56K           | 1    | 417345634  |
| PCB2 | R5011    | CARBON R | R16J-56K           | 1    | 417345634  |
| PCB2 | R5012    | CARBON R | R16J-56K           | 1    | 417345634  |
| PCB2 | R5013    | CARBON R | R16J-56K           | 1    | 417345634  |
| PCB2 | R5014    | CARBON R | R16J-56K           | 1    | 417345634  |
| PCB2 | R5015    | CARBON R | R16J-56K           | 1    | 417345634  |
| PCB2 | R5020    | CARBON R | R16J-330           | 1    | 417343314  |

|      |       |          |           |   |           |  |
|------|-------|----------|-----------|---|-----------|--|
| PCB2 | R5021 | CARBON R | R16J-330  | 1 | 417343314 |  |
| PCB2 | R5022 | CARBON R | R16J-330  | 1 | 417343314 |  |
| PCB2 | R5023 | CARBON R | R16J-330  | 1 | 417343314 |  |
| PCB2 | R5024 | CARBON R | R16J-330  | 1 | 417343314 |  |
| PCB2 | R5025 | CARBON R | R16J-330  | 1 | 417343314 |  |
| PCB2 | R5030 | CARBON R | R16J-56K  | 1 | 417345634 |  |
| PCB2 | R5031 | CARBON R | R16J-56K  | 1 | 417345634 |  |
| PCB2 | R5032 | CARBON R | R16J-56K  | 1 | 417345634 |  |
| PCB2 | R5033 | CARBON R | R16J-56K  | 1 | 417345634 |  |
| PCB2 | R5034 | CARBON R | R16J-56K  | 1 | 417345634 |  |
| PCB2 | R5035 | CARBON R | R16J-56K  | 1 | 417345634 |  |
| PCB2 | R5040 | CARBON R | R16J-2.2K | 1 | 417342224 |  |
| PCB2 | R5041 | CARBON R | R16J-2.2K | 1 | 417342224 |  |
| PCB2 | R5042 | CARBON R | R16J-2.2K | 1 | 417342224 |  |
| PCB2 | R5043 | CARBON R | R16J-2.2K | 1 | 417342224 |  |
| PCB2 | R5044 | CARBON R | R16J-2.2K | 1 | 417342224 |  |
| PCB2 | R5045 | CARBON R | R16J-2.2K | 1 | 417342224 |  |
| PCB2 | R5050 | CARBON R | R16J-4.7K | 1 | 417344724 |  |
| PCB2 | R5051 | CARBON R | R16J-4.7K | 1 | 417344724 |  |
| PCB2 | R5052 | CARBON R | R16J-4.7K | 1 | 417344724 |  |

|      |       |          |           |   |           |
|------|-------|----------|-----------|---|-----------|
| PCB2 | R5053 | CARBON R | R16J-4.7K | 1 | 417344724 |
| PCB2 | R5054 | CARBON R | R16J-4.7K | 1 | 417344724 |
| PCB2 | R5055 | CARBON R | R16J-4.7K | 1 | 417344724 |
| PCB2 | R5060 | CARBON R | R16J-1.2K | 1 | 417341224 |
| PCB2 | R5061 | CARBON R | R16J-1.2K | 1 | 417341224 |
| PCB2 | R5062 | CARBON R | R16J-1.2K | 1 | 417341224 |
| PCB2 | R5063 | CARBON R | R16J-1.2K | 1 | 417341224 |
| PCB2 | R5064 | CARBON R | R16J-1.2K | 1 | 417341224 |
| PCB2 | R5065 | CARBON R | R16J-1.2K | 1 | 417341224 |
| PCB2 | R5080 | CARBON R | R16J-470  | 1 | 417344714 |
| PCB2 | R5081 | CARBON R | R16J-470  | 1 | 417344714 |
| PCB2 | R5082 | CARBON R | R16J-470  | 1 | 417344714 |
| PCB2 | R5083 | CARBON R | R16J-470  | 1 | 417344714 |
| PCB2 | R5084 | CARBON R | R16J-470  | 1 | 417344714 |
| PCB2 | R5085 | CARBON R | R16J-470  | 1 | 417344714 |
| PCB2 | R5090 | CARBON R | R16J-100K | 1 | 417341044 |
| PCB2 | R5091 | CARBON R | R16J-100K | 1 | 417341044 |
| PCB2 | R5092 | CARBON R | R16J-100K | 1 | 417341044 |
| PCB2 | R5093 | CARBON R | R16J-100K | 1 | 417341044 |
| PCB2 | R5094 | CARBON R | R16J-100K | 1 | 417341044 |
| PCB2 | R5095 | CARBON R | R16J-100K | 1 | 417341044 |
| PCB2 | R5100 | CARBON R | R16J-100K | 1 | 417341044 |
| PCB2 | R5101 | CARBON R | R16J-100K | 1 | 417341044 |
| PCB2 | R5102 | CARBON R | R16J-100K | 1 | 417341044 |
| PCB2 | R5103 | CARBON R | R16J-100K | 1 | 417341044 |
| PCB2 | R5104 | CARBON R | R16J-100K | 1 | 417341044 |
| PCB2 | R5105 | CARBON R | R16J-100K | 1 | 417341044 |
| PCB2 | R5110 | CARBON R | R16J-1K   | 1 | 417341024 |
| PCB2 | R5111 | CARBON R | R16J-1K   | 1 | 417341024 |
| PCB2 | R5112 | CARBON R | R16J-1K   | 1 | 417341024 |
| PCB2 | R5113 | CARBON R | R16J-1K   | 1 | 417341024 |



|      |       |             |          |   |           |  |
|------|-------|-------------|----------|---|-----------|--|
| PCB2 | R5114 | CARBON R    | R16J-1K  | 1 | 417341024 |  |
| PCB2 | R5115 | CARBON R    | R16J-1K  | 1 | 417341024 |  |
| PCB2 | R5130 | CARBON R    | R16J-18K | 1 | 417341834 |  |
| PCB2 | R5131 | CARBON R    | R16J-18K | 1 | 417341834 |  |
| PCB2 | R5132 | CARBON R    | R16J-18K | 1 | 417341834 |  |
| PCB2 | R5133 | CARBON R    | R16J-18K | 1 | 417341834 |  |
| PCB2 | R5134 | CARBON R    | R16J-18K | 1 | 417341834 |  |
| PCB2 | R5135 | CARBON R    | R16J-18K | 1 | 417341834 |  |
| PCB2 | R5160 | NF CARBON R | R25J-150 | 1 | 415471514 |  |
| PCB2 | R5161 | NF CARBON R | R25J-150 | 1 | 415471514 |  |
| PCB2 | R5162 | NF CARBON R | R25J-150 | 1 | 415471514 |  |
| PCB2 | R5163 | NF CARBON R | R25J-150 | 1 | 415471514 |  |
| PCB2 | R5164 | NF CARBON R | R25J-150 | 1 | 415471514 |  |
| PCB2 | R5165 | NF CARBON R | R25J-150 | 1 | 415471514 |  |
| PCB2 | R5170 | NF CARBON R | R25J-150 | 1 | 415471514 |  |
| PCB2 | R5171 | NF CARBON R | R25J-150 | 1 | 415471514 |  |
| PCB2 | R5172 | NF CARBON R | R25J-150 | 1 | 415471514 |  |
| PCB2 | R5173 | NF CARBON R | R25J-150 | 1 | 415471514 |  |
| PCB2 | R5174 | NF CARBON R | R25J-150 | 1 | 415471514 |  |
| PCB2 | R5175 | NF CARBON R | R25J-150 | 1 | 415471514 |  |

|      |           |             |                    |      |            |
|------|-----------|-------------|--------------------|------|------------|
| PCB2 | R5180     | NF CARBON R | R25J-10            | 1    | 415471004  |
| PCB2 | R5181     | NF CARBON R | R25J-10            | 1    | 415471004  |
| PCB2 | R5182     | NF CARBON R | R25J-10            | 1    | 415471004  |
| PCB2 | R5183     | NF CARBON R | R25J-10            | 1    | 415471004  |
| PCB2 | R5184     | NF CARBON R | R25J-10            | 1    | 415471004  |
| PCB2 | R5185     | NF CARBON R | R25J-10            | 1    | 415471004  |
| PCB2 | R5190     | NF CARBON R | R25J-10            | 1    | 415471004  |
| PCB2 | R5191     | NF CARBON R | R25J-10            | 1    | 415471004  |
| PCB2 | R5192     | NF CARBON R | R25J-10            | 1    | 415471004  |
| PCB2 | R5193     | NF CARBON R | R25J-10            | 1    | 415471004  |
| PCB2 | R5194     | NF CARBON R | R25J-10            | 1    | 415471004  |
| PCB2 | R5195     | NF CARBON R | R25J-10            | 1    | 415471004  |
| PCB2 | R6935     | METAL O R   | RS2WBJ-120         | 1    | 441721214F |
| PCB2 | R9501     | METAL R     | RNU1/2WCJ-1        | 1    | 453530104  |
| PCB2 | R9502     | METAL R     | RNU1/2WCJ-0.47     | 1    | 453534794  |
| PCB2 | R9503     | METAL R     | RNU1/2WCJ-0.22     | 1    | 453532294  |
| PCB2 | R9521     | METAL R     | RNU1/2WCJ-3.3      | 1    | 453530334  |
| PCB2 | RL241     | RELAY       | NRL-2P1A-DC4.5-156 | 1    | 25065610   |
| PCB2 | RL241 or  | RELAY       | NPL-2P1A-DC4.5-169 | ( 1) | 25065645   |
| PCB2 | RL241 or  | RELAY       | NRL-2P2A-DC4.5-173 | ( 1) | 25065658   |
| PCB2 | RL241 or  | RELAY       | NRL-2P2A-DC4.5-172 | ( 1) | 25065654   |
| PCB2 | RL241A    | TAPE        | TAPE(CLOTH-16U)    | 1    | 29110083   |
| PCB2 | RL242     | RELAY       | NRL-2P1A-DC4.5-156 | 1    | 25065610   |
| PCB2 | RL242 or  | RELAY       | NPL-2P1A-DC4.5-169 | ( 1) | 25065645   |
| PCB2 | RL242 or  | RELAY       | NRL-2P2A-DC4.5-173 | ( 1) | 25065658   |
| PCB2 | RL242 or  | RELAY       | NRL-2P2A-DC4.5-172 | ( 1) | 25065654   |
| PCB2 | RL242A    | TAPE        | TAPE(CLOTH-16U)    | 1    | 29110083   |
| PCB2 | RL6800    | RELAY       | NRL-2P5A-DC24-158  | 1    | 25065618   |
| PCB2 | RL6800 or | RELAY       | NRL-2P5A-DC24-129  | ( 1) | 25065563   |
| PCB2 | RL6800 or | RELAY       | NRL-2P5A-DC24-098  | ( 1) | 25065517   |
| PCB2 | RL6800A   | TAPE        | TAPE(CLOTH-16U)    | 1    | 29110083   |

|      |           |          |                     |      |          |
|------|-----------|----------|---------------------|------|----------|
| PCB2 | RL6801    | RELAY    | NRL-2P5A-DC24-158   | 1    | 25065618 |
| PCB2 | RL6801 or | RELAY    | NRL-2P5A-DC24-129   | ( 1) | 25065563 |
| PCB2 | RL6801 or | RELAY    | NRL-2P5A-DC24-098   | ( 1) | 25065517 |
| PCB2 | RL6801A   | TAPE     | TAPE(CLOTH-16U)     | 1    | 29110083 |
| PCB2 | RL6803    | RELAY    | NRL-2P5A-DC24-158   | 1    | 25065618 |
| PCB2 | RL6803 or | RELAY    | NRL-2P5A-DC24-129   | ( 1) | 25065563 |
| PCB2 | RL6803 or | RELAY    | NRL-2P5A-DC24-098   | ( 1) | 25065517 |
| PCB2 | RL6803A   | TAPE     | TAPE(CLOTH-16U)     | 1    | 29110083 |
| PCB2 | RL6804    | RELAY    | NRL-2P5A-DC24-158   | 1    | 25065618 |
| PCB2 | RL6804 or | RELAY    | NRL-2P5A-DC24-129   | ( 1) | 25065563 |
| PCB2 | RL6804 or | RELAY    | NRL-2P5A-DC24-098   | ( 1) | 25065517 |
| PCB2 | RL6804A   | TAPE     | TAPE(CLOTH-16U)     | 1    | 29110083 |
| PCB2 | P206A     | PLUG     | NPLG-15P667         | 1    | 25055711 |
| PCB2 | P241      | PIN JACK | NPJ-9PDGLR483       | 1    | 25045686 |
| PCB2 | P241 or   | PIN JACK | NPJ-9PDGLRGLRGLR564 | ( 1) | 25045784 |
| PCB2 | P243A     | PLUG     | NPLG-4P760          | 1    | 25055804 |
| PCB2 | P243B     | SOCKET   | NSCT-4P1313         | 1    | 25051526 |
| PCB2 | P306A     | PLUG     | NPLG-12P359         | 1    | 25055376 |
| PCB2 | P410A     | SOCKET   | NSCT-11P1026        | 1    | 25051236 |
| PCB2 | P411A     | SOCKET   | NSCT-10P1025        | 1    | 25051235 |

|      |          |          |                  |      |          |  |
|------|----------|----------|------------------|------|----------|--|
| PCB2 | P801B    | SOCKET   | NSCT-15P1030     | 1    | 25051240 |  |
| PCB2 | P5001    | BUS BAR  | BBL40            | 1    | 27141867 |  |
| PCB2 | P5005    | WS CLAMP | CB-71683(L=50)   | 1    | 260261   |  |
| PCB2 | P6000A   | SOCKET   | NSCT-5P2185      | 1    | 25052288 |  |
| PCB2 | P6001A   | SOCKET   | NSCT-5P2185      | 1    | 25052288 |  |
| PCB2 | P6002A   | SOCKET   | NSCT-5P2185      | 1    | 25052288 |  |
| PCB2 | P6003A   | SOCKET   | NSCT-5P2185      | 1    | 25052288 |  |
| PCB2 | P6004A   | SOCKET   | NSCT-5P2185      | 1    | 25052288 |  |
| PCB2 | P6005A   | SOCKET   | NSCT-5P2185      | 1    | 25052288 |  |
| PCB2 | P6011A   | SOCKET   | NSCT-10P2190     | 1    | 25052293 |  |
| PCB2 | P6072    | TRM      | NTM-1P233(M1969) | 1    | 25060302 |  |
| PCB2 | P6073    | TRM      | NTM-1P233(M1969) | 1    | 25060302 |  |
| PCB2 | P6800    | TRM      | NTM-4PDMN308     | 1    | 25060377 |  |
| PCB2 | P6801    | TRM      | NTM-4PDML309     | 1    | 25060378 |  |
| PCB2 | P6802    | TRM      | NTM-8PDMN306     | 1    | 25060375 |  |
| PCB2 | P6931A   | SOCKET   | NSCT-16P1314     | 1    | 25051527 |  |
| PCB2 | P7503B   | SOCKET   | NSCT-8P2138      | 1    | 25052241 |  |
| PCB2 | P7503Bor | SOCKET   | NSCT-8P1101      | ( 1) | 25051312 |  |
| PCB2 | P7503Bor | SOCKET   | NSCT-8P1841      | ( 1) | 25052054 |  |
| PCB2 | P7503Bor | SOCKET   | NSCT-8P1639      | ( 1) | 25051852 |  |
| PCB2 | JL6803B  | SOCKET   | NSCT-6P98        | 1    | 25050270 |  |
| PCB2 | JL6804B  | SOCKET   | NSCT-6P98        | 1    | 25050270 |  |
| PCB2 | JL6805B  | SOCKET   | NSCT-4P96        | 1    | 25050268 |  |
| PCB2 | JL9501A  | WIRE HOL | NSCT-7P898       | 1    | 25051111 |  |
| PCB2 | JL9501B  | WIRE HOL | NSCT-7P898       | 1    | 25051111 |  |

|            |                                      |
|------------|--------------------------------------|
| <b>U16</b> | POWER AMPLIFIER PC BOARD (NAAF-8245) |
| <b>U18</b> | TERMINAL PC BOARD (NAPS-8247)        |
| <b>U19</b> | POWER SUPPLY PC BOARD (NAPS-8248)    |
| <b>U20</b> | TERMINAL PC BOARD (NAPS-8249)        |
| <b>U21</b> | VIDEO PC BOARD (NAVD-8250)           |

**U26** THERMAL SENSOR PC BOARD (NAETC-8255)

&lt;Notes&gt; Indicate the parts on the PC board ass'y of U02-U04 collectively. Not dividing into each PC board ass'y.

| PCB3 | REF. NO. | NAME   | DESCRIPTION | QTY  | PART NO. | REMARKS |
|------|----------|--------|-------------|------|----------|---------|
| PCB3 | U281     | PHT CP | TORX179L    | 1    | 24120101 |         |
| PCB3 | U282     | PHT CP | TORX179L    | 1    | 24120101 |         |
| PCB3 | U283     | PHT CP | TORX179L    | 1    | 24120101 |         |
| PCB3 | Q201     | TR     | RN1241-A    | 1    | 2213631  |         |
| PCB3 | Q201 or  | TR     | RN1241-B    | ( 1) | 2213632  |         |
| PCB3 | Q202     | TR     | RN1241-A    | 1    | 2213631  |         |
| PCB3 | Q202 or  | TR     | RN1241-B    | ( 1) | 2213632  |         |
| PCB3 | Q203     | IC     | LA7956      | 1    | 22241759 |         |
| PCB3 | Q204     | TR     | KTA1267-GR  | 1    | 2215995  |         |
| PCB3 | Q204 or  | TR     | 2SA933S-R   | ( 1) | 2213354  |         |
| PCB3 | Q205     | TR     | KRA102M     | 1    | 2215770  |         |
| PCB3 | Q205 or  | TR     | DTA114ES    | ( 1) | 2213510  |         |
| PCB3 | Q206     | TR     | KRA102M     | 1    | 2215770  |         |
| PCB3 | Q206 or  | TR     | DTA114ES    | ( 1) | 2213510  |         |
| PCB3 | Q207     | TR     | RN1241-A    | 1    | 2213631  |         |
| PCB3 | Q207 or  | TR     | RN1241-B    | ( 1) | 2213632  |         |

|      |          |    |            |      |             |
|------|----------|----|------------|------|-------------|
| PCB3 | Q208     | TR | RN1241-A   | 1    | 2213631     |
| PCB3 | Q208 or  | TR | RN1241-B   | ( 1) | 2213632     |
| PCB3 | Q209     | TR | KTA1267-GR | 1    | 2215995     |
| PCB3 | Q209 or  | TR | 2SA933S-R  | ( 1) | 2213354     |
| PCB3 | Q210     | TR | RN1241-A   | 1    | 2213631     |
| PCB3 | Q210 or  | TR | RN1241-B   | ( 1) | 2213632     |
| PCB3 | Q211     | TR | RN1241-A   | 1    | 2213631     |
| PCB3 | Q211 or  | TR | RN1241-B   | ( 1) | 2213632     |
| PCB3 | Q212     | IC | LA7956     | 1    | 22241759    |
| PCB3 | Q213     | IC | LA7956     | 1    | 22241759    |
| PCB3 | Q281     | IC | 74HCU04F   | 1    | 222740046R2 |
| PCB3 | Q6010    | TR | 2SC1740S-R | 1    | 2213284     |
| PCB3 | Q6010 or | TR | 2SC1740S-S | ( 1) | 2213285     |
| PCB3 | Q6011    | TR | 2SC1740S-R | 1    | 2213284     |
| PCB3 | Q6011 or | TR | 2SC1740S-S | ( 1) | 2213285     |
| PCB3 | Q6012    | TR | 2SC1740S-R | 1    | 2213284     |
| PCB3 | Q6012 or | TR | 2SC1740S-S | ( 1) | 2213285     |
| PCB3 | Q6013    | TR | 2SC1740S-R | 1    | 2213284     |
| PCB3 | Q6013 or | TR | 2SC1740S-S | ( 1) | 2213285     |
| PCB3 | Q6014    | TR | 2SC1740S-R | 1    | 2213284     |
| PCB3 | Q6014 or | TR | 2SC1740S-S | ( 1) | 2213285     |
| PCB3 | Q6015    | TR | 2SC1740S-R | 1    | 2213284     |
| PCB3 | Q6015 or | TR | 2SC1740S-S | ( 1) | 2213285     |
| PCB3 | Q6020    | TR | 2SC1740S-R | 1    | 2213284     |
| PCB3 | Q6020 or | TR | 2SC1740S-S | ( 1) | 2213285     |
| PCB3 | Q6021    | TR | 2SC1740S-R | 1    | 2213284     |
| PCB3 | Q6021 or | TR | 2SC1740S-S | ( 1) | 2213285     |
| PCB3 | Q6022    | TR | 2SC1740S-R | 1    | 2213284     |
| PCB3 | Q6022 or | TR | 2SC1740S-S | ( 1) | 2213285     |
| PCB3 | Q6023    | TR | 2SC1740S-R | 1    | 2213284     |
| PCB3 | Q6023 or | TR | 2SC1740S-S | ( 1) | 2213285     |

|      |          |    |            |      |         |
|------|----------|----|------------|------|---------|
| PCB3 | Q6024    | TR | 2SC1740S-R | 1    | 2213284 |
| PCB3 | Q6024 or | TR | 2SC1740S-S | ( 1) | 2213285 |
| PCB3 | Q6025    | TR | 2SC1740S-R | 1    | 2213284 |
| PCB3 | Q6025 or | TR | 2SC1740S-S | ( 1) | 2213285 |
| PCB3 | Q6030    | TR | KTD2061-Y  | 1    | 2203434 |
| PCB3 | Q6030 or | TR | 2SC5171    | ( 1) | 2203010 |
| PCB3 | Q6031    | TR | KTD2061-Y  | 1    | 2203434 |
| PCB3 | Q6031 or | TR | 2SC5171    | ( 1) | 2203010 |
| PCB3 | Q6032    | TR | KTD2061-Y  | 1    | 2203434 |
| PCB3 | Q6032 or | TR | 2SC5171    | ( 1) | 2203010 |
| PCB3 | Q6033    | TR | KTD2061-Y  | 1    | 2203434 |
| PCB3 | Q6033 or | TR | 2SC5171    | ( 1) | 2203010 |
| PCB3 | Q6034    | TR | KTD2061-Y  | 1    | 2203434 |
| PCB3 | Q6034 or | TR | 2SC5171    | ( 1) | 2203010 |
| PCB3 | Q6035    | TR | KTD2061-Y  | 1    | 2203434 |
| PCB3 | Q6035 or | TR | 2SC5171    | ( 1) | 2203010 |
| PCB3 | Q6040    | TR | KTB1369-Y  | 1    | 2203424 |
| PCB3 | Q6040 or | TR | 2SA1930    | ( 1) | 2203000 |
| PCB3 | Q6041    | TR | KTB1369-Y  | 1    | 2203424 |
| PCB3 | Q6041 or | TR | 2SA1930    | ( 1) | 2203000 |

|      |          |    |            |      |         |
|------|----------|----|------------|------|---------|
| PCB3 | Q6042    | TR | KTB1369-Y  | 1    | 2203424 |
| PCB3 | Q6042 or | TR | 2SA1930    | ( 1) | 2203000 |
| PCB3 | Q6043    | TR | KTB1369-Y  | 1    | 2203424 |
| PCB3 | Q6043 or | TR | 2SA1930    | ( 1) | 2203000 |
| PCB3 | Q6044    | TR | KTB1369-Y  | 1    | 2203424 |
| PCB3 | Q6044 or | TR | 2SA1930    | ( 1) | 2203000 |
| PCB3 | Q6045    | TR | KTB1369-Y  | 1    | 2203424 |
| PCB3 | Q6045 or | TR | 2SA1930    | ( 1) | 2203000 |
| PCB3 | Q6070    | TR | 2SC2631-R  | 1    | 2214984 |
| PCB3 | Q6070 or | TR | 2SC2631-S  | ( 1) | 2214985 |
| PCB3 | Q6071    | TR | 2SC2631-R  | 1    | 2214984 |
| PCB3 | Q6071 or | TR | 2SC2631-S  | ( 1) | 2214985 |
| PCB3 | Q6072    | TR | 2SC2631-R  | 1    | 2214984 |
| PCB3 | Q6072 or | TR | 2SC2631-S  | ( 1) | 2214985 |
| PCB3 | Q6073    | TR | 2SC2631-R  | 1    | 2214984 |
| PCB3 | Q6073 or | TR | 2SC2631-S  | ( 1) | 2214985 |
| PCB3 | Q6074    | TR | 2SC2631-R  | 1    | 2214984 |
| PCB3 | Q6074 or | TR | 2SC2631-S  | ( 1) | 2214985 |
| PCB3 | Q6075    | TR | 2SC2631-R  | 1    | 2214984 |
| PCB3 | Q6075 or | TR | 2SC2631-S  | ( 1) | 2214985 |
| PCB3 | Q6303    | TR | KTA1267-GR | 1    | 2215995 |
| PCB3 | Q6303 or | TR | 2SA933S-R  | ( 1) | 2213354 |
| PCB3 | Q6303 or | TR | 2SA933S-S  | ( 1) | 2213355 |
| PCB3 | Q6313    | TR | KTA1267-GR | 1    | 2215995 |
| PCB3 | Q6313 or | TR | 2SA933S-R  | ( 1) | 2213354 |
| PCB3 | Q6313 or | TR | 2SA933S-S  | ( 1) | 2213355 |
| PCB3 | Q6601    | TR | KTC3199-GR | 1    | 2215864 |
| PCB3 | Q6601 or | TR | 2SC1740S-R | ( 1) | 2213284 |
| PCB3 | Q6601 or | TR | 2SC1740S-S | ( 1) | 2213285 |
| PCB3 | Q6601 or | TR | 2SC2458-GR | ( 1) | 2212115 |
| PCB3 | Q6602    | TR | KTC3199-GR | 1    | 2215864 |



|      |          |    |            |      |         |
|------|----------|----|------------|------|---------|
| PCB3 | Q6602 or | TR | 2SC1740S-R | ( 1) | 2213284 |
| PCB3 | Q6602 or | TR | 2SC1740S-S | ( 1) | 2213285 |
| PCB3 | Q6602 or | TR | 2SC2458-GR | ( 1) | 2212115 |
| PCB3 | Q6603    | TR | KTC3199-GR | 1    | 2215864 |
| PCB3 | Q6603 or | TR | 2SC1740S-R | ( 1) | 2213284 |
| PCB3 | Q6603 or | TR | 2SC1740S-S | ( 1) | 2213285 |
| PCB3 | Q6603 or | TR | 2SC2458-GR | ( 1) | 2212115 |
| PCB3 | Q6701    | TR | KTC3200-BL | 1    | 2215896 |
| PCB3 | Q6701 or | TR | KTC3200-GR | ( 1) | 2215895 |
| PCB3 | Q6701 or | TR | 2SC1775A-E | ( 1) | 2210755 |
| PCB3 | Q6701 or | TR | 2SC1775A-F | ( 1) | 2210756 |
| PCB3 | Q6701 or | TR | 2SC1845-E  | ( 1) | 2211733 |
| PCB3 | Q6701 or | TR | 2SC1845-F  | ( 1) | 2211732 |
| PCB3 | Q6701 or | TR | 2SC2240-BL | ( 1) | 2211406 |
| PCB3 | Q6702    | TR | KTC3200-BL | 1    | 2215896 |
| PCB3 | Q6702 or | TR | KTC3200-GR | ( 1) | 2215895 |
| PCB3 | Q6702 or | TR | 2SC1775A-E | ( 1) | 2210755 |
| PCB3 | Q6702 or | TR | 2SC1775A-F | ( 1) | 2210756 |
| PCB3 | Q6702 or | TR | 2SC1845-E  | ( 1) | 2211733 |
| PCB3 | Q6702 or | TR | 2SC1845-F  | ( 1) | 2211732 |

|      |          |       |            |      |          |
|------|----------|-------|------------|------|----------|
| PCB3 | Q6702 or | TR    | 2SC2240-BL | ( 1) | 2211406  |
| PCB3 | Q6703    | TR    | KTA1268-GR | 1    | 2215885  |
| PCB3 | Q6703 or | TR    | KTA1268-BL | ( 1) | 2215886  |
| PCB3 | Q6703 or | TR    | 2SA992-E   | ( 1) | 2211793  |
| PCB3 | Q6703 or | TR    | 2SA992-F   | ( 1) | 2211792  |
| PCB3 | Q6901    | TR    | KTC3199-GR | 1    | 2215864  |
| PCB3 | Q6901 or | TR    | 2SC1740S-R | ( 1) | 2213284  |
| PCB3 | Q6901 or | TR    | 2SC1740S-S | ( 1) | 2213285  |
| PCB3 | Q6901 or | TR    | 2SC2458-GR | ( 1) | 2212115  |
| PCB3 | Q921     | TR    | KTC3199-GR | 1    | 2215864  |
| PCB3 | Q921 or  | TR    | 2SC1740S-R | ( 1) | 2213284  |
| PCB3 | Q921 or  | TR    | 2SC1740S-S | ( 1) | 2213285  |
| PCB3 | Q921 or  | TR    | 2SC2458-GR | ( 1) | 2212115  |
| PCB3 | D921     | DIODE | RL1N4003   | 1    | 22380260 |
| PCB3 | D921 or  | DIODE | GP104003E  | ( 1) | 22380035 |
| PCB3 | D922     | DIODE | RL1N4003   | 1    | 22380260 |
| PCB3 | D922 or  | DIODE | GP104003E  | ( 1) | 22380035 |
| PCB3 | D923     | DIODE | RL1N4003   | 1    | 22380260 |
| PCB3 | D923 or  | DIODE | GP104003E  | ( 1) | 22380035 |
| PCB3 | D924     | DIODE | RL1N4003   | 1    | 22380260 |
| PCB3 | D924 or  | DIODE | GP104003E  | ( 1) | 22380035 |
| PCB3 | D925     | DIODE | 1SS133     | 1    | 223163   |
| PCB3 | D925 or  | DIODE | 1SS270A    | ( 1) | 223205   |
| PCB3 | D925 or  | DIODE | WG713A     | ( 1) | 223222   |
| PCB3 | D925 or  | DIODE | 1N4148M    | ( 1) | 223273   |
| PCB3 | D6000    | DIODE | 1SS133     | 1    | 223163   |
| PCB3 | D6000 or | DIODE | 1SS270A    | ( 1) | 223205   |
| PCB3 | D6000 or | DIODE | WG713A     | ( 1) | 223222   |
| PCB3 | D6001    | DIODE | 1SS133     | 1    | 223163   |
| PCB3 | D6001 or | DIODE | 1SS270A    | ( 1) | 223205   |
| PCB3 | D6001 or | DIODE | WG713A     | ( 1) | 223222   |

|      |          |       |         |      |        |
|------|----------|-------|---------|------|--------|
| PCB3 | D6002    | DIODE | 1SS133  | 1    | 223163 |
| PCB3 | D6002 or | DIODE | 1SS270A | ( 1) | 223205 |
| PCB3 | D6002 or | DIODE | WG713A  | ( 1) | 223222 |
| PCB3 | D6003    | DIODE | 1SS133  | 1    | 223163 |
| PCB3 | D6003 or | DIODE | 1SS270A | ( 1) | 223205 |
| PCB3 | D6003 or | DIODE | WG713A  | ( 1) | 223222 |
| PCB3 | D6004    | DIODE | 1SS133  | 1    | 223163 |
| PCB3 | D6004 or | DIODE | 1SS270A | ( 1) | 223205 |
| PCB3 | D6004 or | DIODE | WG713A  | ( 1) | 223222 |
| PCB3 | D6005    | DIODE | 1SS133  | 1    | 223163 |
| PCB3 | D6005 or | DIODE | 1SS270A | ( 1) | 223205 |
| PCB3 | D6005 or | DIODE | WG713A  | ( 1) | 223222 |
| PCB3 | D6010    | DIODE | 1SS133  | 1    | 223163 |
| PCB3 | D6010 or | DIODE | 1SS270A | ( 1) | 223205 |
| PCB3 | D6010 or | DIODE | WG713A  | ( 1) | 223222 |
| PCB3 | D6011    | DIODE | 1SS133  | 1    | 223163 |
| PCB3 | D6011 or | DIODE | 1SS270A | ( 1) | 223205 |
| PCB3 | D6011 or | DIODE | WG713A  | ( 1) | 223222 |
| PCB3 | D6012    | DIODE | 1SS133  | 1    | 223163 |
| PCB3 | D6012 or | DIODE | 1SS270A | ( 1) | 223205 |

|      |          |         |           |      |           |
|------|----------|---------|-----------|------|-----------|
| PCB3 | D6012 or | DIODE   | WG713A    | ( 1) | 223222    |
| PCB3 | D6013    | DIODE   | 1SS133    | 1    | 223163    |
| PCB3 | D6013 or | DIODE   | 1SS270A   | ( 1) | 223205    |
| PCB3 | D6013 or | DIODE   | WG713A    | ( 1) | 223222    |
| PCB3 | D6014    | DIODE   | 1SS133    | 1    | 223163    |
| PCB3 | D6014 or | DIODE   | 1SS270A   | ( 1) | 223205    |
| PCB3 | D6014 or | DIODE   | WG713A    | ( 1) | 223222    |
| PCB3 | D6015    | DIODE   | 1SS133    | 1    | 223163    |
| PCB3 | D6015 or | DIODE   | 1SS270A   | ( 1) | 223205    |
| PCB3 | D6015 or | DIODE   | WG713A    | ( 1) | 223222    |
| PCB3 | D6306    | DIODE   | 1SS133    | 1    | 223163    |
| PCB3 | D6306 or | DIODE   | 1SS270A   | ( 1) | 223205    |
| PCB3 | D6306 or | DIODE   | WG713A    | ( 1) | 223222    |
| PCB3 | D6307    | DIODE   | 1SS133    | 1    | 223163    |
| PCB3 | D6307 or | DIODE   | 1SS270A   | ( 1) | 223205    |
| PCB3 | D6307 or | DIODE   | WG713A    | ( 1) | 223222    |
| PCB3 | D6701    | DIODE   | 1SS133    | 1    | 223163    |
| PCB3 | D6701 or | DIODE   | 1SS270A   | ( 1) | 223205    |
| PCB3 | D6701 or | DIODE   | WG713A    | ( 1) | 223222    |
| PCB3 | D6701 or | DIODE   | 1N4148M   | ( 1) | 223273    |
| PCB3 | D6702    | DIODE   | 1SS133    | 1    | 223163    |
| PCB3 | D6702 or | DIODE   | 1SS270A   | ( 1) | 223205    |
| PCB3 | D6702 or | DIODE   | WG713A    | ( 1) | 223222    |
| PCB3 | D6702 or | DIODE   | 1N4148M   | ( 1) | 223273    |
| PCB3 | D6703    | ZENER D | MTZJ5.1B  | 1    | 224470512 |
| PCB3 | D6703 or | ZENER D | DZ-5.1BSB | ( 1) | 224850512 |
| PCB3 | D6704    | ZENER D | MTZJ5.1B  | 1    | 224470512 |
| PCB3 | D6704 or | ZENER D | DZ-5.1BSB | ( 1) | 224850512 |
| PCB3 | D6714    | ZENER D | MTZJ5.1B  | 1    | 224470512 |
| PCB3 | D6714 or | ZENER D | DZ-5.1BSB | ( 1) | 224850512 |
| PCB3 | D6903    | DIODE   | D10XB60H  | 1    | 22380337  |

|      |          |            |                   |      |            |
|------|----------|------------|-------------------|------|------------|
| PCB3 | D6903A   | HEAT SINK  | RAD-196           | 1    | 27160545   |
| PCB3 | D6903B   | SCREW      | 3P+10FN(BC)       | 1    | 82143010   |
| PCB3 | D6903C   | TAPE       | TAPE(CLOTH-16U)   | 1    | 29110083   |
| PCB3 | D6904    | DIODE      | D10XB60H          | 1    | 22380337   |
| PCB3 | D6904B   | SCREW      | 3P+10FN(BC)       | 1    | 82143010   |
| PCB3 | D6906    | DIODE      | 1SS133            | 1    | 223163     |
| PCB3 | D6906 or | DIODE      | 1SS270A           | ( 1) | 223205     |
| PCB3 | D6906 or | DIODE      | WG713A            | ( 1) | 223222     |
| PCB3 | D6906 or | DIODE      | 1N4148M           | ( 1) | 223273     |
| PCB3 | T902     | P TRANS    | NPT-1492D         | 1    | 2301739    |
| PCB3 | L281     | CHOKE COIL | NCH-1452 220K     | 1    | 233454K220 |
| PCB3 | L281 or  | CHOKE COIL | NCH-1561 220K     | ( 1) | 233526K220 |
| PCB3 | L282     | CHOKE COIL | NCH-1452 220K     | 1    | 233454K220 |
| PCB3 | L282 or  | CHOKE COIL | NCH-1561 220K     | ( 1) | 233526K220 |
| PCB3 | L283     | CHOKE COIL | NCH-1452 022M     | 1    | 233454M022 |
| PCB3 | L283 or  | CHOKE COIL | NCH-1561 022K     | ( 1) | 233526K022 |
| PCB3 | C201     | VR C       | CE04W50V-2.2M(VR) | 1    | 394680227  |
| PCB3 | C201 or  | ELECT C    | CE04W50V2.2M(SC)  | ( 1) | 394780227  |
| PCB3 | C202     | VR C       | CE04W50V-2.2M(VR) | 1    | 394680227  |
| PCB3 | C202 or  | ELECT C    | CE04W50V2.2M(SC)  | ( 1) | 394780227  |

|      |         |         |                   |      |           |
|------|---------|---------|-------------------|------|-----------|
| PCB3 | C203    | VR C    | CE04W16V-470M(VR) | 1    | 394644717 |
| PCB3 | C203 or | ELECT C | CE04W16V470M(SC)  | ( 1) | 394744717 |
| PCB3 | C204    | VR C    | CE04W50V-2.2M(VR) | 1    | 394680227 |
| PCB3 | C204 or | ELECT C | CE04W50V2.2M(SC)  | ( 1) | 394780227 |
| PCB3 | C205    | VR C    | CE04W16V-470M(VR) | 1    | 394644717 |
| PCB3 | C205 or | ELECT C | CE04W16V470M(SC)  | ( 1) | 394744717 |
| PCB3 | C206    | CERA C  | CK45F50V-223Z     | 1    | 335622230 |
| PCB3 | C207    | VR C    | CE04W50V-2.2M(VR) | 1    | 394680227 |
| PCB3 | C207 or | ELECT C | CE04W50V2.2M(SC)  | ( 1) | 394780227 |
| PCB3 | C208    | CERA C  | CK45F50V-223Z     | 1    | 335622230 |
| PCB3 | C209    | VR C    | CE04W50V-2.2M(VR) | 1    | 394680227 |
| PCB3 | C209 or | ELECT C | CE04W50V2.2M(SC)  | ( 1) | 394780227 |
| PCB3 | C210    | CERA C  | CK45F50V-223Z     | 1    | 335622230 |
| PCB3 | C211    | VR C    | CE04W16V-470M(VR) | 1    | 394644717 |
| PCB3 | C211 or | ELECT C | CE04W16V470M(SC)  | ( 1) | 394744717 |
| PCB3 | C212    | CERA C  | CK45F50V-223Z     | 1    | 335622230 |
| PCB3 | C213    | VR C    | CE04W50V-2.2M(VR) | 1    | 394680227 |
| PCB3 | C213 or | ELECT C | CE04W50V2.2M(SC)  | ( 1) | 394780227 |
| PCB3 | C214    | CERA C  | CK45F50V-223Z     | 1    | 335622230 |
| PCB3 | C215    | VR C    | CE04W16V-470M(VR) | 1    | 394644717 |
| PCB3 | C216    | CERA C  | CK45F50V-223Z     | 1    | 335622230 |
| PCB3 | C217    | VR C    | CE04W50V-2.2M(VR) | 1    | 394680227 |
| PCB3 | C217 or | ELECT C | CE04W50V2.2M(SC)  | ( 1) | 394780227 |
| PCB3 | C218    | VR C    | CE04W50V-2.2M(VR) | 1    | 394680227 |
| PCB3 | C218 or | ELECT C | CE04W50V2.2M(SC)  | ( 1) | 394780227 |
| PCB3 | C219    | CERA C  | CK45F50V-223Z     | 1    | 335622230 |
| PCB3 | C220    | CERA C  | CK45F50V-223Z     | 1    | 335622230 |
| PCB3 | C221    | VR C    | CE04W16V-47M(VR)  | 1    | 394644707 |
| PCB3 | C221 or | ELECT C | CE04W16V47M(SC)   | ( 1) | 394744707 |
| PCB3 | C223    | VR C    | CE04W16V-47M(VR)  | 1    | 394644707 |
| PCB3 | C223 or | ELECT C | CE04W16V47M(SC)   | ( 1) | 394744707 |

|      |         |         |                   |      |           |
|------|---------|---------|-------------------|------|-----------|
| PCB3 | C225    | VR C    | CE04W16V-47M(VR)  | 1    | 394644707 |
| PCB3 | C225 or | ELECT C | CE04W16V47M(SC)   | ( 1) | 394744707 |
| PCB3 | C227    | CERA C  | CK45F50V-223Z     | 1    | 335622230 |
| PCB3 | C240    | TF C    | ECQ-V50V-104J     | 1    | 374721044 |
| PCB3 | C280    | CERA C  | CK45F50V-223Z     | 1    | 335622230 |
| PCB3 | C281    | TF C    | ECQ-V50V-104J     | 1    | 374721044 |
| PCB3 | C282    | CERA C  | CC45SL50V-101J    | 1    | 345021014 |
| PCB3 | C283    | CERA C  | CK45F50V-223Z     | 1    | 335622230 |
| PCB3 | C284    | CERA C  | CC45SL50V-080D    | 1    | 345020802 |
| PCB3 | C285    | VR C    | CE04W6.3V-47M(VR) | 1    | 394624707 |
| PCB3 | C286    | TF C    | ECQ-V50V-104J     | 1    | 374721044 |
| PCB3 | C287    | CERA C  | CK45F50V-223Z     | 1    | 335622230 |
| PCB3 | C288    | VR C    | CE04W6.3V-47M(VR) | 1    | 394624707 |
| PCB3 | C901    | IS C    | RE275V-103M       | 1    | 3500196S  |
| PCB3 | C921    | CERA C  | CK45F50V-223Z     | 1    | 335622230 |
| PCB3 | C922    | VR C    | CE04W35V-100M(VR) | 1    | 394661017 |
| PCB3 | C923    | CERA C  | CK45F50V-223Z     | 1    | 335622230 |
| PCB3 | C6040   | VR C    | CE04W50V-47M(VR)  | 1    | 394684707 |
| PCB3 | C6041   | VR C    | CE04W50V-47M(VR)  | 1    | 394684707 |
| PCB3 | C6042   | VR C    | CE04W50V-47M(VR)  | 1    | 394684707 |

|      |          |          |                    |      |           |
|------|----------|----------|--------------------|------|-----------|
| PCB3 | C6043    | VR C     | CE04W50V-47M(VR)   | 1    | 394684707 |
| PCB3 | C6044    | VR C     | CE04W50V-47M(VR)   | 1    | 394684707 |
| PCB3 | C6045    | VR C     | CE04W50V-47M(VR)   | 1    | 394684707 |
| PCB3 | C6230    | TF C     | ECQ-V50V-473J      | 1    | 374724734 |
| PCB3 | C6231    | TF C     | ECQ-V50V-473J      | 1    | 374724734 |
| PCB3 | C6232    | TF C     | ECQ-V50V-473J      | 1    | 374724734 |
| PCB3 | C6233    | TF C     | ECQ-V50V-473J      | 1    | 374724734 |
| PCB3 | C6234    | TF C     | ECQ-V50V-473J      | 1    | 374724734 |
| PCB3 | C6235    | TF C     | ECQ-V50V-473J      | 1    | 374724734 |
| PCB3 | C6701    | VR C     | CE04W6.3V-220M(VR) | 1    | 394622217 |
| PCB3 | C6701 or | ELECT C  | CE04W6.3V220M(SC)  | ( 1) | 394722217 |
| PCB3 | C6703    | CERA C   | CK45F50V-223Z      | 1    | 335622230 |
| PCB3 | C6704    | VR C     | CE04W50V-1M(VR)    | 1    | 394680107 |
| PCB3 | C6704 or | ELECT C  | CE04W50V-1M(SC)    | ( 1) | 394780107 |
| PCB3 | C6706    | VR C     | CE04W6.3V-100M(VR) | 1    | 394621017 |
| PCB3 | C6706 or | ELECT C  | CE04W6.3V100M(SC)  | ( 1) | 394721017 |
| PCB3 | C6708    | TF C     | ECQ-B50V-223J      | 1    | 374722234 |
| PCB3 | C6716    | VR C     | CE04W6.3V-100M(VR) | 1    | 394621017 |
| PCB3 | C6901    | ELECT C  | CE69W75V-12000M    | 1    | 3504394   |
| PCB3 | C6901 or | ELECT C  | CE69W75V-12000M    | ( 1) | 3504405   |
| PCB3 | C6901B   | TAPE     | TAPE(CLOTH-8U)     | 1    | 29110082  |
| PCB3 | C6902    | ELECT C  | CE69W75V-12000M    | 1    | 3504394   |
| PCB3 | C6902 or | ELECT C  | CE69W75V-12000M    | ( 1) | 3504405   |
| PCB3 | C6902A   | TAPE     | TAPE(CLOTH-8U)     | 1    | 29110082  |
| PCB3 | C6903    | TF C     | ECQ-V50V-104J      | 1    | 374721044 |
| PCB3 | C6904    | TF C     | ECQ-V100-334J      | 1    | 374733344 |
| PCB3 | C6905    | TF C     | ECQ-V100-334J      | 1    | 374733344 |
| PCB3 | C6906    | TF C     | ECQ-V50V-104J      | 1    | 374721044 |
| PCB3 | C6907    | TF C     | ECQ-V50V-104J      | 1    | 374721044 |
| PCB3 | R201     | CARBON R | R16J-75            | 1    | 417347504 |
| PCB3 | R202     | CARBON R | R16J-75            | 1    | 417347504 |



|      |      |          |           |   |           |
|------|------|----------|-----------|---|-----------|
| PCB3 | R203 | CARBON R | R16J-75   | 1 | 417347504 |
| PCB3 | R204 | CARBON R | R16J-100K | 1 | 417341044 |
| PCB3 | R205 | CARBON R | R16J-75   | 1 | 417347504 |
| PCB3 | R206 | CARBON R | R16J-75   | 1 | 417347504 |
| PCB3 | R207 | CARBON R | R16J-680K | 1 | 417346844 |
| PCB3 | R208 | CARBON R | R16J-680K | 1 | 417346844 |
| PCB3 | R209 | CARBON R | R16J-680K | 1 | 417346844 |
| PCB3 | R210 | CARBON R | R16J-220  | 1 | 417342214 |
| PCB3 | R211 | CARBON R | R16J-75   | 1 | 417347504 |
| PCB3 | R212 | CARBON R | R16J-75   | 1 | 417347504 |
| PCB3 | R213 | CARBON R | R16J-75   | 1 | 417347504 |
| PCB3 | R214 | CARBON R | R16J-75   | 1 | 417347504 |
| PCB3 | R215 | CARBON R | R16J-75   | 1 | 417347504 |
| PCB3 | R216 | CARBON R | R16J-75   | 1 | 417347504 |
| PCB3 | R217 | CARBON R | R16J-100K | 1 | 417341044 |
| PCB3 | R218 | CARBON R | R16J-100K | 1 | 417341044 |
| PCB3 | R219 | CARBON R | R16J-75   | 1 | 417347504 |
| PCB3 | R220 | CARBON R | R16J-75   | 1 | 417347504 |
| PCB3 | R221 | CARBON R | R16J-75   | 1 | 417347504 |
| PCB3 | R222 | CARBON R | R16J-75   | 1 | 417347504 |

|      |       |             |             |   |           |
|------|-------|-------------|-------------|---|-----------|
| PCB3 | R223  | CARBON R    | R16J-100K   | 1 | 417341044 |
| PCB3 | R224  | CARBON R    | R16J-100K   | 1 | 417341044 |
| PCB3 | R225  | CARBON R    | R16J-680K   | 1 | 417346844 |
| PCB3 | R226  | CARBON R    | R16J-680K   | 1 | 417346844 |
| PCB3 | R227  | CARBON R    | R16J-680K   | 1 | 417346844 |
| PCB3 | R228  | CARBON R    | R16J-220    | 1 | 417342214 |
| PCB3 | R229  | CARBON R    | R16J-680K   | 1 | 417346844 |
| PCB3 | R230  | CARBON R    | R16J-680K   | 1 | 417346844 |
| PCB3 | R281  | CARBON R    | R16J-75     | 1 | 417347504 |
| PCB3 | R282  | CARBON R    | R16J-470    | 1 | 417344714 |
| PCB3 | R284  | CARBON R    | R16J-10K    | 1 | 417341034 |
| PCB3 | R921  | METAL R     | RNU1WCJ-8.2 | 1 | 453630824 |
| PCB3 | R923  | CARBON R    | R16J-1K     | 1 | 417341024 |
| PCB3 | R924  | METAL O R   | RS1/2WBJ-82 | 1 | 443528204 |
| PCB3 | R926  | METAL O R   | RS1WBJ-470  | 1 | 443624714 |
| PCB3 | R6000 | CARBON R    | R16J-5.6K   | 1 | 417345624 |
| PCB3 | R6001 | CARBON R    | R16J-5.6K   | 1 | 417345624 |
| PCB3 | R6002 | CARBON R    | R16J-5.6K   | 1 | 417345624 |
| PCB3 | R6003 | CARBON R    | R16J-5.6K   | 1 | 417345624 |
| PCB3 | R6004 | CARBON R    | R16J-5.6K   | 1 | 417345624 |
| PCB3 | R6005 | CARBON R    | R16J-5.6K   | 1 | 417345624 |
| PCB3 | R6010 | CARBON R    | R16J-3.9K   | 1 | 417343924 |
| PCB3 | R6011 | CARBON R    | R16J-3.9K   | 1 | 417343924 |
| PCB3 | R6012 | CARBON R    | R16J-3.9K   | 1 | 417343924 |
| PCB3 | R6013 | CARBON R    | R16J-3.9K   | 1 | 417343924 |
| PCB3 | R6014 | CARBON R    | R16J-3.9K   | 1 | 417343924 |
| PCB3 | R6015 | CARBON R    | R16J-3.9K   | 1 | 417343924 |
| PCB3 | R6020 | NF CARBON R | R25J-2.2    | 1 | 415470224 |
| PCB3 | R6021 | NF CARBON R | R25J-2.2    | 1 | 415470224 |
| PCB3 | R6022 | NF CARBON R | R25J-2.2    | 1 | 415470224 |
| PCB3 | R6023 | NF CARBON R | R25J-2.2    | 1 | 415470224 |

|      |       |             |           |   |           |
|------|-------|-------------|-----------|---|-----------|
| PCB3 | R6024 | NF CARBON R | R25J-2.2  | 1 | 415470224 |
| PCB3 | R6025 | NF CARBON R | R25J-2.2  | 1 | 415470224 |
| PCB3 | R6030 | CARBON R    | R16J-680  | 1 | 417346814 |
| PCB3 | R6031 | CARBON R    | R16J-680  | 1 | 417346814 |
| PCB3 | R6032 | CARBON R    | R16J-680  | 1 | 417346814 |
| PCB3 | R6033 | CARBON R    | R16J-680  | 1 | 417346814 |
| PCB3 | R6034 | CARBON R    | R16J-680  | 1 | 417346814 |
| PCB3 | R6035 | CARBON R    | R16J-680  | 1 | 417346814 |
| PCB3 | R6040 | TRIM R      | N06HR1KBC | 1 | 5210258   |
| PCB3 | R6041 | TRIM R      | N06HR1KBC | 1 | 5210258   |
| PCB3 | R6042 | TRIM R      | N06HR1KBC | 1 | 5210258   |
| PCB3 | R6043 | TRIM R      | N06HR1KBC | 1 | 5210258   |
| PCB3 | R6044 | TRIM R      | N06HR1KBC | 1 | 5210258   |
| PCB3 | R6045 | TRIM R      | N06HR1KBC | 1 | 5210258   |
| PCB3 | R6050 | CARBON R    | R16J-3.9K | 1 | 417343924 |
| PCB3 | R6051 | CARBON R    | R16J-3.9K | 1 | 417343924 |
| PCB3 | R6052 | CARBON R    | R16J-3.9K | 1 | 417343924 |
| PCB3 | R6053 | CARBON R    | R16J-3.9K | 1 | 417343924 |
| PCB3 | R6054 | CARBON R    | R16J-3.9K | 1 | 417343924 |
| PCB3 | R6055 | CARBON R    | R16J-3.9K | 1 | 417343924 |

|      |       |             |             |   |           |
|------|-------|-------------|-------------|---|-----------|
| PCB3 | R6070 | NF CARBON R | R25J-120    | 1 | 415471214 |
| PCB3 | R6071 | NF CARBON R | R25J-120    | 1 | 415471214 |
| PCB3 | R6072 | NF CARBON R | R25J-150    | 1 | 415471514 |
| PCB3 | R6073 | NF CARBON R | R25J-150    | 1 | 415471514 |
| PCB3 | R6074 | NF CARBON R | R25J-150    | 1 | 415471514 |
| PCB3 | R6075 | NF CARBON R | R25J-150    | 1 | 415471514 |
| PCB3 | R6080 | NF CARBON R | R25J-2.2    | 1 | 415470224 |
| PCB3 | R6081 | NF CARBON R | R25J-2.2    | 1 | 415470224 |
| PCB3 | R6082 | NF CARBON R | R25J-2.2    | 1 | 415470224 |
| PCB3 | R6083 | NF CARBON R | R25J-2.2    | 1 | 415470224 |
| PCB3 | R6084 | NF CARBON R | R25J-2.2    | 1 | 415470224 |
| PCB3 | R6085 | NF CARBON R | R25J-2.2    | 1 | 415470224 |
| PCB3 | R6090 | NF CARBON R | R25J-2.2    | 1 | 415470224 |
| PCB3 | R6091 | NF CARBON R | R25J-2.2    | 1 | 415470224 |
| PCB3 | R6092 | NF CARBON R | R25J-2.2    | 1 | 415470224 |
| PCB3 | R6093 | NF CARBON R | R25J-2.2    | 1 | 415470224 |
| PCB3 | R6094 | NF CARBON R | R25J-2.2    | 1 | 415470224 |
| PCB3 | R6095 | NF CARBON R | R25J-2.2    | 1 | 415470224 |
| PCB3 | R6100 | CEMENT R    | RSS2WK-0.22 | 1 | 4800071   |
| PCB3 | R6101 | CEMENT R    | RSS2WK-0.22 | 1 | 4800071   |
| PCB3 | R6102 | CEMENT R    | RSS2WK-0.22 | 1 | 4800071   |
| PCB3 | R6103 | CEMENT R    | RSS2WK-0.22 | 1 | 4800071   |
| PCB3 | R6104 | CEMENT R    | RSS2WK-0.22 | 1 | 4800071   |
| PCB3 | R6105 | CEMENT R    | RSS2WK-0.22 | 1 | 4800071   |
| PCB3 | R6140 | CARBON R    | R16J-22K    | 1 | 417342234 |
| PCB3 | R6141 | CARBON R    | R16J-22K    | 1 | 417342234 |
| PCB3 | R6142 | CARBON R    | R16J-22K    | 1 | 417342234 |
| PCB3 | R6143 | CARBON R    | R16J-22K    | 1 | 417342234 |
| PCB3 | R6144 | CARBON R    | R16J-22K    | 1 | 417342234 |
| PCB3 | R6145 | CARBON R    | R16J-22K    | 1 | 417342234 |
| PCB3 | R6150 | CARBON R    | R16J-12K    | 1 | 417341234 |

|      |       |          |          |   |           |  |
|------|-------|----------|----------|---|-----------|--|
| PCB3 | R6151 | CARBON R | R16J-12K | 1 | 417341234 |  |
| PCB3 | R6152 | CARBON R | R16J-12K | 1 | 417341234 |  |
| PCB3 | R6153 | CARBON R | R16J-12K | 1 | 417341234 |  |
| PCB3 | R6154 | CARBON R | R16J-12K | 1 | 417341234 |  |
| PCB3 | R6155 | CARBON R | R16J-12K | 1 | 417341234 |  |
| PCB3 | R6160 | CARBON R | R16J-33K | 1 | 417343334 |  |
| PCB3 | R6161 | CARBON R | R16J-33K | 1 | 417343334 |  |
| PCB3 | R6162 | CARBON R | R16J-33K | 1 | 417343334 |  |
| PCB3 | R6163 | CARBON R | R16J-33K | 1 | 417343334 |  |
| PCB3 | R6164 | CARBON R | R16J-33K | 1 | 417343334 |  |
| PCB3 | R6165 | CARBON R | R16J-33K | 1 | 417343334 |  |
| PCB3 | R6170 | CARBON R | R16J-47K | 1 | 417344734 |  |
| PCB3 | R6171 | CARBON R | R16J-47K | 1 | 417344734 |  |
| PCB3 | R6172 | CARBON R | R16J-47K | 1 | 417344734 |  |
| PCB3 | R6173 | CARBON R | R16J-47K | 1 | 417344734 |  |
| PCB3 | R6174 | CARBON R | R16J-47K | 1 | 417344734 |  |
| PCB3 | R6175 | CARBON R | R16J-47K | 1 | 417344734 |  |
| PCB3 | R6180 | CARBON R | R16J-47K | 1 | 417344734 |  |
| PCB3 | R6181 | CARBON R | R16J-47K | 1 | 417344734 |  |
| PCB3 | R6182 | CARBON R | R16J-47K | 1 | 417344734 |  |

|      |       |          |                          |   |           |
|------|-------|----------|--------------------------|---|-----------|
| PCB3 | R6183 | CARBON R | R16J-47K                 | 1 | 417344734 |
| PCB3 | R6184 | CARBON R | R16J-47K                 | 1 | 417344734 |
| PCB3 | R6185 | CARBON R | R16J-47K                 | 1 | 417344734 |
| PCB3 | R6190 | CARBON R | R16J-330K                | 1 | 417343344 |
| PCB3 | R6191 | CARBON R | R16J-330K                | 1 | 417343344 |
| PCB3 | R6192 | CARBON R | R16J-330K                | 1 | 417343344 |
| PCB3 | R6193 | CARBON R | R16J-330K                | 1 | 417343344 |
| PCB3 | R6194 | CARBON R | R16J-330K                | 1 | 417343344 |
| PCB3 | R6195 | CARBON R | R16J-330K                | 1 | 417343344 |
| PCB3 | R6230 | METAL R  | RNU1WCJ-8.2              | 1 | 453630824 |
| PCB3 | R6231 | METAL R  | RNU1WCJ-8.2              | 1 | 453630824 |
| PCB3 | R6232 | METAL R  | RNU1WCJ-8.2              | 1 | 453630824 |
| PCB3 | R6233 | METAL R  | RNU1WCJ-8.2              | 1 | 453630824 |
| PCB3 | R6234 | METAL R  | RNU1WCJ-8.2              | 1 | 453630824 |
| PCB3 | R6235 | METAL R  | RNU1WCJ-8.2              | 1 | 453630824 |
| PCB3 | R6306 | CARBON R | R16J-10K                 | 1 | 417341034 |
| PCB3 | R6307 | CARBON R | R16J-470                 | 1 | 417344714 |
| PCB3 | R6308 | CARBON R | R16J-4.7K                | 1 | 417344724 |
| PCB3 | R6317 | CARBON R | R16J-470                 | 1 | 417344714 |
| PCB3 | R6318 | CARBON R | R16J-4.7K                | 1 | 417344724 |
| PCB3 | R6380 | RESISTOR | PTFL04BF471Q2N34B0 (80)  | 1 | 4000217   |
| PCB3 | R6381 | RESISTOR | PTFL04BC471Q2N34B0 (110) | 1 | 4000220   |
| PCB3 | R6601 | CARBON R | R16J-1K                  | 1 | 417341024 |
| PCB3 | R6602 | CARBON R | R16J-1K                  | 1 | 417341024 |
| PCB3 | R6603 | CARBON R | R16J-1K                  | 1 | 417341024 |
| PCB3 | R6604 | METAL R  | RNU1/2WCJ-8.2            | 1 | 453530824 |
| PCB3 | R6605 | METAL R  | RNU1/2WCJ-8.2            | 1 | 453530824 |
| PCB3 | R6701 | CARBON R | R16J-22K                 | 1 | 417342234 |
| PCB3 | R6702 | CARBON R | R16J-10K                 | 1 | 417341034 |
| PCB3 | R6704 | CARBON R | R16J-47K                 | 1 | 417344734 |
| PCB3 | R6706 | CARBON R | R16J-220K                | 1 | 417342244 |

|      |          |           |                    |      |           |  |
|------|----------|-----------|--------------------|------|-----------|--|
| PCB3 | R6708    | CARBON R  | R16J-33K           | 1    | 417343334 |  |
| PCB3 | R6709    | CARBON R  | R16J-5.6K          | 1    | 417345624 |  |
| PCB3 | R6710    | CARBON R  | R16J-12K           | 1    | 417341234 |  |
| PCB3 | R6719    | CARBON R  | R16J-5.6K          | 1    | 417345624 |  |
| PCB3 | R6902    | CARBON R  | R16J-1K            | 1    | 417341024 |  |
| PCB3 | R6980    | METAL O R | RS1/2WBJ-390       | 1    | 443523914 |  |
| PCB3 | R6981    | METAL O R | RS1/2WBJ-390       | 1    | 443523914 |  |
| PCB3 | R6100    | OTHER R   | RGC22-0.22 OHMK    | 1    | 4000131   |  |
| PCB3 | R6100 or | METAL PR  | MPC708-2WK-0.22    | ( 1) | 4500027   |  |
| PCB3 | R6101    | OTHER R   | RGC22-0.22 OHMK    | 1    | 4000131   |  |
| PCB3 | R6101 or | METAL PR  | MPC708-2WK-0.22    | ( 1) | 4500027   |  |
| PCB3 | R6102    | OTHER R   | RGC22-0.22 OHMK    | 1    | 4000131   |  |
| PCB3 | R6102 or | METAL PR  | MPC708-2WK-0.22    | ( 1) | 4500027   |  |
| PCB3 | R6103    | OTHER R   | RGC22-0.22 OHMK    | 1    | 4000131   |  |
| PCB3 | R6103 or | METAL PR  | MPC708-2WK-0.22    | ( 1) | 4500027   |  |
| PCB3 | R6104    | OTHER R   | RGC22-0.22 OHMK    | 1    | 4000131   |  |
| PCB3 | R6104 or | METAL PR  | MPC708-2WK-0.22    | ( 1) | 4500027   |  |
| PCB3 | R6105    | OTHER R   | RGC22-0.22 OHMK    | 1    | 4000131   |  |
| PCB3 | R6105 or | METAL PR  | MPC708-2WK-0.22    | ( 1) | 4500027   |  |
| PCB3 | RL901    | RELAY     | NRL-1P10A-DC12-140 | 1    | 25065584  |  |

|      |           |           |                    |      |              |
|------|-----------|-----------|--------------------|------|--------------|
| PCB3 | RL901 or  | RELAY     | NRL-1P10A-DC12-097 | ( 1) | 25065516     |
| PCB3 | RL901A    | TAPE      | TAPE(CLOTH-16U)    | 1    | 29110083     |
| PCB3 | RL6901    | RELAY     | NRL-1P5A-DC12-127  | 1    | 25065561     |
| PCB3 | RL6901 or | RELAY     | NRL-1P5A-DC12-096  | ( 1) | 25065515     |
| PCB3 | RL6901 or | RELAY     | NRL-1P10A-DC12-093 | ( 1) | 25065508     |
| PCB3 | RL6901 or | RELAY SW  | NRL-1P5A-DC12-102  | ( 1) | 25065526     |
| PCB3 | RL6901A   | TAPE      | TAPE(CLOTH-16U)    | 1    | 29110083     |
| PCB3 | RL6902    | RELAY     | NRL-1P5A-DC12-127  | 1    | 25065561     |
| PCB3 | RL6902 or | RELAY     | NRL-1P5A-DC12-096  | ( 1) | 25065515     |
| PCB3 | RL6902 or | RELAY     | NRL-1P10A-DC12-093 | ( 1) | 25065508     |
| PCB3 | RL6902 or | RELAY SW  | NRL-1P5A-DC12-102  | ( 1) | 25065526     |
| PCB3 | RL6902A   | TAPE      | TAPE(CLOTH-16U)    | 1    | 29110083     |
| PCB3 | P201      | PIN JACK  | NPJ-10PDBY517      | 1    | 25045729     |
| PCB3 | P202      | PIN JACK  | NPJ-15PDBY515      | 1    | 25045727     |
| PCB3 | P281      | PIN JACK  | NPJ-1PDOR369       | 1    | 25045548     |
| PCB3 | P281 or   | PIN JACK  | NPJ-1PDO553        | ( 1) | 25045771     |
| PCB3 | P282      | ST JACK   | LGY2502-0200C      | 1    | 25045696     |
| PCB3 | P902      | SOCKET    | NSCT-2P1358        | 1    | 25051571     |
| PCB3 | P901A     | PLUG      | NPLG-2P631         | 1    | 25055675     |
| PCB3 | P901A or  | PLUG      | 1-1123724-2        | ( 1) | 25056402     |
| PCB3 | P902 or   | AC OUTLET | AC-181-UL-11V      | ( 1) | 25053030     |
| PCB3 | P911      | CRIMP AS  | CRIMP AS           | 1    | 2069943259UL |
| PCB3 | P912      | CRIMP AS  | CRIMP AS           | 1    | 2069943224UL |
| PCB3 | P931      | PLUG      | NPLG-5P657         | 1    | 25055701     |
| PCB3 | P931A     | SOCKET    | NSCT-5P1020        | 1    | 25051230     |
| PCB3 | P995      | SOCKET AS | NSAS-6P1334        | 1    | 2009990875UL |
| PCB3 | P6000     | PLUG      | NPLG-5P0960        | 1    | 25056010     |
| PCB3 | P6001     | PLUG      | NPLG-5P0960        | 1    | 25056010     |
| PCB3 | P6002     | PLUG      | NPLG-5P0960        | 1    | 25056010     |
| PCB3 | P6003     | PLUG      | NPLG-5P0960        | 1    | 25056010     |
| PCB3 | P6004     | PLUG      | NPLG-5P0960        | 1    | 25056010     |



|      |        |            |                  |   |              |  |
|------|--------|------------|------------------|---|--------------|--|
| PCB3 | P6005  | PLUG       | NPLG-5P0960      | 1 | 25056010     |  |
| PCB3 | P6011  | PLUG       | NPLG-10P0965     | 1 | 25056015     |  |
| PCB3 | P6080  | PLUG       | NPLG-2P29        | 1 | 25055038     |  |
| PCB3 | P6081  | PLUG       | NPLG-2P29        | 1 | 25055038     |  |
| PCB3 | P6082  | PLUG       | NPLG-2P29        | 1 | 25055038     |  |
| PCB3 | P6083  | PLUG       | NPLG-2P29        | 1 | 25055038     |  |
| PCB3 | P6084  | PLUG       | NPLG-2P29        | 1 | 25055038     |  |
| PCB3 | P6085  | PLUG       | NPLG-2P29        | 1 | 25055038     |  |
| PCB3 | P6301  | PLUG       | NPLG-3P32        | 1 | 25055042     |  |
| PCB3 | P6380  | SHLD CASE  | (THERMISTOR)     | 1 | 27225154A    |  |
| PCB3 | P6903  | BUS BAR    | BBL15            | 1 | 27141869     |  |
| PCB3 | P6906  | RETAINER   | KANAGU           | 1 | 27141059     |  |
| PCB3 | P6907  | TRM(SCREW) | NEGITANSI M3     | 1 | 25065425     |  |
| PCB3 | P6931  | PLUG       | NPLG-16P761      | 1 | 25055805     |  |
| PCB3 | P6981  | WS CLAMP   | CB-71694(L=30)   | 1 | 260260       |  |
| PCB3 | P206B  | SOCKET     | NSCT-15P1030     | 1 | 25051240     |  |
| PCB3 | P253A  | PLUG       | NPLG-5P220       | 1 | 25055236     |  |
| PCB3 | P6072A | TRM        | NTM-1P232(M1700) | 1 | 25060301     |  |
| PCB3 | P6073A | TRM        | NTM-1P232(M1700) | 1 | 25060301     |  |
| PCB3 | J010   | CRIMP AS   | CRIMP AS         | 1 | 2069925151UL |  |

|      |         |          |             |   |              |   |
|------|---------|----------|-------------|---|--------------|---|
| PCB3 | J011    | CRIMP AS | CRIMP AS    | 1 | 2069925266UL |   |
| PCB3 | JL6402A | WIRE HOL | NSCT-3P874  | 1 | 25051087     |   |
| PCB3 | JL6402B | WIRE HOL | NSCT-3P874  | 1 | 25051087     |   |
| PCB3 | JL6803A | WIRE HOL | NSCT-6P897  | 1 | 25051110     |   |
| PCB3 | JL6804A | WIRE HOL | NSCT-6P897  | 1 | 25051110     |   |
| PCB3 | JL6805A | WIRE HOL | NSCT-4P895  | 1 | 25051108     |   |
| PCB3 | JL6952A | WIRE HOL | NSCT-5P896  | 1 | 25051109     |   |
| PCB3 | JL6952B | WIRE HOL | NSCT-5P896  | 1 | 25051109     |   |
| PCB3 | F6901A  | FUSE HOL | NSCT-1P2031 | 1 | 25052133     | ! |
| PCB3 | F6901B  | FUSE HOL | NSCT-1P2031 | 1 | 25052133     | ! |
| PCB3 | F6902A  | FUSE HOL | NSCT-1P2031 | 1 | 25052133     | ! |
| PCB3 | F6902B  | FUSE HOL | NSCT-1P2031 | 1 | 25052133     | ! |
| PCB3 | F901A   | FUSE HOL | NSCT-1P2031 | 1 | 25052133     | ! |
| PCB3 | F901B   | FUSE HOL | NSCT-1P2031 | 1 | 25052133     | ! |
| PCB3 | F903A   | FUSE HOL | NSCT-1P2031 | 1 | 25052133     | ! |
| PCB3 | F903B   | FUSE HOL | NSCT-1P2031 | 1 | 25052133     | ! |

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