

Service Service Service



Service Manual



© Copyright 2007 Philips Consumer Electronics B.V. Eindhoven, The Netherlands
All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, electronic, mechanical, photocopying, or otherwise without the prior permission of Philips.

Published by YB 0706 Service Audio

Subject to modification

GB) 3141 785 31351

Version 1.0



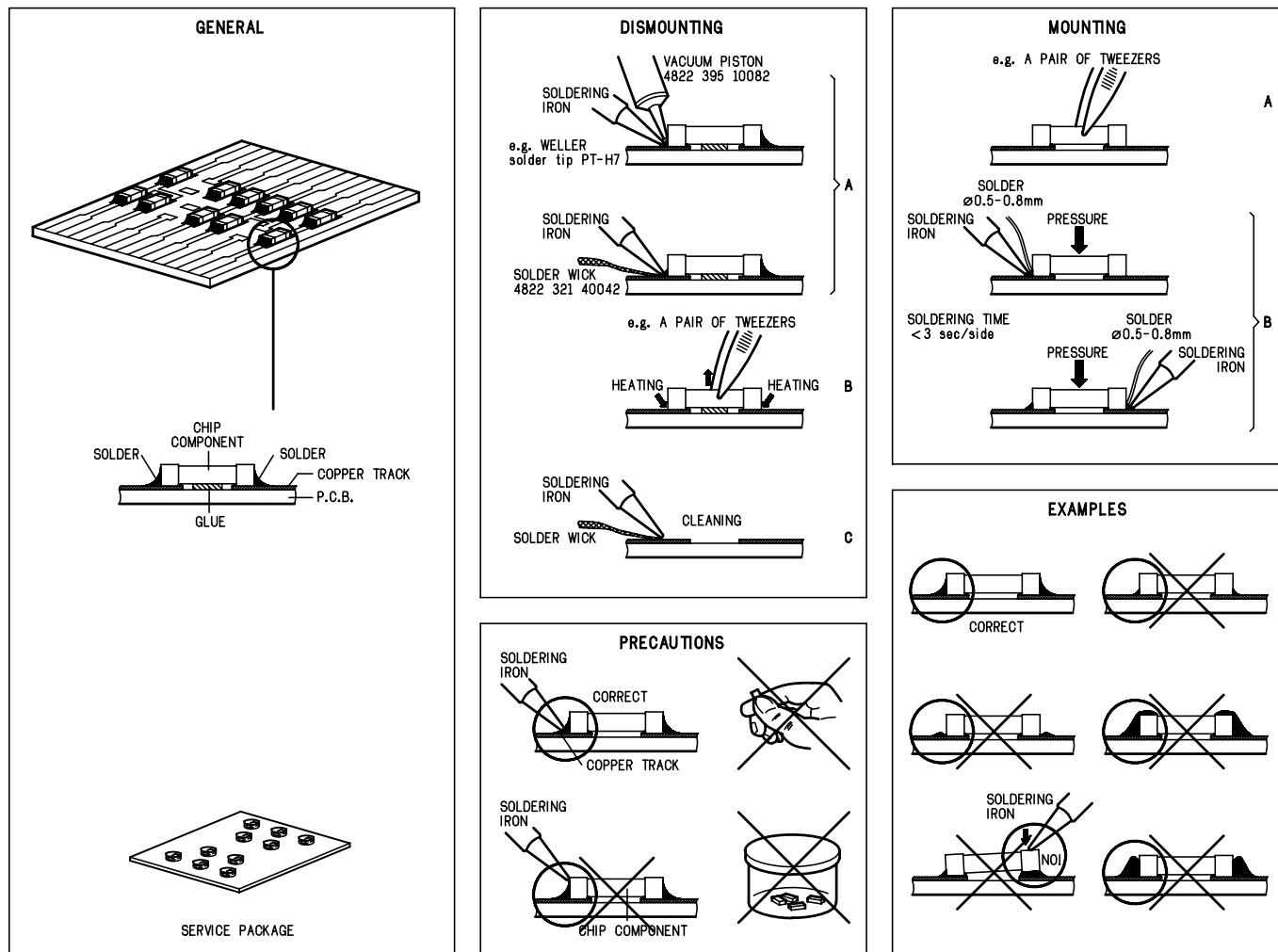
PHILIPS

**CLASS 1
LASER PRODUCT**

TABLE OF CONTENTS

Handling chip components	1-1
Service tools	1-1
Leadfree and safety information	1-2
Technical specification	2-1
Connections and controls	3-1 ... 3-4
Disassembly Instrucitor	4-1 ... 4-5
Service test program	5-1 ... 5-2
Software upgrading procedure	5-3
CD database upgrading procedure	5-4
Set block diagram (waC7000)	6-1
Set block diagram (waS7000)	6-2
Set wiring diagram (waC7000)	7-1
Set wiring diagram (waS7000)	7-2
Keys & RC Board (waC7000)	
circuit diagram	8-1
layout diagram	8-2
Standby Key Board (waC7000)	8-3
Eject Key Board (waC7000)	8-3
AF Board (waC7000)	
circuit diagram	9-1 ... 9-3
layout diagram	9-4 ... 9-5
AMP Socket Board (waC7000)	9-6
AMP Board (waC7000)	
circuit diagram	10-1 ... 10-2
layout diagram	10-3 ... 10-4
Slot CD Loader Control Board (waC7000)	
circuit diagram	11-1
layout diagram	11-2
Interface HDD to Melody Board (waC7000)	
circuit diagram	11-1
layout diagram	11-2
Interface HDD-supply Board (waC7000)	
circuit diagram	12-1
layout diagram	12-2
Interface Ethernet (waS7000)	13-1
Interface IPOD (waS7000)	13-2
Keys & RC Board (waS7000)	
circuit diagram	14-1
layout diagram	14-2 ... 14-3
AF Board (waS7000)	
circuit diagram	15-1 ... 15-4
layout diagram	15-5 ... 15-6
HAS Module	16-1
circuit diagram	16-2 ... 16-11
layout diagram	16-12 ... 16-13
Exploded view diagram (waC7000)	17-1
Exploded view diagram (waS7000)	17-2
Mechanical & Electrical Partslist	17-3 ... 17-4

HANDLING CHIP COMPONENTS



SERVICE TOOLS

TORX T10 screwdriver with shaftlength 150mm.....	4822 395 50423
TORX screwdriver set SBC 163.....	4822 295 50145
Audio signal disc SBC 429.....	4822 397 30184
Playability test disc SBC 444.....	4822 397 30245
Test disc 5 (disc without errors) +	
Test disc 5A (disc with dropout errors, black spots and fingerprints) SBC 426/426A.....	4822 397 30096
Burn in test disc (65 min. 1kHz signal at -30 dB level without "pause").....	4822 397 30155

AVAILABLE ESD PROTECTION EQUIPMENT

anti-static table mat	large 1200x650x1.25mm	4822 466 10953
	small 600x650x1.25mm	4822 466 10958
anti-static wristband		4822 395 10223
connection box (3 press stud connections, $1M\Omega$)		4822 320 11307
extendible cable (2m, $2M\Omega$, to connect wristband to connection box)		4822 320 11305
connecting cable (3m, $2M\Omega$, to connect table mat to connection box)		4822 320 11306
earth cable ($1M\Omega$, to connect any product to mat or to connection box)		4822 320 11308
KIT ESD3 (combining all 6 prior products - small table mat)		4822 310 10671
wristband tester		4822 344 13999

INFORMATION ABOUT LEAD-FREE SOLDERING

Philips CE is producing lead-free sets from 1.1.2005 onwards.

IDENTIFICATION:

Regardless of special logo (not always indicated) one must treat all sets from **1 Jan 2005** onwards, according next rules:



Example S/N:



Bottom line of typeplate gives a 14-digit S/N. Digit 5&6 is the year, digit 7&8 is the week number, so in this case 2005 wk12

So from **0501** onwards = from 1 Jan 2005 onwards

Important note: *In fact also products of year 2004 must be treated in this way as long as you avoid mixing solder-alloys (leaded/ lead-free). So best to always use SAC305 and the higher temperatures belong to this.*

Due to lead-free technology some rules have to be respected by the workshop during a repair:

- Use only lead-free solder alloy Philips SAC305 with order code 0622 149 00106. If lead-free solder-paste is required, please contact the manufacturer of your solder-equipment. In general use of solder-paste within workshops should be avoided because paste is not easy to store and to handle.
- Use only adequate solder tools applicable for lead-free solder alloy. The solder tool must be able
 - To reach at least a solder-temperature of 400°C,
 - To stabilize the adjusted temperature at the solder-tip
 - To exchange solder-tips for different applications.
- Adjust your solder tool so that a temperature around 360°C – 380°C is reached and stabilized at the solder joint. Heating-time of the solder-joint should not exceed ~ 4 sec. Avoid temperatures above 400°C otherwise wear-out of tips will rise drastically and flux-fluid will be destroyed. To avoid wear-out of tips switch off un-used equipment, or reduce heat.
- Mix of lead-free solder alloy / parts with leaded solder alloy / parts is possible but PHILIPS recommends strongly to avoid mixed solder alloy types (leaded and lead-free).
If one cannot avoid or does not know whether product is lead-free, clean carefully the solder-joint from old solder alloy and re-solder with new solder alloy (SAC305).
- Use only original spare-parts listed in the Service-Manuals. Not listed standard-material (commodities) has to be purchased at external companies.
- Special information for BGA-ICs:
 - always use the 12nc-recognizable soldering temperature profile of the specific BGA (for de-soldering always use the lead-free temperature profile, in case of doubt)
 - lead free BGA-ICs will be delivered in so-called 'dry-packaging' (sealed pack including a silica gel pack) to protect the IC against moisture. After opening, dependent of MSL-level seen on indicator-label in the bag, the BGA-IC possibly still has to be baked dry. (MSL=Moisture Sensitivity Level). This will be communicated via AYS-website.
Do not re-use BGAs at all.
- For sets produced before 1.1.2005 (except products of 2004), containing leaded solder-alloy and components, all needed spare-parts will be available till the end of the service-period. For repair of such sets nothing changes.
- On our website www.atyourservice.ce.Philips.com you find more information to:
 - BGA-de-/soldering (+ baking instructions)
 - Heating-profiles of BGAs and other ICs used in Philips-sets

You will find this and more technical information within the "magazine", chapter "workshop news".

For additional questions please contact your local repair-helpdesk.

SERVICE INSTRUCTION

Safety regulations require that after a repair, the set must be returned in its original condition. Pay in particular attention to the following points:

- Route the wire trees correctly and fix them with the mounted cable clamps.
- Check the insulation of the AC Power lead for external damage.
- Check the strain relief of the AC Power cord for proper function.
- Check the electrical DC resistance between the AC Power Plug and the secondary side (only for sets which have a AC Power isolated power supply):
- 1. Unplug the AC Power cord and connect a wire between the two pins of the AC Power plug.
- 2. Set the AC Power switch to the "on" position (keep the AC Power cord unplugged!).
- 3. Measure the resistance value between the pins of the AC Power plug and the metal shielding of the tuner or the aerial connection on the set. The reading should be larger than 4.5 Mohm (For U.S. it should be between 4.2 Mohm and 12 Mohm).
- 4. Switch "off" the set, and remove the wire between the two pins of the AC Power plug.
- Check the cabinet for defects, to avoid touching of any inner parts by the customer.

TECHNICAL SPECIFICATION

Mains voltage	/37 : ~120V /05/12/79 : ~230V /55/97 : ~240V/120V (with voltage selection)	
Mains frequency	/37 : 60Hz /05/12/79 : 50Hz /55/97 : 50Hz/60Hz	
Battery	Center remote : 4 x AA Station remote : 2 x AA	
Power consumption	waS7000 Maximum : 25W Active standby : ≤14W Eco-standby : ≤1W	waC7000 Maximum : 55W Active standby : ≤17W Eco-standby : ≤1W
Dimension (W x H x D)	waC7000 : 608x303x175mm waS7000 : 360x283x128mm	
Weight	waC7000 : 7.7 kg waS7000 : 4.2 kg	
Amplifier		
Out power (RMS)	waC7000 : 2 x 15 + 2 x 25W waS7000 : 2 x 6 + 1 x 12W	
Speaker impedance	waC7000 : 16 Ω (panels) : 8 Ω (subwoofer) waS7000 : 16 Ω (panels) : 8 Ω (subwoofer)	
Frequency response	: 50Hz-12KHz (±3dB)	
S/N	: ≤72dB(IEC)	
Aux input sensitivity	: 500mV	
Headphone impedance	: 21 – 150 Ω	
Wireless	Wireless standard : 802.11g (backward compatible to 802.11b) Wireless security : WEP 64 or 128bit : WPA , AES-CCM Frequency range : 2142 – 2462 MHz (channel 1-11) Transmit range : >220m(mp3,320kbps) : >150m(pcm,1.6mbps)	
Tuner-FM	Tuning range : 87.5 – 108.0MHz IF frequency : 10.7MHz Sensitivity limit : 25dBf Image rejection : >25dB IF rejection : >60dB Number of preset : 60 Antenna/cable : 75 Ω(coax or T-ant)	
HDD/USB/CD player (for waC7000 only)	MP3 : all variable bit rate audio WMA : up to 160kbps bit rate HDD storage* : 80GB	

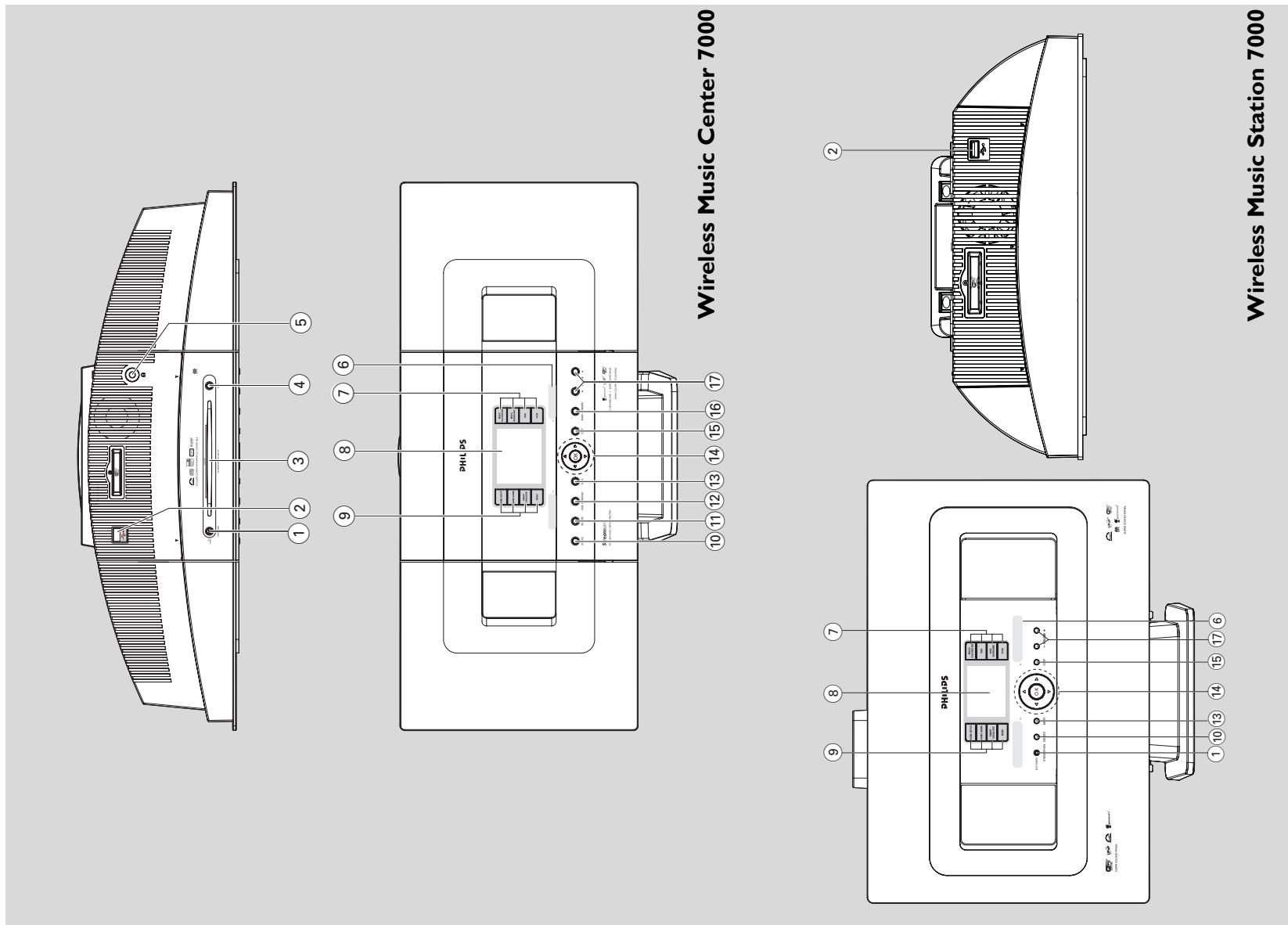
Actual free space is 75GB or less due to the buffer partition for MP3
Compression , firmware ,music CD database and demo tracks storing.

CONNECTION AND CONTROLS

Controls

Controls on Center and Station (Top and front panels)

VIEW	- toggles playback display and previous option list
Display	- shows status of the set
SAME ARTIST	- HD: plays all the tracks of current Artist
SAME GENRE	- HD: plays all the tracks of current Genre
SMART EQUALIZER	- HD: selects the matched sound setting for current Genre
 MENU	- enters or exits setup menu
SOURCE	- selects sound source HD(hard disk), CD, Radio, USB, UPnP or AUX In standby mode: switches the set on and selects sound source HD, CD, Radio, USB, UPnP or AUX
 RECORD	- CD/Radio/AUX: starts the recording to hard disk
INCR. SURROUND	- selects surround sound effect
MUTE	- switches the sound off temporarily
IR	- sensor for the infrared remote control
Helpful hints:	<ul style="list-style-type: none"> - Adjust the volume to a moderate level before you plug in the headphones. - Connecting headphones will switch off the speakers.
MUSIC FOLLOWS ME	- HD: moves music playback from Center to Station, or from Station to Center
MUSIC BROADCAST	- HD: broadcast music from Center to Station
DBB (Dynamic Bass Boost)	- turns the bass enhancement on (DBB1, DBB2, DBB3) or off
OK	- confirms selection
HD/CD: starts or pauses play/back	-



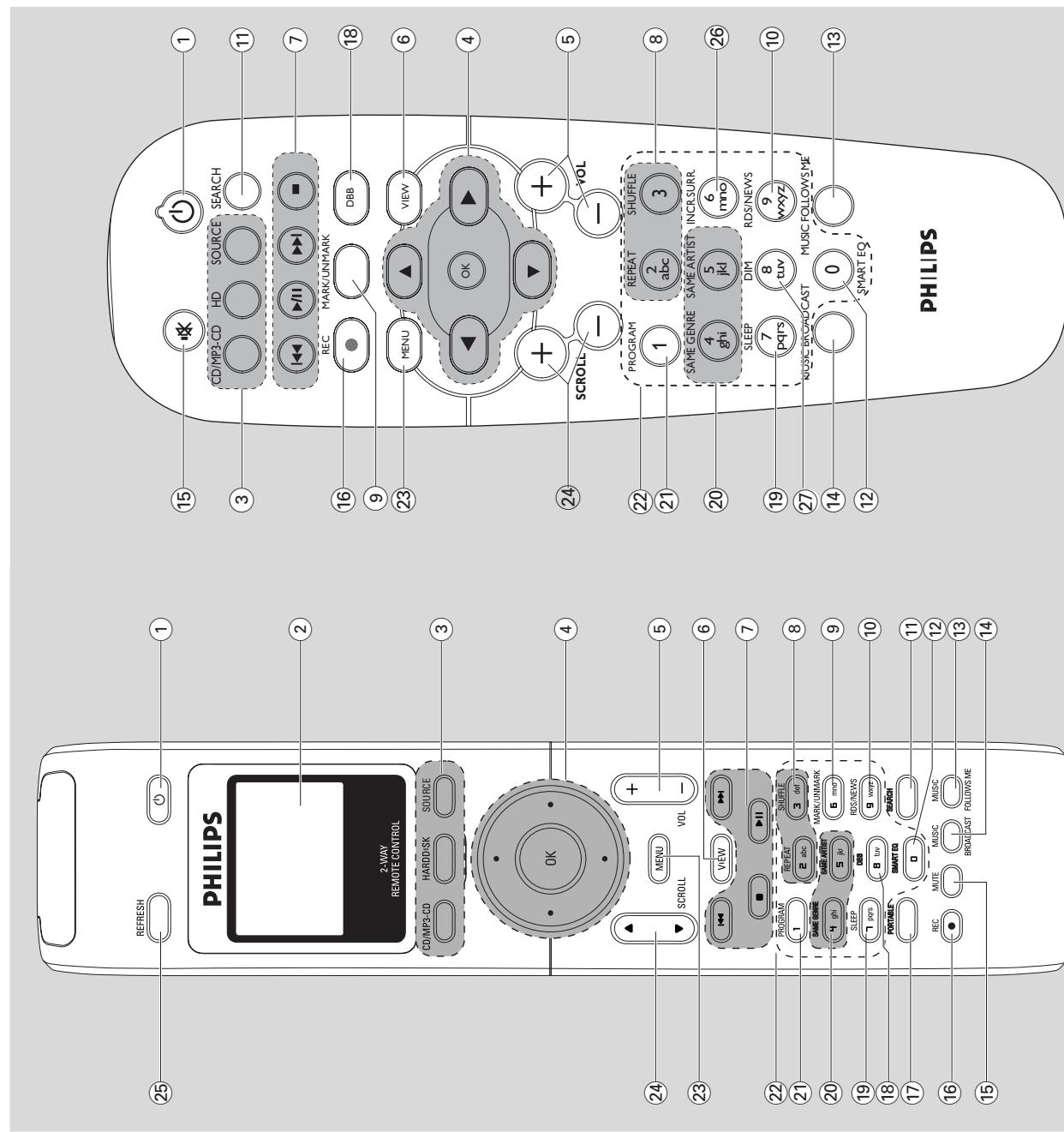
Controls

Controls

- (15) **STOP**
– stops playback or recording
- (16) **MarkUNMark**
– CD: selects or deselects tracks to be recorded on hard disk
- (17) **VOLUME +, -**
– adjusts the volume level

Remote control

- ▶ / **OK**
– confirms selection
Text input: confirms input and moves the cursor forward
- OK**
HD/CD: starts or pauses playback
- VOL +, -**
adjusts the volume level
- VIEW**
synchronous display of the set's status
- (3) **CD/MP3-CD**
– Selects CD source
In standby mode: switches the set on and selects CD source.
- HARDDISK (HD)**
– Selects HD (hard disk) source
In standby mode: switches the set on and selects HD source
- SOURCE**
– Selects Radio source, UPnP source, USB source or AUX from an additional connected appliance
- In **standby mode:** switches the set on and selects Radio source, USB source, UPnP source or the audio input from an additional connected appliance
- (4) ▶ / ▷ / ▲ / ▼
– navigation controls (left, right, up, down) to scroll through the option list
- (5) **REPEAT**
selects continuous playback
- SHUFFLE**
selects random playback
- MARK/UNMARK (Center only)**
CD: selects or deselects tracks to be recorded on hard disk
- (6) **RDS/NEWS**
Radio: selects RDS information HD/CD/UPnP/AUX: turns NEWS function on or off
- SEARCH**
searches by keywords
- SMART EQ**
HD: selects the matched sound setting for current Genre
- (7) **MUSIC FOLLOWS ME**
HD: moves music playback between Center and Station



2-way remote control

1-way remote control

CONNECTION AND CONTROLS

Controls

- | | | | |
|--------------------------------------|------|--------------------------|---|
| MUSIC BROADCAST (Center only) | (14) | SCROLL ▲ / ▼ | HD: broadcast music from Center to Station |
| MUTE | (15) | REFRESH | switches the sound off temporarily |
| REC | (16) | INCR. SURR. | switch
CD/Radio/AUX: starts the recording to hard disk |
| PORTABLE | (17) | DIM | select the audio input from a connected hard disk player |
| DBB (Dynamic Bass Boost) | (18) | SLEEP | turns the bass enhancement on (DBB1, DBB2, DBB3) or off |
| SAME GENRE | (19) | SAME ARTIST | adjusts/displays/switches off sleep timer |
| PROGRAM | (20) | PROGRAM | HD: plays all the tracks of current Genre |
| Alphanumeric keys | (21) | Alphanumeric keys | HD: plays all the tracks of current Artist |
| MENU | (22) | MENU | Radio: manually programs preset radio stations |
| | (23) | | for text input |
| | | | enters or exits setup menu |

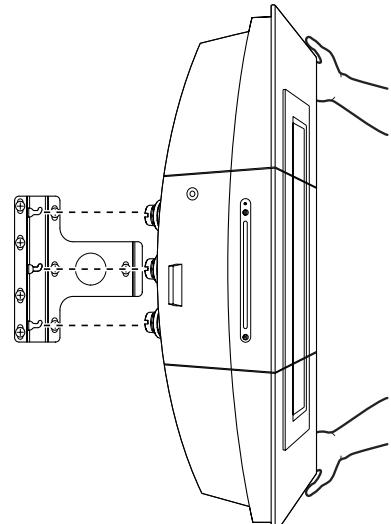
For more information on operation instruction please visit Philips Audio internet site :

Appendix

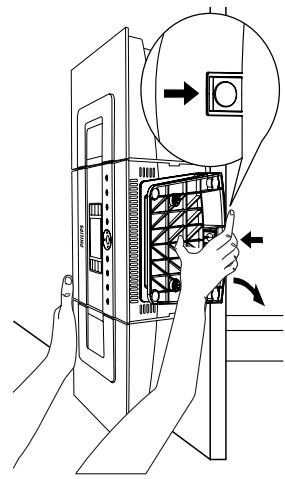
CONNECTION AND CONTROLS

3 - 4

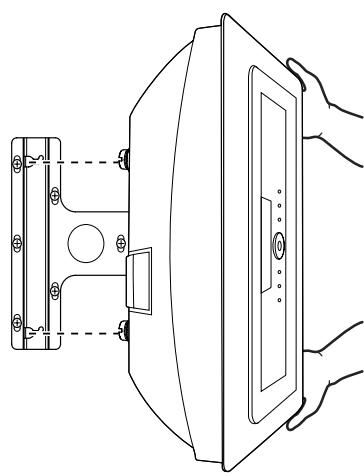
- 5** To detach the stand from Center or Station
- As shown, hold down the **Lock+unlock** button(s).
 - Move out the stand to detach.



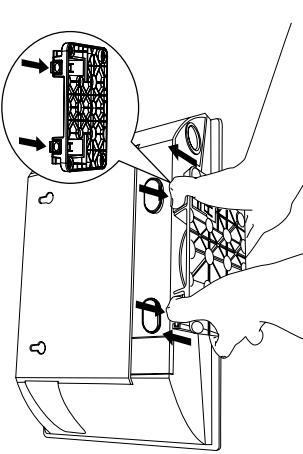
Center



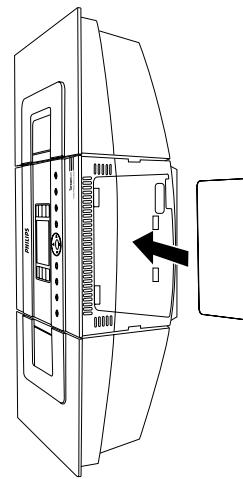
Center



Station



Station



- 6** On Center, insert the supplied protective card sheet where the stand was installed.

- 7** As shown, hook and mount Center or Station in place.

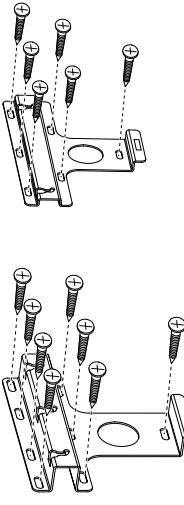
- To find a suitable location for mounting try your necessary rear connections and the Wi-Fi connection between Center and Station (see the chapter **Installation**).

Ask a qualified person to help you with the wall mounting, who should:

- to avoid unexpected damage, learn about the piping, wiring and other relevant information inside your walls;
- according to your walls' materials, decide what type of screws you need to fix the mounting brackets and hold the weight of a Center or Station;
- according to the drilling requirements, choose suitable drilling tools;
- take other precautions necessary for the wall mounting work.

Mounting your Center or Station

- 1** Align the bracket (for Center or Station) in the chosen location on a wall. Use a pencil to mark the drilling positions.

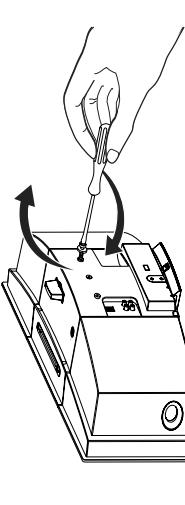


Center

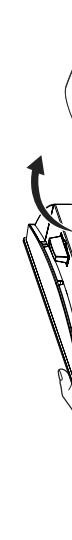
- 2** Drill holes as marked.

- 3** Fix the brackets to the wall using suitable screws (not supplied).

- 4** As shown, fasten the supplied screws to your Center or Station using a screwdriver



Station



Station

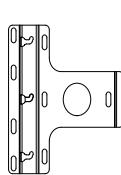
How to mount your Center and Station onto walls

IMPORTANT!

- The wall mounting instructions are for the use of the qualified wall mounting person only!
- Ask a qualified person to help you with the wall mounting, which includes drilling holes on the wall, fixing the mounting brackets to the wall, and mounting the sets onto the brackets.

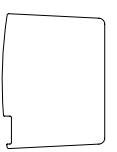
What's in the supplied mounting kits

For Center:



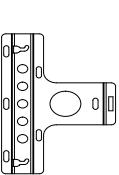
1 x mounting bracket

3 x screws (for Center mounting)



1 x protective card sheet

For Station:



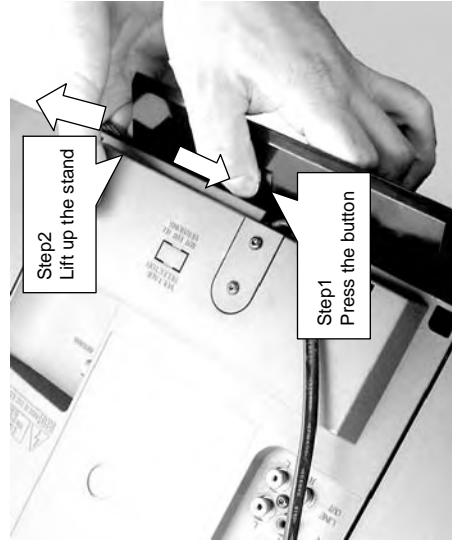
1 x mounting bracket
2 x screws (for Station mounting)

What else you'll need

- 8 x screws for fixing the Center's bracket
- 6 x screws for fixing the Station's bracket
- Drilling tools (e.g. electric drill)

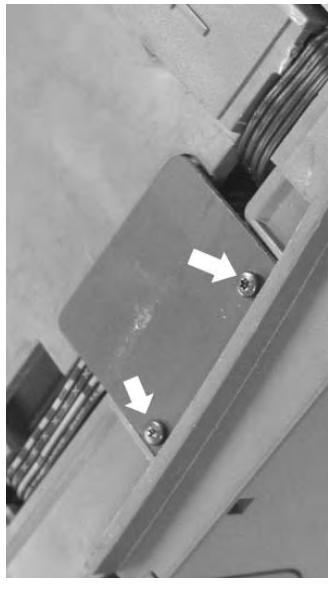
DISASSEMBLY INSTRUCTION(waC7000)

1. Remove Stand



2. Remove Loudspeaker Box

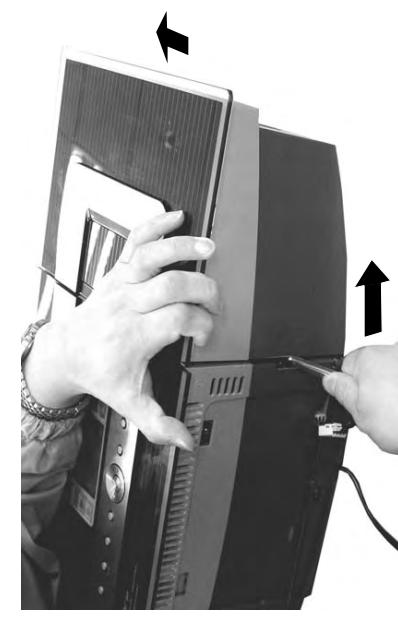
a. remove screws M2x8 - 2 pcs



b. pull out speaker cable connector



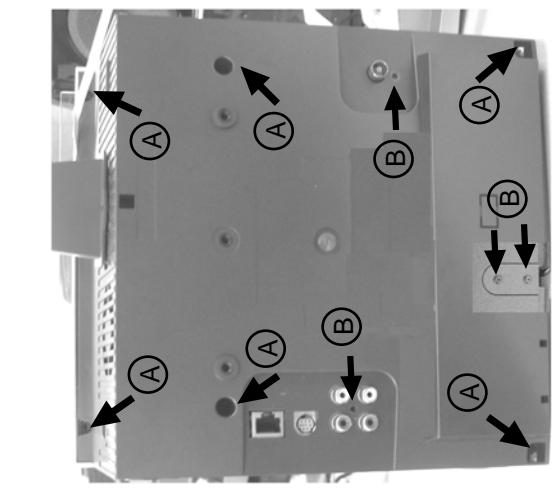
c. take out loudspeakers



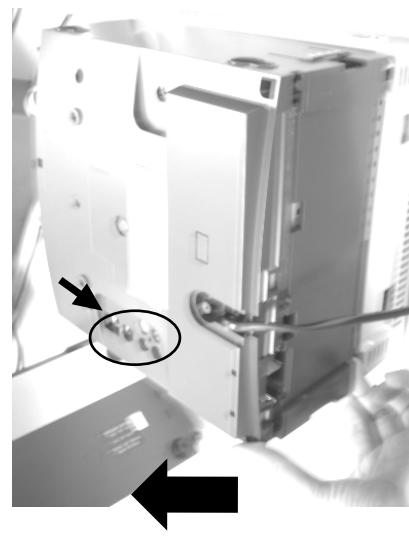
4 - 1

3. Separate Front and Back Cabinet.

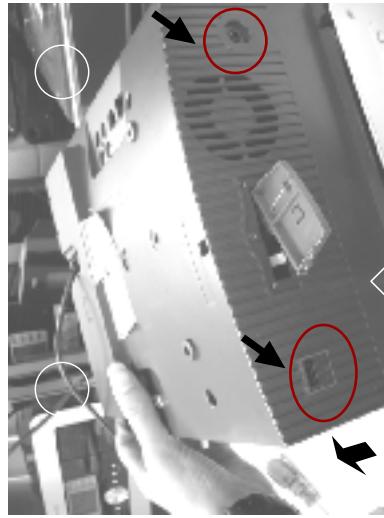
- a1. remove screws T3x20 - 6 pcs. ①
- a2. remove screws T3X10 - 4 pcs. ②



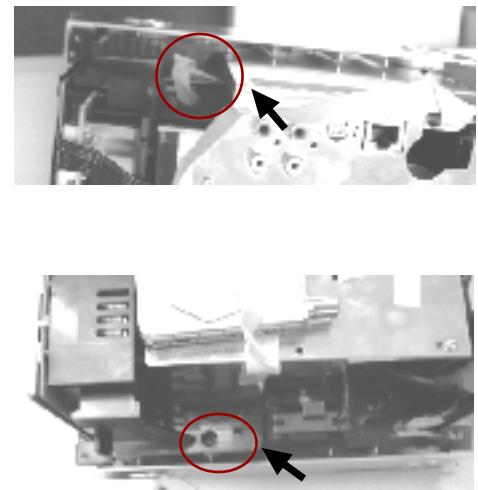
c. lift the back cabinet till the terminals sinked.



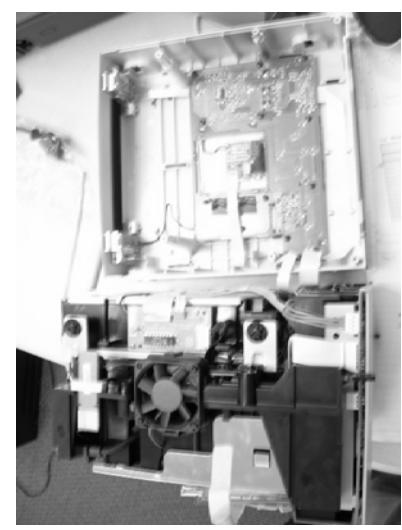
d. lift the back cabinet till the terminals sinked.



e. remove screws M3X12 - 2pcs.



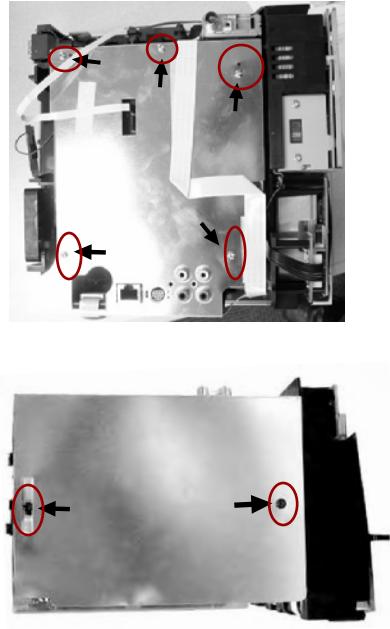
f. pull out Core Pre-assembly



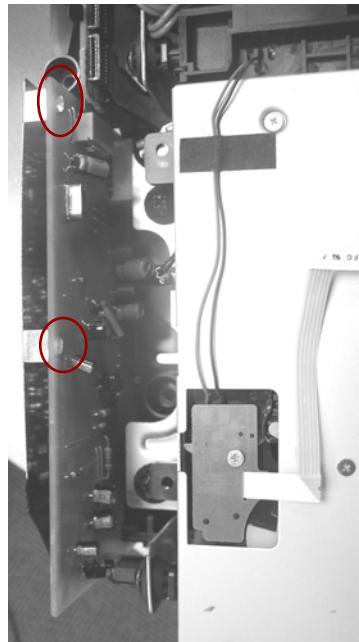
DISASSEMBLY INSTRUCTION(waC7000)

4 - 2

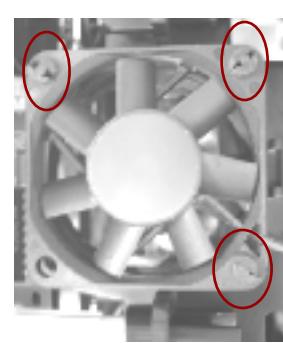
4. Remove Shield Sheet
a. remove screw T3x10 - 7 pcs.



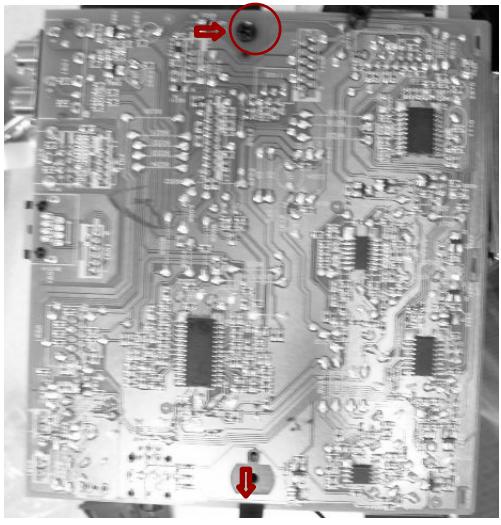
- b. release 2 catches and pull out the shield sheet.



5. Remove cooling FAN
- crush rubbers - 3 pcs and pull out fan.

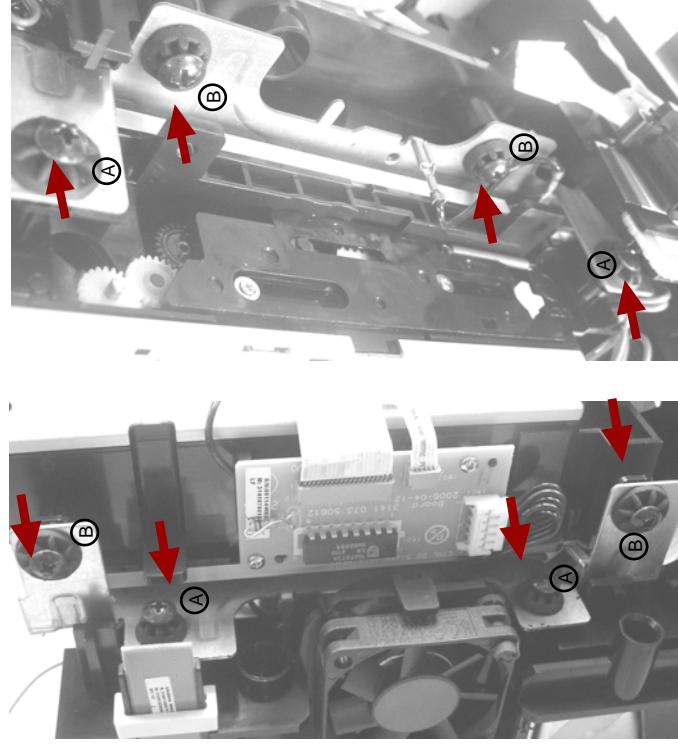


6. Remove PBAS - AF
- remove screws T3x10 - 1 pcs and release hook - 1 pcs.

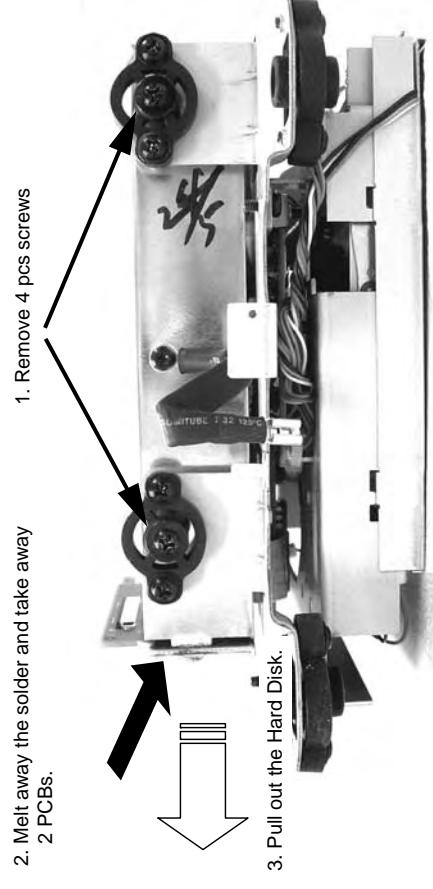


7. Remove Bracket CD/HDD

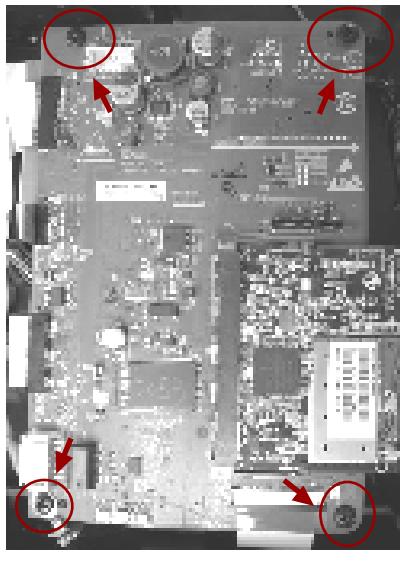
- a. remove screws T3x10 - 4 pcs.
b.remove screws T3x6 - 4 pcs.



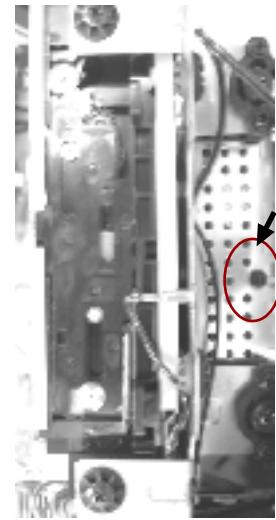
8. Remove Hard Disk
- remove screws (314107040061) - 4 pcs.



9. Remove HAS module
- remove screws T3x10 - 4 pcs.

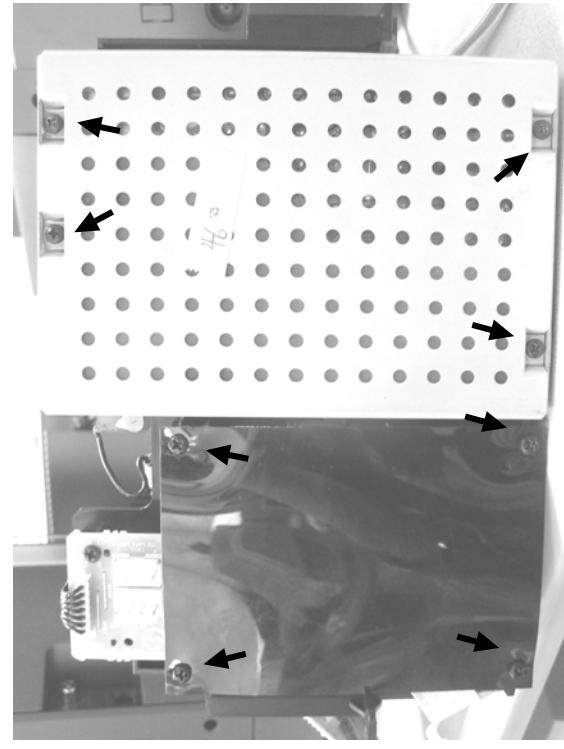


- c.remove screws T4x6 - 1 pcs.

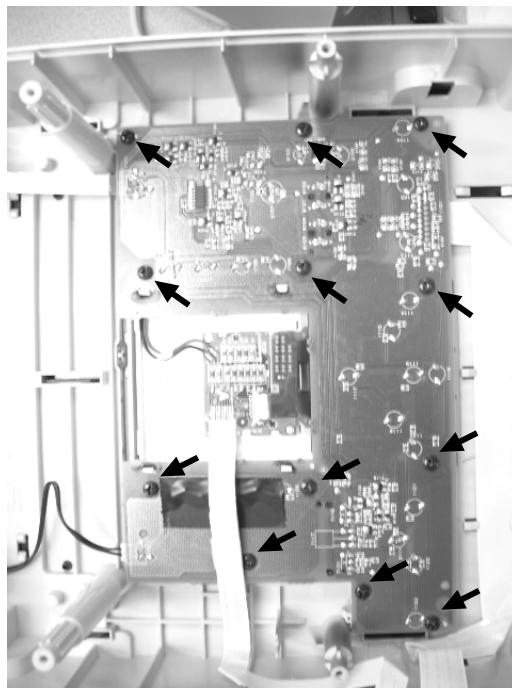


DISASSEMBLY INSTRUCTION(waC7000)

10. Remove AMP board and Supply module
- remove screws T3x12 - 8 pcs.



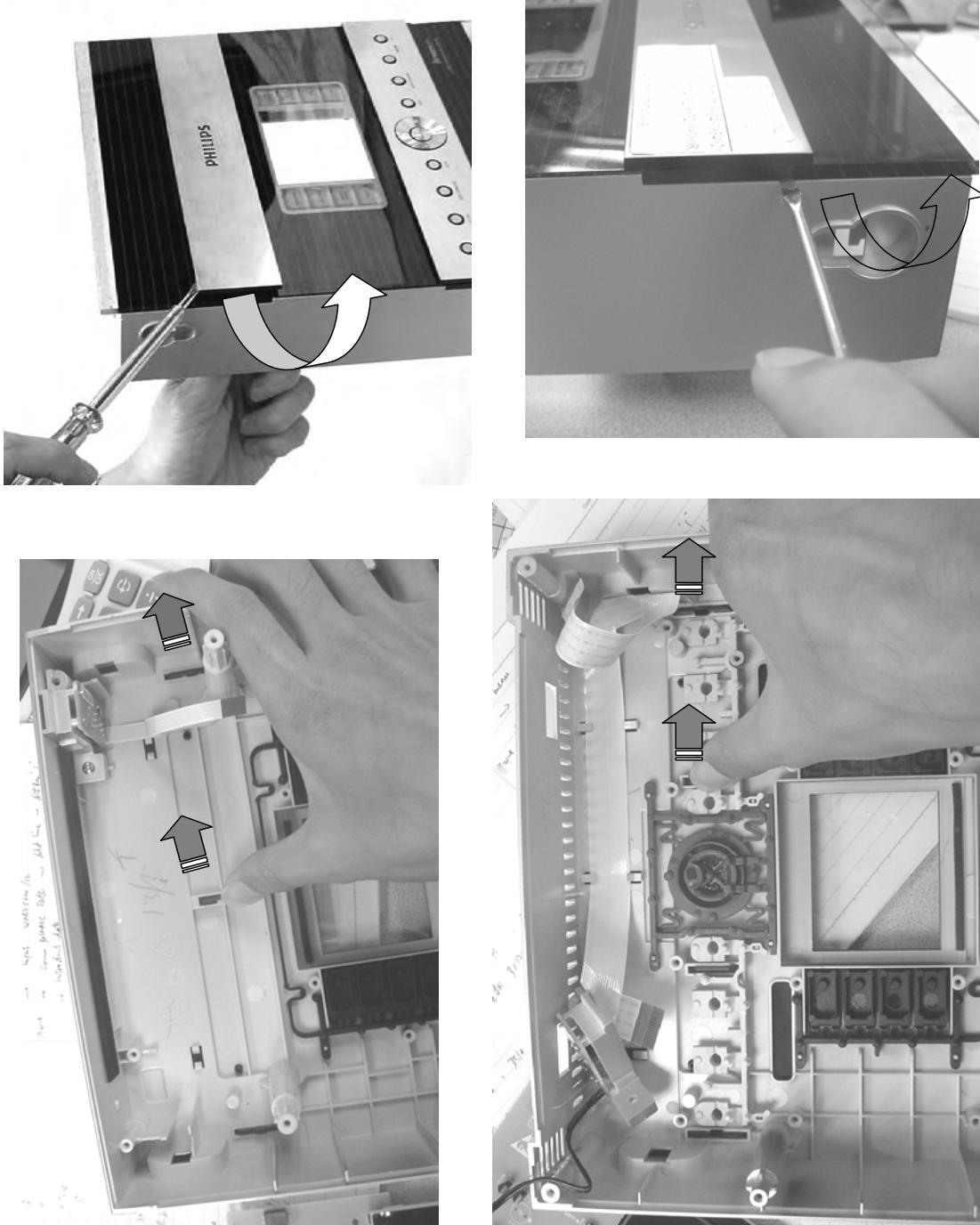
11. Remove PBAS Front
- remove screws T3x10 - 12 pcs.



12. Remove BTN PWR/REC PRE-ASSY
- remove screws T3x8 - 2 pcs.



13. Remove COVER FNT CEN BTM and COVER FNT CEN UPPER



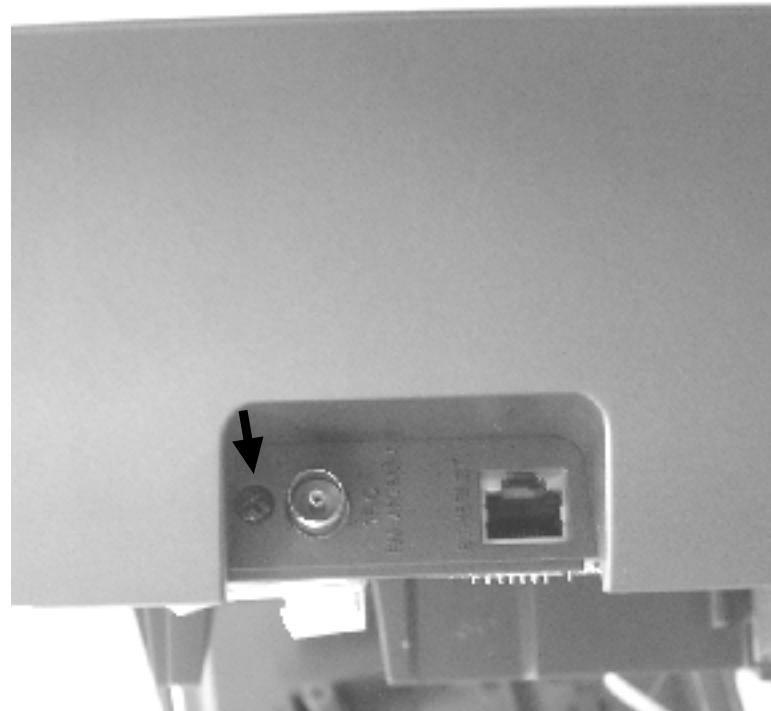
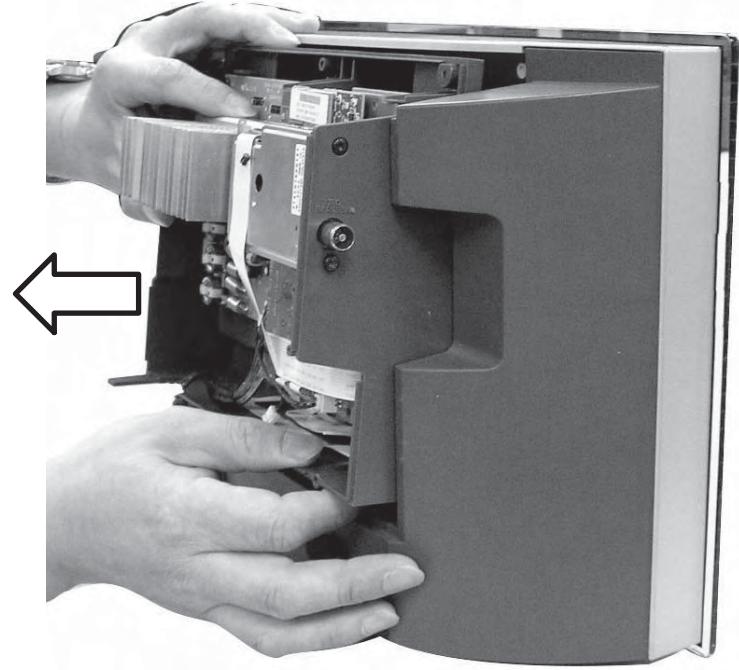
DISASSEMBLY INSTRUCTION(waS7000)

4 - 4

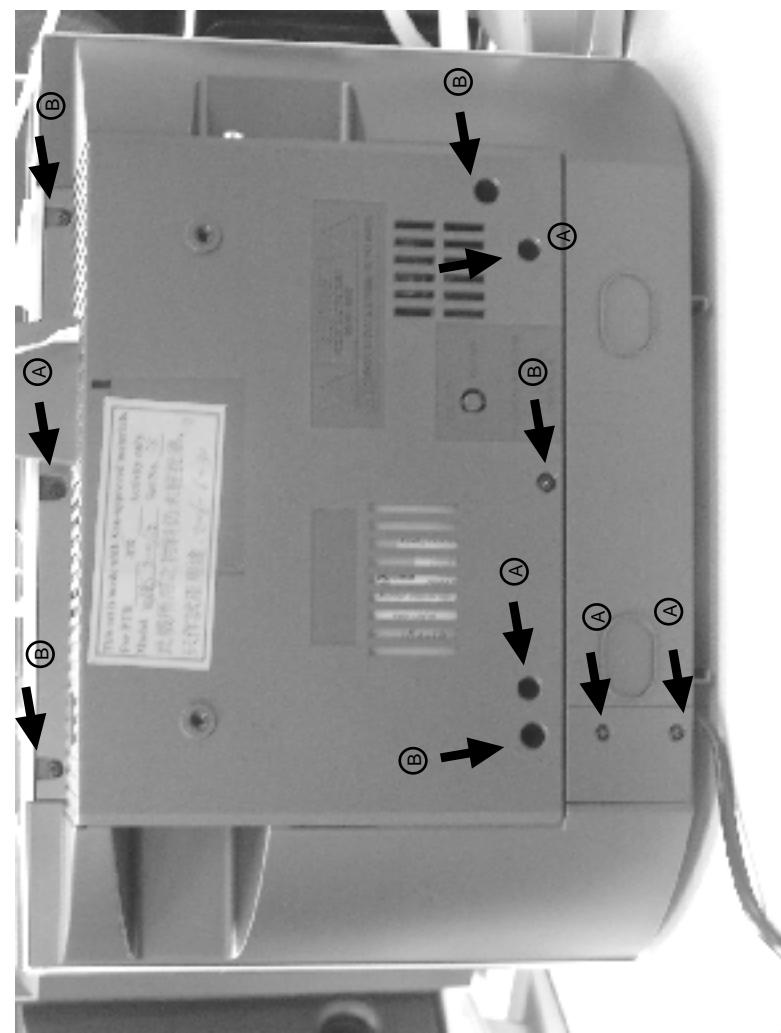
1. Remove STAND.

3. Remove F-CAB CENTER PRE-ASSY.

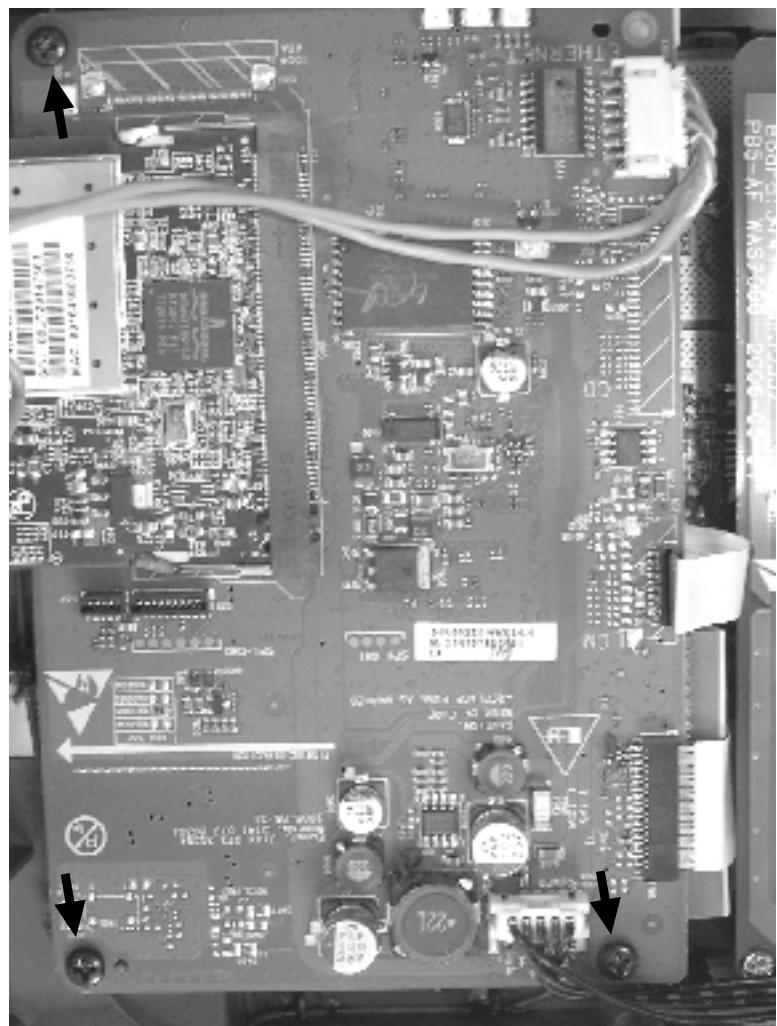
4. Remove Tuner Module
Screw M3x6 - 1 pcs.



2. Remove Cabinet Back Assy.
Screw T3x12 - 5 pcs. Ⓐ
Screw T3x16 - 5 pcs. Ⓑ

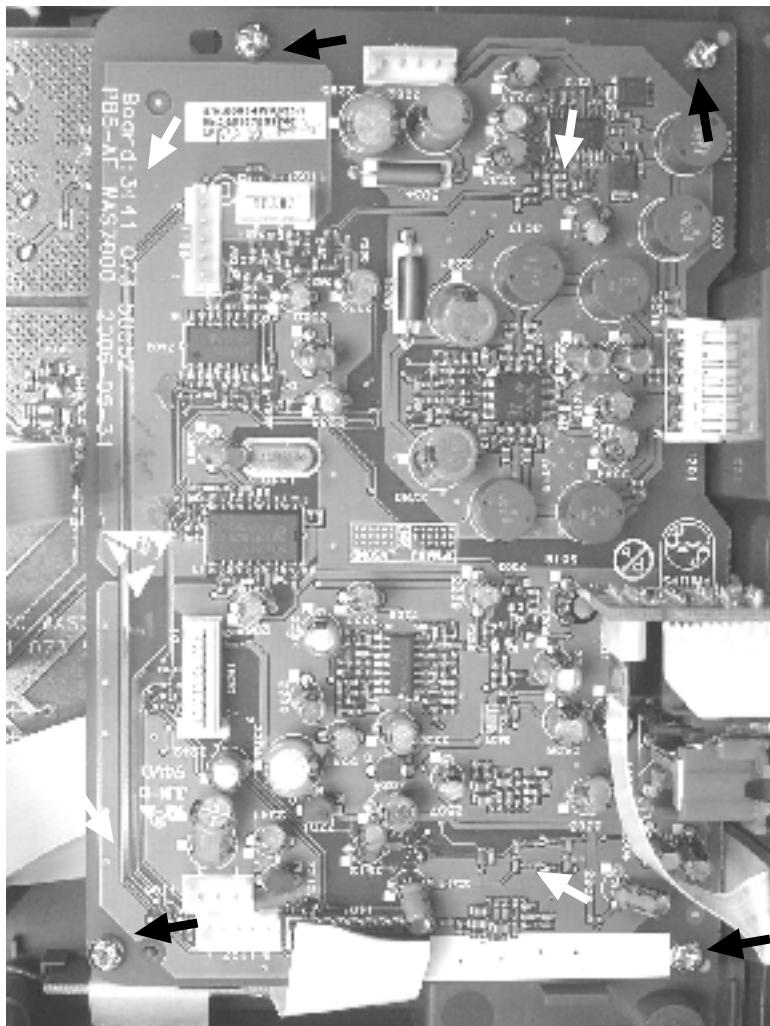


5. Remove WESSLI-3A Module
Screw T3x10 - 3 pcs.



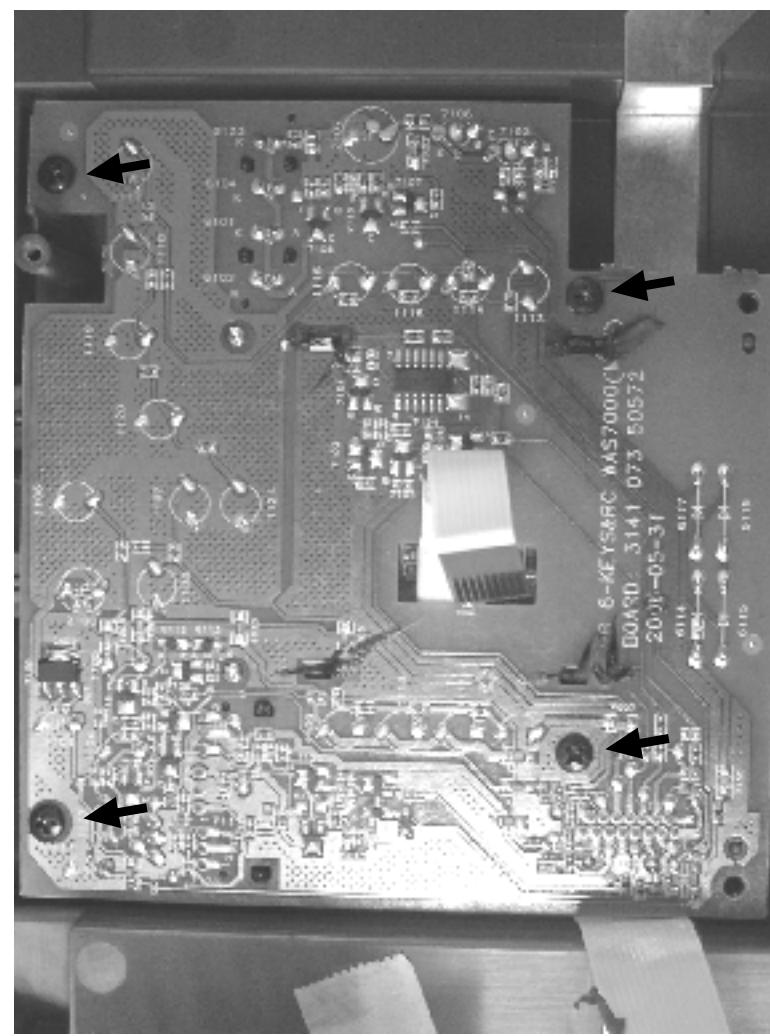
DISASSEMBLY INSTRUCTION(waS7000)

6. Remove PBAS 5 - AF from Centre Cabinet
Screw T3x8 - 4 pcs.



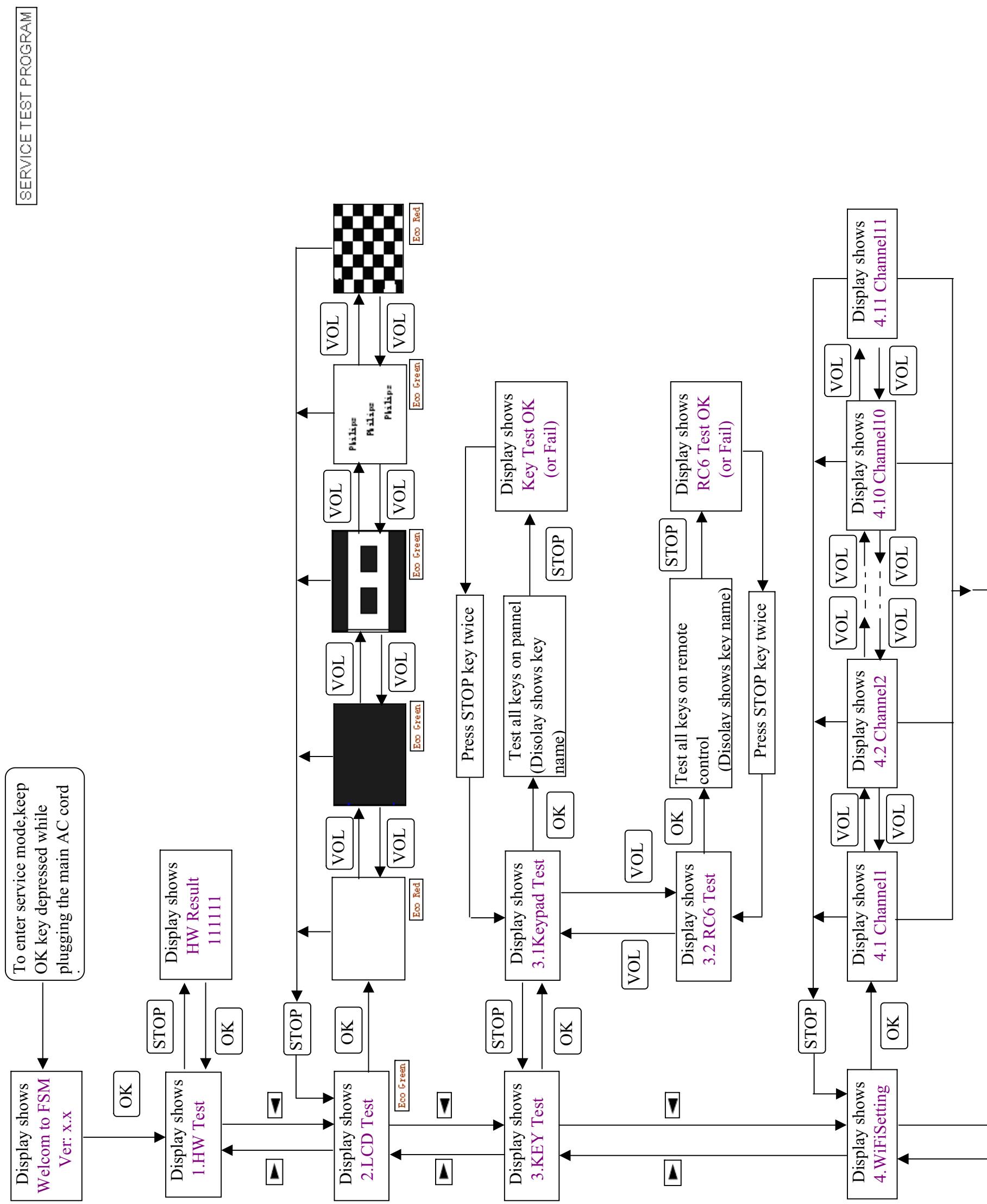
4 - 5

7. Remove PBAS 6 - KEYS&RC from Centre Cabinet
Screw T3x10 - 4 pcs.



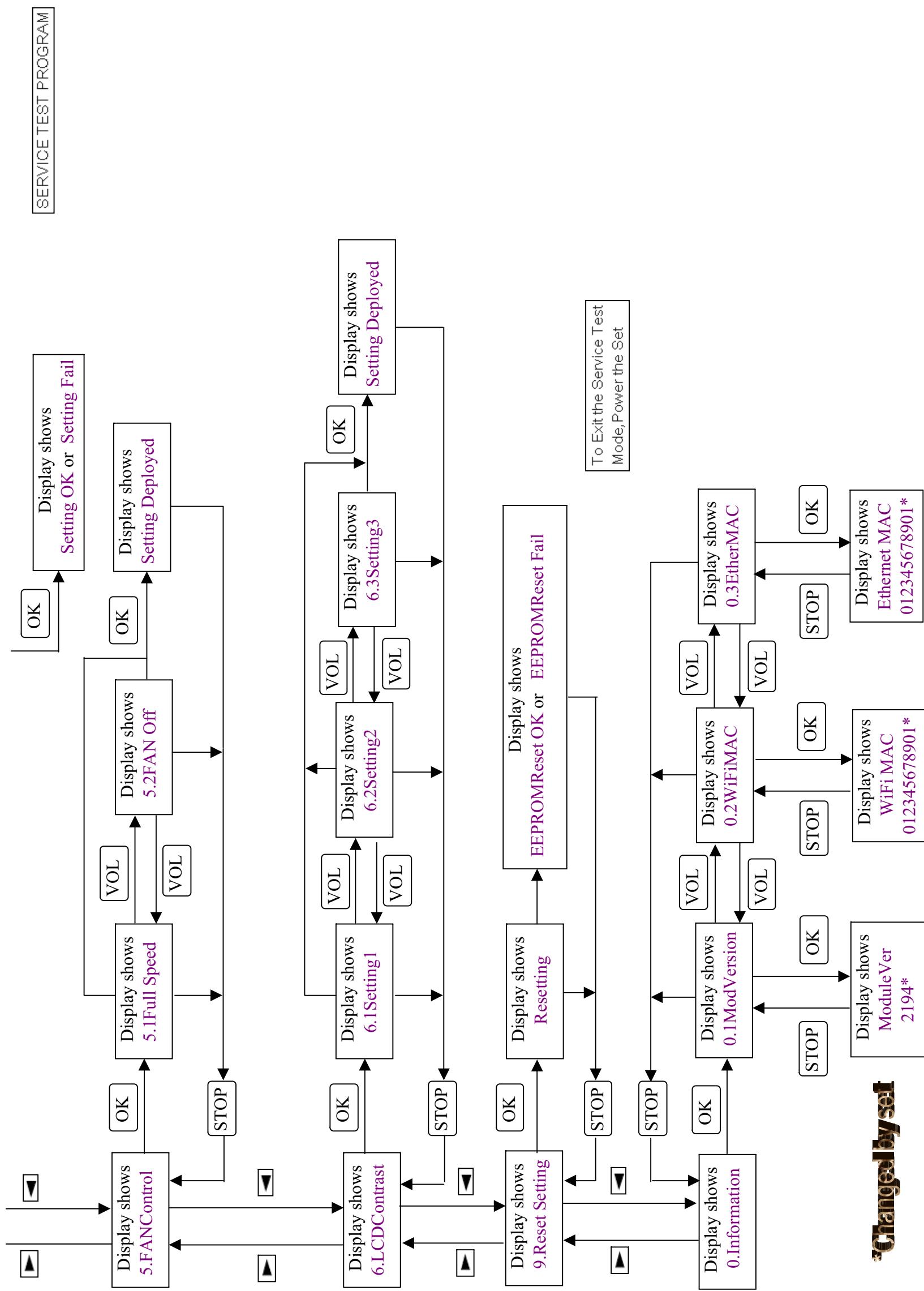
5 - 2

SERVICE TEST PROGRAM



SERVICE TEST PROGRAM

2
-
15



SOFTWARE UPGRADING PROCEDURE(waC7000)

Software Version Verification Procedure

It is important to write down the system version information of your Center before you start the upgrade procedure. This information is also useful in case you need to call Philips Customer Care Center.

1. Press **MENU**.
2. Press **/** to select "Information". Press **OK**.
3. Press **/** to select "System". Press **OK**.
4. The software version number is shown on the display.

5. If the software version is not the latest one, you need to upgrade waC7000.

There are 2 ways to update the software.

- A) Using CD-Rom
- B) Using WADM

A. Using CD-Rom

1. Software Upgrade Disc Preparation

Tools Required : You will need the following items :

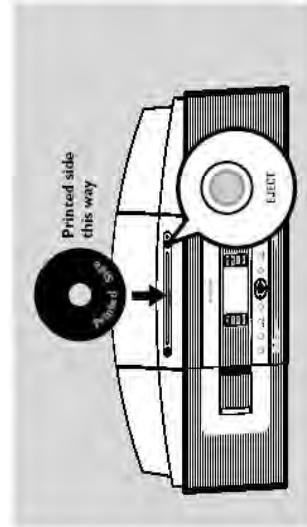
- PC (Pentium III 300MHz processor or higher)
- CD-R/RW writer and writing application software
- Blank CD-R or CDRW disc
- Broadband / High speed internet connection

2. How to download the software to your computer

1. To download free firmware and software upgrades for your product, please login to www.club.philips.com
Download the firmware upgrade files and store them on your PC
2. Unzip the .zip file and extract files into your PC.

Note:

- Please do not rename the filename.
- If you do not have the software to open the .zip file, please visit below website to download the software.
<http://www.winzip.com/>



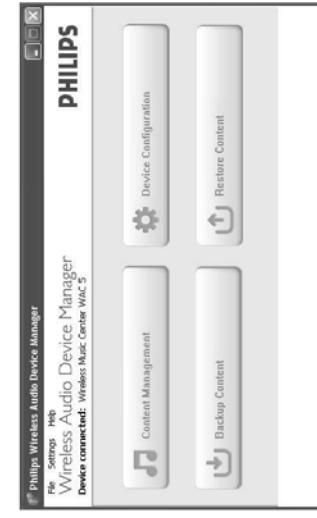
B. Using WADM

1. How to download the software to your computer

1. To download free firmware and software upgrades for your product, please login to www.club.philips.com
Download the firmware upgrade files and store them on your PC
2. Unzip the .zip file and extract files into your PC.
3. Note:
- The Audio Center will upgrade automatically.
- The message "Updating firmware, please wait...." and the "process bar" show on the display of the Audio Center.
- The upgrade process of the Center will reboot twice
4. The Audio Center will upgrade automatically.
- The message "Updating firmware, please wait...." and the "process bar" show on the display of the Audio Center.
5. It takes around 5 mins to complete the firmware upgrade for the Audio Center.
6. When done, the Audio Center will go to the HD mode automatically. Then the Audio Center will upgrade the Station wireless automatically.
7. It takes around 5 mins to complete the firmware upgrade for the Auido Station.
8. When done, the "Updating firmware, please wait...." and the "process bar" show on the display of the Audio Station.
- The upgrade process of the Audio Station will reboot twice

Note: Do NOT power off the Audio Center or eject the disc at this stage.

1. Make sure the Audio Station has connected to the Audio Center.
2. Launch the WADM



2. Steps to update waC7000

1. Make sure the Audio Station has connected to the Audio Center.
2. Launch the WADM
3. After the upgrade
Do confirm the software version by checking the system version.
Please follow the procedure described in the section "Software Version Verification Procedures".

Note: Do NOT power off the Audio Station at this stage.

1. Make sure the Audio Station has connected to the Audio Center.
2. Burn the file to blank CD-R or CDRW. Finalize the disc. (The application may do this automatically.)
3. Turn on the Audio Center and turn on the Audio Station, insert the CD to the slot loader, CD graphic printed side facing you.
4. Click to enter the "Firmware upgrade" sub-menu
As prompted,click "Browse" and indicate the location where you kept the firmware upgrade files on PC
5. Click to enter the "Device configuration" button to start
The IE browser is launched
6. Click the "Device configuration" button to start
The IE browser is launched
7. Click the "Device configuration" button to start
The IE browser is launched
8. When done, the Audio Station will go to the HD mode. You can start the normal operations afterward.

3. After the upgrade



3. Steps to upgrade the waC7000

1. Make sure the Audio Station has connected to the Audio Center.
2. Burn the file to blank CD-R or CDRW. Finalize the disc. (The application may do this automatically.)
3. Turn on the Audio Center and turn on the Audio Station, insert the CD to the slot loader, CD graphic printed side facing you.
4. Click to enter the "Firmware upgrade" sub-menu
As prompted,click "Browse" and indicate the location where you kept the firmware upgrade files on PC
5. Click to enter the "Device configuration" button to start
The IE browser is launched
6. Click the "Device configuration" button to start
The IE browser is launched
7. Click the "Device configuration" button to start
The IE browser is launched
8. When done, the Audio Station will go to the HD mode. You can start the normal operations afterward.

CD DATABASE UPGRADING PROCEDURE(waC7000)

The CD Database is provided quarterly on the internet. There are 2 ways to update the embedded CDDB.

- A) Using CD-Rom
- B) Using WADM

A. Using CD-Rom

1. CDDB Update Disc Preparation

Tools Required : You will need the following items :

- PC (Pentium III 300MHz processor or higher)
- CD-R/RW writer and writing application software
- Blank CD-R or CDRW disc
- Broadband / High speed internet connection

2. How to download the CDDB to your computer

1. Register your Philips wireless audio product with www.club.philips.com
- Download the CD Database update files and store them on your PC

2. Unzip the .zip file and extract files into your PC.

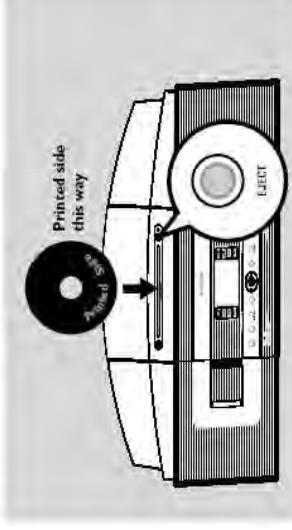
Note:

- Please do not rename the filename.
- If you do not have the software to open the .zip file, please visit below website to download the software.
<http://www.winzip.com/>

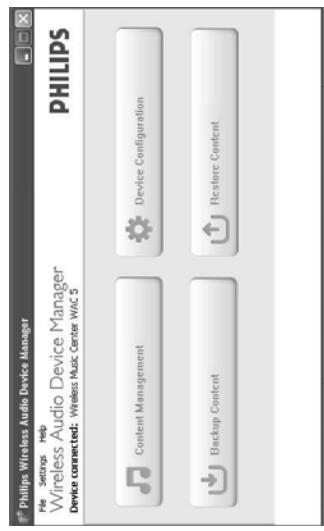
3. Steps to update the Gracenote CDDB

1. Burn the file to blank CD-R or CDRW. Finalize the disc. (The application may do this automatically.)
2. Turn on the Audio Center.

3. Insert CD into Audio Center's CD loader, with CD graphic printed side facing you.



1. Make sure the Audio Station has connected to the Audio Center.
2. Launch the WADM



- Note: Do NOT power off the Audio Center at this stage.**

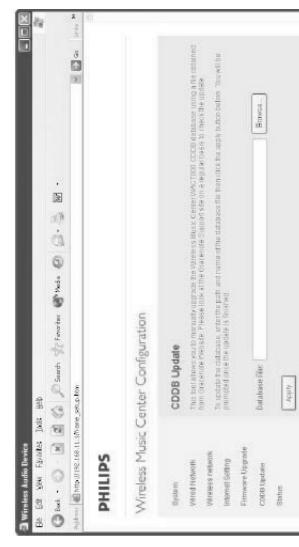
6. Click Apply to start updating CD Database
7. It takes around 15-20 mins to complete CDDB updating.

8. If the CDDB is updated successfully, the message "Update Finished" (depends on the language setting on the set) shows.

Note: If the message "Update Aborted" shows, the CDDB file you downloaded maybe corrupted. Please download the zip file again.

9. You can start the normal operation afterward.

1. CDDB Update Disc Preparation
2. How to download the CDDB to your computer
3. Click the "Device configuration" button to start
→ The IE browser is launched
4. Click to enter the "CD Database update" sub-menu
5. As prompted, click "Browse" and indicate the location where you kept the firmware upgrade files on PC



B. Using WADM

1. How to download the CDDB to your computer

1. Register your Philips wireless audio product with www.club.philips.com

Download the CD Database update files and store them on your PC

2. Unzip the .zip file and extract files into your PC

Note:

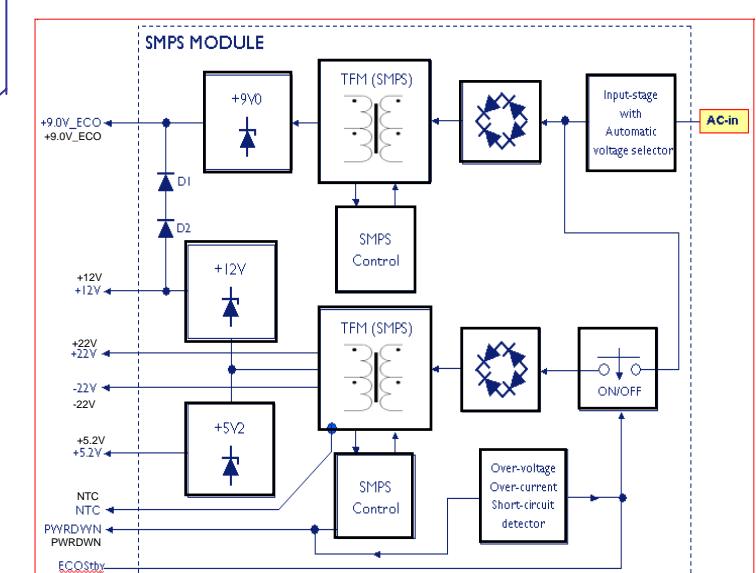
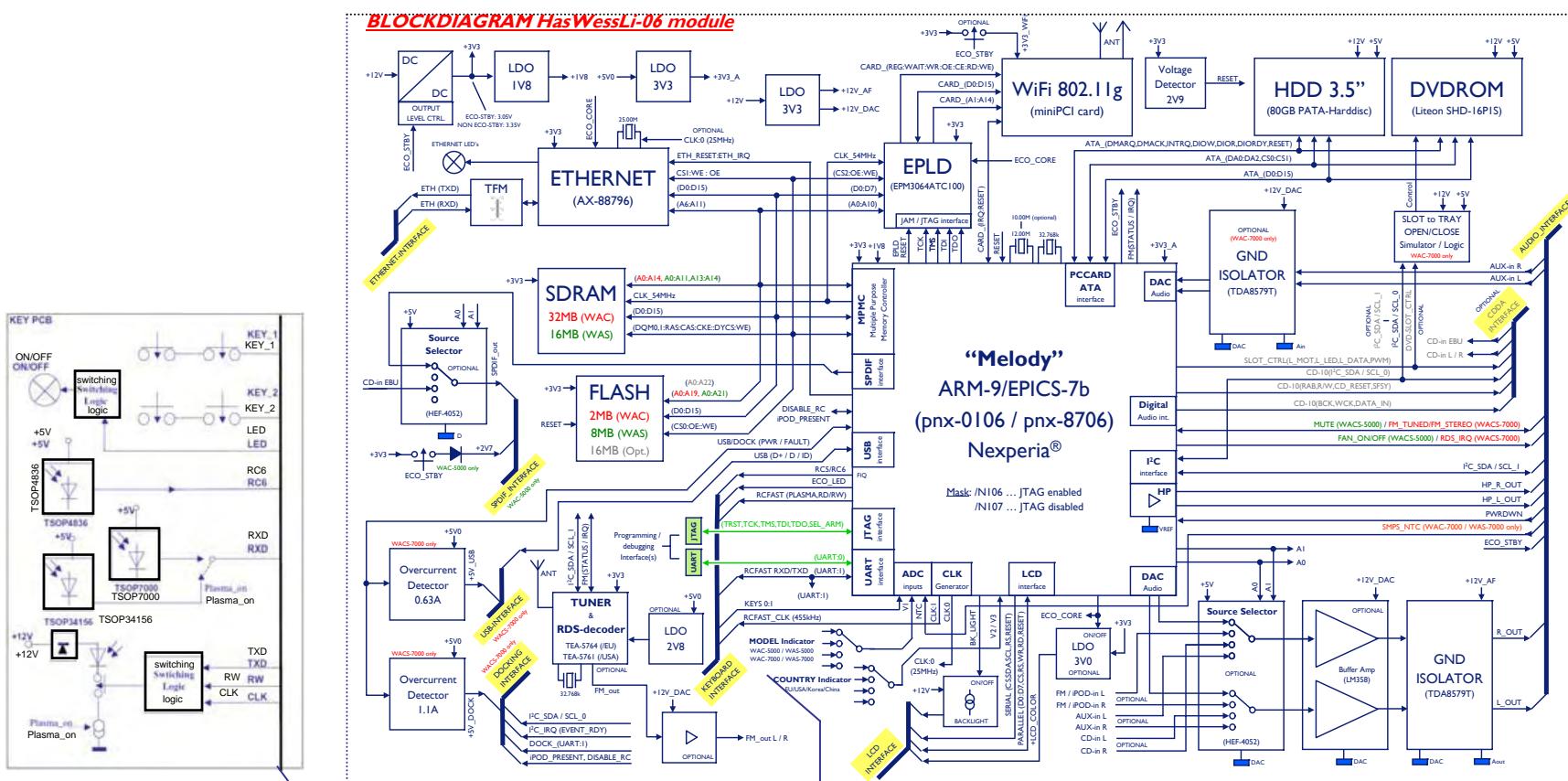
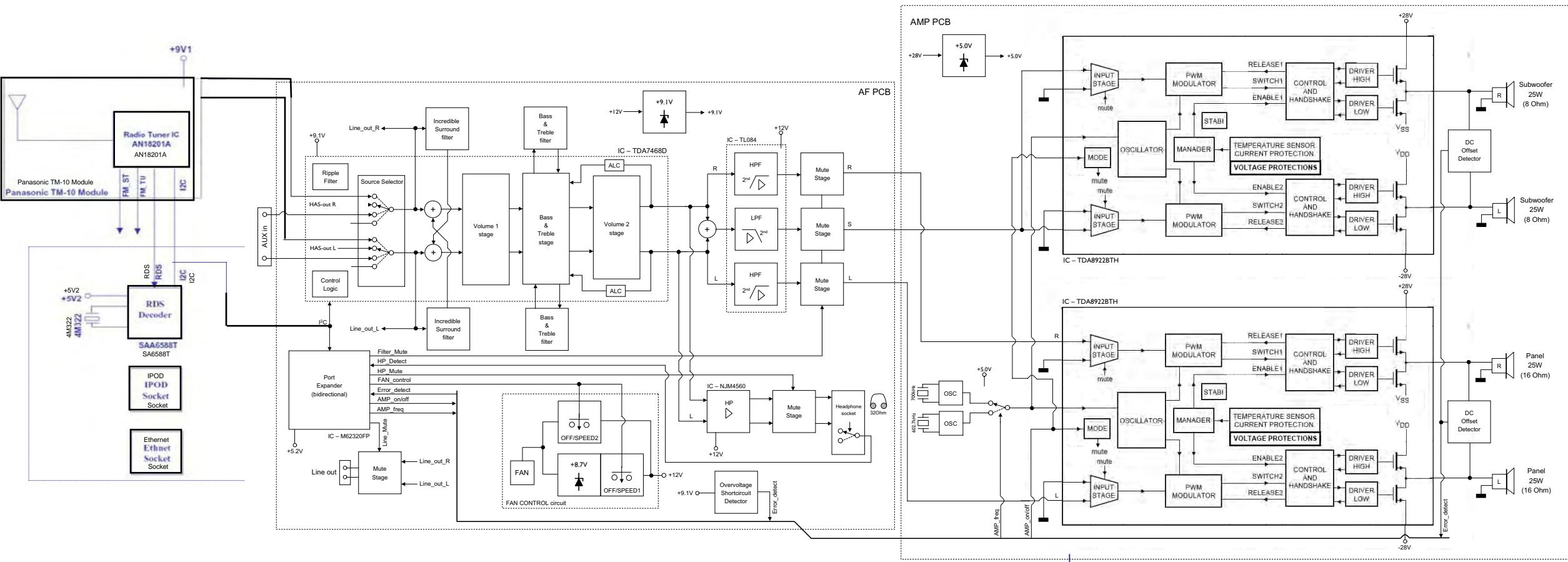
- Please do not rename the filename.
- If you do not have the software to open the .zip file, please visit below website to download the software.
<http://www.winzip.com/>

2. Steps to update the Gracenote CDDB

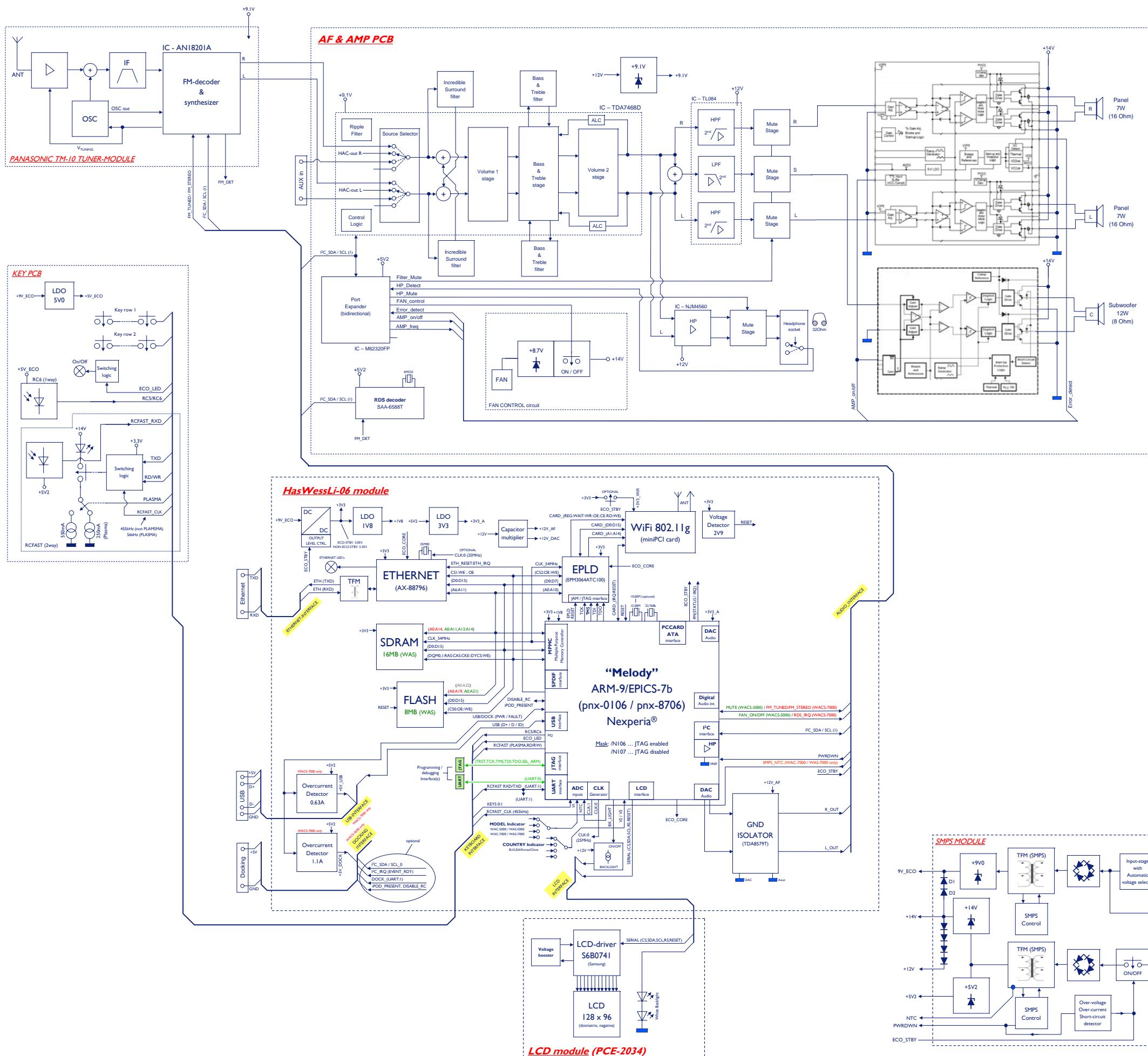
1. Burn the file to blank CD-R or CDRW. Finalize the disc. (The application may do this automatically.)
2. Turn on the Audio Center.

3. Insert CD into Audio Center's CD loader, with CD graphic printed side facing you.

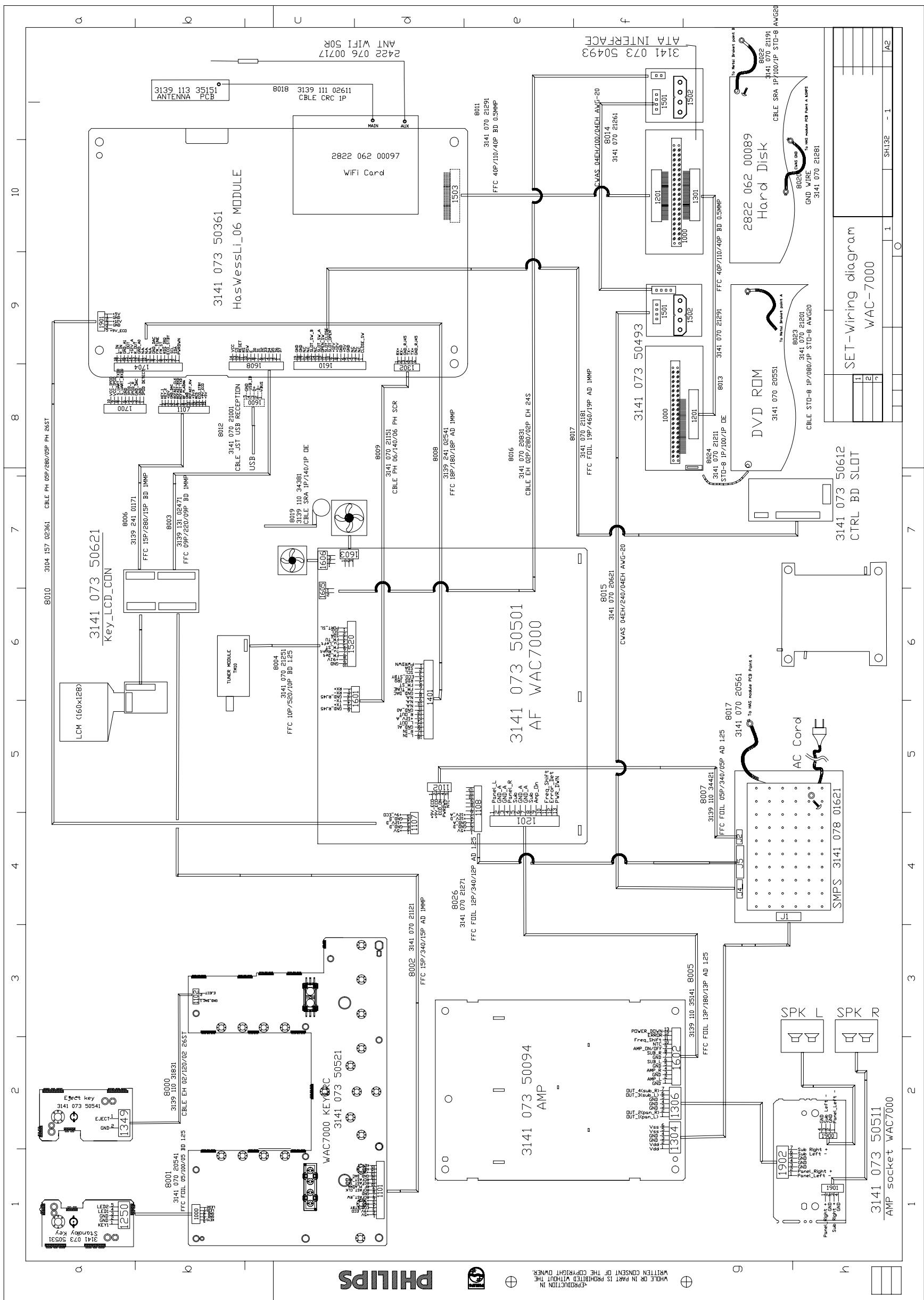
SET BLOCK DIAGRAM(waC7000)



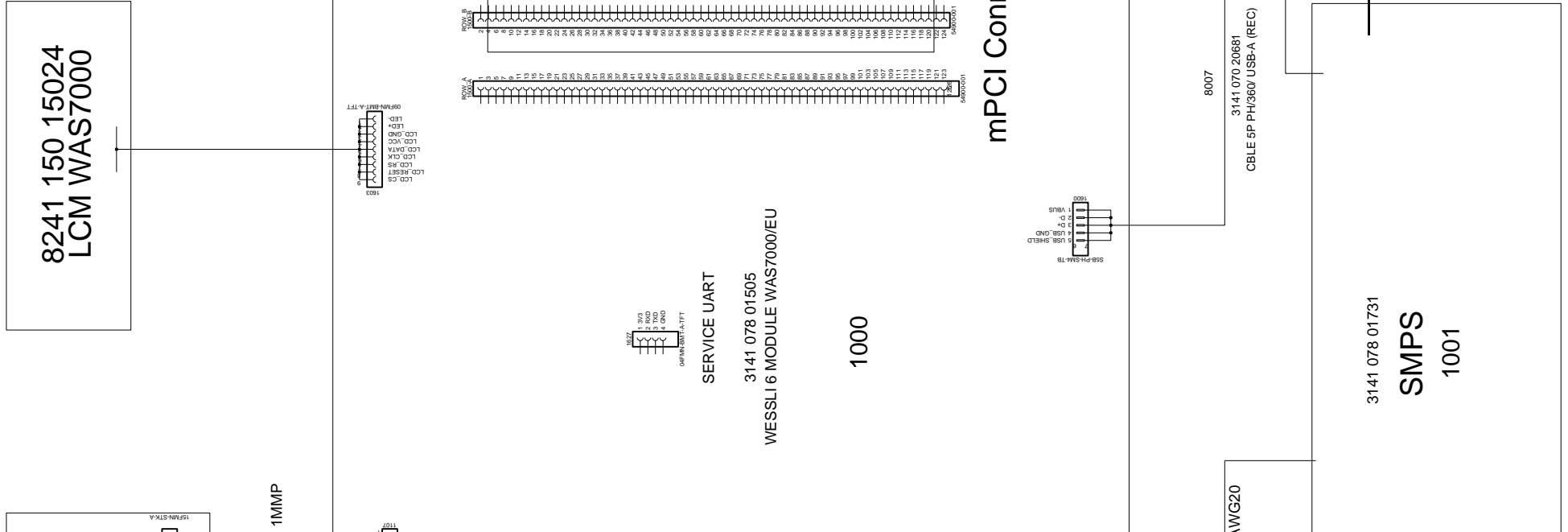
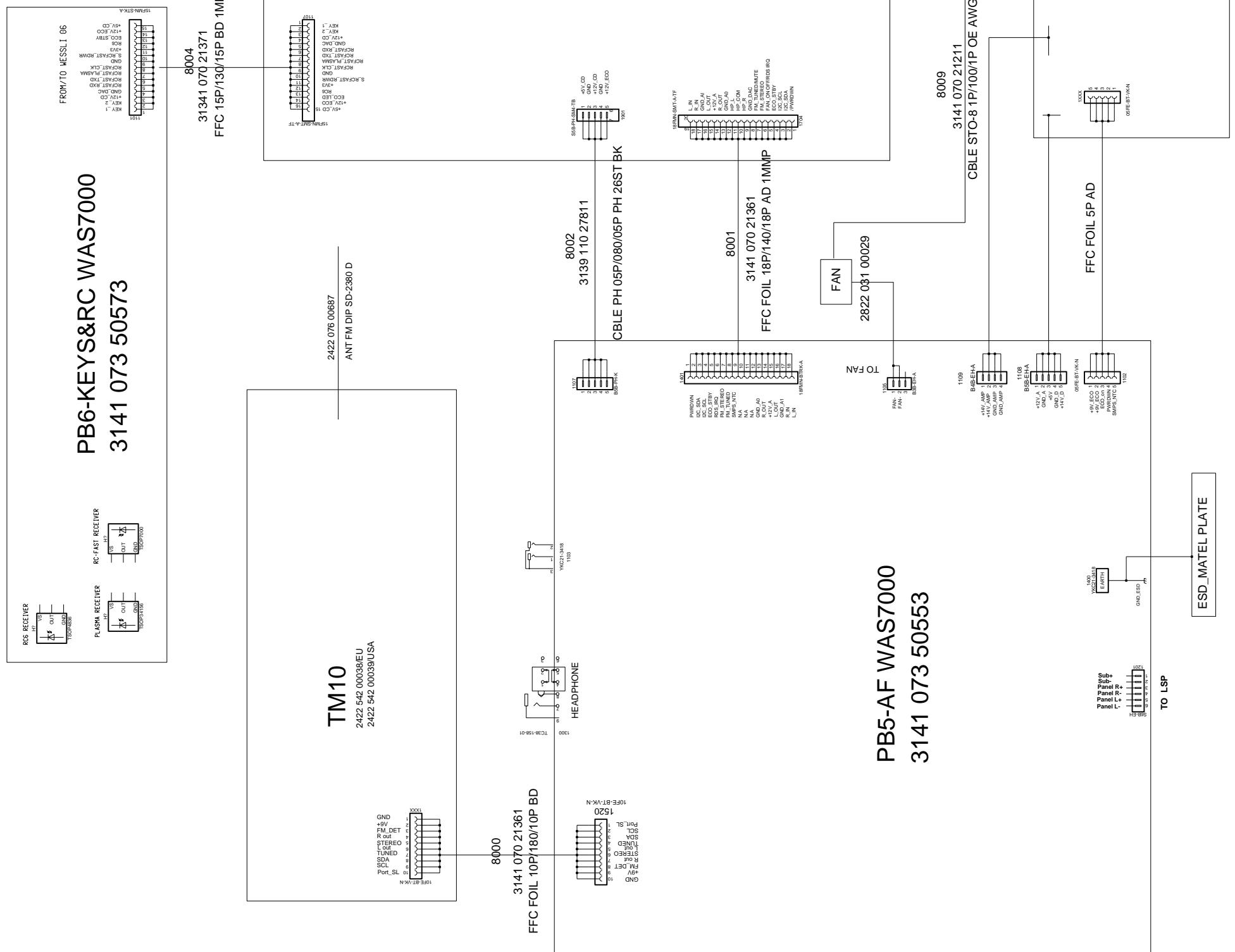
SET BLOCK DIAGRAM(waS7000)



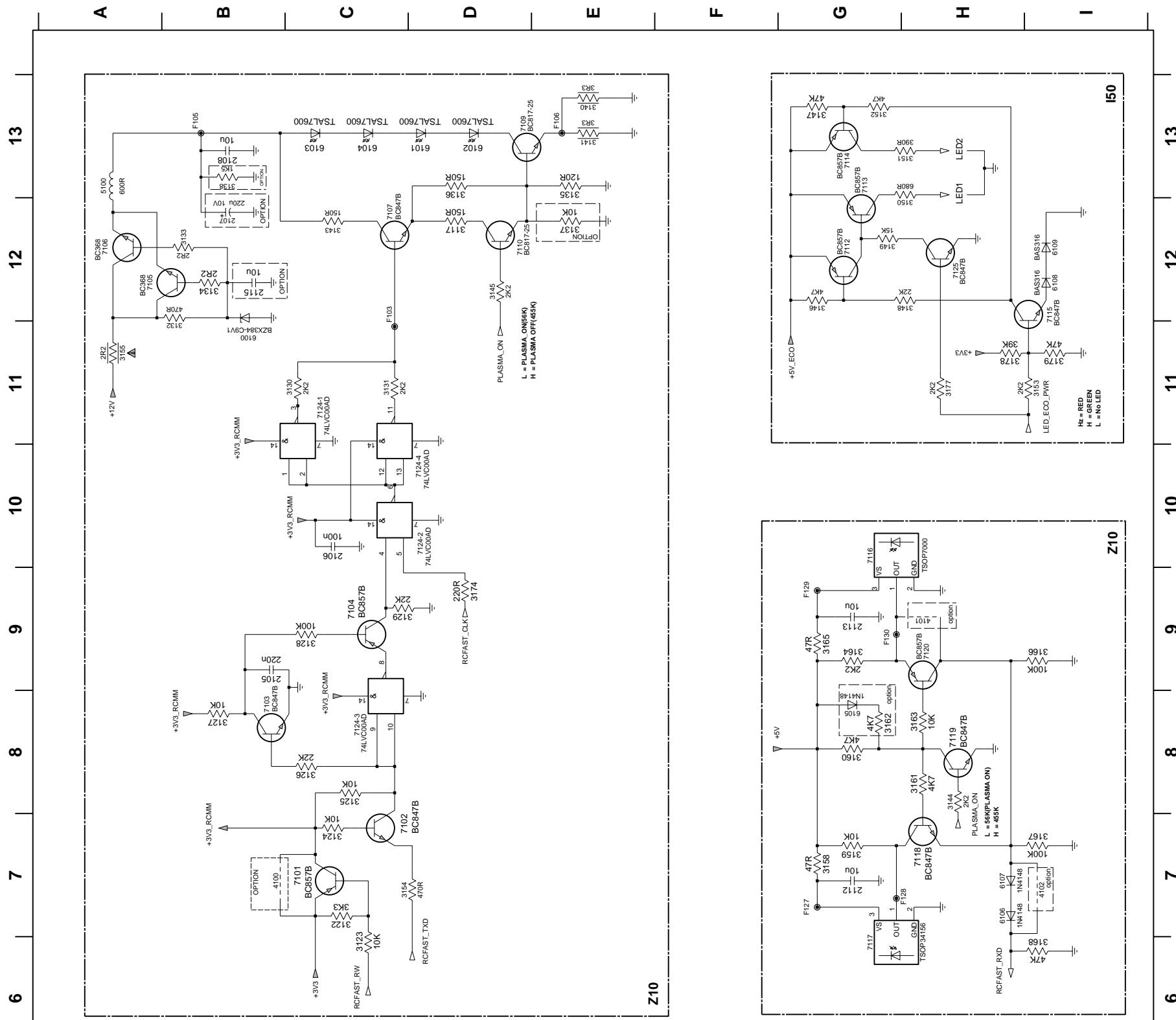
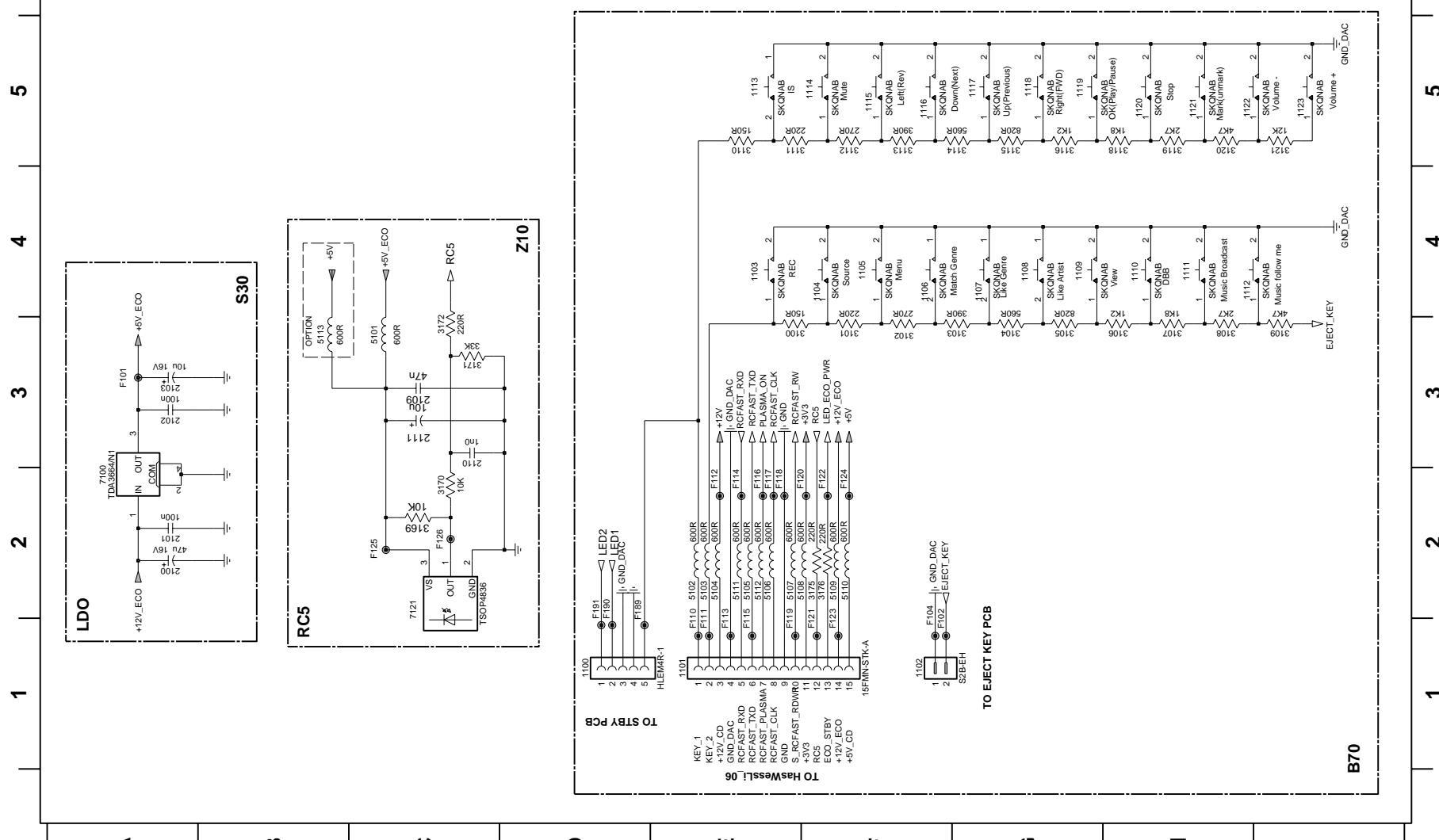
SET WIRING DIAGRAM(waC7000)



SET WIRING DIAGRAM(waS7000)

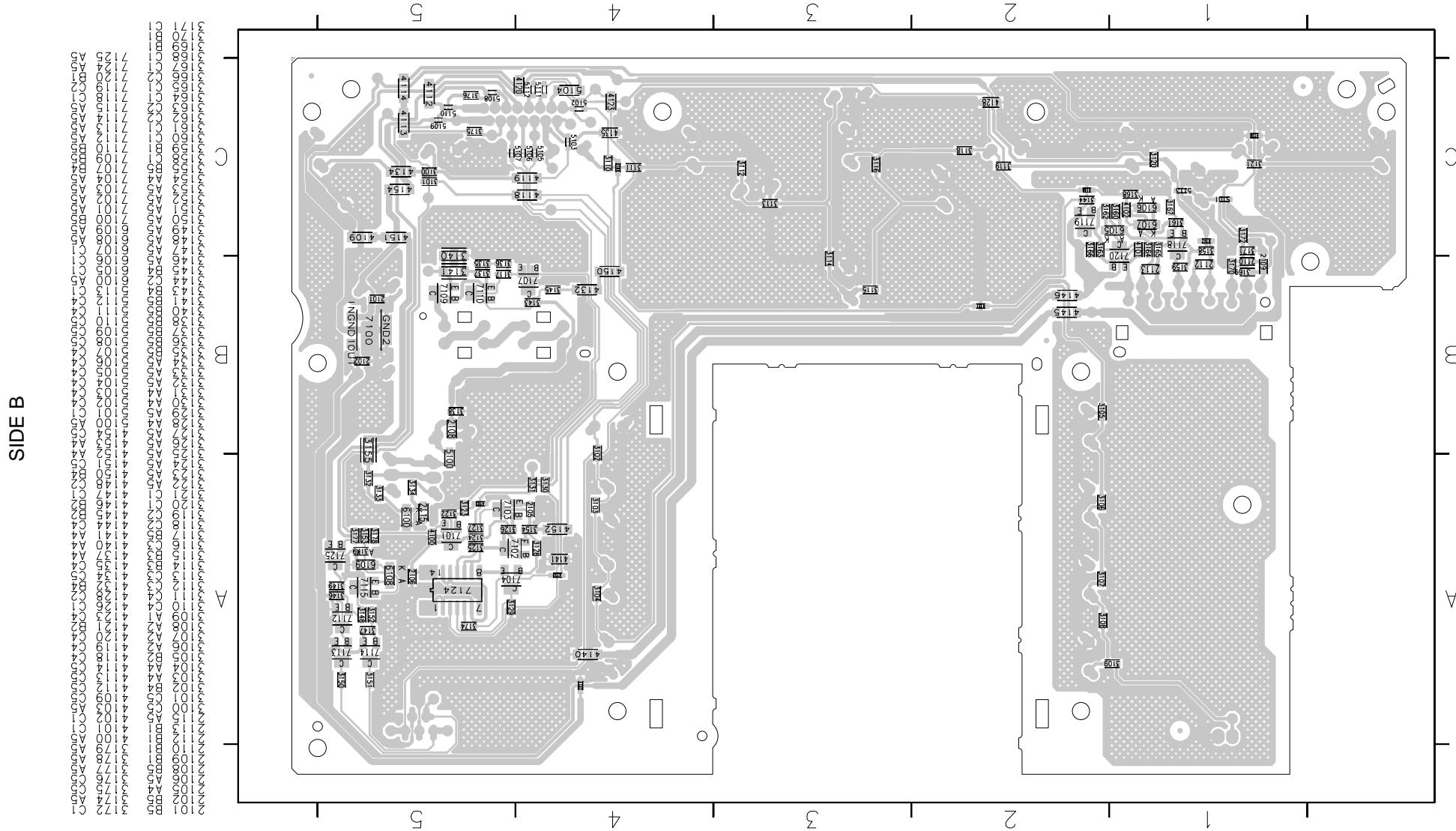


KEY COMBINE PANEL - KEY & RC BOARD(wac7000)



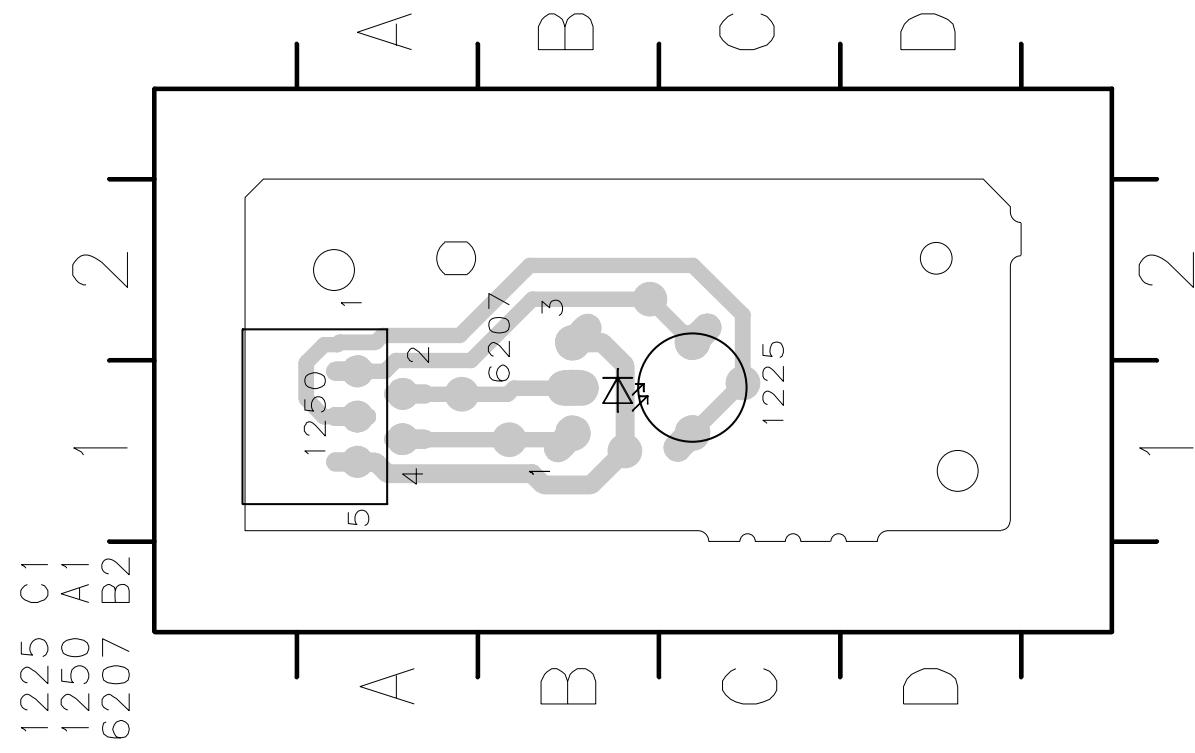
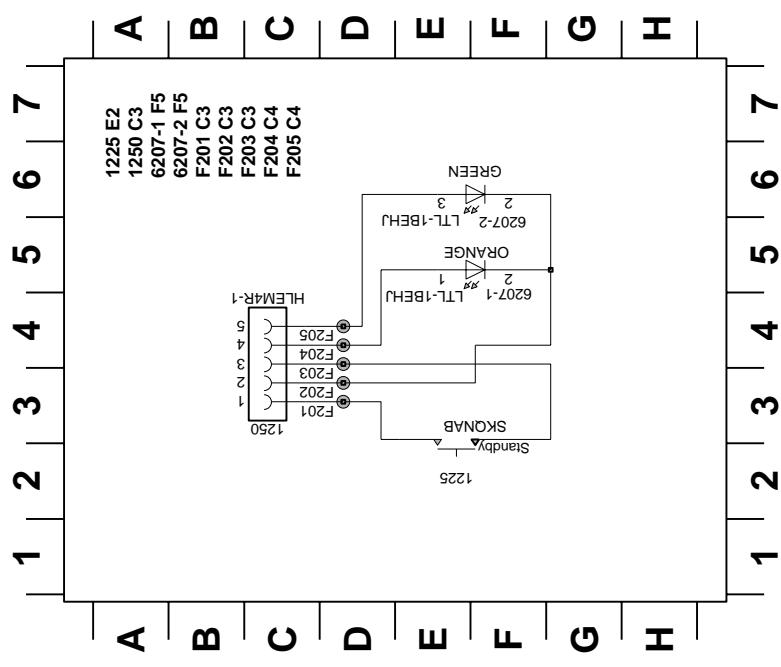
KEYS/ RC BOARD - Layout Diagram(wac7000)

8-2

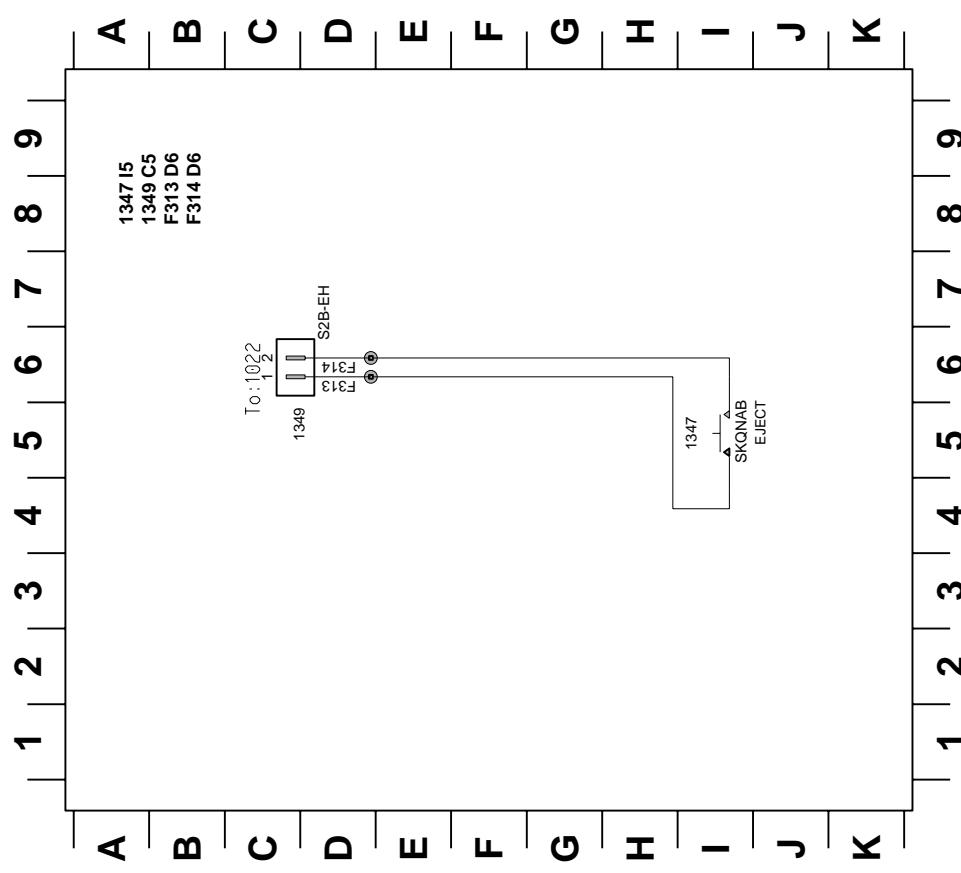


STANDBY KEY BOARD & EJECT KEY BOARD (waC7000)

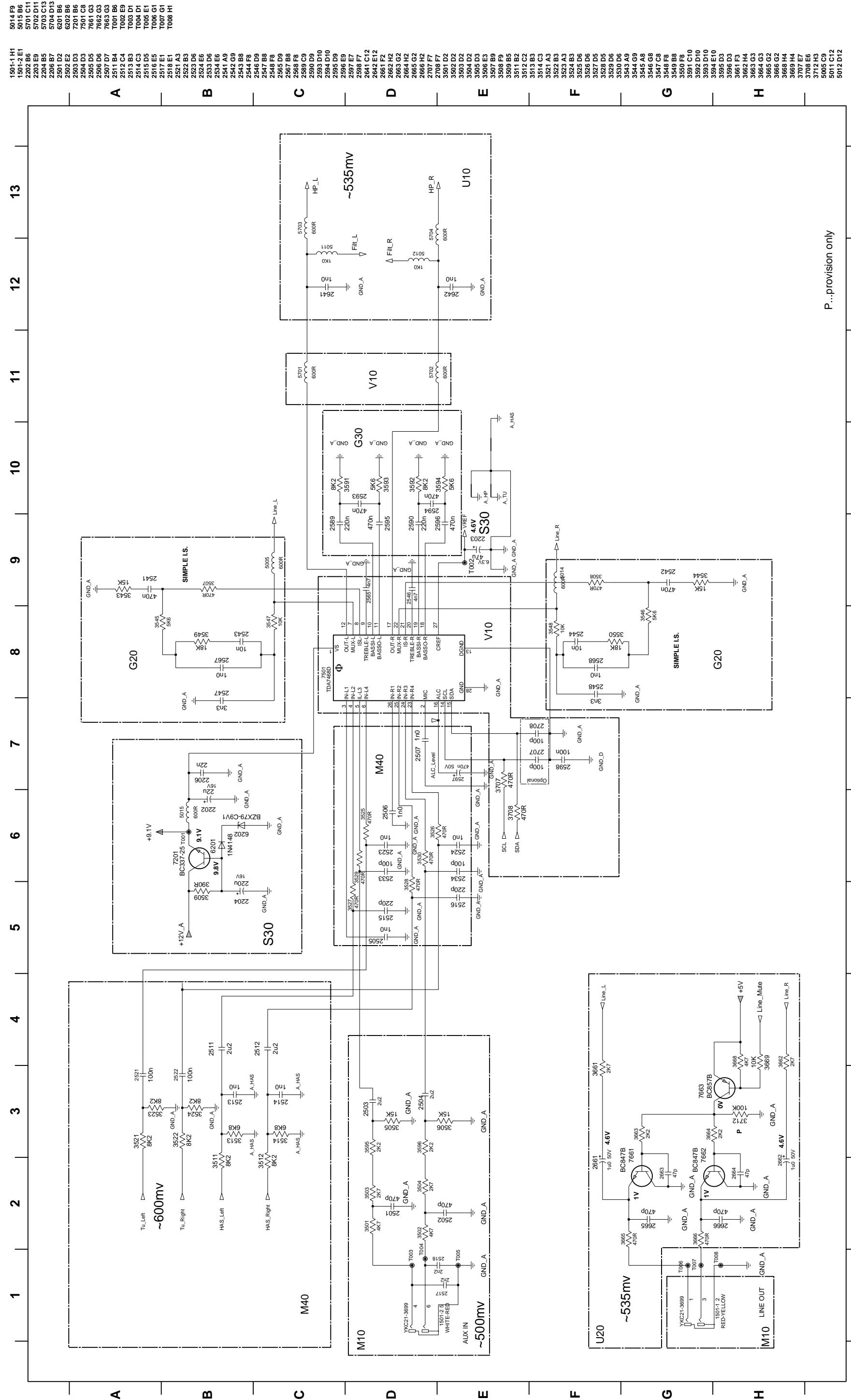
3
-
8



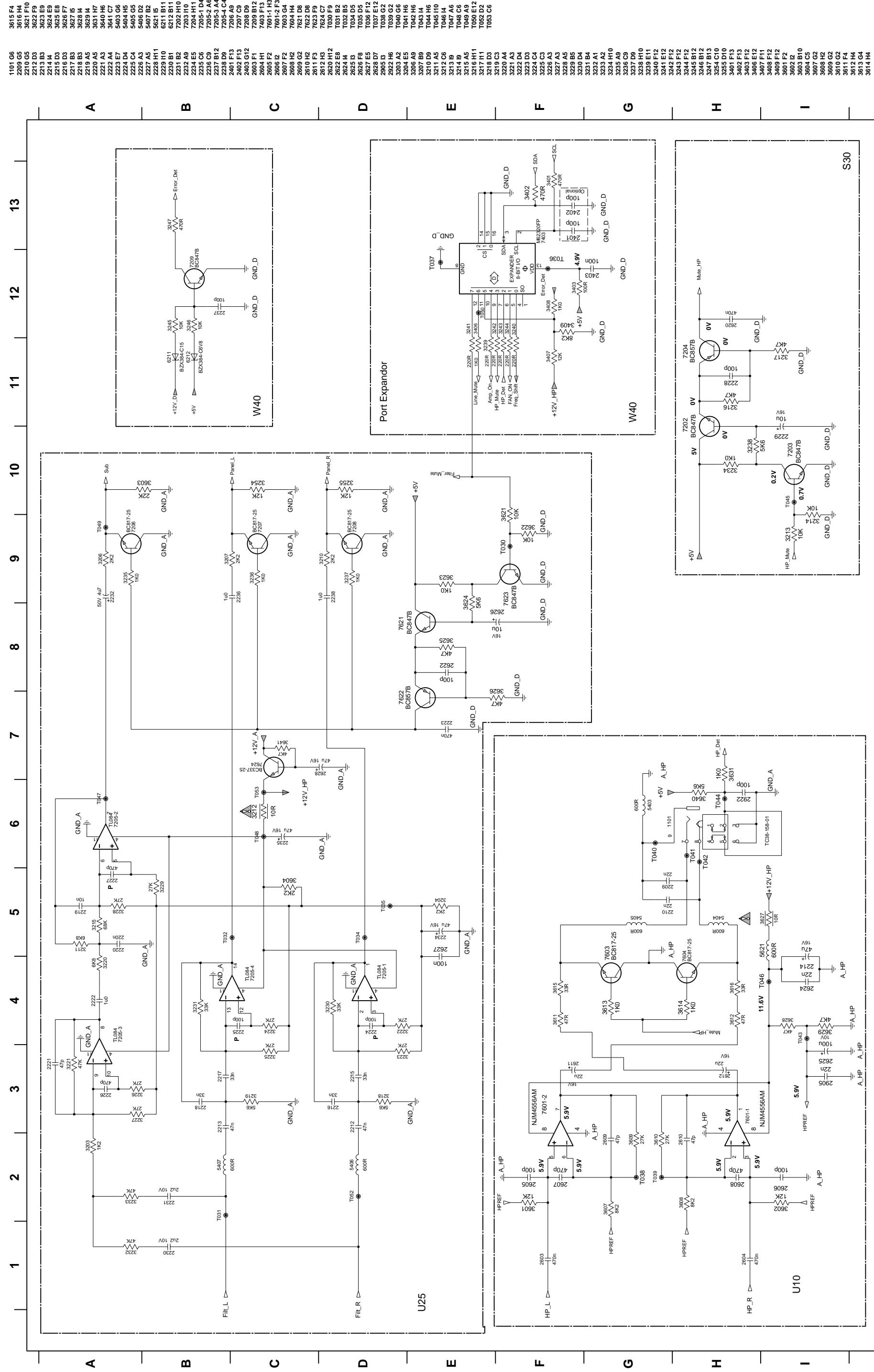
EJECT KEY BOARD



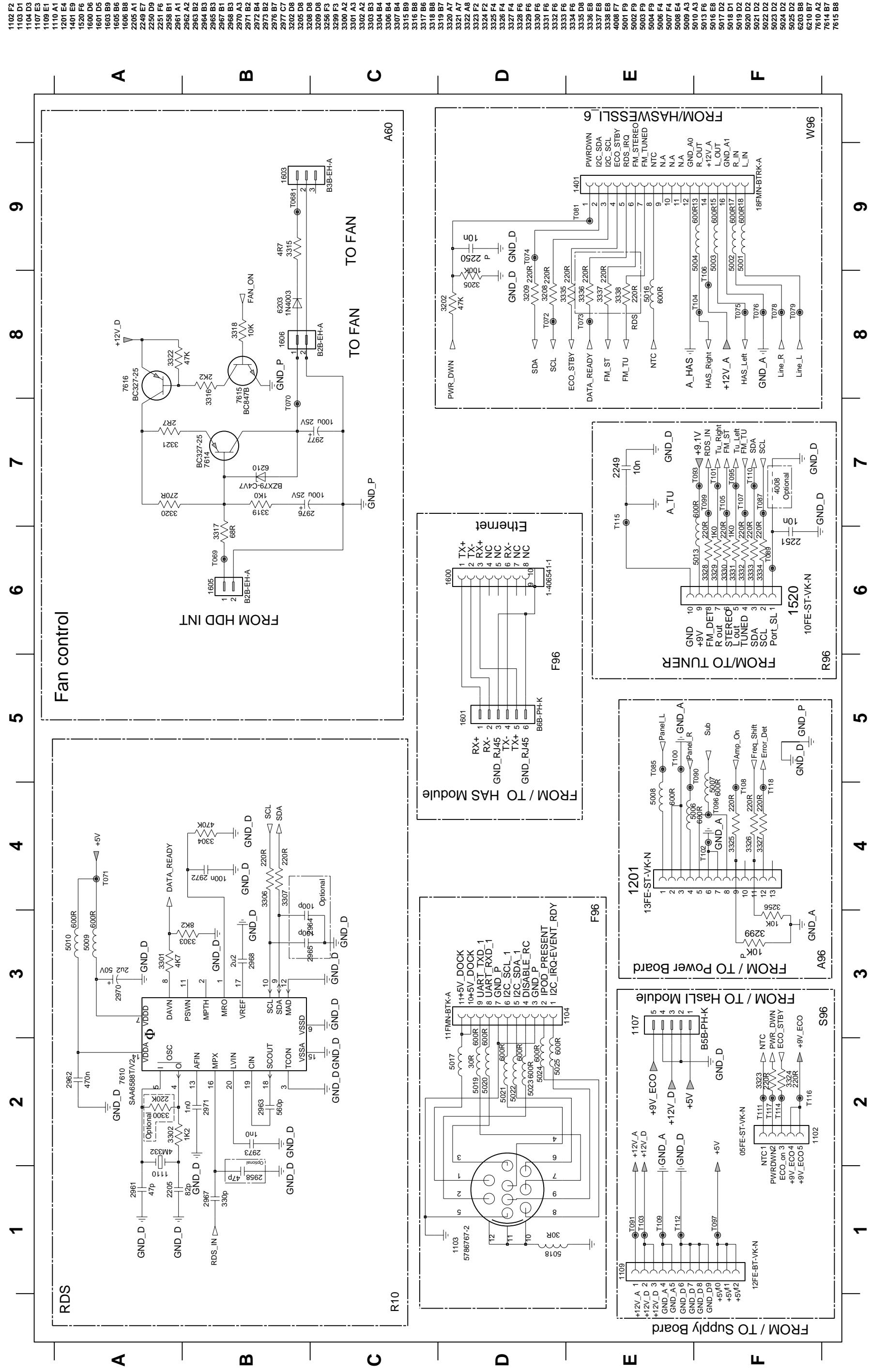
PB5 - AF BOARD - Circuit Diagram (Part1)(wacC7000)



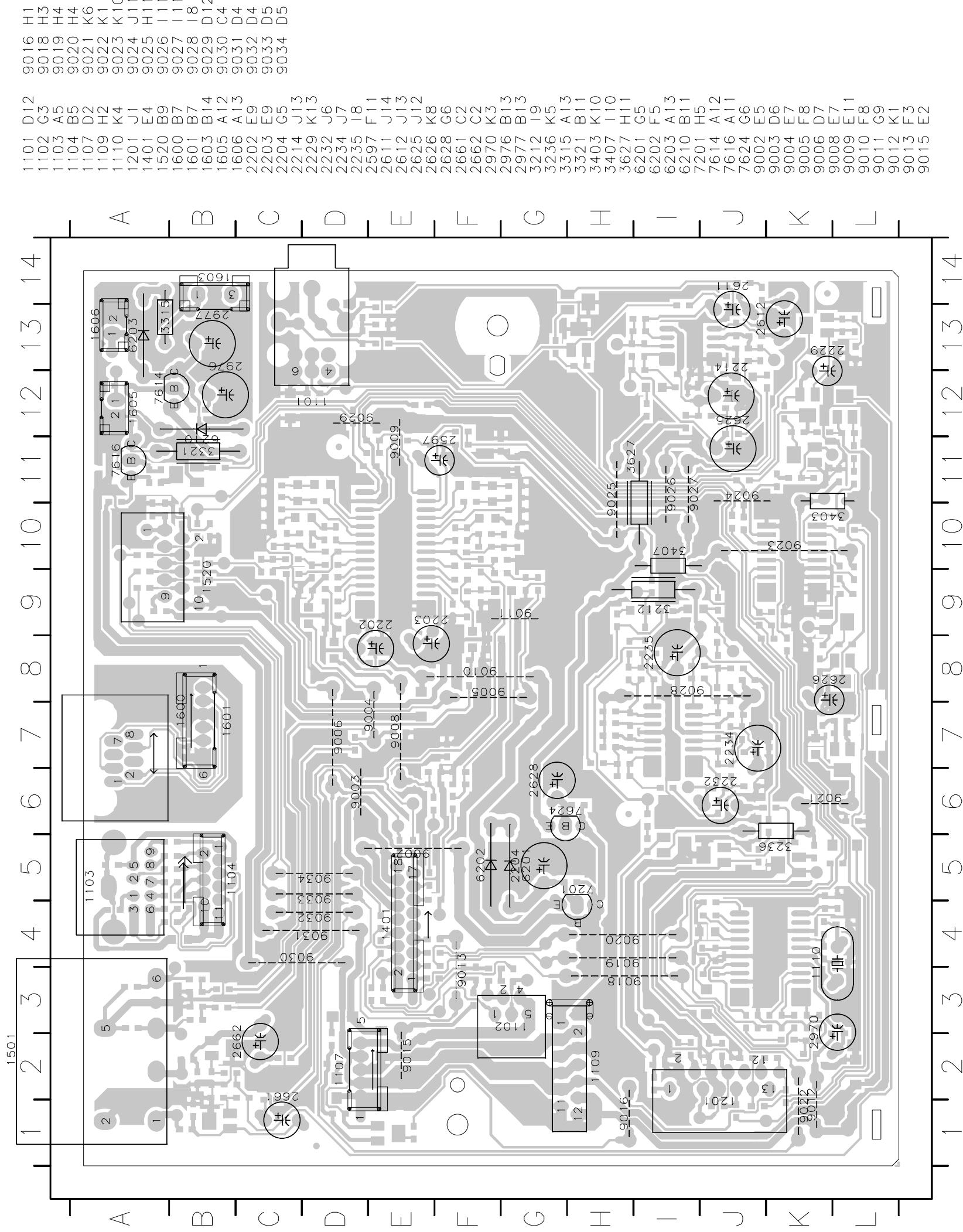
PB5 - AF BOARD - Circuit Diagram (Part2)(wac7000)



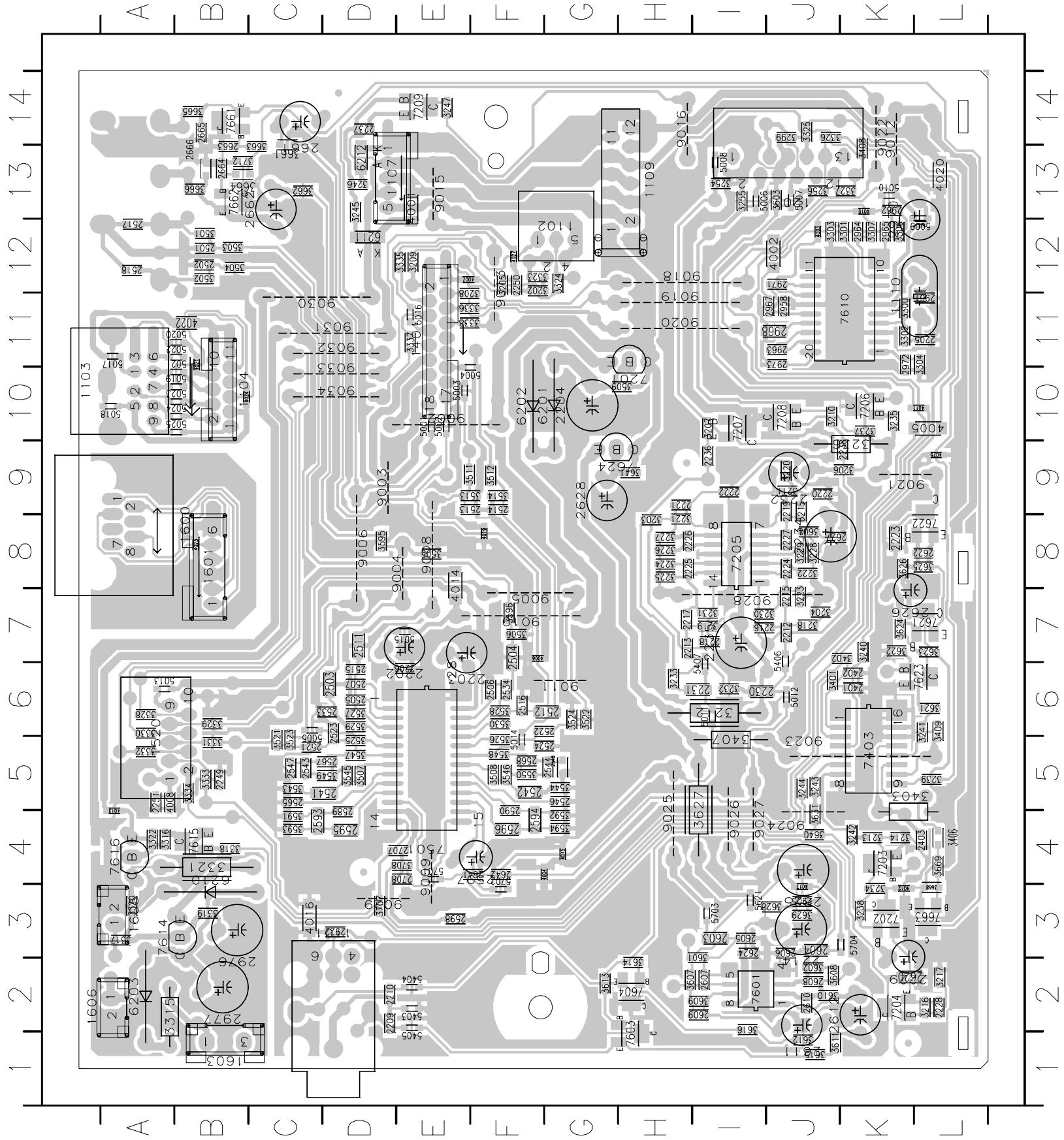
PB5 - AF BOARD - Circuit Diagram (Part3)(wac7000)



PB5 - AF BOARD - Layout Diagram (SideA)(wac7000)

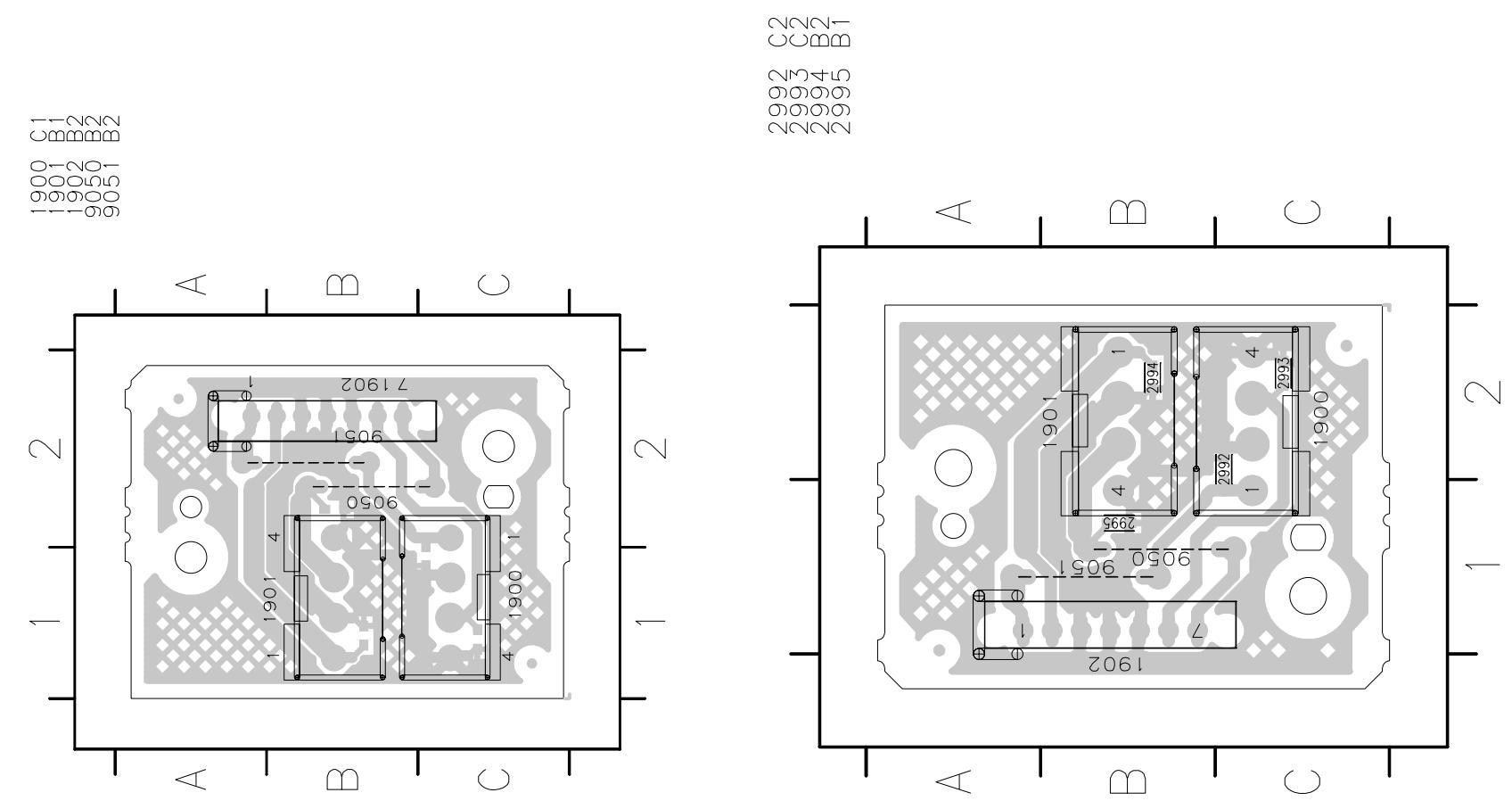
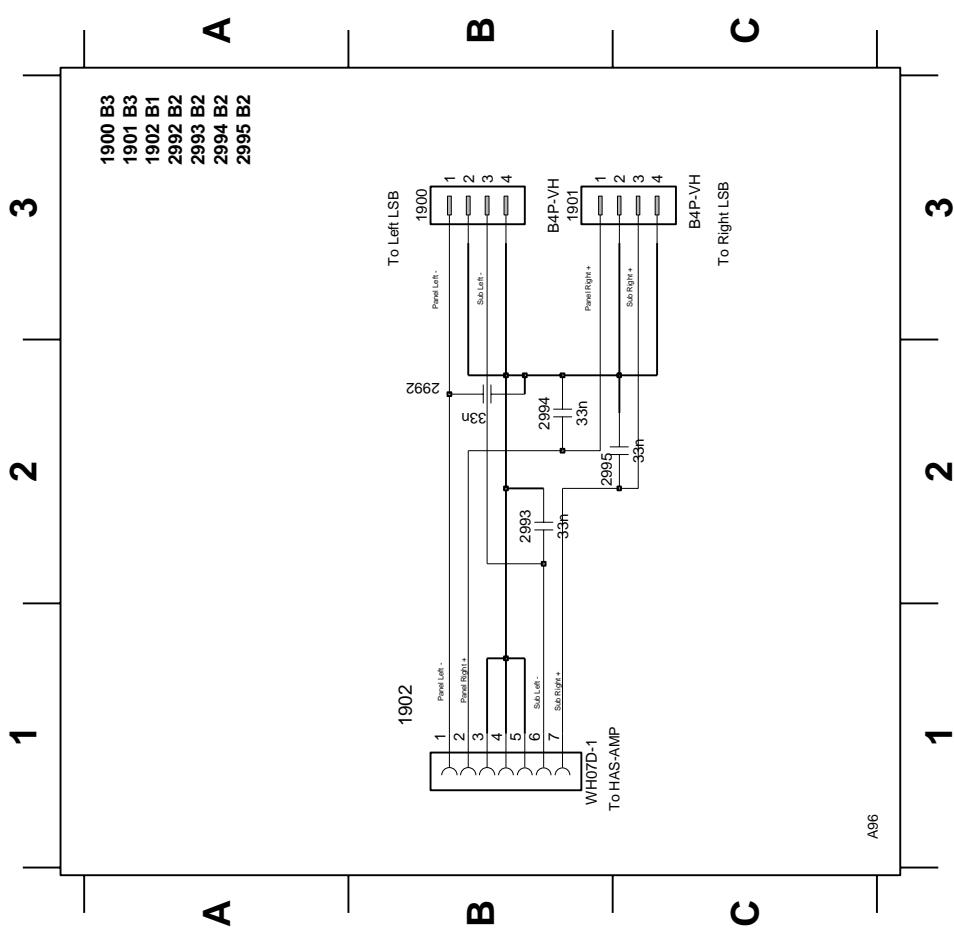


PB5 - AF BOARD - Layout Diagram (SideB)(waC7000)



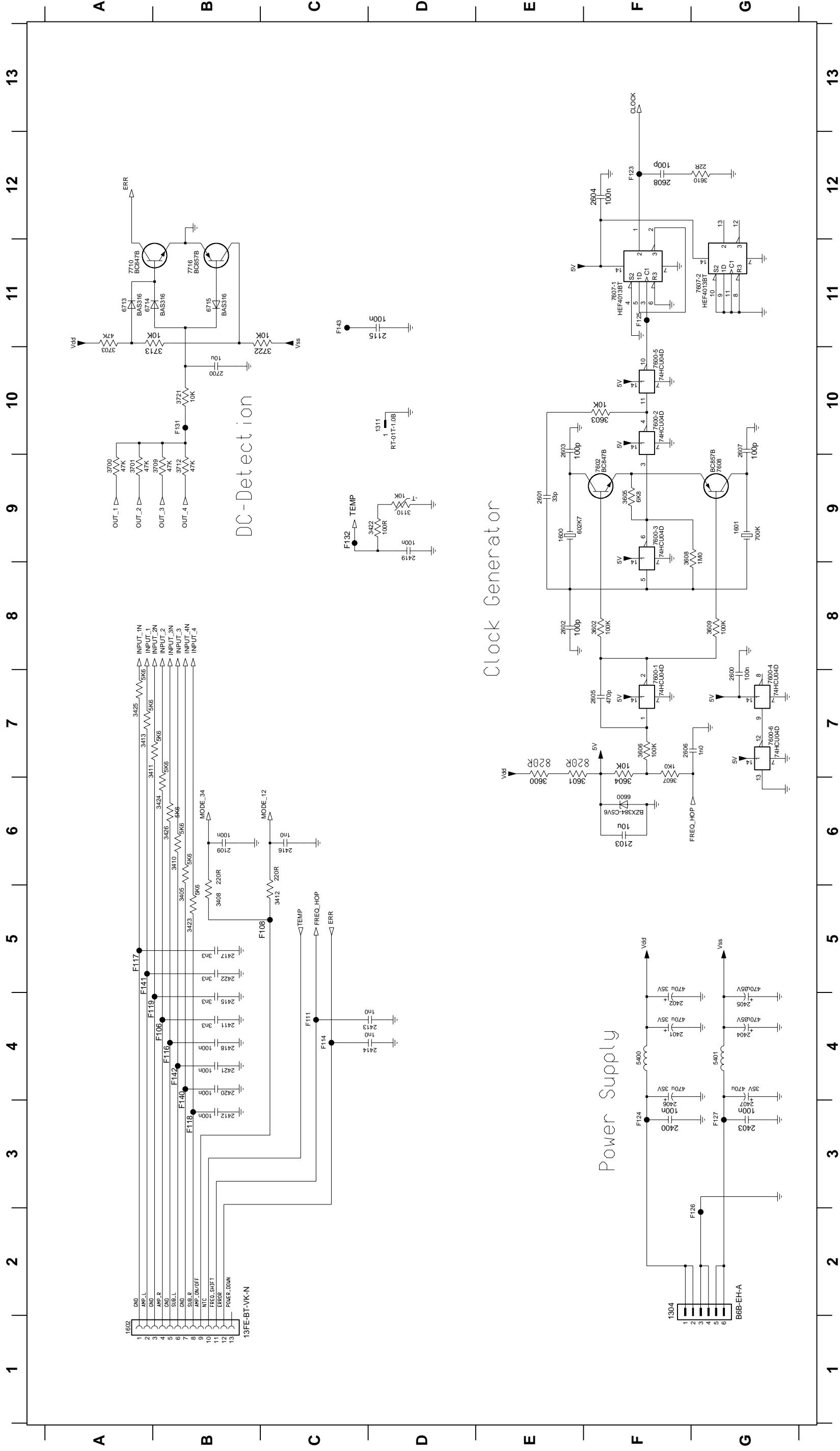
PB9 - AMP SOCKET(waC7000)

6
-6

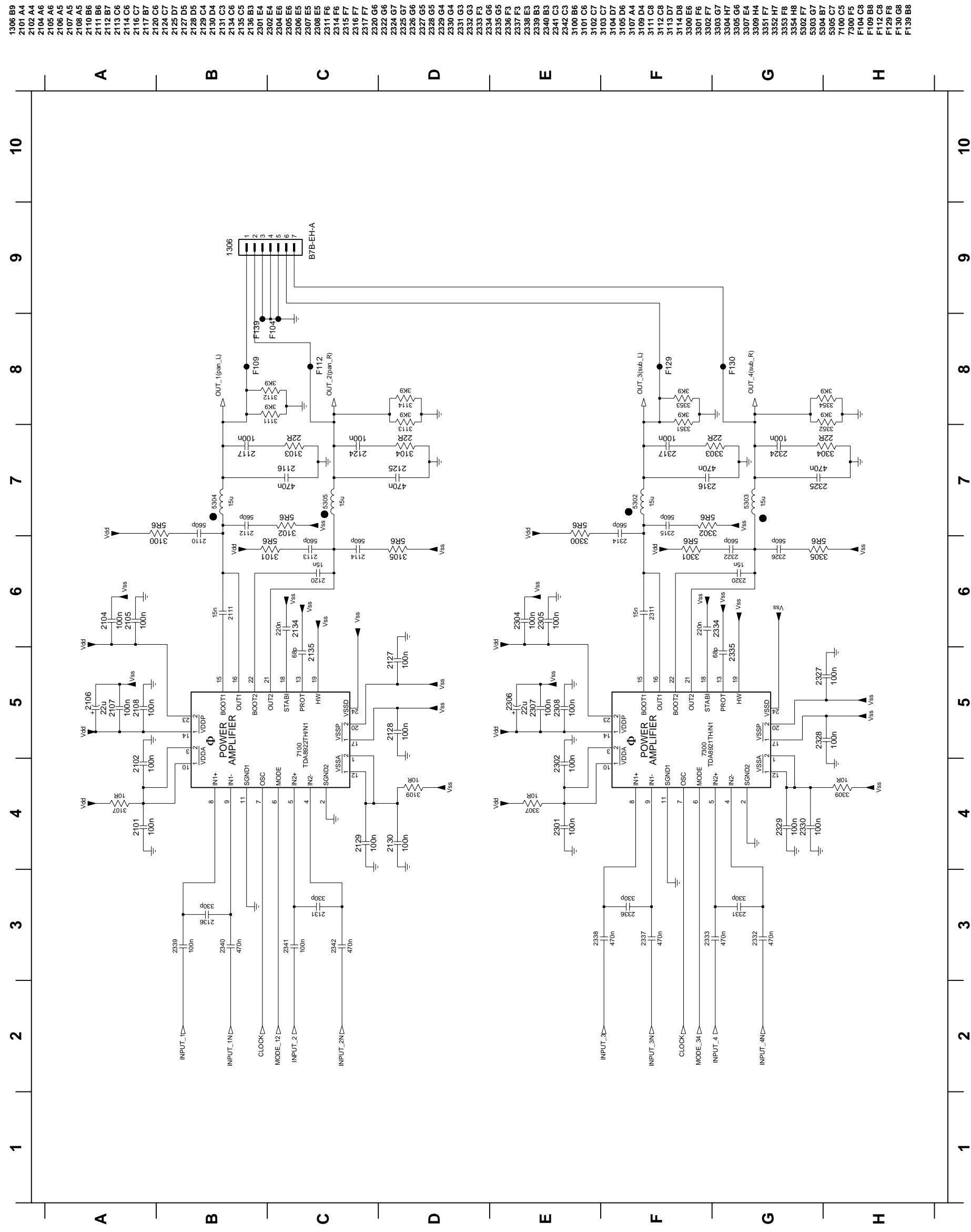


AMPLIFIER BOARD - Circuit Diagram (part 1)(waC7000)

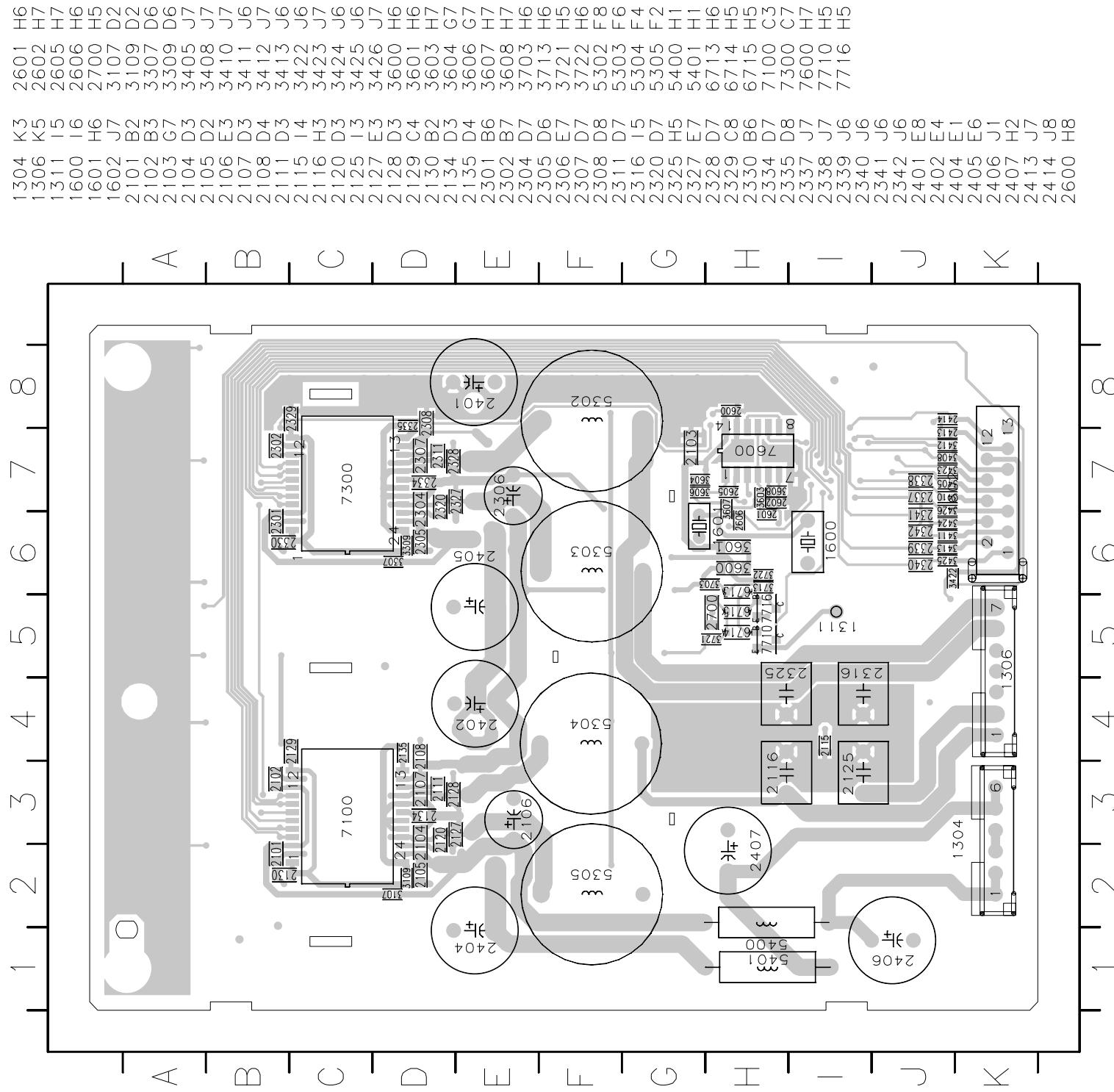
1304 F1	2103 F6	2402 F4	2407 G3	2415 B4	2420 B4	2602 E8	2607 G10	3408 B5	3422 D9	3605 F9	3610 G12	3712 B9	5401 G4	7600-1 F8	7600-6 G7	7710 A11	F114 C4	F131 B10	F123 F12	F132 C9
1311 D10	2108 B6	2403 G3	2411 B4	2416 C6	2421 B4	2603 E10	2608 F12	3410 B6	3423 B5	3601 F6	3606 F7	3700 A9	3713 B10	6800 F6	7600-2 F10	7602 F9	F116 B4	F132 C9		
2115 D11	2404 F1	2412 B3	2417 B5	2422 B5	2421 A7	2604 F12	2700 B10	3411 A7	3424 B6	3602 F8	3607 F9	3701 A9	3721 B10	6713 A11	7600-3 F9	7607-1 F11	F106 B4	F140 B4		
1601 G9	2400 F3	2405 G4	2413 D4	2418 B4	2419 D4	2600 G7	2605 F7	3110 D9	3425 A7	3603 F10	3608 F9	3703 A10	3722 C10	6714 A11	7600-4 G8	7607-2 G11	F117 B5	F141 A5		
1602 A1	2401 F4	2406 F3	2414 D4	2419 D9	2601 E9	2606 F7	3405 B6	3426 B6	3604 F6	3609 G8	3709 B9	3722 C10	6715 B11	7600-5 F10	7608 G9	F118 B3	F127 G3	F142 B4		



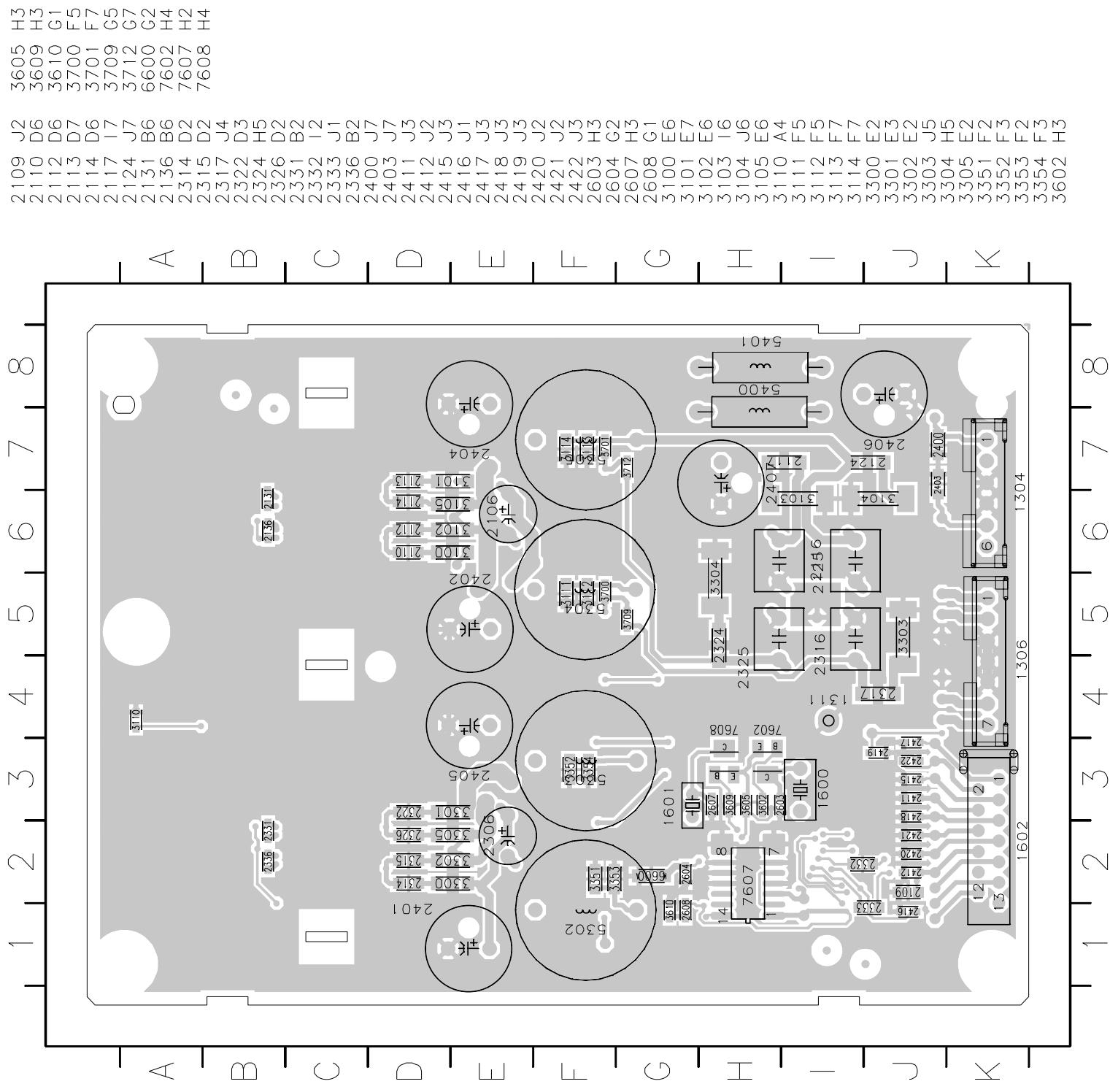
AMPLIFIER BOARD - Circuit Diagram (part 2)(waC7000)



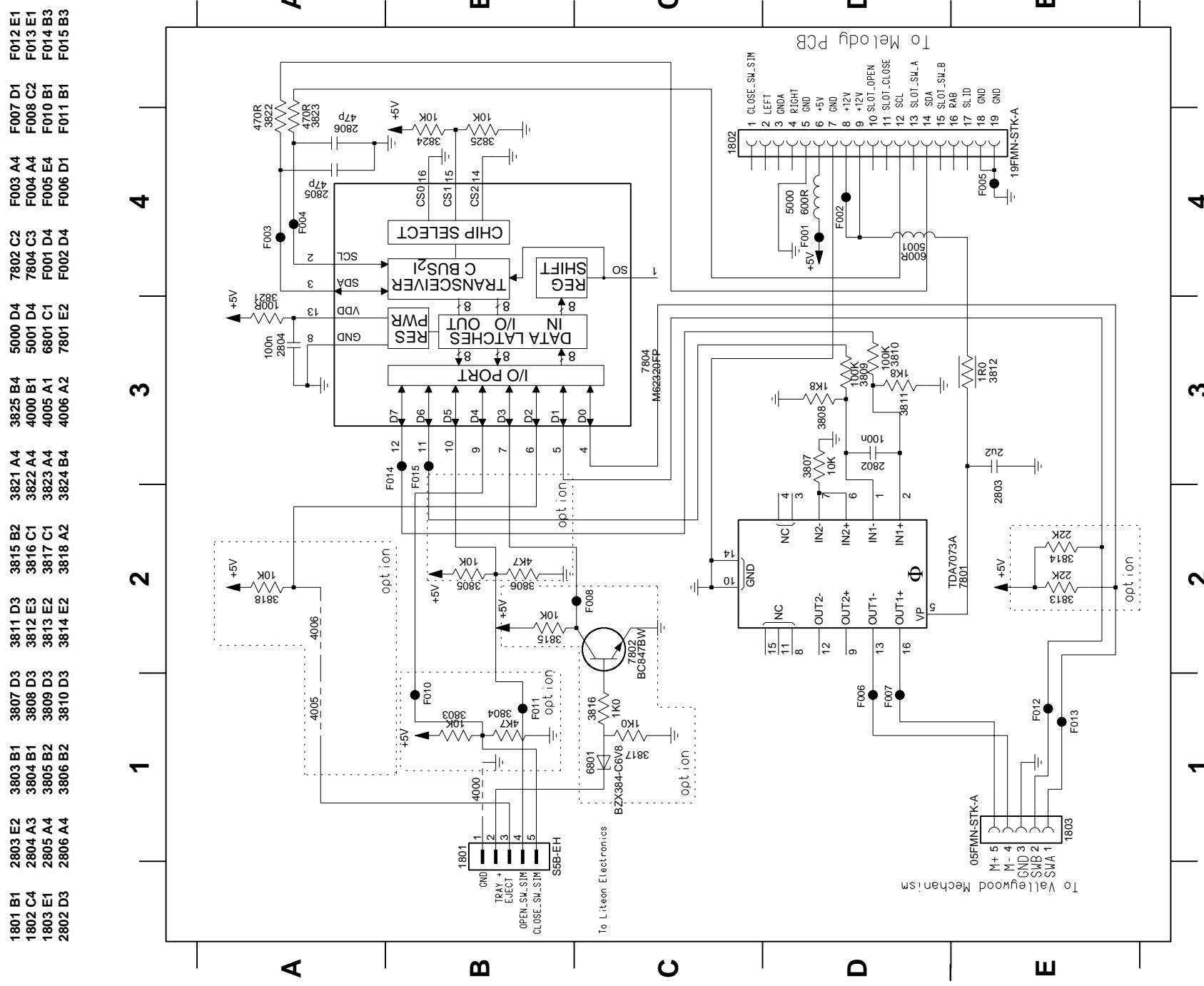
AMPLIFIER BOARD - Layout Diagram (side A)(waC7000)



AMPLIFIER BOARD - Layout Diagram (side B)(waC7000)

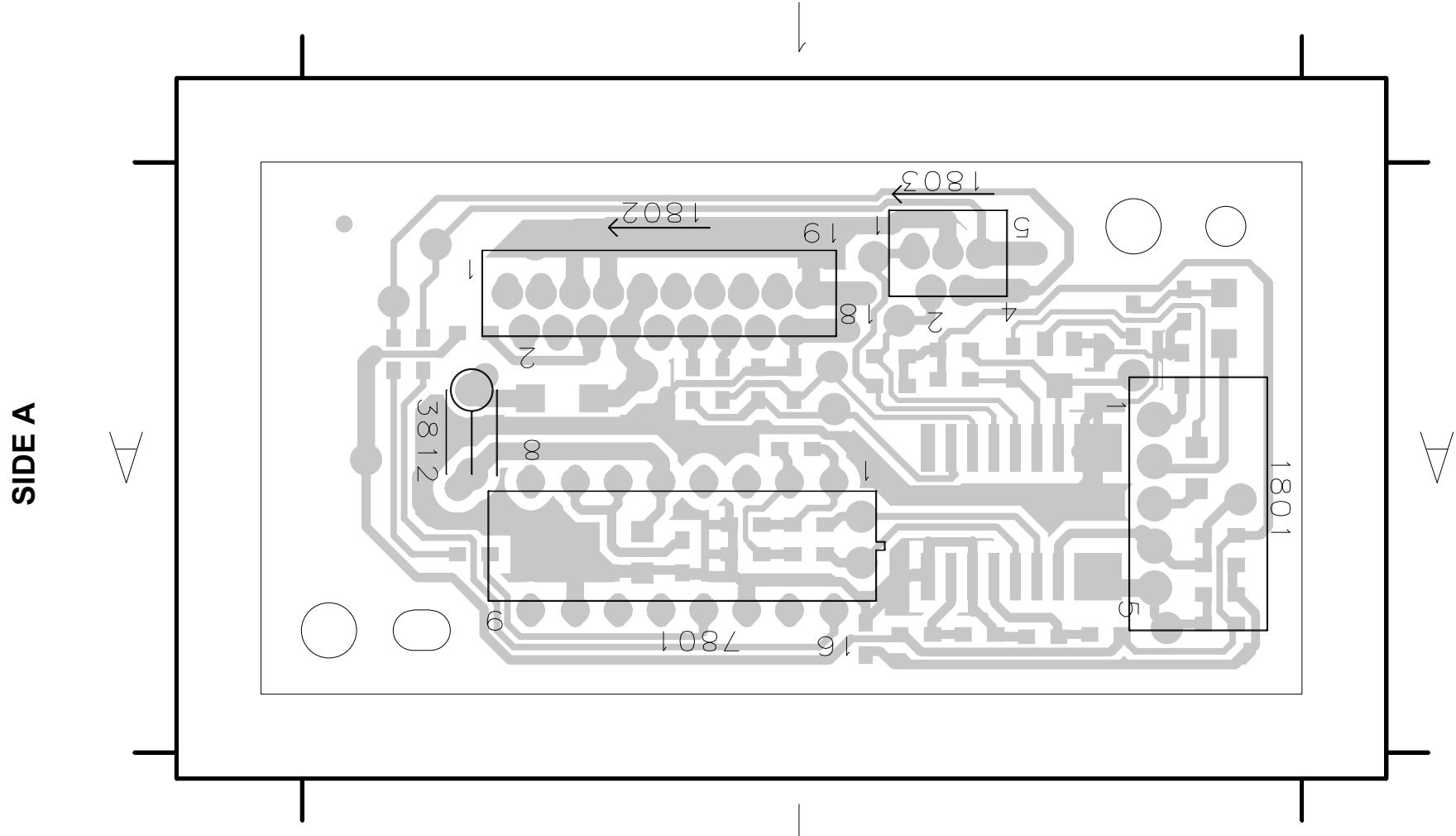
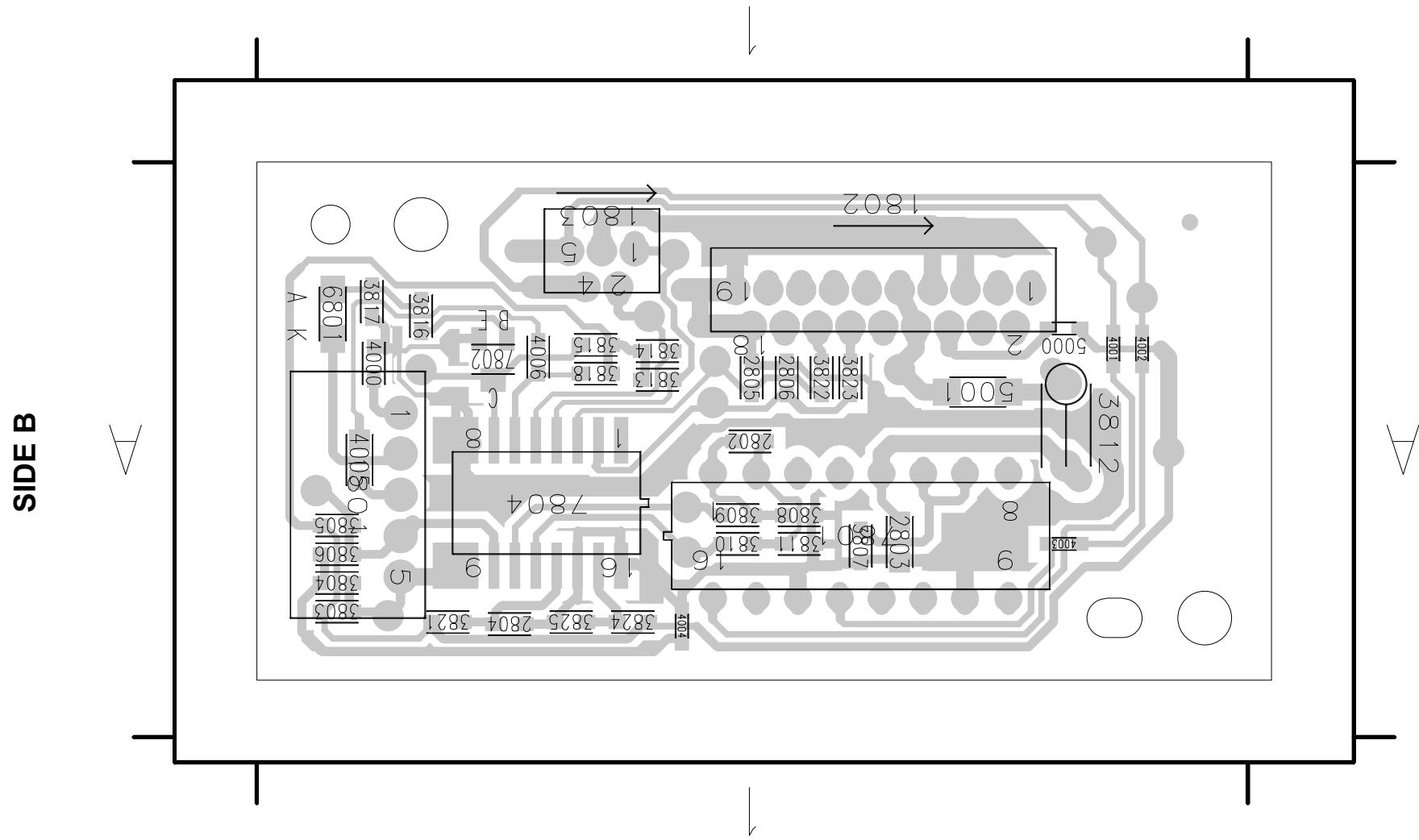


SLOT DVD LOADER CONTROL BOARD - Circuit Diagram (wac7000)



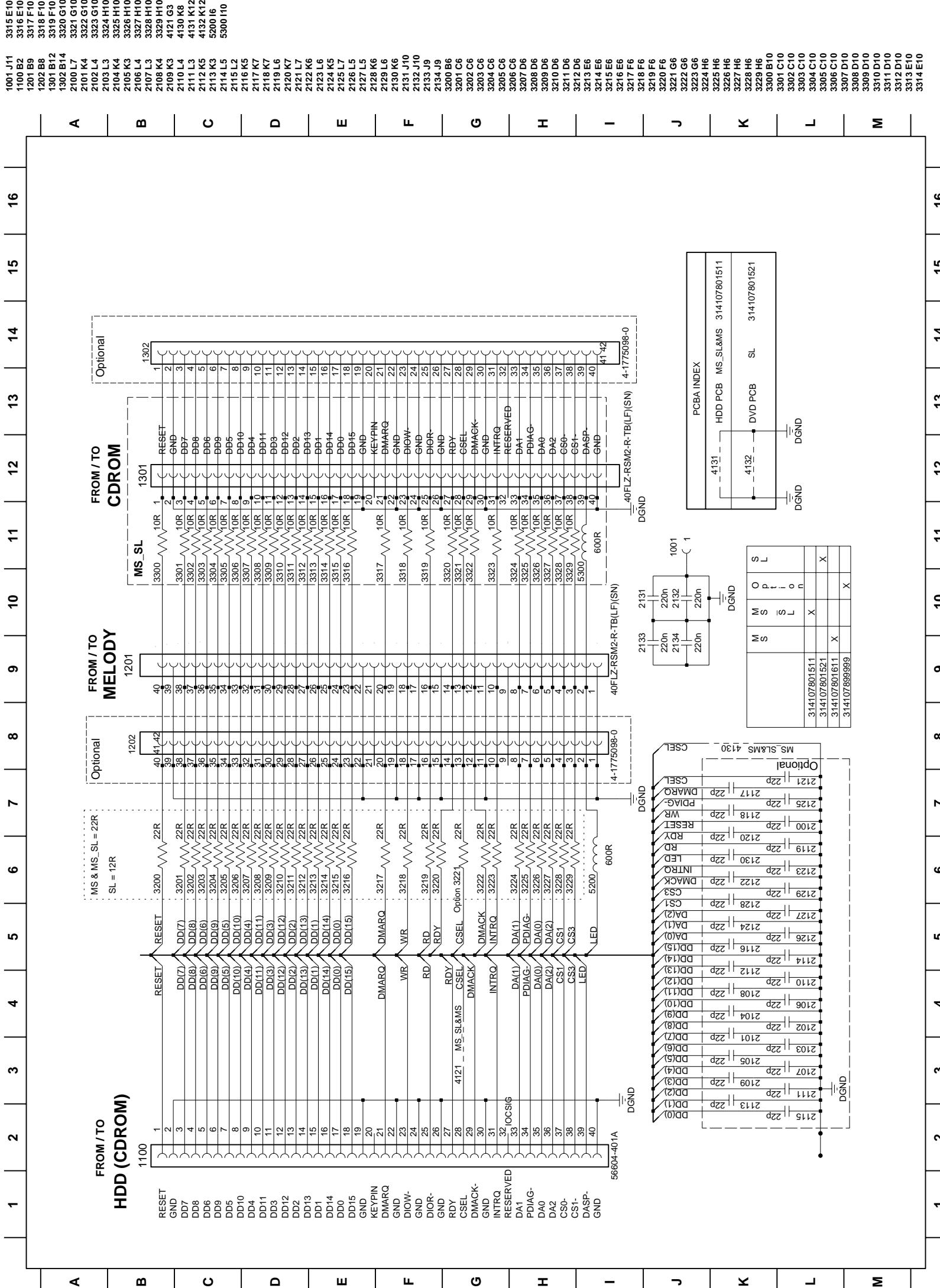
SLOT DVD LOADER CONTROL BOARD - Layout Diagram (wac7000)

12 - 2



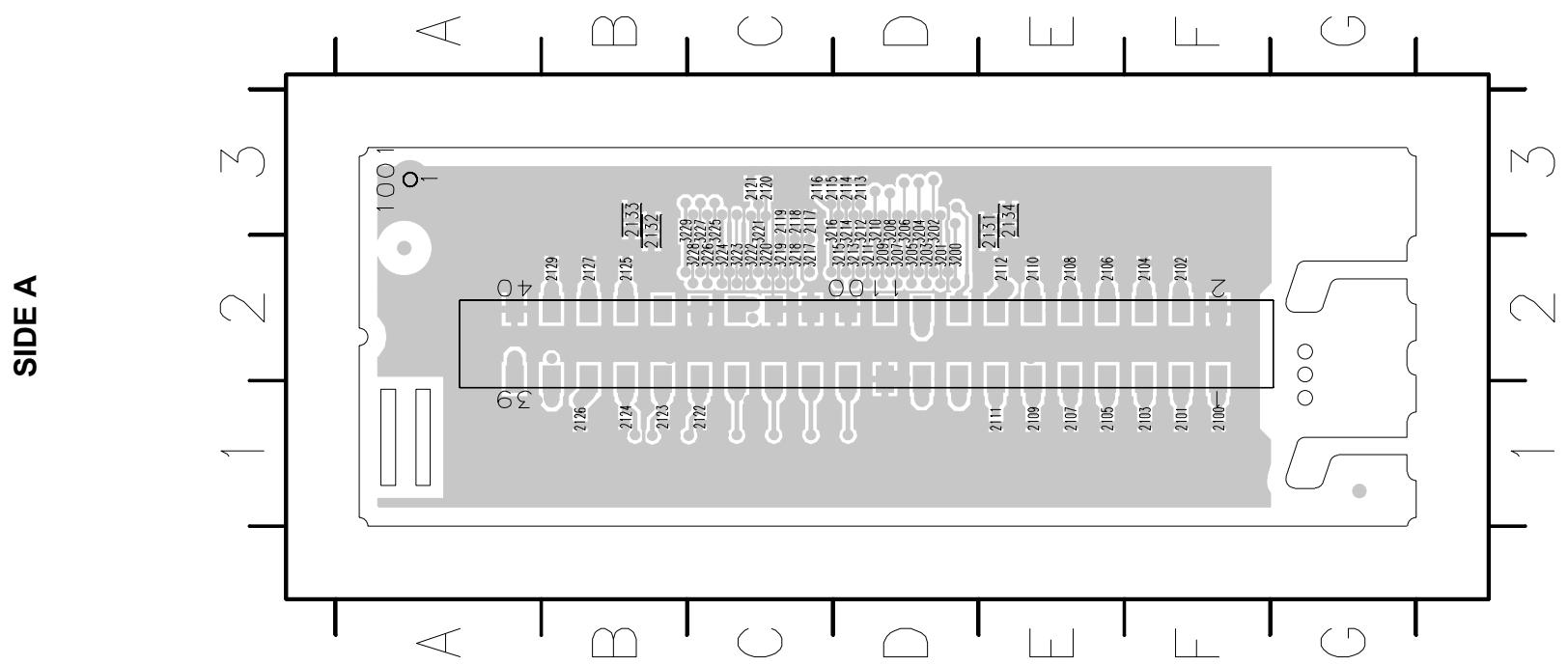
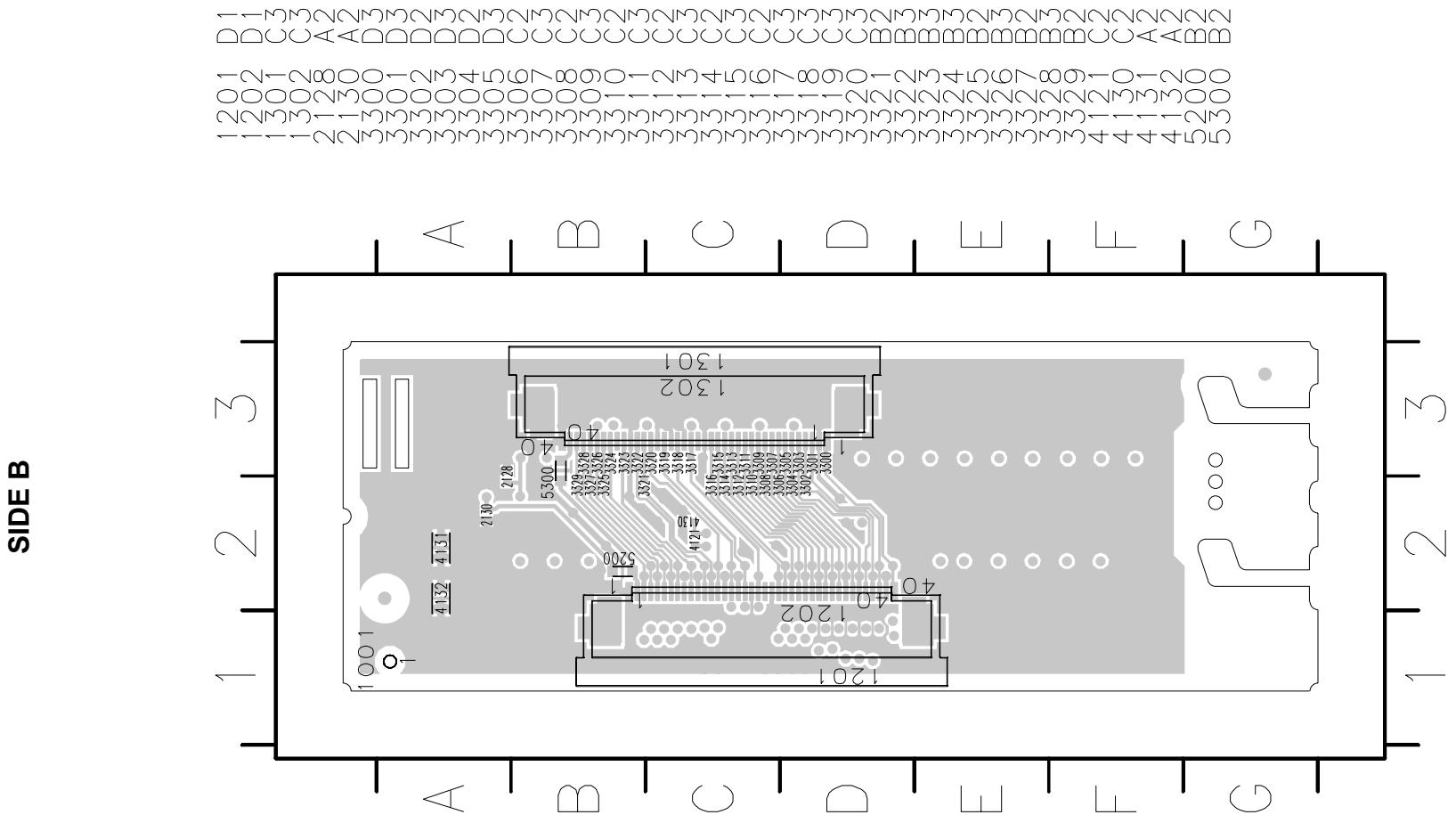
— — — — —
A A A A A
— — — — —
O O O — O
O O O O O O O O
— — — — —

PB - ATA - MS/SL Interface - Circuit Diagram (waC7000)

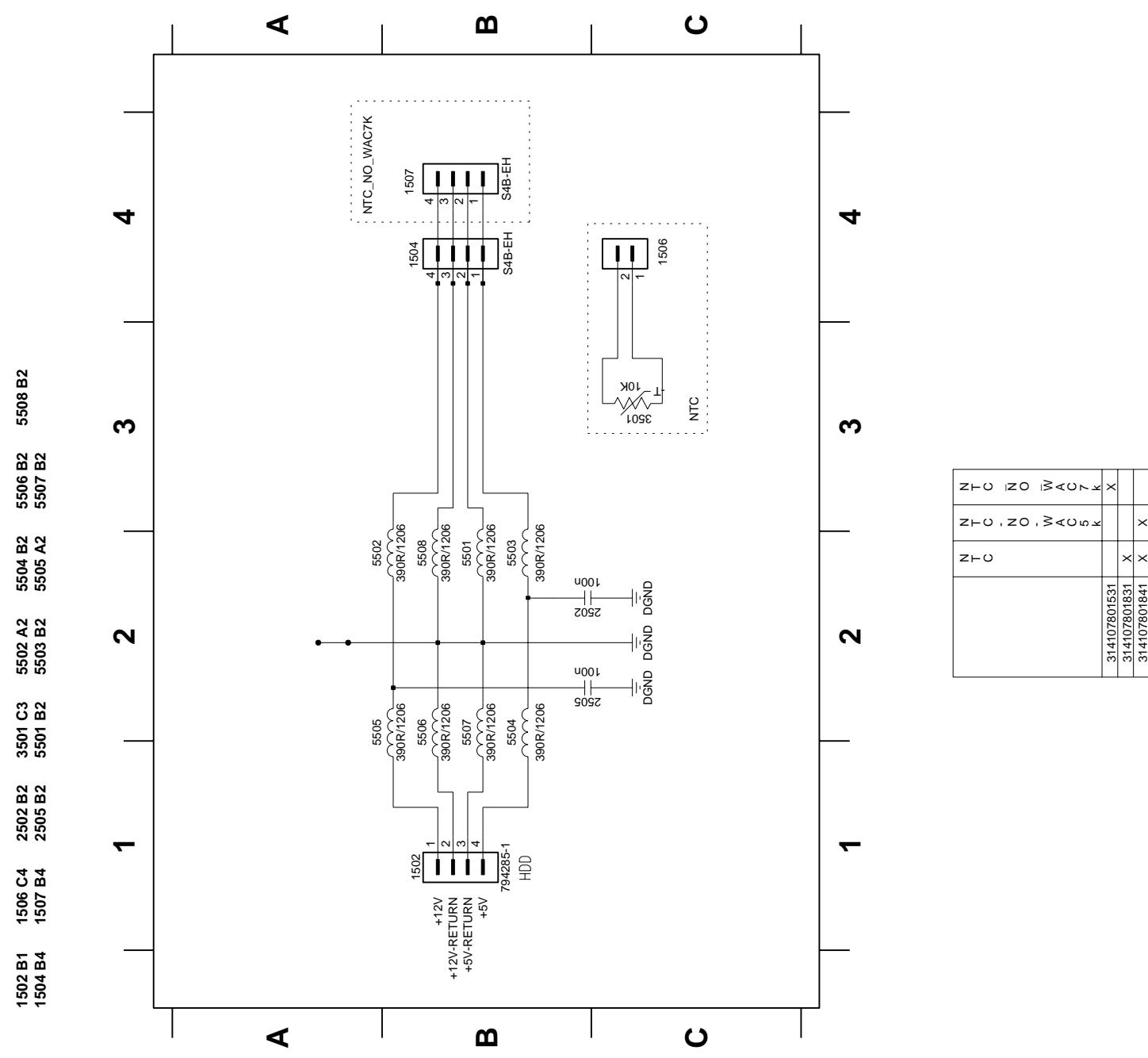


PB - ATA - MS/SL Interface - Layout Diagram (wac7000)

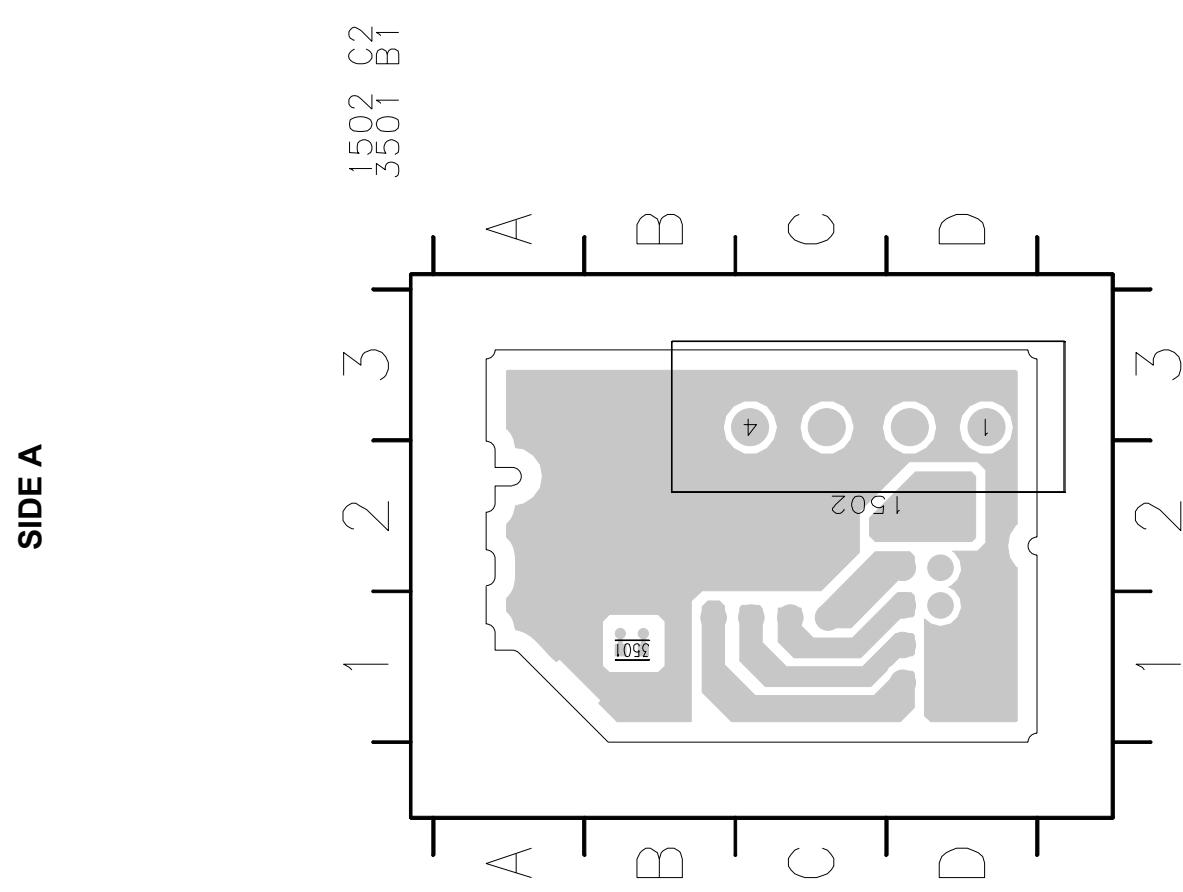
12 - 4



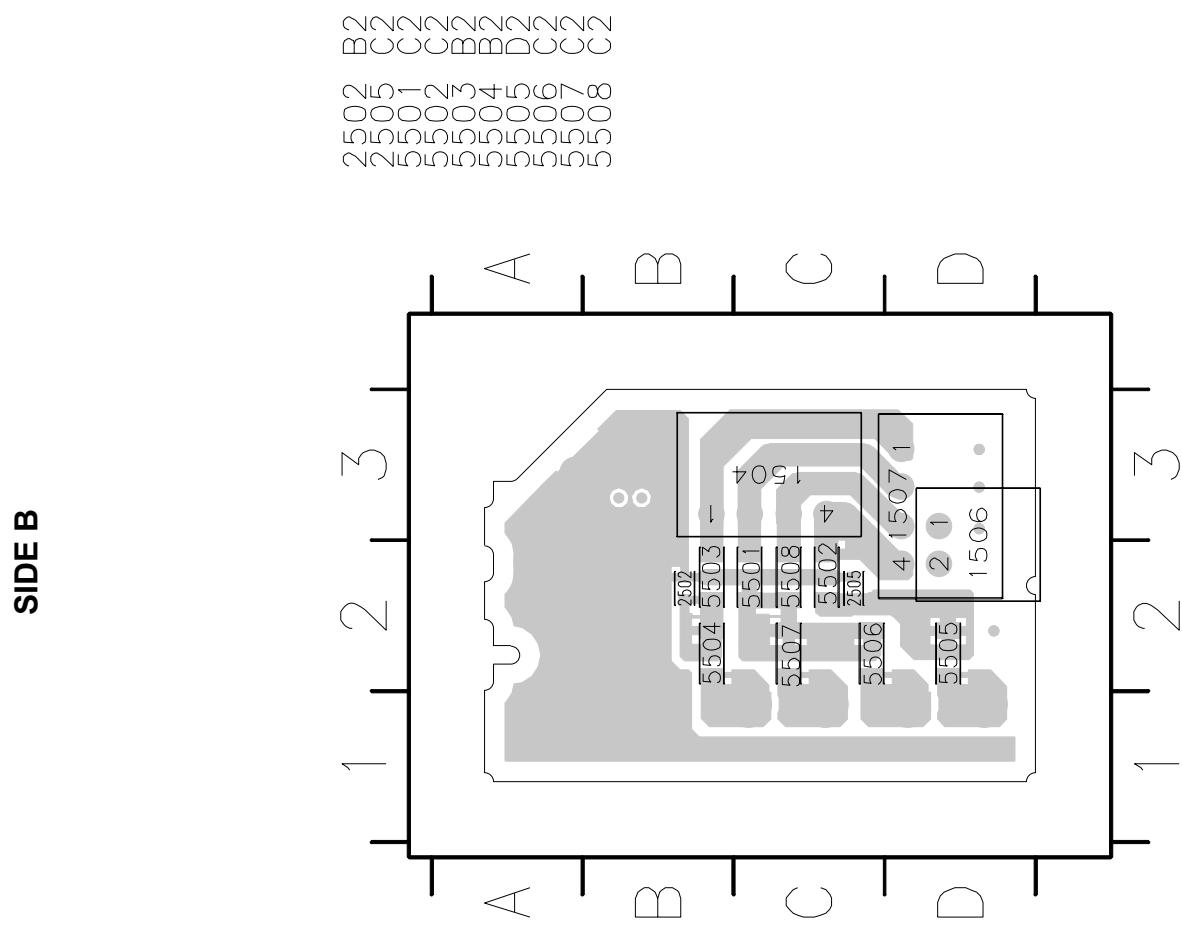
PB - ATA - PW Interface - Circuit Diagram (waC7000)



PB - ATA - PW Interface - Layout Diagram (waC7000)



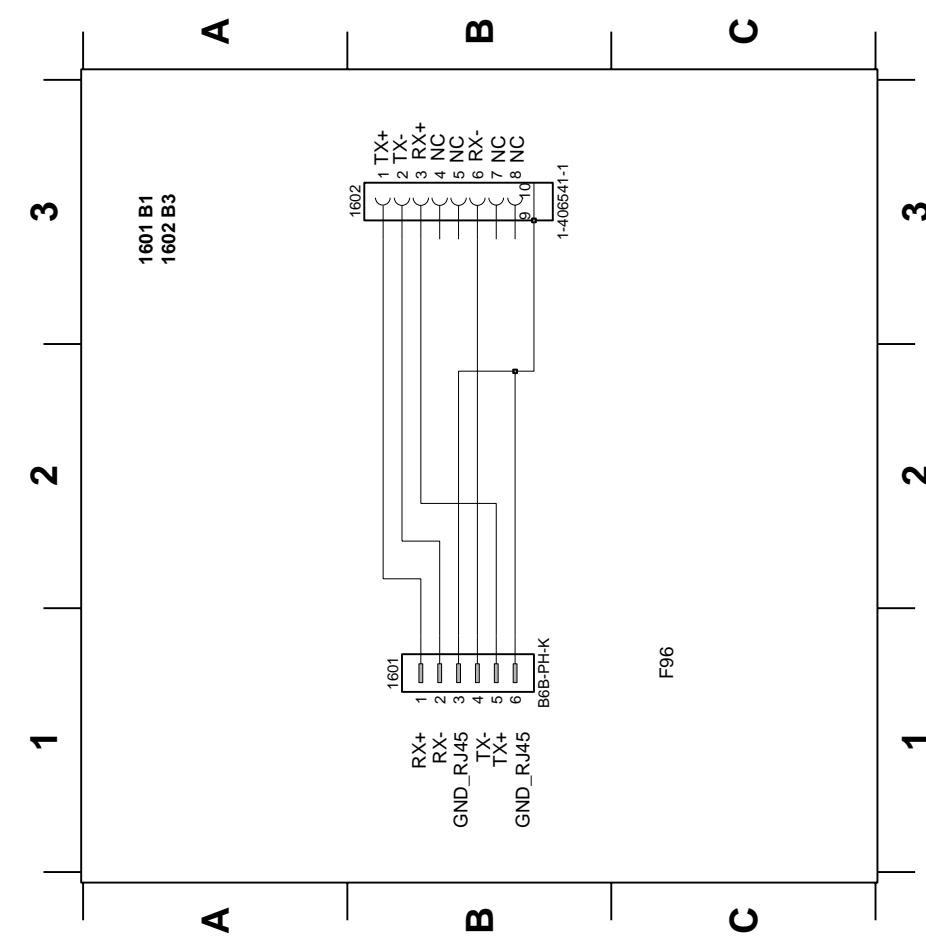
SIDE B



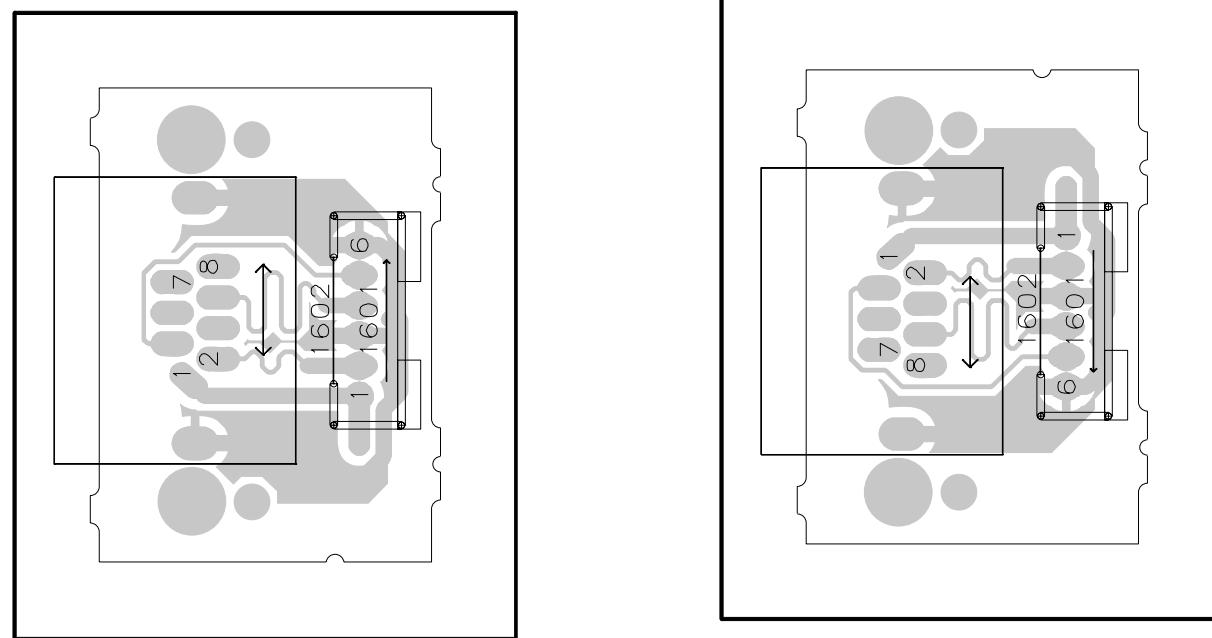
PB9 - Ethernet Interface (waS7000)

13 - 1

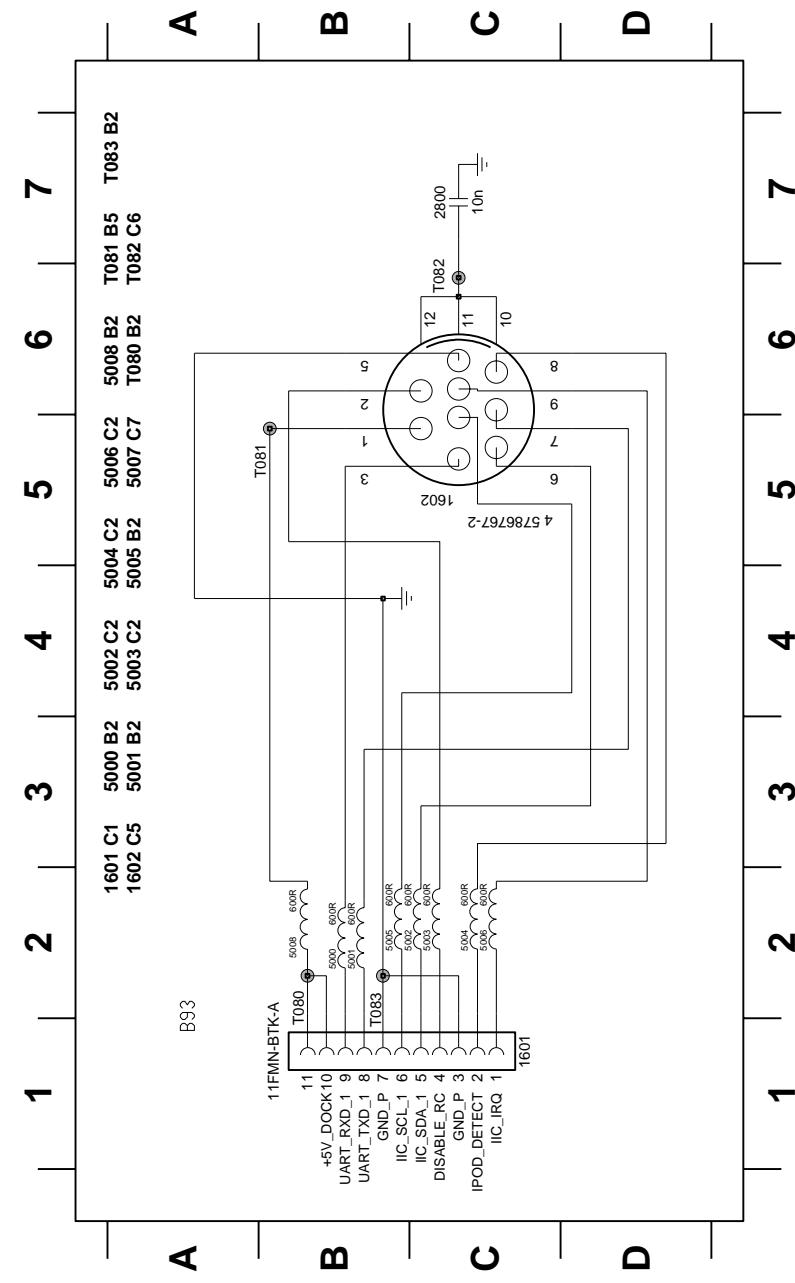
Circuit diagram



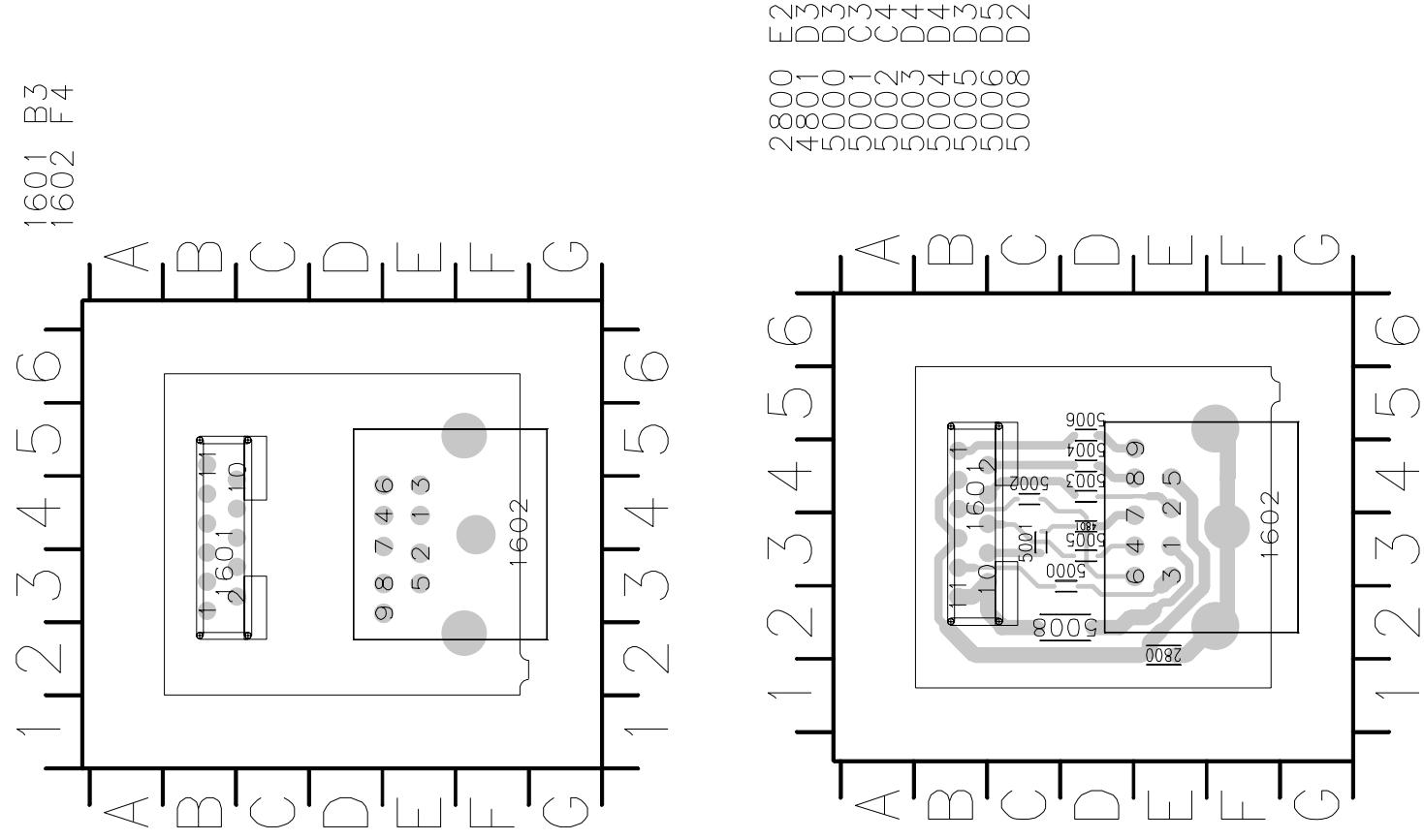
Layout diagram



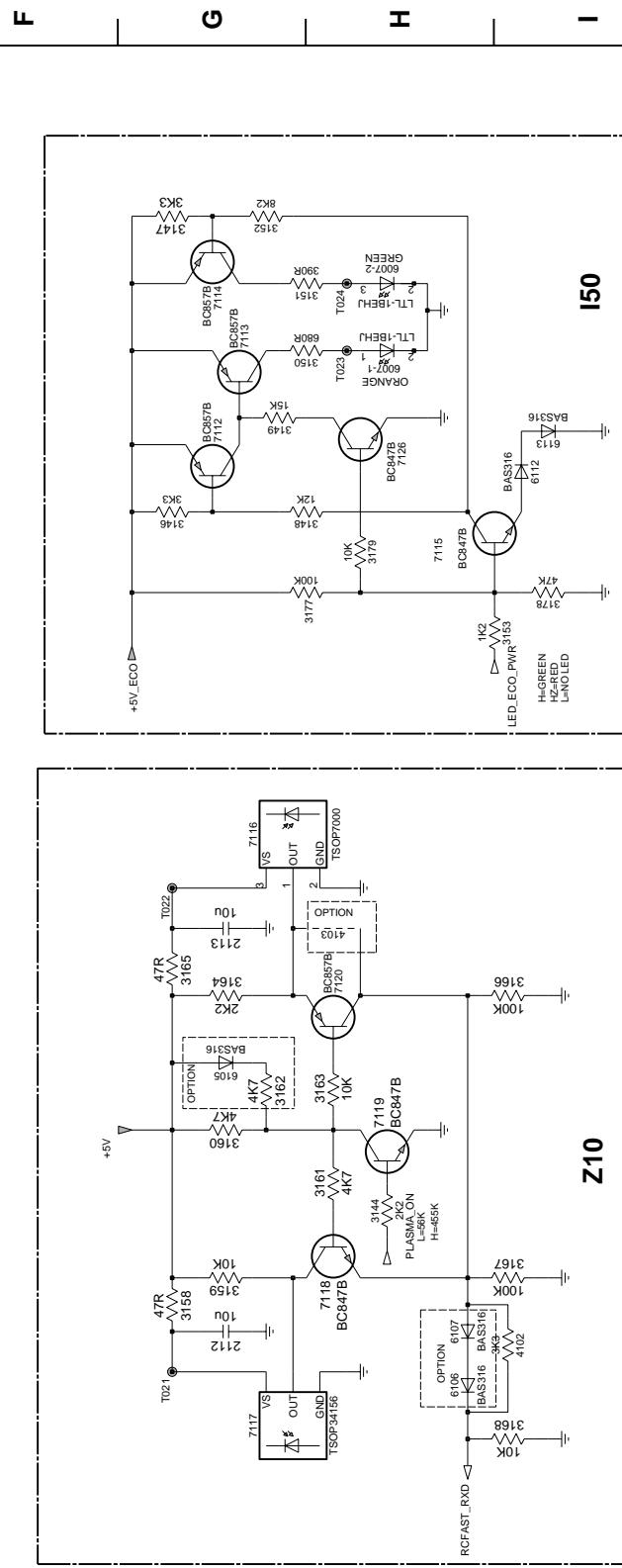
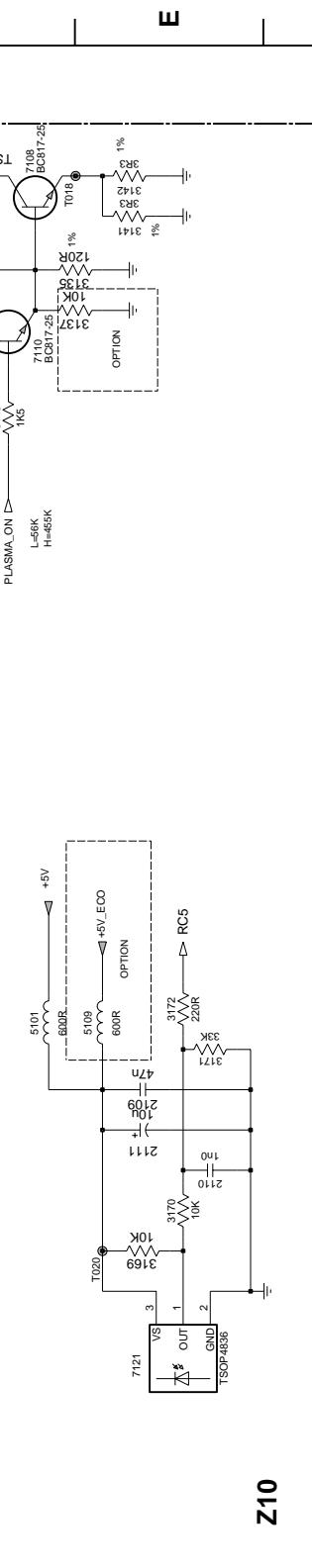
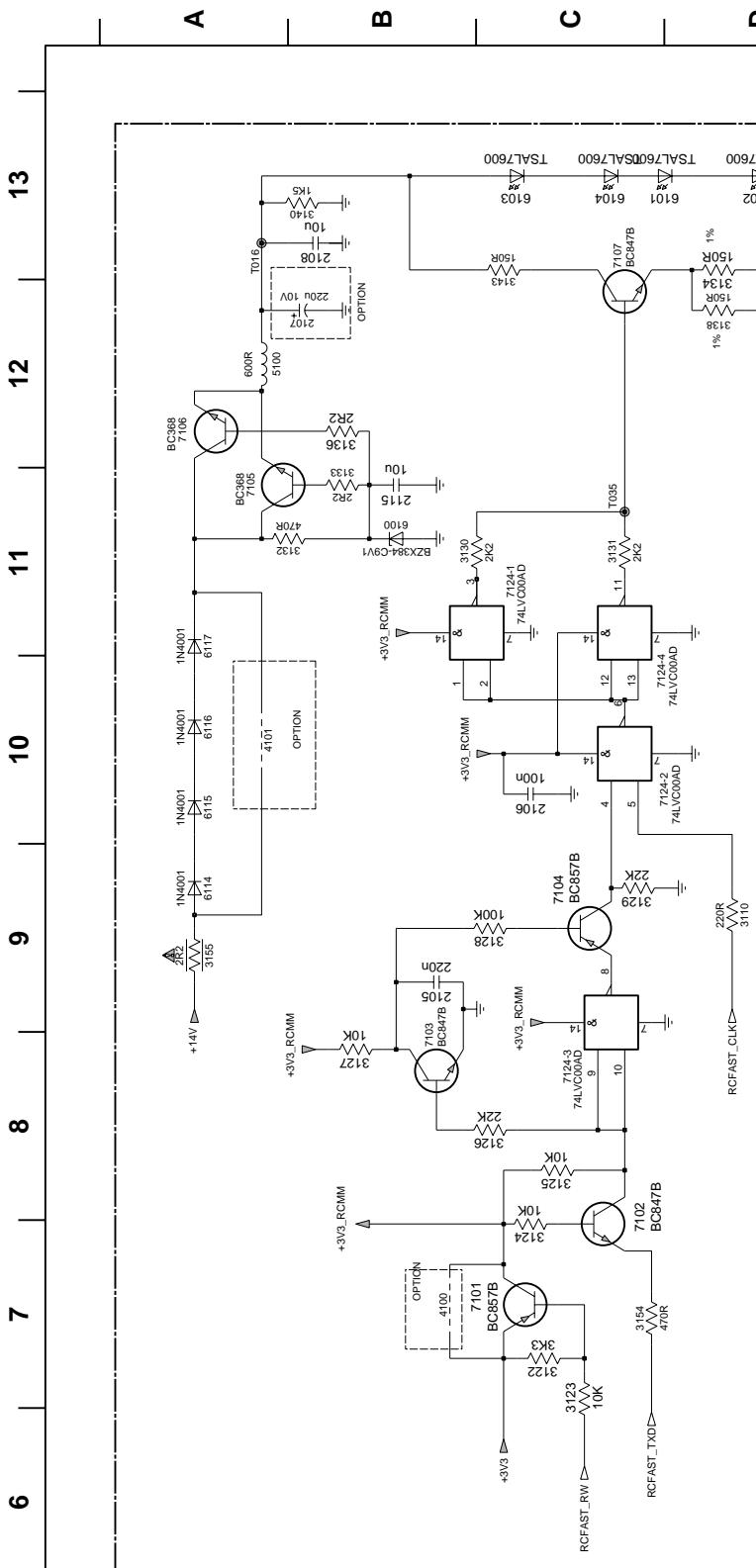
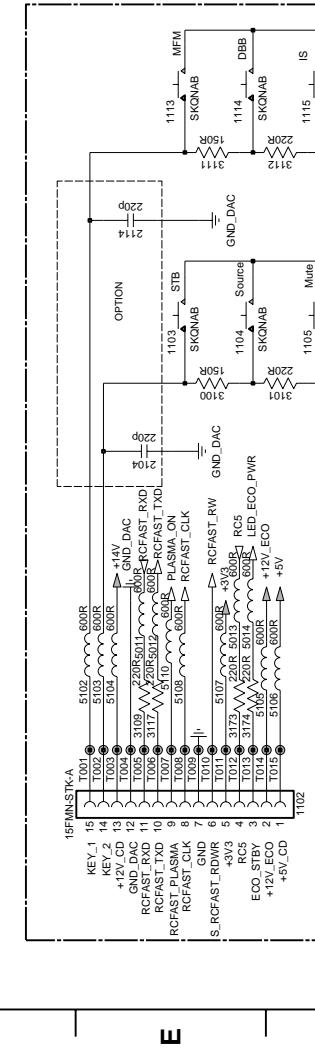
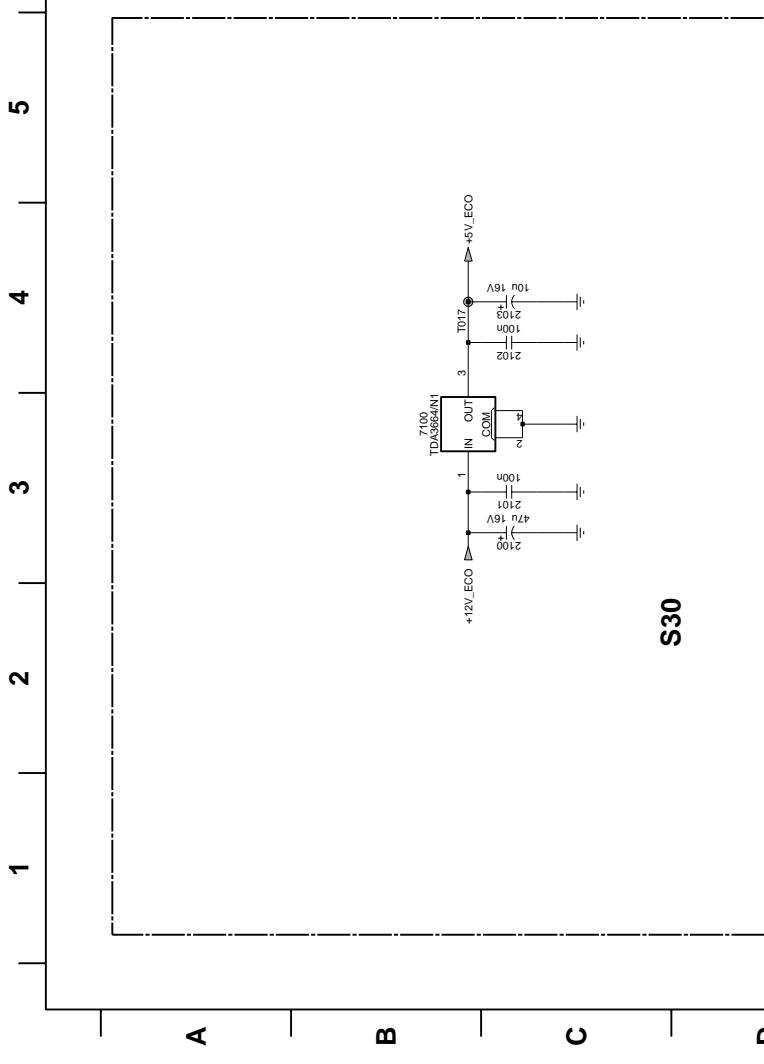
Circuit diagram



Layout diagram



PB6-KEYS & RC - Circuit Diagram (waS7000)



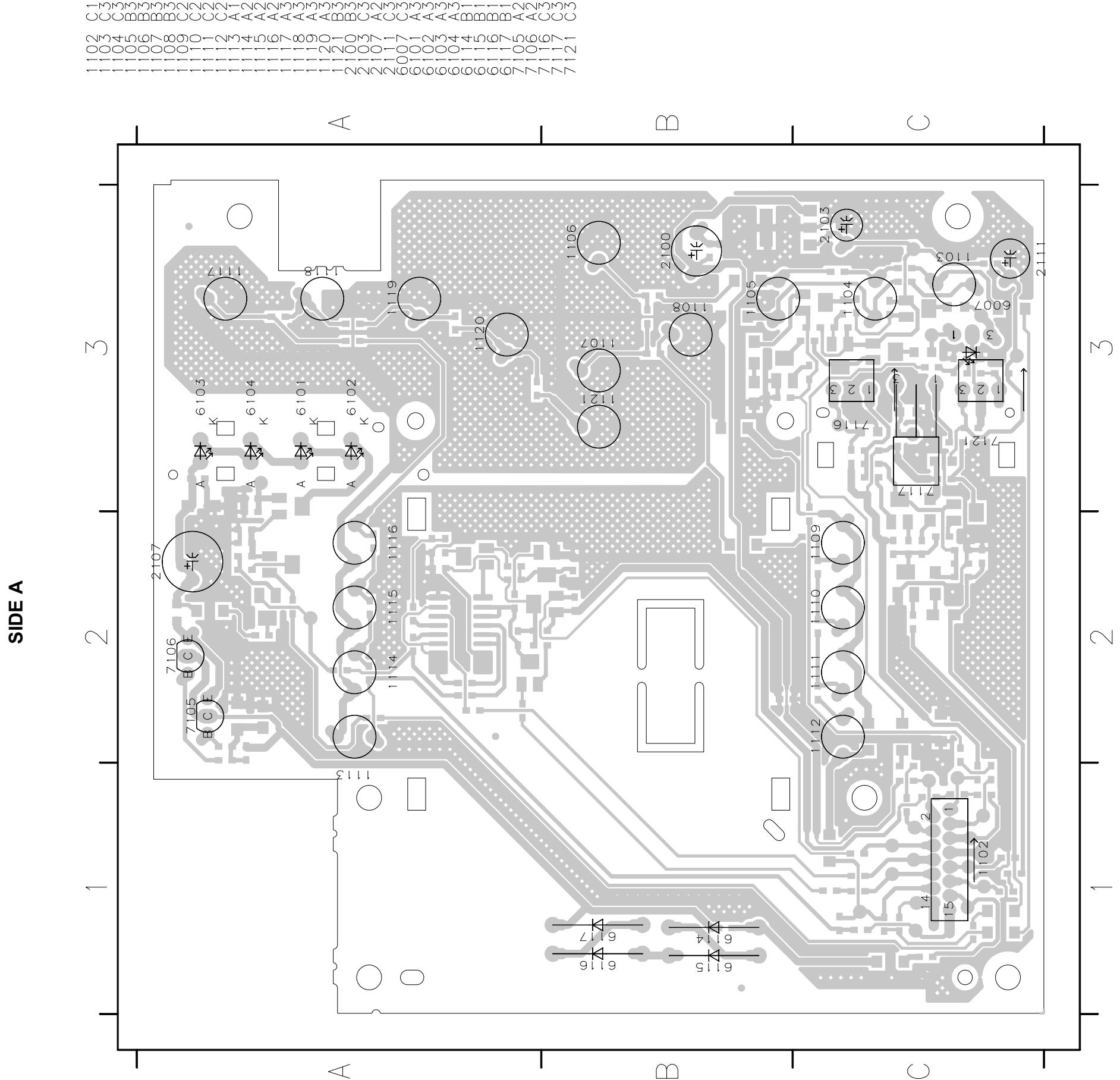
M92

150

218

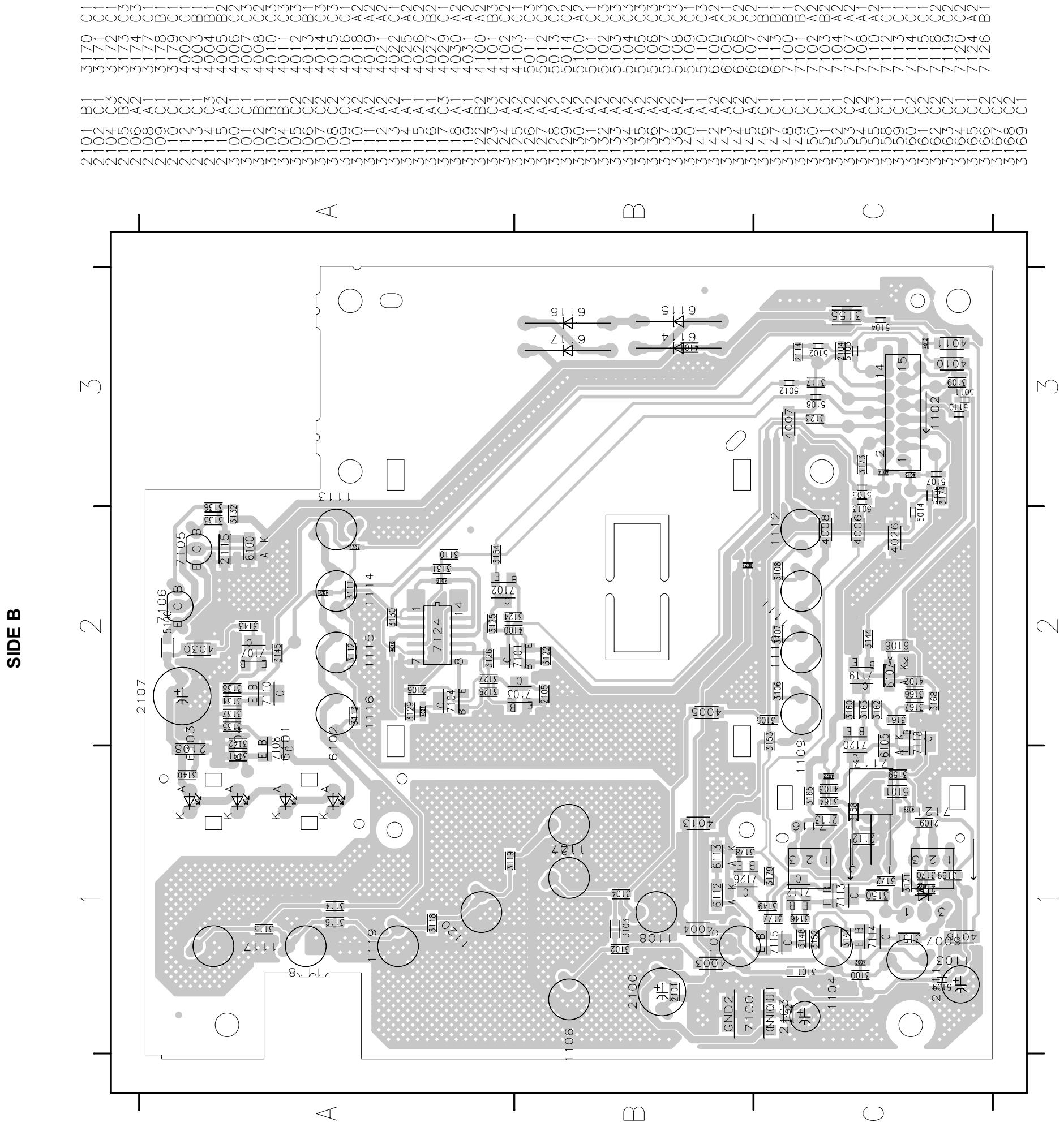
PB6-KEYS & RC - Layout Diagram (waS7000)

14 - 2

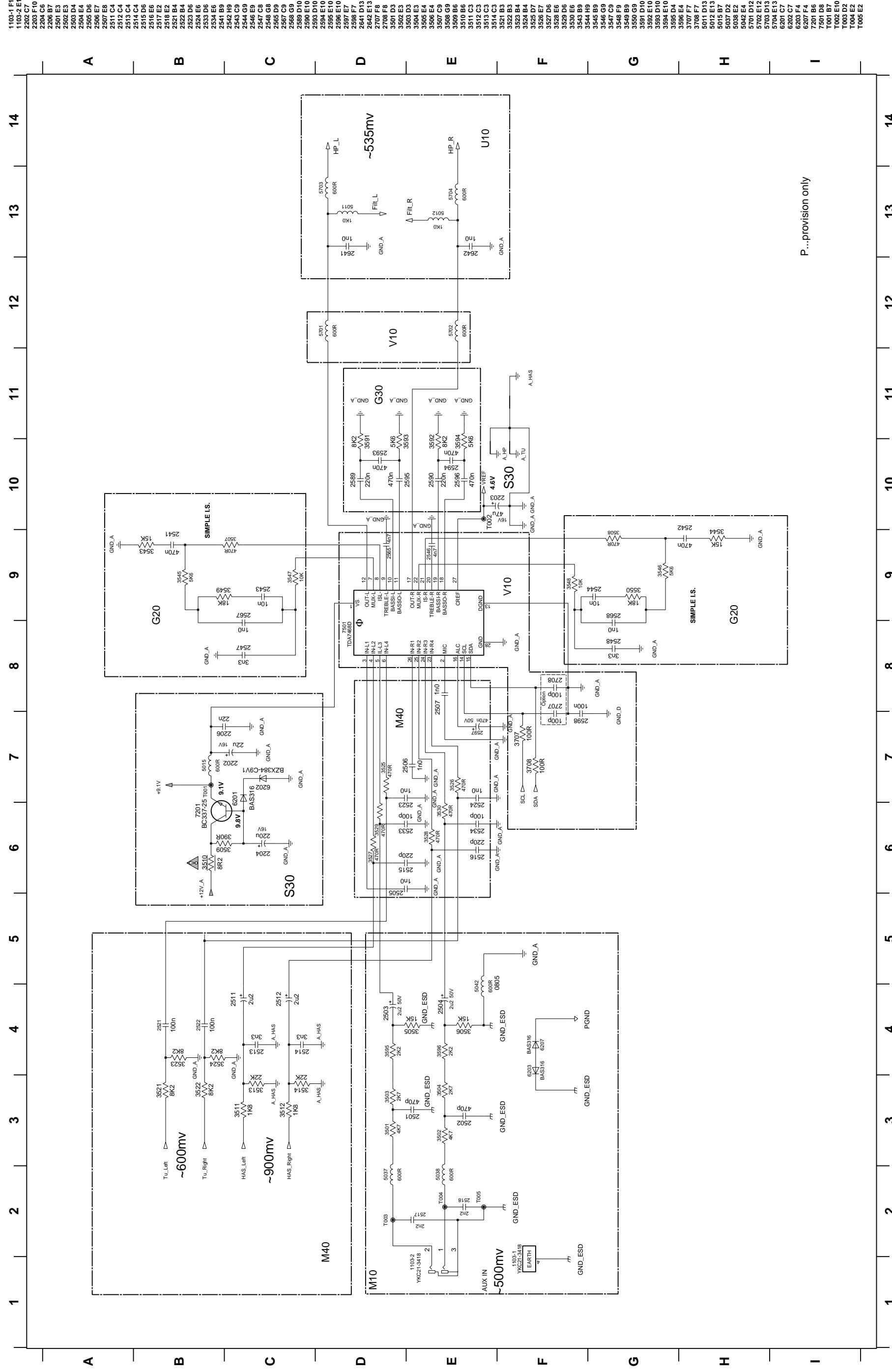


PB6-KEYS & RC - Layout Diagram (waS7000)

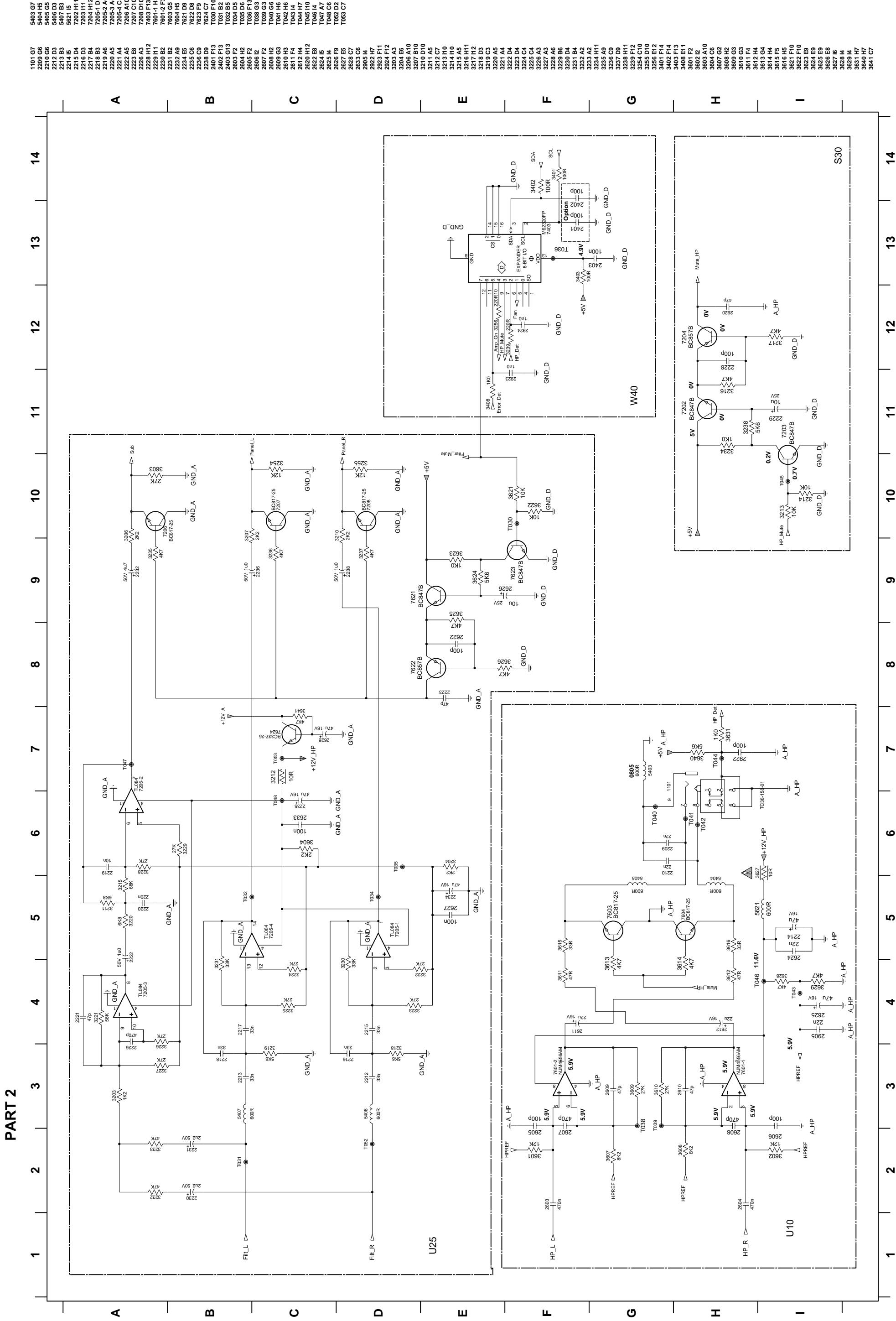
14 - 3



PB5-AF BOARD - Circuit Diagram (waS7000)



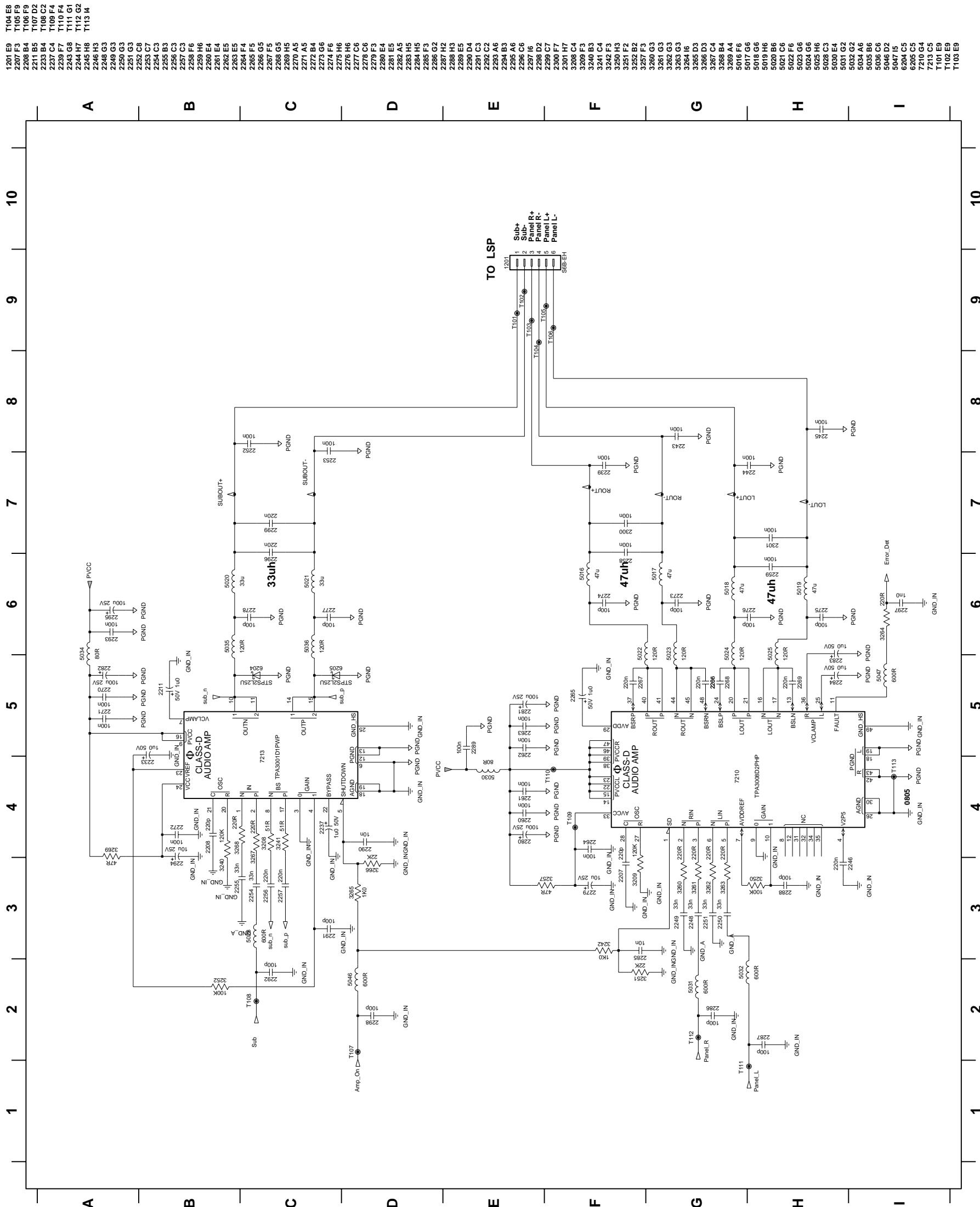
PB5-AF BOARD - Circuit Diagram (waS7000)



PB5-AF BOARD - Circuit Diagram (waS7000)

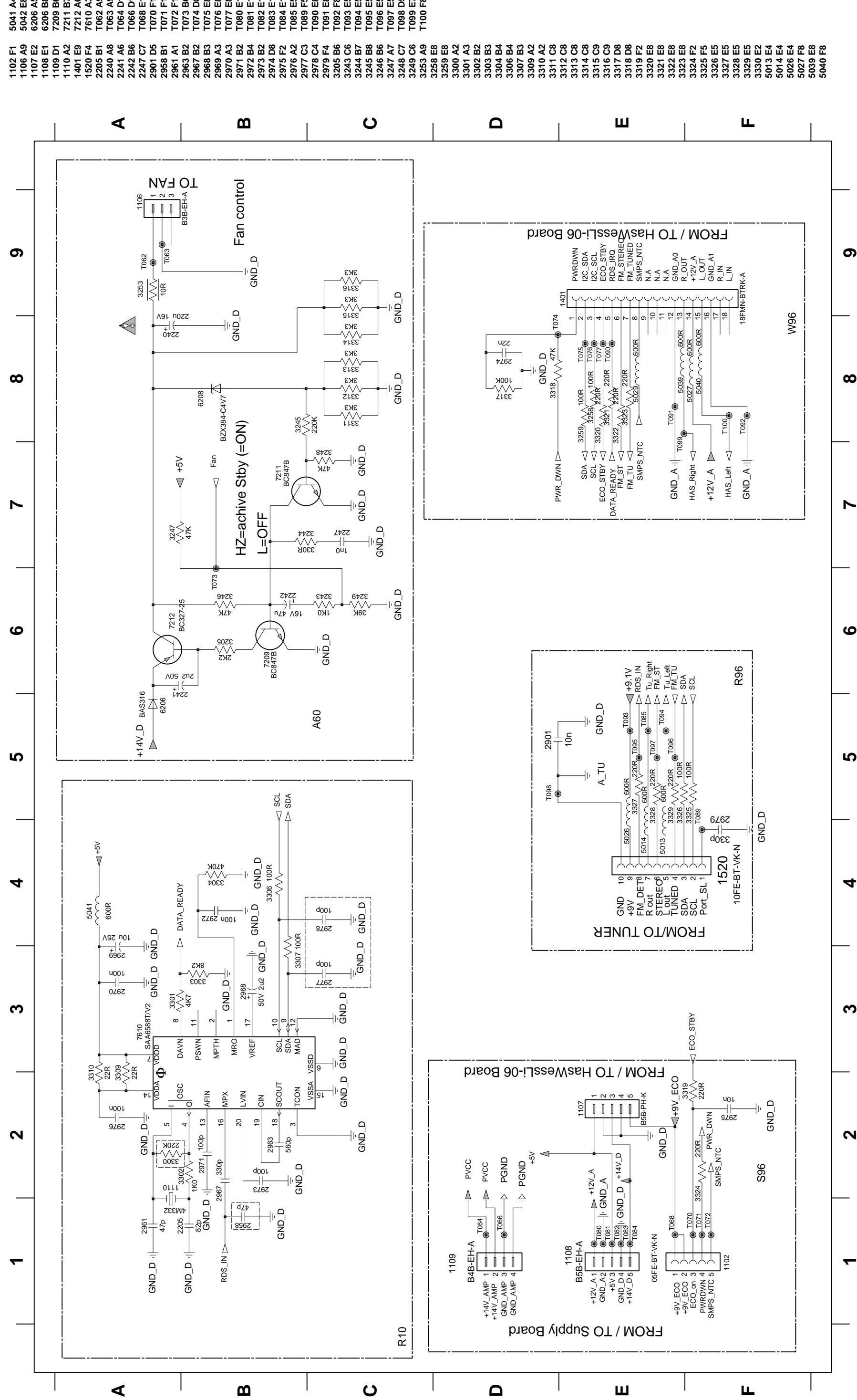
15 - 3

PART 3

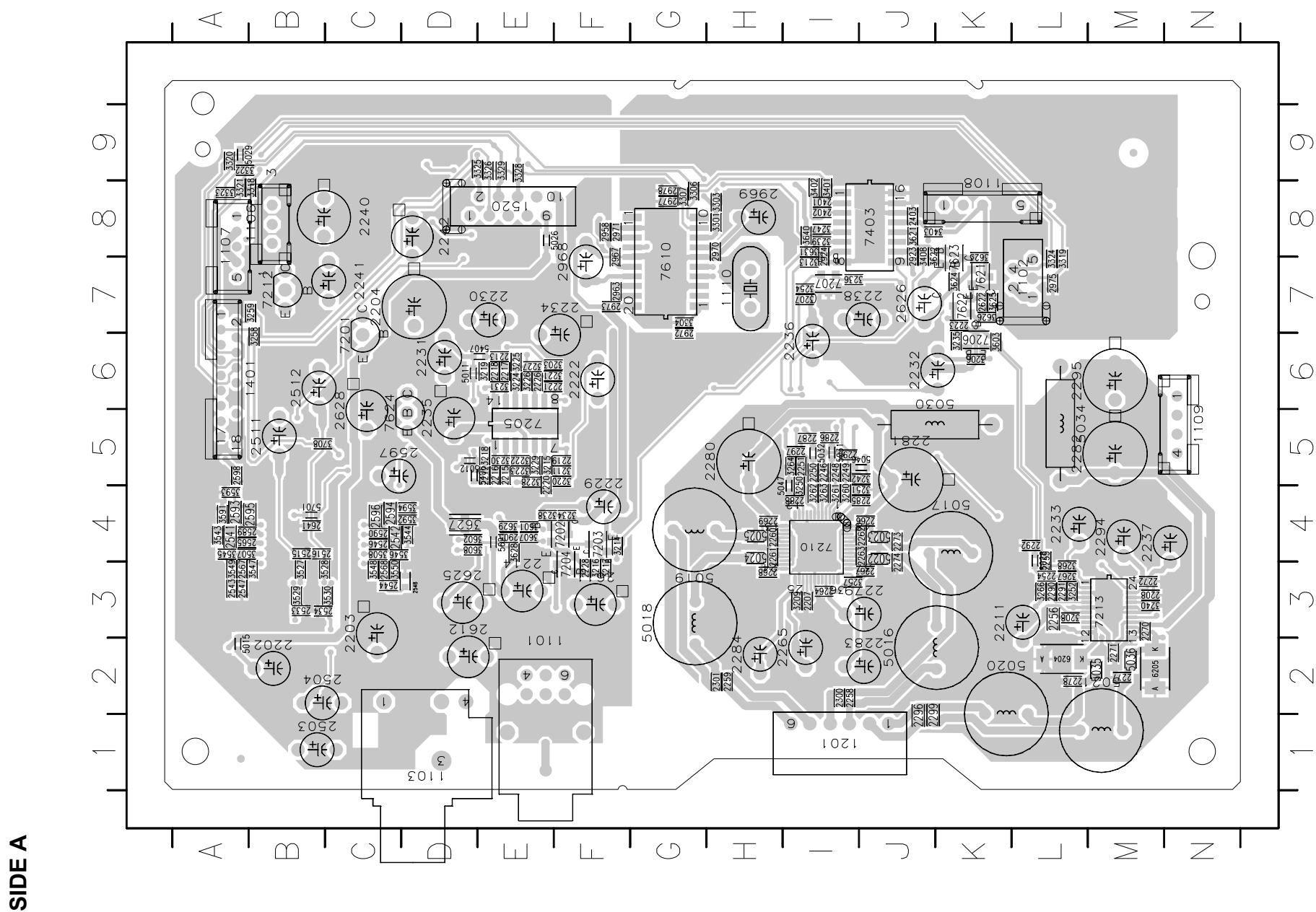


PB5-AF BOARD - Circuit Diagram (waS7000)

PART 4

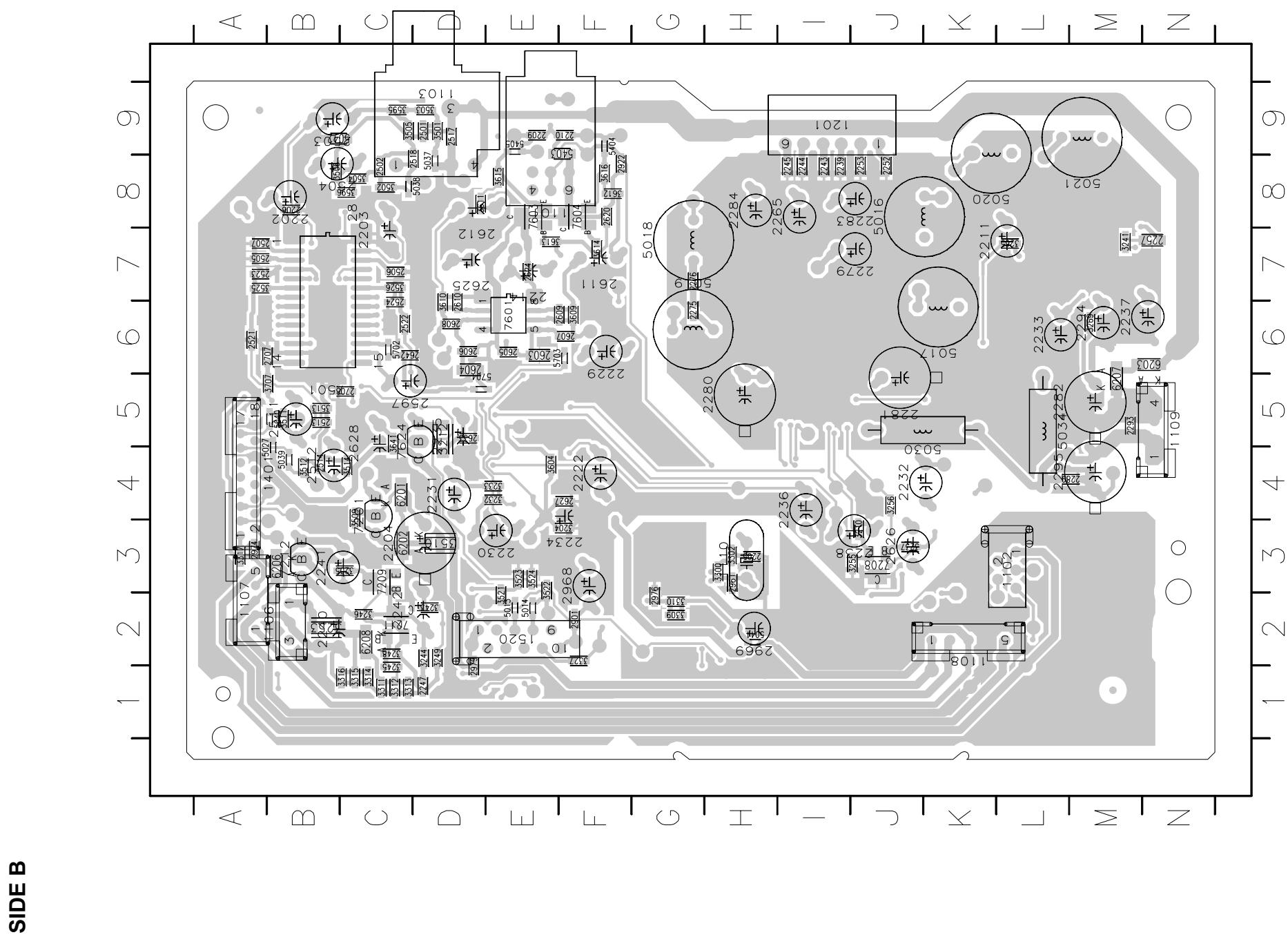


PB5-AF BOARD - Layout Diagram (waS7000)



PB5-AF BOARD - Layout Diagram (waS7000)

047-847-4747
www.koreanair.com





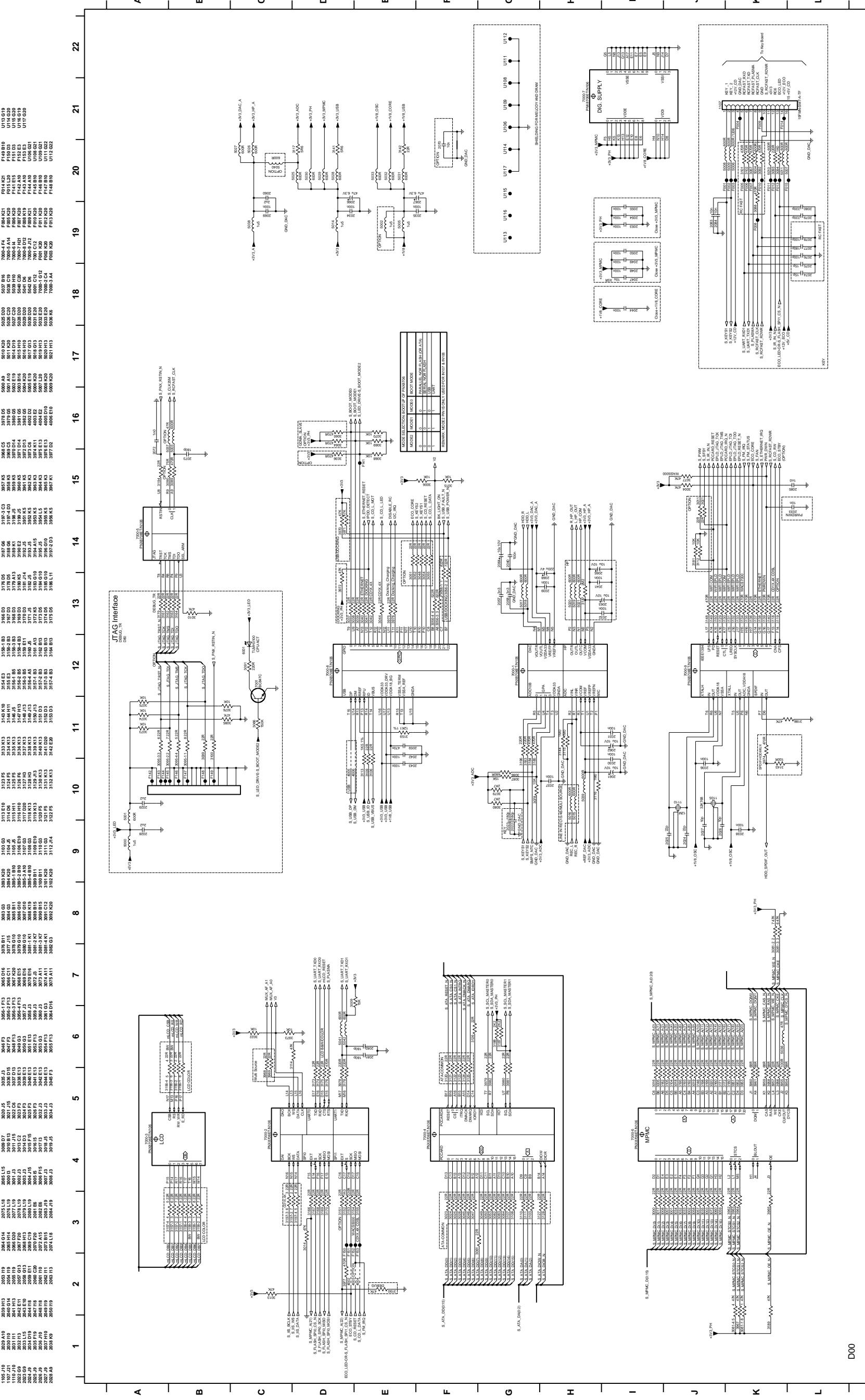
HAS MODULE

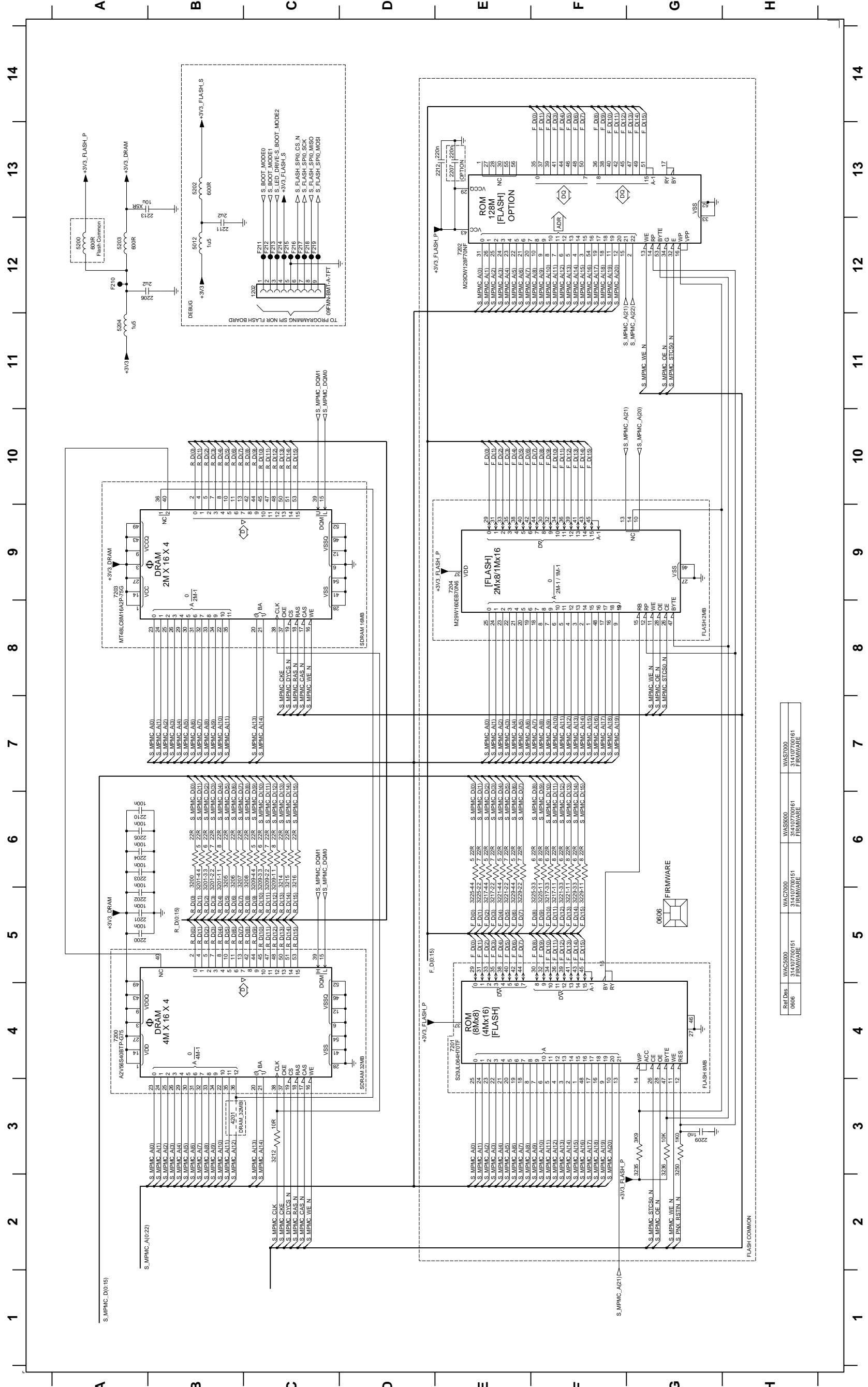
This module can only be repaired on component level
at authorized service workshop.

In case of defects please replace the entire board resp. the WiFi Card.

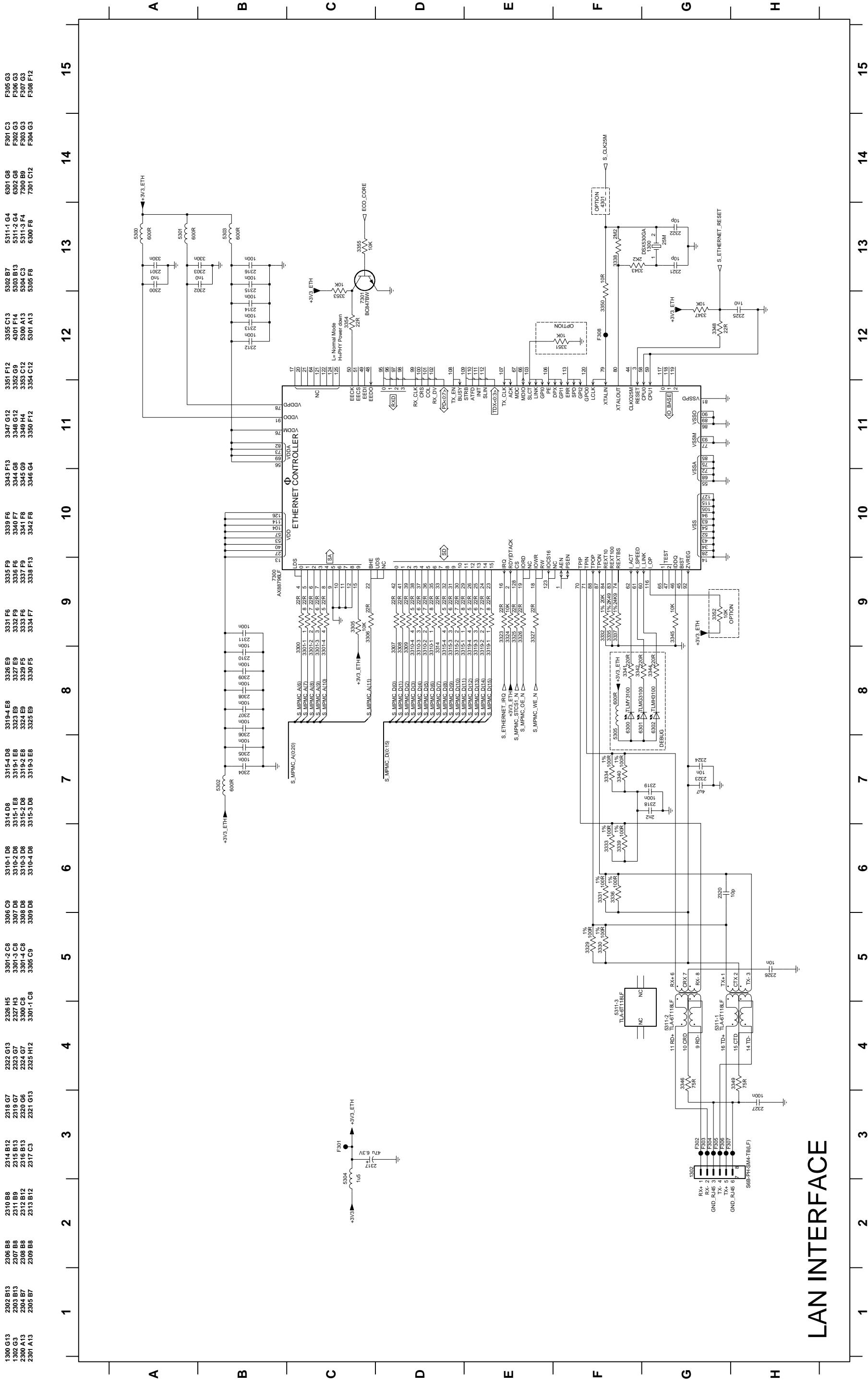
3141 078 01481HAS Printed Board Assembly - Europe
3141 078 02031HAS Printed Board Assembly - Nafta
2822 065 01728WiFi Card Mini PCI

CIRCUIT DIAGRAM - Part 1

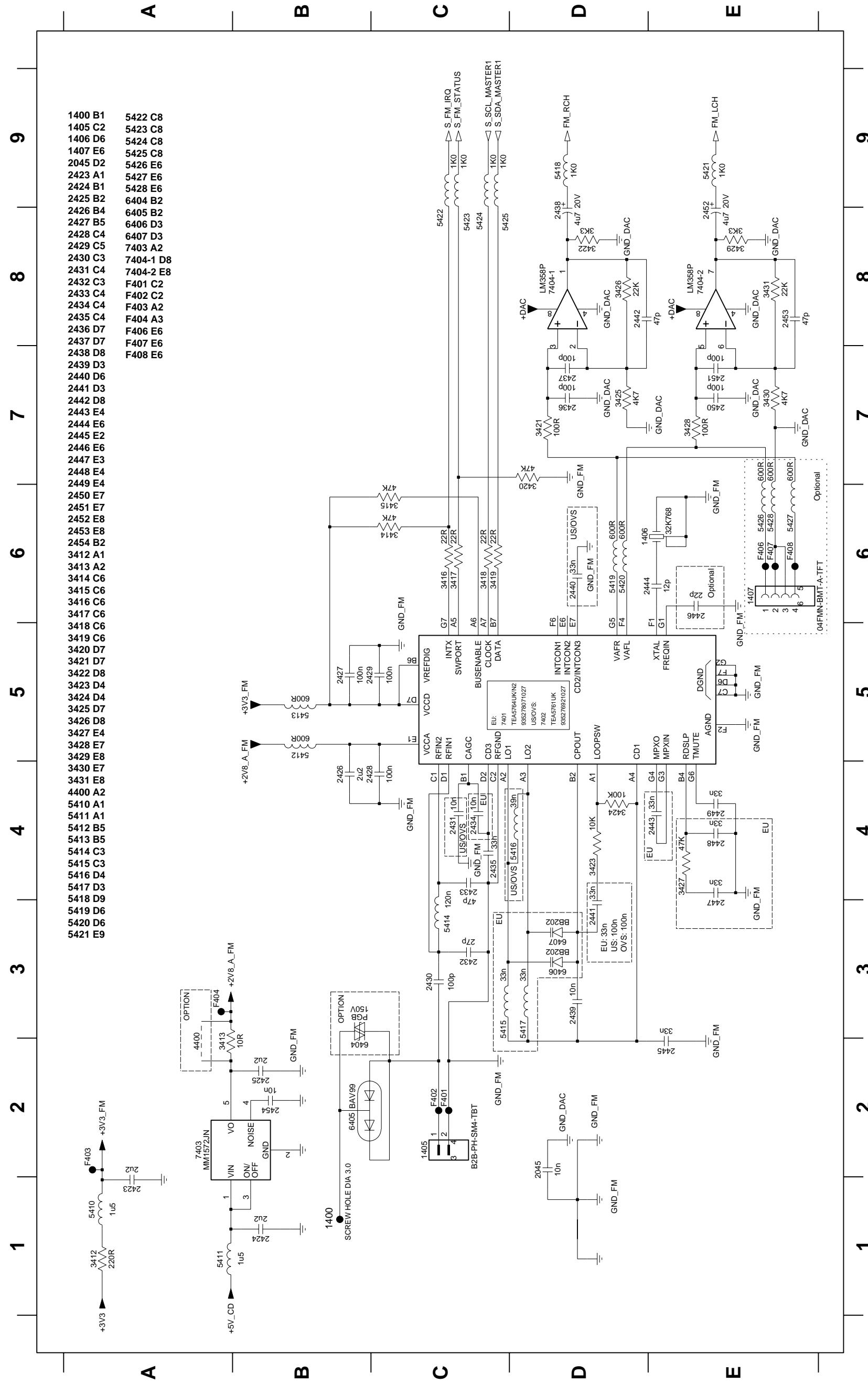




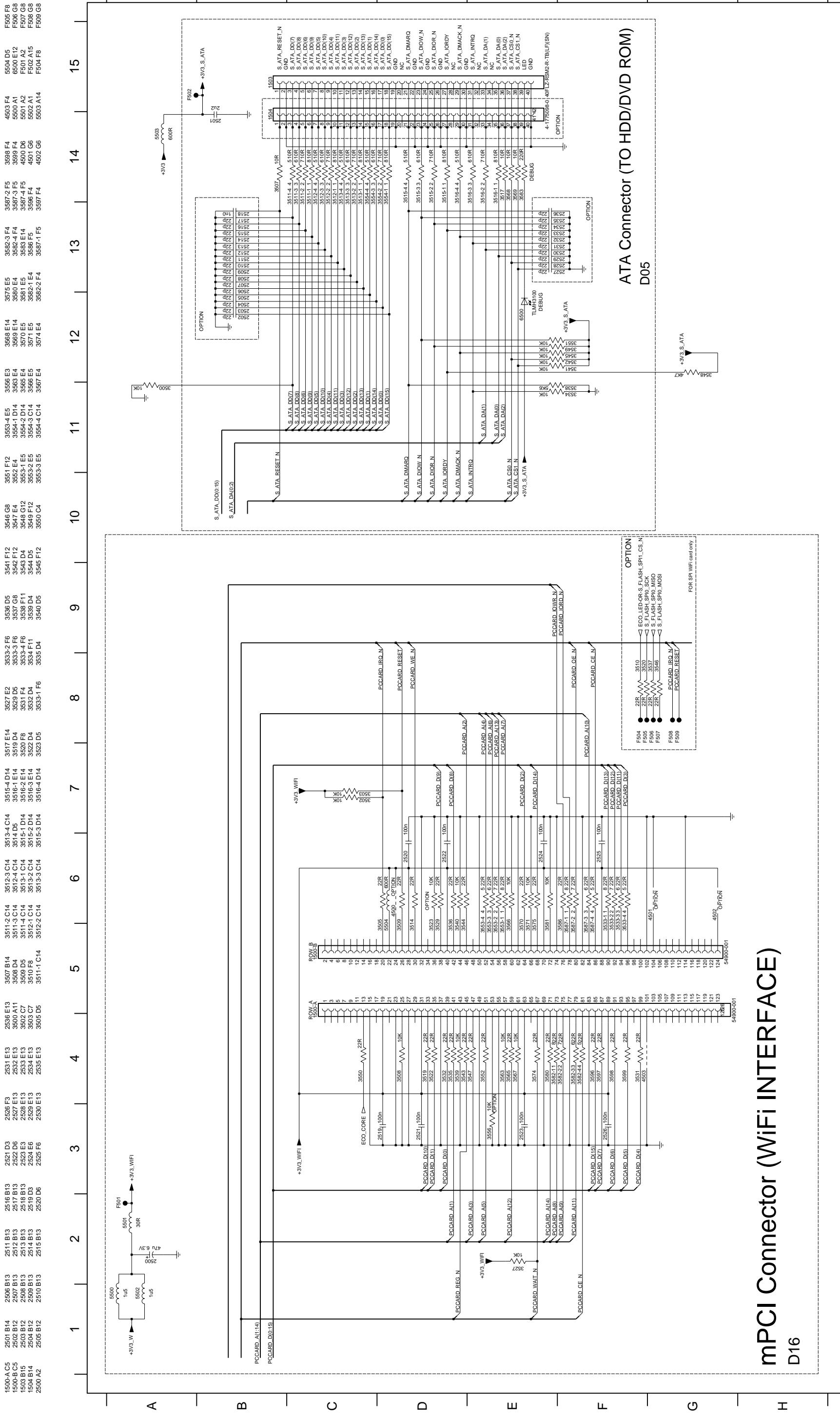
CIRCUIT DIAGRAM - Part 3



CIRCUIT DIAGRAM - Part 4

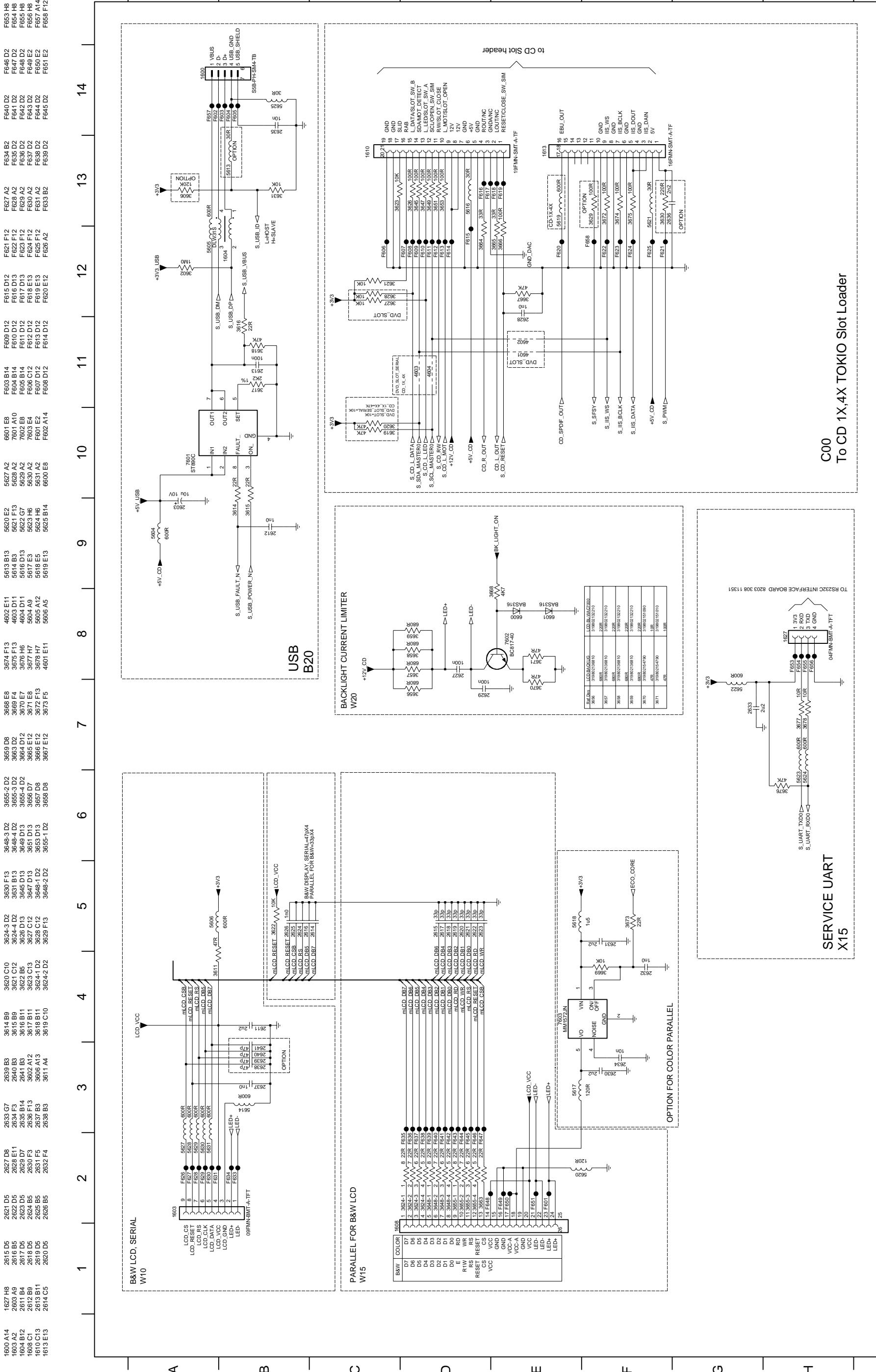


CIRCUIT DIAGRAM - Part 5



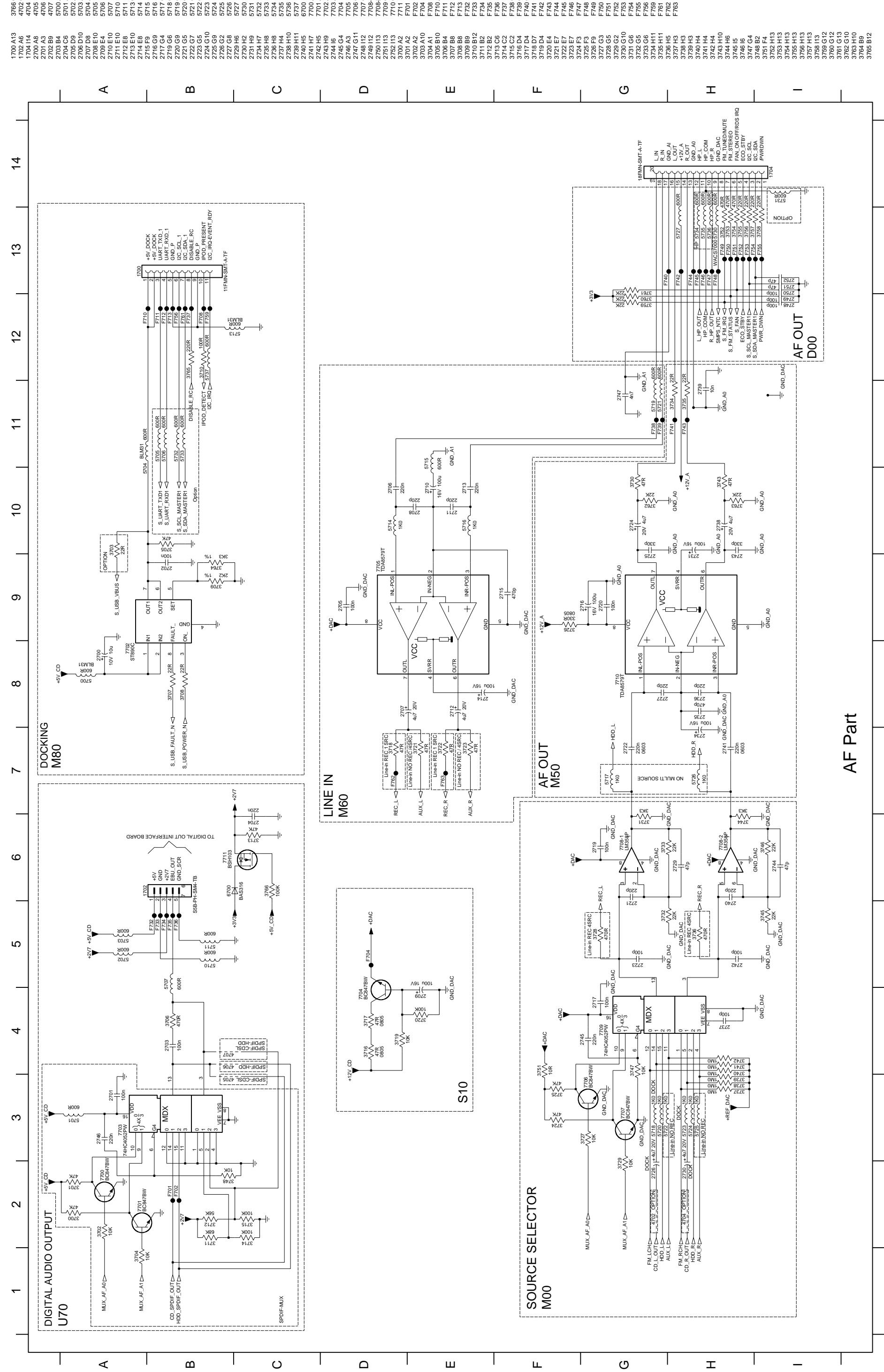
mPCI Connector (WiFi INTERFACE)

CIRCUIT DIAGRAM - Part 6

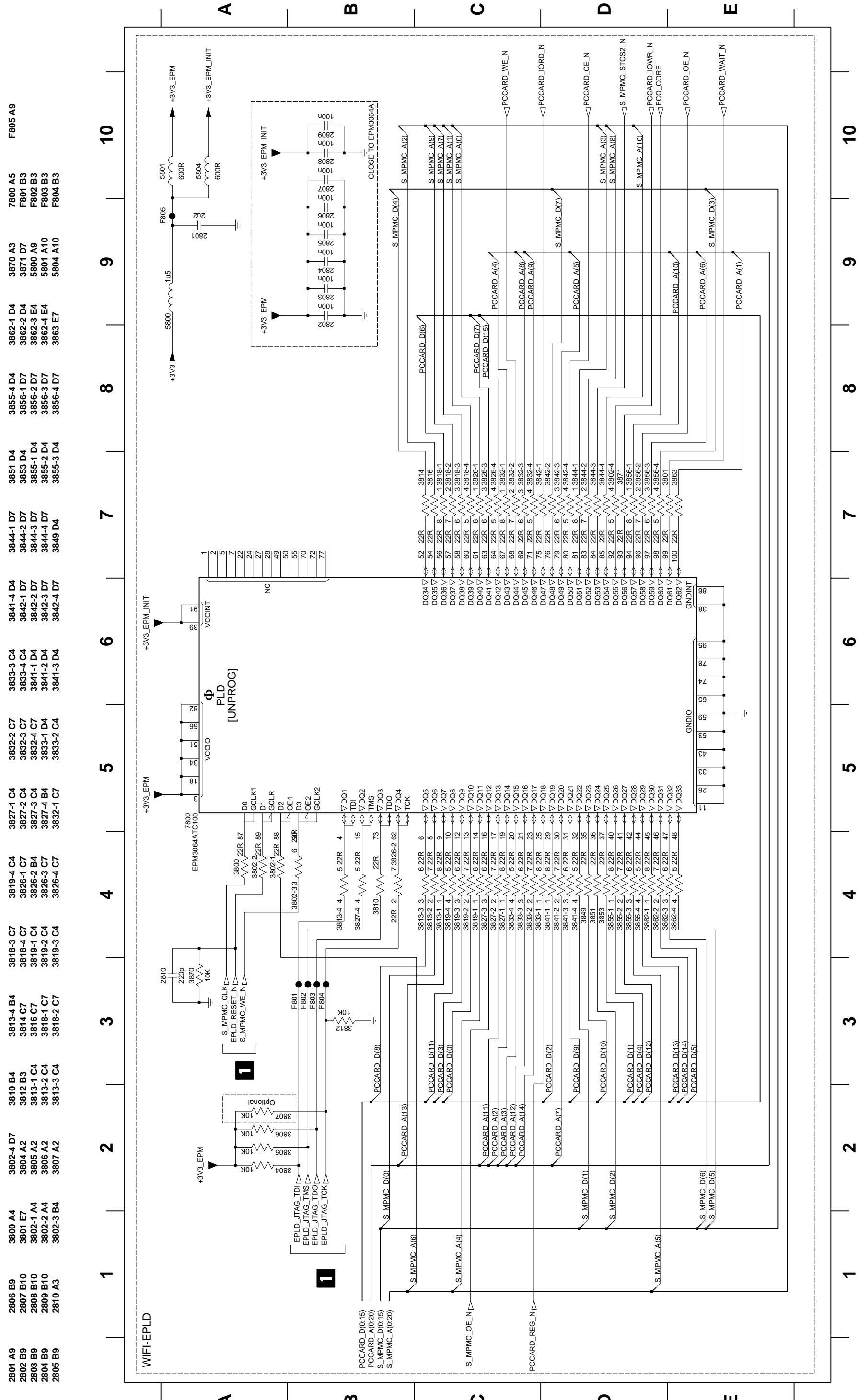


I/O Interface

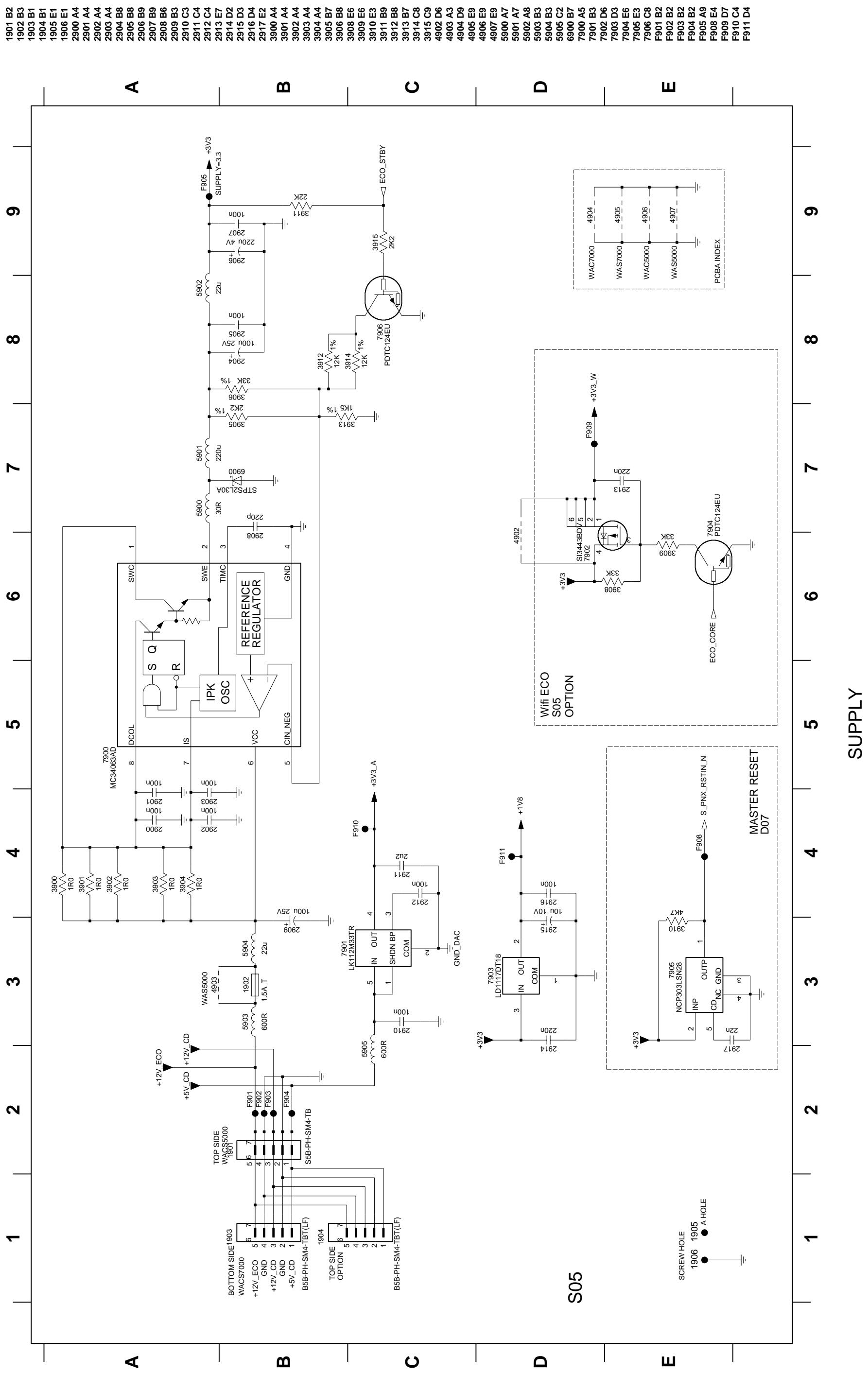
CIRCUIT DIAGRAM - Part 7



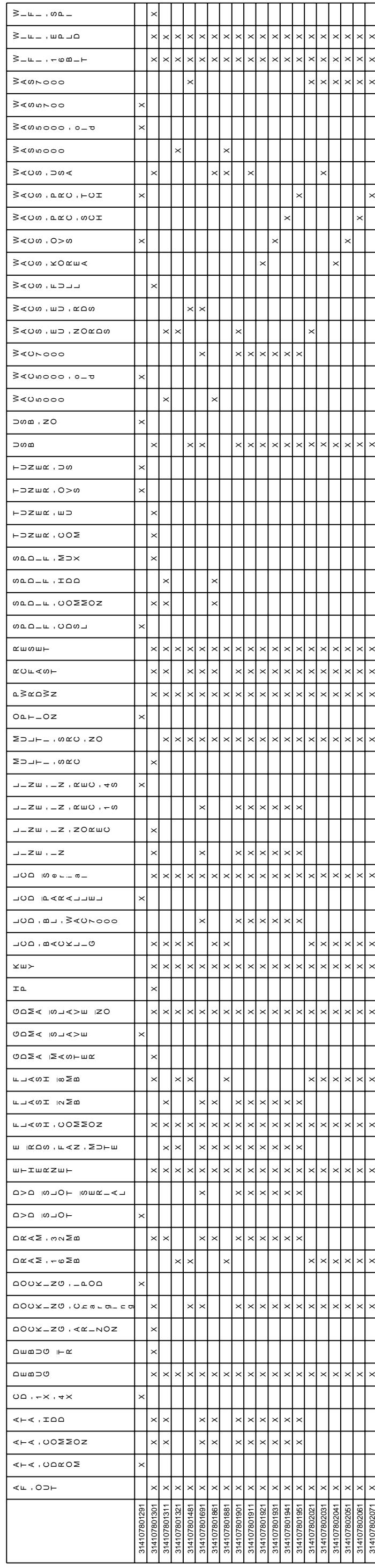
CIRCUIT DIAGRAM - Part 8



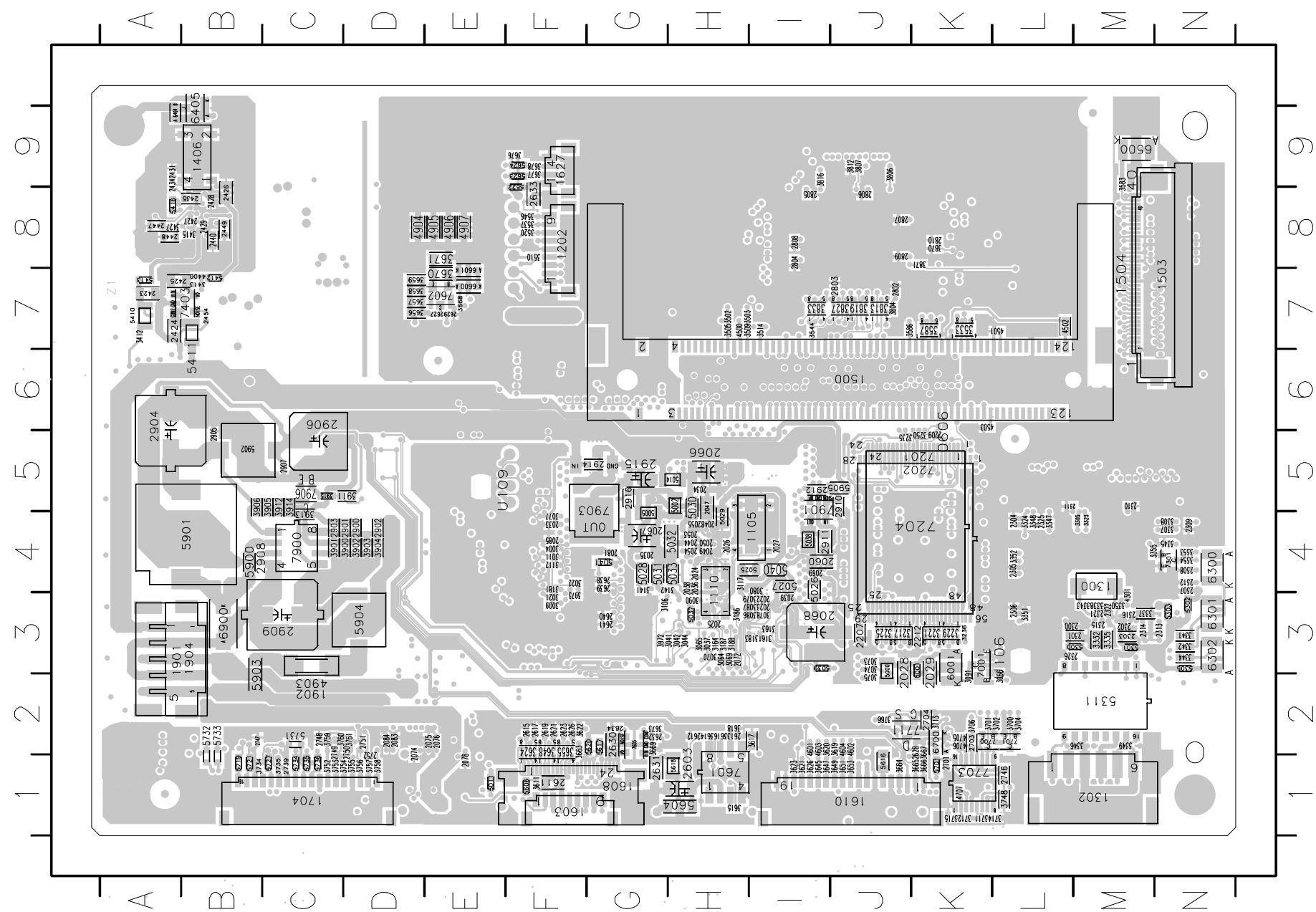
CIRCUIT DIAGRAM - Part 9



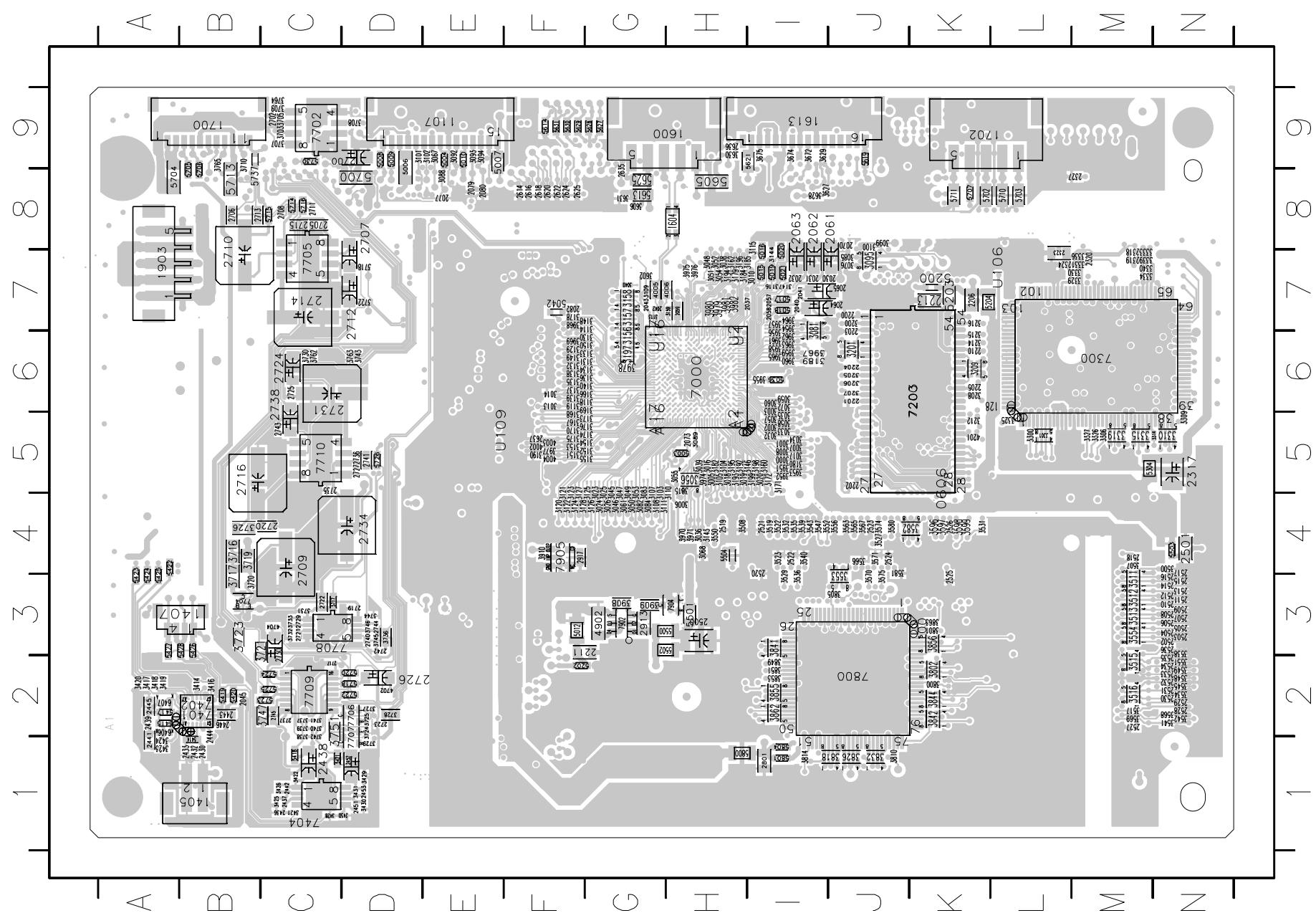
CIRCUIT DIAGRAM - Part 10



AYOUT DIAGRAM (side A)



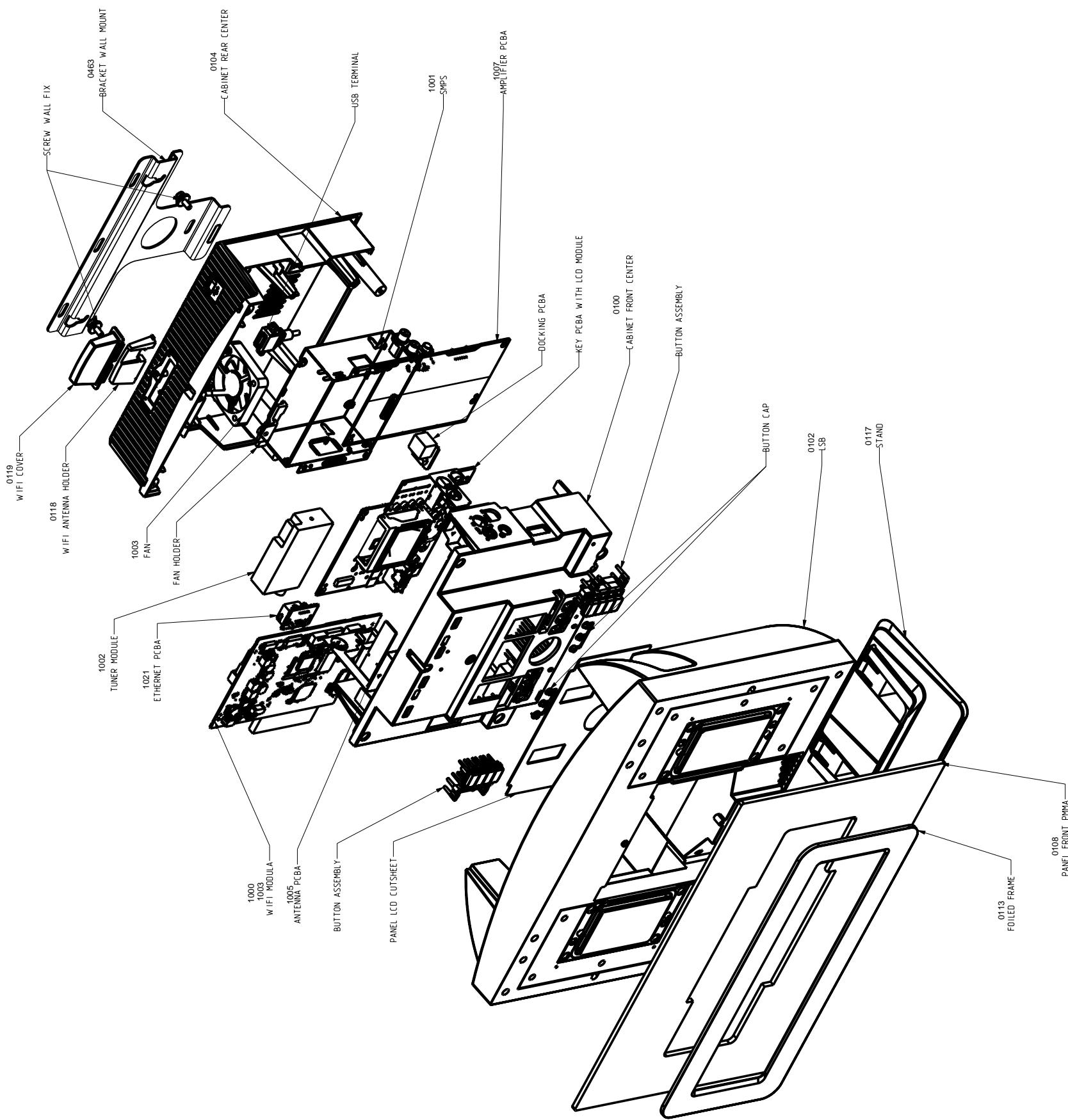
LAYOUT DIAGRAM (side B)



EXPLODED VIEW DIAGRAM (wacC7000)

17 - 1

EXPLODED VIEW DIAGRAM (waS7000)



ACCESSORIES PARTS LIST

0456	2422 076 00687	ANT FM DIP SD-2380 B
0457	3141 078 70262	DVD ROM INSTALL SW WAC7000
0458	2422 076 00569	CBLE LAN 1M5 LAN RJ45 B
0460	3139 228 69151	PRODUCT ASSY RM20008/01 PACKED
0461	3139 238 13751	PROD ASSY RC19336006/01 PKD
0463	3141 071 20362	WALL MOUNT BRACKET WAS700
0465	3141 071 20321	W/M BKT WAC700

WAS7000 MECHANICAL & ELECTRICAL PARTS LIST

0100	3141 077 51001	CAB F. CENTER ASSY WAS7000/12(ALL EXCEPT /37)
0100	3141 077 51011	CAB F. CENTER ASSY WAS7000/37 (/37)
0102	3141 078 50161	BOX SPK ASSY WAS7000
0104	3141 077 51021	CAB R. CENTER ASSY WAS7000/12(ALL EXCEPT /37)
0104	3141 077 51031	CAB R. CENTER ASSY WAS7000/37 (/37)
0117	3141 077 50551	STAND ASSY WA10/22
0118	3141 074 01703	BRACKET ANTENNA WJ10/22
0119	3141 074 01694	COVER ANTENNA WJ10/22
0108	3141 073 20522	PANEL FRONT WAS7000/12 (/12)
0108	3141 073 20532	PANEL FRONT WAS7000/55 (ALL EXCEPT /12)
0113	3141 077 50611	PANNEL FRAME PRE-ASSY WA10/22
1000	3141 078 01481	PBAS WessLi-06 (WAS-7K_EU_RDS)(ALL EXCEPT /37)
1000	3141 078 02031	PBAS WessLi-06 (WAS-7K_USA) (/37)
1003	2822 065 01728	WMOD WIFI MPC1 MP-G-BR-05 Y
1001	△ 3141 078 01731	MODULE SMPS WAS7000
1002	2422 542 00038	TUN A+F ENG07815QF EUR B (ALL EXCEPT /37)
1002	2422 542 00039	TUN FM ENG06814QF USA B (/37)
1003	2822 031 00029	FAN 12VDC 1.08W 3300RPM B
1004	2422 076 00717	ANT WIFI 2450MHZ 50R Y
1005	3139 118 56981	PCBAS ANTENNA MC-i250/37 (ALL)
1006	2722 171 00447	LCD MODULE PCE2034-02 (VARI) Y
1007	3141 078 01741	PBAS 5 - AF WAS7000/RDS (ALL EXCEPT /37)
1007	3141 078 01751	PBAS 5 - AF WAS7000/NON RDS (/37)
1009	3141 078 02141	PBAS 8 - IPOD INT. WAS7000
1020	3141 078 01771	PBAS 6 - KEYS & RC WAS7000
1021	3141 078 01761	PBAS 9 - Ethernet WAS7000
8000	3139 111 04471	FFC FOIL 10P/180/10P BD
8001	3141 070 21361	FFC FOIL 18P/140/18P AD 1MMP
8004	3141 070 21371	FFC FOIL 15P/140/15P BD 1MMP
8005	3141 070 20701	CBLE CRC 1P/280/1P CRC F-MF
8008	△ 2422 070 98233	MAINSCORD AUS 7A5 1M8 VH BK B (/79)
8008	△ 2422 070 98236	MAINSCORD UK 5A 1M8 VH BK B (/05)
8008	△ 2422 070 98231	MAINSCORD IEC 2A5 1M8 VH BK B (/12/97)
8008	△ 2422 070 98235	MAINSCORD UL 6A 1M8 VH BK B (/37)
8011	3139 111 02321	FFC FOIL 11P/220/11P BD 1MMP

WAC7000 MECHANICAL & ELECTRICAL PARTS LIST

0102	3141 074 01172	DAMPER HDD DRIVER WJ10
0108	3141 074 03351	BUTTON EJECT WAC7000
0115	3141 074 03601	RUBBER STOPPER WAC7000
0116	3141 074 03611	BRUBBER STOPPER WAC7000
0121	3141 071 20581	SHIELDING BOX HDD WAC7000
0201	3141 077 51111	CAB F. CENTER ASSY WAC7000/55 (/05/79/97)
0201	3141 077 51041	CAB F. PRE-ASSY WAC7000/12 (/12)
0201	3141 077 51051	CAB F. PRE-ASSY WAC7000/37 (/37)
0208	3141 073 20541	COVER FNT CEN BTM WAC7000
0210	3141 074 01694	COVER ANTENNA WJ10/22
0213	3141 074 01372	COVER MAINS CORD WJ10/22
0214	3141 074 01703	BRACKET ANTENNA WJ10/22
0227	3141 074 01215	COVER LSB WJ10/22
0200	3141 077 51131	BRACKET CORE ASSY WAC7000

WAC7000 MECHANICAL & ELECTRICAL PARTS LIST

0228	3141 077 50501	LSB BOX PRE-ASSY WJ10/22
0232	3141 074 01583	COVER FNT CEN UPPER WJ10/22
0284	3141 077 50461	STAND CEN PRE-ASSY WJ10/22
0285	3141 074 01841	FOOT RUBBER WAC5
0286	3141 074 02331	DAMPER BRACKET MOUNT WAC5
0287	3141 074 03312	CABINET REAR C WAC7000 (ALL EXCEPT /37)
0287	3141 074 03442	CABINET REAR C WAC7000/37 (/37)
0289	3141 077 51151	PANEL C BTM PRE-ASSY WAC7000
0295	3141 074 03641	PANEL LSB WAC7000
0209	3141 073 20512	PANEL DISPLAY WAC7000
0206	3141 077 51161	PANEL C UP PRE-ASSY WAC7000
0200	3141 077 51131	BRACKET CORE ASSY WAC7000
0300	3141 077 51061	STANDBY PRE-ASSY WAC7000
1000	3141 078 01691	PBAS HasLi-06 (WAC-7K_EU_RDS)(ALL EXCEPT /37)
1000	3141 078 01911	PBAS HasLi-06 (WAC-7K_USA) (/37)
1002	3141 070 50391	PRG.ASSY HDD WAC-5000 V1856
1003	2822 065 01728	WMOD WIFI G MPC1 MP-G-BR-05 Y
1005	3141 077 10191	PBAS - ATA-MS/SL/PW Int. (PH)
1001	▲ 3141 078 01621	MOD SMPS WAC-7000 (120 / 230V)
1002	3141 078 00281	MODULE AMP - HAS 4ch (40W)
1003	2422 542 00038	TUN A+F ENG07815QF EUR B (ALL EXCEPT /37)
1003	2422 542 00039	TUN FM ENG06814QF USA B (/37)
1004	2822 031 00029	FAN 12VDC 1.08W 3300RPM B
1005	2822 031 00054	FAN 12VDC 0.5W 3700RPM B
1006	2422 076 00717	ANT WIFI 2450MHZ 50R Y
1007	3139 118 56981	PCBAS ANTENNA MC-i250
1008	2722 171 00446	LCD MODULE COF-PCE2033-03 Y
1009	3141 078 01811	MODULE DVD-Slotloader 2006
1011	3141 078 01711	PBAS 5 - AF (W/O RDS) WAC7000 (/05/37)
1011	3141 078 01631	PBAS 5 - AF (RDS) WAC7000 (ALL EXCEPT /37)
1012	3141 078 01641	PBAS 9 - AMP SOCKET WAC7000
1014	3141 078 01651	PBAS 6 - KEYS & RC WAC7000
1015	3141 078 01661	PBAS 7 - STBY KEY WAC7000
1016	3141 078 01671	PBAS 8 - EJECT KEY WAC7000
1017	3141 077 10211	PBAS-ATA-SL/PW I/F (PH)
1019	3141 078 01821	PBAS 4 - KEY-LCD-CON. WAC7000
8001	3141 070 20541	FFC FOIL 05P/100/05P BD 1.25mm
8002	3141 070 21451	FFC 15P/340/15P AD 1MM FOLD
8003	3141 070 21421	FFC 09P/220/09P BD 1MM FOLD
8004	3141 070 21471	FFC 10P/520/10P BD 1.25MM FOLD
8005	3141 070 21401	FFC 13P/180/13P AD 1.25MM FOLD
8006	3141 070 21431	FFC 15P/280/15P BD 1MM FOLD
8007	3141 070 21381	FFC 05P/340/05P BD 1.25MM FOLD
8008	3141 070 21391	FFC 18P/140/18P AD 1MM FOLD
8011	3141 070 21291	FFC FOIL 40P/110/40P BD 0.5MMP
8013	3141 070 21291	FFC FOIL 40P/110/40P BD 0.5MMP
8017	3141 070 21461	FFC 19P/460/19P AD 1MM FOLD
8018	3141 070 20701	CBLE CRC 1P/280/1P CRC F-MF
8021	3141 070 21411	FFC 11P/140/11P BD 1MM FOLD
8025	▲ 2422 070 98236	MAINSCORD UK 5A 1M8 VH BK B (/05)
8025	▲ 2422 070 98231	MAINSCORD IEC 2A5 1M8 VH BK B (/12/97)
8025	▲ 2422 070 98235	MAINSCORD UL 6A 1M8 VH BK B (/37)
8025	▲ 2422 070 98233	MAINSCORD AUS 7A5 1M8 VH BK B
8026	3141 070 21441	FFC 12P/340/12P BD 1.25MM FOLD

Note: Only these parts mentioned in the list are normal service parts.

REVISION LIST

Version 1.0 (3141 785 31350)

- - Draft release

Version 1.1 (3141 785 31351)

- - Update partlist