

Service Service Service



Service Manual



This Manual gives information on servicing the Audio Center (WAC700) of Wireless Audio Center and Station bundle (WACS700).

For servicing the Audio Station (WAS700), please refer Service Manual of WAS700 (3140 785 30522)

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**CLASS 1
LASER PRODUCT**

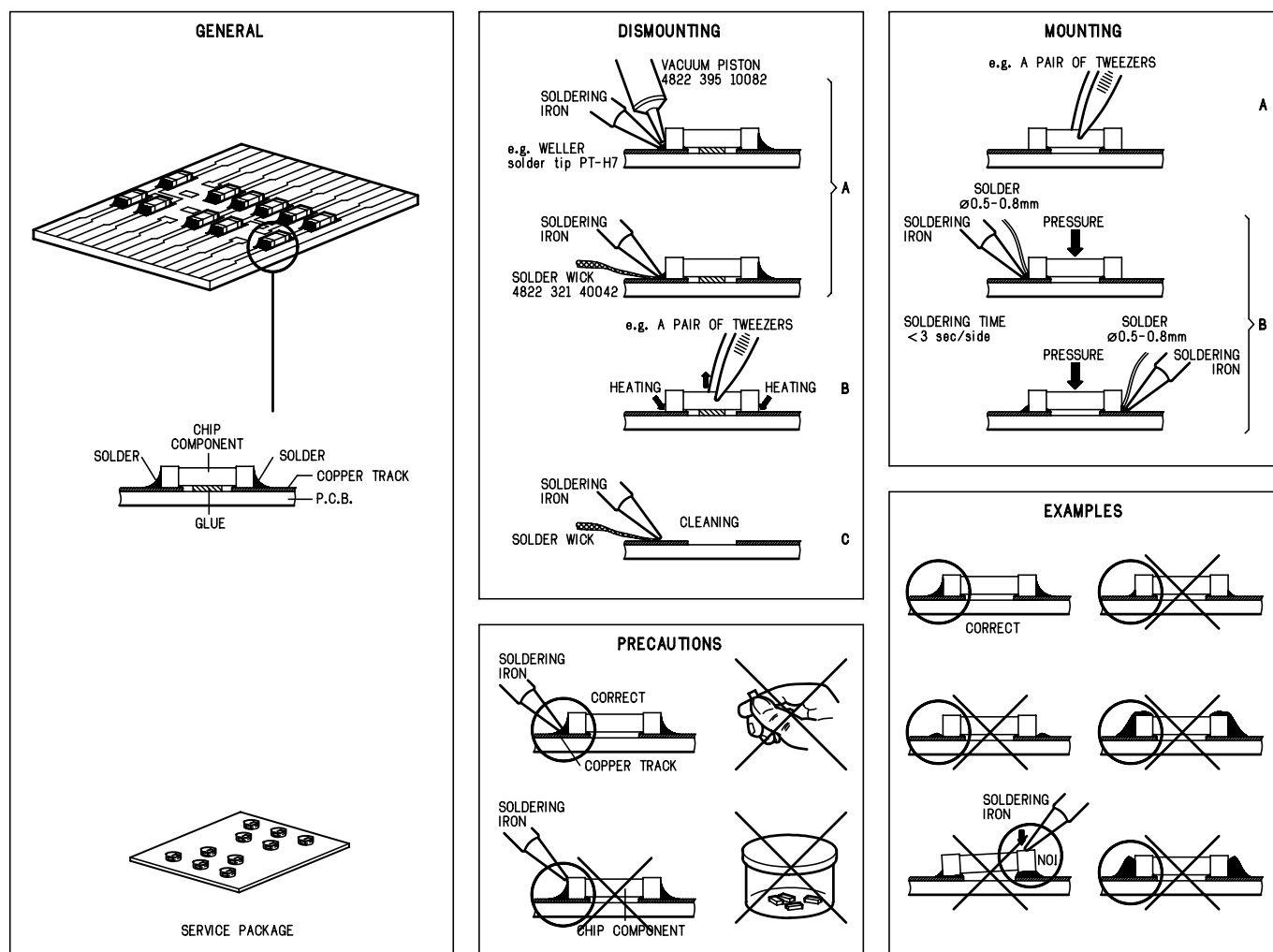


PHILIPS

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HANDLING CHIP COMPONENTS



SERVICE TOOLS

TORX T10 screwdriver with shaft length 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 Ω) 4822 320 11307

extendible cable (2m, 2M Ω , to connect wristband to connection box) 4822 320 11305

connecting cable (3m, 2M Ω , to connect table mat to connection box) 4822 320 11306

earth cable (1M Ω , 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

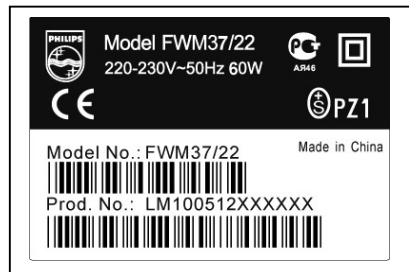
Philips CE is producing lead-free sets from 1.1.2005 onwards.

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 (lead-ed/ 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 SPECIFICATIONS

GENERAL

Mains voltage	-/22/93 :	230 V
	-/05/79 :	240 V
	-/37 :	120 V
Mains frequency	-/05/22/79/93 :	50 Hz
	-/37 :	60 Hz
Battery	Centre remote :	6V (R03 x 4)
	Station remote :	CR2025 x 1

Power consumption		
Active	WAC700 :	< 35 W
	WAS700 :	< 25 W
Standby	WAC700 :	< 18 W
	WAS700 :	< 14 W
Eco-standby	WAC700 :	< 1 W
	WAS700 :	< 1 W

Dimension (W x H x D)		
	WAC700 :	608 x 303 x 175 mm
	WAS700 :	360 x 283 x 128 mm

Weight	WAC700 :	7.7 Kg
	WAS700 :	4.2 Kg

AMPLIFIER

Output power (RMS)	WAC700 :	2 x 15 W + 2 x 25W
	WAS700 :	2 x 5 W + 1 x 10 W
Speaker impedance	WAS700 :	16 Ω (Panel)
		8 Ω (subwoofer)
	WAC700 :	6 Ω (Panel)
		12 Ω (subwoofer)
Frequency response	:	50 Hz - 16 kHz (± 3 dB)
S/N Ratio	:	> 72 dBA (IEC)
Aux input sensitivity	:	500mV
Headphone Impedance	:	21 Ω – 150 Ω

WIRELESS

Wireless standard	:	802.11g
(backward compatible to 802.11b)		
Wireless security	:	WEP 64 or 128bit
		WPA=PSK
Frequency range	:	2412-2462 MHz
		(CH1-CH11)

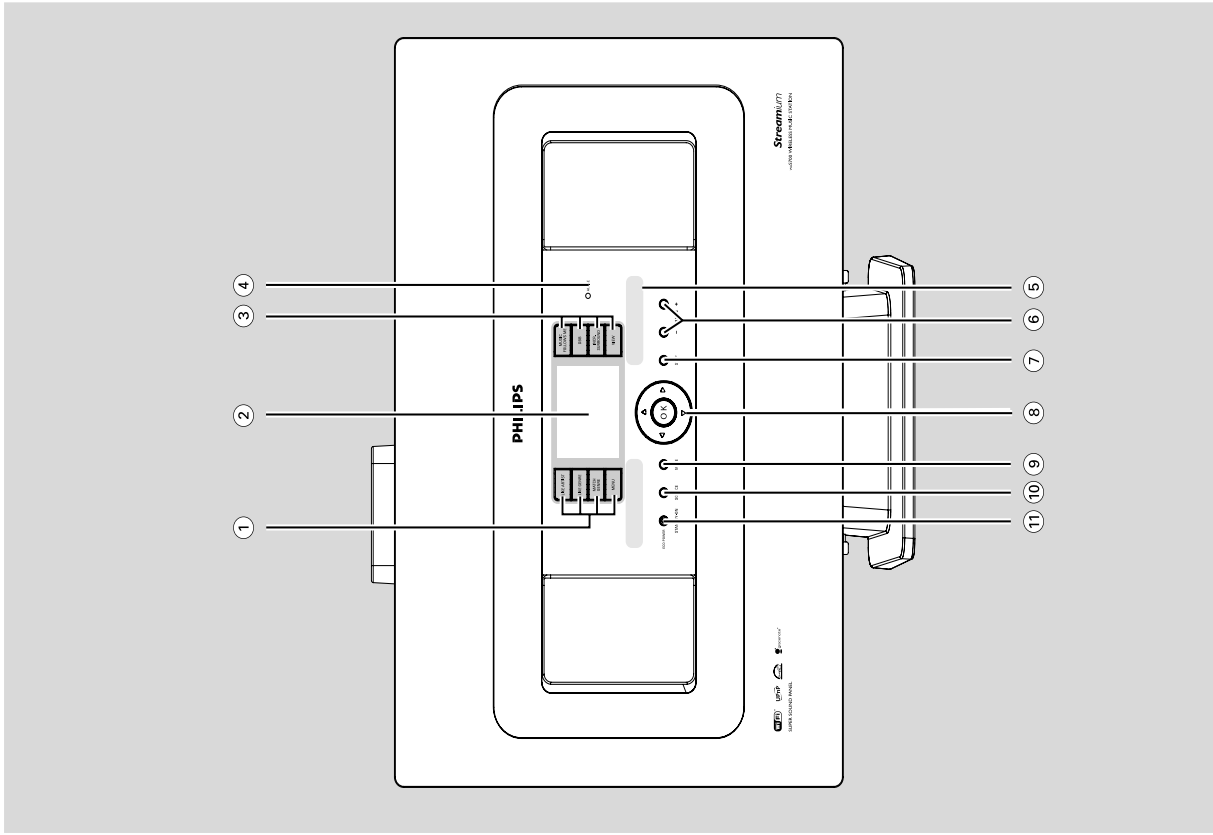
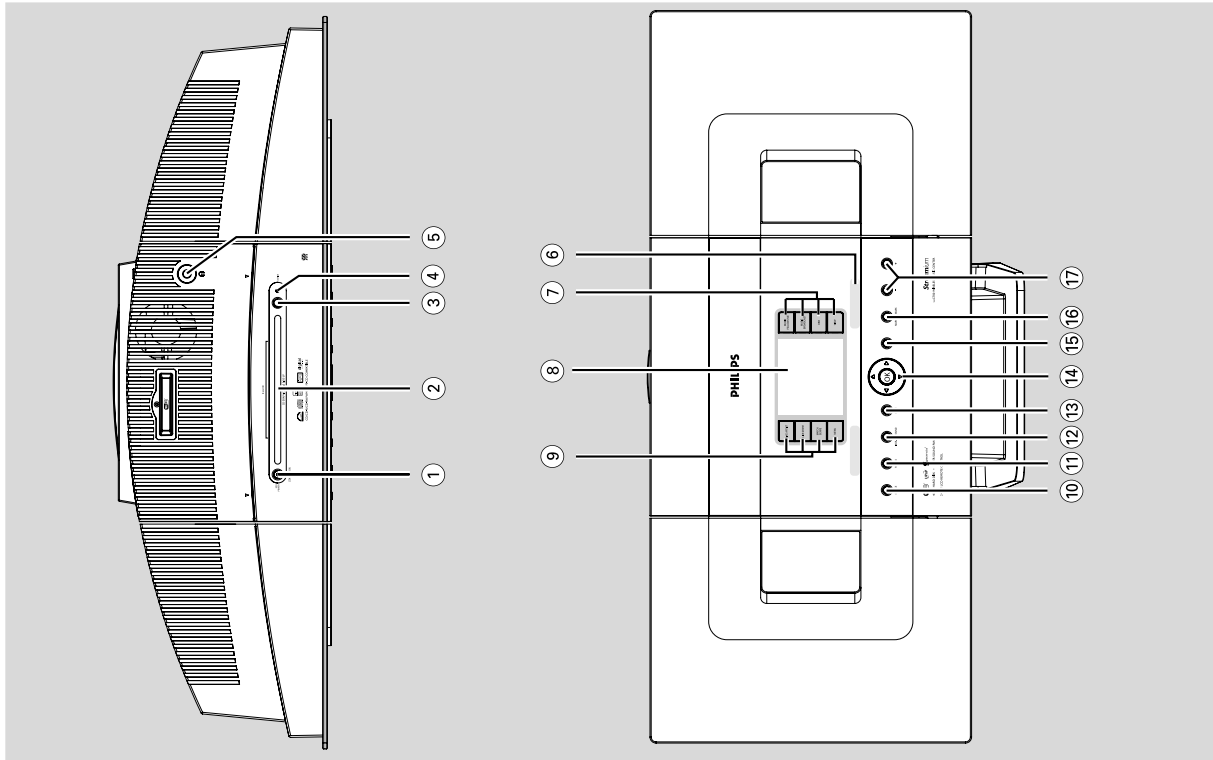
TUNER - FM SECTION

Tuning range	:	87.5 - 108 MHz
IF frequency	:	10.7 MHz $\pm$ 0.2 MHz
Number of presets	:	40
FM Antenna/cable	:	COAX / T-antenna

HDD/CD player (wac700 only)

Frequency Range	:	30-18000 Hz, -3 dB
S/N ratio	:	$\geq$ 72 dBA (IEC)
MPEG 1 Layer 3 (MP3-CD)	:	MPEG AUDIO
MP3-CD bit rate	:	32-256 kbps, VBR,
		128 kbps advised
WMA bit rate	:	up to 160kbps
Sampling frequencies	:	32, 44.1, 48 kHz
HDD Storage capacity	:	40GB*
Recording quality	:	128kbps or 160kbps
Recording speed	:	1x, 4x

*Actual free space is 35GB or less, due to the buffer partition for MP3 compression, firmware, music CD database and demo tracks stored.



CONNECTION AND CONTROLS

Controls (illustrations on page 3)

- Controls on the Center (Top and front panels)**

 - ① **STANDBY-ON/ ECO POWER**
 - press briefly to switch Center on or to standby mode ;
 - press and hold to switch Center to Eco Power mode or on
 - ② **CD slot loader**
 - ③ **EJECT**
 - ejects a disc from the slot loader
 - ④ **ACTIVE**
 - HD: lights up green during CD ripping /MP3 conversion
 - ⑤  3.5 mm headphone socket
 - Helpful hints:**
 - Adjust the volume to a moderate level before you plug in the headphones.
 - Connecting headphones will switch off the speakers.
 - ⑥ **IR**
 - sensor for the infrared remote control
 - Helpful hints: Always point the remote control towards this sensor.**
 - ⑦ **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.
 - VIEW**
 - toggles playback display and previous option list
 - ⑧ **Display**
 - shows status of Center
 - ⑨ **SAME ARTIST**
 - HD: plays all the tracks of current Artist
 - SAME GENRE**
 - HD: plays all the tracks of current Genre
- SMART EQUALIZER**

 - HD: selects match sound setting for current Genre

MENU

 - enters or exits setup menu.

⑩ **SOURCE**

 - selects sound source **HD, CD, Radio or AUX**
 - In standby mode: switches Center on and selects sound source **HD, CD, Radio or AUX**

⑪ **RECORD**

 - CD/Radio/AUX:

Controls (illustrations on page 4)

- Controls on the Station (front panel)**

① **SAME ARTIST**

 - HD: plays all the tracks of current artist

SAME GENRE

 - HD: plays all the tracks of current genre

SMART EQUALIZER

 - HD: selects match sound setting for current genre

MENU

 - enters or exits setup menu

② **Display**

 - shows status of Station

③ **MUSIC FOLLOWS ME**

 - HD: moves music playback from Station to Center; or from Center to Station

DBB (Dynamic Bass Boost)

 - turns the bass enhancement on (DBB1, DBB2, DBB3) or off

INCR. SURROUND

 - selects surround sound effect

VIEW

 - toggles playback display and previous option list

④ **ACTIVE**

 - HD: lights up green when streaming is activated between Center and Station

⑤ **IR**

 - sensor for the infrared remote control
 - Helpful hints: Always point the remote control towards this sensor.**

⑥ **VOLUME - +**

 - adjusts the volume level

⑦ **STOP**

 - stops playback
 - In standby mode: activates/ deactivates the demonstration mode (press and hold the button for 5 seconds)
- ⑧    

 - navigation controls (left, right, up, down) to scroll through the option list

⑨ 

 - HD: returns to previous option lists
 - Radio: enters the list of preset stations

⑩  

 - HD: skips/searches tracks/passage backward/ forward (in playback screen); fast scrolls the option list
 - Radio: tunes to radio stations

⑪  

 - confirms selection

OK

 - HD: starts or pauses playback

⑨ **MUTE**

 - switches the sound off temporarily

⑩ **SOURCE**

 - selects sound source **HD, Radio or AUX**
 - In standby mode: switches Station on and selects sound source **HD, Radio or AUX**

⑪ **STANDBY-ON/ ECO POWER**

 - press briefly to switch Station on or to standby mode;
 - press and hold to switch Station to Eco Power mode or on

CONNECTION AND CONTROLS

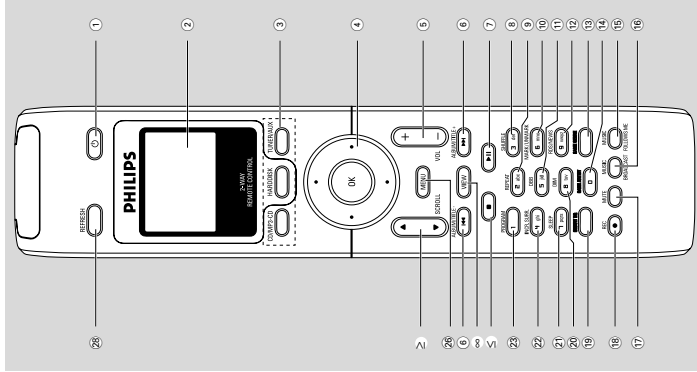
Controls

- ⑮ **MUSIC BROADCAST**
 - HD: broadcasts music from Center to Station
- ⑰ **MUTE**
 - switches the sound off temporarily
- ⑮ **REC**
 - CD/Radio/AUX: starts the recording to hard disk
- ⑰ **SMART EQ**
 - HD: selects match sound setting for current genre
- ⑰ **DIM**
 - changes the brightness of display illumination
- ⑰ **SLEEP**
 - adjusts/displays/switches off sleep timer
- ⑰ **INCR. SURROUND**
 - selects surround sound effect
- ⑰ **PROGRAM**
 - manually programs preset radio stations
- ⑰ **■**
 - stops playback or recording
 - In **standby mode**: activates/ deactivates the demonstration mode (*press and hold the button for 5 seconds*)

Controls

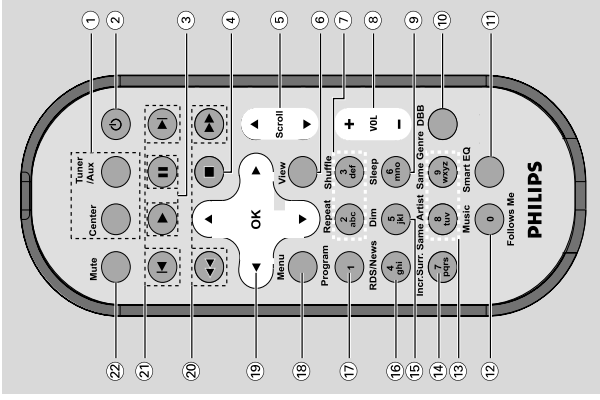
- In **standby mode**: switches the set on and selects **Radio** source or the audio input from an additional connected appliance
- ④ ◀ / ▶ / ▲ / ▼
 - navigation controls (left, right, up, down) to scroll through the option list
- ▼
 - HD/CD: returns to previous option lists
 - Radio: enters the list of preset stations
- ▲ / ▼
 - HD/CD: skips/searches tracks/passage backward/forward (in playback screen); fast scrolls the option list
 - Radio: tunes to radio stations
- ▶ / OK
 - confirms selection
- ⑤ VOL + -
 - adjusts the volume level
- ⑥ ◀◀ / ▶▶
 - HD/CD: skips/searches tracks/passage backward/forward (in playback screen)
- ⑦ ▶▶ II
 - HD/CD: starts or pauses playback
- ⑧ SHUFFLE
 - selects random playback
- ⑨ REPEAT
 - selects continuous playback
- ⑩ MARK/UNMARK
 - CD: selects or deselects tracks to be recorded on hard disk
- ⑪ DBB/Dynamic Bass Boost
 - turns the bass enhancement on (**DBB1**, **DBB2**, **DBB3**) or off
- ⑫ RDS/NEWS
 - Radio: selects RDS information
 - HD/CD/AUX: turns NEWS function on or off
- ⑬ SAME GENRE
 - HD: plays all the tracks of current Genre
- ⑭ SAME ARTIST
 - HD: plays all the tracks of current Artist
- ⑮ MUSIC FOLLOWS ME
 - HD: moves music playback from Center to Station, or from Station to Center

Center's 2-way remote control



- ① **⏻**
 - press briefly to switch the set to standby mode
 - press and hold to switch the set to Eco Power mode or on
- ② **Synchro display**
 - synchronous display of the set's status
- ③ **Source buttons**
- CD/MP3-CD**
 - selects **CD** source
- In **standby mode**: switches the set on and selects **CD** source.
- HARDDISK**
 - selects **HD** source
- In **standby mode**: switches the set on and selects **HD** source
- TUNER/AUX**
 - selects **Radio** source or the audio input from an additional connected appliance

Station's remote control



- ① **Source buttons**
- Center**
 - selects **HD** source (located on Center)
 - In **standby mode**: switches the set on and selects **HD** source (located on Center)
- Tuner/Aux**
 - selects **Radio** source or the audio input from an additional connected appliance
 - In **standby mode**: switches the set on and selects **Radio** source or the audio input from an additional connected appliance
- ② **⏻**
 - press briefly to switch the set to standby mode
 - press and hold to switch the set to Eco Power mode or on
- ③ **▶**
 - HD/CD: starts playback
- II**
 - HD/CD: pauses playback

CONNECTION AND CONTROLS

Controls

■

stops playback or recording

In **standby mode**: activates/ deactivates the demonstration mode (press and hold the button for 5 seconds)

▲ / ▼ **Scroll**

scroll the display screen upward or downward

6 **View**

toggles playback display and previous option list

7 **Repeat**

selects random playback

Shuffle

selects continuous playback

8 **VOL +,-**

adjusts the volume level

9 **Sleep**

adjusts/displays/switches off sleep timer

10 **DBB(Dynamic Bass Boost)**

turns the bass enhancement on (**DBB1**, **DBB2**, **DBB3**) or off

11 **Smart EQ**

HD: selects match sound setting for current genre

12 **Music Follows Me**

HD: moves music playback between Center and Station

13 **Same Artist**

HD: plays all the tracks of current Artist

Same Genre

HD: plays all the tracks of current Genre

14 **Incr. Surr.**

selects surround sound effect

15 **Dim**

changes the brightness of display illumination

16 **RDS/News**

Radio: selects RDS information

HD/CD/AUX: turns NEWS function on or off

17 **Program**

manually programs preset radio stations

18 **Menu**

enters or exits setup menu

19 ◀ / ▶ / ▲ / ▼

navigation controls (left, right, up, down) to scroll through the option list

▼

HD/CD: returns to previous option lists

Radio: enters the list of preset stations

▲ / ▼

HD/CD: skips/searches tracks/passage backward/forward (in playback screen); fast scrolls the option list

Radio: tunes to radio stations

▶ / OK

confirms selection

20 ◀◀ / ▶▶

HD/CD: searches track passage backward/forward (in playback screen)

21 ◀◀◀ / ▶▶▶

HD/CD: skips tracks backward/forward (in playback screen)

22 **MUTE**

switches the sound off temporarily

For more information on operation instruction please visit Philips Support internet site : <http://www.p4c.philips.com>

Appendix

Appendix

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

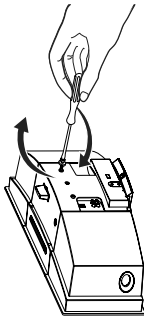
- 8 x screws for fixing the Center's bracket
- 6 x screws for fixing the Station's bracket
- Drilling tools (e.g. electric drill)

Preparation

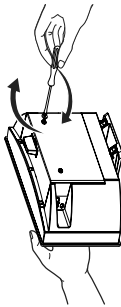
- To find a suitable location for mounting, try your necessary rear connections and the Wi-Fi connection between Center and Station (see the chapter **Installation**).
- Ask a qualified person to help you with the wall mounting, who should:
 - to avoid unexpected damage, learn about the piping, wiring 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

- Align the bracket (for Center or Station) in the chosen location on a wall. Use a pencil to mark the drilling positions.
- Drill holes as marked.
- Fix the brackets to the wall using suitable screws (not supplied).
- As shown, fasten the supplied screws to your Center or Station using a screwdriver

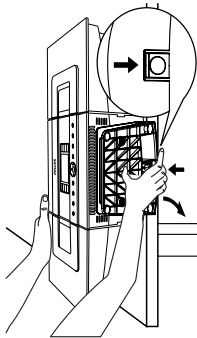


Center

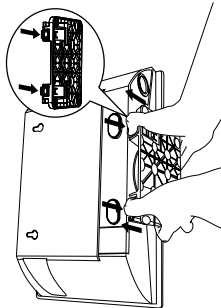


Station

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

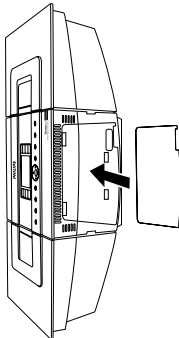


Center

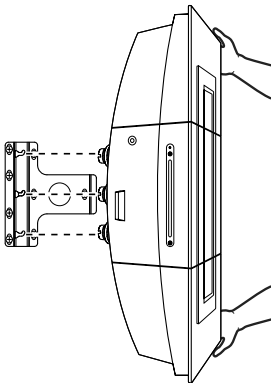


Station

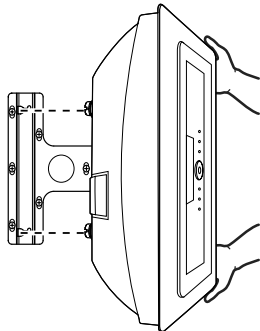
- On Center, insert the supplied protective card sheet where the stand was installed.



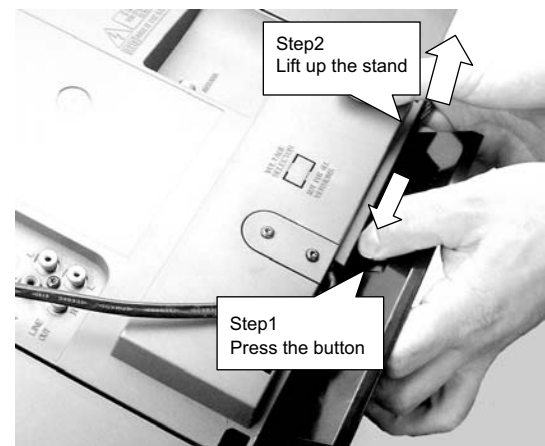
- As shown, hook and mount Center or Station in place.



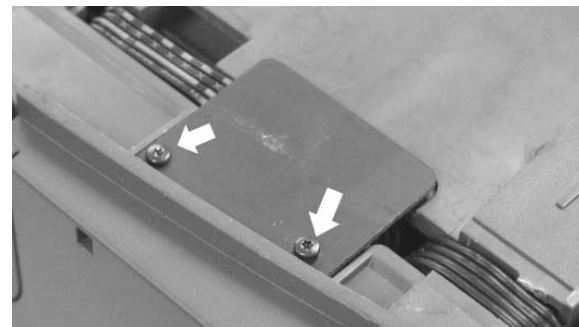
Center



Station

DISASSEMBLY INSTRUCTION**1. Remove Stand****2. Remove Loudspeaker Box**

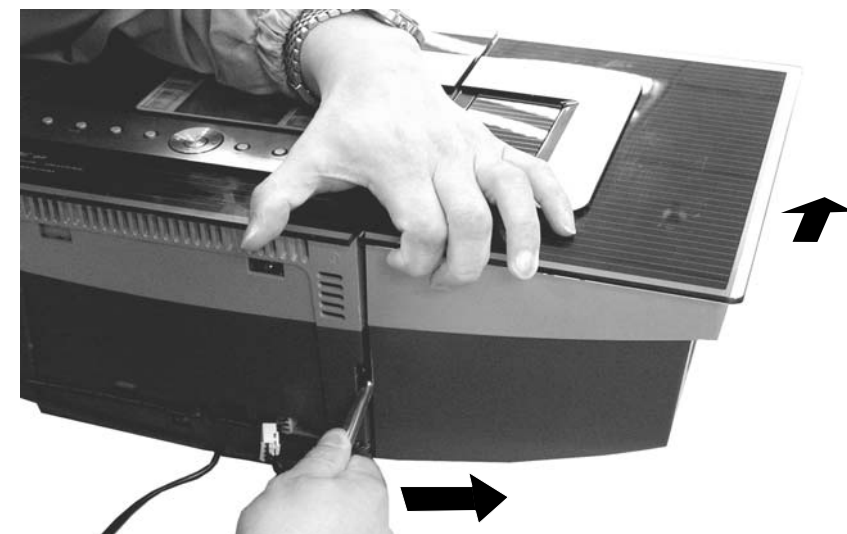
a. remove screws M2x8 - 2 pcs



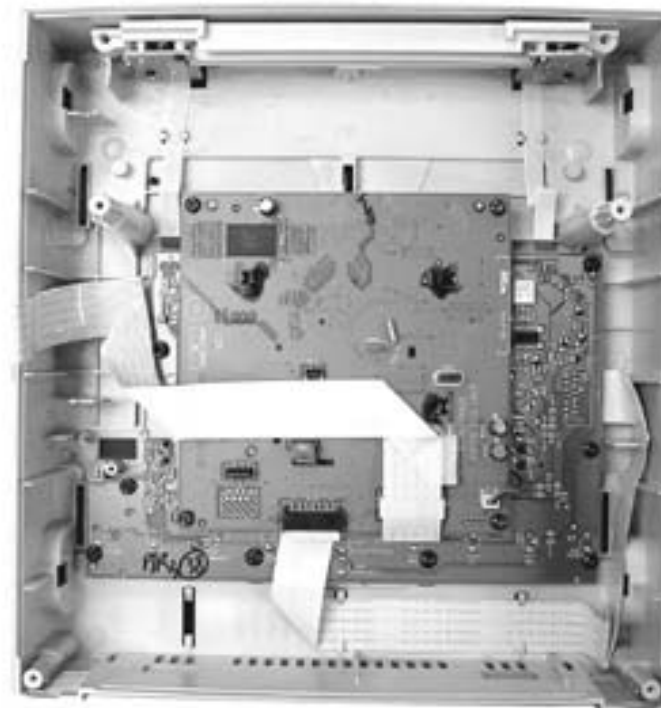
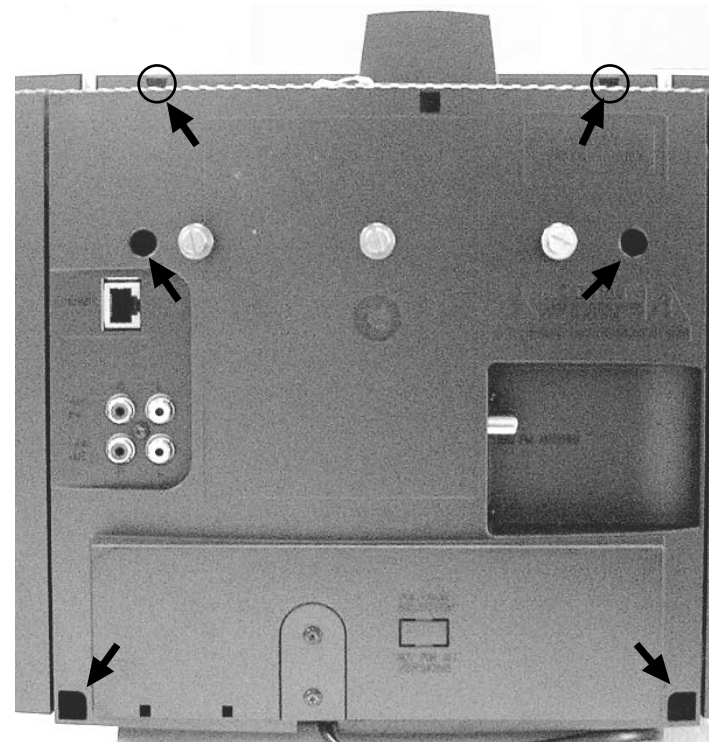
b. pull out speaker cable connector



c. take out loudspeakers

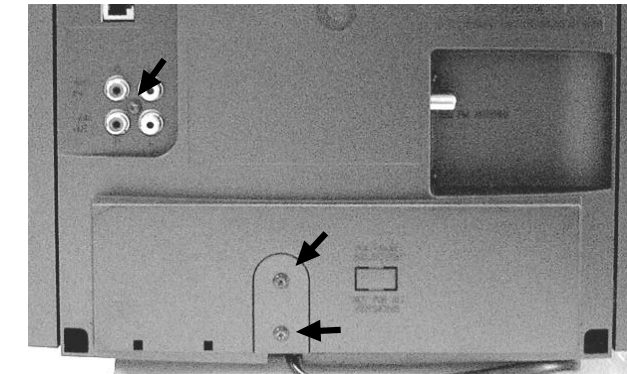
**3. Separate Front and Back Cabinet.**

a. remove screws T3x20 - 6 pcs.

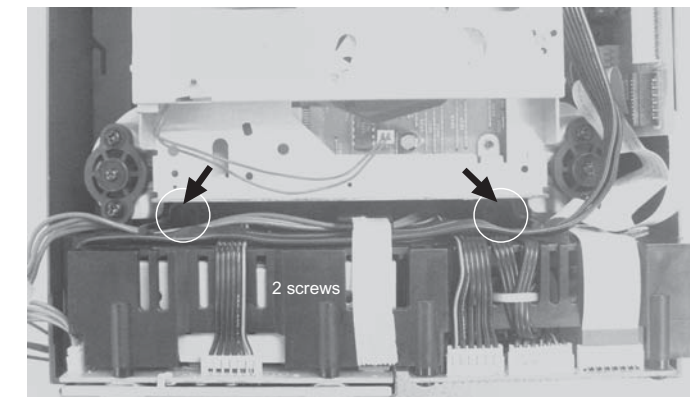
**4. Remove Core Pre-assembly**

a. remove AC cord cover - screw T3x8 2 pcs.

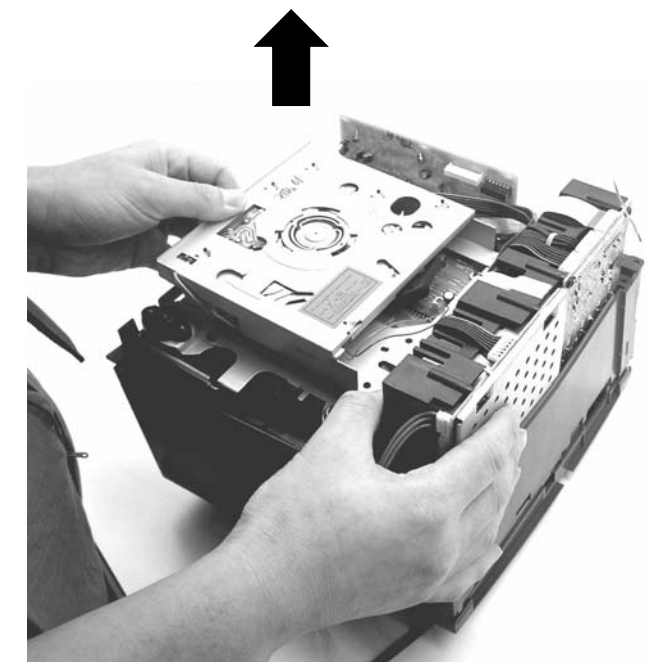
b. remove screw M3x10 - 1 pc. (Aux Jack)



c. remove screws M3x10 - 2 pcs.



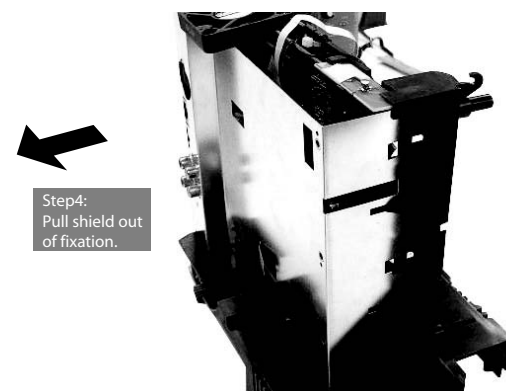
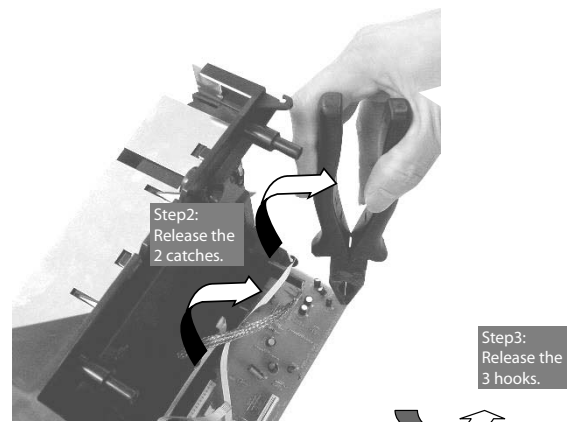
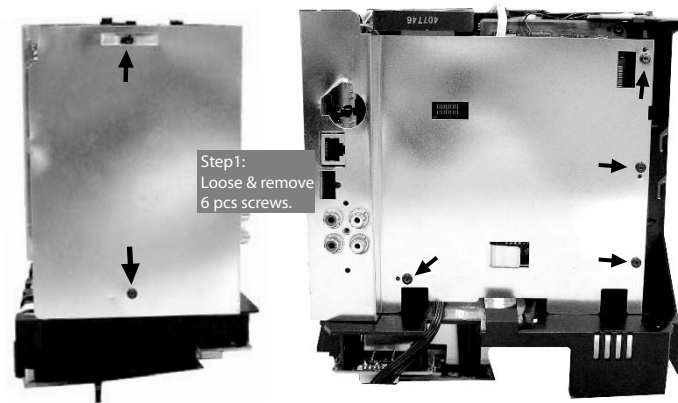
d. pull out Core Pre-assembly



DISASSEMBLY INSTRUCTION

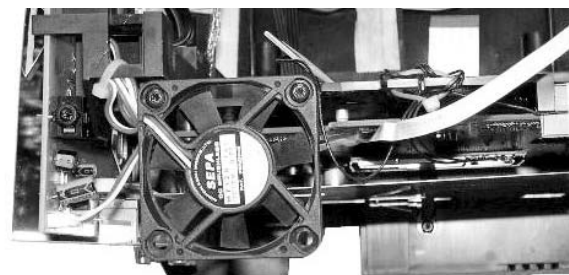
5. Remove Shield Sheet

- a. remove screw T3x10 - 6 pcs.



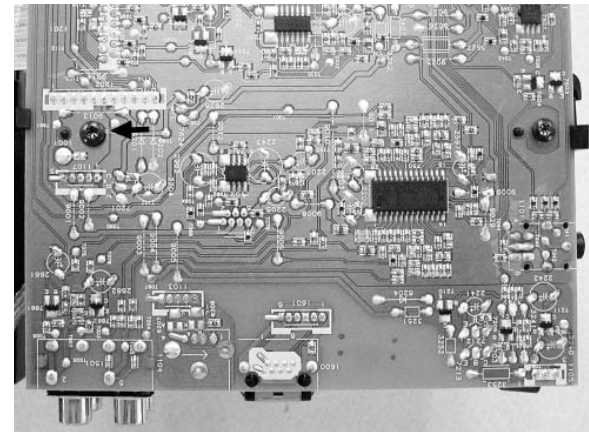
6. Remove cooling FAN

- remove screw T3x12 - 2 pcs.



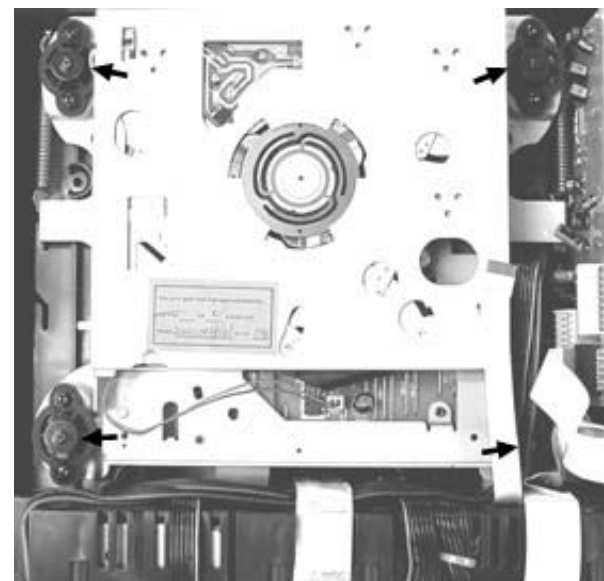
7. Remove PBAS - AF

- remove screws T3x10 - 1 pcs.

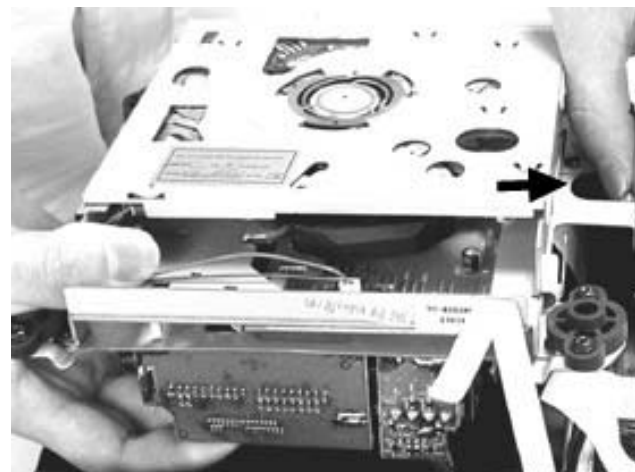


8. Remove Bracket CD/HDD

- a. remove screws T3x10 - 2 pcs.

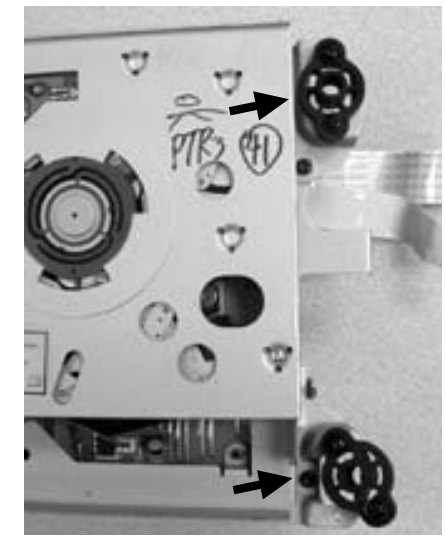


- b. remove Spring CD/HDD



9. Remove CD Module

- remove screws T2.5x8 - 4 pcs.



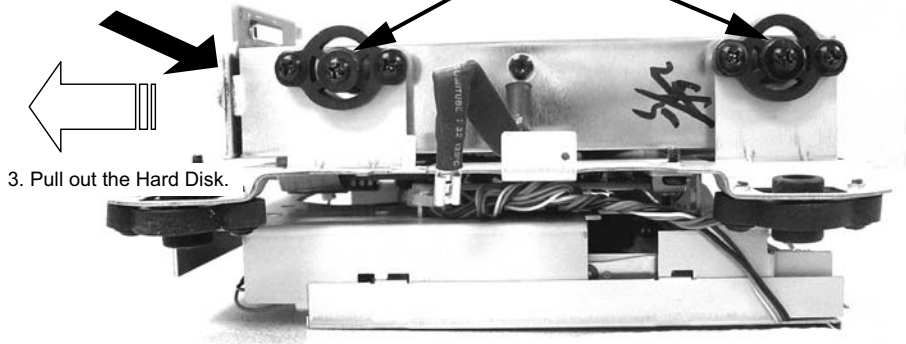
10. Remove Hard Disk

- remove screws (314107040061) - 4 pcs.

2. Melt away the solder and take away 2 PCBs.

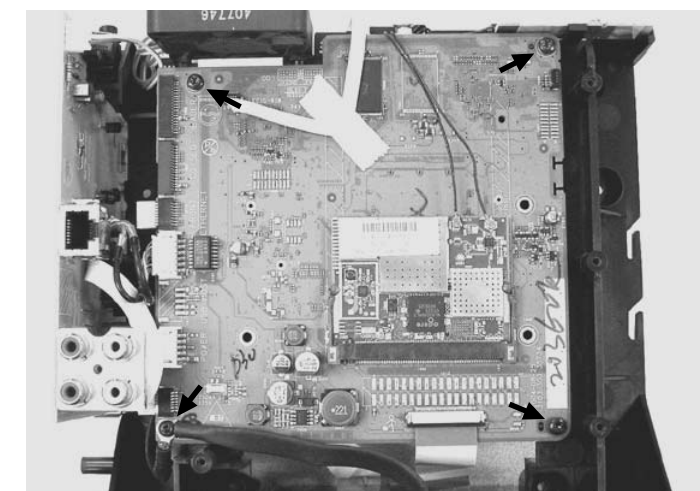
1. Remove 4 pcs screws

3. Pull out the Hard Disk.



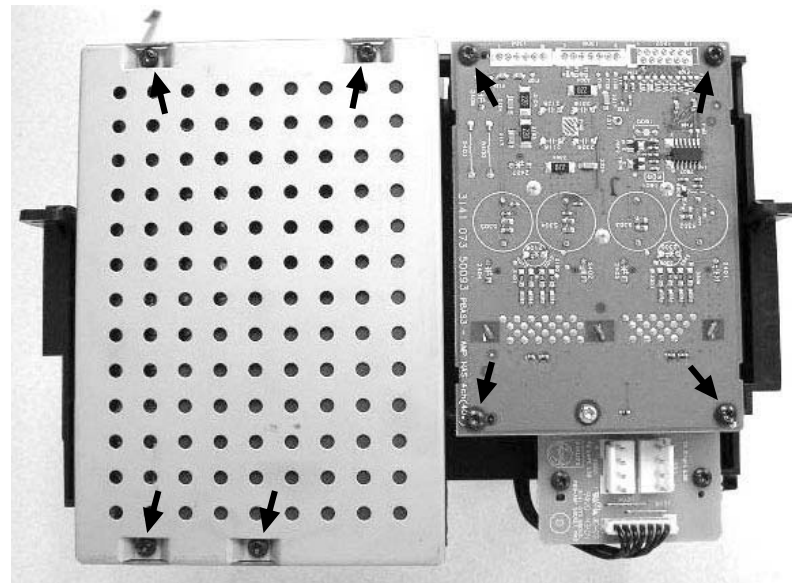
11. Remove HAS module

- remove screws T3x10 - 4 pcs.

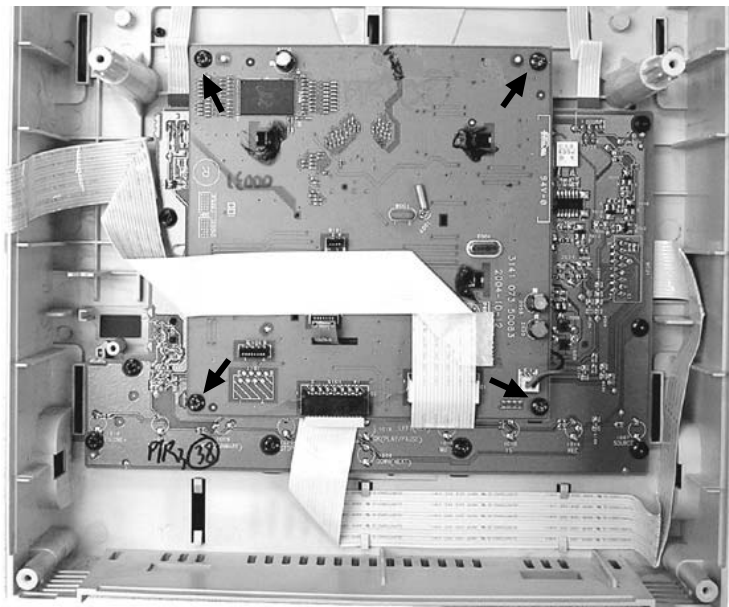


DISASSEMBLY INSTRUCTION

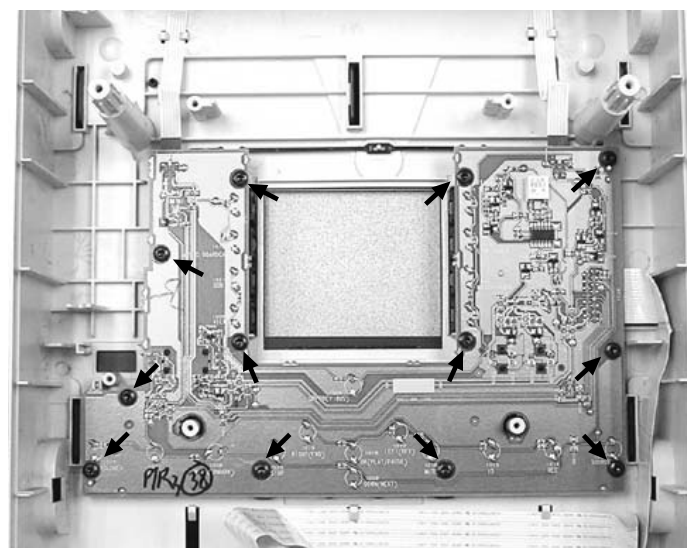
12. Remove AMP board and Supply module
- remove screws T3x12 - 8 pcs.



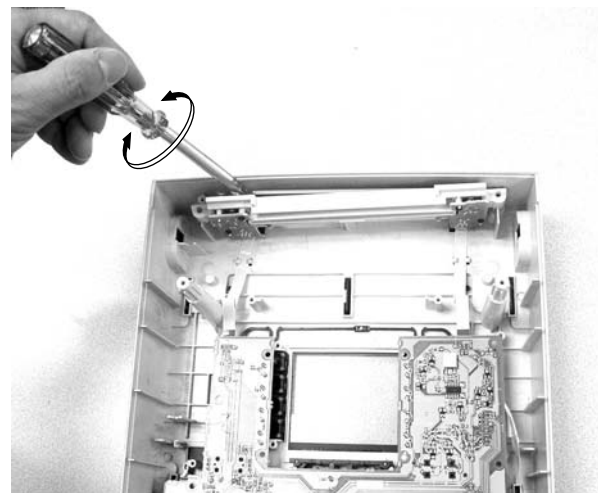
13. Remove PBAS Front
- remove screws T3x10 - 4 pcs.



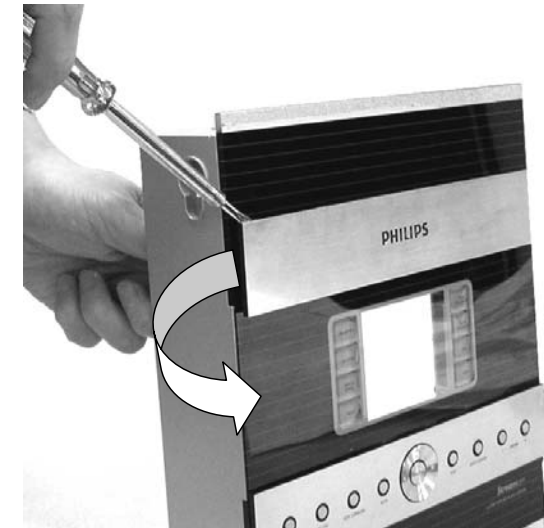
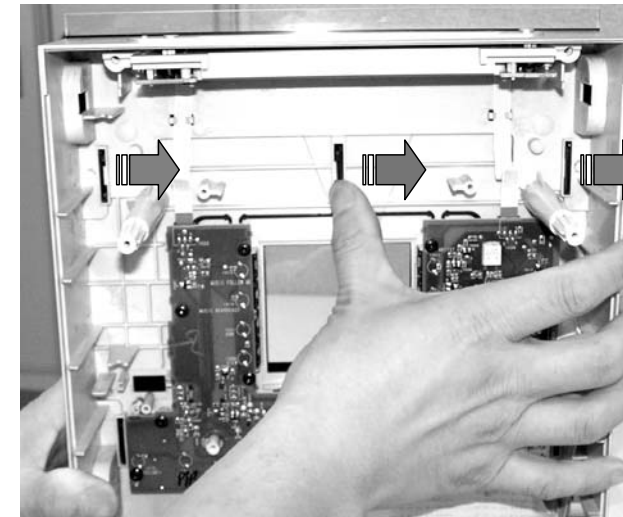
14. Remove Panel Key board
- remove screws T3x10 - 12 pcs.



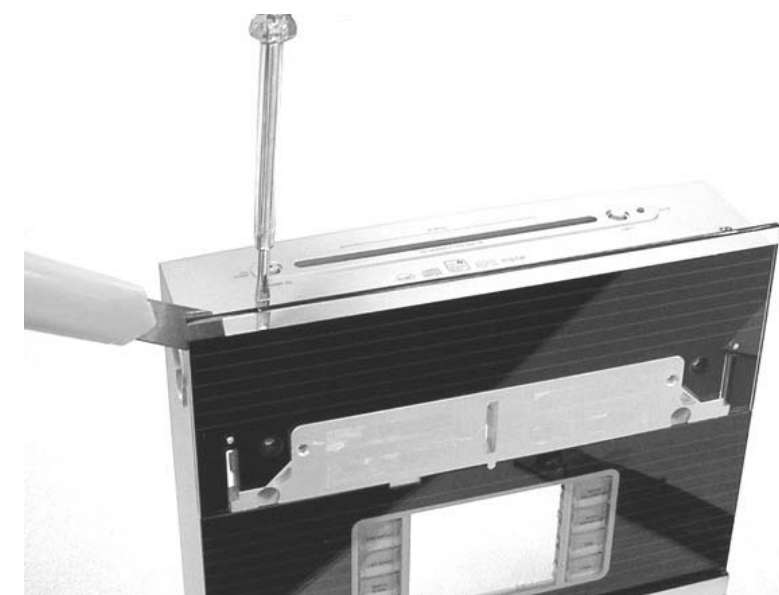
15. Remove BTN PWR/REC PRE-ASSY



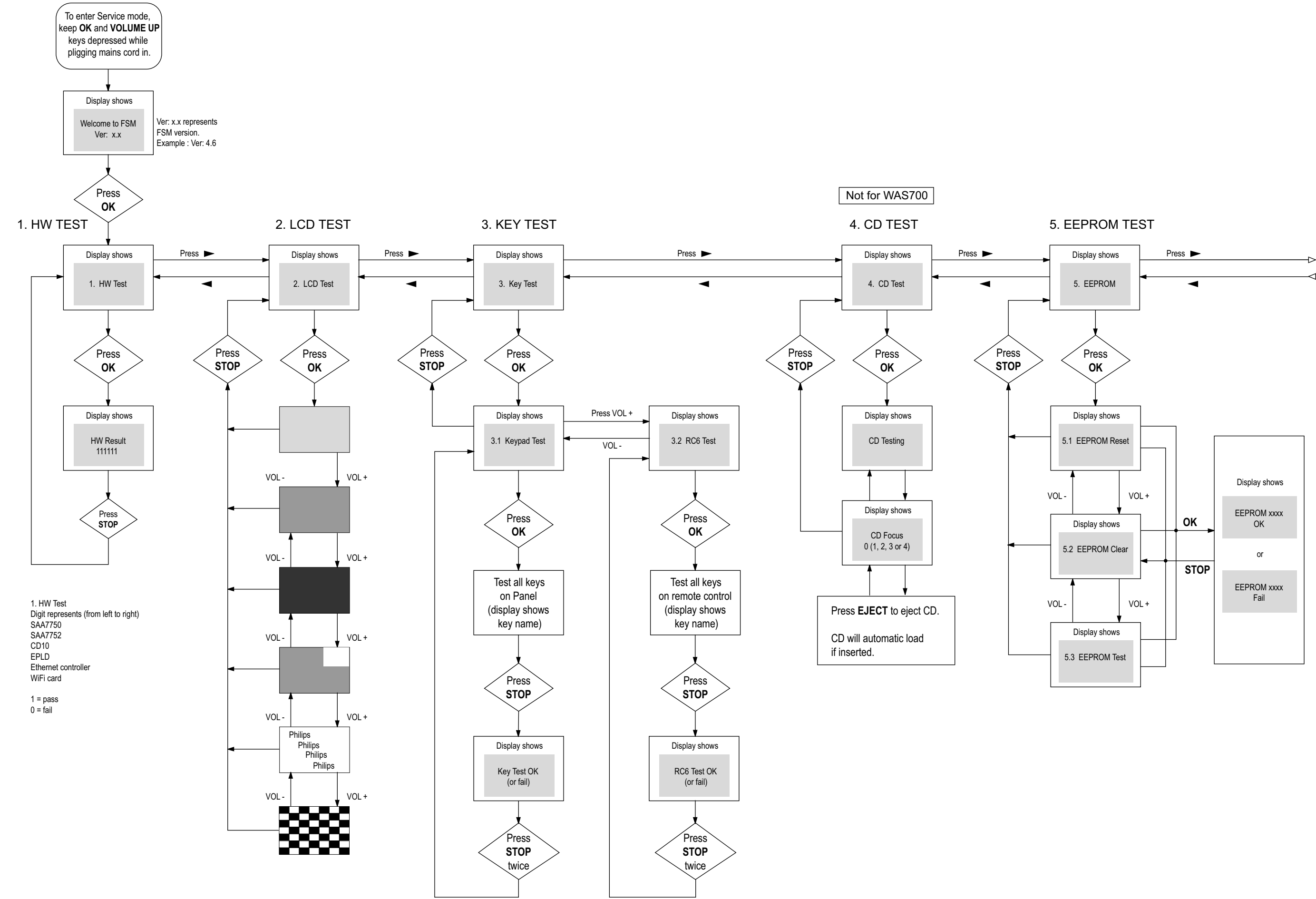
16. Remove PANEL DISPLAY and PANEL CEN Pre-assy



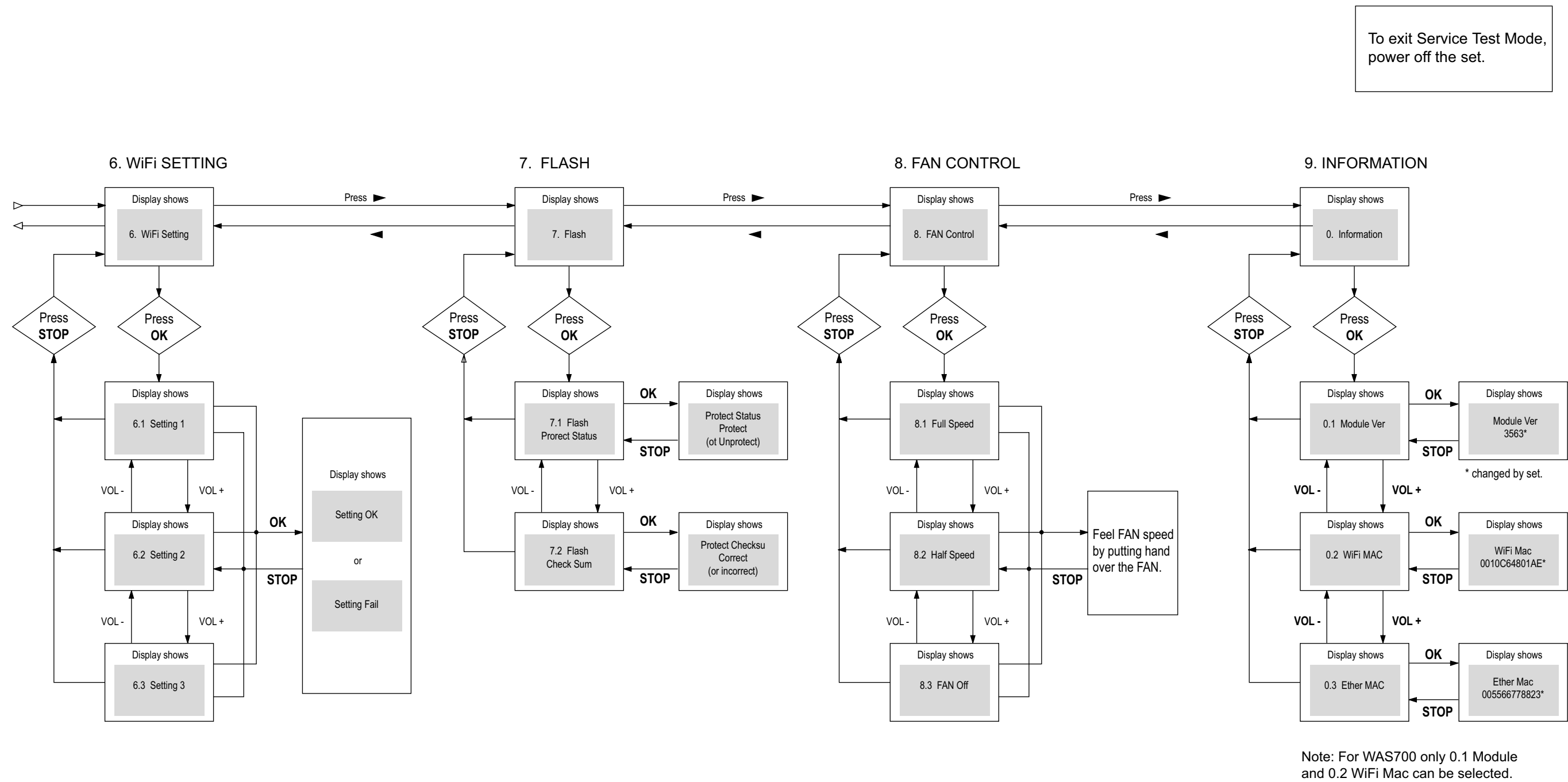
17. Remove COVER FNT CEN BTM and COVER FNT CEN UPPER



SERVICE TEST PROGRAM



SERVICE TEST PROGRAM



SOFTWARE UPGRADING PROCEDURE

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 waCS700.

There are 2 ways to update the software.

- A) Using CD-Rom
- B) Using DMM

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. Click the link to save the software on your computer.



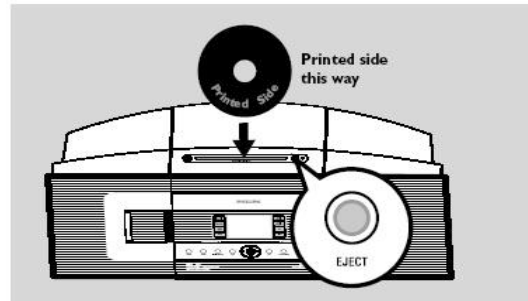
2. Unzip the .zip file and extract files into your PC.

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 upgrade the waCS700

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 off the Audio Station, insert the CD to the slot loader, CD graphic printed side facing you.



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.
 - The upgrade process of the Center will reboot twice

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

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. Turn on the Audio Station (paired earlier), the Audio Center will upgrade the Station wireless automatically.
7. It takes around 5 mins to complete the firmware upgrade for the Audio Station.

- The message **"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 Station at this stage.

8. When done, the Audio Station will go to the HD mode. You can start the normal operations afterward.

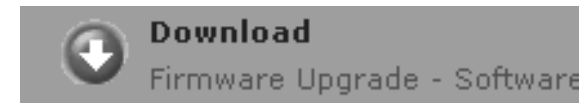
3. After the upgrade

Do confirm the software version by checking the system version. Please follow the procedure described in the section **"Software Version Verification Procedures"**.

B. Using DMM

1. How to download the software to your computer

1. Click the link to save the software on your computer.



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/>

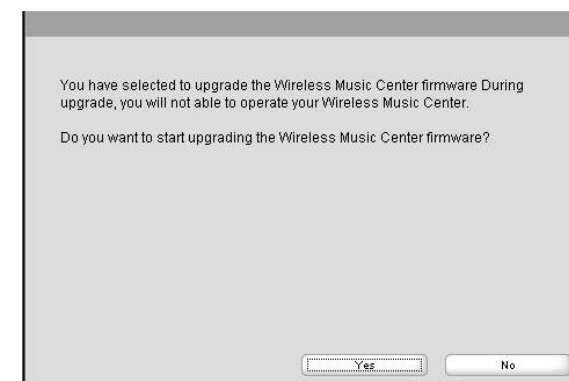
2. Steps to update waCS700

1. Launch the DMM

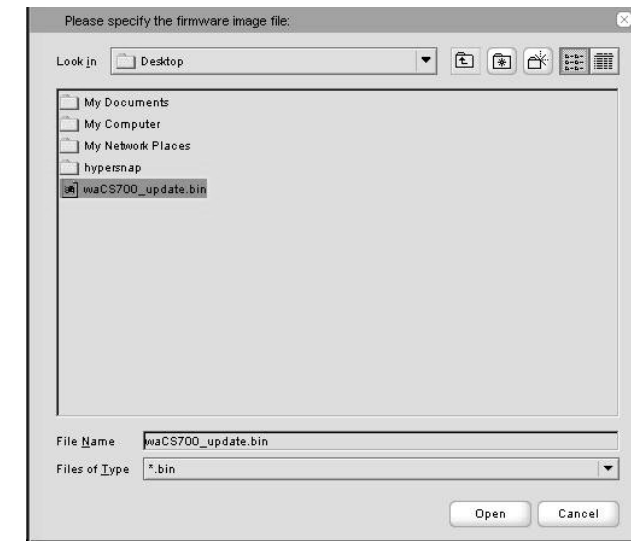
2. Select **Preference → Player Firmware → Upgrade Firmware.**



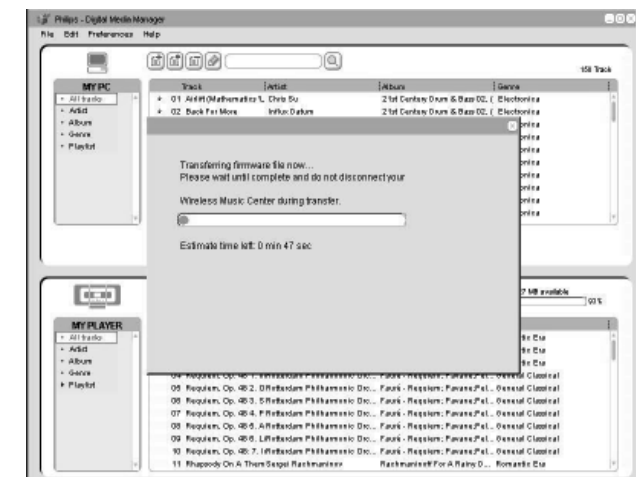
3. Click **Yes** to start the process.



4. Find the file where you stored in the PC and then click **"Open"**



5. The file is starting to transfer to the Audio Center.



6. After the firmware file is transferred to the Audio Center successfully, the Audio Center starts upgrade the Audio Station automatically.



- The message **"Updating firmware, please wait....."** and the **"process bar"** show on the display of the Audio Station.
- The upgrade process of the Station will reboot twice

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

SOFTWARE UPGRADING PROCEDURE

7. It takes around 5 mins to complete the firmware upgrade for the Audio Center.
8. When done, the Audio Center will go to the HD mode automatically. Turn on the Audio Station (paired earlier), the Audio Center will upgrade the Station wireless automatically.
9. It takes around 5 mins to complete the firmware upgrade for the Audio Station.
 - The message “**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 Station at this stage.

10. When done, the Audio Station will go to the HD mode. You can start the normal operations afterward.

4. 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**”.

CD DATABASE UPGRADING PROCEDURE

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

- A) Using CD-Rom
- B) Using DMM

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. Click the link to save the CDDB on your computer.



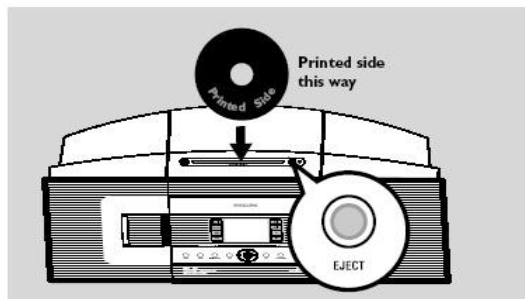
2. Unzip the .zip file and extract files into your PC.

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.



4. The Audio Center starts update the Audio's embedded CDDB automatically. The message "Updating the Gracenote database" (depends on the language setting on the set) is shown on the display.

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

5. It takes around 15-20 mins to complete CDDB updating.

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

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

7. Press eject button and then take out the disc.

8. You can start the normal operation afterward.

B. Using DMM

1. How to download the CDDB to your computer

1. Click the link to save the CDDB on your computer.



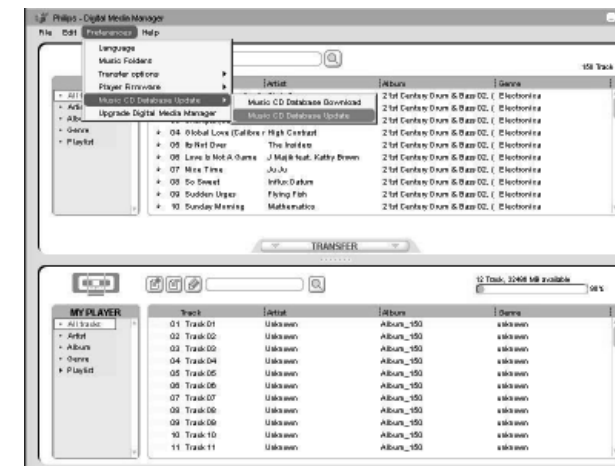
2. Unzip the .zip file and extract files into your PC.

Note:

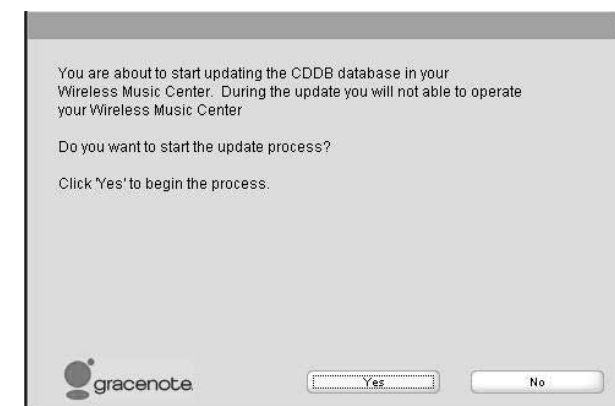
- Please do not rename the filename.
- If you do not have the software to open the .zip file, please visit below website to download the software.
<http://www.winzip.com/>

2. Steps to update the Gracenote CDDB

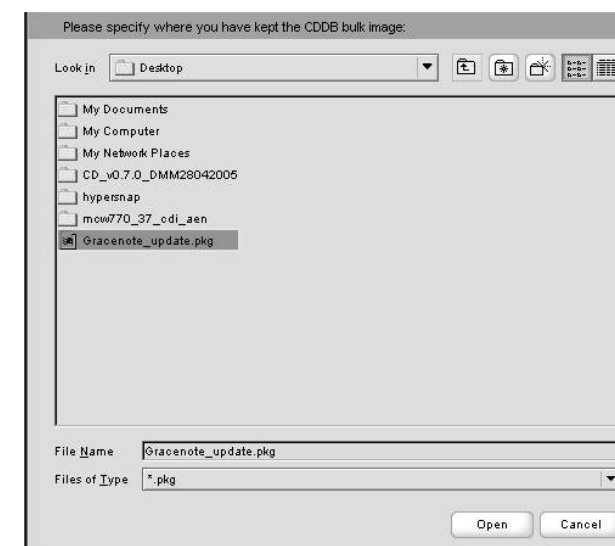
1. Launch the DMM
2. Select **Preference** → **Music CD Database Update** → **Music CD Database Update**.



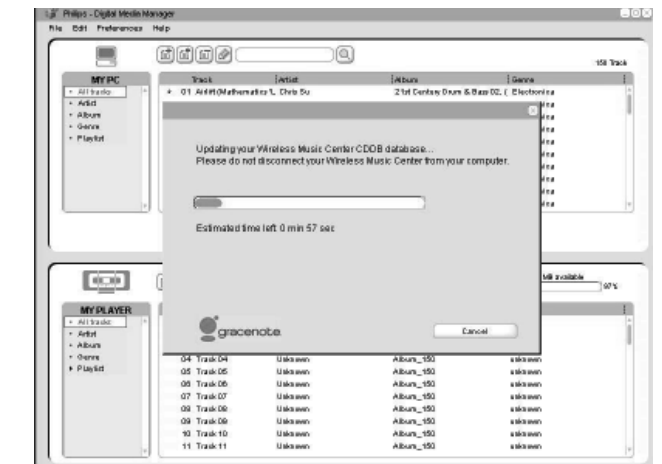
3. Click Yes to start the process.



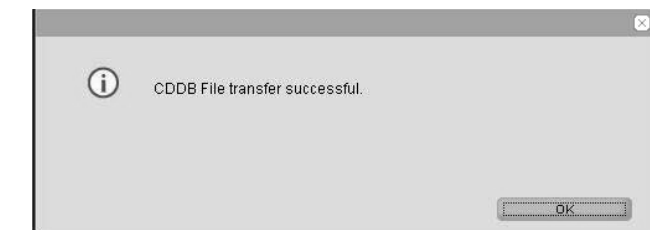
4. Find the file where you stored in the PC and then click Open.



5. The file is starting to transfer to the Audio Center.



6. After the CDDB file is transferred to the Audio Center successfully, the Audio Center starts update the Audio Center's embedded CDDB automatically.



The message "**Updating the Gracenote database**" (depends on the language setting on the set) is shown on the display.

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

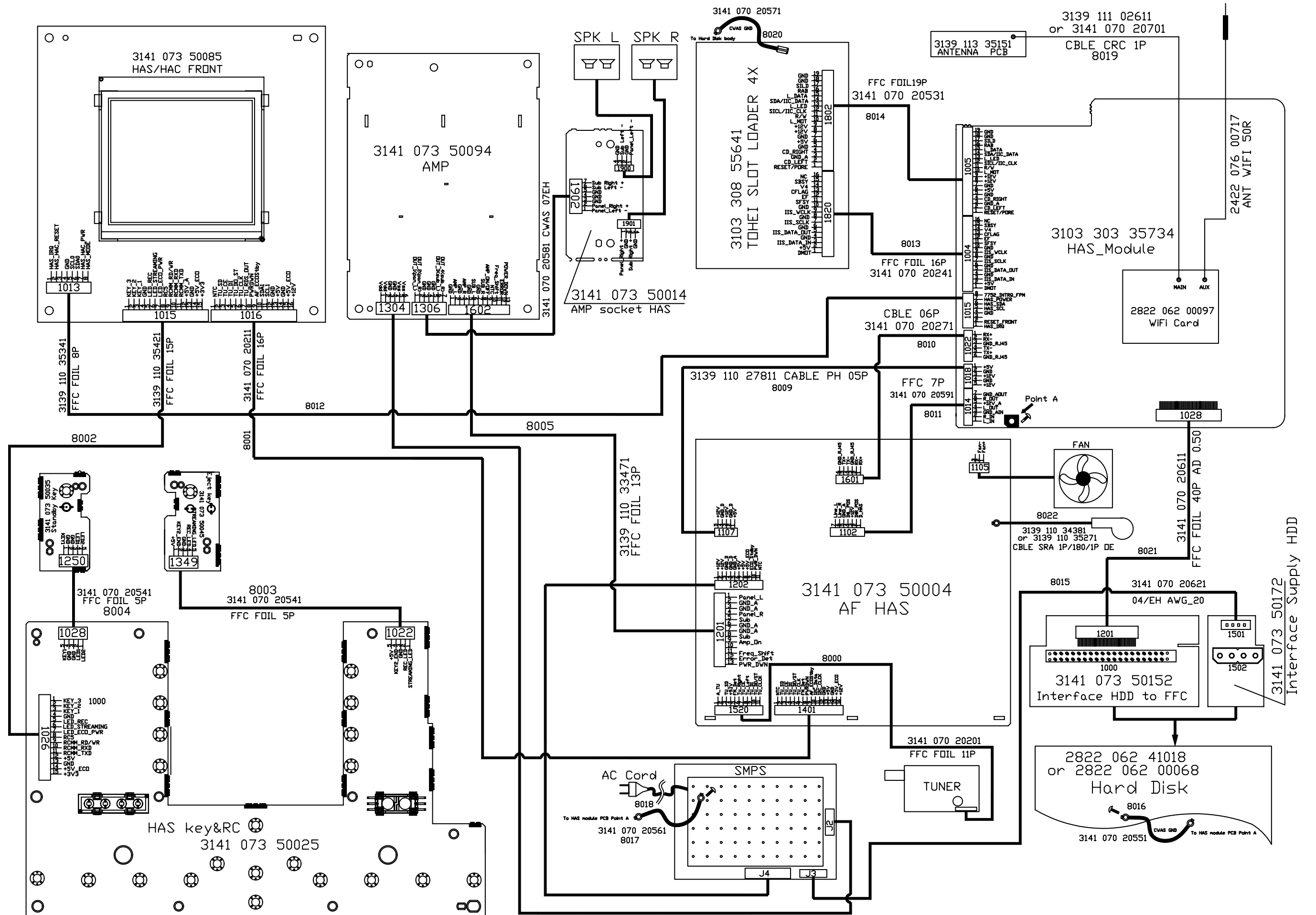
7. It takes around 15-20 mins to complete CDDB updating.

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.

SET WIRING DIAGRAM



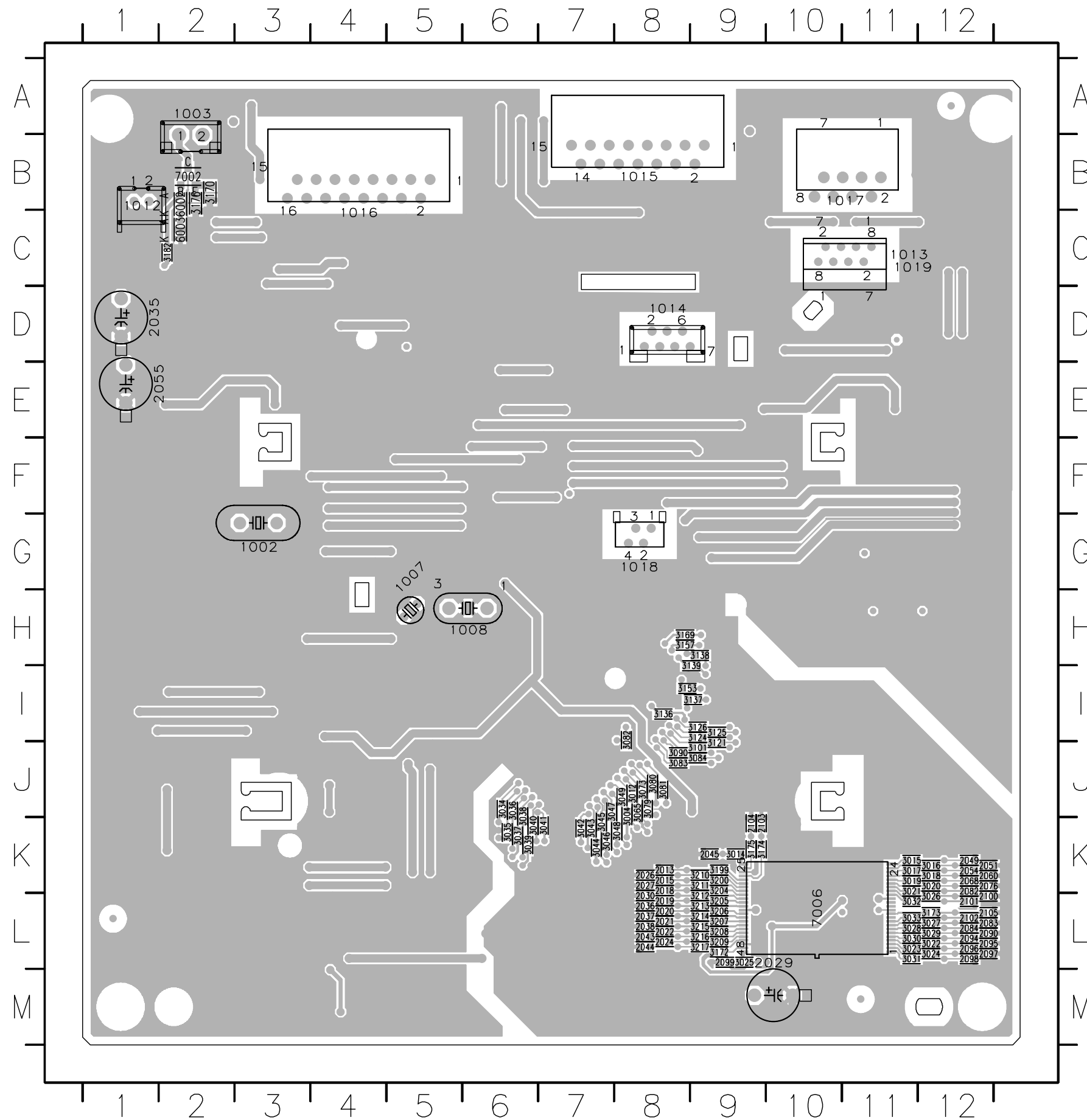
The schematic is divided into horizontal sections labeled A through I:

- A**: Power supply and initial signal input stage.
- B**: Signal processing and control logic.
- C**: Memory (Flash) and timing components.
- D**: Further signal processing and control logic.
- E**: Power supply and initial signal input stage.
- F**: Signal processing and control logic.
- G**: Power supply and initial signal input stage.
- H**: Signal processing and control logic.
- I**: Output driver and final signal processing.

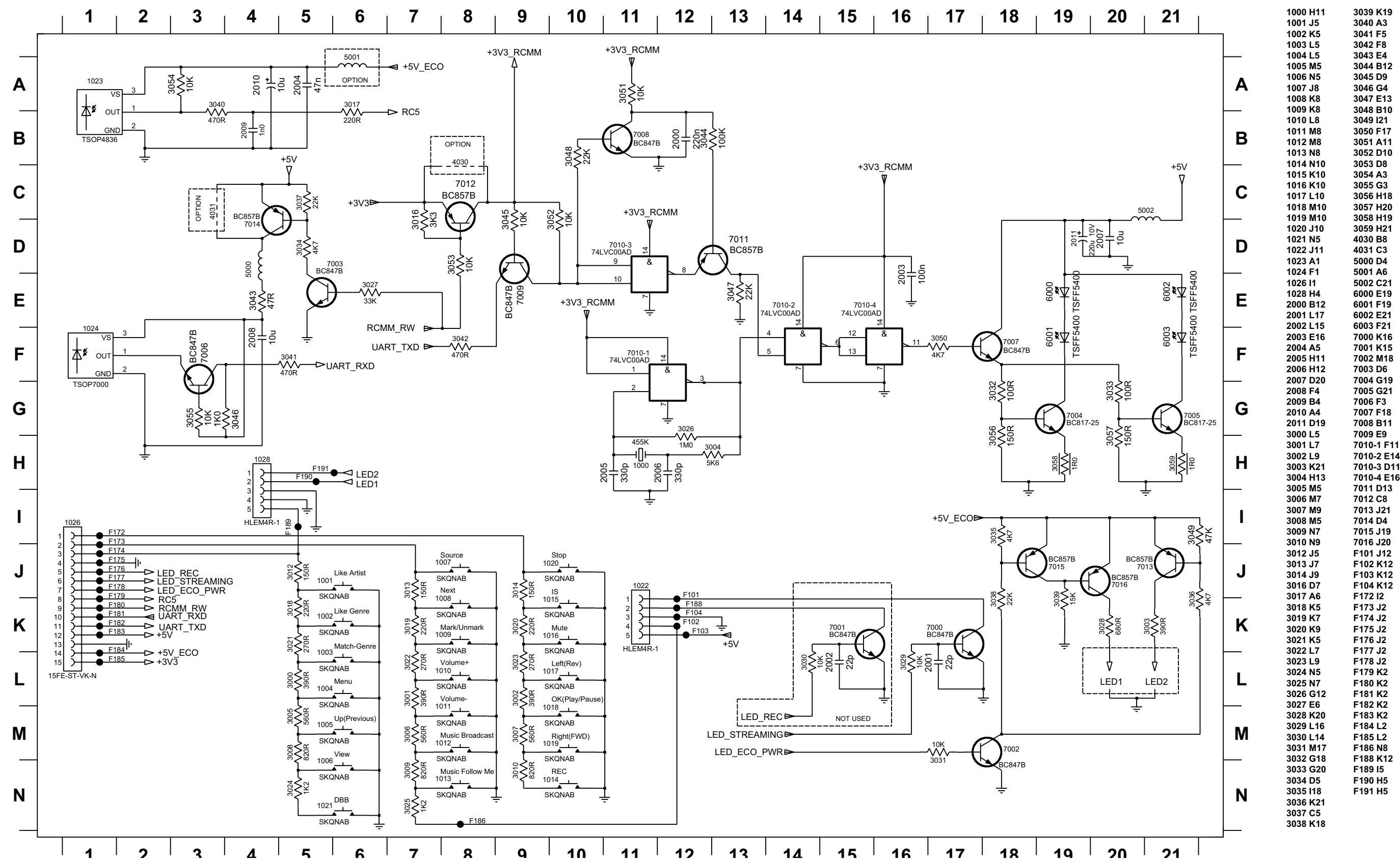
Key components and labels include:

- ICs**: 7016, 7018, 7019, 7020, 7021, 7022, 7023, 7024, 7025, 7026, 7027, 7028, 7029, 7030, 7031, 7032, 7033, 7034, 7035, 7036, 7037, 7038, 7039, 7040, 7041, 7042, 7043, 7044, 7045, 7046, 7047, 7048, 7049, 7050, 7051, 7052, 7053, 7054, 7055, 7056, 7057, 7058, 7059, 7060, 7061, 7062, 7063, 7064, 7065, 7066, 7067, 7068, 7069, 7070, 7071, 7072, 7073, 7074, 7075, 7076, 7077, 7078, 7079, 7080, 7081, 7082, 7083, 7084, 7085, 7086, 7087, 7088, 7089, 7090, 7091, 7092, 7093, 7094, 7095, 7096, 7097, 7098, 7099, 7100, 7101, 7102, 7103, 7104, 7105, 7106, 7107, 7108, 7109, 7110, 7111, 7112, 7113, 7114, 7115, 7116, 7117, 7118, 7119, 7120, 7121, 7122, 7123, 7124, 7125, 7126, 7127, 7128, 7129, 7130, 7131, 7132, 7133, 7134, 7135, 7136, 7137, 7138, 7139, 7140, 7141, 7142, 7143, 7144, 7145, 7146, 7147, 7148, 7149, 7150, 7151, 7152, 7153, 7154, 7155, 7156, 7157, 7158, 7159, 7160, 7161, 7162, 7163, 7164, 7165, 7166, 7167, 7168, 7169, 7170, 7171, 7172, 7173, 7174, 7175, 7176, 7177, 7178, 7179, 7180, 7181, 7182, 7183, 7184, 7185, 7186, 7187, 7188, 7189, 7190, 7191, 7192, 7193, 7194, 7195, 7196, 7197, 7198, 7199, 7200, 7201, 7202, 7203, 7204, 7205, 7206, 7207, 7208, 7209, 7210, 7211, 7212, 7213, 7214, 7215, 7216, 7217, 7218, 7219, 7220, 7221, 7222, 7223, 7224, 7225, 7226, 7227, 7228, 7229, 7230, 7231, 7232, 7233, 7234, 7235, 7236, 7237, 7238, 7239, 7240, 7241, 7242, 7243, 7244, 7245, 7246, 7247, 7248, 7249, 7250, 7251, 7252, 7253, 7254, 7255, 7256, 7257, 7258, 7259, 7260, 7261, 7262, 7263, 7264, 7265, 7266, 7267, 7268, 7269, 7270, 7271, 7272, 7273, 7274, 7275, 7276, 7277, 7278, 7279, 7280, 7281, 7282, 7283, 7284, 7285, 7286, 7287, 7288, 7289, 7290, 7291, 7292, 7293, 7294, 7295, 7296, 7297, 7298, 7299, 7300, 7301, 7302, 7303, 7304, 7305, 7306, 7307, 7308, 7309, 7310, 7311, 7312, 7313, 7314, 7315, 7316, 7317, 7318, 7319, 7320, 7321, 7322, 7323, 7324, 7325, 7326, 7327, 7328, 7329, 7330, 7331, 7332, 7333, 7334, 7335, 7336, 7337, 7338, 7339, 7340, 7341, 7342, 7343, 7344, 7345, 7346, 7347, 7348, 7349, 7350, 7351, 7352, 7353, 7354, 7355, 7356, 7357, 7358, 7359, 7360, 7361, 7362, 7363, 7364, 7365, 7366, 7367, 7368, 7369, 7370, 7371, 7372, 7373, 7374, 7375, 7376, 7377, 7378, 7379, 7380, 7381, 7382, 7383, 7384, 7385, 7386, 7387, 7388, 7389, 7390, 7391, 7392, 7393, 7394, 7395, 7396, 7397, 7398, 7399, 7400, 7401, 7402, 7403, 7404, 7405, 7406, 7407, 7408, 7409, 7410, 7411, 7412, 7413, 7414, 7415, 7416, 7417, 7418, 7419, 7420, 7421, 7422, 7423, 7424, 7425, 7426, 7427, 7428, 7429, 7430, 7431, 7432, 7433, 7434, 7435, 7436, 7437, 7438, 7439, 7440, 7441, 7442, 7443, 7444, 7445, 7446, 7447, 7448, 7449, 7450, 7451, 7452, 7453, 7454, 7455, 7456, 7457, 7458, 7459, 7460, 7461, 7462, 7463, 7464, 7465, 7466, 7467, 7468, 7469, 7470, 7471, 7472, 7473, 7474, 7475, 7476, 7477, 7478, 7479, 7480, 7481, 7482, 7483, 7484, 7485, 7486, 7487, 7488, 7489, 7490, 7491, 7492, 7493, 7494, 7495, 7496, 7497, 7498, 7499, 7500, 7501, 7502, 7503, 7504, 7505, 7506, 7507, 7508, 7509, 7510, 7511, 7512, 7513, 7514, 7515, 7516, 7517, 7518, 7519, 7520, 7521, 7522, 7523, 7524, 7525, 7526, 7527, 7528, 7529, 7530, 7531, 7532, 7533, 7534, 7535, 7536, 7537, 7538, 7539, 7540, 7541, 7542, 7543, 7544, 7545, 7546, 7547, 7548, 7549, 7550, 7551, 7552, 7553, 7554, 7555, 7556, 7557, 7558, 7559, 7560, 7561, 7562, 7563, 7564, 7565, 7566, 7567, 7568, 7569, 7570, 7571, 7572, 7573, 7574, 7575, 7576, 7577, 7578, 7579, 7580, 7581, 7582, 7583, 7584, 7585, 7586, 7587, 7588, 7589, 7590, 7591, 7592, 7593, 7594, 7595, 7596, 7597, 7598, 7599, 7600, 7601, 7602, 7603, 7604, 7605, 7606, 7607, 7608, 7609, 7610, 7611, 7612, 7613, 7614, 7615, 7616, 7617, 7618, 7619, 7620, 7621, 7622, 7623, 7624, 7625, 7626, 7627, 7628, 7629, 7630, 7631, 7632, 7633, 7634, 7635, 7636, 7637, 7638, 7639, 7640, 7641, 7642, 7643, 7644, 7645, 7646, 7647, 7648, 7649, 7650, 7651, 76

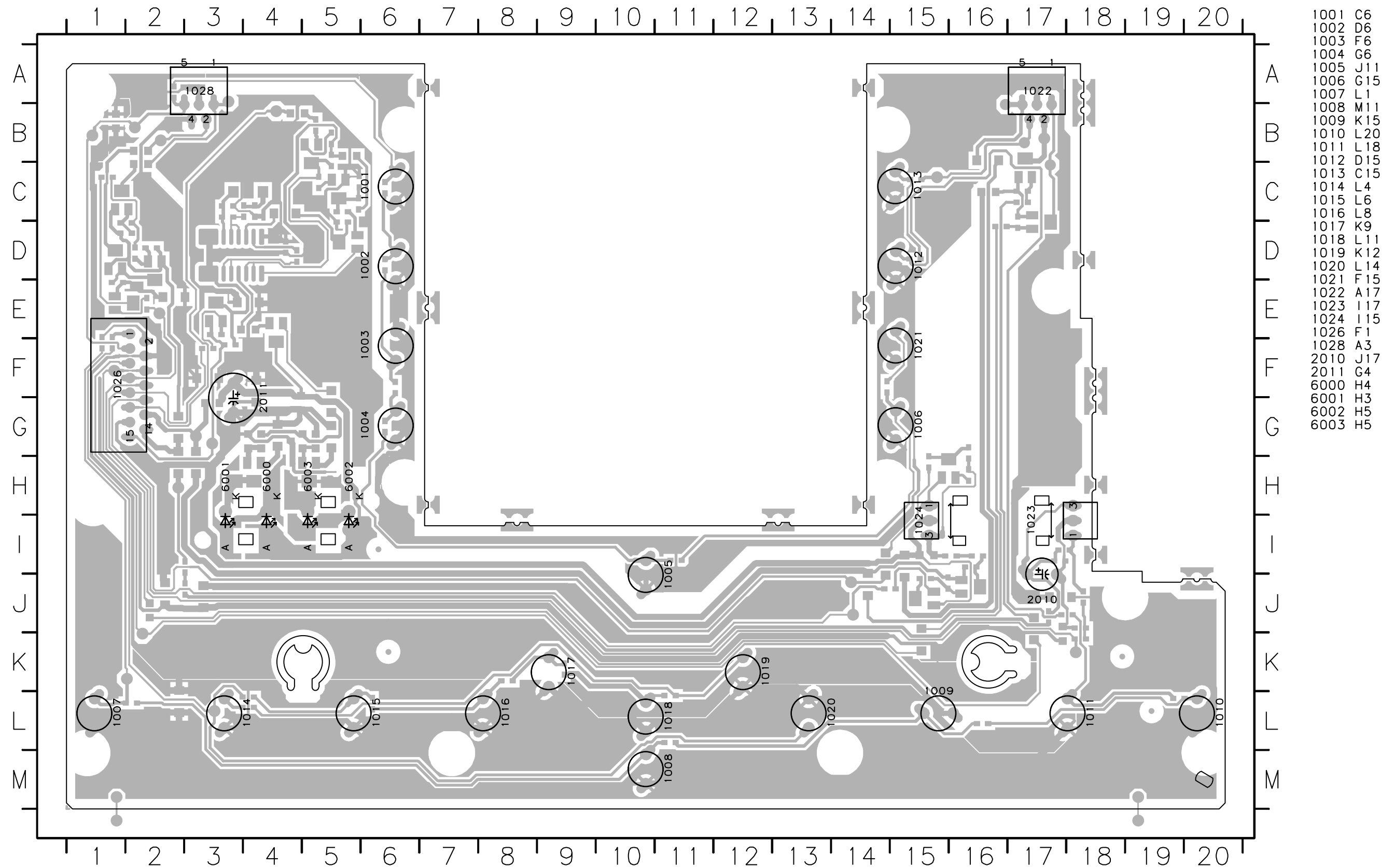
1002 H2	3021 D4	3162 G6	F026 H3
1003 E4	3022 D4	3163 H6	F027 H1
1007 E8	3023 D4	3164 D1	F028 H1
1008 E4	3024 D4	3165 E3	F029 H1
1012 F14	3025 E4	3166 B1	F030 I3
1013 A14	3026 E4	3167 E9	F031 A3
1014 B1	3027 D4	3168 E6	F032 B8
1015 C13	3028 D4	3169 G6	F033 A13
1016 H13	3029 D4	3170 E3	F037 A3
1017 H2	3030 E4	3171 E6	F038 B3
1018 H9	3031 D4	3172 E4	F039 B13
1019 A14	3032 E4	3173 E4	F040 G14
1020 H2	3033 E4	3174 E4	F041 B13
2001 H2	3034 E4	3175 E6	F042 E2
2002 I2	3035 B6	3176 E3	F043 B2
2003 I2	3036 C6	3177 F10	F044 A5
2004 H2	3037 E4	3178 F10	F045 A1
2005 B10	3038 C6	3179 F10	F046 A2
2006 D10	3039 C6	3180 E4	F047 A2
2007 H2	3040 C6	3181 E4	F048 E2
2008 E9	3041 C6	3182 E2	F049 A3
2009 E10	3042 C6	3183 A2	F050 B3
2010 H2	3043 E4	3184 E4	F051 E13
2011 F4	3044 C6	3185 F10	F052 E13
2012 B5	3045 C6	3186 I2	
2013 C1	3046 D6	3183 I5	
2014 B5	3047 D6	3184 F12	
2015 C1	3048 D6	3185 F12	
2016 B3	3049 D6	3186 D3	
2017 B2	3050 D6	3187 D3	
2018 C1	3051 G5	3188 D3	
2019 D1	3052 B8	3189 C2	
2020 D1	3053 B8	3190 C2	
2021 D1	3054 C8	3201 G14	
2022 D1	3055 C8	3202 G14	
2023 H2	3056 C8	3203 F12	
2024 D1	3057 C8	3204 D2	
2025 H3	3058 C8	3205 D2	
2026 D1	3059 B8	3206 D2	
2027 D1	3060 B8	3207 D2	
2028 F12	3061 B5	3208 D2	
2029 B3	3062 E8	3209 D2	
2030 D1	3063 E8	3210 D2	
2031 H3	3064 E8	3211 D2	
2032 G3	3065 D6	3212 D2	
2033 A7	3066 C8	3213 D2	
2034 A8	3067 B9	3214 D2	
2035 G2	3068 D9	3215 D2	
2036 D1	3069 G8	3216 D2	
2037 D1	3070 G8	3217 D2	
2038 D1	3071 H12	3218 H8	
2039 E8	3072 F8	3219 F8	
2040 E8	3073 F8	3220 F8	
2041 A6	3074 B8	3223 F12	
2042 H2	3075 B8	3224 B8	
2043 H2	3076 D3	3225 B8	
2044 D1	3077 G13	3226 G9	
2045 C5	3078 E12	3227 G8	
2046 C12	3079 E8	3228 B8	
2047 C12	3080 E8	3229 A8	
2048 C12	3081 E6	3230 A8	
2049 C2	3082 E6	3231 G14	
2050 A5	3083 E6	3232 G14	
2051 C5	3084 E6	3233 B2	
2052 B6	3085 A4	3234 B2	
2053 G2	3086 B6	4002 B10	
2054 D5	3087 A4	4003 A10	
2055 F4	3088 A5	5001 G2	
2056 A12	3089 G10	5002 B2	
2057 A12	3090 F6	5005 B2	
2058 A12	3091 B3	5006 A8	
2059 A12	3092 G13	5007 B3	
2060 D5	3093 H12	5025 A1	
2061 A12	3094 H12	5026 A1	
2062 A13	3095 B13	5027 B1	
2063 H1	3096 A13	5028 B1	
2064 H1	3097 G13	5029 B1	
2065 H1	3098 E13	5030 B1	
2066 H1	3099 G10	5031 B1	
2067 H1	3100 A13	5032 B1	
2068 D5	3101 F6	5033 D3	
2069 H12	3102 B13	5034 D3	
2070 H12	3103 F12	5035 H12	
2071 F9	3104 A10	5036 H12	
2072 F9	3105 A11	5037 H12	
2073 F9	3106 A11	5038 H12	
2074 B6	3107 A11	5039 F4	
2075 A6	3108 E6	5040 B5	
2076 B6	3109 B9	5041 H5	
2077 A2	3110 B9	5042 F12	
2078 A2	3111 B9	5043 D13	
2079 A2	3112 B10	5044 D3	
2080 A2	3113 B11	5045 D3	
2081 A2	3114 B11	5046 H12	
2082 D5	3115 B6	5047 H12	
2083 D5	3116 C8	5048 A7	
2084 D5	3117 D8	5050 D3	
2085 F4	3118 D8	5051 F13	
2086 C5	3119 D8	5052 D3	
2087 H2	3120 D8	6000 G3	
2088 E12	3121 F6	6001 F6	
2089 E12	3122 G8	6002 E3	
2090 D5	3123 C9	6003 E3	
2091 A7	3124 F6	6004 H2	
2092 G10	3125 F6	7002 E3	
2093 G3	3126 F6	7003 F13	
2094 D5	3127 C9	7004 F13	
2095 D5	3128 C9	7006 C8	
2096 D5	3129 C9	7007 A5	
2097 D5	3130 C9	7008 F11	
2098 D5	3131 C10	7009 F11	
2099 D5	3132 C11	7011 A3	
2100 E5	3133 C11	7012 H5	
2101 E5	3134 D10	7013 A10	
2102 E5	3135 D10	7014 B10	
2103 F4	3136 F6	7016 F3	
2104 F5	3137 F6	7017 C10	
2105 F5	3138 F6	7001 D13	
2106 B3	3139 G6	6002 D3	
2107 G13	3140 D8	6003 D3	
2108 E9	3141 D10	6004 D3	
2109 H2	3142 E9	6005 C3	
2102 H2	3143 D13	6006 C3	
2003 A5	3144 F8	6007 H12	
2004 E6	3145 F9	6008 D3	
2005 A4	3146 G8	6009 D12	
2006 B9	3147 H12	6010 D13	
2007 B9	3148 H12	6011 D13	
2008 A9	3149 H12	6012 D13	
2009 H4	3150 H12	6013 D13	
2010 B9	3151 H12	6014 F14	
2011 A1	3152 H12	6016 H13	
2012 D6	3153 G13	6017 H13	
2013 G8	3154 H12	6018 H11	
2014 C4	3155 I4	6019 H11	
2015 C4	3156 I4	6020 H11	
2016 C4	3157 G6	6021 H3	
2017 D4	3158 D13	6022 H3	
2018 D4	3159 D13	6023 H3	
2019 D4	3160 B10	6024 H3	
2020 D4	3161 G6	6025 H11	



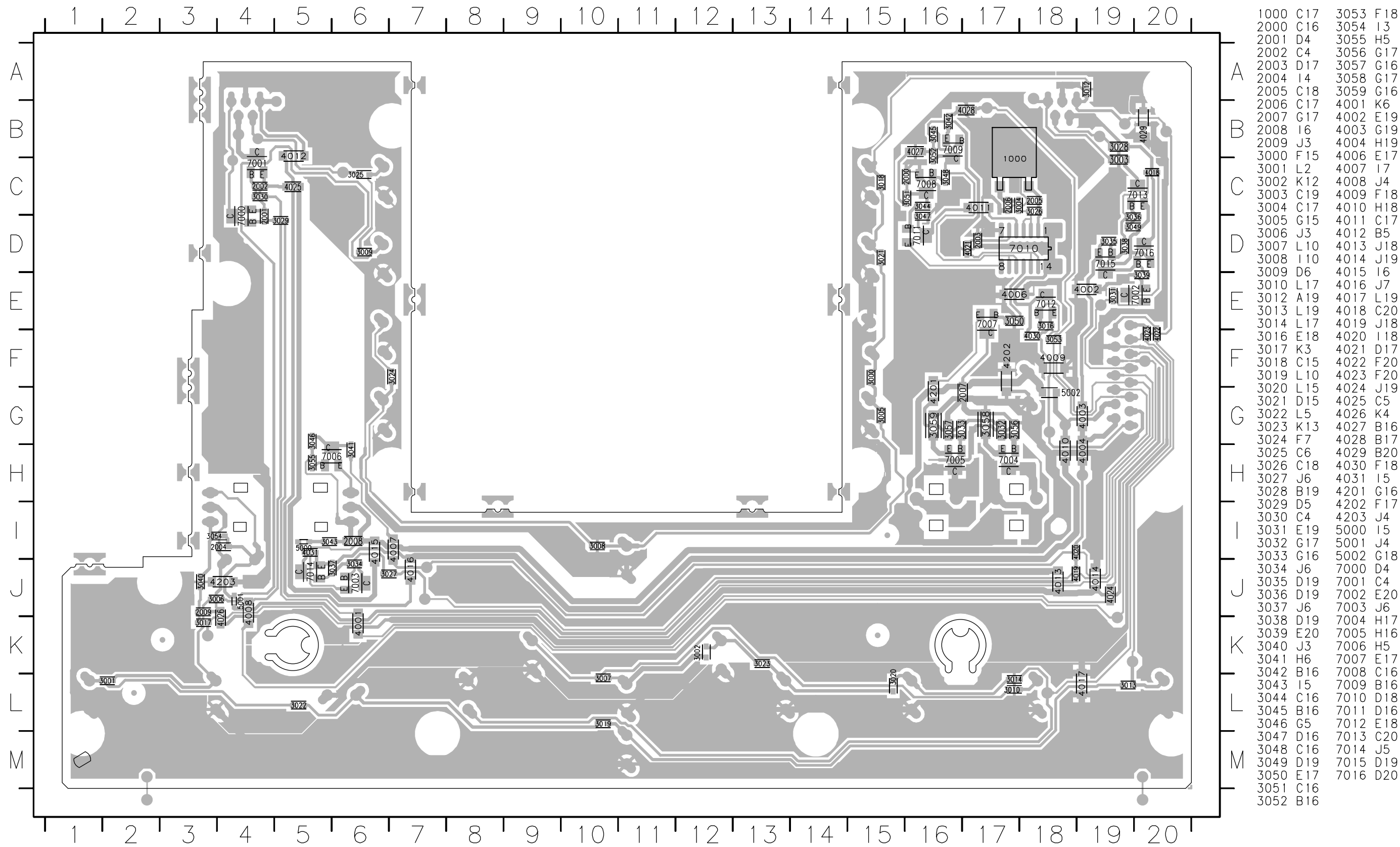
KEY COMBINE PANEL - KEY & RC BOARD - Circuit Diagram



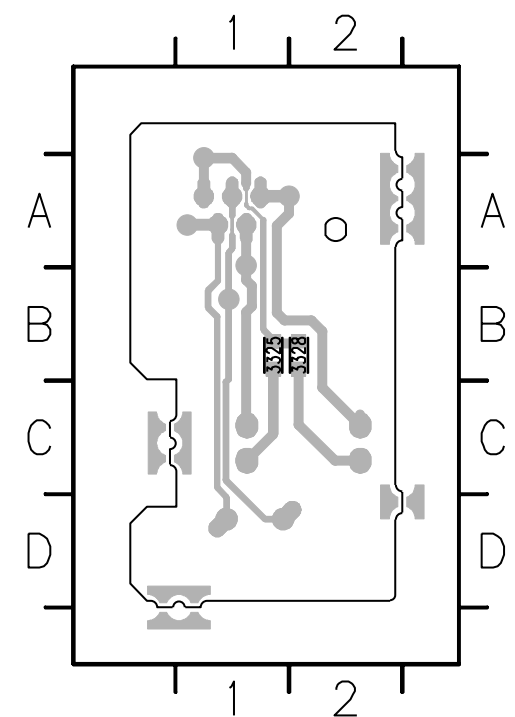
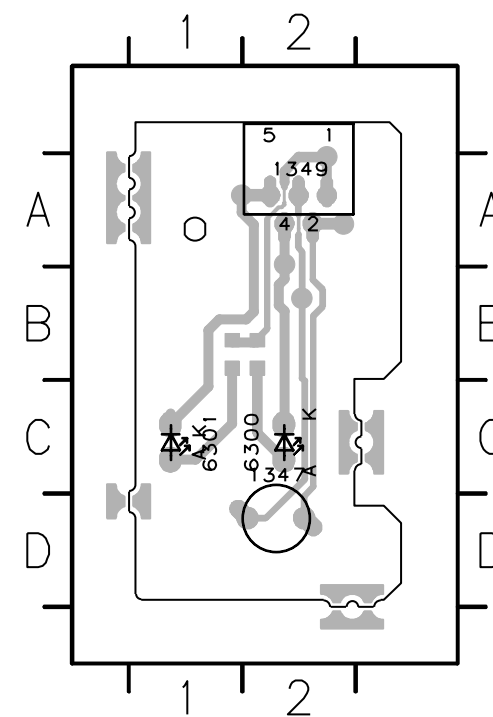
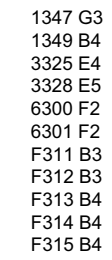
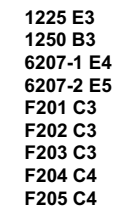
KEY COMBINE PANEL - KEY & RC BOARD - Layout Diagram (side A)



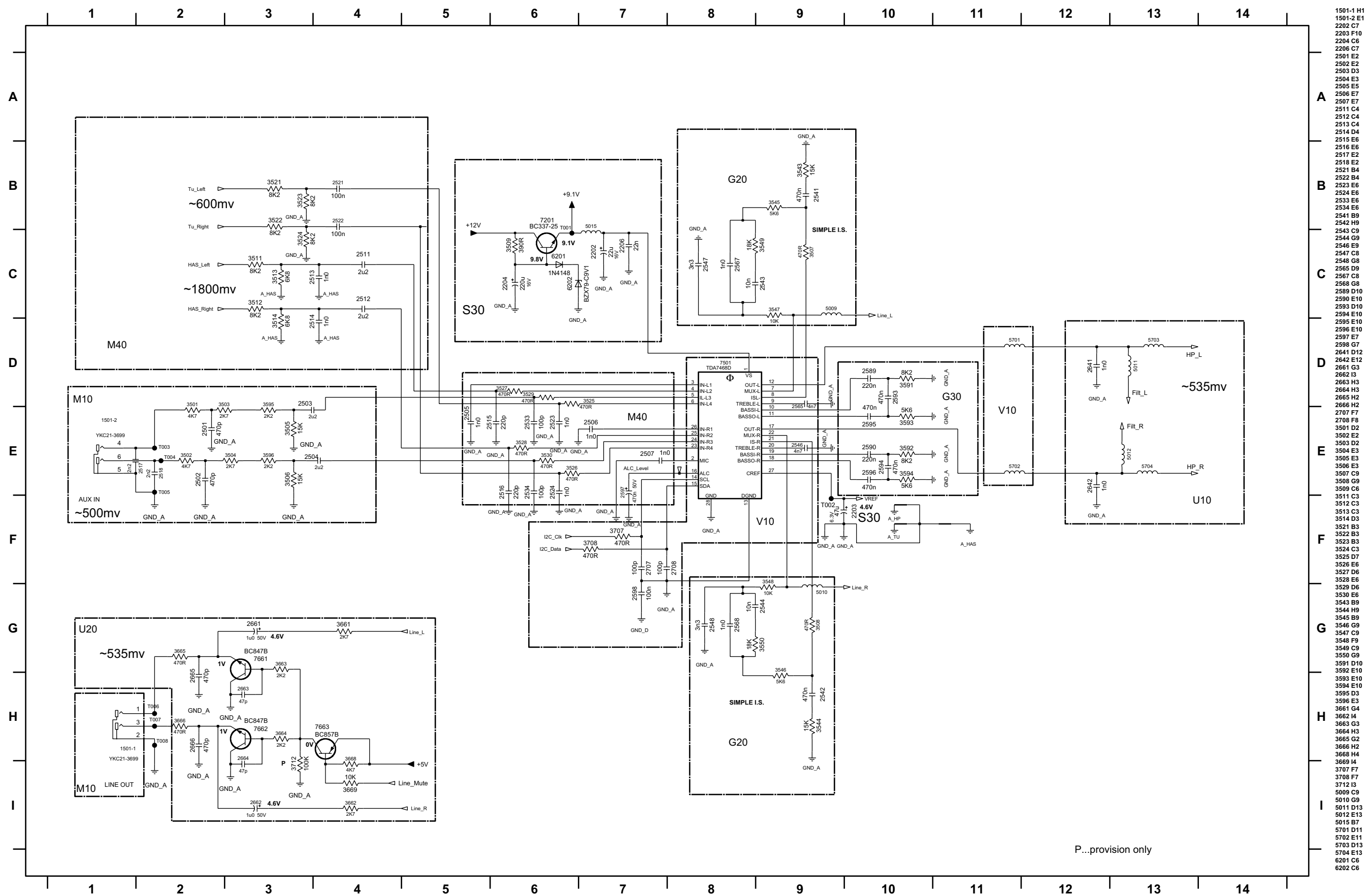
KEY COMBINE PANEL - KEY & RC BOARD - Layout Diagram (side B)



KEY COMBINE PANEL - EJECT KEY BOARD



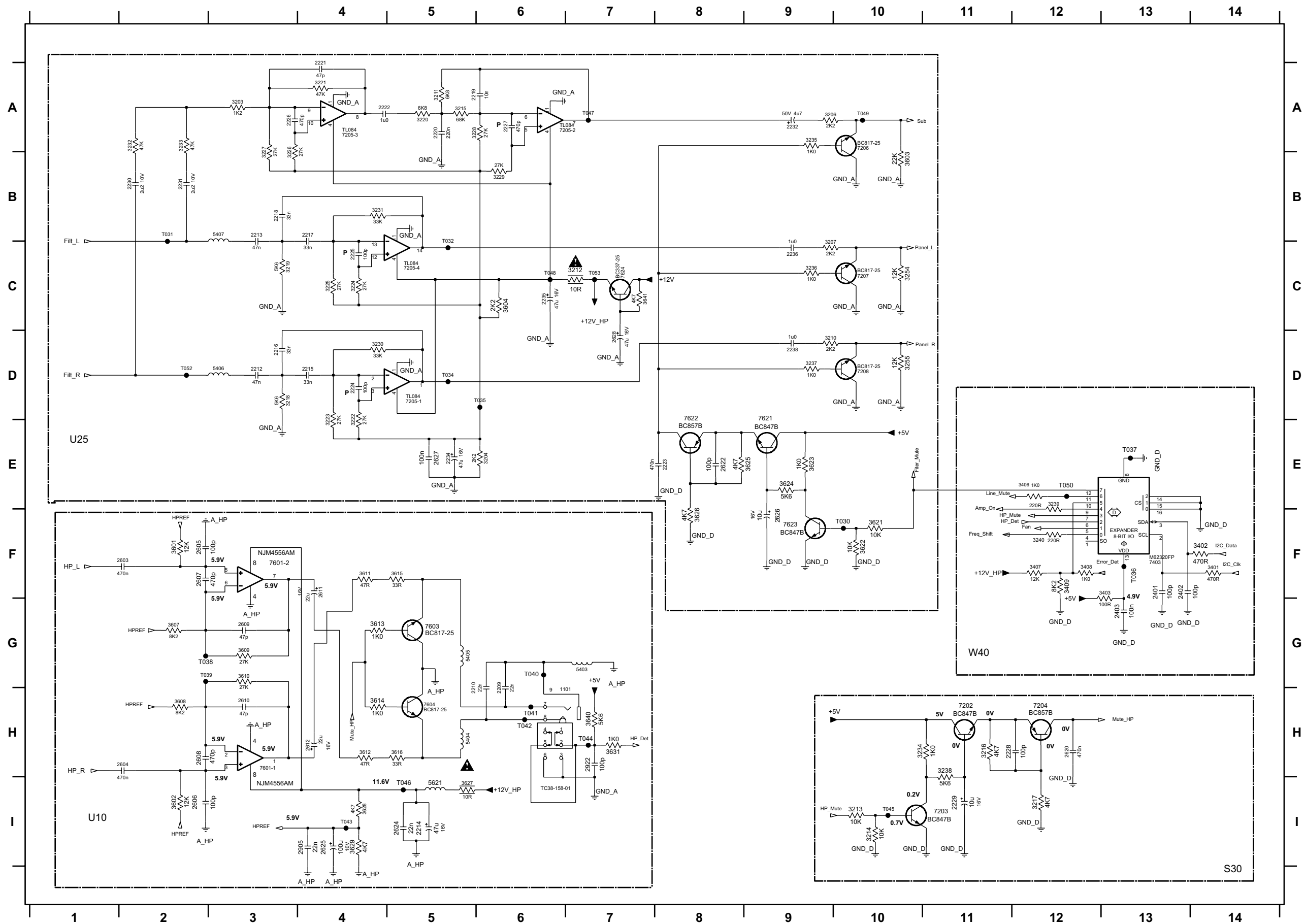
AF BOARD - Circuit Diagram (part 1)



P...provision only

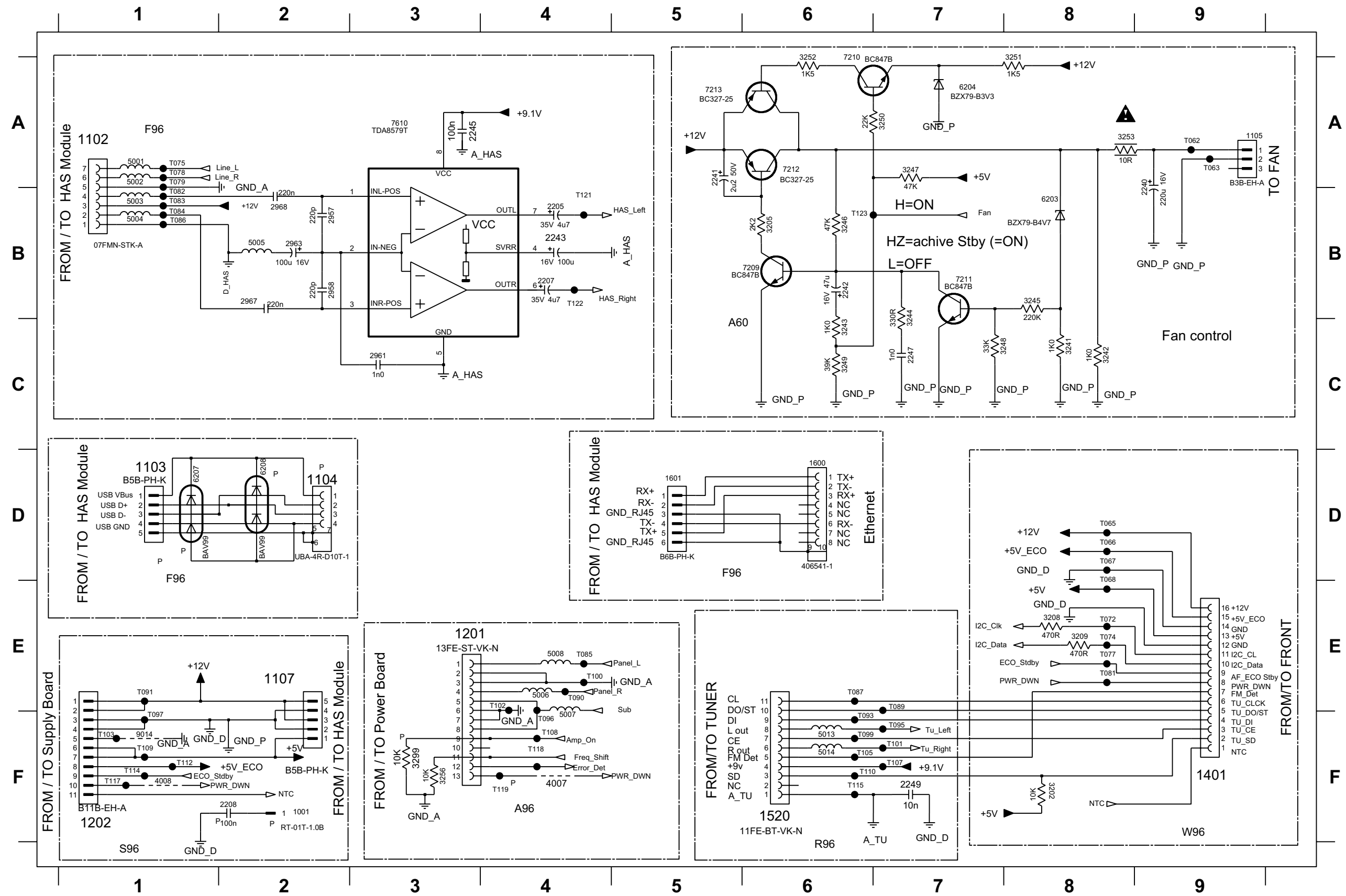
1501-1 H1	7201 B6
1501-2 E1	7501 D8
2202 C7	7661 G3
2203 F10	7662 H3
2204 C6	7663 H4
2206 C7	T001 B6
2501 E2	T002 F9
2502 E2	T003 E2
2503 D3	T004 E2
2504 E3	T005 E2
2505 E5	T006 H2
2506 E7	T007 H2
2507 E7	T008 H2
2511 C4	
2512 C4	
2513 C4	
2514 D4	
2515 E6	
2516 E6	
2517 E2	
2518 E2	
2521 B4	
2522 B4	
2523 E6	
2524 E6	
2533 E6	
2534 E6	
2541 B9	
2542 H9	
2543 C9	
2544 G9	
2546 E9	
2547 C8	
2548 G8	
2565 D9	
2567 C8	
2568 G8	
2589 D10	
2590 E10	
2593 D10	
2594 E10	
2595 E10	
2596 E10	
2597 E7	
2598 G7	
2641 D12	
2642 E12	
2661 G3	
2662 I3	
2663 H3	
2664 H3	
2665 H2	
2666 H2	
2707 F7	
2708 F8	
3501 D2	
3502 E2	
3503 D2	
3504 E3	
3505 E3	
3506 E3	
3507 C9	
3508 G9	
3509 C6	
3511 C3	
3512 C3	
3513 C3	
3514 D3	
3521 B3	
3522 B3	
3523 B3	
3524 C3	
3525 D7	
3526 E6	
3527 D6	
3528 E6	
3529 D6	
3530 E6	
3543 B9	
3544 H9	
3545 B9	
3546 G9	
3547 C9	
3548 F9	
3549 C9	
3550 G9	
3591 D10	
3592 E10	
3593 E10	
3594 E10	
3595 D3	
3596 E3	
3661 G4	
3662 I4	
3663 G3	
3664 H3	
3665 G2	
3666 H2	
3668 H4	
3669 I4	
3707 F7	
3708 F7	
3712 I3	
5009 C9	
5010 G9	
5011 D13	
5012 E13	
5015 B7	
5701 D11	
5702 E11	
5703 D13	
5704 E13	
6201 C6	
6202 C6	

AF BOARD - Circuit Diagram (part 2)



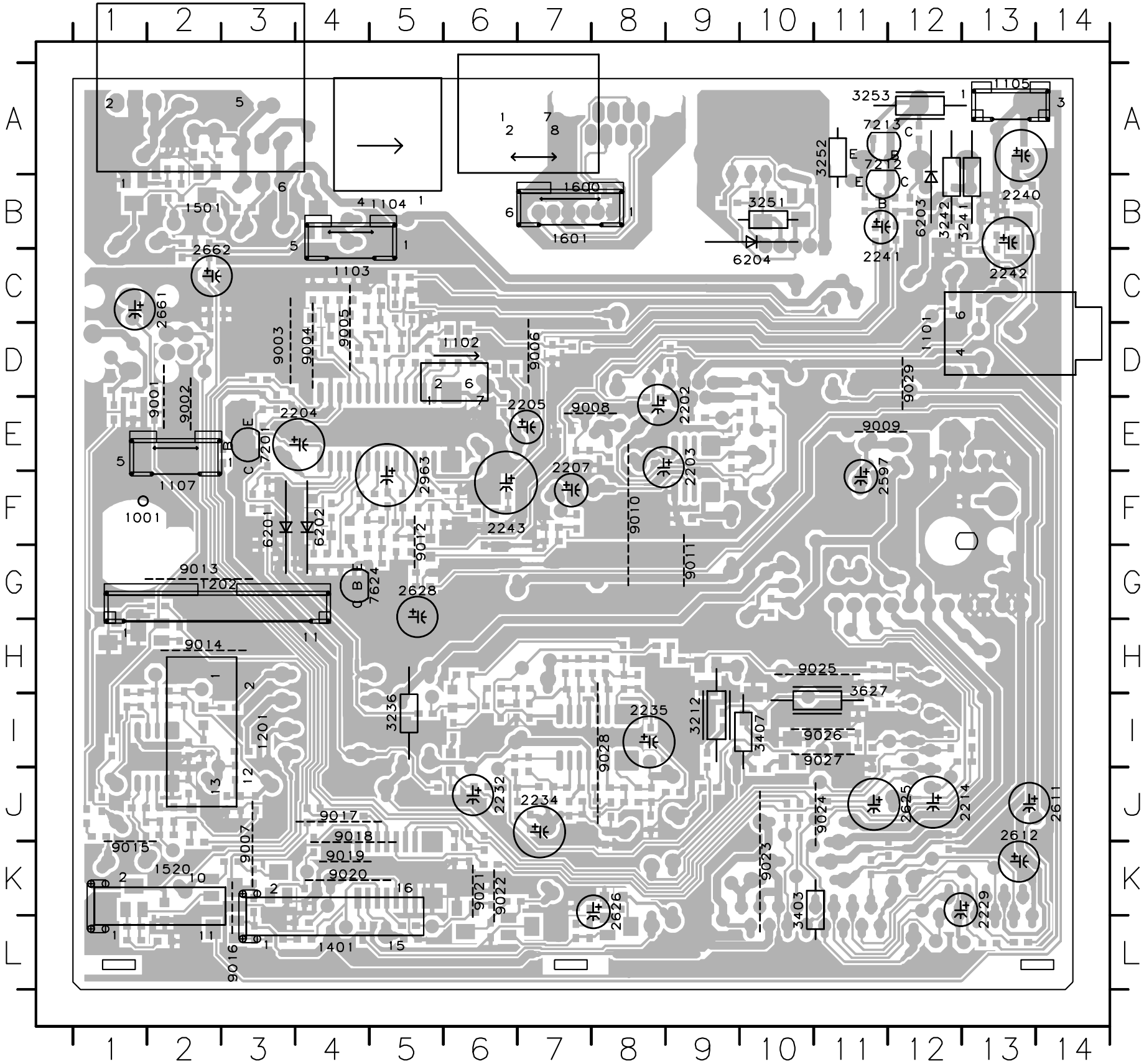
1101 H6	3631 H7
2209 H6	3640 H7
2210 H5	3641 C7
2212 D3	5403 G7
2213 B3	5404 H5
2214 I5	5405 G5
2215 D4	5406 D3
2216 D3	5407 B3
2217 B4	5621 I5
2218 B3	7202 H11
2219 A5	7203 I11
2220 A5	7204 H12
2221 A4	7205-1 D5
2222 A4	7205-2 A6
2223 E8	7205-3 A4
2224 D4	7205-4 C5
2225 C4	7206 A10
2226 A3	7207 C10
2227 A6	7208 D10
2228 H11	7403 F13
2229 I11	7601-1 H3
2230 B2	7601-2 F3
2231 B2	7603 G5
2232 A9	7604 H5
2234 E5	7621 E9
2235 C6	7622 D8
2236 C9	7623 F9
2238 D9	7624 C7
2401 F13	T030 F10
2402 F13	T031 B2
2403 G13	T032 C5
2603 F2	T034 D5
2604 H2	T035 D6
2605 F2	T036 F13
2606 I2	T037 E13
2607 F2	T038 G2
2608 H2	T039 G2
2609 G3	T040 G6
2610 H3	T041 H6
2611 F4	T042 H6
2612 H4	T043 I4
2620 H12	T044 H7
2622 E8	T045 I10
2624 I5	T046 I5
2625 I4	T047 A7
2626 F9	T048 C6
2627 E5	T049 A10
2628 D7	T052 D2
2905 I4	T053 C7
2922 H7	
3203 A3	
3204 E6	
3206 A9	
3207 C9	
3210 D9	
3211 A5	
3212 C7	
3213 I10	
3214 I10	
3215 A5	
3216 H11	
3217 I12	
3218 D3	
3219 C3	
3220 A5	
3221 A4	
3222 E4	
3223 E4	
3224 C4	
3225 C4	
3226 B3	
3227 B3	
3228 A5	
3229 B6	
3230 D4	
3231 B4	
3232 A2	
3233 A2	
3234 H10	
3235 A9	
3236 C9	
3237 D9	
3238 H11	
3239 E12	
3240 F12	
3254 C10	
3255 D10	
3401 F14	
3402 F14	
3403 F13	
3406 E12	
3407 F12	
3408 F12	
3409 F12	
3601 F2	
3602 I2	
3603 B10	
3604 C6	
3607 G2	
3608 H2	
3609 G3	
3610 G3	
3611 F4	
3612 H4	
3613 G4	
3614 H4	
3615 F5	
3616 H5	
3621 F10	
3622 F10	
3623 E9	
3624 E9	
3625 E9	
3626 F8	
3627 I5	
3628 I4	
3629 I4	

AF BOARD - Circuit Diagram (part 3)



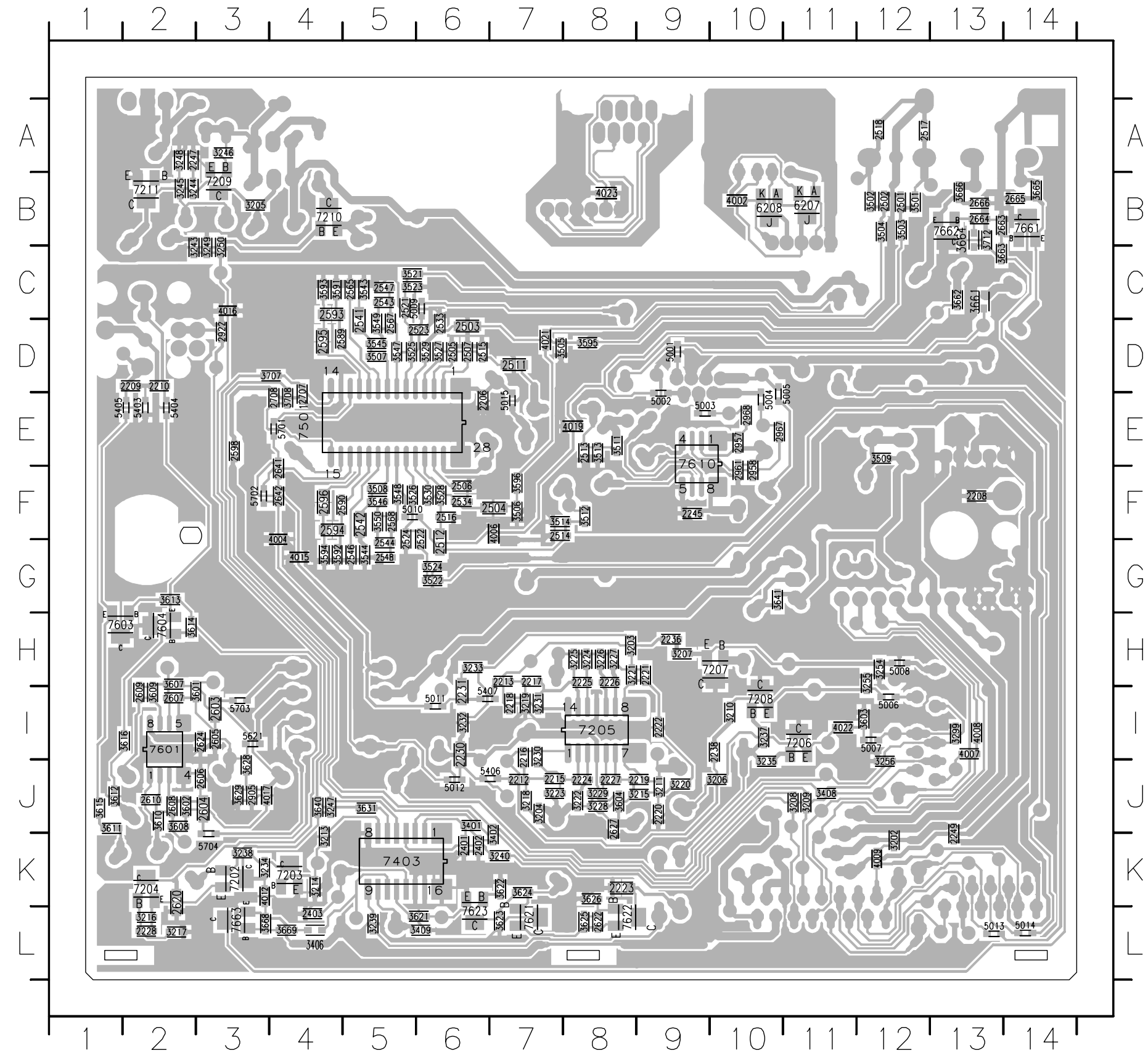
1001 F2	T099 F6
1102 A1	T100 E4
1103 D1	T101 F7
1104 D2	T102 E4
1105 A9	T103 F1
1107 E2	T105 F6
1201 E4	T107 F7
1202 F1	T108 F4
1401 F9	T109 F1
1520 F6	T110 F6
1600 D6	T112 F1
1601 D5	T114 F1
2205 B4	T115 F6
2207 B4	T117 F1
2208 F2	T118 F4
2240 A9	T119 F4
2241 A5	T121 B4
2242 B6	T122 B4
2243 B4	T123 B6
2245 A3	
2247 C7	
2249 F7	
2957 B2	
2958 B2	
2961 C3	
2963 B2	
2967 B2	
2968 B2	
3202 F8	
3205 B6	
3208 E8	
3209 E8	
3241 C8	
3242 C8	
3243 C6	
3244 B7	
3245 B8	
3246 B6	
3247 A7	
3248 C7	
3249 C6	
3250 A7	
3251 A8	
3252 A6	
3253 A8	
3256 F3	
3299 F3	
4007 F4	
4008 F1	
5001 A1	
5002 A1	
5003 B1	
5004 B1	
5005 B2	
5006 E4	
5007 F4	
5008 E4	
5013 F6	
5014 F6	
6203 B8	
6204 A7	
6207 D1	
6208 D2	
7209 B6	
7210 A6	
7211 B7	
7212 A6	
7213 A5	
7610 A3	
9014 F1	
T062 A9	
T063 A9	
T065 D8	
T066 D8	
T067 D8	
T068 E8	
T072 E8	
T074 E8	
T075 A1	
T077 E8	
T078 A1	
T079 A1	
T081 E8	
T082 B1	
T083 B1	
T084 B1	
T085 E4	
T086 B1	
T087 E6	
T089 E7	
T090 E4	
T091 E1	
T093 F6	
T095 F7	
T096 F4	
T097 F1	

AF BOARD - Layout Diagram (side A)



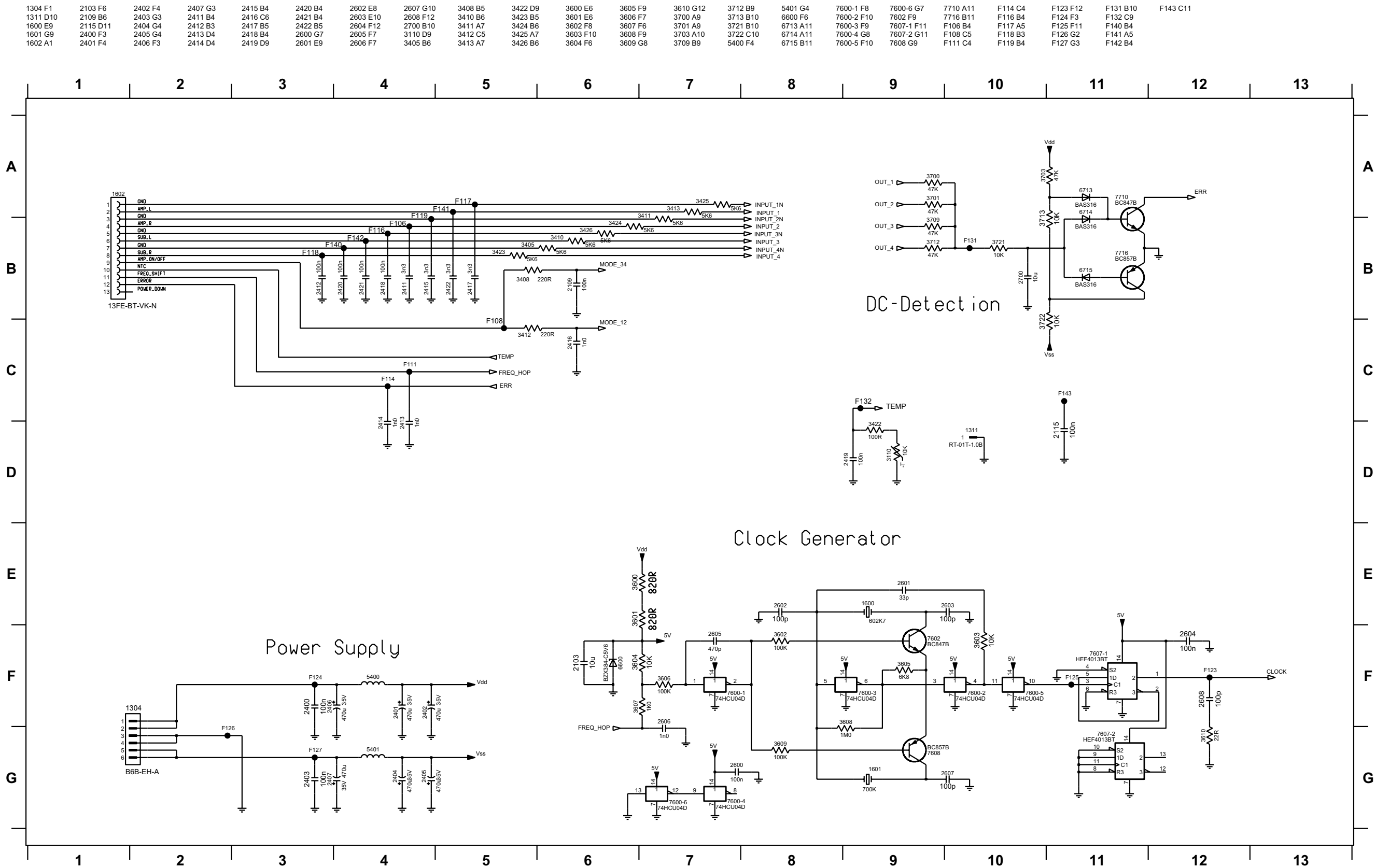
1001	F1	9007	K3
1101	D12	9008	E7
1102	D6	9009	E11
1103	C4	9010	F8
1104	B5	9011	G9
1105	A13	9012	F5
1107	F2	9013	G2
1201	I3	9014	H2
1202	G2	9015	K1
1401	L4	9016	L3
1501	B2	9017	J4
1520	K2	9018	J4
1600	B7	9019	K4
1601	B7	9020	K4
2202	E9	9021	K6
2203	E9	9022	K6
2204	E4	9023	K10
2205	E7	9024	J11
2207	E7	9025	H11
2214	J13	9026	I11
2229	K13	9027	I11
2232	J6	9028	I8
2234	J7	9029	D12
2235	I8		
2240	B13		
2241	C11		
2242	C13		
2243	F6		
2597	F11		
2611	J14		
2612	J13		
2625	J12		
2626	K8		
2628	G5		
2661	C2		
2662	C2		
2963	F5		
3212	I9		
3236	I5		
3241	B13		
3242	B12		
3251	B10		
3252	A11		
3253	A11		
3403	K10		
3407	I10		
3627	H11		
6201	F3		
6202	F4		
6203	B12		
6204	C10		
7201	E3		
7212	A11		
7213	A11		
7624	G5		
9001	E2		
9002	E2		
9003	D3		
9004	D4		
9005	D4		
9006	D7		

AF BOARD - Layout Diagram (side A)

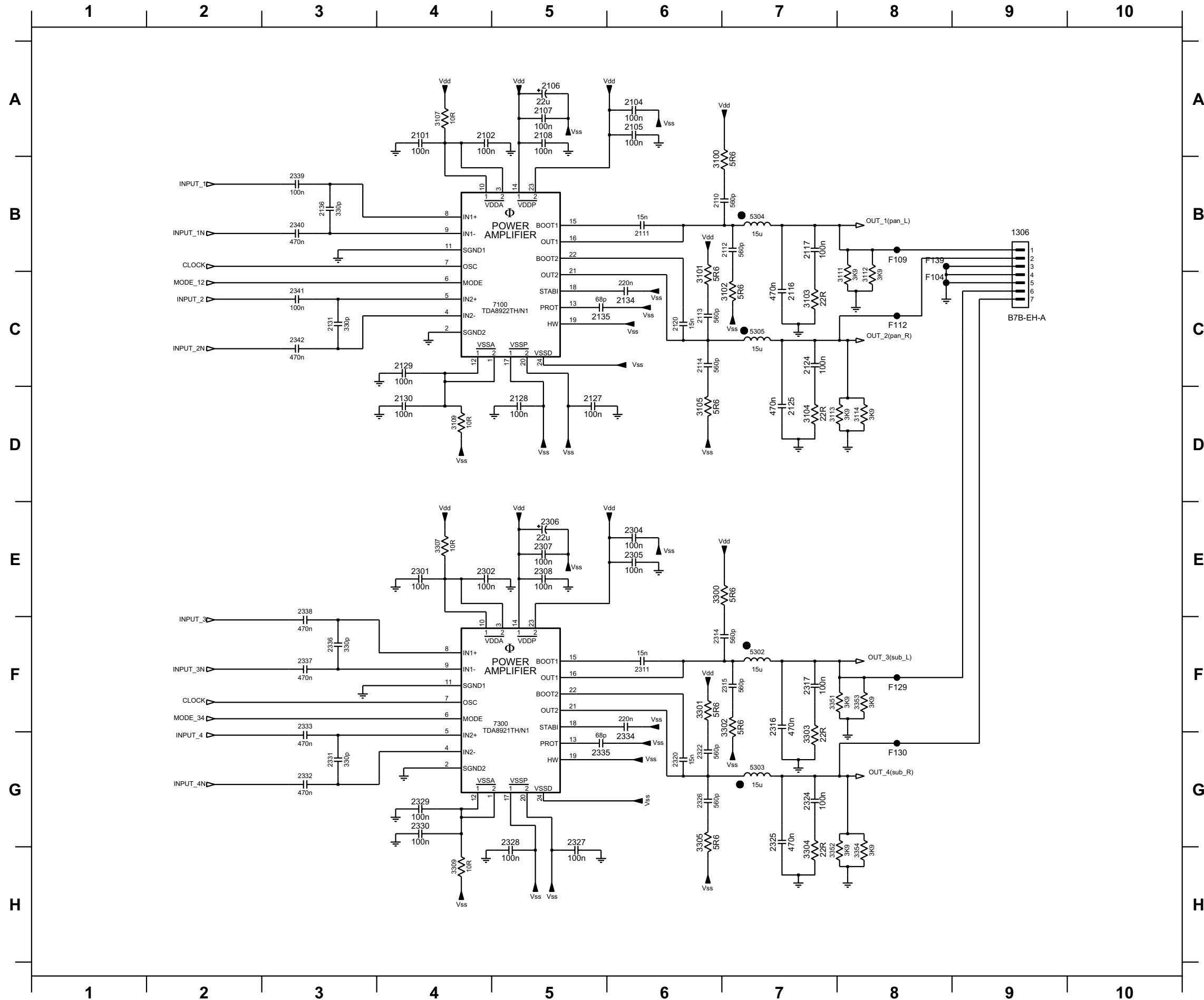


2206	E6	2589	D4	3230	I7	3594	G4	5009	C5
2208	F13	2590	F4	3231	I7	3595	D8	5010	F5
2209	D2	2593	C4	3232	I6	3596	F7	5011	I6
2210	D2	2594	F4	3233	H6	3601	I2	5012	J6
2212	J7	2595	D4	3234	K3	3602	J2	5013	L13
2213	H7	2596	F4	3235	J10	3603	I12	5014	L14
2215	J7	2598	E3	3237	I10	3604	J8	5015	E7
2216	I7	2603	I3	3238	K3	3607	H2	5403	E2
2217	H7	2604	J3	3239	L5	3608	J2	5404	E2
2218	I7	2605	I3	3240	K7	3609	I2	5405	E1
2219	J9	2606	J3	3243	C2	3610	J2	5406	J7
2220	J9	2607	I2	3244	B2	3611	J1	5407	I6
2221	H9	2608	J2	3245	B2	3612	J1	5621	I3
2222	I9	2609	I2	3246	A3	3613	G2	5701	E4
2223	K8	2610	J2	3247	J4	3614	H2	5702	F4
2224	J8	2620	K2	3248	A2	3615	J1	5703	I3
2225	H8	2622	L8	3249	C3	3616	I2	5704	K3
2226	H8	2624	I3	3250	C3	3621	L6	6207	B11
2227	J8	2627	J8	3254	H12	3622	K7	6208	B10
2228	L2	2641	F4	3255	H12	3623	L7	7202	K3
2230	I6	2642	F4	3256	J12	3624	K7	7203	K4
2231	I6	2663	B13	3299	I13	3625	L8	7204	K2
2236	H9	2664	B13	3401	J6	3626	K8	7205	I8
2238	I10	2665	B14	3402	K7	3628	J3	7206	I11
2245	F9	2666	B13	3406	L4	3629	J3	7207	H10
2247	A2	2707	E4	3408	J11	3631	J5	7208	I10
2249	K13	2708	E4	3409	L6	3640	J4	7209	B3
2401	K6	2905	J3	3501	B12	3641	G10	7210	B4
2402	K6	2922	D3	3502	B12	3661	C13	7211	B2
2403	L4	2957	E10	3503	B12	3662	C13	7403	K5
2501	B12	2958	F10	3504	B12	3663	C13	7501	E4
2502	B12	2961	F10	3505	D7	3664	B13	7601	I2
2503	D6	2967	E10	3506	F7	3665	B14	7603	H1
2504	F7	2968	E10	3507	D5	3666	B13	7604	H2
2505	D6	3202	K12	3508	F5	3668	L3	7610	E9
2506	F6	3203	H8	3509	E12	3669	L4	7621	L7
2507	D6	3204	J7	3511	E8	3707	D4	7622	L8
2511	D7	3205	B3	3512	F8	3708	E4	7623	L6
2512	G6	3206	J10	3513	E8	3712	B13	7661	B14
2513	E8	3207	H9	3514	F7	4002	B10	7662	B13
2514	F7	3208	J11	3521	C5	4004	F4	7663	L3
2515	D6	3209	J11	3522	G6	4006	F7		
2516	F6	3210	I10	3523	C5	4007	I13		
2517	A12	3211	J9	3524	G6	4008	I13		
2518	A12	3213	K4	3525	D5	4009	K12		
2521	C5	3214	K4	3526	F5	4012	K3		
2522	F6	3215	J9	3527	D6	4015	G4		
2523	D6	3216	L2	3528	F6	4016	C3		
2524	F5	3217	L2	3529	D6	4017	J3		
2533	D6	3218	J7	3530	F6	4019	E8		
2534	F6	3219	I7	3543	C5	4021	D7		
2541	D5	3220	J9	3544	G5	4022	I11		
2542	F5	3221	H8	3545	D5	4023	B8		
2543	C5	3222	J8	3546	F5	5001	D9		
2544	G5	3223	J7	3547	D5	5002	E9		
2546	G5	3224	H8	3548	F5	5003	E9		
2547	C5	3225	H8	3549	D5	5004	E10		
2548	G5	3226	H8	3550	F5	5005	E11		
2565	C5	3227	H8	3591	C4	5006	I12		
2567	D5	3228	J8	3592	G4	5007	I12		
2568	F5	3229	J8	3593	C4	5008	H12		

AMPLIFIER BOARD - Circuit Diagram (part 1)

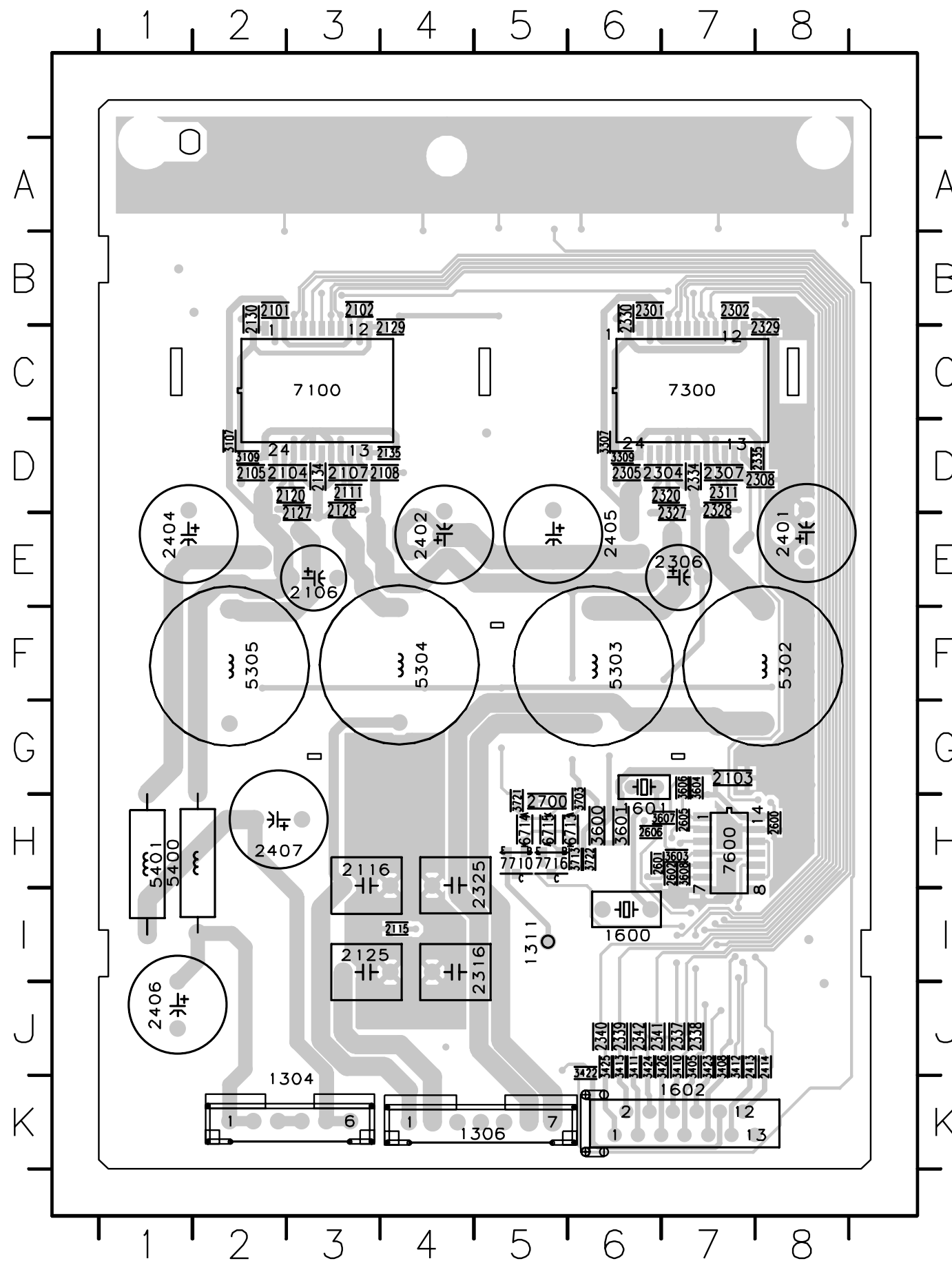


AMPLIFIER BOARD - Circuit Diagram (part 2)



1306 B9
2101 A4
2102 A4
2104 A6
2105 A6
2106 A5
2107 A5
2108 A5
2110 B6
2111 B6
2112 B7
2113 C6
2114 C6
2116 C7
2117 B7
2120 C6
2124 C7
2125 D7
2127 D5
2128 D5
2129 C4
2130 D4
2131 C3
2134 C6
2135 C5
2136 B3
2301 E4
2302 E4
2304 E6
2305 E6
2306 E5
2307 E5
2308 E5
2311 F6
2314 F6
2315 F7
2316 F7
2317 F7
2320 G6
2322 G6
2324 G7
2325 G7
2326 G6
2327 G5
2328 G5
2329 G4
2330 G4
2331 G3
2332 G3
2333 F3
2334 G6
2335 G5
2336 F3
2337 F3
2338 E3
2339 B3
2340 B3
2341 C3
2342 C3
3100 B6
3101 C6
3102 C7
3103 C7
3104 D7
3105 D6
3107 A4
3109 D4
3111 C8
3112 C8
3113 D7
3114 D8
3300 E6
3301 F6
3302 F7
3303 G7
3304 H7
3305 G6
3307 E4
3309 H4
3351 F7
3352 H7
3353 F8
3354 H8
5302 F7
5303 G7
5304 B7
5305 C7
7100 C5
7300 F5
F104 C8
F109 B8
F112 C8
F129 F8
F130 G8
F139 B8

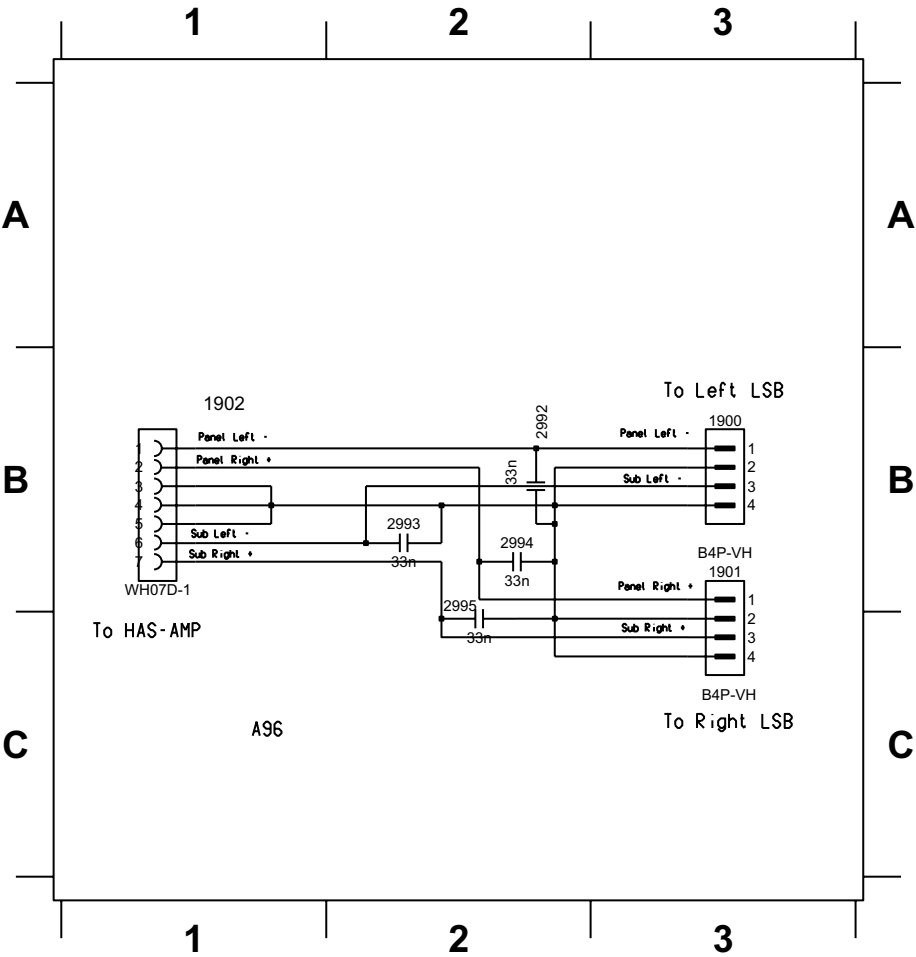
AMPLIFIER BOARD - Layout Diagram (side A)



1304	K3	2601	H6
1306	K5	2602	H7
1311	I5	2605	H7
1600	I6	2606	H6
1601	H6	2700	H5
1602	J7	3107	D2
2101	B2	3109	D2
2102	B3	3307	D6
2103	G7	3309	D6
2104	D3	3405	J7
2105	D2	3408	J7
2106	E3	3410	J7
2107	D3	3411	J6
2108	D4	3412	J7
2111	D3	3413	J6
2115	I4	3422	J6
2116	H3	3423	J7
2120	D3	3424	J6
2125	I3	3425	J6
2127	E3	3426	J7
2128	D3	3600	H6
2129	C4	3601	H6
2130	B2	3603	H7
2134	D3	3604	G7
2135	D4	3606	G7
2301	B6	3607	H7
2302	B7	3608	H7
2304	D7	3703	H6
2305	D6	3713	H6
2306	E7	3721	H5
2307	D7	3722	H6
2308	D8	5302	F8
2311	D7	5303	F6
2316	I5	5304	F4
2320	D7	5305	F2
2325	H5	5400	H1
2327	E7	5401	H1
2328	D7	6713	H6
2329	C8	6714	H5
2330	B6	6715	H5
2334	D7	7100	C3
2335	D8	7300	C7
2337	J7	7600	H7
2338	J7	7710	H5
2339	J6	7716	H5
2340	J6		
2341	J6		
2342	J6		
2401	E8		
2402	E4		
2404	E1		
2405	E6		
2406	J1		
2407	H2		
2413	J7		
2414	J8		
2600	H8		

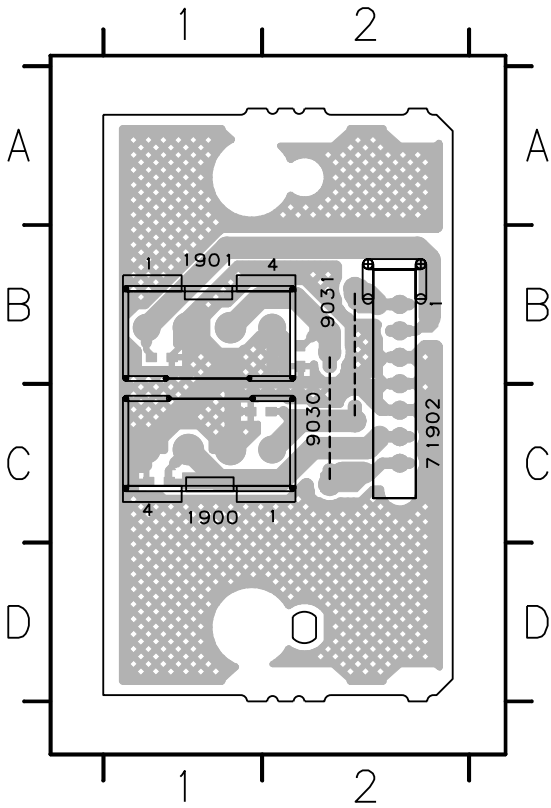
2109	J2	3605	H3
2110	D6	3609	H3
2112	D6	3610	G1
2113	D7	3700	F5
2114	D6	3701	F7
2117	I7	3709	G5
2124	J7	3712	G7
2131	B6	6600	G2
2136	B6	7602	H4
2314	D2	7607	H2
2315	D2	7608	H4
2317	J4		
2322	D3		
2324	H5		
2326	D2		
2331	B2		
2332	I2		
2333	J1		
2336	B2		
2400	J7		
2403	J7		
2411	J3		
2412	J2		
2415	J3		
2416	J1		
2417	J3		
2418	J3		
2419	J3		
2420	J2		
2421	J2		
2422	J3		
2603	H3		
2604	G2		
2607	H3		
2608	G1		
3100	E6		
3101	E7		
3102	E6		
3103	I6		
3104	J6		
3105	E6		
3110	A4		
3111	F5		
3112	F5		
3113	F7		
3114	F7		
3300	E2		
3301	E3		
3302	E2		
3303	J5		
3304	H5		
3305	E2		
3351	F2		
3352	F3		
3353	F2		
3354	F3		
3602	H3		

AMP SOCKET BOARD - Circuit Diagram

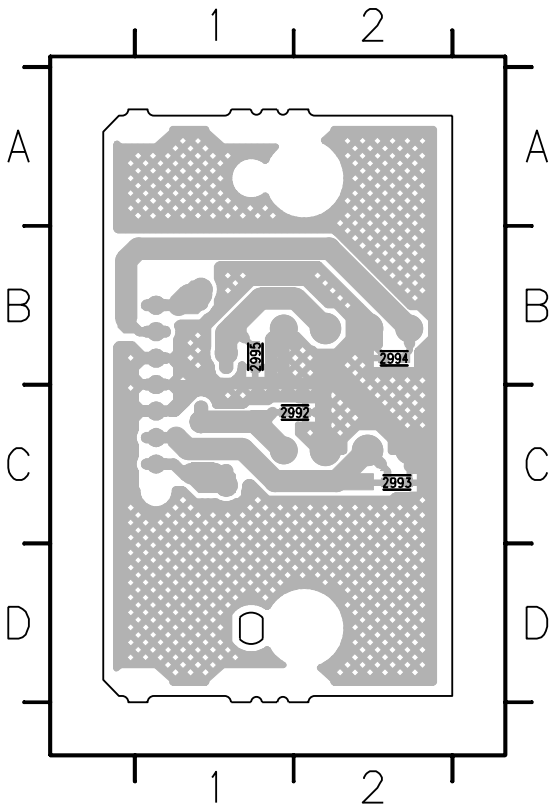


1900 B3
1901 B3
1902 B1
2992 B2
2993 B2
2994 B2
2995 B2

AMP SOCKET BOARD - Layout Diagram



1900 C1
1901 B1
1902 C2
2992 C2
2993 C2
2994 B2
2995 B1



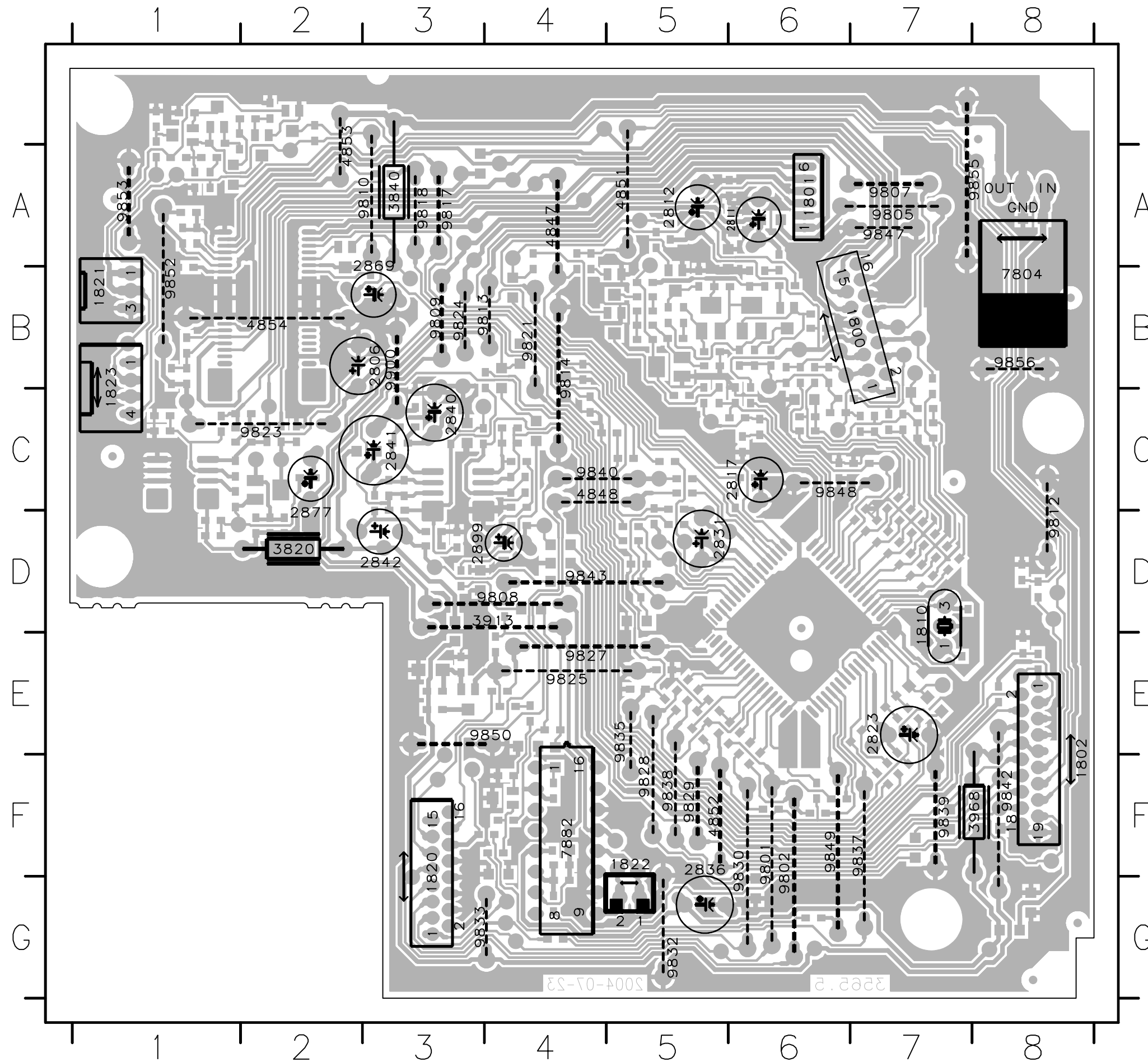
2992 C2
2993 C2
2994 B2
2995 B1

The schematic diagram illustrates the internal circuitry of a 4x CD Board (Slot Loader). Key components and sections include:

- Motor Driver:** Utilizes a 7882 TDA7073A IC to drive the disc and loader motors. It includes a 12V regulator and various timing components.
- Audio Out:** Features two LM358D op-amp channels for DACLEFT and DACRIGHT, converting digital signals to analog for the disc.
- Loader Motor:** Controlled by a 7884 BC807-25W transistor and a 7886 BC817-40W transistor, driven by a 3V3_mech signal.
- LED/SW PCB:** Contains LEDs for Disc Eject, Disc Down, and Disc In, along with a switch for Disc Eject.
- Sensor PCB:** Includes a Disc Eject Sensor and a Disc In / 8cm Sensor.
- Control Interface:** Connects to a 7804 17898CP IC, which manages the disc's position and data.
- Data Interface:** Connects to a 7800 7800 IC, which handles the data transfer between the disc and the host.
- Power Regulation:** Includes a 12V regulator (7812) and a 3.3V regulator (7805) to provide stable power to the various components.
- Connectors:** The board features a 18-pin connector (PH-S) for the disc and a 18-pin connector (PH-B) for the loader motor.

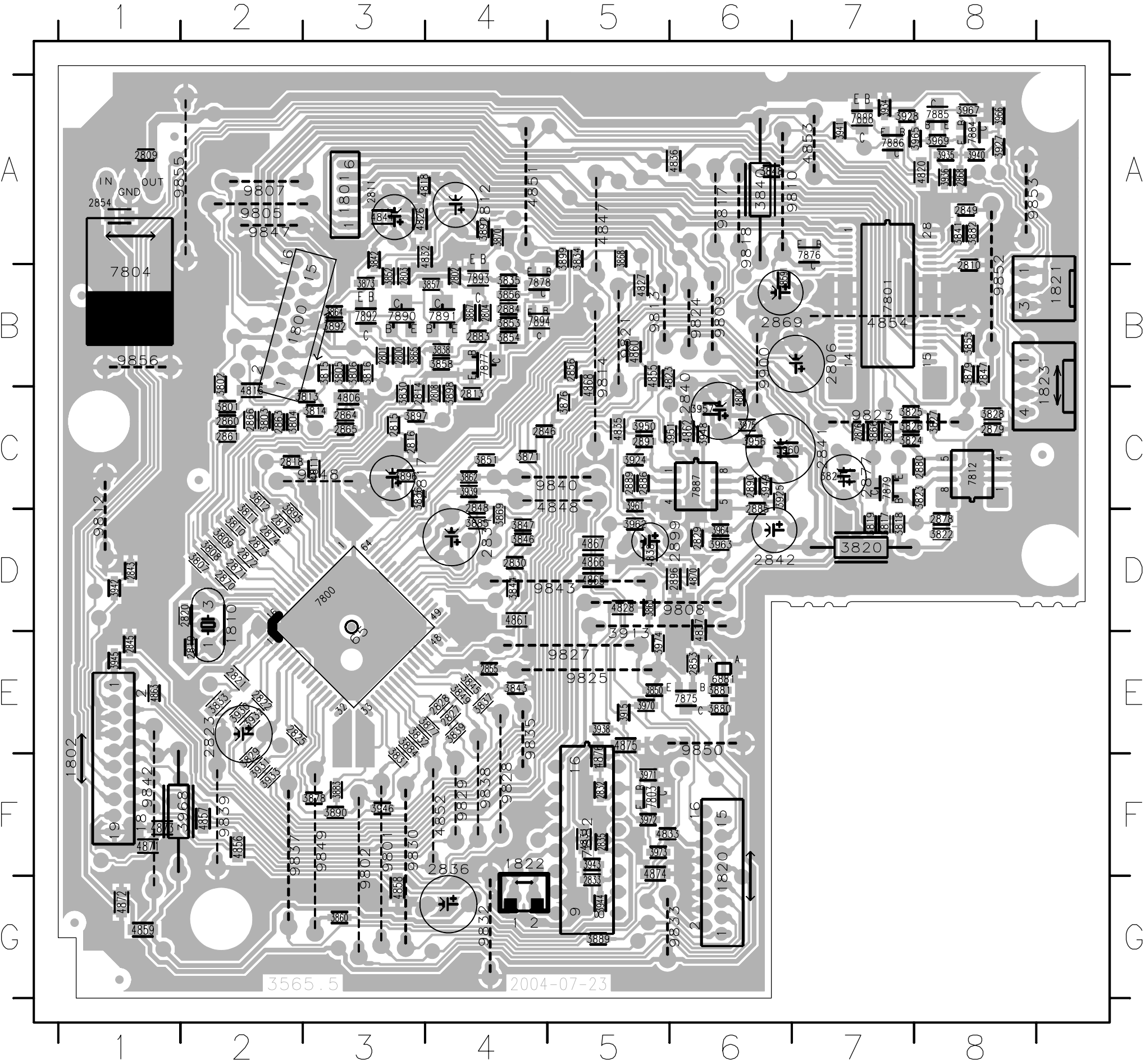
The diagram is a detailed representation of the board's internal components and their interconnections, showing the flow of power and data throughout the system.

SLOT CD LOADER BOARD - Layout Diagram (side A)

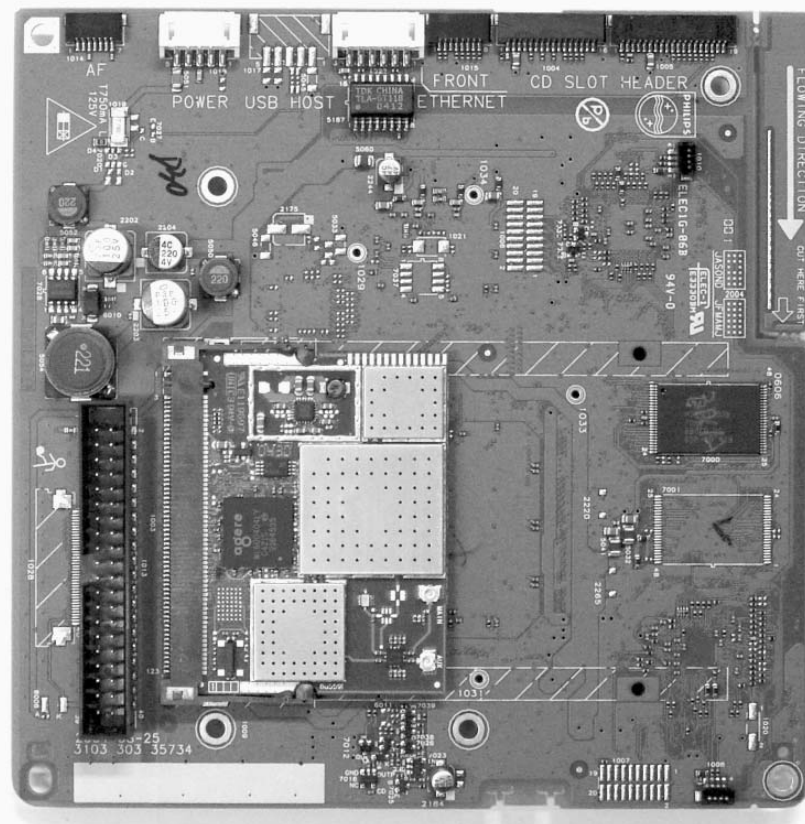


1800	B7	9849	F6
1801	A6	9850	E4
1802	F8	9852	B1
1810	D7	9853	A1
1820	F3	9855	A8
1821	B1	9856	B8
1822	F5	9900	B3
1823	B1		
2806	B3		
2811	A6		
2812	A5		
2817	C6		
2823	E7		
2831	D5		
2836	F5		
2840	C3		
2841	C3		
2842	D3		
2869	A3		
2877	D2		
2899	D3		
3820	D2		
3840	A3		
3913	D4		
3968	F8		
4847	A4		
4848	C4		
4851	A5		
4852	F5		
4853	A2		
4854	B2		
7804	B8		
7882	F4		
9801	F6		
9802	F6		
9805	A7		
9807	A7		
9808	D4		
9809	B3		
9810	A3		
9812	D8		
9813	B3		
9814	B4		
9817	A3		
9818	A3		
9821	B4		
9823	C2		
9824	B3		
9825	E4		
9827	E4		
9828	F5		
9829	F5		
9830	F6		
9832	G5		
9833	G3		
9835	E5		
9837	F7		
9838	F5		
9839	F7		
9840	C4		
9842	F8		
9843	D4		
9847	A7		
9848	C6		

SLOT CD LOADER BOARD - Layout Diagram (side B)



28000	B3	38005	B3	38072	C7	48006
28001	B3	38006	B3	38073	B3	48011
28002	B4	38007	D2	38076	C5	48016
28003	B3	38008	D2	38077	F3	48018
28004	B4	38009	D2	38078	F3	48020
28008	C4	38010	D2	38079	B8	48023
28009	A1	38011	D2	38080	E6	48026
28010	B8	38012	C2	38081	E6	48027
28013	C4	38013	C3	38082	A8	48028
28014	C3	38014	C3	38083	F3	48031
28015	C3	38015	B3	38084	F3	48032
28016	C3	38016	B3	38085	D4	48033
28018	C2	38017	D7	38089	G5	48035
28019	E2	38018	D7	38090	F3	48036
28020	D2	38019	D7	38091	A4	48037
28021	E2	38022	C7	38092	B3	48038
28022	E2	38023	D8	38095	D2	48044
28025	E2	38024	C8	38096	C3	48055
28027	E4	38025	C7	38097	C3	48056
28028	E4	38026	C7	38098	C4	48057
28029	D6	38027	C7	38099	A5	48058
28030	D4	38028	C8	38105	E5	48059
28032	F5	38029	F2	38124	C5	48060
28033	F5	38030	F2	38125	C6	48061
28035	F5	38031	C3	38127	A8	48062
28043	D1	38032	F3	38128	A7	48063
28045	F1	38033	E2	38130	E2	48065
28046	F1	38034	E2	38131	F2	48066
28047	B8	38035	A5	38132	E2	48067
28048	C4	38036	B4	38133	F2	48068
28049	A8	38037	C3	38134	A7	48070
28053	E6	38038	F4	38135	A8	48071
28054	A1	38039	B4	38136	A8	48072
28055	E4	38040	E4	38138	E5	48073
28056	B5	38041	A8	38139	C4	48074
28060	C2	38042	A3	38140	A8	48075
28061	C2	38043	E4	38141	A7	48076
28063	C2	38044	D4	38142	D1	6881
28064	C3	38045	F4	38143	F5	7800
28065	C3	38046	D4	38144	G5	7801
28066	C2	38047	D4	38145	F1	7803
28068	A8	38048	A6	38146	F3	7812
28070	D2	38049	E4	38148	O6	7875
28071	D2	38050	E5	38149	C6	7876
28072	D2	38051	C4	38150	C5	7877
28073	D2	38052	B3	38151	O6	7878
28074	D2	38053	B4	38156	C6	7879
28075	D2	38054	B4	38157	C6	7884
28076	C7	38055	B8	38160	O6	7885
28078	D8	38056	B4	38161	C5	7886
28079	C8	38057	B4	38162	D5	7887
28080	B4	38058	B4	38163	D6	7888
28083	B4	38059	B6	38164	D6	7889
28084	O6	38060	G3	38165	A8	7890
28085	O6	38061	D5	38166	A8	7891
28086	C5	38062	C4	38167	A8	7892
28088	C5	38063	B3	38169	A8	7893
28089	C5	38064	B3	38170	E5	7894
28090	C5	38065	C7	38171	F5	
28096	D6	38066	B4	38172	F5	
38001	C2	38067	A5	38173	F5	
38002	B2	38068	D4	38174	E5	
38003	C2	38069	A4	38175	C6	
38004	C2	38070	C4	48000	C6	



HAS MODULE

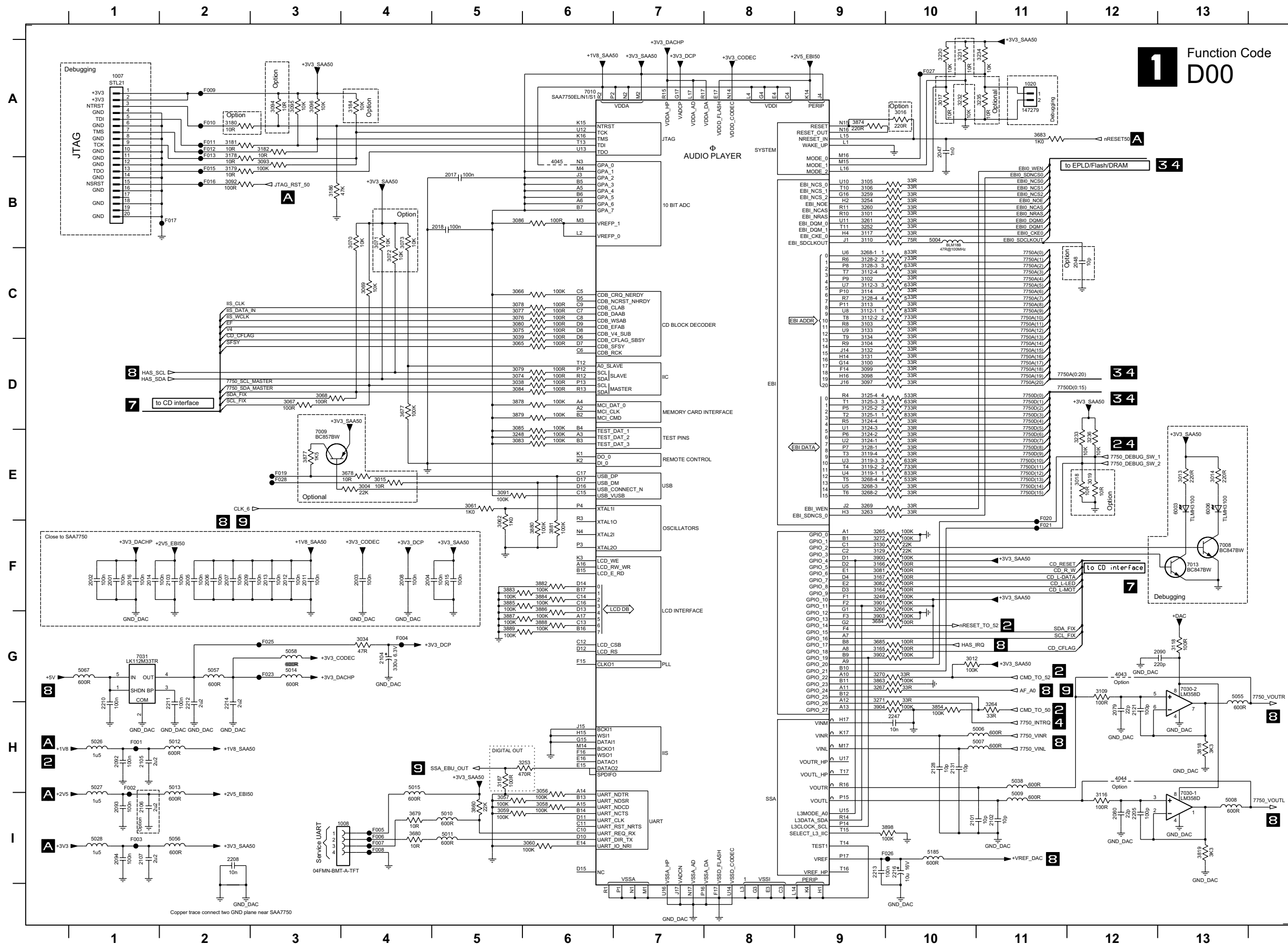
This module can only be repaired on component level
at authorized service workshop.

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

For sets produced before week 542
3103 308 68101HAS Printed Board Assembly
2822 062 00097WMOD WIFIG MPC1 MP-G-AG-01

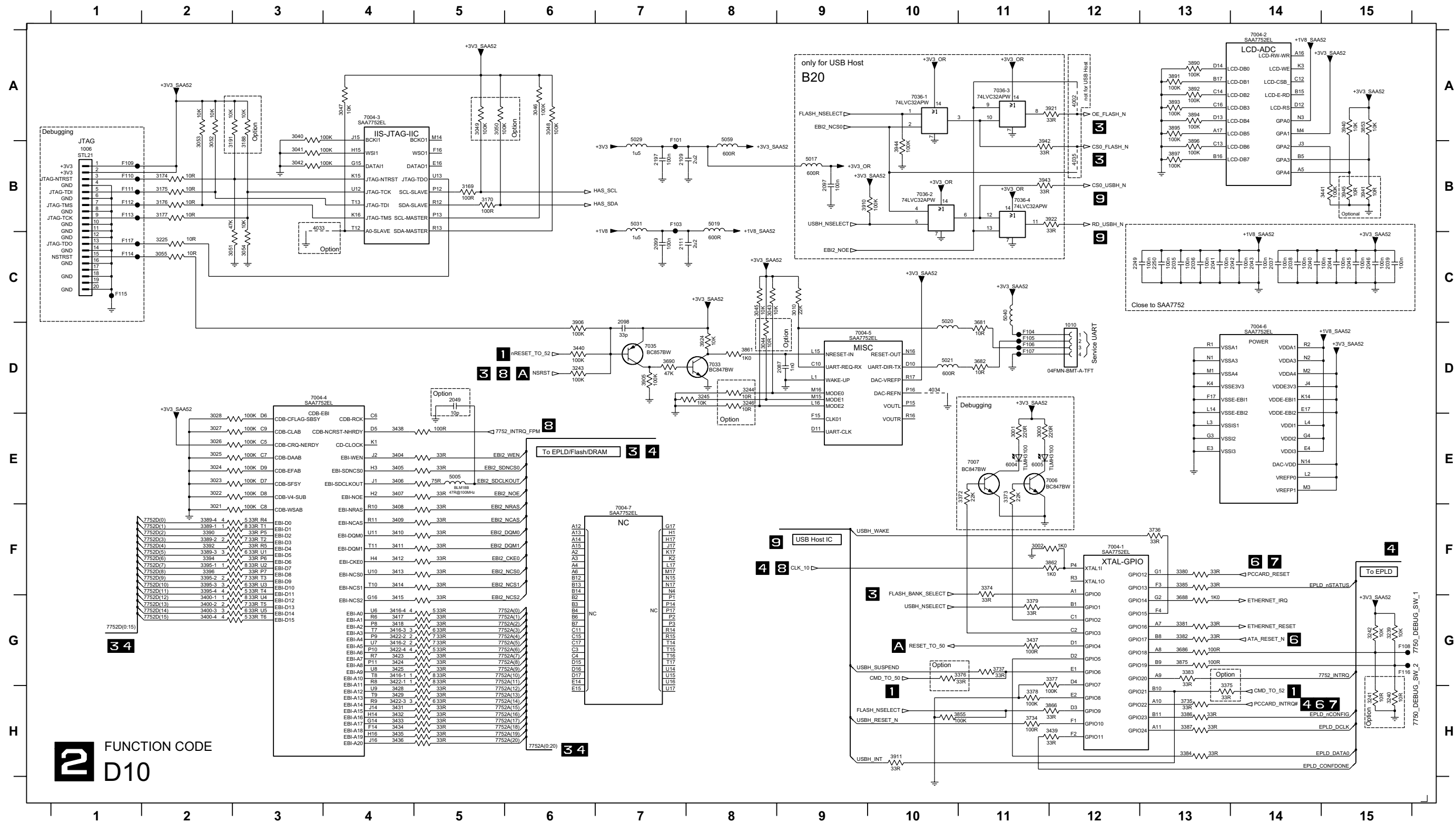
For sets produced in or after week 542
3141 078 01121HAS Printed Board Assembly
2822 065 01728WMOD WIFIG MP-G-BR-05

CIRCUIT DIAGRAM - Part 1

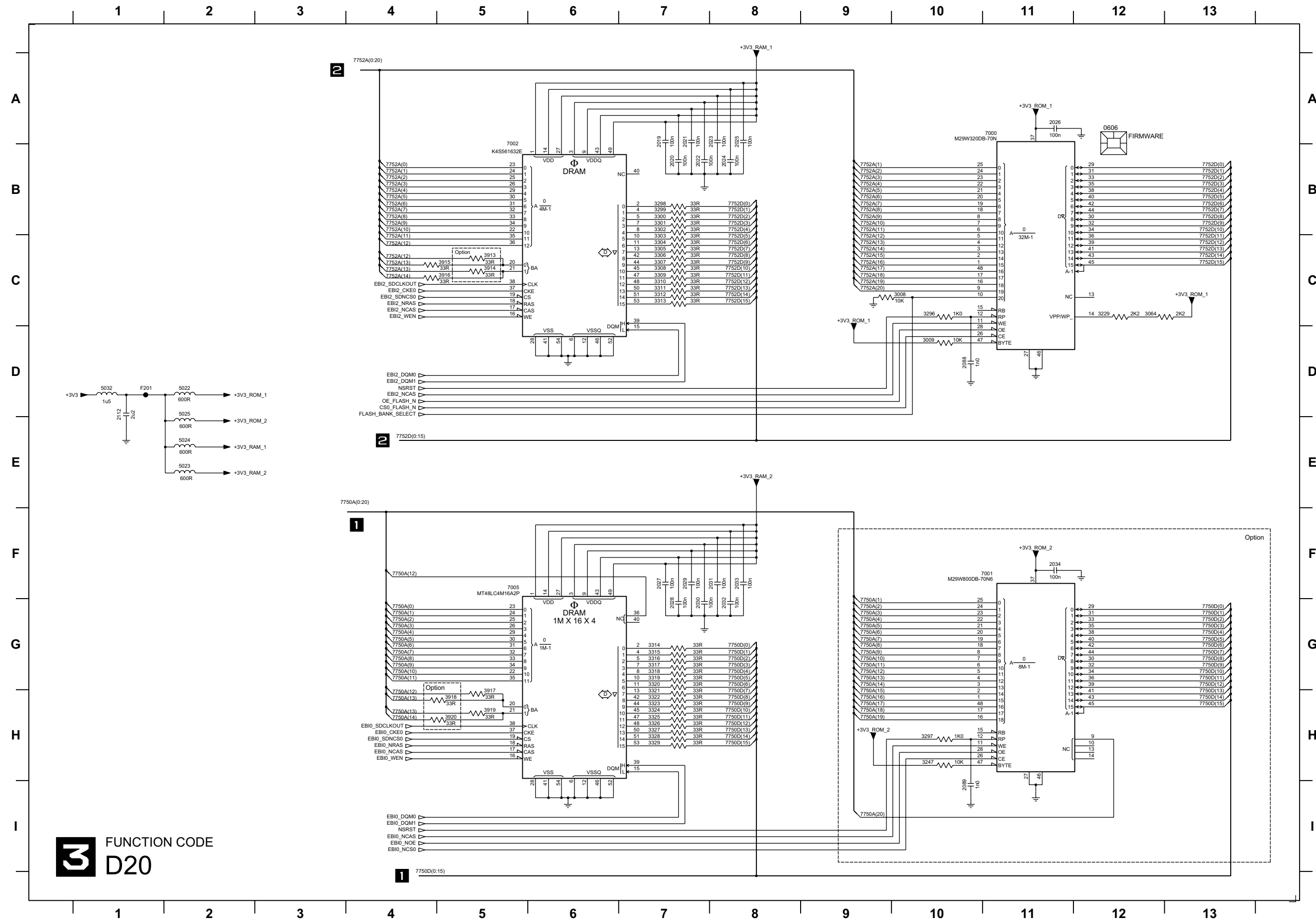


1007 A1	3119-4 E9	7009 E3
1008 I4	3124-1 E9	7010 A6
1020 A11	3124-2 E9	7013 F13
2001 F1	3124-3 E9	7030-1 H3
2002 F1	3124-4 D9	7030-2 G13
2003 F4	3125-1 D9	7031 G1
2004 F4	3125-2 D9	F001 H1
2005 F2	3125-3 D9	F002 H1
2006 F2	3125-4 D9	F003 I1
2007 F2	3128-1 E9	F004 G4
2008 F4	3128-2 C9	F005 I4
2009 F2	3128-3 C9	F006 I4
2011 F3	3128-4 C9	F007 I4
2012 F3	3129 F9	F008 I4
2013 F3	3130 F9	F009 A2
2014 F1	3131 D9	F010 A2
2015 F5	3132 D9	F011 A2
2016 F1	3133 C9	F012 A2
2017 B5	3134 D9	F013 B2
2018 B5	3164 F9	F015 B2
2047 A10	3165 G9	F016 B2
2048 C12	3166 F9	F017 B2
2079 H12	3167 F9	F019 E3
2080 H12	3178 B2	F020 F11
2090 G13	3179 B2	F021 F11
2092 H1	3180 A2	F023 G3
2093 I1	3181 A2	F025 G3
2094 I1	3182 A3	F026 H10
2101 H10	3184 A4	F027 A10
2102 H11	3186 B3	F028 E3
2103 F2	3187 H5	
2104 G4	3230 A10	
2105 H1	3231 A10	
2106 I1	3232 A10	
2107 I1	3233 E12	
2121 H12	3234 A11	
2128 H10	3235 A11	
2131 H10	3236 E12	
2205 I12	3248 E5	
2208 I2	3249 F9	
2210 H1	3252 B9	
2211 H2	3253 H6	
2212 H2	3254 B9	
2213 B9	3259 B9	
2214 H2	3260 B9	
2216 I10	3261 B9	
2247 H10	3263 E9	
3004 E4	3264 H11	
3012 G10	3265 F9	
3013 E13	3266 G9	
3014 E13	3267 G9	
3015 C4	3268-1 C9	
3016 A10	3268-2 E9	
3017 A10	3268-3 E9	
3018 E12	3268-4 E9	
3019 E12	3269 E9	
3034 G4	3270 G9	
3038 D5	3271 H9	
3039 D5	3272 F9	
3056 I6	3277 D4	
3057 I5	3278 E4	
3058 I6	3279 I4	
3059 I5	3280 I4	
3060 I6	3281 A11	
3061 E5	3284 G9	
3062 F5	3285 G9	
3063 D5	3286 D5	
3064 C5	3287 H13	
3065 C5	3288 G6	
3066 C5	3289 G5	
3067 D3	3290 F9	
3068 D3	3291 F9	
3069 C4	3292 G9	
3070 B4	3293 A9	
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3072 C4	3295 D5	
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3081 F9	3304 H9	
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3083 E5	3306 H9	
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3112-3 C9	3336 G9	
3112-4 C9	3337 G9	
3113 C9	3338 G9	
3114 C9	3339 G9	
3115 H12	3340 G9	
3116 H12	3341 G9	
3117 B9	3342 G9	
3118 G13	3343 G9	
3119-1 E9	3344 G9	
3119-2 E9	3345 G9	
3119-3 E9	3346 G9	

1006 B1	2041 C13	2097 B9	3000 E11	3025 E2	3044 D8	3052 B2	3176 B2	3242 F15	3375 H13	3383 G13	3389A F2	3396 F2	3407 E4	3415 G4	3422-2 G4	3431 H4	3439 H12	3734 H11	3866 H12	3896 B13	3924 D8	4033 B3	5029 B7	7004-3 A4	7035 D7	F105 D11	F113 B1	
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2035 C13	2043 C14	2099 C7	3002 F11	3027 E2	3046 A6	3054 C3	3188 B3	3244 D8	3377 G12	3385 F13	3392 F2	3400-2 G2	3409 F4	3416-2 G4	3422-4 G4	3433 H4	3441 B14	3736 F13	3890 A13	3905 D7	3941 B15	4035 B12	5040 C11	7004-5 D9	7036-2 B10	F107 D11	F115 C1	
2036 C13	2044 C15	2109 B7	3010 C9	3028 E2	3047 A4	3055 C2	3191 B3	3245 D8	3378 H11	3386 H13	3394 F2	3405-3 G2	3410 F4	3416-3 G4	3423 G4	3434 H4	3441 D11	3737 G11	3891 A13	3906 D6	3942 B11	5005 E5	5059 B8	7004-6 D14	7037 A11	F108 G15	F116 G15	
2037 C14	2045 C15	2111 C7	3021 F2	3040 A3	3048 A6	3169 B5	3225 C2	3246 D8	3379 G11	3387 H13	3395-1 F2	3400-4 G2	3411 F4	3416-4 G4	3424 G4	3435 H4	3682 D11	3853 A15	3892 A13	3910 B9	3943 B11	5017 B9	6004 E11	7006 F17	7036-4 B11	F109 B1	F117 C1	
2038 C14	2046 C15	2197 B7	3022 E2	3041 B3	3049 A5	3170 B5	3239 G15	3372 E11	3380 F13	3389-1 F2	3395-2 F2	3404 E4	3412 F4	3417 G4	3425 G4	3436 H4	3855 H11	3893 A13	3911 H10	3944 B10	5019 B8	6006 E11	7007 E11	F101 B7	F110 B1			
2039 C15	2049 D5	2240 C12	3023 E2	3042 B3	3050 A5	3174 B2	3240 H15	3373 E11	3381 G13	3389-2 F2	3395-3 F2	3405 E4	3413 F4	3418 G4	3428 H4	3437 G11	3688 D13	3861 D8	3894 A13	3921 A12	3945 B15	5020 D10	7004-1 F12	7007 E11	F103 B7	F111 B1		
2040 C14	2087 D9	2250 C13	3024 E2	3043 C8	3051 C3	3175 B2	3241 H15	3374 F11	3382 G13	3389-3 F2	3395-4 F2	3403 D4	3414 F4	3422-1 G4	3429 H4	3438 E4	3690 D7	3862 F12	3895 A13	3922 B12	4002 A12	5021 D10	7004-2 A14	7033 D8	F104 D11	F112 B1		

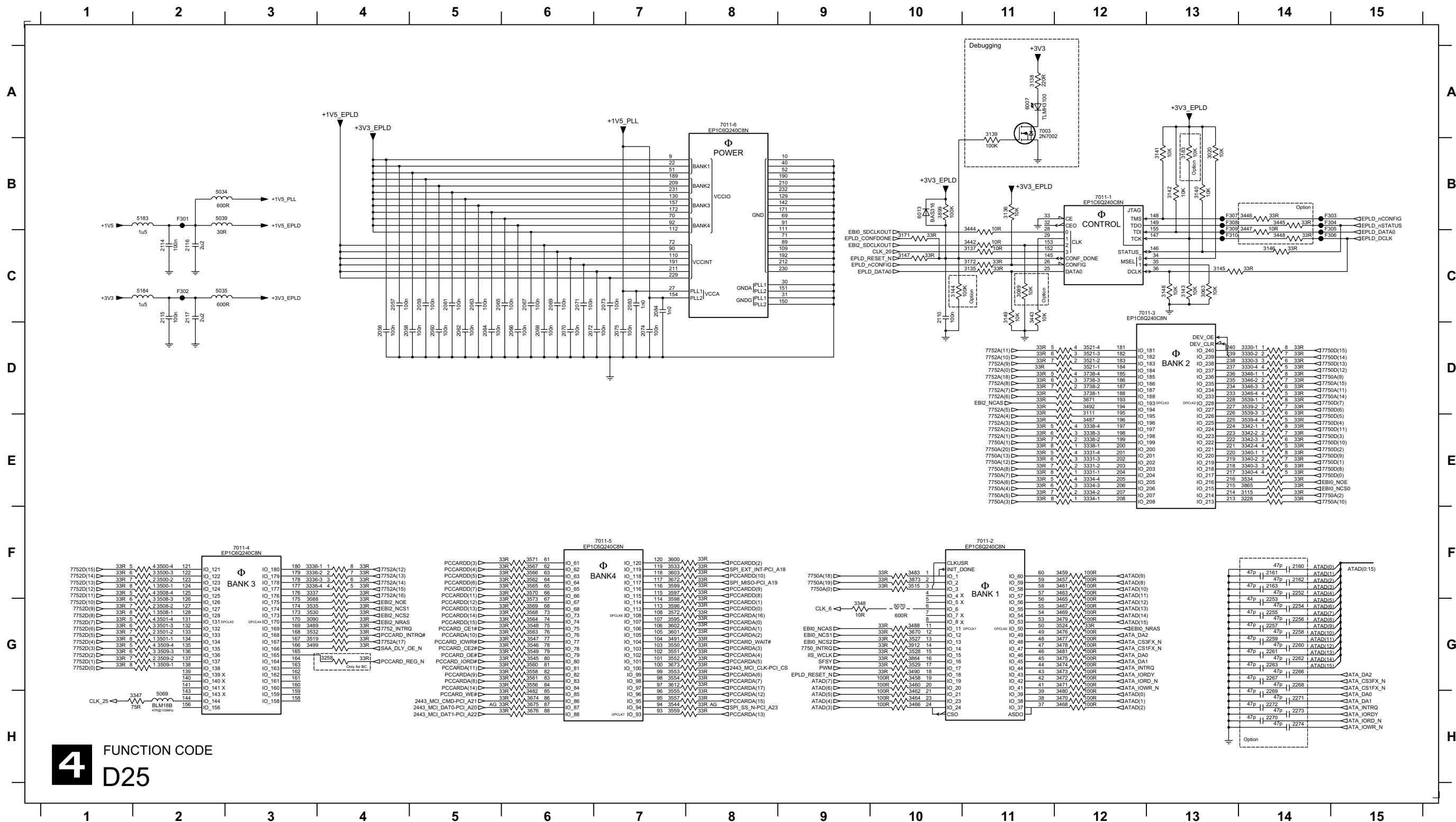


2066 A12
2019 A7
2020 B7
2021 A7
2022 B7
2023 A8
2024 B8
2025 A8
2026 A11
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2028 G7
2029 F7
2030 G7
2031 F8
2032 G8
2033 F8
2034 F11
2088 D10
2089 H10
2112 D1
3008 C10
3009 D10
3064 C12
3229 H10
3247 H10
3250 C10
3287 H10
3298 B7
3299 B7
3300 B7
3301 B7
3302 B7
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3304 C7
3305 C7
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3308 C7
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3316 G7
3317 G7
3318 G7
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3321 H7
3322 H7
3323 H7
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3326 H7
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3913 C5
3914 C5
3915 C5
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3917 H5
3918 H5
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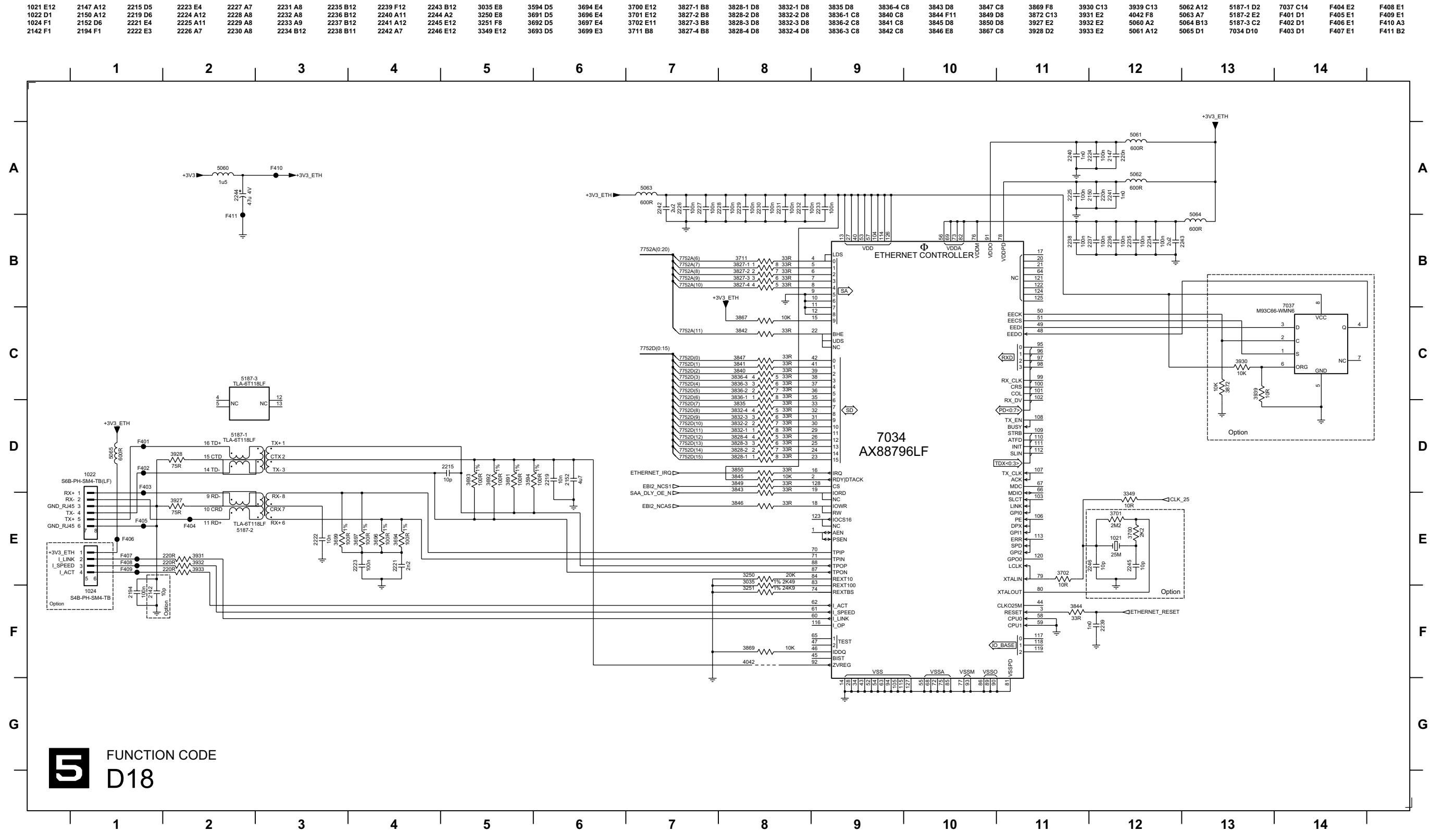


CIRCUIT DIAGRAM - Part 4

2056 D4	2066 D6	2083 C7	2163 G14	2261 G14	2273 H14	3136 B11	3146 C14	3330-2 D14	3334-4 E12	3340-1 E14	3346-3 D14	3448 C14	3466 H10	3476 G12	3489 G3	3501-2 G2	3509-4 G2	3529 H10	3544 H7	3554 H7	3564 G6	3595 G7	3670 G10	3738-4 D12	5070 G10	7011-5 F7	F309 C13
2057 C4	2067 C6	2084 C7	2262 H14	2274 H14	3137 C11	3147 C10	3330-3 D14	3336-1 G3	3340-2 E14	3346-4 D14	3457 G12	3467 G12	3477 G12	3490 H10	3501-3 G2	3515 G10	3530 G3	3545 H6	3555 H7	3565 G6	3596 G7	3671 D12	3864 H10	5183 B2	7011-6 A8	F310 C13	
2058 D4	2068 D6	2110 C10	2253 G14	2263 H14	3020 B13	3138 A11	3148 C13	3330-4 D14	3336-2 G3	3340-3 E14	3347 H2	3458 H10	3468 H12	3478 G12	3491 G7	3501-4 G2	3519 G3	3532 G3	3546 G6	3556 H6	3566 G6	3597 G7	3672 G7	3865 E14	5184 C2	F301 B2	
2059 C5	2069 C6	2114 C2	2254 G14	2266 H14	3063 C13	3139 A11	3149 C11	3331-1 E12	3336-3 G3	3340-4 E14	3348 G9	3459 G12	3469 G12	3479 G12	3492 D12	3508-1 G2	3521-1 D12	3533 G7	3547 G6	3557 H7	3567 G6	3598 G7	3673 H7	3873 G10	6007 A11	F302 C2	
2060 D5	2070 D6	2115 C2	2255 G14	2267 H14	3088 G3	3140 B13	3171 C10	3331-2 E12	3336-4 G3	3342-1 E14	3442 C11	3460 H10	3470 H12	3480 H12	3499 G3	3508-2 G2	3521-2 D12	3535 E14	3548 G6	3558 H6	3568 G6	3599 G7	3674 H6	3899 B10	6013 B10	F303 B14	
2061 C5	2071 C6	2116 C2	2256 G14	2268 H14	3089 C11	3141 B13	3172 C11	3331-3 E12	3337 G3	3342-2 E14	3443 C11	3461 G12	3471 H12	3481 G12	3500-1 G2	3521-3 D12	3535 G3	3549 G6	3559 H7	3569 G6	3599 G7	3675 H6	3912 G10	7003 A11	F304 B14		
2062 D5	2072 D6	2117 C2	2257 G14	2269 H14	3090 G3	3142 B13	3173 C11	3331-4 E12	3338-1 E12	3342-3 E14	3444 C11	3462 H10	3472 H12	3482 H6	3500-2 G2	3521-4 D12	3538-1 D14	3550 G7	3560 H6	3570 G6	3599 G7	3676 H6	3913 B12	7011-1 B12	F305 C14		
2063 C5	2073 C6	2160 G14	2258 G14	2270 H14	3111 E12	3143 C13	3228 E14	3334-1 E12	3338-2 E12	3342-4 E14	3445 B14	3463 G12	3473 H12	3483 G10	3500-3 G2	3509-1 H2	3524 G12	3539-2 D14	3551 G7	3561 H6	3571 F6	3602 G7	3738-1 D12	5035 B2	7011-2 F11	F306 C14	
2064 D5	2074 D7	2161 G14	2259 G14	2271 H14	3115 E14	3144 C10	3258 H4	3334-2 E12	3338-3 E12	3346-1 D14	3446 B14	3464 H10	3474 H12	3487 E12	3500-4 G2	3509-2 H2	3527 G10	3539-3 E14	3552 H7	3562 G6	3572 G7	3603 G7	3738-2 D12	5039 B2	7011-3 C13	F307 B13	
2065 C5	2075 D7	2162 G14	2260 G14	2272 H14	3135 C11	3145 C13	3330-1 D14	3334-3 E12	3338-4 E12	3346-2 D14	3447 C14	3465 G12	3475 H12	3488 G10	3501-1 G2	3509-3 G2	3528 G10	3539-4 E14	3553 H7	3563 G6	3573 G6	3612 H7	3738-3 D12	5069 H2	7011-4 F3	F308 B13	



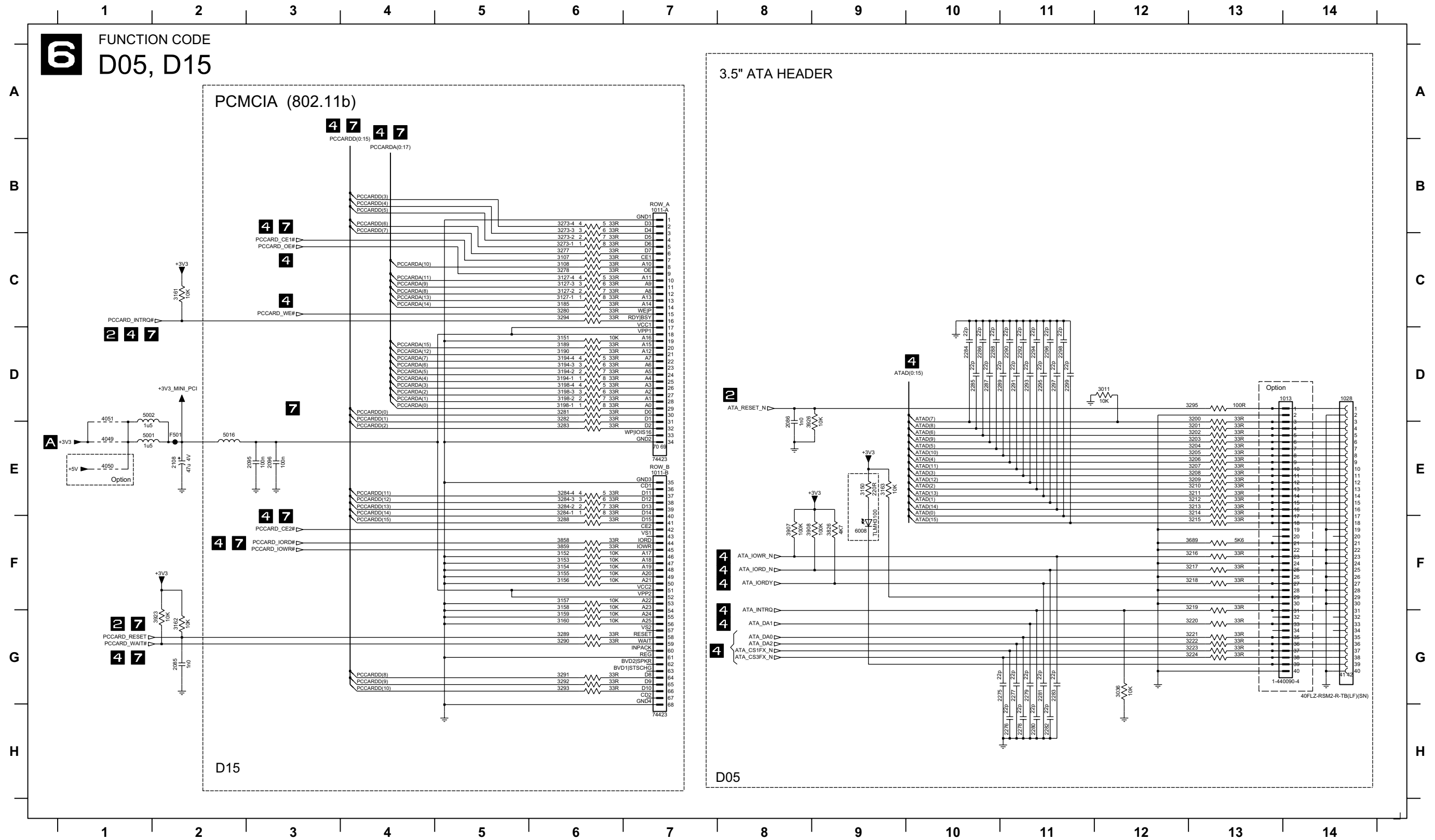
CIRCUIT DIAGRAM - Part 5



5 FUNCTION CODE
D18

CIRCUIT DIAGRAM - Part 6

1011-A B7	2086 E8	2276 H11	2281 G11	2286 D10	2291 D11	2296 D11	3036 G12	3127-3 C6	3153 F6	3158 F6	3163 E9	3194-2 D6	3198-3 D6	3203 E13	3208 E13	3213 E13	3218 F13	3223 G13	3273-4 B6	3282 D6	3284-4 E6	3292 G6	3826 F9	3923 G2	5001 E1
1011-B E7	2095 E3	2277 G11	2282 H11	2287 D10	2292 D11	2297 D11	3107 C6	3127-4 C6	3154 F6	3159 G6	3185 C6	3194-3 D6	3198-4 D6	3204 E13	3209 E13	3214 E13	3219 F13	3224 G13	3277 C6	3283 E6	3288 F6	3293 G6	3858 F6	3926 E8	5002 D1
1013 D14	2096 E3	2278 H11	2283 G11	2288 D10	2293 D11	2298 D11	3108 C6	3150 E9	3155 F6	3160 G6	3189 D6	3194-4 D6	3198-1 D6	3205 E13	3210 E13	3215 F13	3220 G13	3273-1 C6	3278 C6	3284-1 E6	3289 G6	3294 C6	3859 F6	4049 E1	5016 E2
1028 D14	2108 E2	2279 G11	2284 D10	2289 D11	2294 D11	2299 D11	3127-1 C6	3151 D6	3156 F6	3161 C2	3190 D6	3198-1 D6	3201 E13	3206 E13	3211 E13	3216 F13	3221 G13	3273-2 C6	3280 C6	3284-2 E6	3290 G6	3295 D13	3907 F8	4050 E1	6008 F9
2085 G2	2275 G11	2280 H11	2285 D10	2290 D11	2295 D11	3011 D12	3127-2 C6	3152 F6	3157 F6	3162 G2	3194-1 D6	3198-2 D6	3202 E13	3207 E13	3212 E13	3217 F13	3222 G13	3273-3 B6	3281 D6	3284-3 E6	3291 G6	3689 F13	3908 F8	4051 D1	F501 E2



Mini PCI TI / AG / BC (802.11g)

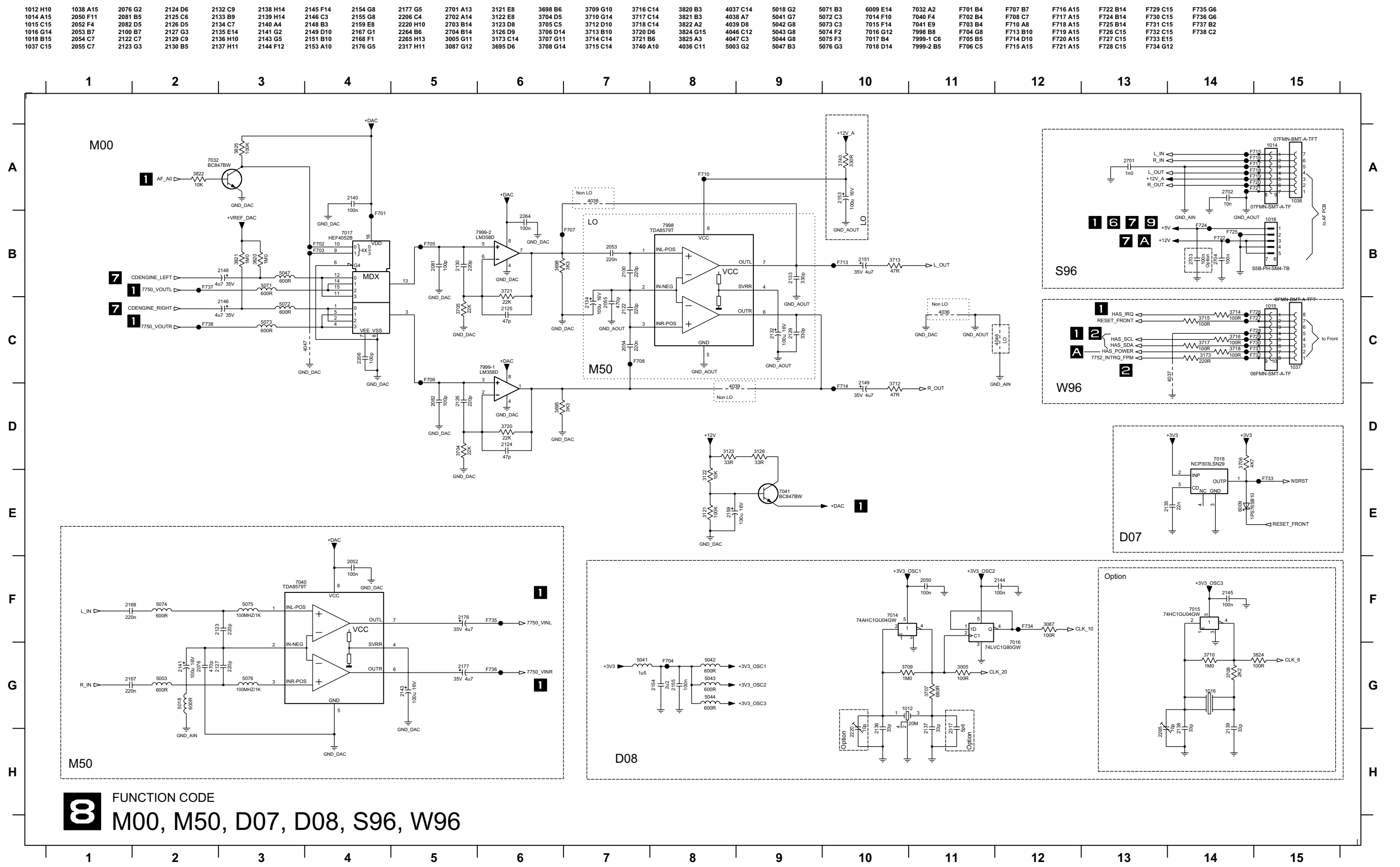
D16

C00

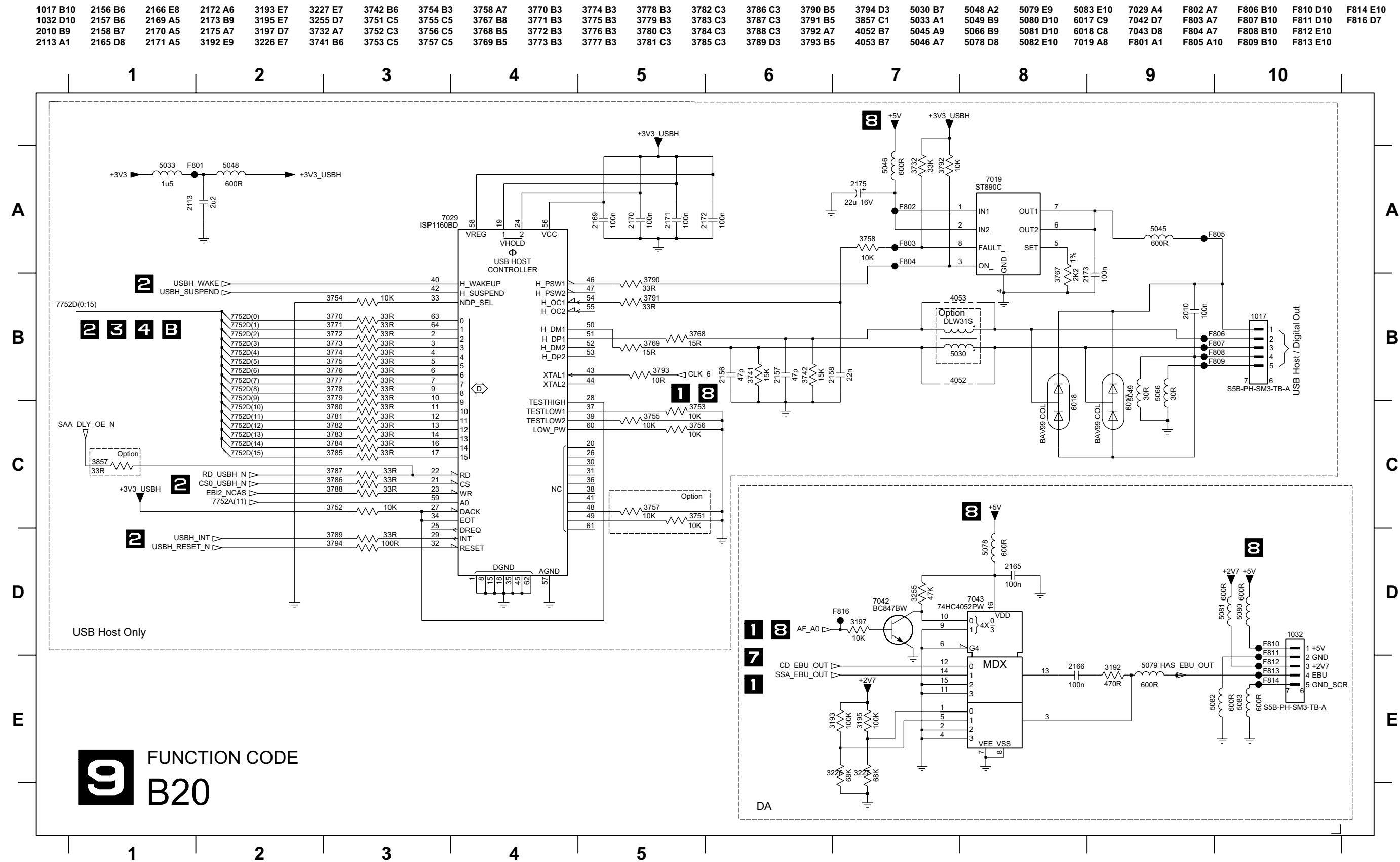
FUNCTION CODE
D16, C00

1003-A D4	F612 D11
1003-B D4	F613 E11
1004 F11	F614 E11
1005 C11	F615 E11
1035 C12	F616 E11
1036 F12	F617 G11
2051 C5	F618 G11
2091 H10	F619 G11
2118 E10	F620 G11
2119 D3	F621 G11
2120 C5	F622 G11
2248 D3	F623 G11
3003 D10	F624 G11
3006 D10	F625 H11
3007 G10	F626 G11
3029 D10	
3030 D10	
3031 D10	
3032 E10	
3033 E10	
3037 E10	
3168 H10	
3237 D10	
3238 C10	
3256 E3	
3257 E5	
3262 F5	
3615 D3	
3616 E3	
3617 E3	
3618 E3	
3619 E3	
3620 E3	
3621 E3	
3622 F3	
3623 E3	
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3628 G3	
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3636 D5	
3637 D5	
3638 D5	
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3650-3 F4	
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3661-2 G5	
3661-3 G5	
3661-4 G5	
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3663 E10	
3664 G10	
3665 G10	
3666 G10	
3667 G10	
3668 G10	
3669 G10	
3946 D5	
3947 E3	
3948 F3	
3949 F5	
3950 F5	
3951 G5	
3952 H5	
3953 H5	
4001 G3	
4003 H1	
4004 H1	
4005 H1	
5036 D10	
5037 G10	
5068 C2	
5077 F10	
5084 D5	
F601 D11	
F602 D11	
F603 D11	
F604 D11	
F605 D11	
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F611 D11	

CIRCUIT DIAGRAM - Part 8

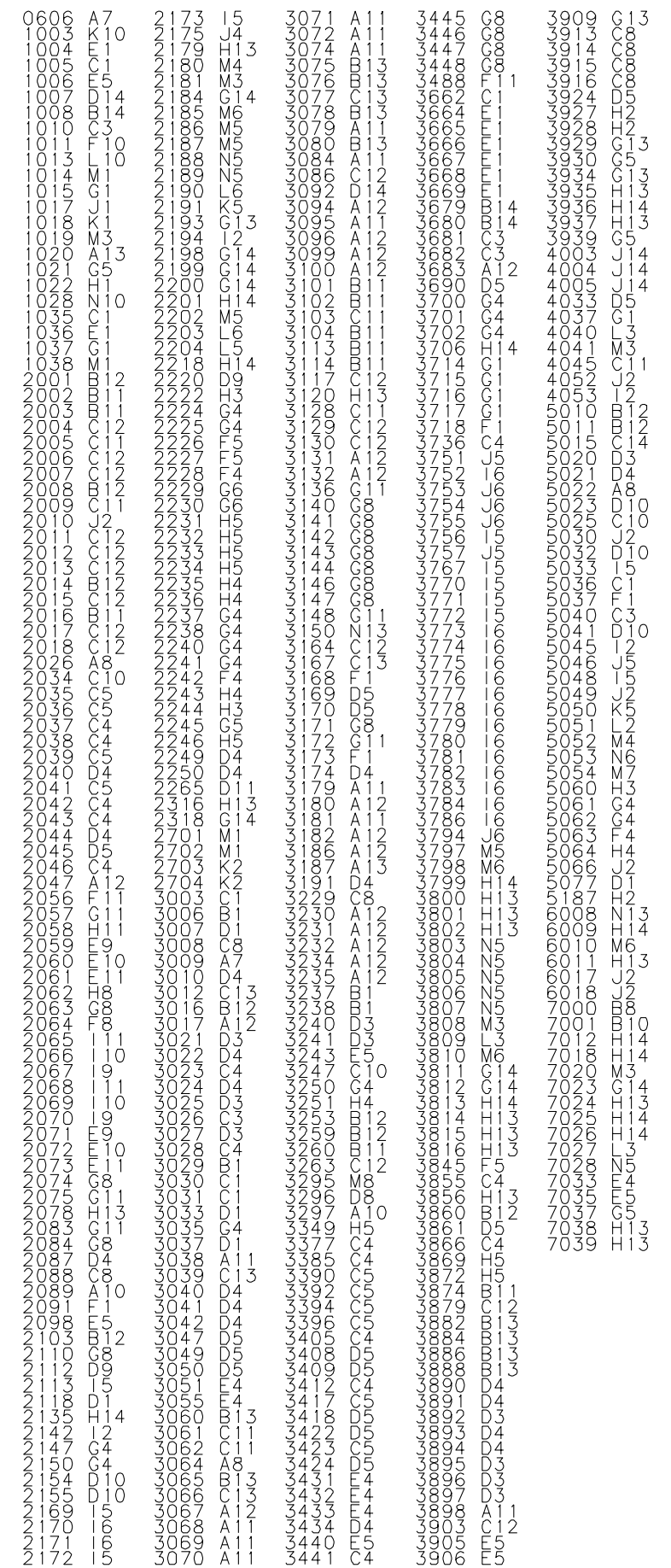
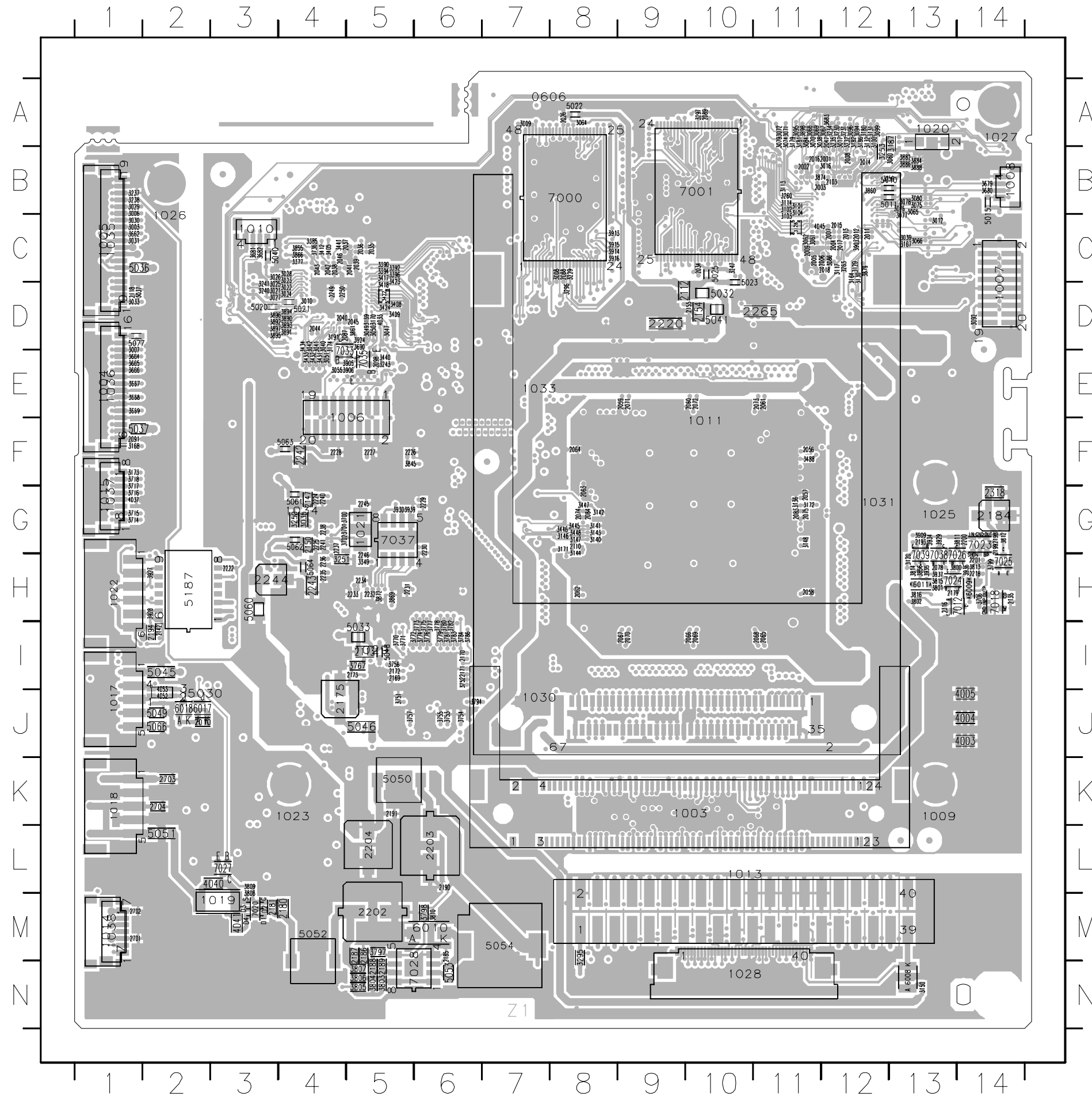


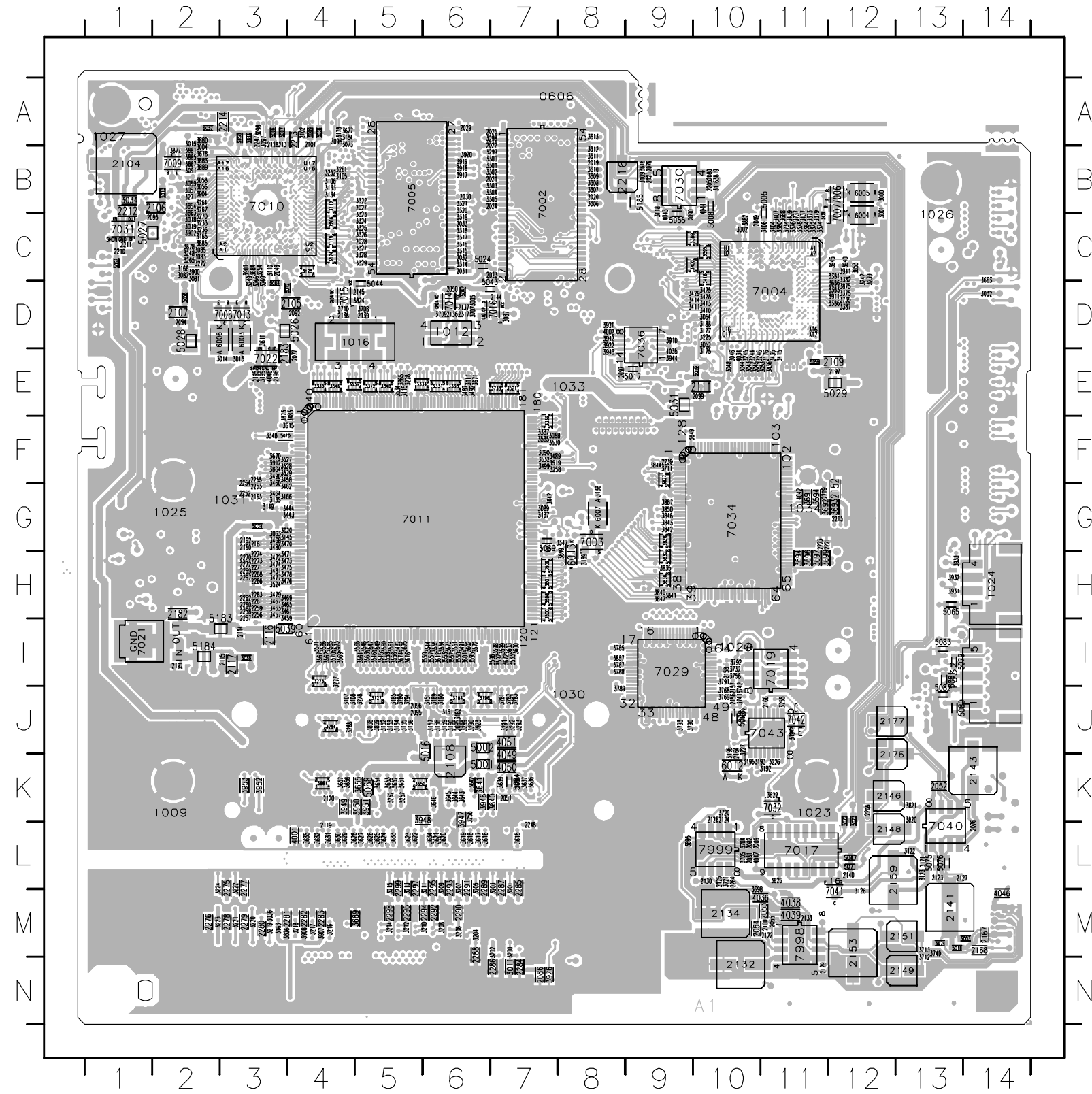
CIRCUIT DIAGRAM - Part 9



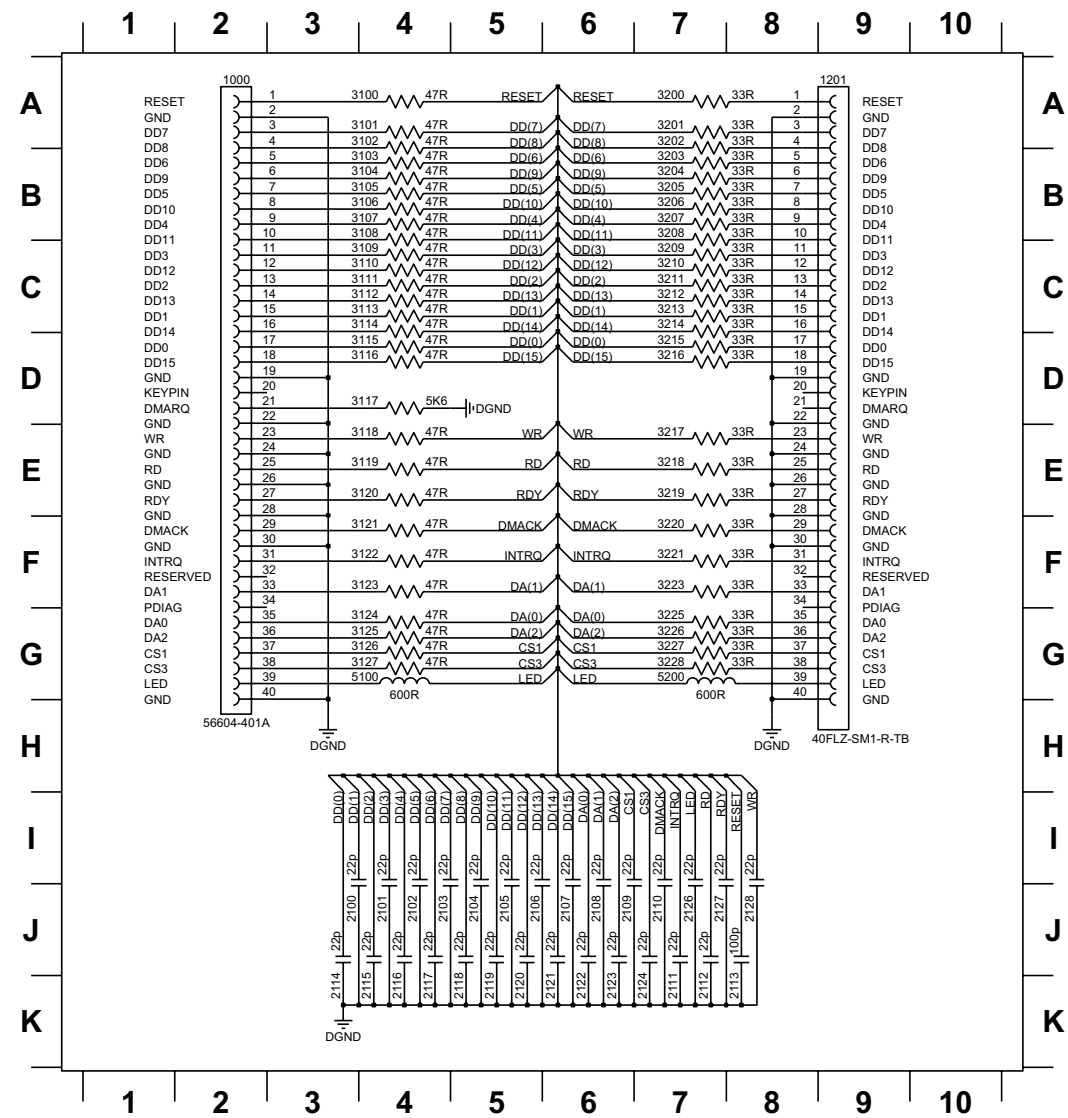
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1029 F8	5054 B7
1030 F8	6010 B7
1031 F8	6011 D4
1033 F8	6012 A8
1034 F7	7012 F5
2077 E2	7020 B2
2078 D6	7021 D2
2164 A9	7022 E2
2179 E5	7023 D7
2180 C3	7024 E5
2181 C3	7025 E8
2182 D2	7026 E6
2183 E2	7027 C2
2184 D8	7028 A5
2185 B6	7038 C6
2186 A4	7039 C5
2187 A4	F901 B2
2188 B4	F902 B3
2189 B4	F907 B7
2190 B8	F908 D2
2191 B8	F909 E3
2192 D1	F910 E7
2193 C5	F911 F7
2195 F1	F912 D8
2196 F2	F913 D9
2198 D8	F914 B9
2199 E8	
2200 D7	
2201 E7	
2202 B3	
2203 B8	
2204 B8	
2218 E6	
2316 F5	
2318 D9	
3120 C4	
3196 A9	
3199 F3	
3611 F3	
3797 C7	
3798 B7	
3799 F7	
3800 E6	
3801 D5	
3802 F4	
3803 B3	
3804 B3	
3805 A3	
3806 A3	
3807 A3	
3808 B2	
3809 C2	
3810 B7	
3811 D7	
3812 E8	
3813 E6	
3814 D4	
3815 E5	
3816 F4	
3856 D4	
3909 C4	
3929 C6	
3934 C5	
3935 D6	
3936 E6	
3937 D6	
4040 B2	
4041 B2	
4048 F2	
5050 B8	
5051 B1	
5052 B3	

LAYOUT DIAGRAM (side A)



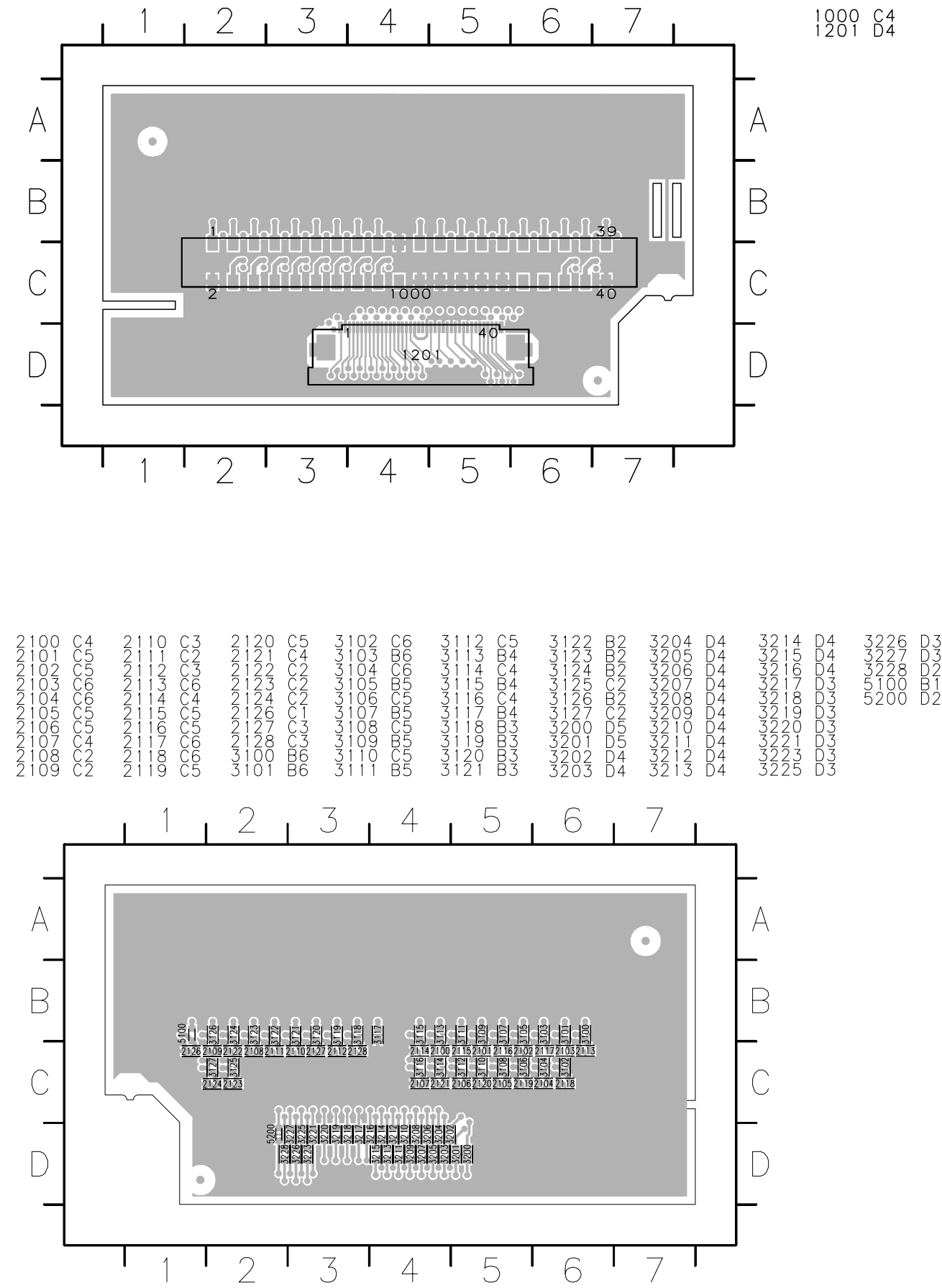
[illegible]

INTERFACE HDD TO FCC BOARD - Circuit Diagram

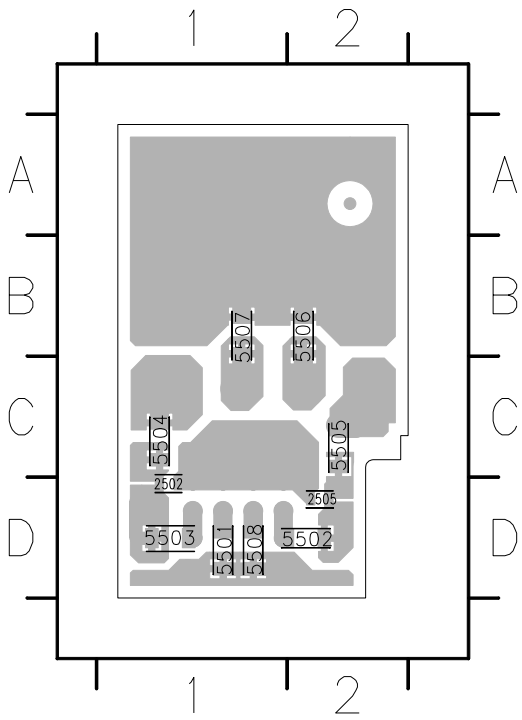
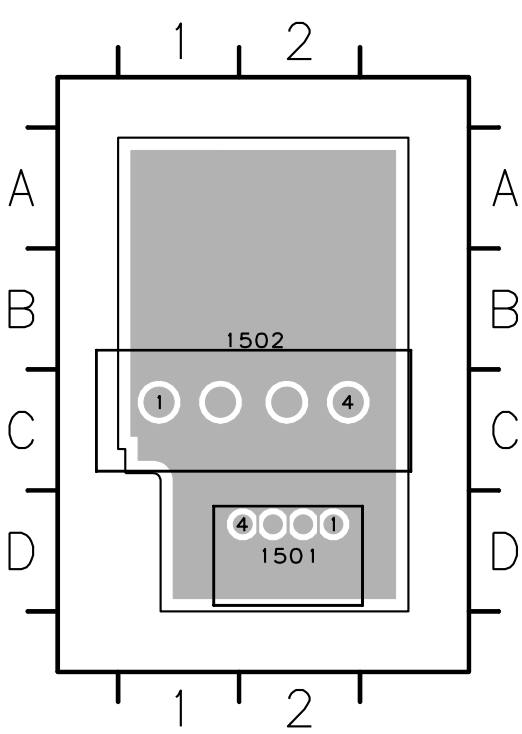
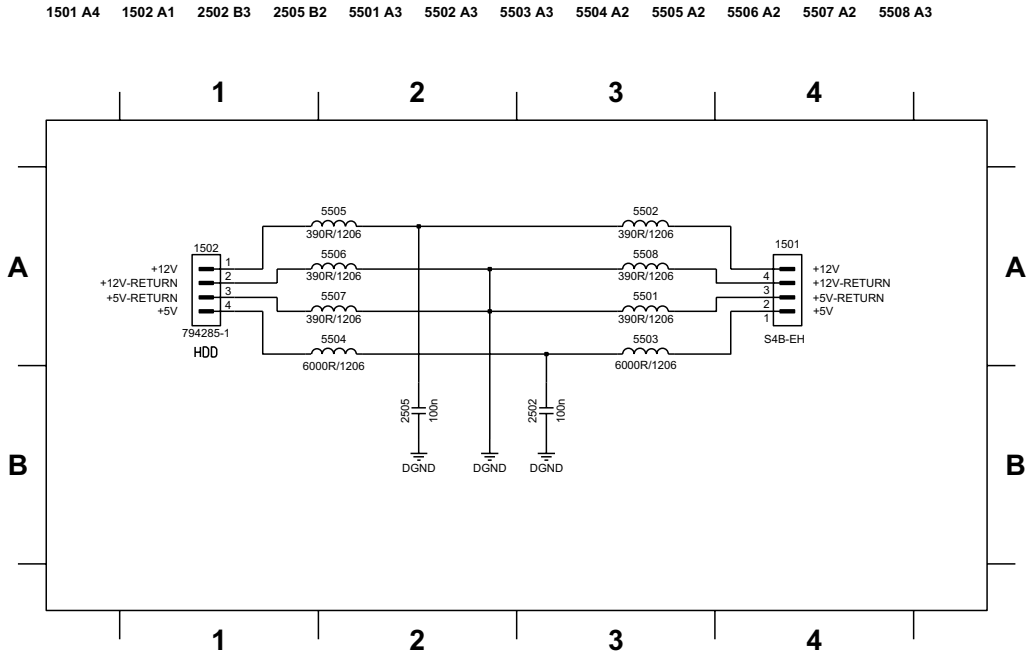


- 1000 A2
- 1201 A9
- 2100 J3
- 2101 J4
- 2102 J4
- 2103 J4
- 2104 J5
- 2105 J5
- 2106 J5
- 2107 J6
- 2108 J6
- 2109 J6
- 2110 J7
- 2111 K7
- 2112 K7
- 2113 K8
- 2114 K3
- 2115 K4
- 2116 K4
- 2117 K4
- 2118 K5
- 2119 K5
- 2120 K5
- 2121 K6
- 2122 K6
- 2123 K6
- 2124 K7
- 2126 J7
- 2127 J7
- 2128 J8
- 3100 A4
- 3101 A4
- 3102 A4
- 3103 B4
- 3104 B4
- 3105 B4
- 3106 B4
- 3107 B4
- 3108 B4
- 3109 C4
- 3110 C4
- 3111 C4
- 3112 C4
- 3113 C4
- 3114 C4
- 3115 D4
- 3116 D4
- 3117 D4
- 3118 E4
- 3119 E4
- 3120 E4
- 3121 F4
- 3122 F4
- 3123 F4
- 3124 G4
- 3125 G4
- 3126 G4
- 3127 G4

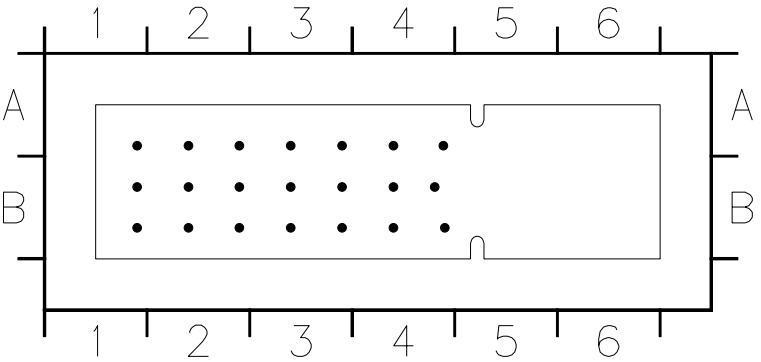
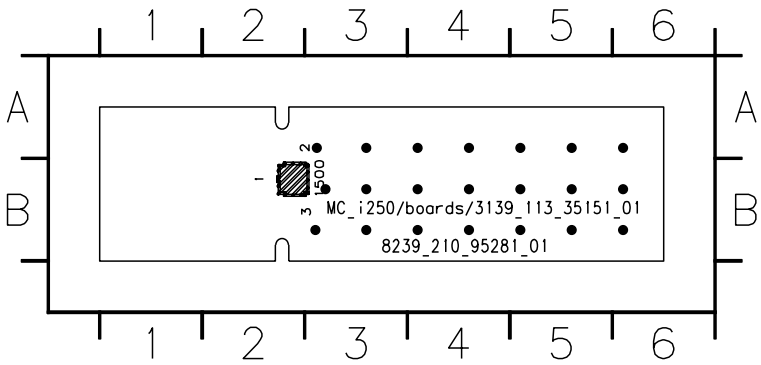
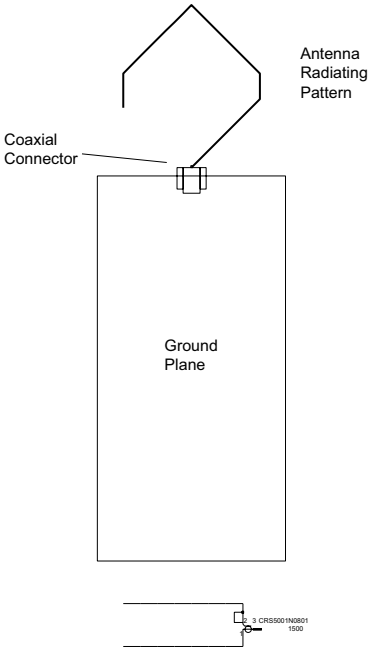
INTERFACE HDD TO FCC BOARD - Layout Diagram



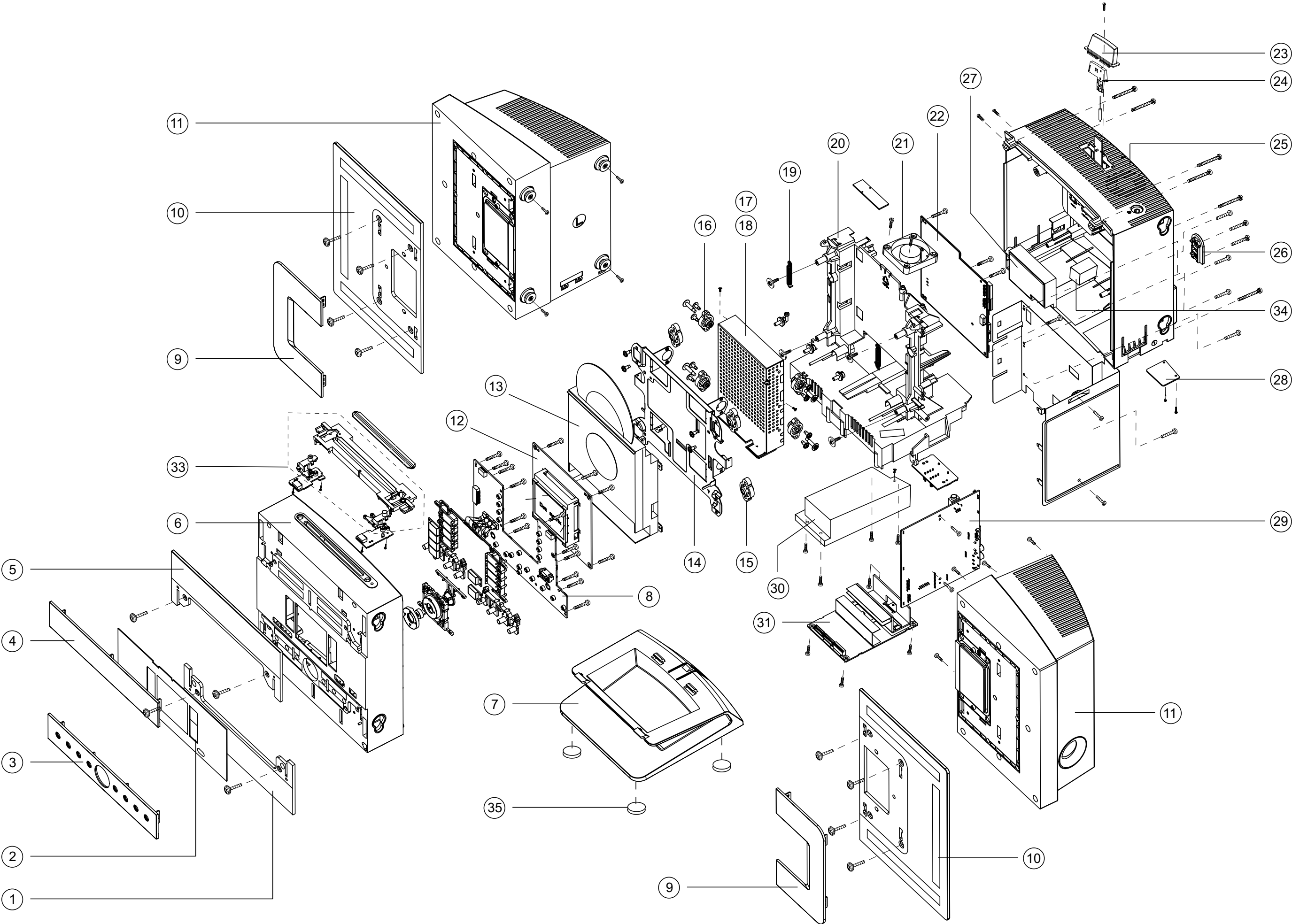
INTERFACE HDD SUPPLY BOARD



ANTENNA BOARD



EXPLODED VIEW DIAGRAM



ACCESSORIES LIST

3141 078 70071	CD ROM INSTALL SW (WACS700/12)	/05, /22
3141 078 70231	CD ROM INSTALL SW (WACS700/37)	/37
3141 078 70241	CD ROM INSTALL SW (WACS700/93)	/93
2422 076 00687	ANT FM DIP	
2422 076 00569	CABLE LAN 1M5 LAN RJ45 B	
3139 228 64431	TINO REMOTE RM20001/01	/05, /22
3139 228 68091	TINO REMOTE RM20005/01	/93
3139 238 08551	REMOTE RC1463401/01	
3141 070 40321	SCREW WALL FIX WAS700	
3141 071 20321	WALL MOUNT BKT WAC700	
3141 073 20221	BTM SHEET WAC700	

MECHANICAL PARTS LIST

1	3141 074 00972	COVER FNT CEN BTM	
2	3141 074 00964	PANEL CEN BTM	
3	3141 074 00982	PANEL DISPLAY	
4	3141 077 50491	PANEL CEN PRE-ASSY	
5	3141 074 01582	COVER FNT CEN UPPER	
6	3141 077 50221	CAB FRONT PRE-ASSY	/05, /22
6	3141 077 50621	CAB FRONT PRE-ASSY	/37
7	3141 077 50461	STAND CEN PRE-ASSY	
8	#	PBAS 6 - KEYS & RC HAS	
9	3141 074 01224	PANEL LSB	
10	3141 074 01214	COVER LSB	
11	3141 077 50501	LSB BOX PRE-ASSY	
12	#	PBAS 4 - FRONT HAS	
13	3103 308 54641	SLOT LOADER MODULE + MP3	
14	3141 071 20161	BRACKET CD/HDD	
15	3141 074 01181	DAMPER CD DRIVER	
16	3141 074 01171	DAMPER HDD DRIVER	
17	8241 150 14561	PROG. HDD HASLI - 40GB	
18	3141 071 20263	SHIELD BOX	
19	3141 071 00051	SPRING CD/HDD	
20	3141 074 01164	BRACKET CORE	
21	2822 031 00029	FAN 12VDC	
22	3141 078 01121	PBAS - HASLI (11G)	
23	3141 074 01693	COVER ANTENNA WJ10/22	
24	3141 074 01703	BRACKET ANTENNA WJ10/22	
25	3141 077 50441	CABINET REAR PRE-ASSY (/22)	/05, /22
25	3141 077 50821	CABINET REAR PRE-ASSY (/37)	/37
26	3141 074 01372	COVER MAINS CORD	
27	3141 078 00181	MODULE TUNER	/05, /22
27	3141 078 00201	MODULE TUNER	/37, /93
28	3141 073 20161	CUT SHEET LSB CABLE	
28	3141 074 02261	RUBBER CAB. REAR	
29	#	PBAS 5 - AF HAS	
30	#	MODULE SMPS - WAC-700	
31	#	MODULE AMP - HAS 4CH (40W)	
32	3141 077 50421	BTN PWR/REC PRE-ASSY	
35	3141 074 01402	RUBBER FOOT	
36	3141 074 01041	LIGHTGUIDE LED	
37	3141 074 00692	BRACKET RECEIVER	
38	3141 074 00682	BRACKET LED	

refer Electrical Parts List

ELECTRICAL PARTSLIST

ELECTRICAL PARTSLIST

GENERAL

1002	3141 078 00181	MODULE TUNER - PM08 /EU	/05, /22, /79
1002	3141 078 00201	MODULE TUNER - PM08 /US	/37, /93
1003	 3141 078 00211	MODULE SMPS - WAC700 (/22)	/05, /22, /79, 93
1003	 3141 078 00451	MODULE SMPS - WAC700 (/37)	/37
1007	3141 078 70031	LCD MODULE WAC-700	
1008	2822 031 00029	FAN 12VDC 1.08W 3300RPM	
1010	3139 118 56981	PCBAS ANTENNA	
1011	4822 526 10539	CORE, FERRITE	
1013	4822 526 10539	CORE, FERRITE	
1014	2422 076 00717	ANT WIFI 2450MHZ 50R	
1050	3141 078 00541	PBAS 7 - INTERFACE HDD TO FFC	
1051	3141 078 00561	PBAS 9 - INTERFACE HDD-SUPPLY	

WIRING

8000	3141 070 20201	FFC FOIL 11P/340/11P AD	
8001	3141 070 20731	FFC FOIL 16P/400/16P AD	
8002	3141 070 20781	FFC FOIL 15P/340/15P AD	
8003	3141 070 20541	FFC FOIL 05P/100/05P BD 1.25MM	
8004	3141 070 20541	FFC FOIL 05P/100/05P BD 1.25MM	
8005	4822 320 12246	FFC FOIL 13P/220/13P AD	
8011	3141 070 20591	FFC FOIL 07P/120/07P BD 1.00MM	
8012	3139 110 35340	FFC FOIL 08P/340/08P AD 1MMP	
8013	3141 070 20741	FFC FOIL 16P/280/16P AD 1 MMP	
8014	3141 070 20771	FFC FOIL 19P/260/19P AD 1.00MM	
8018	 2422 070 98137	MAINSKORD 220V EUR2M2 (/22)	
8018	 2422 070 00104	MAINSKORD UK 5A 1M8 (/05)	
8018	 2422 070 00084	MAINSKORD UL 7A 2M2 (/37)	
8018	 2422 070 98232	MAINSKORD CA 6A 1M8 (/93)	
8019	3139 111 02611	CBLE CRC 1P/280/1P CRC F-MF	
8021	3141 070 20611	FFC FOIL 40P/080/40P AD 0.50	

ELECTRICAL PARTSLIST

PBAS 6 - KEYS & RC

MISCELLANEOUS

1001	4822 276 13775	SWITCH TACT
1002	4822 276 13775	SWITCH TACT
1003	4822 276 13775	SWITCH TACT
1004	4822 276 13775	SWITCH TACT
1005	4822 276 13775	SWITCH TACT

1006	4822 276 13775	SWITCH TACT
1007	4822 276 13775	SWITCH TACT
1008	4822 276 13775	SWITCH TACT
1009	4822 276 13775	SWITCH TACT
1010	4822 276 13775	SWITCH TACT

1011	4822 276 13775	SWITCH TACT
1012	4822 276 13775	SWITCH TACT
1013	4822 276 13775	SWITCH TACT
1014	4822 276 13775	SWITCH TACT
1015	4822 276 13775	SWITCH TACT

1016	4822 276 13775	SWITCH TACT
1017	4822 276 13775	SWITCH TACT
1018	4822 276 13775	SWITCH TACT
1019	4822 276 13775	SWITCH TACT
1020	4822 276 13775	SWITCH TACT

1021	4822 276 13775	SWITCH TACT
1023	9322 185 95667	IR RECEIVER TSOP4836
1024	9322 210 74667	IR RECEIVER TSOP7000
1225	4822 276 13775	SWITCH TACT
1347	4822 276 13775	SWITCH TACT

INDUCTORS

5000	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5001	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5002	4822 157 71206	BLM21A601SPT

DIODES

6000	9322 207 83676	LED IR TSFF5400
6001	9322 207 83676	LED IR TSFF5400
6002	9322 207 83676	LED IR TSFF5400
6003	9322 207 83676	LED IR TSFF5400
6207	9322 147 06676	LED VS LTL-1BEHJ

6301	9322 033 20682	LED VS TLHG4405
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TRANSISTORS & IC

7000	5322 130 60159	BC846B
7002	5322 130 60159	BC846B
7004	4822 130 42804	BC817-25
7005	4822 130 42804	BC817-25
7006	5322 130 60159	BC846B

7007	5322 130 60159	BC846B
7008	5322 130 60159	BC846B
7009	5322 130 60159	BC846B
7010	9352 499 60118	IC SM 74LVC00AD
7011	4822 130 60373	BC856B

7012	4822 130 60373	BC856B
7013	4822 130 60373	BC856B
7015	4822 130 60373	BC856B
7016	4822 130 60373	BC856B

PBAS 4 - FRONT

MISCELLANEOUS

1002	4822 242 11033	RES XTL 4MHZ332
1007	4822 242 70938	RES XTL 32KHZ768
1008	2422 540 98526	RES CER 10MHZ CSTS*MG03
1225	4822 276 13775	SWITCH TACT
1347	4822 276 13775	SWITCH TACT

INDUCTORS

5001	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5004	2422 549 44393	IND FXD SM EMI 100MHZ 2K7
5005	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5006	2422 549 44393	IND FXD SM EMI 100MHZ 2K7
5024	2422 549 43062	IND FXD SM EMI 100MHZ 600R

5025	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5026	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5027	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5028	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5029	2422 549 43062	IND FXD SM EMI 100MHZ 600R

5030	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5031	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5033	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5034	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5035	2422 549 43062	IND FXD SM EMI 100MHZ 600R

5036	2422 549 44919	IND FXD SM EMI 100MHZ 600R
5037	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5038	2422 549 44919	IND FXD SM EMI 100MHZ 600R
5039	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5040	2422 549 44393	IND FXD SM EMI 100MHZ 2K7

5041	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5042	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5043	2422 549 44919	IND FXD SM EMI 100MHZ 600R
5044	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5045	2422 549 43062	IND FXD SM EMI 100MHZ 600R

5046	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5047	2422 549 44919	IND FXD SM EMI 100MHZ 600R
5049	2422 549 44393	IND FXD SM EMI 100MHZ 2K7
5050	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5051	2422 549 43062	IND FXD SM EMI 100MHZ 600R

5052	2422 549 43062	IND FXD SM EMI 100MHZ 600R
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DIODES

6207	932214706676	LED VS LTL-1BEHJ
6301	932203320682	LED VS TLHG4405

ELECTRICAL PARTSLIST

TRANSISTORS & IC

7001	4822 209 31981	IC SAA6579T
7001	9352 686 05518	IC SAA6581T/V1
7006	3141 070 50111	PRG. FLASH M29W160ET
7007	5322 130 60159	BC846B
7008	4822 209 15449	IC 74HC4094D

7009	3141 070 50101	MCU M30626MWP-211FP
7011	9322 178 88685	IC NCP301LSN27
7012	9322 214 44668	IC M24C08-WMN6P
7013	5322 130 60159	BC846B
7014	5322 130 60159	BC846B

7016	9322 208 21685	IC LK112M33
7017	5322 130 60159	BC846B

PBAS 5 - AF HAS

DIODES

6203	4822 130 34174	BZX79-B4V7
6204	3198 010 53380	DIO REG BZX79-B3V3

TRANSISTORS & IC

7201	4822 130 40981	BC337-25
7202	5322 130 60159	BC846B
7203	5322 130 60159	BC846B
7204	4822 130 60373	BC856B
7205	9965 000 07780	TL084C
7206	4822 130 42804	BC817-25
7207	4822 130 42804	BC817-25
7208	4822 130 42804	BC817-25
7209	5322 130 60159	BC846B
7210	5322 130 60159	BC846B
7211	5322 130 60159	BC846B
7212	4822 130 41246	BC327-25
7213	4822 130 41246	BC327-25
7403	4822 209 17345	M62320FP
7501	9322 150 74668	IC SM TDA7468D
7601	4822 209 31378	NJM4556MB
7603	4822 130 42804	BC817-25
7604	4822 130 42804	BC817-25
7610	4822 209 33985	TDA8579T/N1
7621	5322 130 60159	BC846B
7622	4822 130 60373	BC856B
7623	5322 130 60159	BC846B
7624	4822 130 40981	BC337-25
7661	5322 130 60159	BC846B
7662	5322 130 60159	BC846B

MODULE AMP - HAS 4CH (40W)

DIODES

5302	2422 536 00625	IND FXD DASM S 15U PM20
5303	2422 536 00625	IND FXD DASM S 15U PM20
5304	2422 536 00625	IND FXD DASM S 15U PM20
5305	2422 536 00625	IND FXD DASM S 15U PM20
5400	4822 157 11411	FXDIND BEAD 100MHZ 80R
5401	4822 157 11411	FXDIND BEAD 100MHZ 80R

DIODES

6600	3198 020 55680	DIO REG SM BZX384-C5V6
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TRANSISTORS & IC

7100	9352 753 45518	IC SM TDA8922BTH/N2
7300	9352 719 95518	IC SM TDA8921TH/N1
7600	5322 209 11517	PC74HCU04T
7602	5322 130 60159	BC846B
7607	5322 209 14477	HEF4013BT
7608	4822 130 60373	BC856B
7710	5322 130 60159	BC846B
7716	4822 130 60373	BC856B

ELECTRICAL PARTSLIST

HASLI MODULE 11G

MISCELLANEOUS

1000	3141 078 01121	PBAS - HASLI (BC - 802.11G)
1002	8241 150 14561	PRG. HDD - HASLI - (40GB)
1003	2422 025 17739	CON BM H 124P F MINI-PCI R
1004	2822 065 01728	WMOD WIFIG MPC1 MP-G-BR-05 Y
1012	2422 543 01462	RES XTL SM 20MHZ 20P XR R

1019  2422 086 11113 FUSE SM T 750MA 125V UL R

RESISTORS

3112	2350 033 11339	RST NETW SM 4X 33R PM5
3119	2350 033 11339	RST NETW SM 4X 33R PM5
3124	2350 033 11339	RST NETW SM 4X 33R PM5
3125	2350 033 11339	RST NETW SM 4X 33R PM5
3128	2350 033 11339	RST NETW SM 4X 33R PM5

3268	2350 033 11339	RST NETW SM 4X 33R PM5
3330	2350 033 11339	RST NETW SM 4X 33R PM5
3331	2350 033 11339	RST NETW SM 4X 33R PM5
3334	2350 033 11339	RST NETW SM 4X 33R PM5
3336	2350 033 11339	RST NETW SM 4X 33R PM5

3338	2350 033 11339	RST NETW SM 4X 33R PM5
3340	2350 033 11339	RST NETW SM 4X 33R PM5
3342	2350 033 11339	RST NETW SM 4X 33R PM5
3346	2350 033 11339	RST NETW SM 4X 33R PM5
3389	2350 033 11339	RST NETW SM 4X 33R PM5

3395	2350 033 11339	RST NETW SM 4X 33R PM5
3400	2350 033 11339	RST NETW SM 4X 33R PM5
3416	2350 033 11339	RST NETW SM 4X 33R PM5
3422	2350 033 11339	RST NETW SM 4X 33R PM5
3500	2350 033 11339	RST NETW SM 4X 33R PM5

3501	2350 033 11339	RST NETW SM 4X 33R PM5
3508	2350 033 11339	RST NETW SM 4X 33R PM5
3509	2350 033 11339	RST NETW SM 4X 33R PM5
3521	2350 033 11339	RST NETW SM 4X 33R PM5
3539	2350 033 11339	RST NETW SM 4X 33R PM5

3650	2350 033 11339	RST NETW SM 4X 33R PM5
3738	2350 033 11339	RST NETW SM 4X 33R PM5
3827	2350 033 11339	RST NETW SM 4X 33R PM5
3828	2350 033 11339	RST NETW SM 4X 33R PM5
3832	2350 033 11339	RST NETW SM 4X 33R PM5

3836	2350 033 11339	RST NETW SM 4X 33R PM5
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INDUCTORS

5001	2422 536 00609	IND FXD SM 1U5 PM20
5002	2422 536 00609	IND FXD SM 1U5 PM20
5003	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5004	2422 549 45589	IND FXD 0603 EMI 100MHZ 47R
5005	2422 549 45589	IND FXD 0603 EMI 100MHZ 47R

5006	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5007	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5008	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5009	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5010	2422 549 43062	IND FXD SM EMI 100MHZ 600R

HASLI MODULE 11G

INDUCTORS

5011	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5012	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5013	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5014	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5015	2422 549 43062	IND FXD SM EMI 100MHZ 600R

5018	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5019	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5020	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5021	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5022	2422 549 43062	IND FXD SM EMI 100MHZ 600R

5023	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5024	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5025	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5026	2422 536 00609	IND FXD SM 1U5 PM20
5027	2422 536 00609	IND FXD SM 1U5 PM20

5028	2422 536 00609	IND FXD SM 1U5 PM20
5029	2422 536 00609	IND FXD SM 1U5 PM20
5031	2422 536 00609	IND FXD SM 1U5 PM20
5032	2422 536 00609	IND FXD SM 1U5 PM20
5034	2422 549 43062	IND FXD SM EMI 100MHZ 600R

5035	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5036	4822 157 11716	BLM21P300SPT
5037	4822 157 11716	BLM21P300SPT
5038	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5039	4822 157 11716	BLM21P300SPT

5040	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5041	2422 536 00609	IND FXD SM 1U5 PM20
5042	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5043	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5044	2422 549 43062	IND FXD SM EMI 100MHZ 600R

5047	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5050	2422 536 00392	IND FXD SM 7045 22U PM20
5051	2422 549 44919	IND FXD SM EMI 100MHZ 600R
5052	2422 536 00392	IND FXD SM 7045 22U PM20
5053	4822 157 11716	BLM21P300SPT

5054	2422 536 00823	IND FXD SM 12565 220U PM20
5055	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5056	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5057	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5058	2422 549 43062	IND FXD SM EMI 100MHZ 600R

5059	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5060	2422 536 00609	IND FXD SM 1U5 PM20
5061	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5062	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5063	2422 549 43062	IND FXD SM EMI 100MHZ 600R

5064	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5065	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5067	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5068	4822 157 11716	BLM21P300SPT
5069	2422 549 45589	IND FXD 0603 EMI 100MHZ 47R

5071	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5072	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5073	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5074	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5075	2422 549 44608	IND FXD 0603 EMI 100MHZ 1K

ELECTRICAL PARTSLIST

HASLI MODULE 11G

INDUCTORS

5076	2422 549 44608	IND FXD 0603 EMI 100MHZ 1K
5084	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5183	2422 536 00609	IND FXD SM 1U5 PM20
5184	2422 536 00609	IND FXD SM 1U5 PM20
5185	2422 549 43062	IND FXD SM EMI 100MHZ 600R
5187	2722 171 00154	TFM PULSE SM TLA-6T118LF

DIODES

6009	4822 130 11528	1PS76SB10
6010	9322 165 17668	DIO REC SM STPS2L30A
6013	4822 130 11397	BAS316

TRANSISTORS & IC

7000	9322 184 72668	IC SM AM29LV320DB-90EI
7002	9322 217 07668	IC SM K4S561632E-UC75
7004	9352 777 76557	IC SM SAA7352EL/N103
7005	9322 166 67668	IC SM MT48LC4M16A2TG-7E
7010	9352 786 69557	IC SM SAA7750EL/N102/S1/G
7011	9322 222 18671	IC SM EP1C6Q240C8N
7012	3198 010 42320	BC857BW
7014	9352 630 16165	IC SM 74AHC1GU04GW
7016	9352 686 76125	IC SM 74LVC1G80GW
7017	5322 209 11102	HEF4052BT
7018	9322 191 99685	IC SM NCP303LSN29
7021	9322 167 57668	IC SM KF15BDT
7022	9322 196 92685	IC SM LK112M18
7023	9322 208 20685	IC SM LK112M25
7024	3198 010 42320	BC857BW
7025	9340 219 30115	BC817-25W
7026	3198 010 42310	BC847BW
7028	5322 209 90529	MC34063AD
7030	5322 209 82941	LM358D
7031	9322 208 21685	IC SM LK112M33

SLOT LOADER MODULE

MISCELLANEOUS

1003	3103 308 68001	PBAS 8 SLOT LOADER 4X
1800	4822 267 11028	CON H 16P F 1.00 FFC 0.3 B
1802	2422 025 16836	CON H 19P F 1.00 FFC 0.3 B
1810	2422 540 98519	RES CER 8.467MHZ CSTS*MG03
1820	4822 267 11028	CON H 16P F 1.00 FFC 0.3 B
	3103 308 54640	TOHEI-CD-SLOT-DA23SR-ASSY

RESISTORS

3820	 4822 052 10478	FUS RST 4.7R 5% 0,33W
3840	4822 053 10689	RST 68R 5% 1W
3968	 4822 052 10108	FUS RST 1R 5% 0,33W

DIODES

6881	9322 129 34685	DIO REG SM BZM55-C3V9
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TRANSISTORS & IC

7800	9352 684 20557	IC SM SAA7325H/T/M2B
7801	9322 181 79668	IC SM MM1469PH
7803	3198 010 42320	BC857BW
7804	4822 209 72554	MC7808CT
7812	5322 209 82941	LM358D
7875	5322 130 63679	BC847CW
7876	3198 010 44350	TRA SIG SM BC807-25W
7877	5322 130 42718	BFS20
7878	5322 130 63679	BC847CW
7879	5322 130 60123	BC807-40
7882	4822 209 32852	TDA7073A/N2
7884	3198 010 44350	TRA SIG SM BC807-25W
7885	3198 010 42320	BC857BW
7886	9340 219 40135	TRA SIG SM BC817-40W
7887	5322 209 82941	LM358D
7888	5322 130 63679	BC847CW
7890	5322 130 42718	BFS20
7891	5322 130 42718	BFS20
7892	5322 130 63679	BC847CW
7893	5322 130 63679	BC847CW
7894	5322 130 63679	BC847CW

ANNEX 1

Booting up and Architecture

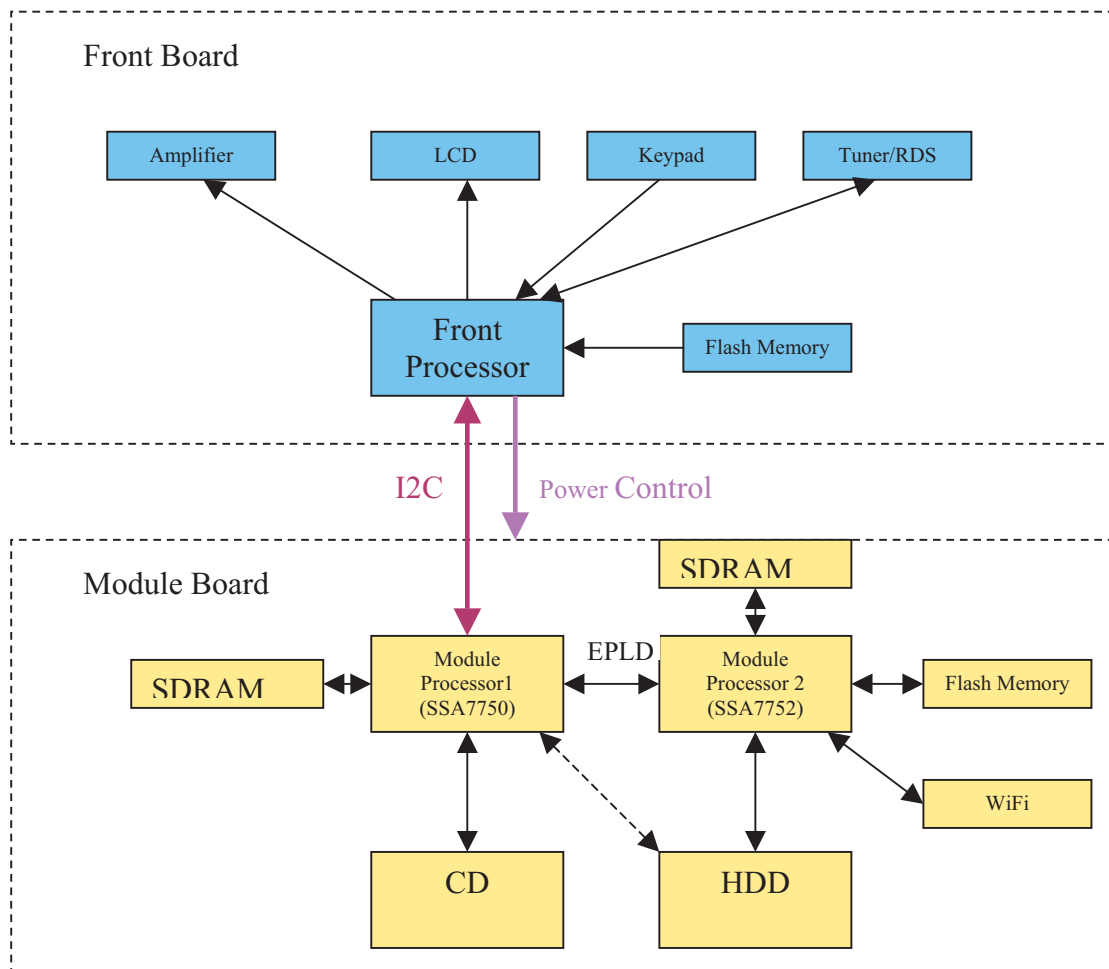


Figure 1 WAC700 Architecture

As illustrated in figure 1, WAC700 (Center) consists of two major parts: Front Board and Module Board. There is one processor/MCU (Front Processor) in Front Board and two processors/MCUs on the Module Board.

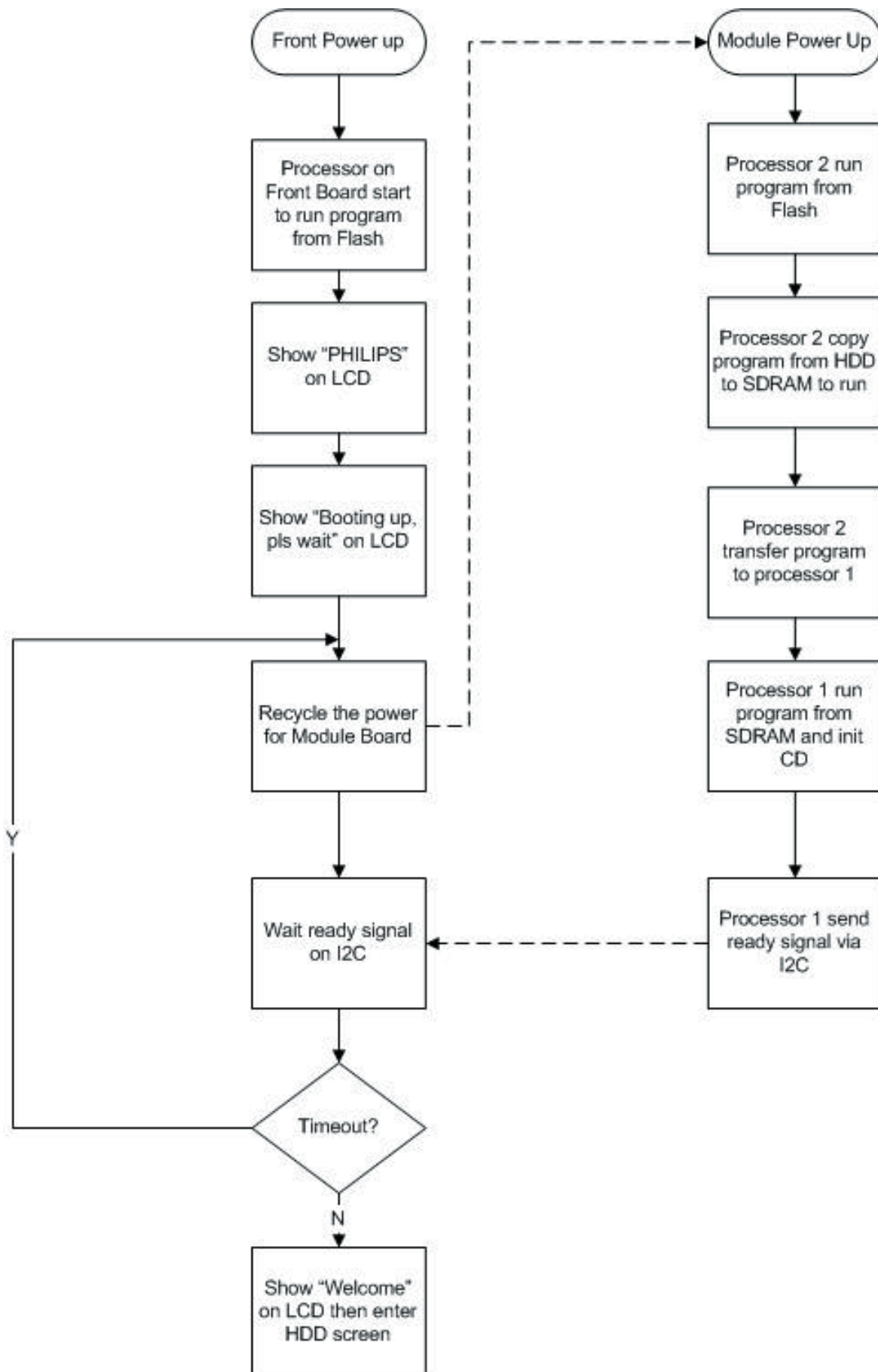
The Front Board is the master in the system. It controls the power of Module Board and it communicates with Module board via I2C bus.

When power up, the processor/MCU in Front Board runs program from its flash memory and shows messages on LCD (e.g. "PHILIPS" "Booting up, pls wait"). Mean while it will enable the power for Module board to let the 2 processors/MCUs to run their program from flash/SDRAM/HDD. The MCU in Front Board will keep showing "Booting up, pls wait" until the processor in Module Board gives ready signal via I2C bus. If there is no response from Module Board in certain period (e.g. 1min), Front Board will recycle the power of Module Board to recover.

The processor 2 on Module Board starts to run program form its flash memory after the power is enabled by Front Board. Then it copy more program from HDD to SDRAM for running. Meanwhile it transfer the program to the processor 1 of Module Board for running. Once Processor 1 gets the program image, it copies to its SDRAM to run and send ready signal to Front Board via I2C bus.

ANNEX 1

Booting up and Architecture



REVISION LIST

Version 1.0 (3141 785 30500)

- Draft release

Version 1.1 (3141 785 30501)

- First release in Audio Website

Version 2.0 (3141 785 30502)

- Add new version - /93.
- Chapter 2 Technical Specification is adapted.
- Chapter 13 HAS module: circuit and layout diagrams are revised.
- Chapter 15 Accessories and Mechanical partslist are adapted.
- Chapter 16 Electrical partslist is adapted.
- Chapter 17 Add Annes 1 - Booting up and Architecture