

This service manual is for HTS3541 first Generation model, which is different from the previous generation models. For First Generation model the serial number begin with KX1xxxxxxxxxxx.

Home Theater DVD Player HTS3541/05/12/51/55/78/79/93/98/X78

Service Service Service



Service Manual

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**CLASS 1
LASER PRODUCT**

Published by RY&LLL - 1130 BU AVM Printed in The Netherlands Subject to modification

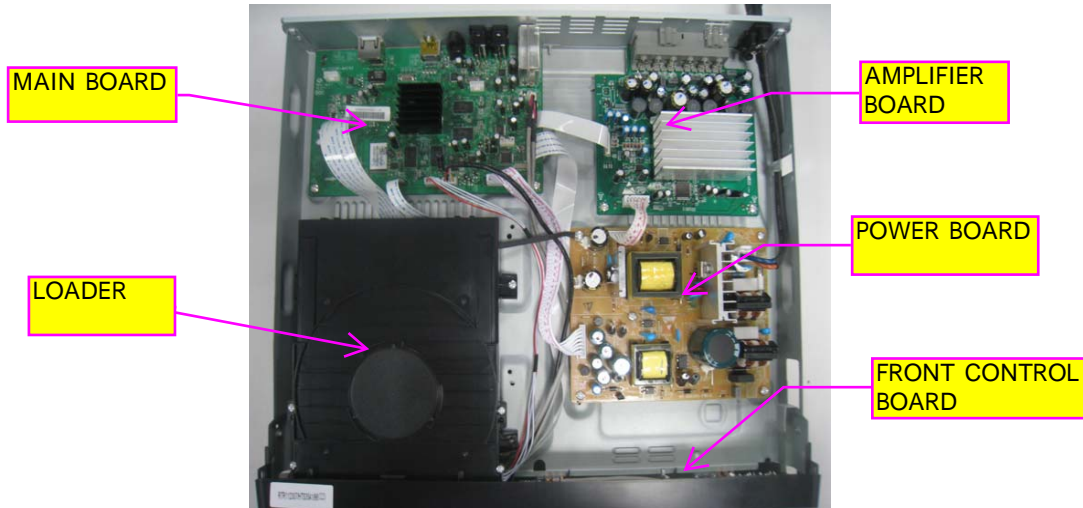


3139 785 35832

Version 1.2

PHILIPS

PCB BOARD LOCATION:



Version Variation

Type/Versions Features	HTS3541								
	/05	/12	/51	/55	/78	/79	/93	/98	X/78
Output Power- 300W	X	X	X	X	X	X	X	X	X
Voltage(220~240V~)	X	X	X			X	X		
Voltage(110~240V~)				X	X			X	X
MP3 LINK	X	X	X	X	X	X	X	X	

Repair Scenario Matrix

Type/Versions Board in used	HTS3541								
	/05	/12	/51	/55	/78	/79	/93	/98	X/78
Main Board	C	C	C	C	C	C	C	C	C
Front Control Board	B	B	C	C	C	C	C	C	C
Amplifier Board	B	B	C	C	C	C	C	C	C
Power Board	B	B	C	C	C	C	C	C	C

*Bd:Board Level Replacement

*C:Component Level Repair

HTS3541/05/12/51/55/78/79/X78:

Product Specifications:

Note

- Specifications and design are subject to change without notice.

Region codes

The type plate on the back or bottom of the home theatre shows which regions it supports.

Country	DVD	BD
Europe, United Kingdom	 	
Asia Pacific, Taiwan, Korea	 	
Latin America	 	
Australia, New Zealand	 	
Russia, India	 	
China	 	

Media formats

- AVCHD, BD, BD-R/ BD-RE, BD-Video, DVD-Video, DVD+R/+RW, DVD-R/-RW, DVD+R/-R DL, CD-R/CD-RW, Audio CD, Video CD/SVCD, Picture files, MP3 media, WMA media, DivX Plus HD media, USB storage device

File formats

- Audio: .aac, .mka, .mp3, .wma, .wav
- Video: .avi, .divx, .mp4, .mkv, .asf, .mpg, .mpeg
- Picture: .jpg, .jpeg, .gif, .png

Amplifier

- Total output power: 300 W RMS (30% THD)
- Frequency response: 20 Hz-20 kHz / ± 3 dB
- Signal-to-noise ratio: > 65 dB (CCIR)/ (A-weighted)
- Input sensitivity:
 - AUX: 2 V
 - Music iLink: 1 V

Video

- Signal system: PAL/NTSC
- HDMI output: 480i/576i, 480p/576p, 720p, 1080i, 1080p, 1080p24

Audio

- S/PDIF Digital audio input:
 - Coaxial: IEC 60958-3
 - Optical: TOSLINK
- Sampling frequency:
 - MP3: 32 kHz, 44.1 kHz, 48 kHz
 - WMA: 44.1 kHz, 48 kHz
- Constant bit rate:
 - MP3: 32 kbps - 320 kbps
 - WMA: 48 kbps - 192 kbps

Radio

- Tuning range:
 - Europe/Russia/China: FM 87.5-108 MHz (50 kHz)
 - Asia Pacific/Latin America: FM 87.5-108 MHz (50/100 kHz)
- Signal-to-noise ratio: FM 50 dB
- Frequency response: FM 200 Hz-12.5 kHz / ± 6 dB

USB

- Compatibility: Hi-Speed USB (2.0)
- Class support: USB Mass Storage Class (MSC)
- File system: FAT16, FAT32, NTFS
- Maximum memory support: < 160 GB

Main unit

- Power supply:
 - Europe/China/Russia/India: 220-240 V~, 50 Hz
 - Latin America/Asia Pacific: 110-240 V~, 50-60 Hz
- Power consumption: 60 W
- Standby power consumption: ≤ 0.9 W
- Dimensions (WxHxD): 360 x 58 x 325 mm
- Weight: 2.4 kg

Subwoofer

- Output power: 50 W RMS (30% THD)
- Impedance: 4 ohm
- Speaker drivers: 133 mm (5.25") woofer
- Dimensions (W x H x D): 160 x 265 x 265 mm
- Weight: 2.5 kg
- Cable length: 3 m

Speakers

Centre speaker:

- Output power: 50 W RMS (30% THD)
- Speaker impedance: 4 ohm
- Speaker drivers: 1 x 63.5 mm (2.5") woofer
- Dimensions (W x H x D): 159 x 84.5 x 80 mm
- Weight: 0.35 kg
- Cable length: 2 m

Front/Rear speaker:

- Output power: 4 x 50 W RMS (30% THD)
- Speaker impedance: 4 ohm
- Speaker drivers: 1 x 63.5 mm (2.5") woofer
- Dimensions (WxHxD): 84.5 x 159 x 80 mm
- Weight (front speakers): 0.35 kg/each
- Weight (rear speakers): 0.35 kg/each
- Cable length (front speakers): 3 m
- Cable length (rear speakers): 7 m

Remote control batteries

- 2 x AAA-R03-1.5 V

Laser

- Laser Type (Diode): InGaN/AlGaIn (BD), AlGaInP (DVD/CD)
- Wave length: 405 +7 nm/-7 nm (BD), 655 +10 nm/-10 nm (DVD), 790 +10 nm/-20 nm (CD)
- Output power (Max. ratings): 20 mW (BD), 6 mW (DVD), 7 mW (CD)

HTS3541/93/98:

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Asia Pacific, Taiwan, Korea	ALL	
Latin America	ALL	
Australia, New Zealand	ALL	
Russia, India	ALL	
China	ALL	

Media formats

- AVCHD, BD, BD-R/ BD-RE, BD-Video, DVD-Video, DVD+R/+RW, DVD-R/-RW, DVD+R/-R DL, CD-R/CD-RW, Audio CD, Video CD/SVCD, Picture files, MP3 media, WMA media, DivX Plus HD media, USB storage device

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- Video:
 - .avi, .divx, .mp4, .mkv, .asf, .wmv, .mpg, .mpeg
 - .rmvb, .rm
- Picture: .jpg, .jpeg, .gif, .png

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- Weight: 2.50 kg
- Cable length: 3 m

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Safety instruction, Warning & Notes

Safety instruction

1. General safety

Safety regulations require that during a repair:

- . Connect the unit to the mains via an isolation transformer.
- . Replace safety components indicated by the symbol ▲, only by components identical to the original ones. Any other component substitution (other than original type) may increase risk of fire or electrical shock hazard.

Safety regulations require that after a repair, you must return the unit in its original condition. Pay, in particular, attention to the following points:

- . Route the wires/cables correctly, and fix them with the mounted cable clamps.
- . Check the insulation of the mains lead for external damage.
- . Check the electrical DC resistance between the mains plug and the secondary side:
 - 1) Unplug the mains cord, and connect a wire between the two pins of the mains plug.
 - 2) Set the mains switch the "on" position (keep the mains cord unplug).
 - 3) Measure the resistance value between the mains plug and the front panel, controls, and chassis bottom.
 - 4) Repair or correct unit when the resistance measurement is less than 1M Ω .
 - 5) Verify this, before you return the unit to the customer/user (ref. UL-standard no. 1492).
 - 6) Switch the unit "off", and remove the wire between the two pins of the mains plug.

2.Laser safety

This unit employs a laser. Only qualified service personnel may remove the cover, or attempt to service this device (due to possible eye injury).

Laser device unit

Type	: Semiconductor laser GaAlAs
Wavelength	: 650nm (DVD)
	: 780nm (VCD/CD)
Output power	: 7mW (DVD)
	: 10mW (DVD /CD)

Beam divergence: 60 degree

Note: Use of controls or adjustments or performance of procedure other than those specified herein, may result in hazardous radiation exposure. Avoid direct exposure to beam.

Warning

1. General

. All ICs and many other semiconductors are susceptible to electrostatic discharges (ESD). Careless handling during repair can reduce life drastically. Make sure that, during repair, you are at the same potential as the mass of the set by a wristband with resistance. Keep components and tools at this same potential. Available ESD protection equipment:

- 1) Complete kit ESD3 (small tablemat, wristband, connection box, extension cable and earth cable) 4822 310 10671.
- 2) Wristband tester 4822 344 13999.

. Be careful during measurements in the live voltage section. The primary side of the power supply, including the heat sink, carries live mains voltage when you connect the player to the mains (even when the player is "off!"). It is possible to touch copper tracks and/or components in this unshielded primary area, when you service the player. Service personnel must take precautions to prevent touching this area or components in this area. A "lighting stroke" and a stripe-marked printing on the printed wiring board, indicate the primary side of the power supply.

. Never replace modules, or components, while the unit is "on".

2. Laser

- . The use of optical instruments with this product, will increase eye hazard.
- . Only qualified service personnel may remove the cover or attempt to service this device, due to possible eye injury.
- . Repair handling should take place as much as possible with a disc loaded inside the player.
- . Text below is placed inside the unit, on the laser cover shield:

CAUTION: VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN, AVOID EXPOSURE TO BEAM.

Notes: Manufactured under licence from Dolby Laboratories. The double-D symbol is trademarks of Dolby Laboratories, Inc. All rights reserved.

Service Hints

CAUTION:

CHARGED CAPACITORS ON THE SERVO BOARD MAY DAMAGE THE DRIVE ELECTRONICS WHEN CONNECTING A NEW DRIVE. THAT'S WHY, BESIDES THE SAFETY MEASURES LIKE

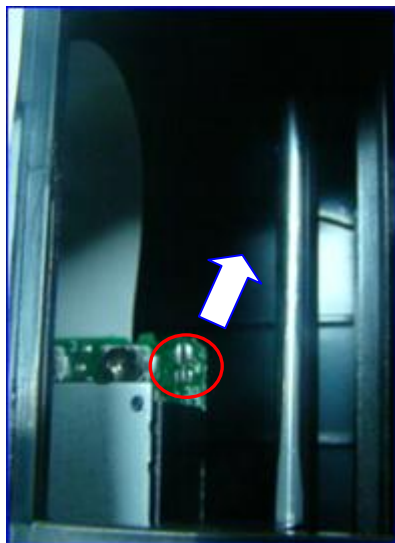
- **SWITCH OFF POWER SUPPLY**
- **ESD PROTECTION**

ADDITIONAL ACTIONS MUST BE TAKEN BY THE PERAIR TECHNICIAN

1. How to replace a defective loader?

Step1: Dismantling the loader to access the ESD protection point;

Step2: Remove the solder joint on the ESD protection point;



(NOTICE: REMOVE THE SOLDER JOINT AS THE WHITE ARROW DIRECTION IN ABOVE PICTURE)

Step3: Connect the 4PIN cable with the base. (Figure 2/3)

Step4: Take a label (can be reused) to cover the pane to prevent dust and touching the protection point (Figure 4)



1. Loader



2. 4pin base



3. Insert 4pin cable



Note: The ESD protection point needs to be soldered if:

- 1). it is still under good condition;
- 2). It is defective but need to sent back for failure analysis to support back charging evidence.

This is also applicable to all partnership workshops.

2. Reference about the loader:

DESCRIPTION	POSITION
BLU-RAY LOADER L9829+414H08	OPU
LOADER LABEL	LABEL
4PIN CONNECTOR L=260MM	4P

1). The ASSY-loader includes three components, as below picture:



The loader



The label



The cable



The ASSY-loader

2). top and bottom pictures :



TOP




Bottom

Notes

Lead-Free requirement for service

IDENTIFICATION:

Regardless of special logo (not always indicated) 

One must treat all sets from 1.1.2005 onwards, according next rules.

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

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

- Use only lead-free solder alloy Philips SAC305 with order code 0622 149 00106. If lead-free solder-paste is required, please contact the manufacturer of your solder-equipment. In general use of solder-paste within workshops should be avoided because paste is not easy to store and to handle.
- Use only adequate solder tools applicable for lead-free solder alloy. The solder tool must be able
 - To reach at least a solder-temperature of 400°C,
 - To stabilize the adjusted temperature at the solder-tip
 - To exchange solder-tips for different applications.
- Adjust your solder tool so that a temperature around 360°C – 380°C is reached and stabilized at the solder joint. Heating-time of the solder-joint should not exceed ~ 4 sec. Avoid temperatures above 400°C otherwise wear-out of tips will rise drastically and flux-fluid will be destroyed. To avoid wear-out of tips switch off un-used equipment, or reduce heat.
- Mix of lead-free solder alloy / parts with leaded solder alloy / parts is possible but PHILIPS recommends strongly to avoid mixed solder alloy types (leaded and lead-free). If one cannot avoid, 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 highest 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. This will be communicated via AYS-website.
- Do not re-use BGAs at all.
- For sets produced before 1.1.2005, containing leaded soldering-tin 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:

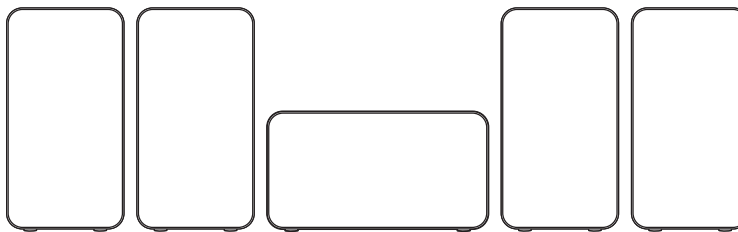
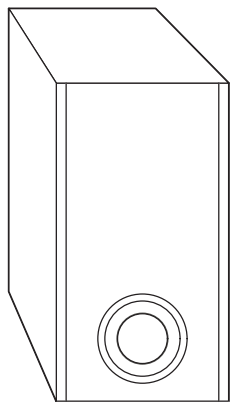
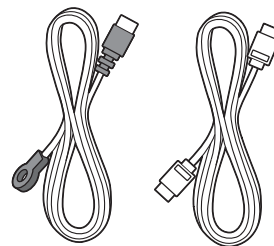
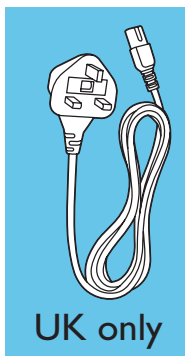
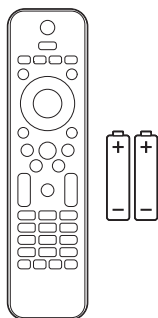
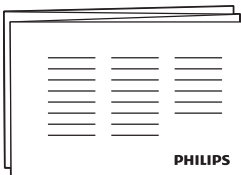
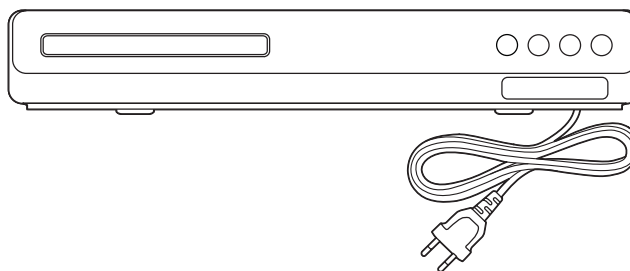
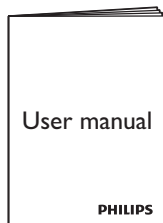
BGA-de-/soldering (+ baking instructions)
Heating-profiles of BGAs and other ICs used in Philips-sets

You will find this and more technical information within the "magazine", chapter "workshop news".
For additional questions please contact your local repair-helpdesk.



- EN** Before using your product, read all accompanying safety information
- DA** Læs alle medfølgende sikkerhedsoplysninger, inden du tager produktet i brug
- DE** Lesen Sie vor Verwendung dieses Produkts alle begleitenden Sicherheitsinformationen
- EL** Πριν χρησιμοποιήσετε το προϊόν, διαβάστε όλες τις παρεχόμενες πληροφορίες ασφάλειας
- ES** Antes de usar el producto, lea toda la información de seguridad adjunta
- FI** Lue kaikki turvallisuuksiedot ennen tuotteen käyttöä
- FR** Avant d'utiliser votre produit, lisez l'intégralité des consignes de sécurité jointes
- IT** Prima di utilizzare il prodotto, leggere tutte le relative informazioni sulla sicurezza
- NL** Lees voordat u het product gaat gebruiken eerst alle bijbehorende veiligheidsinformatie

- NO** Les all vedlagt sikkerhetsinformasjon før du bruker produktet
- PT** Antes de utilizar o produto, leia todas as informações de segurança que o acompanham
- SV** Innan du använder produkten ska du läsa all tillhörande säkerhetsinformation
- TR** Ürününüzü kullanmadan önce ilgili tüm güvenlik bilgilerini okuyun
- CS** Před použitím produktu si přečtěte doprovodné bezpečnostní informace
- HU** A termék használatá elótt alaposan olvassa el a mellékelt biztonsági tudnivalókat
- PL** Przed rozpoczęciem korzystania z produktu należy zapoznać się z informacjami dotyczącymi bezpieczeństwa
- RO** Înainte de a utiliza acest produs, citiți toate informațiile de siguranță care îl însoțesc
- SK** Pred použitím produktu si prečítajte všetky sprievodné bezpečnostné informácie



* Adaptador fornecido como acessório não deverá ser usado nas redes elétricas do Brasil, seu uso é destinado exclusivamente a outros países da América Latina.

1

EN Connect the home theater

DA Tilslut hjemmteateret

DE Anschließen des Home Entertainment-Systems

EL Συνδέστε το home cinema

ES Conecta el sistema de cine en casa

FI Kotiteatterin liittäminen

FR Connecter les enceintes au Home Cinéma

IT Collegamento del sistema Home Theater

NL Sluit de home cinema aan

NO Koble til hjemmekinoanlegget

PT Efectuar as ligações ao sistema de cinema em casa

SV Anslut hemmabiosystemet

TR Ev sinemasını bağlayın

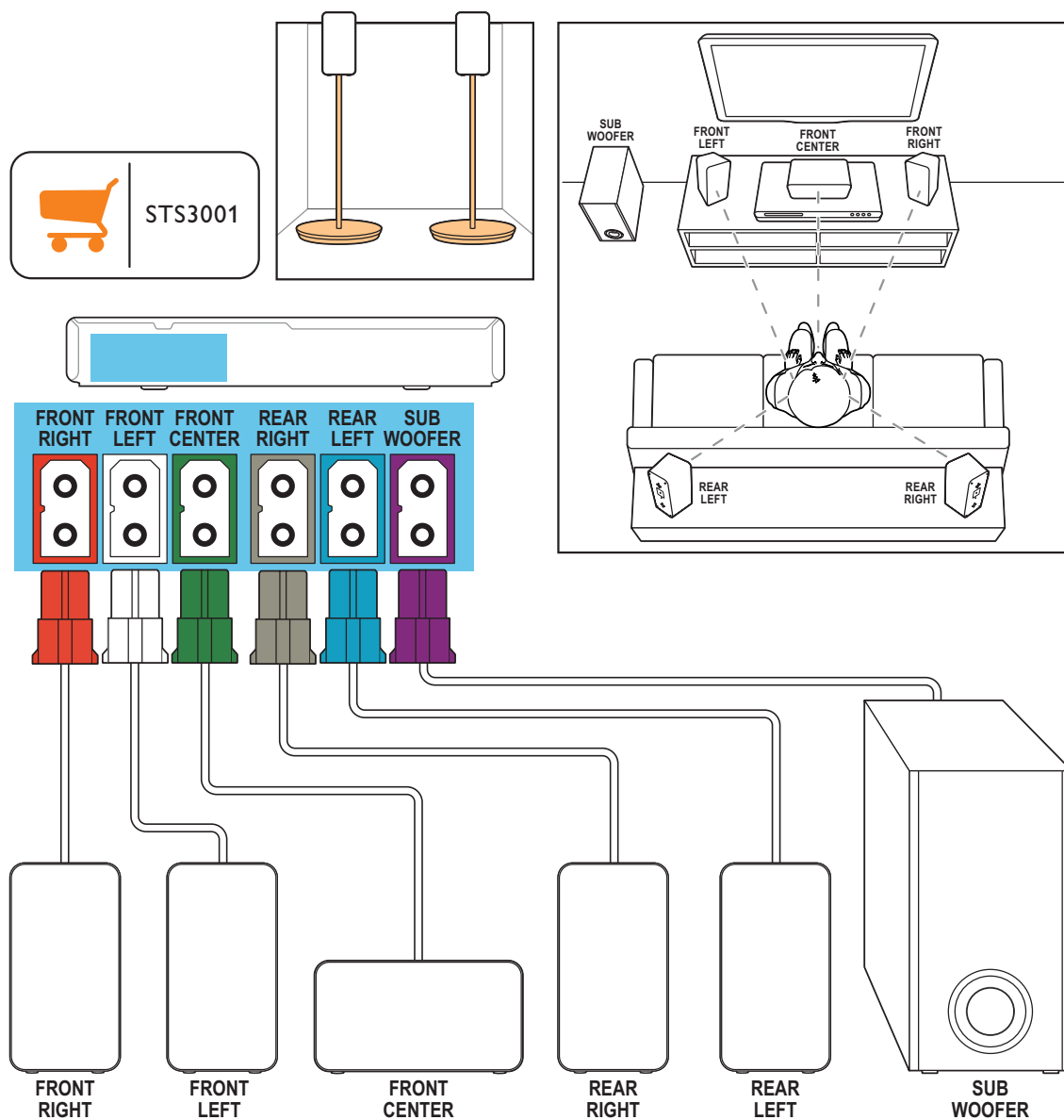
CS Připojte domácí kino

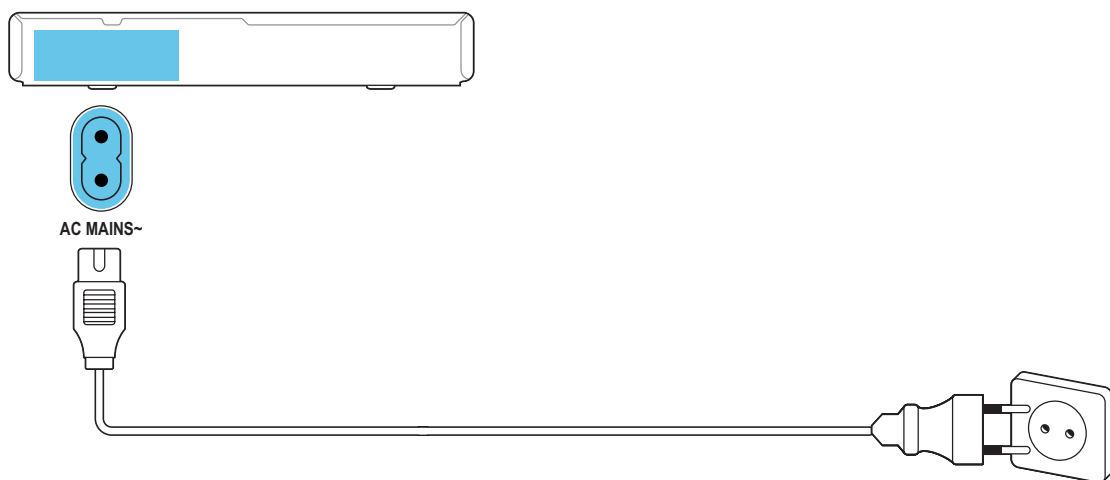
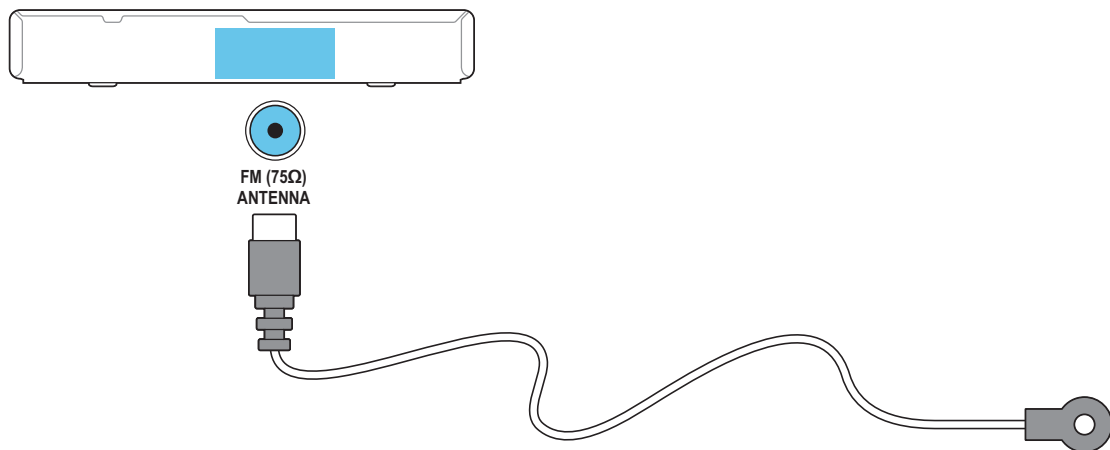
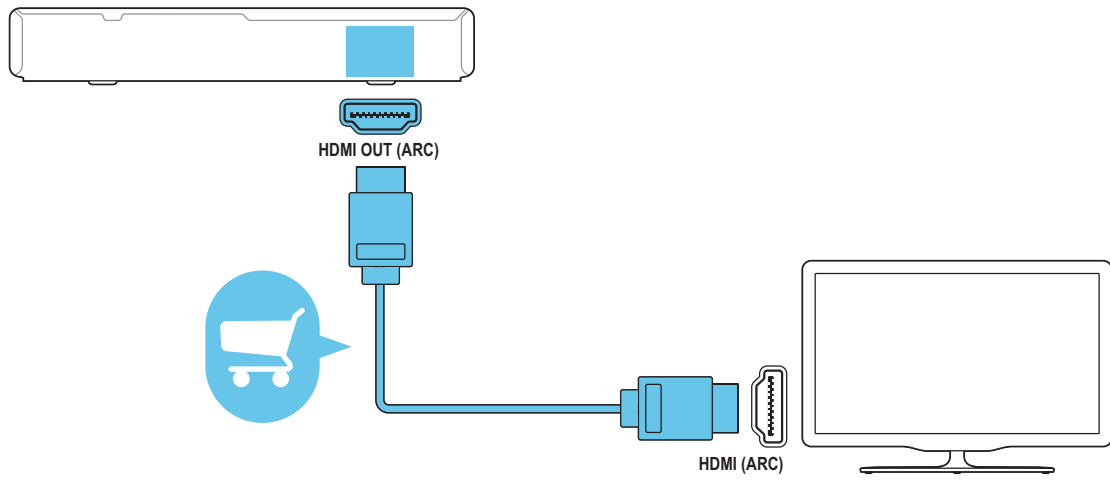
HU A házimozi csatlakoztatása

PL Podłączenie zestawu kina domowego

RO Conectați sistemul home theater

SK Pripojenie k domácemu kinu



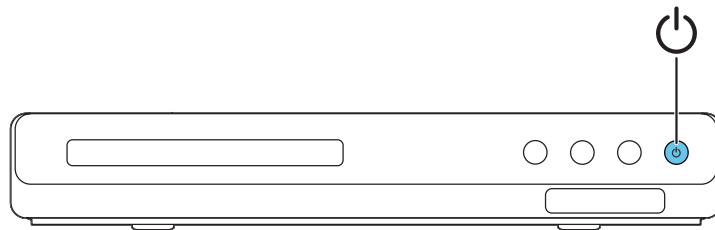


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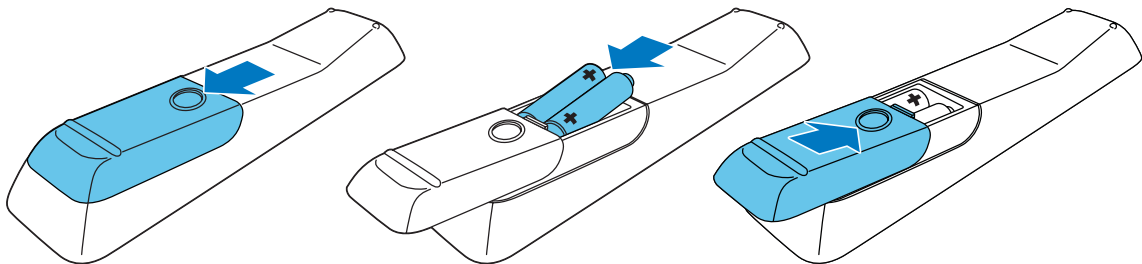
EN Switch on the home theater
DA Tænd for hjemmebiografen
DE Einschalten des Home Entertainment-Systems
EL Ενεργοποιήστε το home cinema
ES Enciende el sistema de cine en casa
FI Virran kytkeminen kotiteatteriin
FR Mettre sous tension le Home Cinéma
IT Accensione del sistema Home Theater
NL Schakel de home cinema in

NO Slå på hjemmekinoanlegget
PT Ligar o sistema de cinema em casa
SV Sätt på hemmabiosystemet
TR Ev sinemasını açın
CS Zapněte domácí kino
HU A házimozi bekapcsolása
PL Włączenie zestawu kina domowego
RO Porniți sistemul home theater
SK Zapnutie domáceho kina

1



2



3

EN Complete the first time setup

DA Fuldfør den indledende opsætning

DE Abschließen der Ersteinrichtung

EL Ολοκληρώστε τη ρύθμιση για πρώτη φορά

ES Finaliza la configuración inicial

FI Ensiasennuksen suorittaminen loppuun

FR Effectuer la configuration initiale

IT Completamento della configurazione iniziale

NL Voltooi de eerste installatie

NO Fullføre den første konfigureringen

PT Executar a configuração inicial

SV Slutför förstagångsinställningen

TR İlk kullanım öncesi kurulumunu tamamlayın

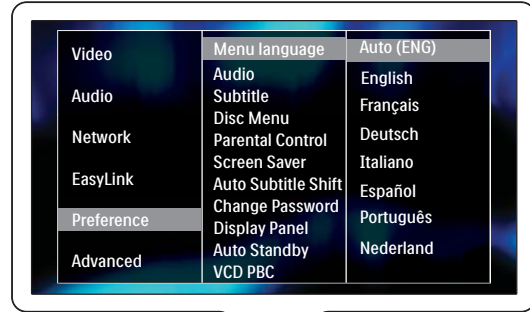
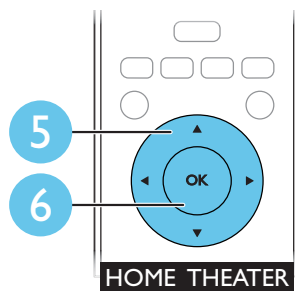
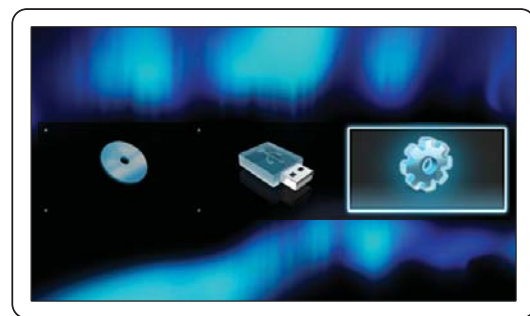
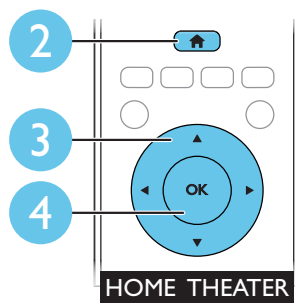
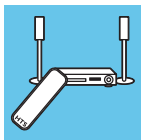
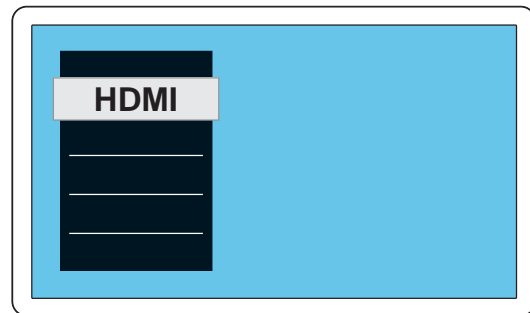
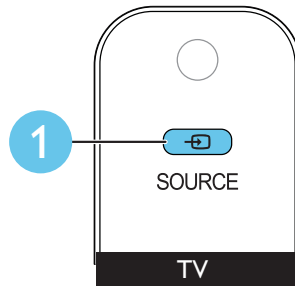
CS Dokončili jste nastavení při prvním zapnutí

HU Az első üzembe helyezés

PL Pierwsza konfiguracja

RO Realizați prima configurare

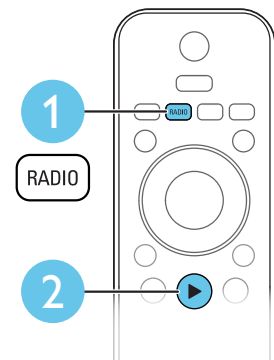
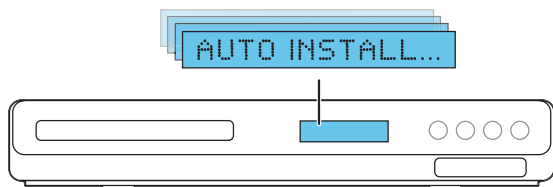
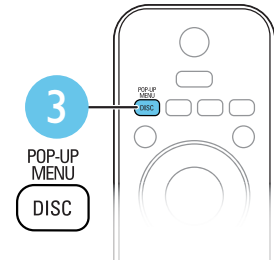
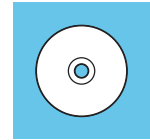
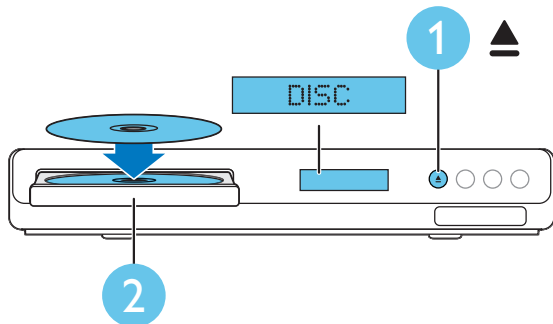
SK Dokončenie prvého nastavenia

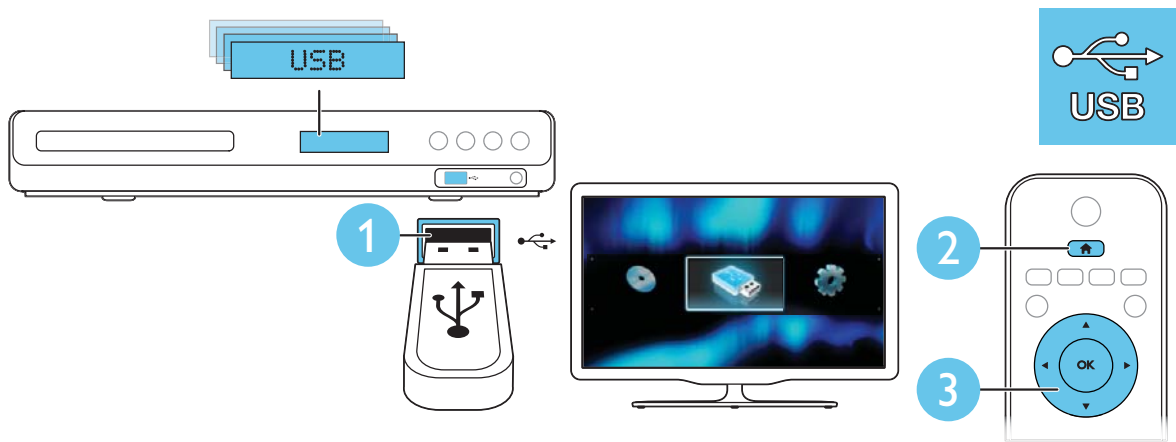
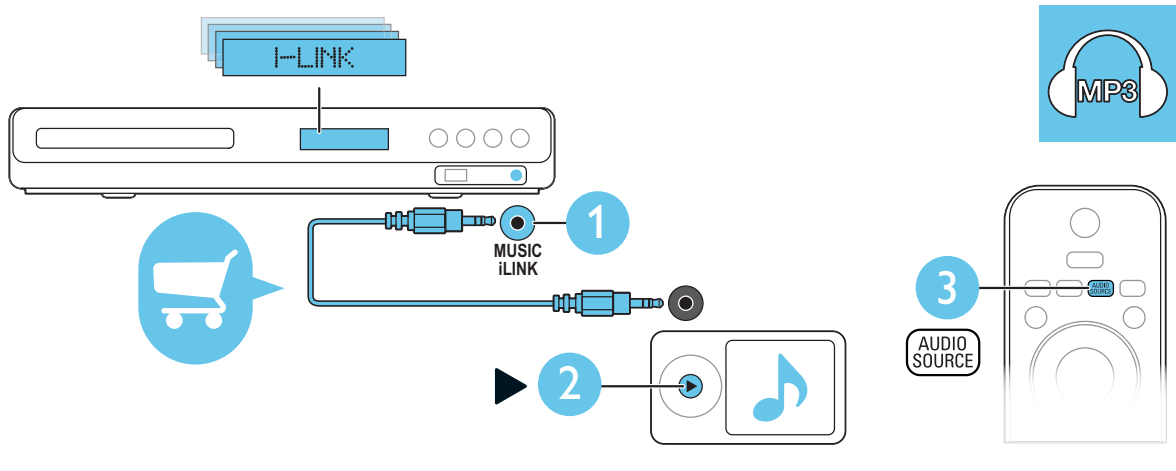


4

- EN** Use your home theater
DA Brug af din hjemmebiograf
DE Verwenden des Home Entertainment-Systems
EL Χρησιμοποιήστε το home cinema
ES Uso del sistema de cine en casa
FI Kotiteatterin käyttäminen
FR Utiliser votre Home Cinéma
IT Utilizzo del sistema Home Theater
NL Uw home cinema bedienen
NO Bruke hjemmekinoanlegget

- PT** Utilizar o sistema de cinema em casa
SV Använda hemmabiosystemet
TR Ev sinema sisteminin kullanılması
CS Použití domácího kina
HU A házi mozi használat
PL Korzystanie z zestawu kina domowego
RO Utilizați sistemul home theater
SK Používanie domáceho kina



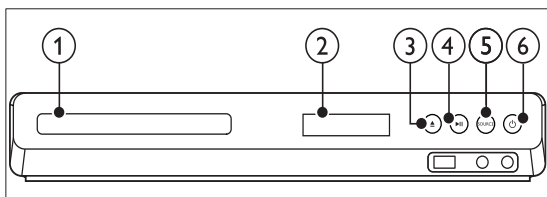


HTS3541/05/12/51/55/78/79/93/98/X78:

Your home theatre

Congratulations on your purchase, and welcome to Philips! To fully benefit from the support that Philips offers, register your home theatre at www.philips.com/welcome.

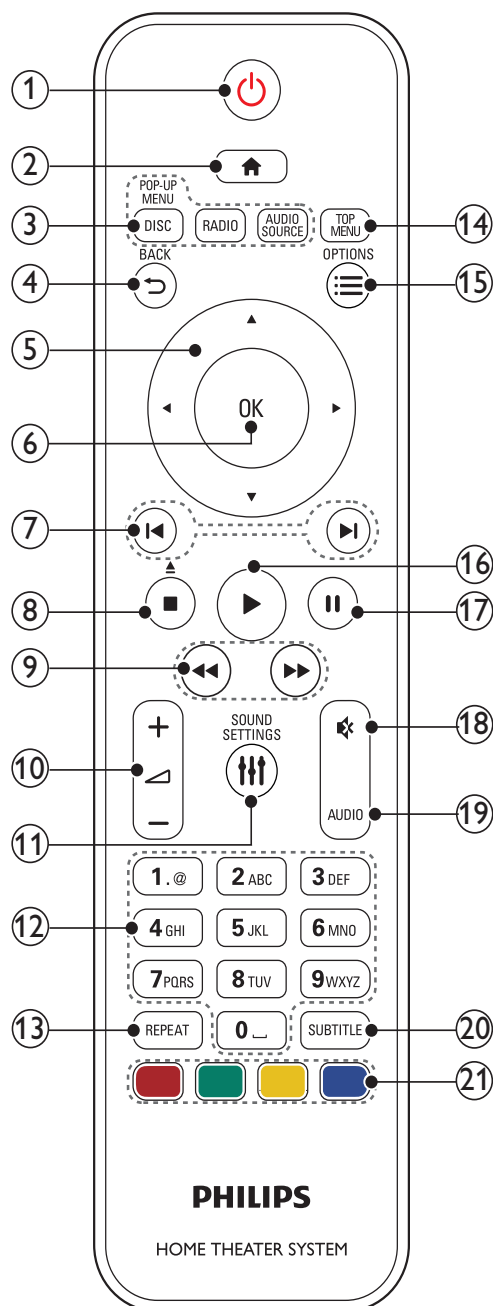
Main unit



- ① **Disc compartment**
- ② **Display panel**
- ③ **▲ (Open/Close)**
Open or close the disc compartment, or eject the disc.
- ④ **▶|| (Play/Pause)**
Start, pause or resume play.
- ⑤ **SOURCE**
Select an audio or video source for the home theatre.
- ⑥ **⏻ (Standby-On)**
Switch the home theatre on or to standby.

Remote control

This section includes an overview of the remote control.



- ① **⏻ (Standby-On)**
- Switch the home theatre on or to standby.
 - When EasyLink is enabled, press and hold for at least three seconds to switch all connected HDMI CEC compliant devices to standby.
- ② **🏠 (Home)**
Access the home menu.
- ③ **Source buttons**
- **DISC/POP-UP MENU** : Switch to disc source. Access or exit the disc menu when you play a disc.
 - **RADIO** : Switch to FM radio.
 - **AUDIO SOURCE** : Select an audio input source.
- ④ **↶ BACK**
- Return to a previous menu screen.
 - In radio mode, press and hold to erase the current preset radio stations.
- ⑤ **Navigation buttons**
- Navigate menus.
 - In radio mode, press left or right to start auto search.
 - In radio mode, press up or down to tune the radio frequency.
- ⑥ **OK**
Confirm an entry or selection.
- ⑦ **⏮ / ⏭ (Previous/Next)**
- Skip to the previous or next track, chapter or file.
 - In radio mode, select a preset radio station.
- ⑧ **■ (Stop) / ▲ (Eject/Open/Close)**
- Stop play.
 - Press and hold for three seconds to open or close the disc compartment, or eject the disc.
- ⑨ **⏮ / ⏭ (Fast Backward / Fast Forward)**
Search backwards or forwards. Press repeatedly to change the search speed.
- ⑩ **🔊 +/- (Volume)**
Increase or decrease volume.
- ⑪ **≡ SOUND SETTINGS**
Access or exit sound options.
- ⑫ **Alphanumeric buttons**
Enter values or letters (using SMS-style entry).
- ⑬ **REPEAT**
Select or turn off repeat mode.
- ⑭ **TOP MENU**
Access the main menu of a disc.
- ⑮ **☰ OPTIONS**
- Access more play options while playing a disc or a USB storage device.
 - In radio mode, set a radio station.
- ⑯ **▶ (Play)**
Start or resume play.
- ⑰ **⏸ (Pause)**
Pause play.
- ⑱ **🔇 (Mute)**
Mute or restore volume.
- ⑲ **AUDIO**
Select an audio language or channel.
- ⑳ **SUBTITLE**
Select subtitle language for video.
- ㉑ **Colour buttons**
Select tasks or options for Blu-ray discs.

Mechanical and Dismantling Instructions

Dismantling Instruction

Detailed information please refer to the model set.

The following guidelines show how to dismantle the player.

Step1: Remove 6 screws around the Top Cover, and then remove the Top Cover (Figure 1).



Sample:HTS3541/98

Figure 1

Step2: If it is necessary to dismantle Loader or Front Panel, the Front door should be removed first. (Figure 2)
Note: Make sure to operate gently otherwise the guider would be damaged.



Please kindly note that dismantle the front door assembly carefully to avoid damage tray and the front door.

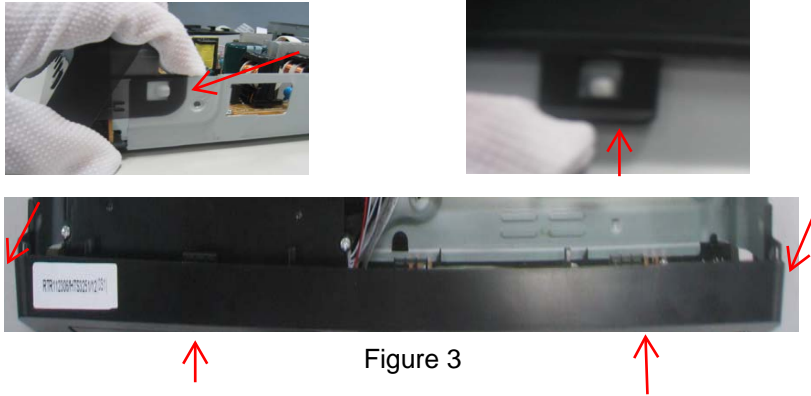
Figure 2

Mechanical and Dismantling Instructions

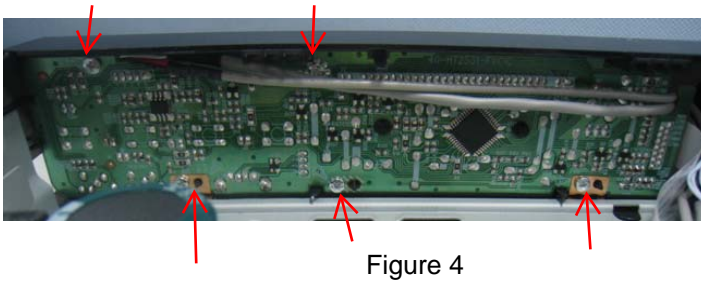
Dismantling Instruction

Detailed information please refer to the model set.

Step3 : Dismantle Front Panel, disconnect the connectors (XP6, XP8,XP604), need release 2 snaps of Front Panel & 2 snaps of bottom cabinet , then gently pull the Panel out from the set. (Figure 3)



Step4 : Dismantle Front Control Board,remove 5 screws. (Figure 4)



Step5: Dismantle Loader, disconnect the 3 connectors (XP5, XP7, XP10) aiming in the below figure, and remove 2 screws that connects the loader and the bottom cabinet. (Figure 5)



Mechanical and Dismantling Instructions

Dismantling Instruction

Detailed information please refer to the model set.

Step6: Dismantle Main Board, first disconnect 2 connectors (XP1, XP13), and then remove 6 screws. (Figure 6)

Step7: Dismantle Power Board, disconnect the connectos XS703 and CN501 on Power Board,then remove 5 screws.(Figure 6)

Step8: Dismantle Amplifier Board, remove 4 screws(Figure 6)

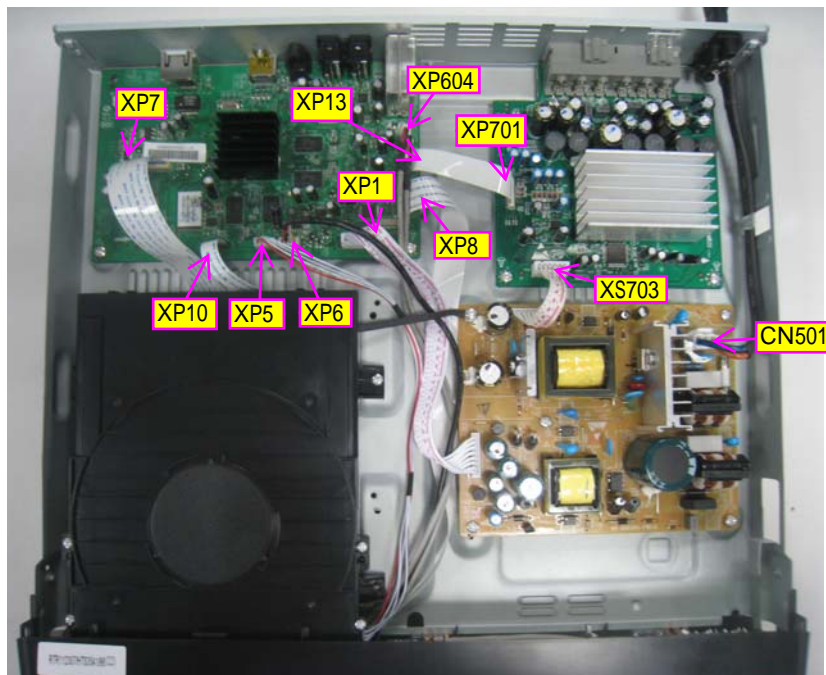


Figure 6

Software upgrade

A. Software upgrade method:

1. Set up a new folder and name it 'UPG' in the root of USB device.
2. Copy the file(HTS_XXXX.bin)which you want to upgrade into the 'UPG' folder
3. Power on the BD Player, after it shows the UI, plug the USB device
4. Select the SETUP Menu, then find and select item 'Advanced'
5. In the item 'Advanced', find and select item 'Software Update', then select item 'USB', please follow the tip to complete the upgrade.

B. Read out the software versions to confirm upgrading

Follow the steps shows below:

SETUP—>Advanced >Version Info.

While it shows the dialog box, we can see some information like below:

For example:

Model: HTSxxxx/xx

System SW:x.xx.xx

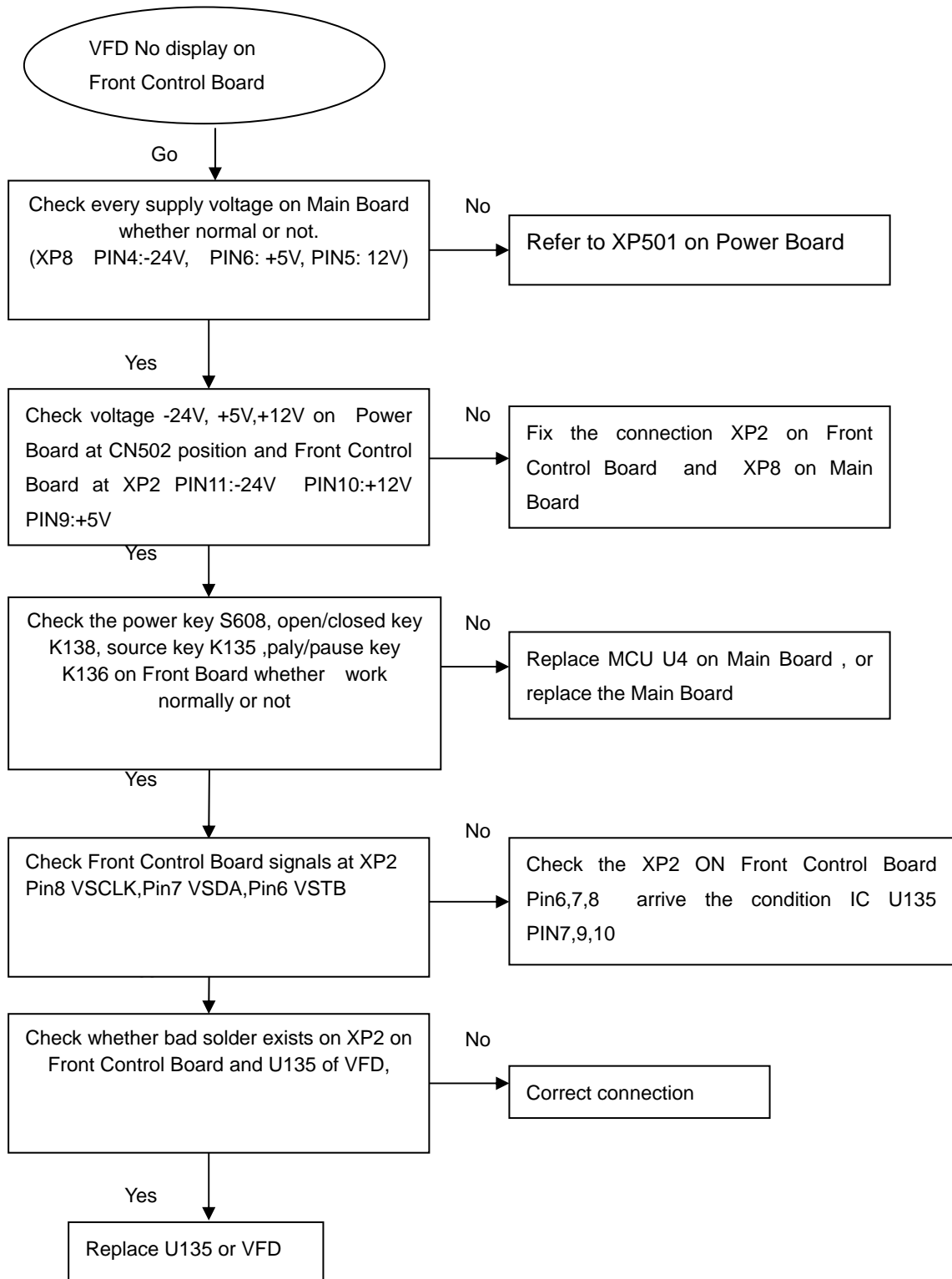
Subsystem SW:xx-xx-xx-xx

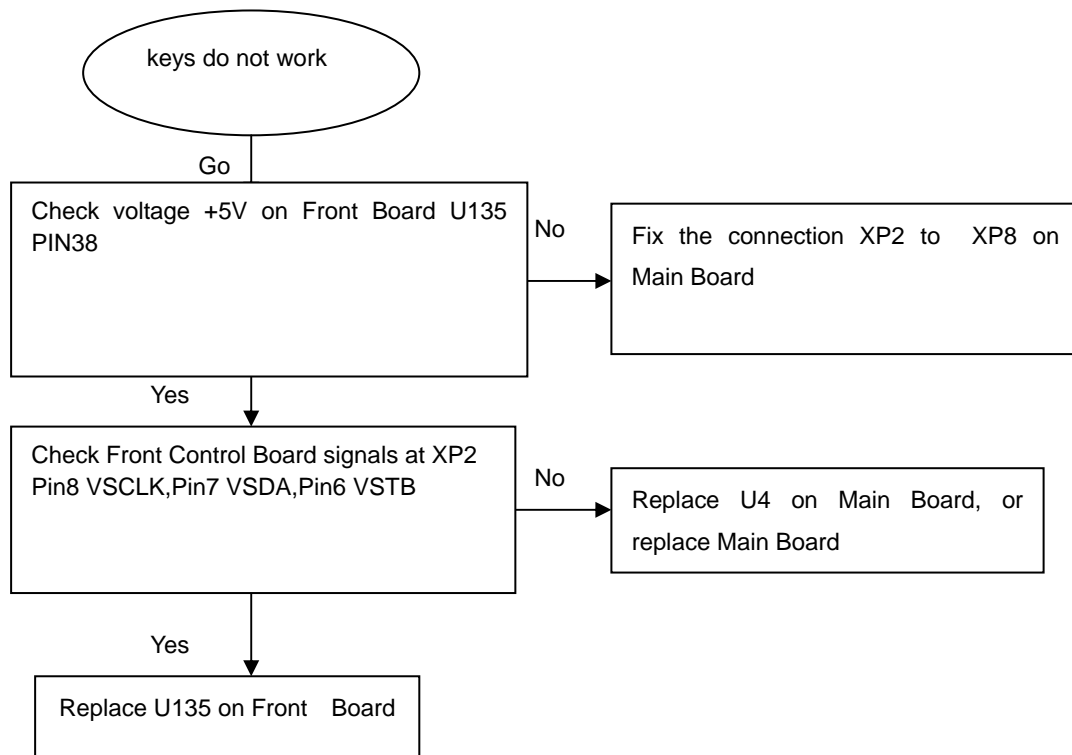
Ethernet MAC:xx:xx:xx:xx:xx;xx

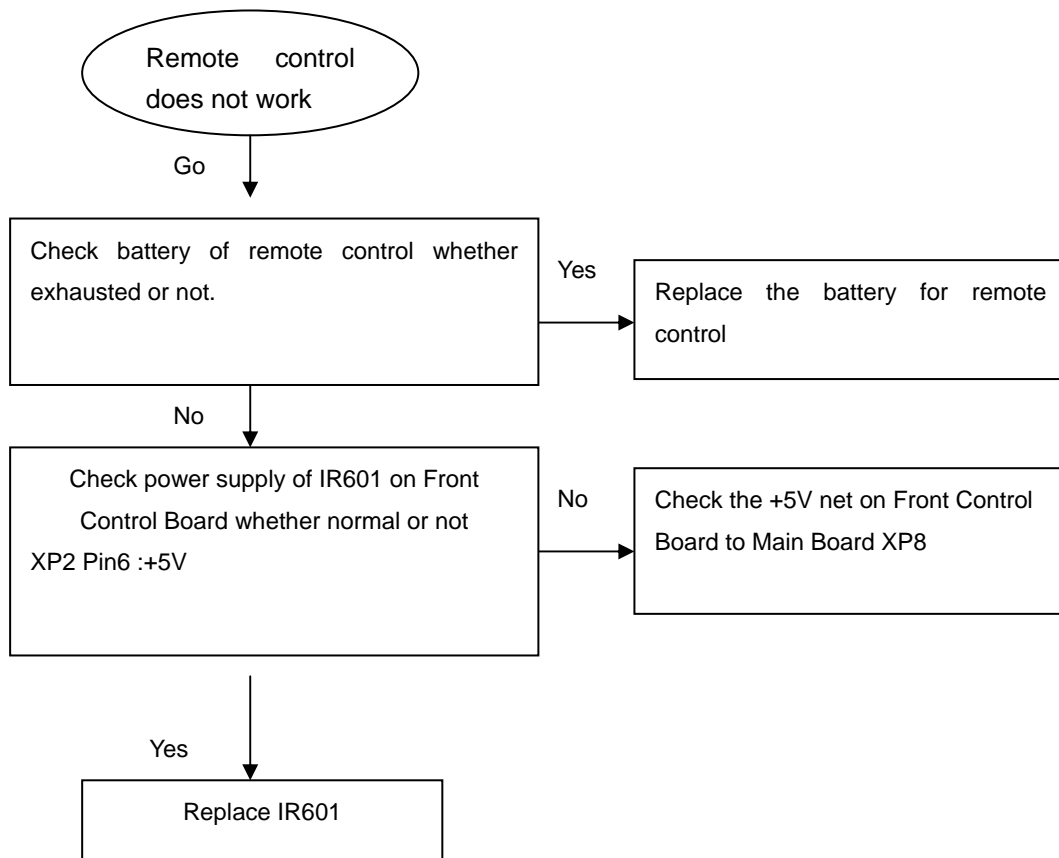
EUI64:xxxxxxxxxxxxxxxx

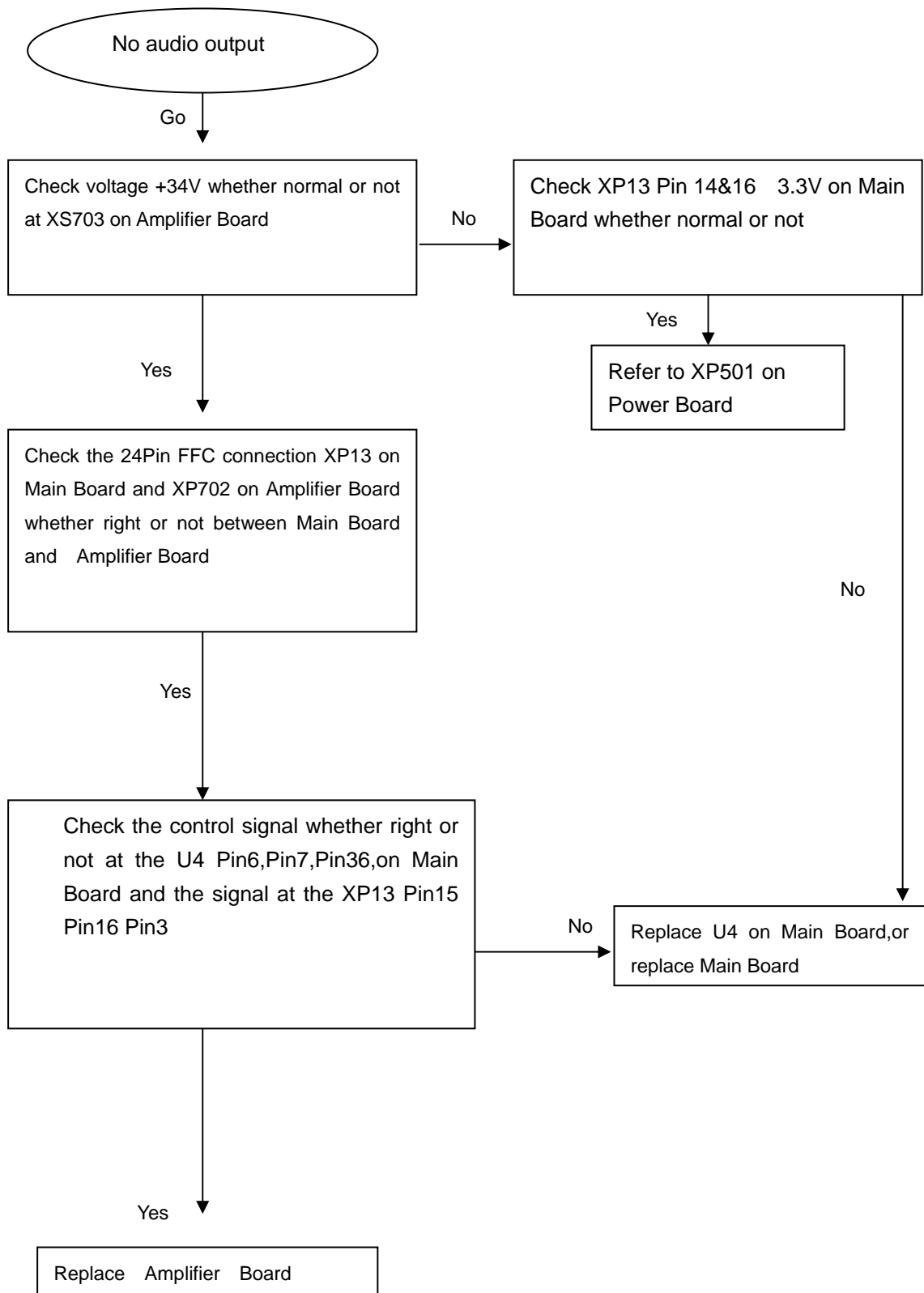
Caution: The set must not be power off during upgrading, Otherwise the Main board will be damaged entirely.

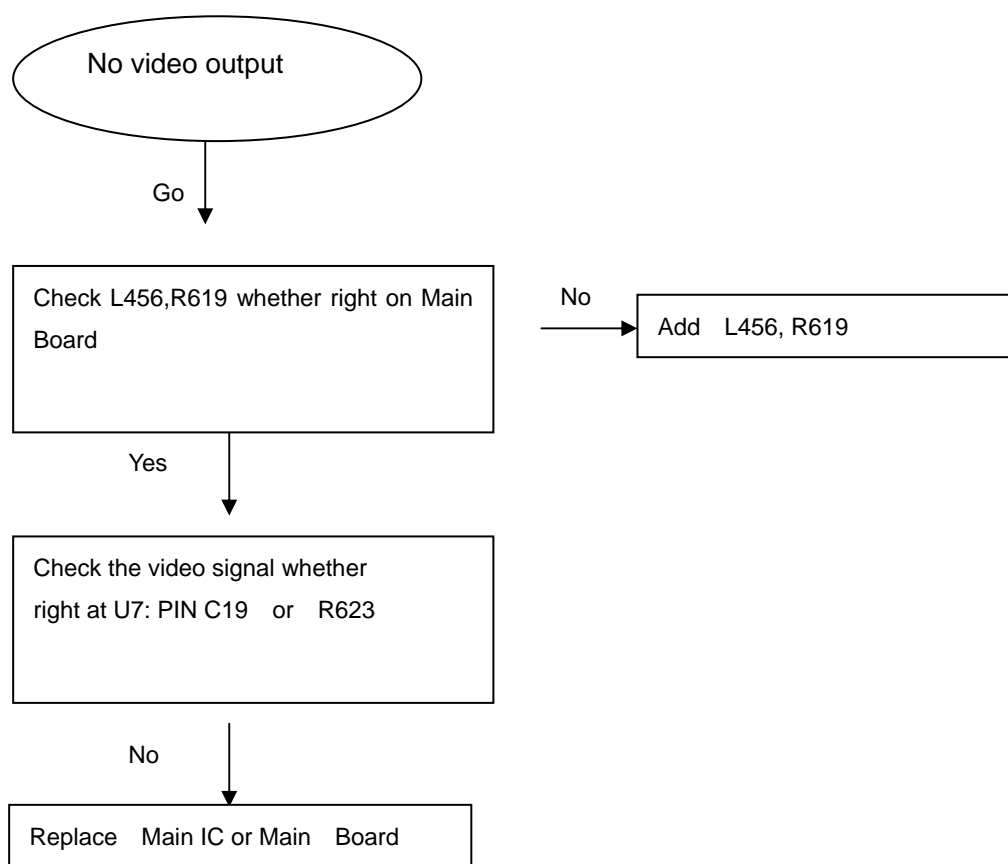
VFD No display on Front Control Board

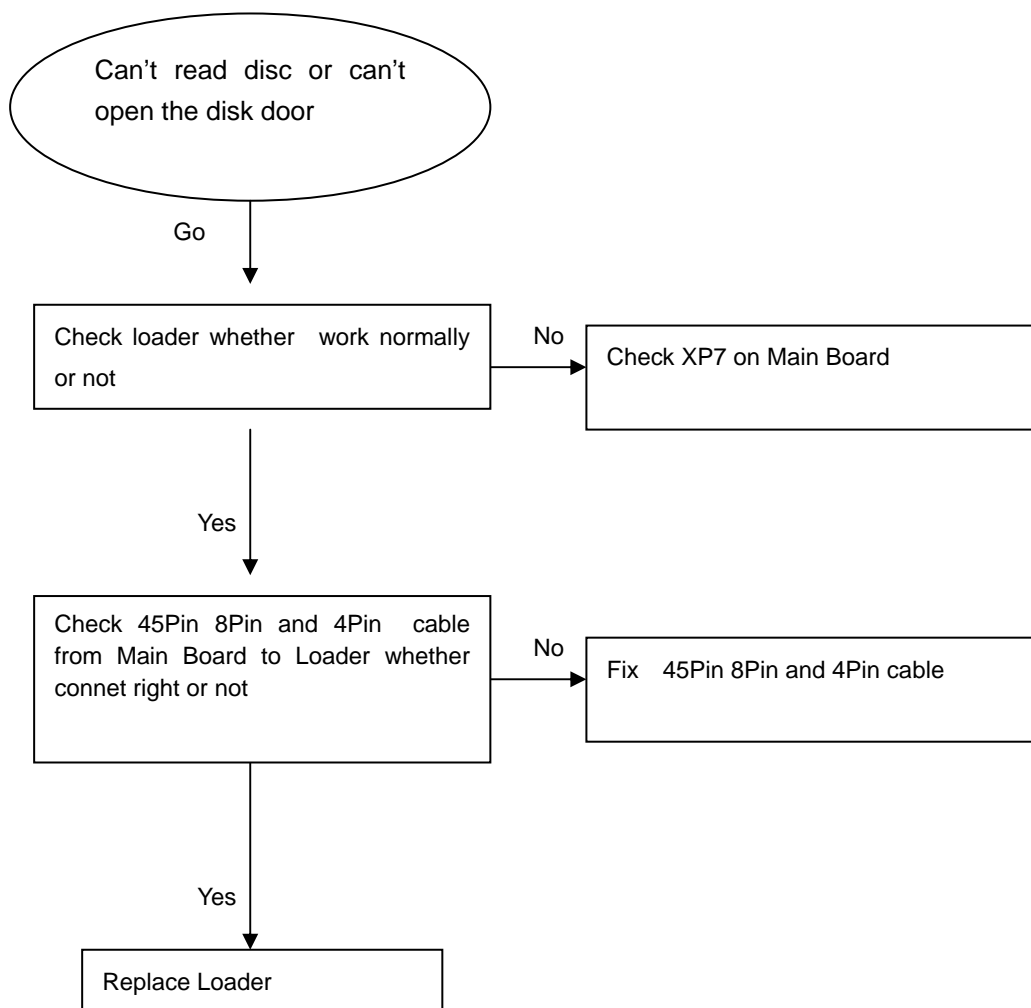


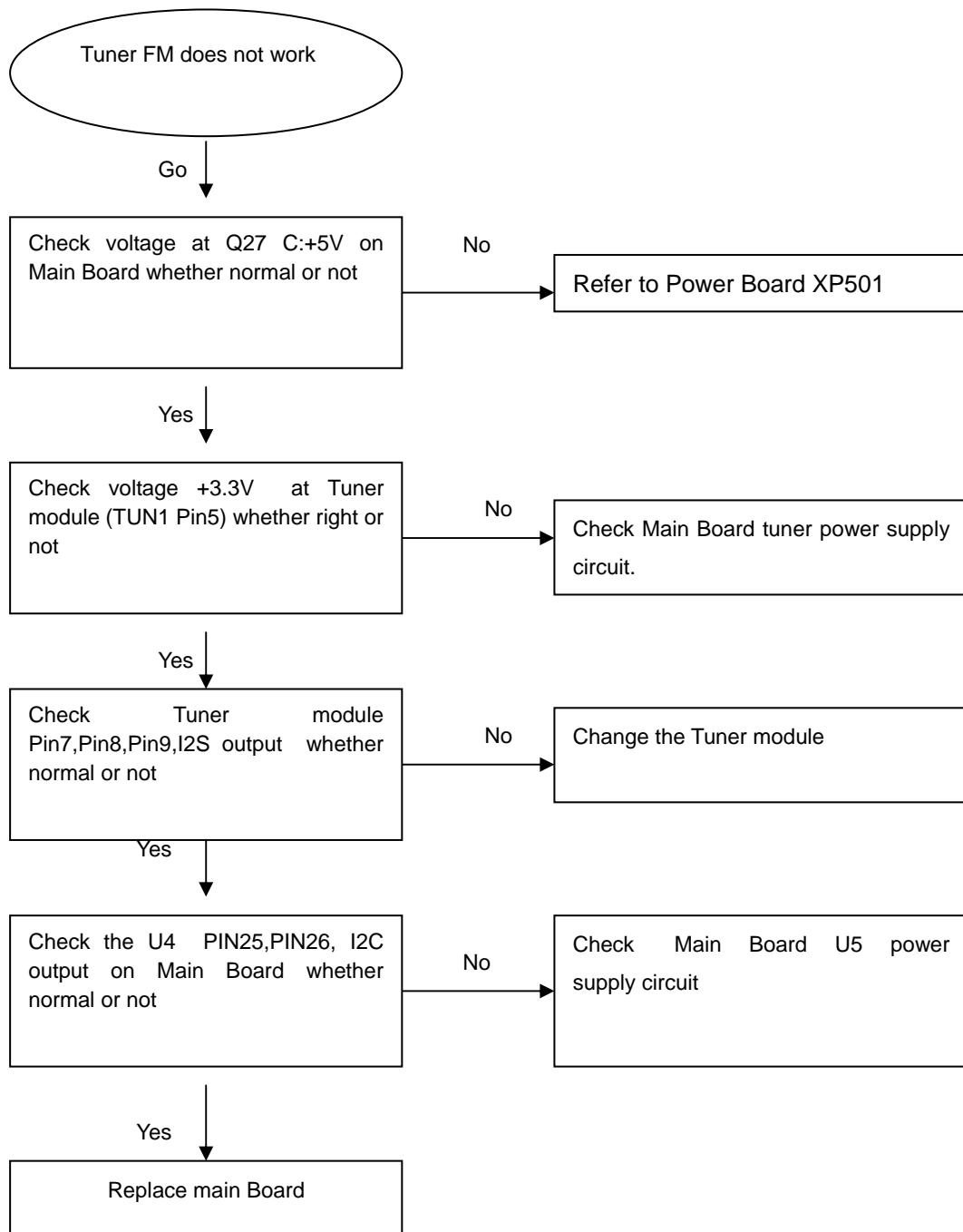
keys do not work

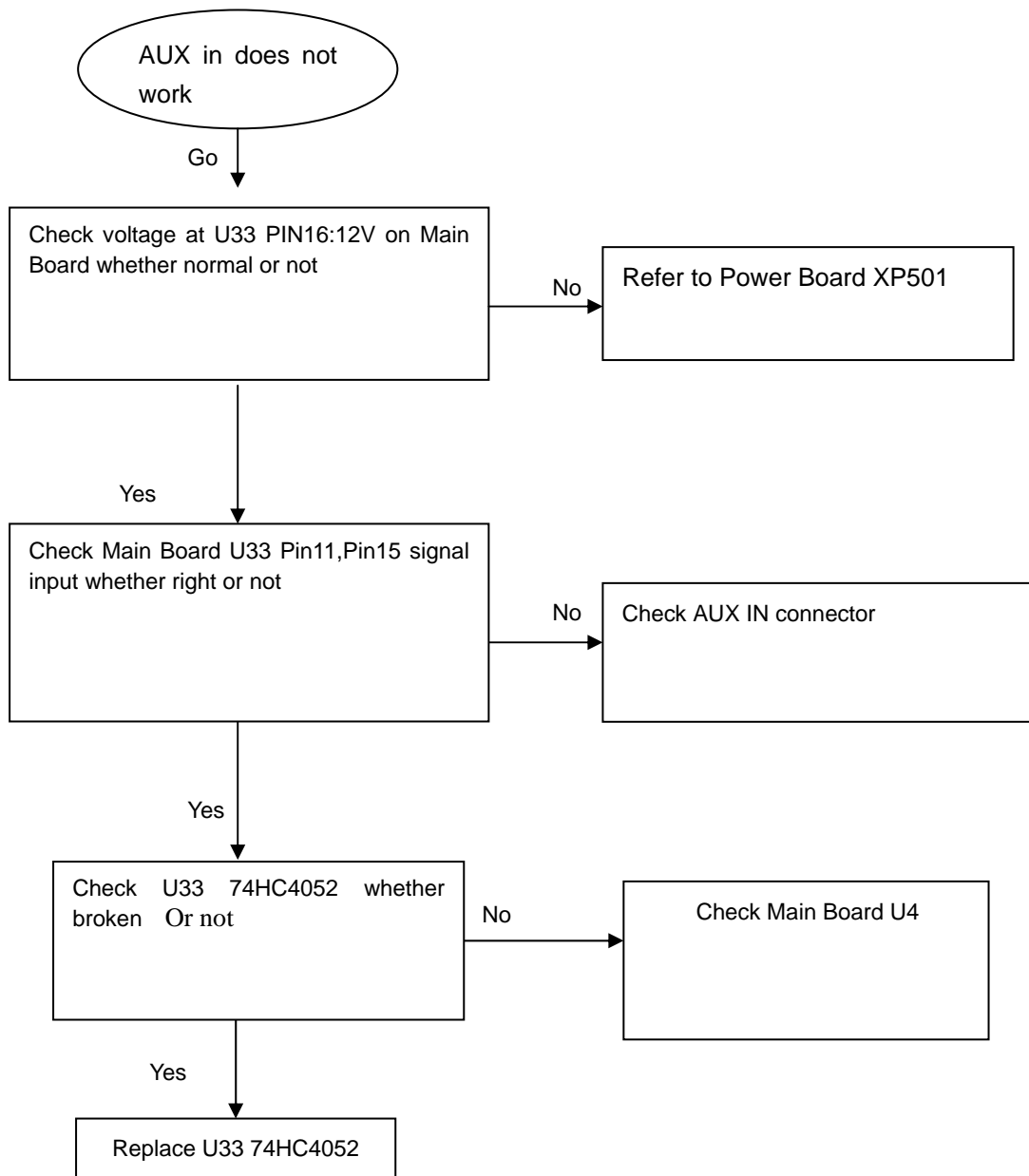
Remote control does not work

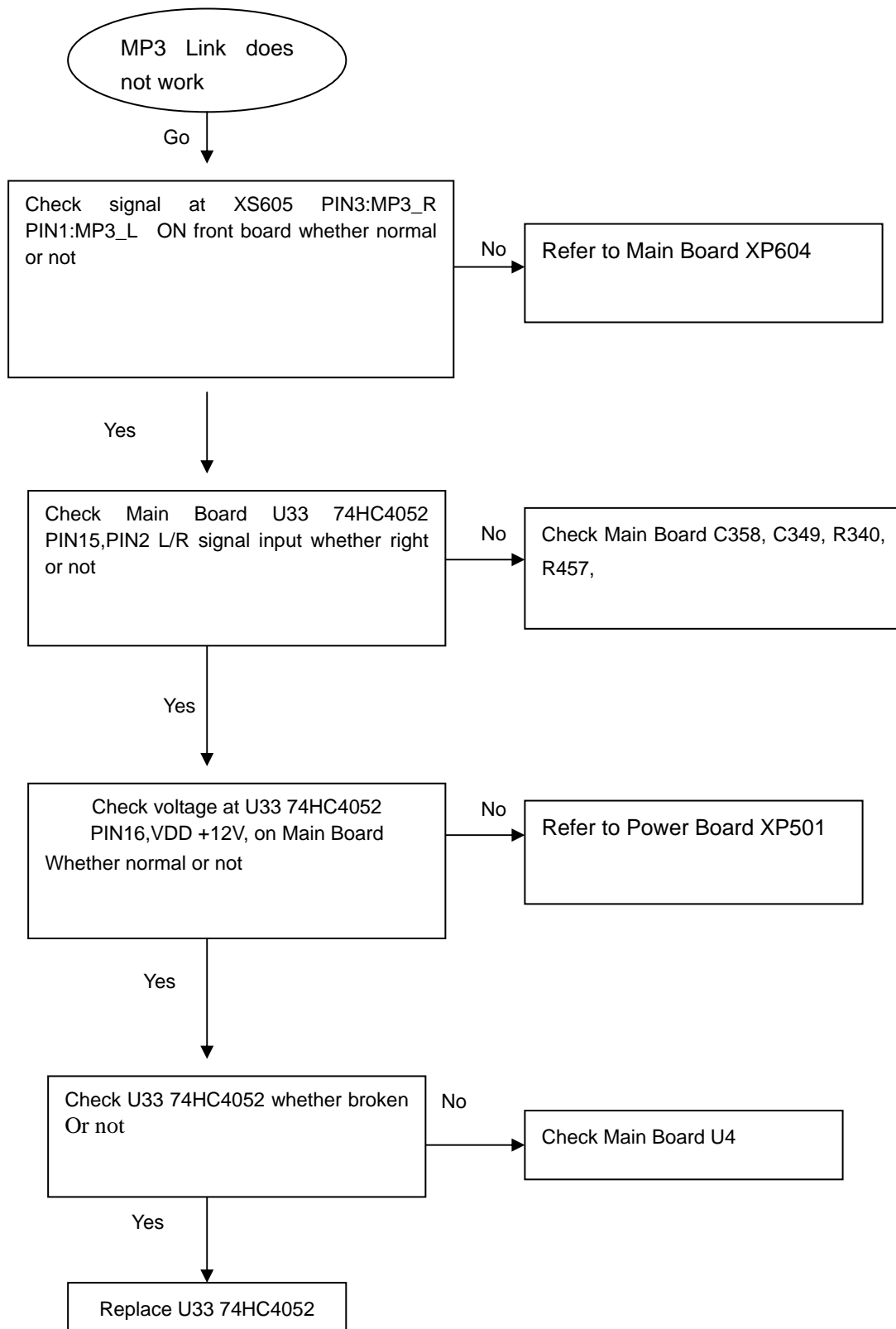
No audio output

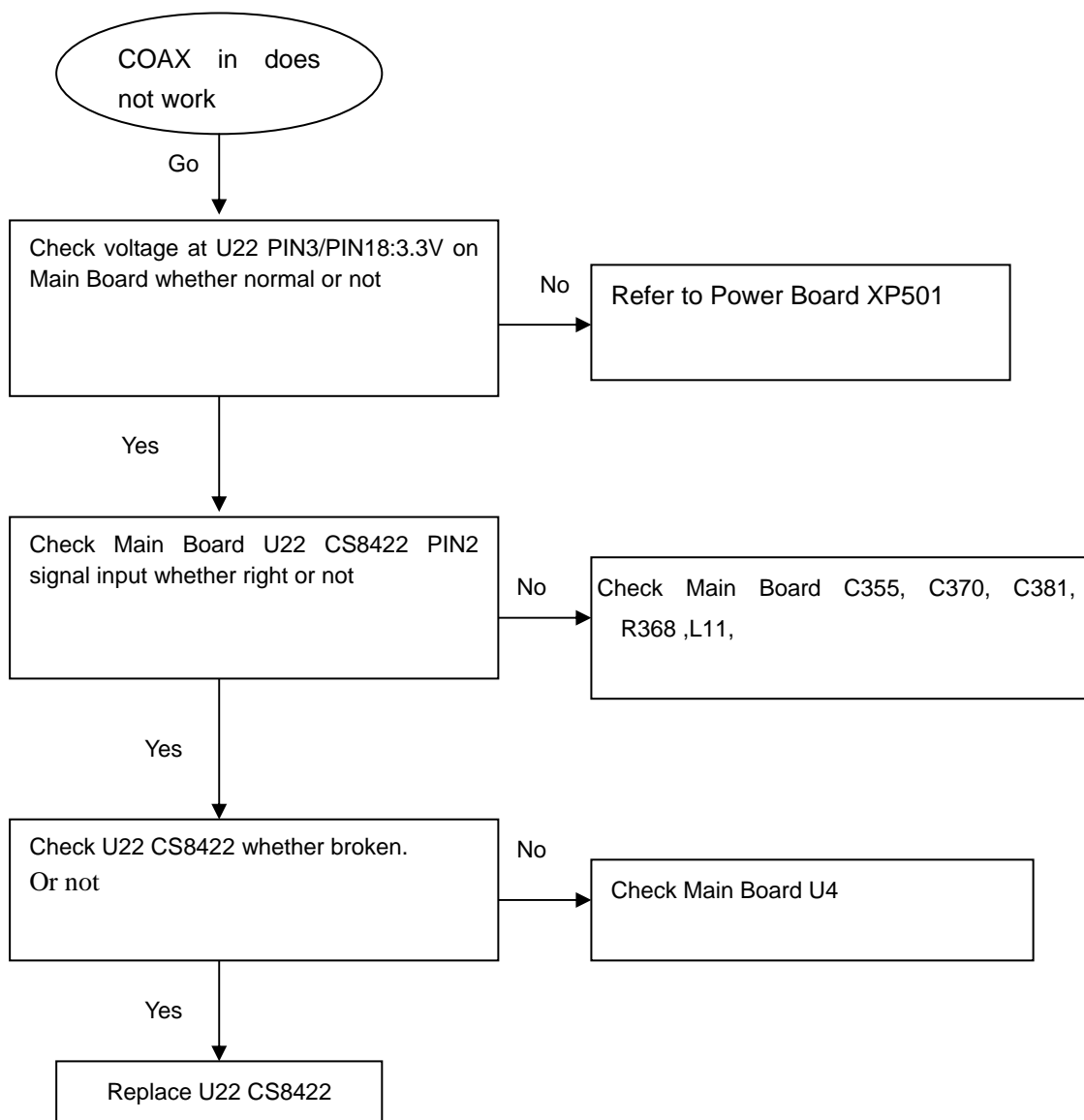
No video output

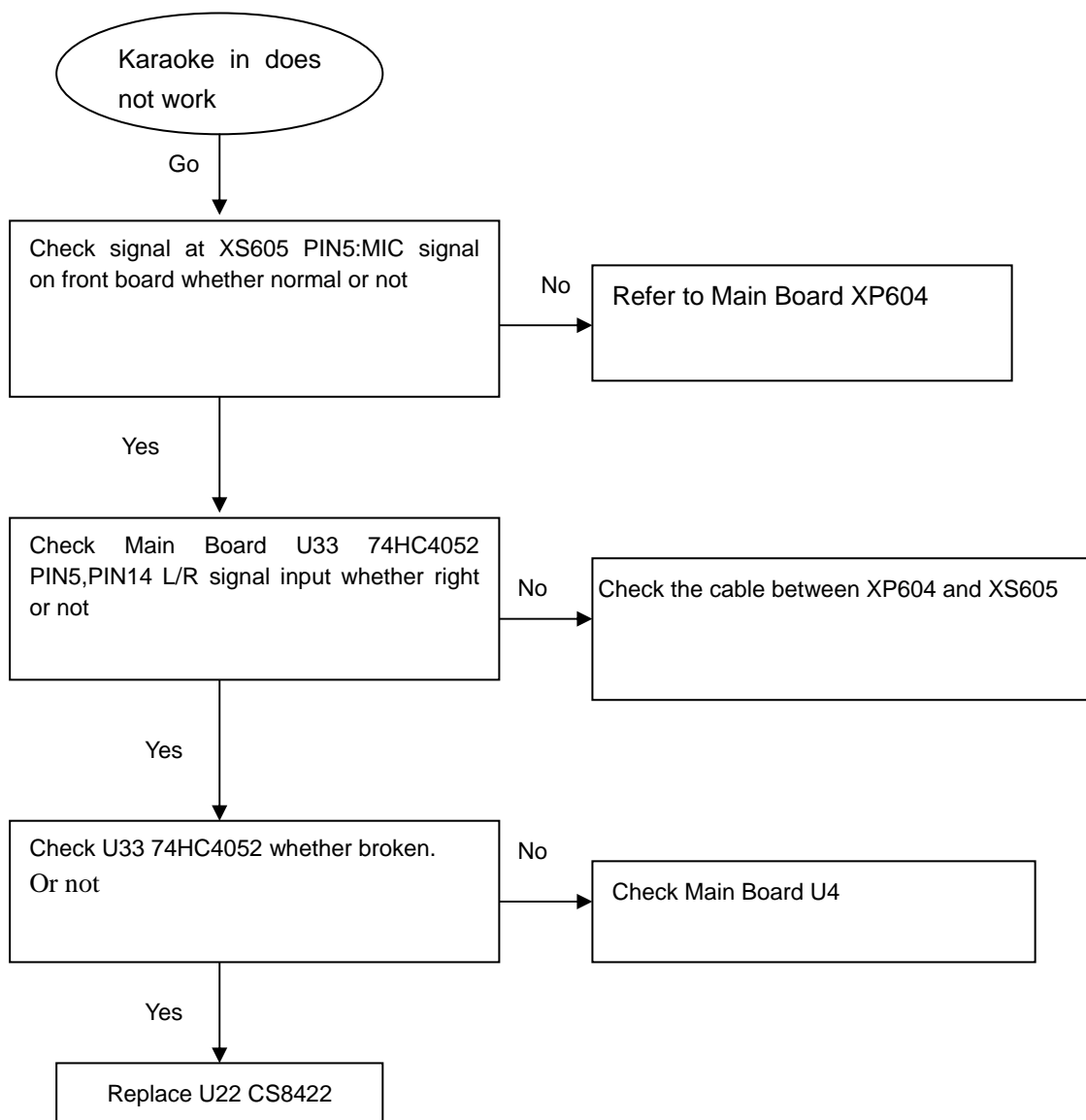
Can't read disc or can't open the disk door

Tuner FM does not work

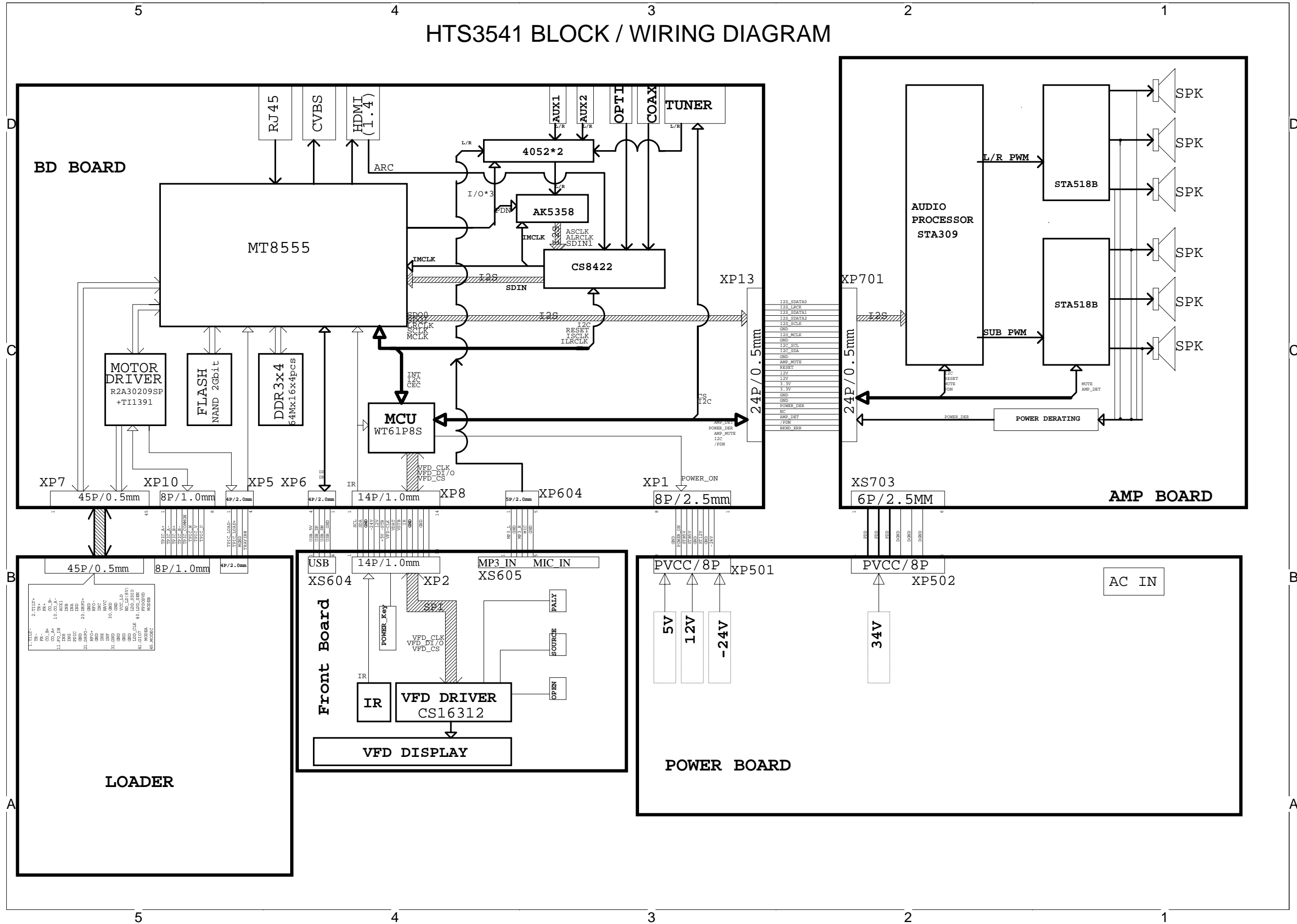
AUX in does not work

MP3 Link does not work

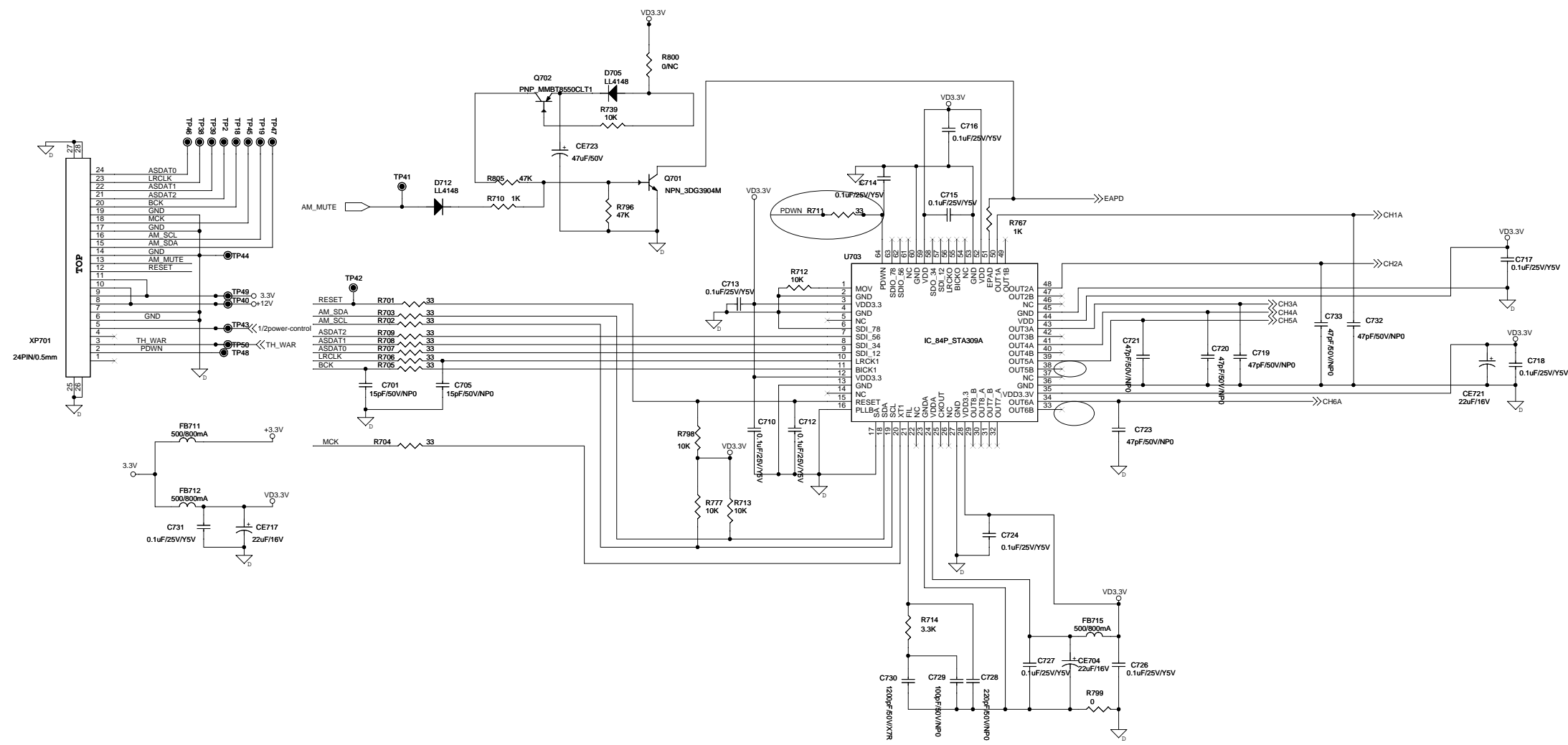
COAX in does not work

Karaoke in does not work

HTS3541 BLOCK / WIRING DIAGRAM



Amplifier Board Circuit Diagram: STA309A



1

2

3

4

1

2

3

4

A

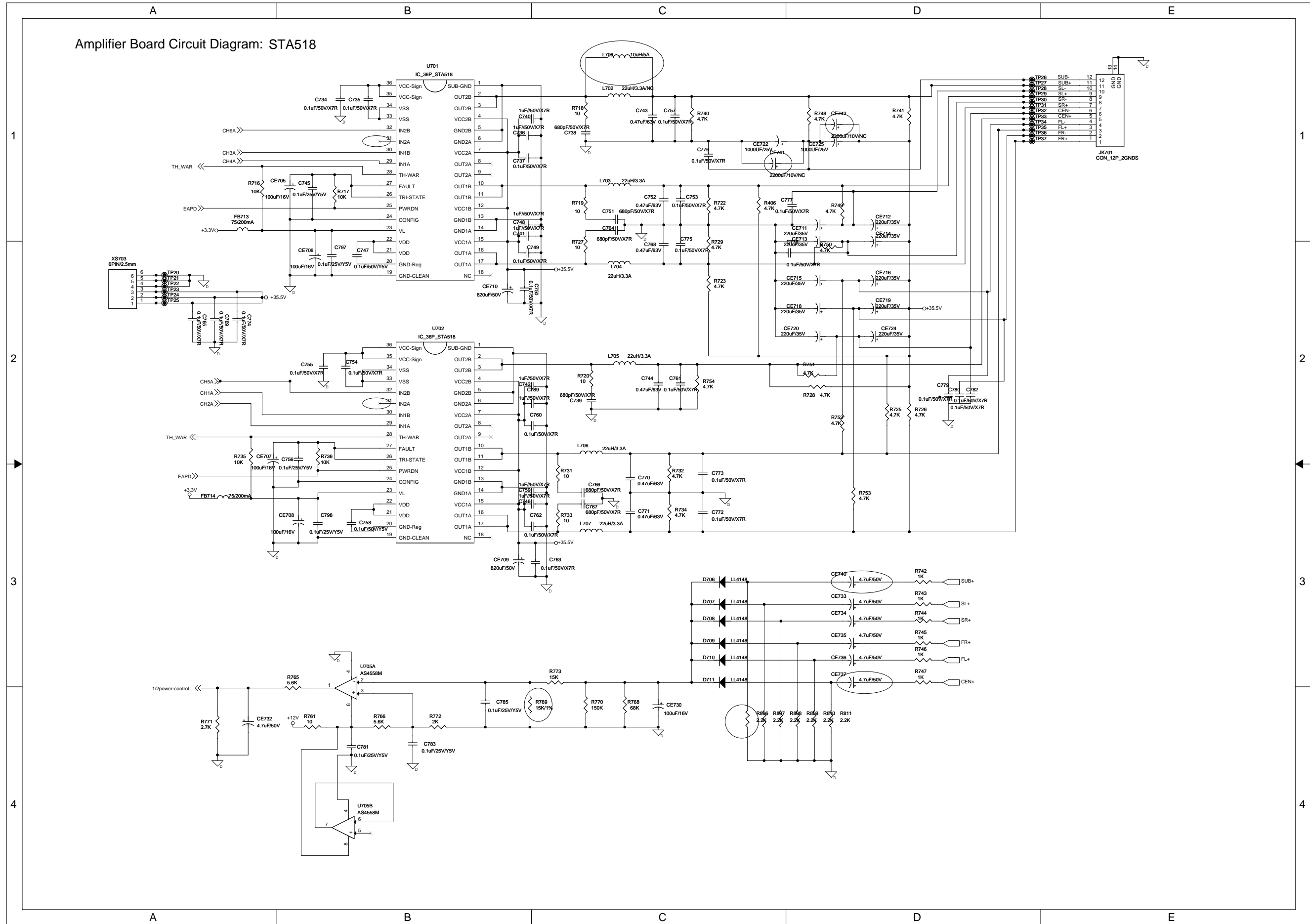
B

C

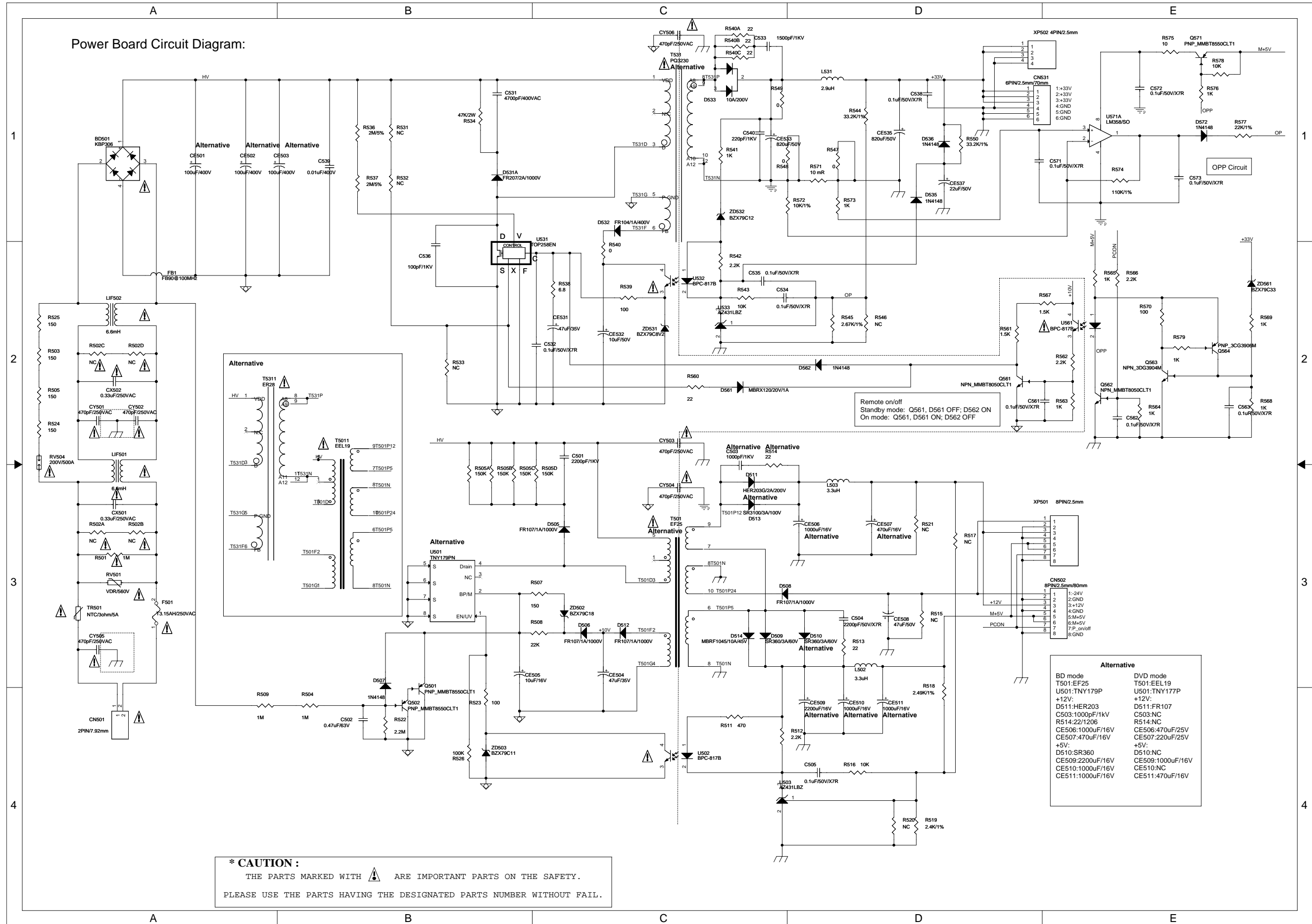
D

E

Amplifier Board Circuit Diagram: STA518



Power Board Circuit Diagram:

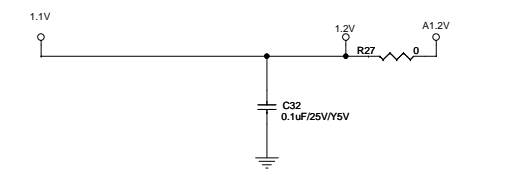
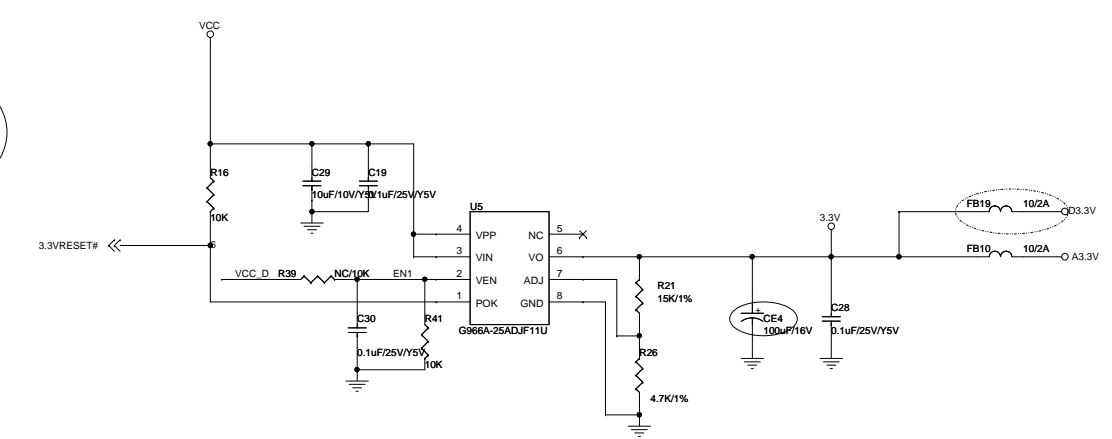
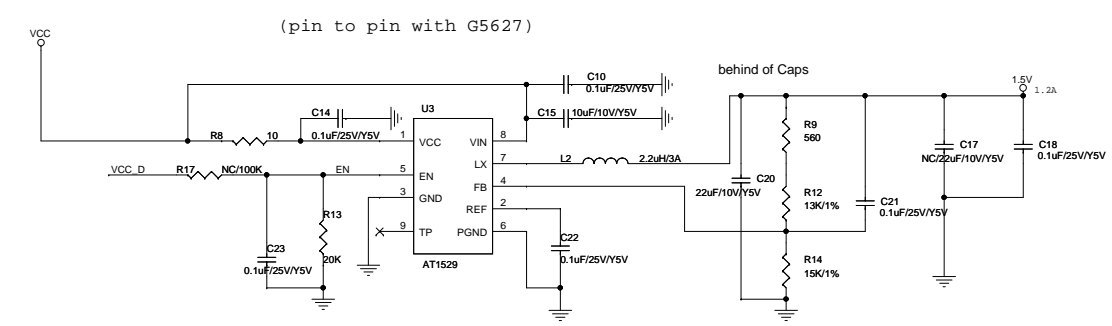
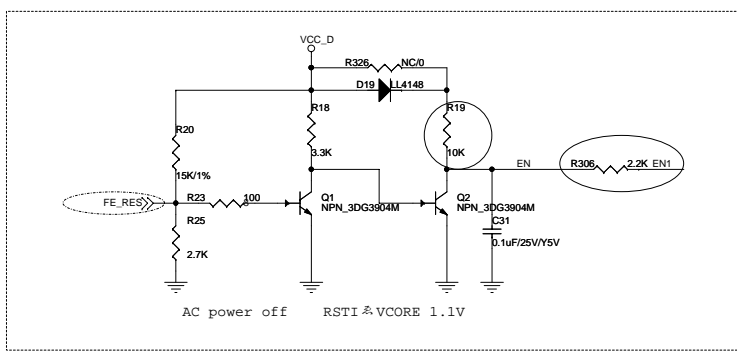
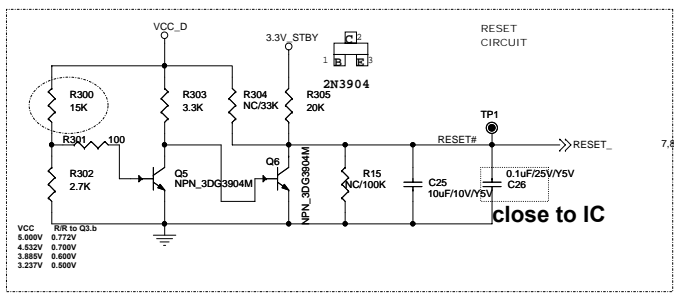
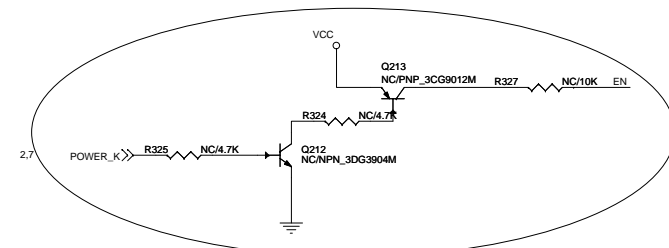
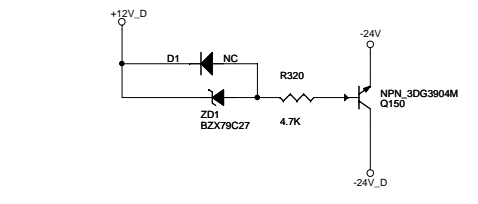
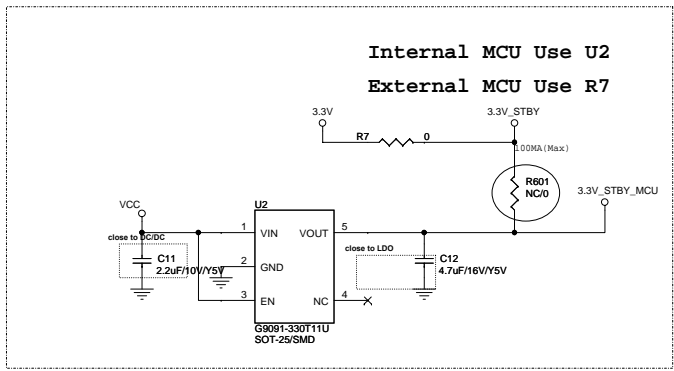
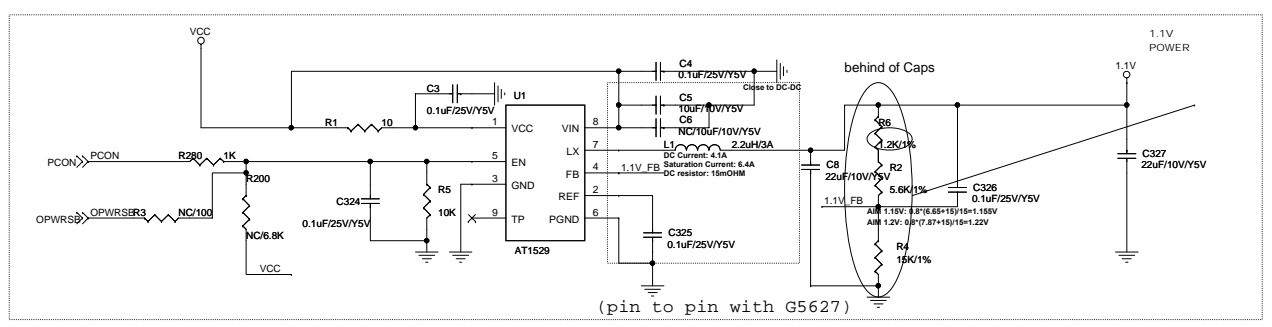
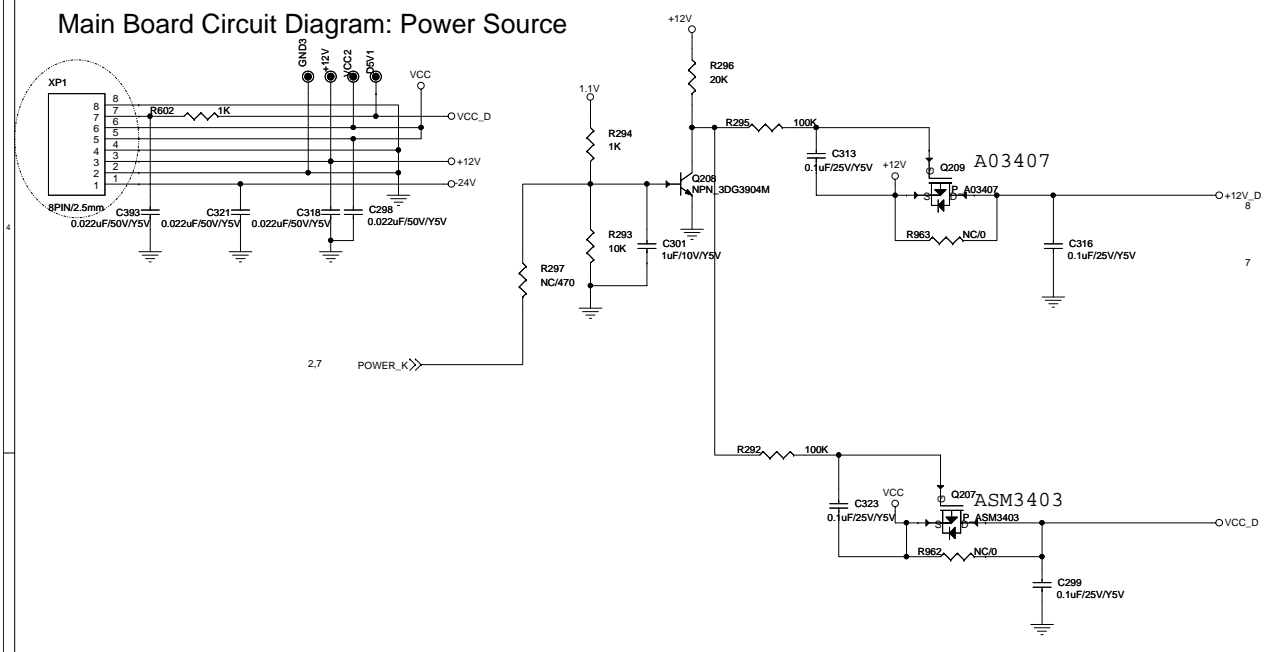


*** CAUTION :**
 THE PARTS MARKED WITH ⚠ ARE IMPORTANT PARTS ON THE SAFETY.
 PLEASE USE THE PARTS HAVING THE DESIGNATED PARTS NUMBER WITHOUT FAIL.

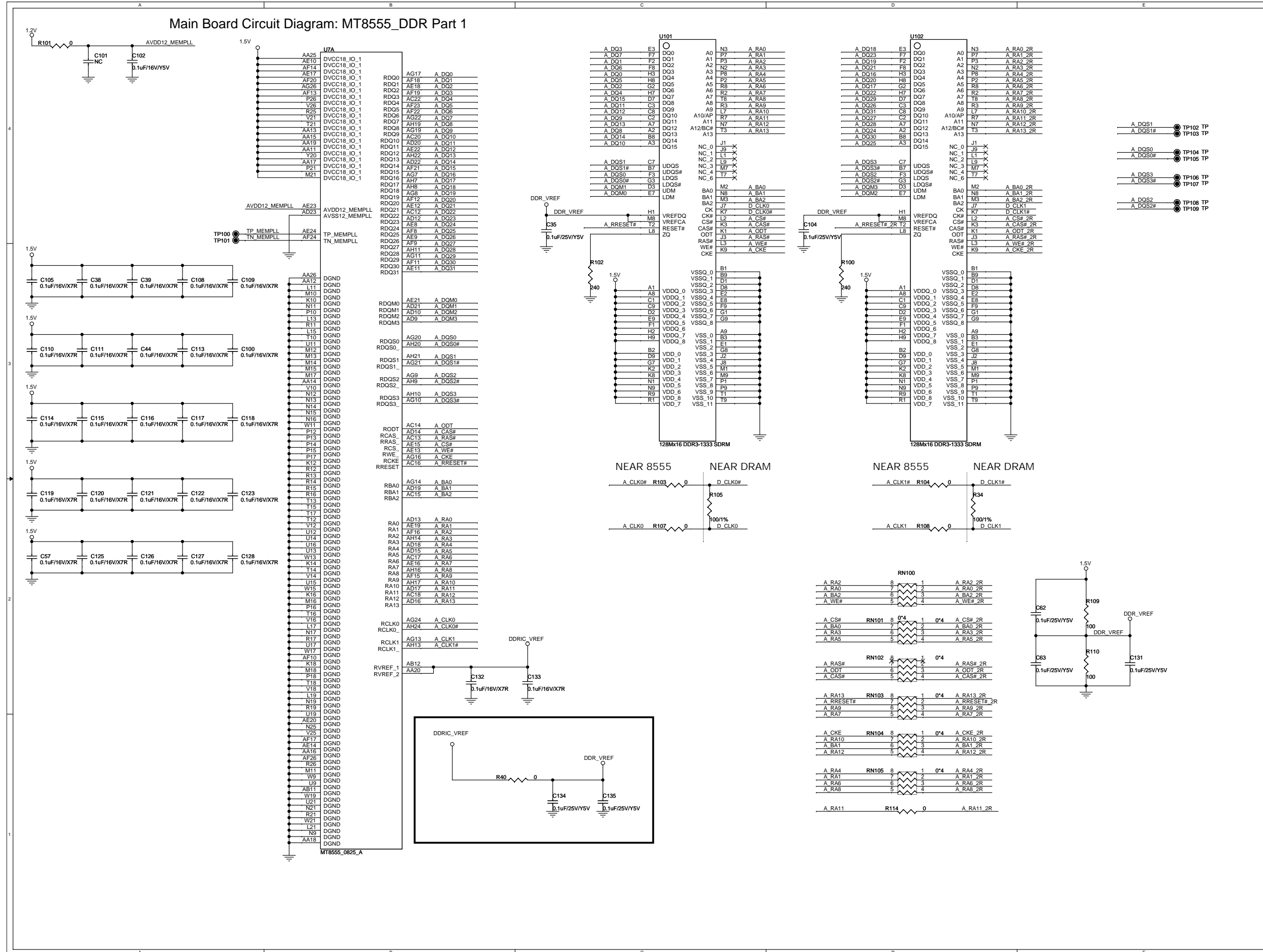
Alternative

BD mode	DVD mode
T501:EF25	T501:EEL19
U501:TNY179P	U501:TNY177P
+12V:	+12V:
D511:HER203	D511:FR107
R514:22/1206	R514:NC
CE506:1000uF/16V	CE506:470uF/25V
CE507:470uF/16V	CE507:220uF/25V
+5V:	+5V:
D510:SR360	D510:NC
CE509:2200uF/16V	CE509:1000uF/16V
CE510:1000uF/16V	CE510:NC
CE511:1000uF/16V	CE511:470uF/16V

Main Board Circuit Diagram: Power Source

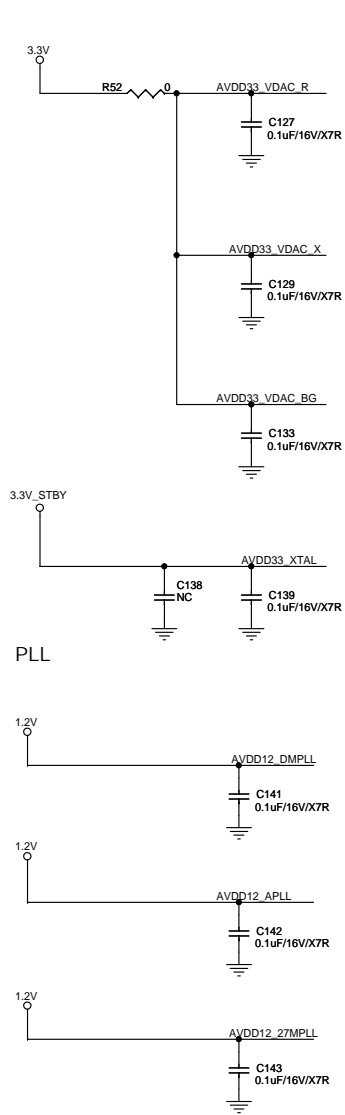


Main Board Circuit Diagram: MT8555_DDR Part 1



Main Board Circuit Diagram: MT8555_HDMI_OUTPUT

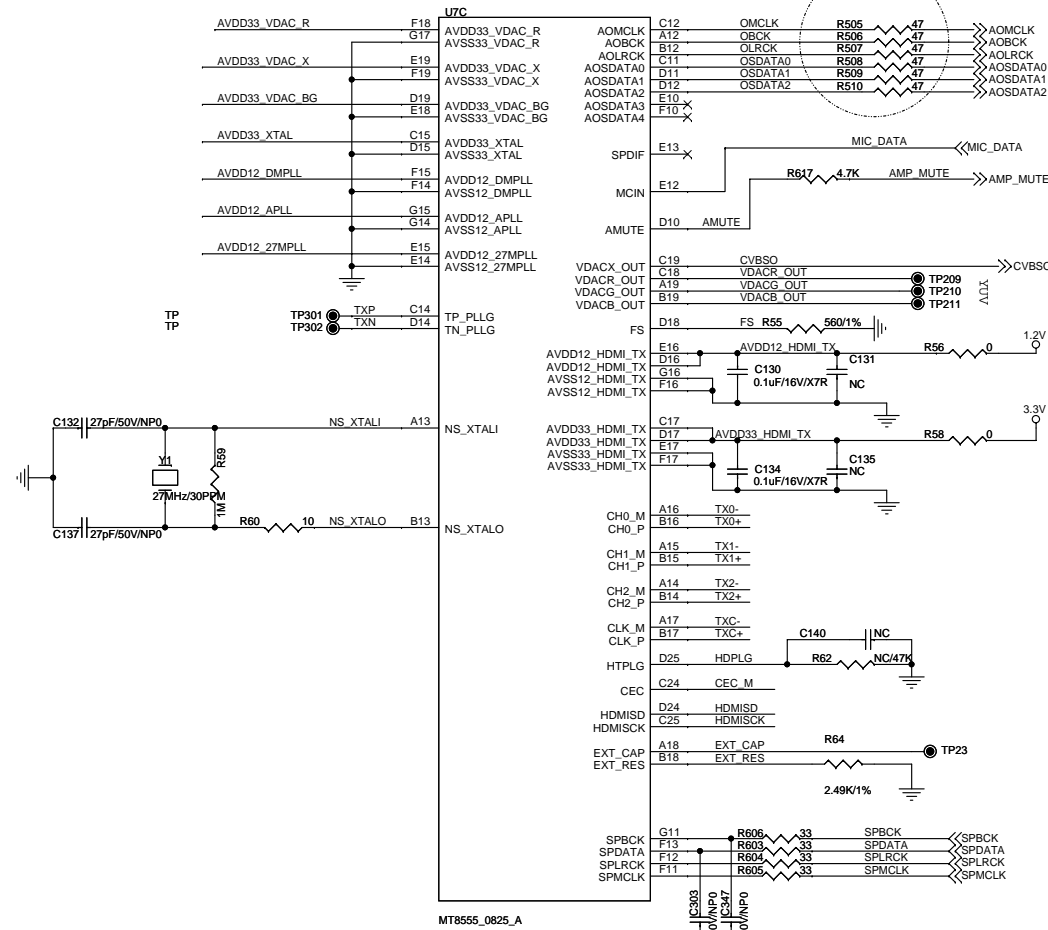
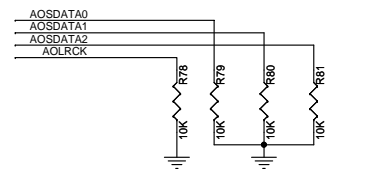
3.3V Analog Power



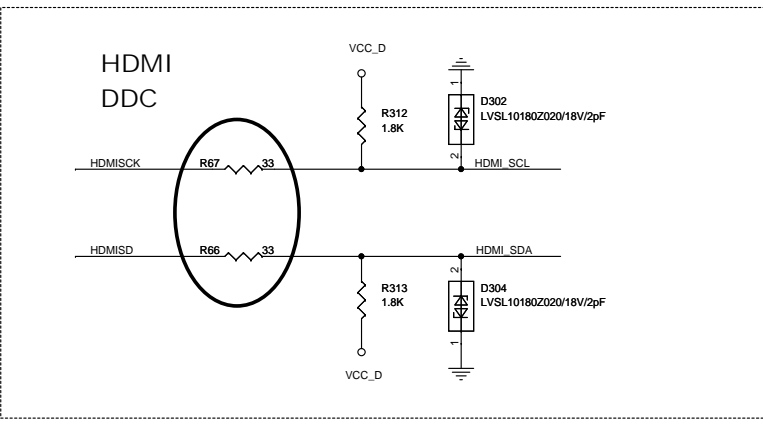
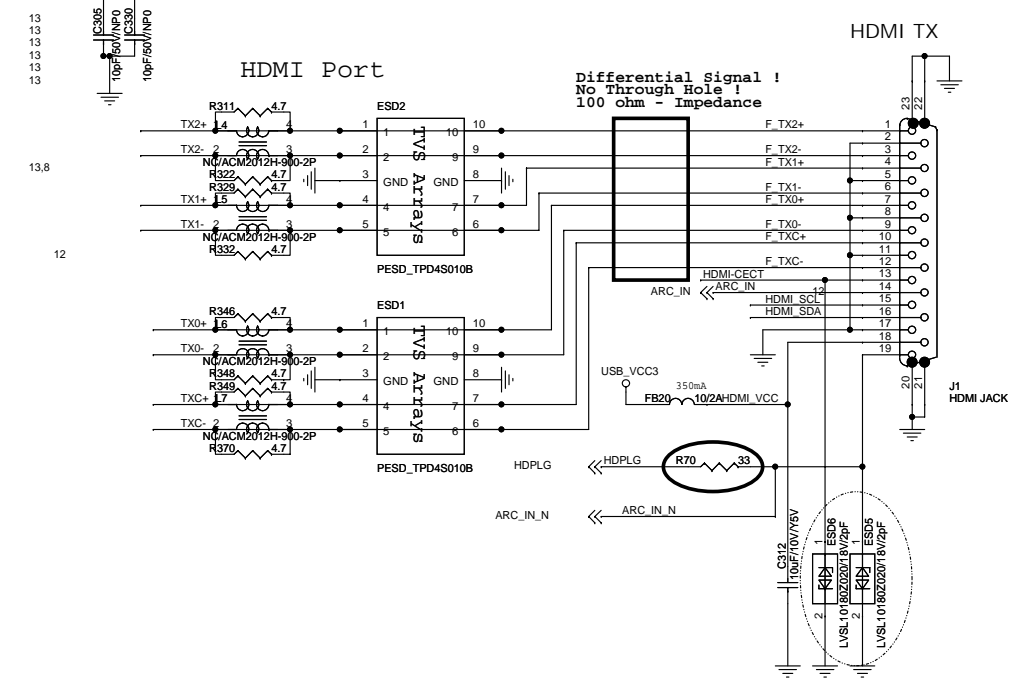
PLL

For PLL testing

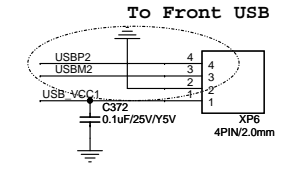
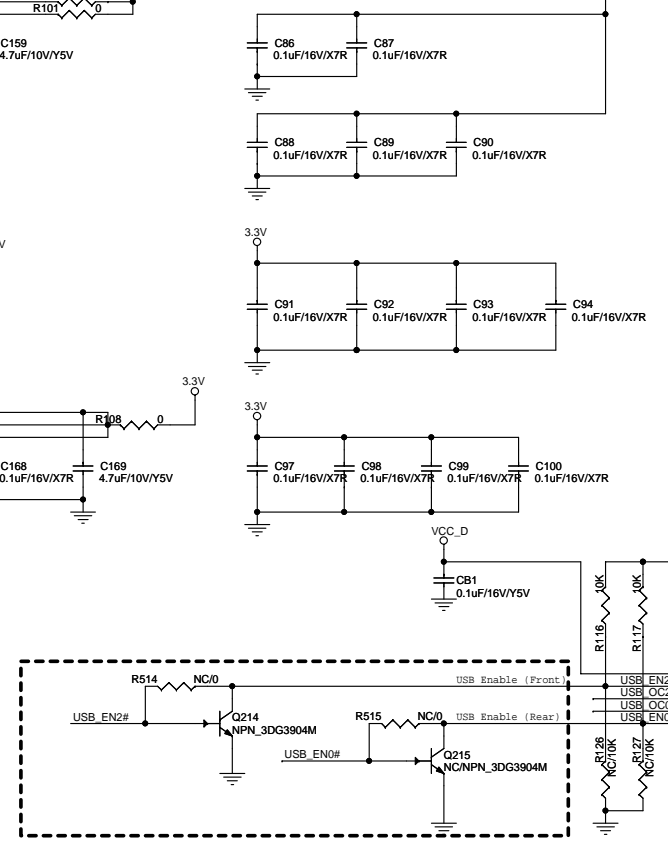
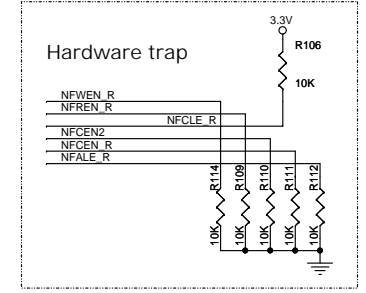
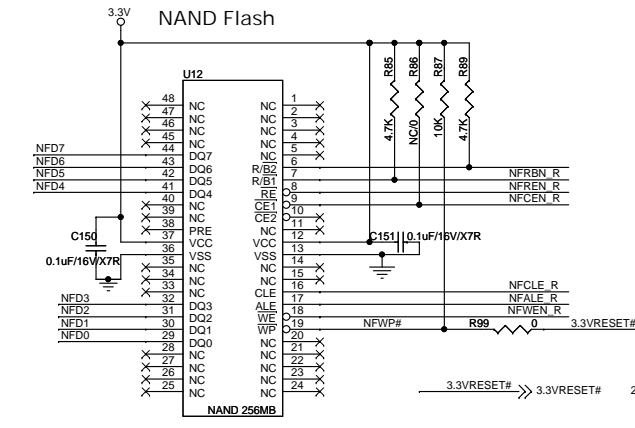
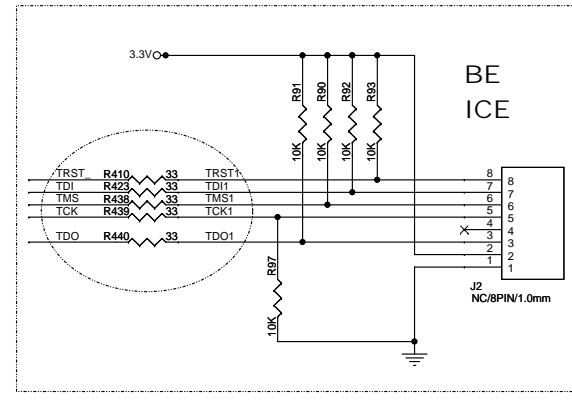
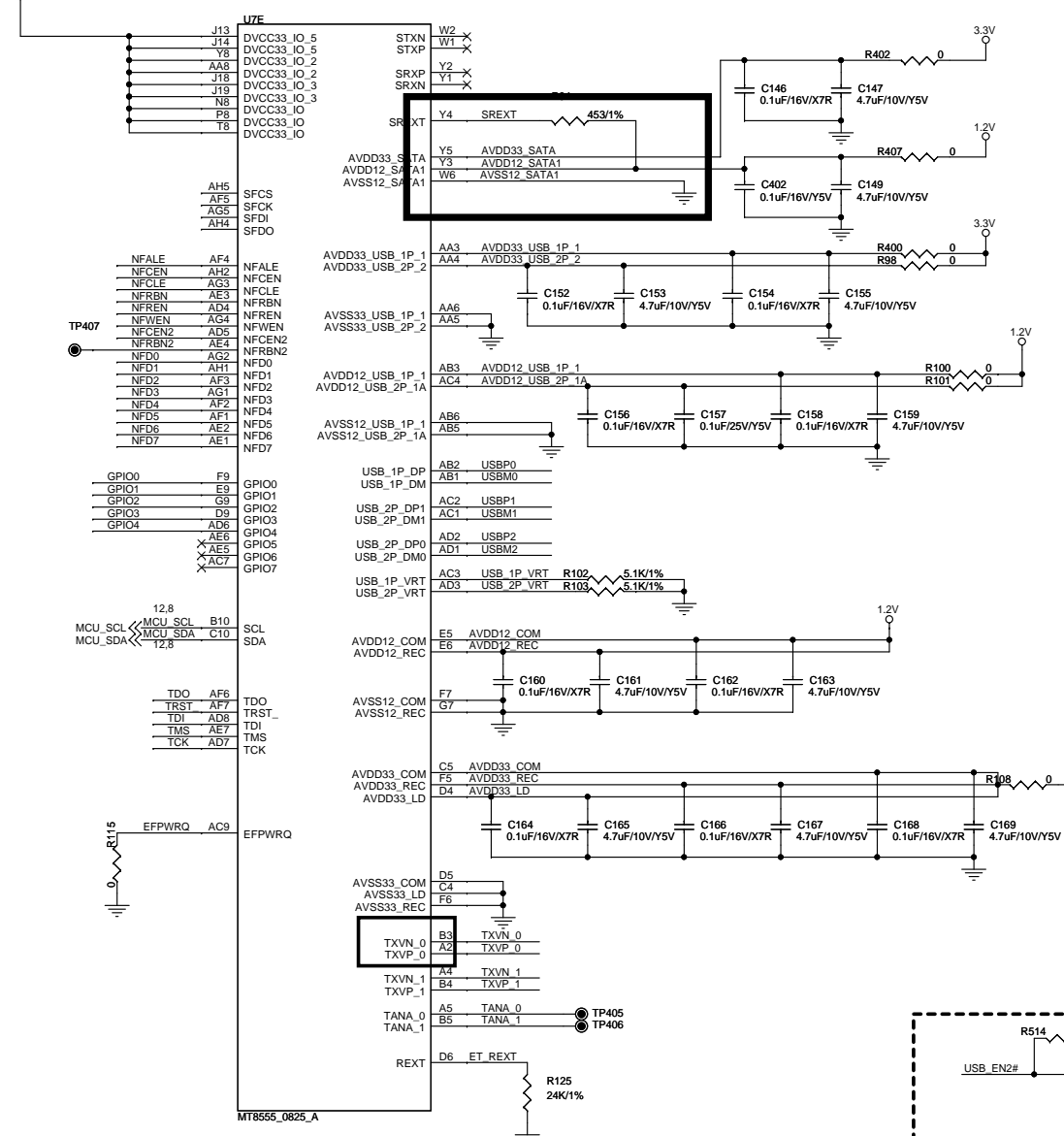
Reserved hardware trap



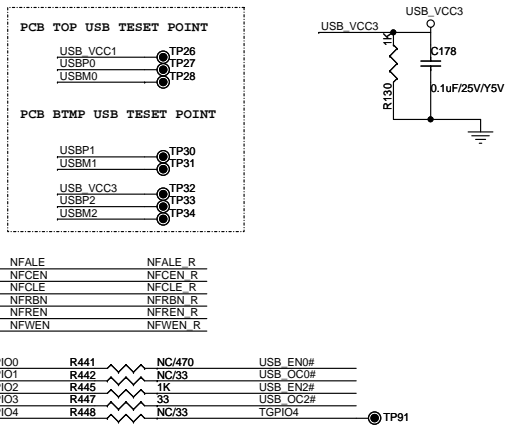
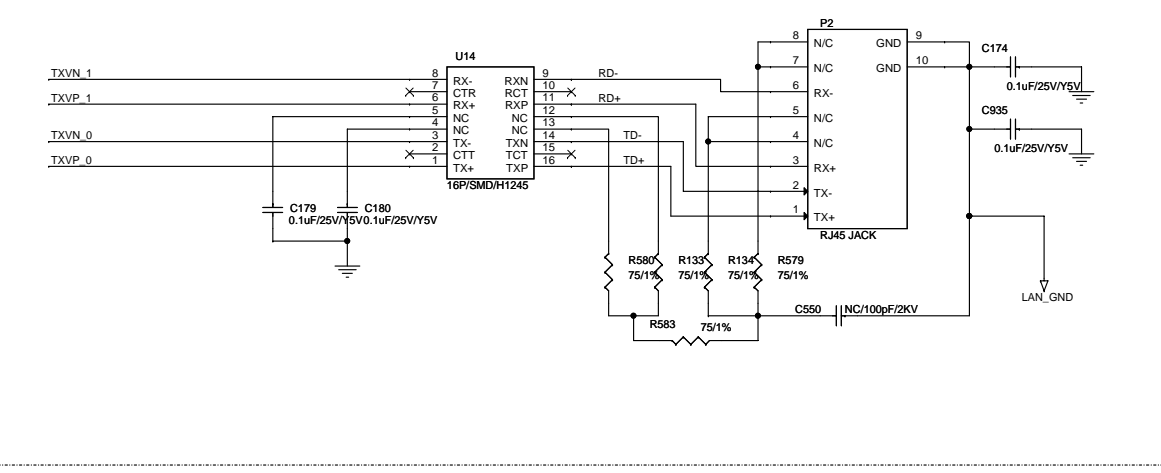
HDMI Port



Main Board Circuit Diagram: MT8555_FLASH



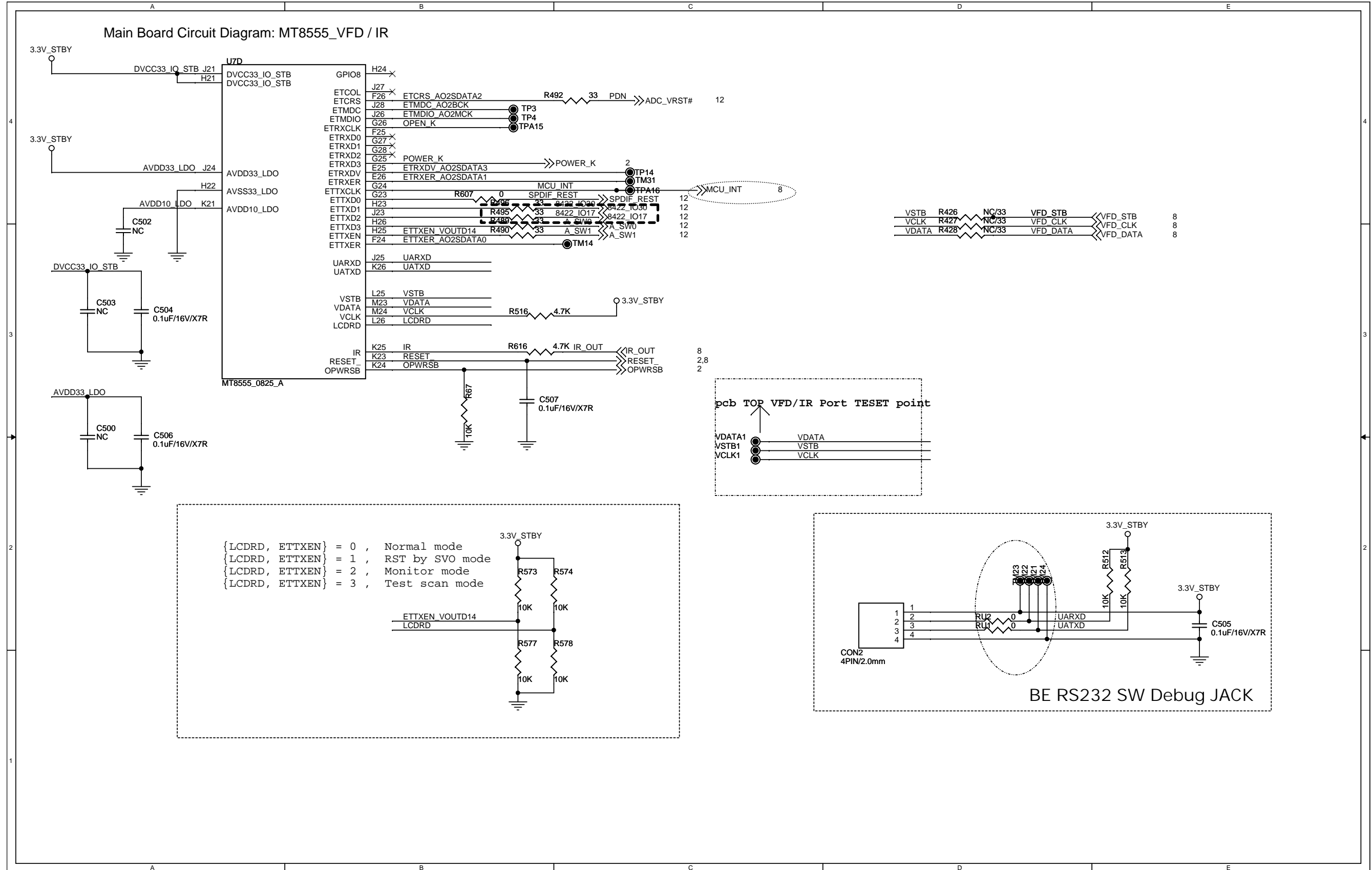
ETHERNET PHY



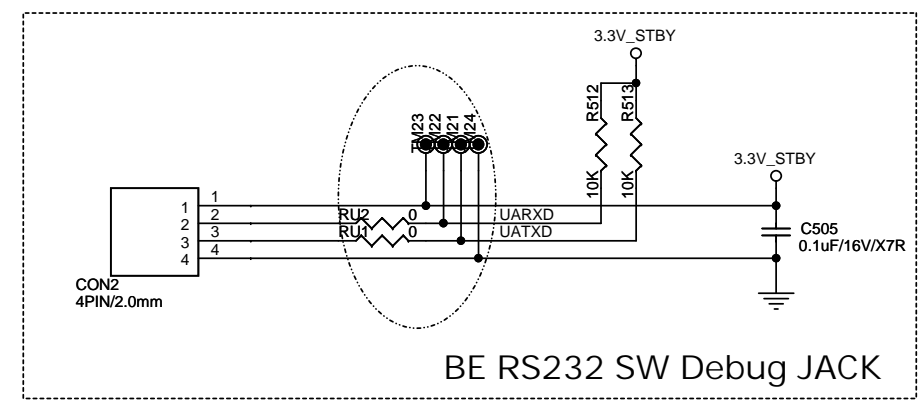
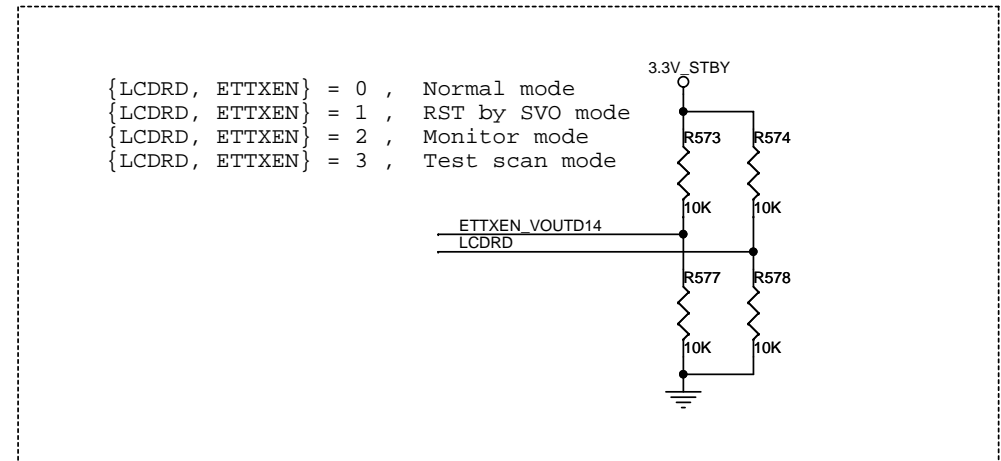
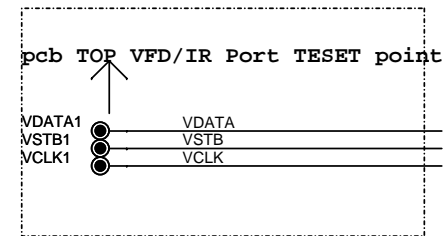
NFALE	NFALE_R
NFCEN	NFCEN_R
NFCLE	NFCLE_R
NFRBN	NFRBN_R
NFRFN	NFRFN_R
NFWEN	NFWEN_R

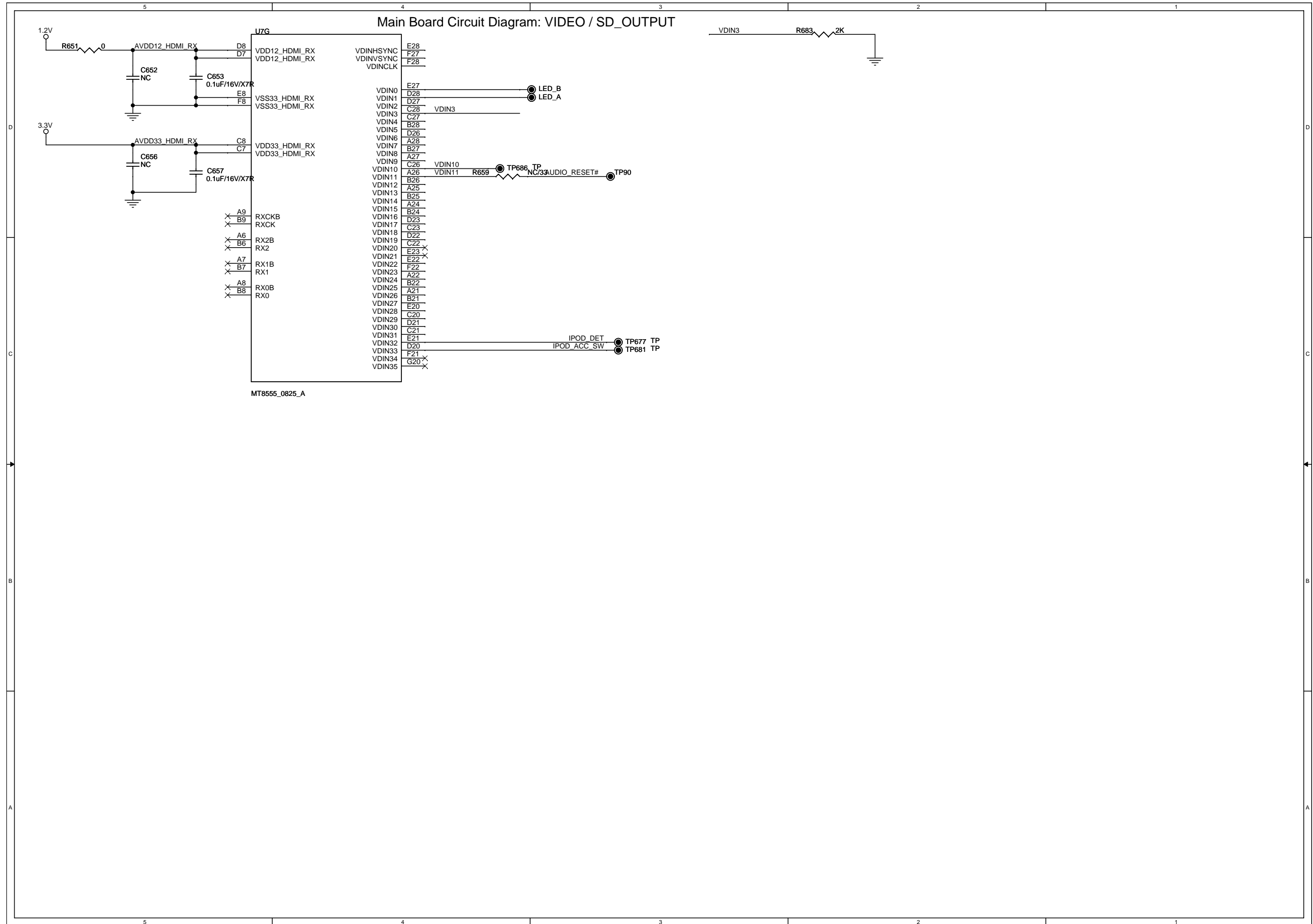
GPIO0	R441	NC/470	USB_EN0#
GPIO1	R442	NC/33	USB_OC0#
GPIO2	R443	1K	USB_EN2#
GPIO3	R444	33	USB_OC2#
GPIO4	R448	NC/33	TGPIO4

Main Board Circuit Diagram: MT8555_VFD / IR

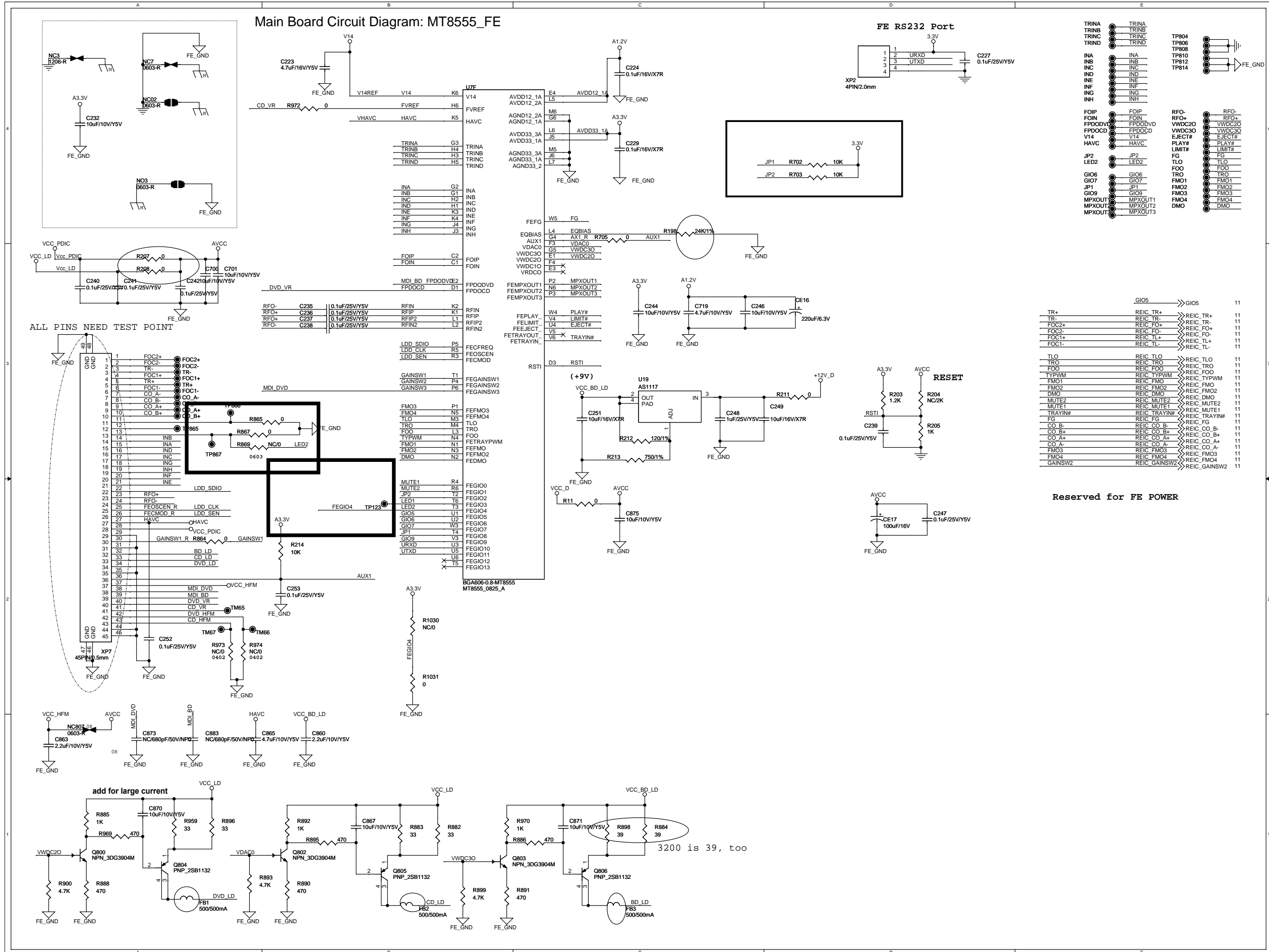


VSTB	R426	NC/33	VFD STB	VFD_STB	8
VCLK	R427	NC/33	VFD_CLK	VFD_CLK	8
VDATA	R428	NC/33	VFD_DATA	VFD_DATA	8





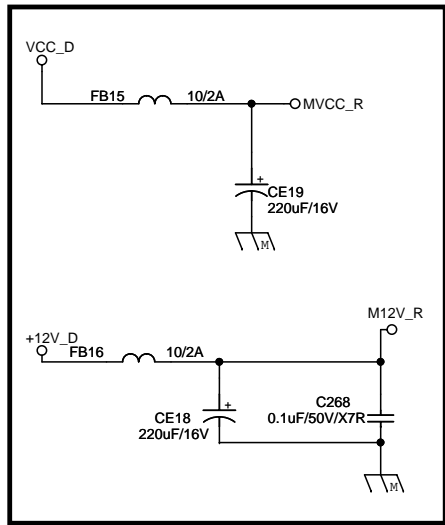
Main Board Circuit Diagram: MT8555_FE



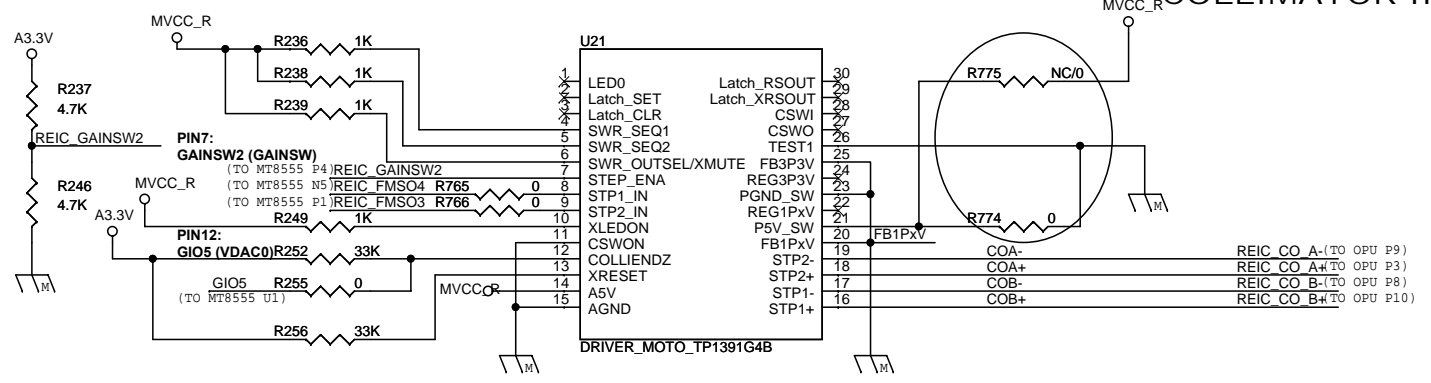
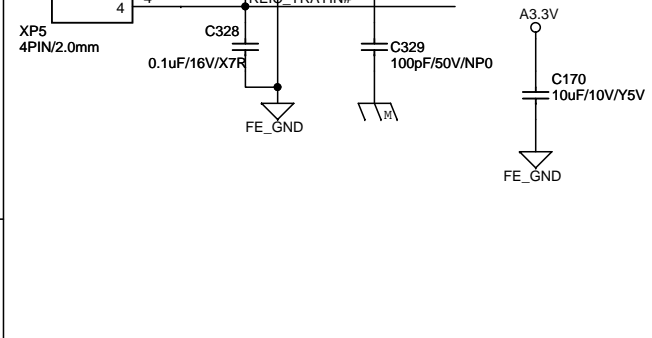
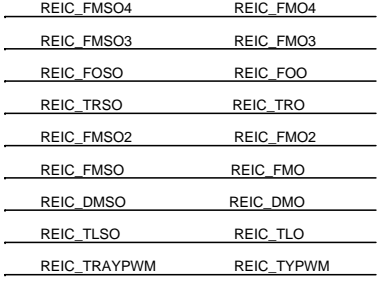
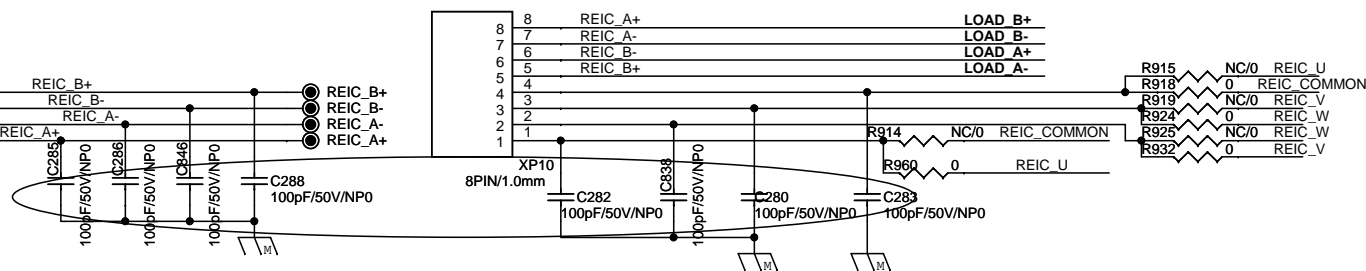
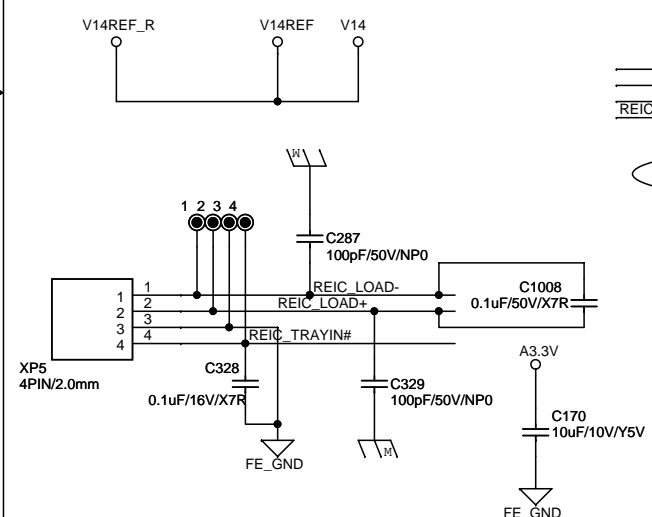
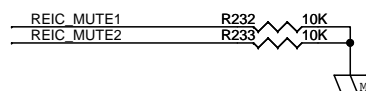
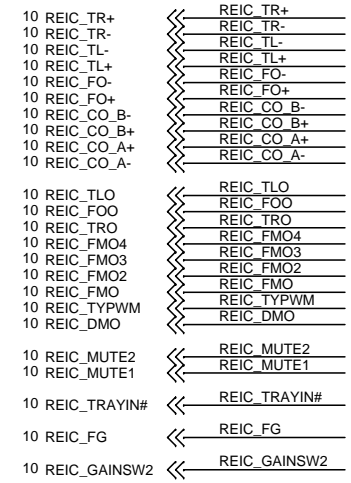
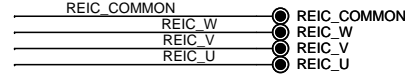
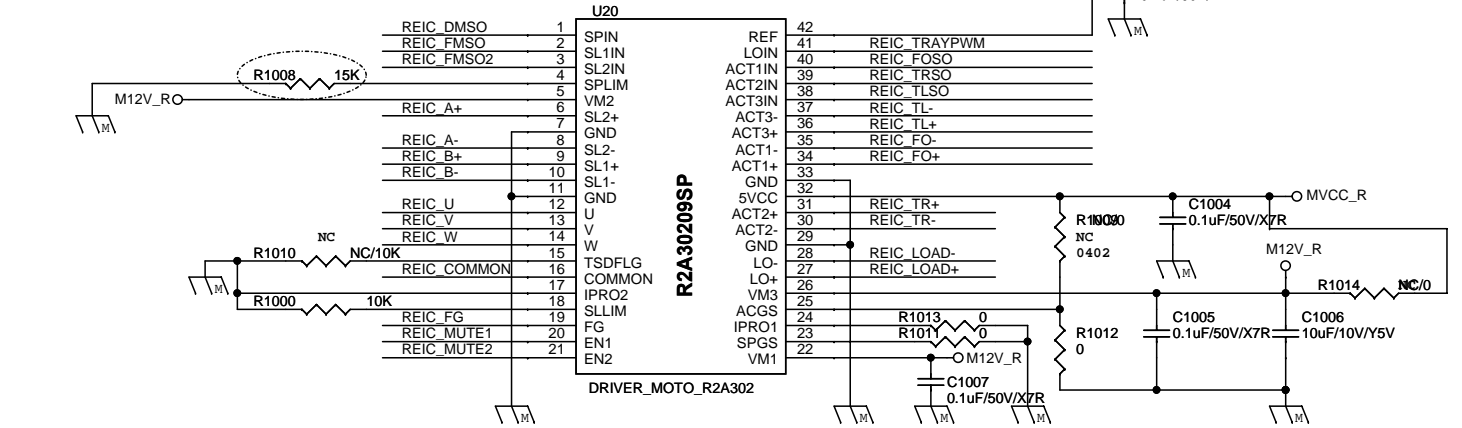
Reserved for FE POWER

3200 is 39, too

Main Board Circuit Diagram: MOTOR_DRIVER

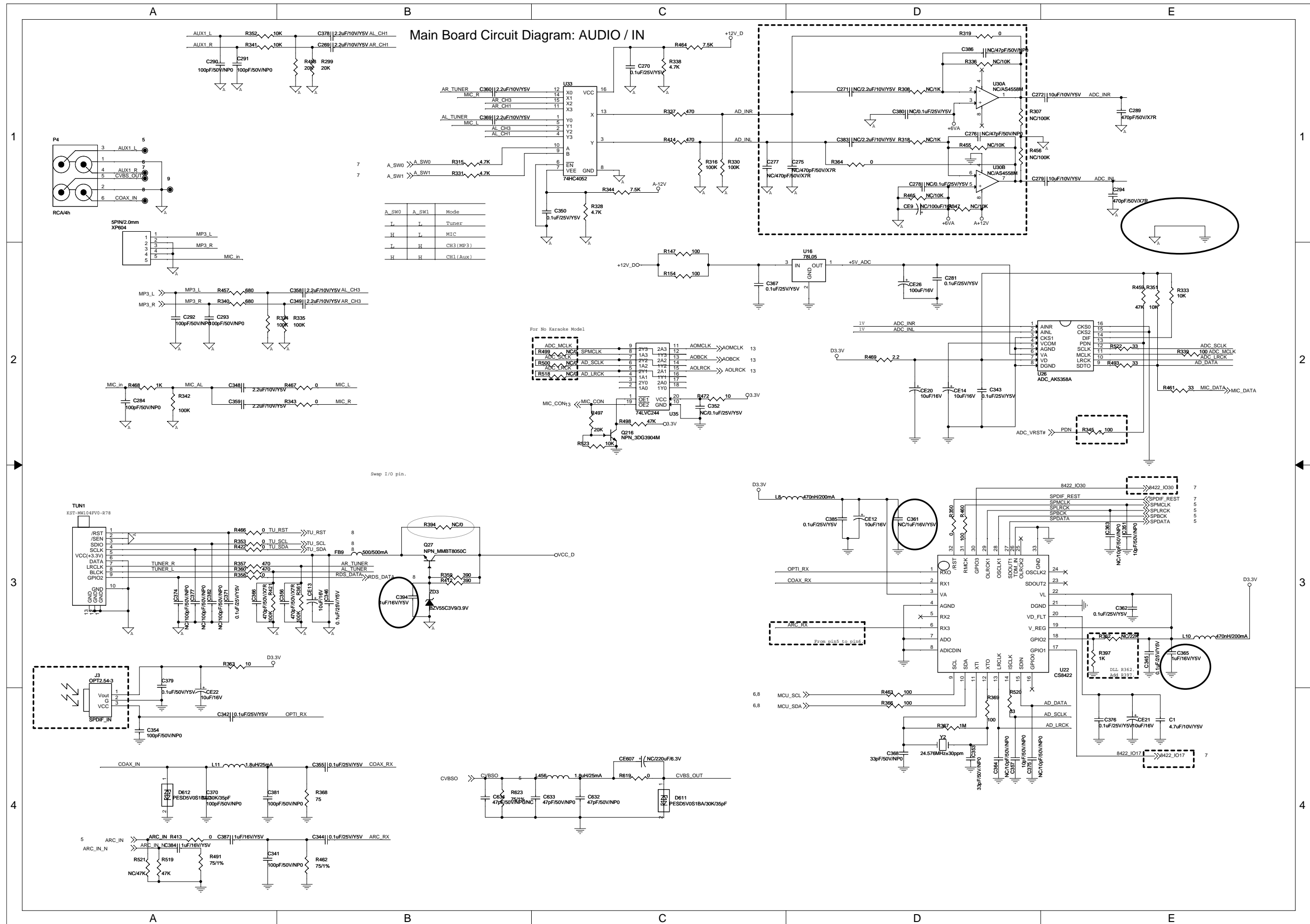


Motor Driver Sensorless



sanyo 414H08	R915	R919	R925	R914	R947	R962	NC
	R918	R924	R932	R960	R946	R961	0 R
Hitach HOP-B1350	R918	R924	R932	R960	R946	R961	NC
	R915	R919	R925	R914	R947	R962	0 R

When use Hitach OPU R863 is 10K



Main Board Circuit Diagram: AMP_OUT

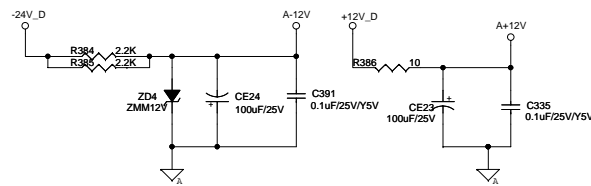
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4

3

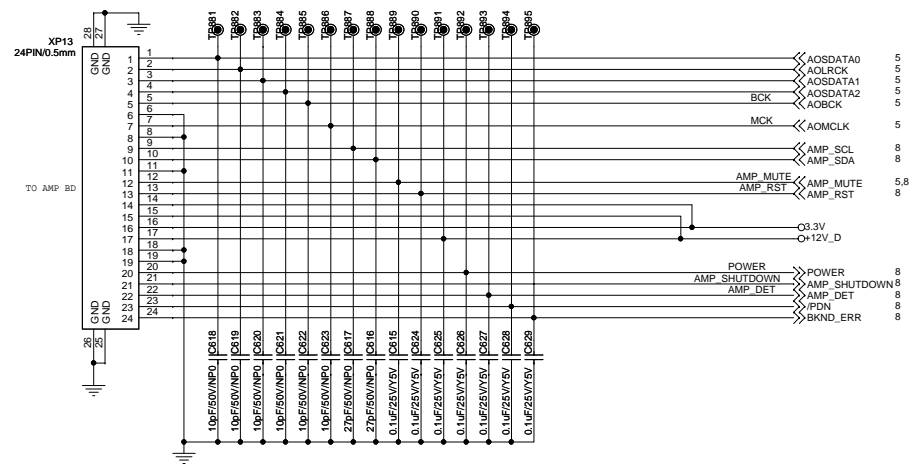
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1



A

A



5

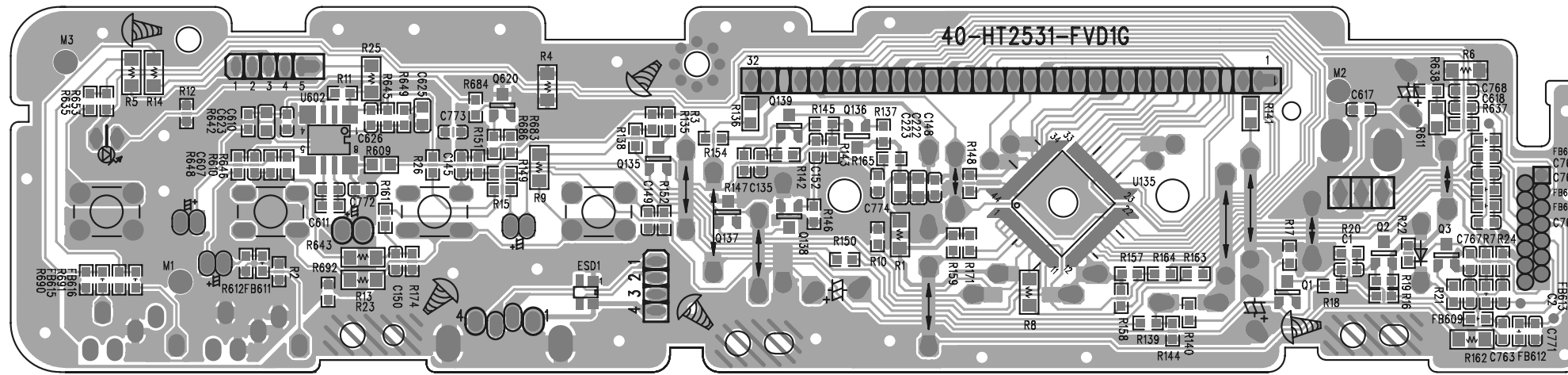
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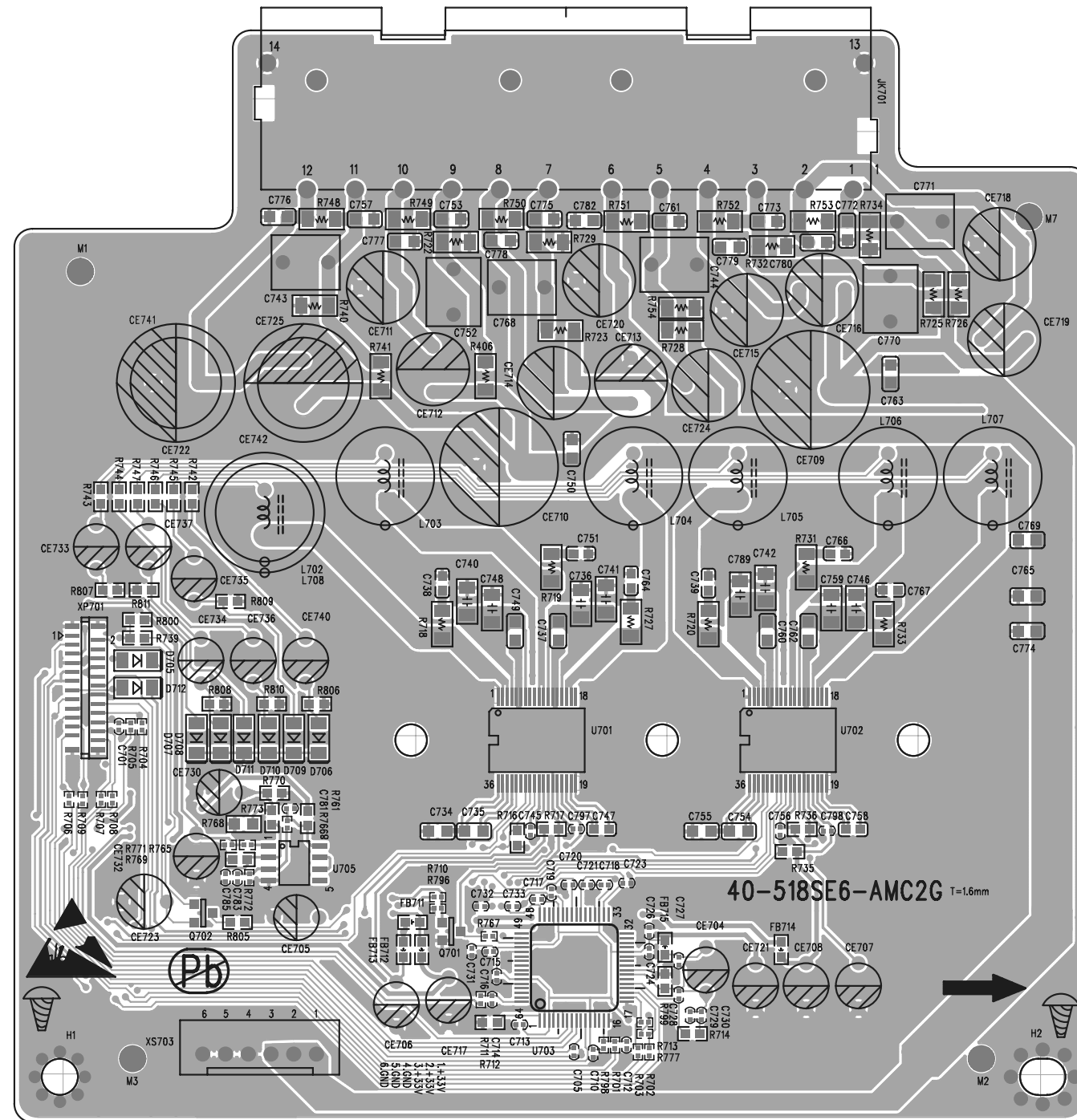
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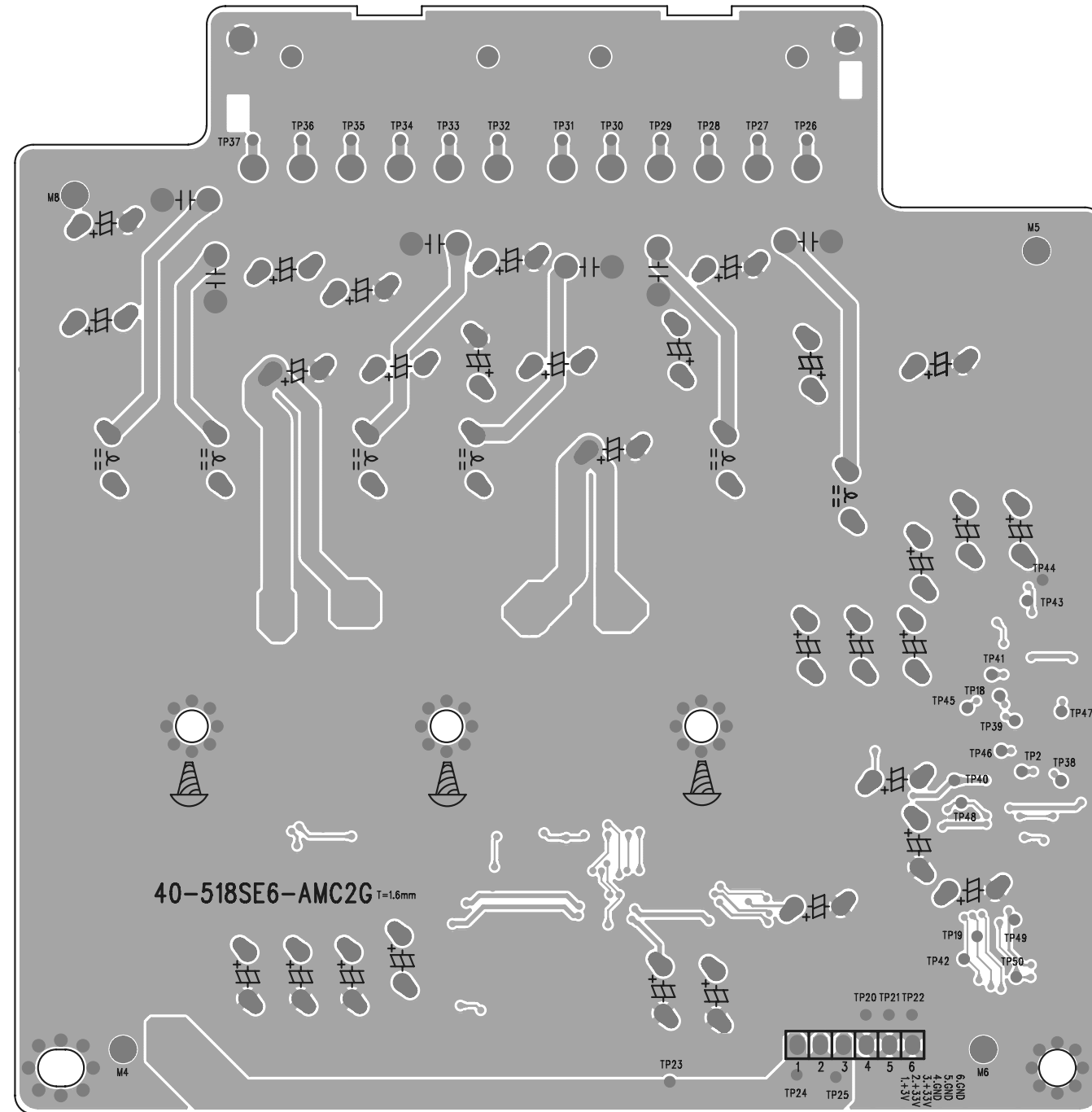
Front Control Board Print-layout (top side):



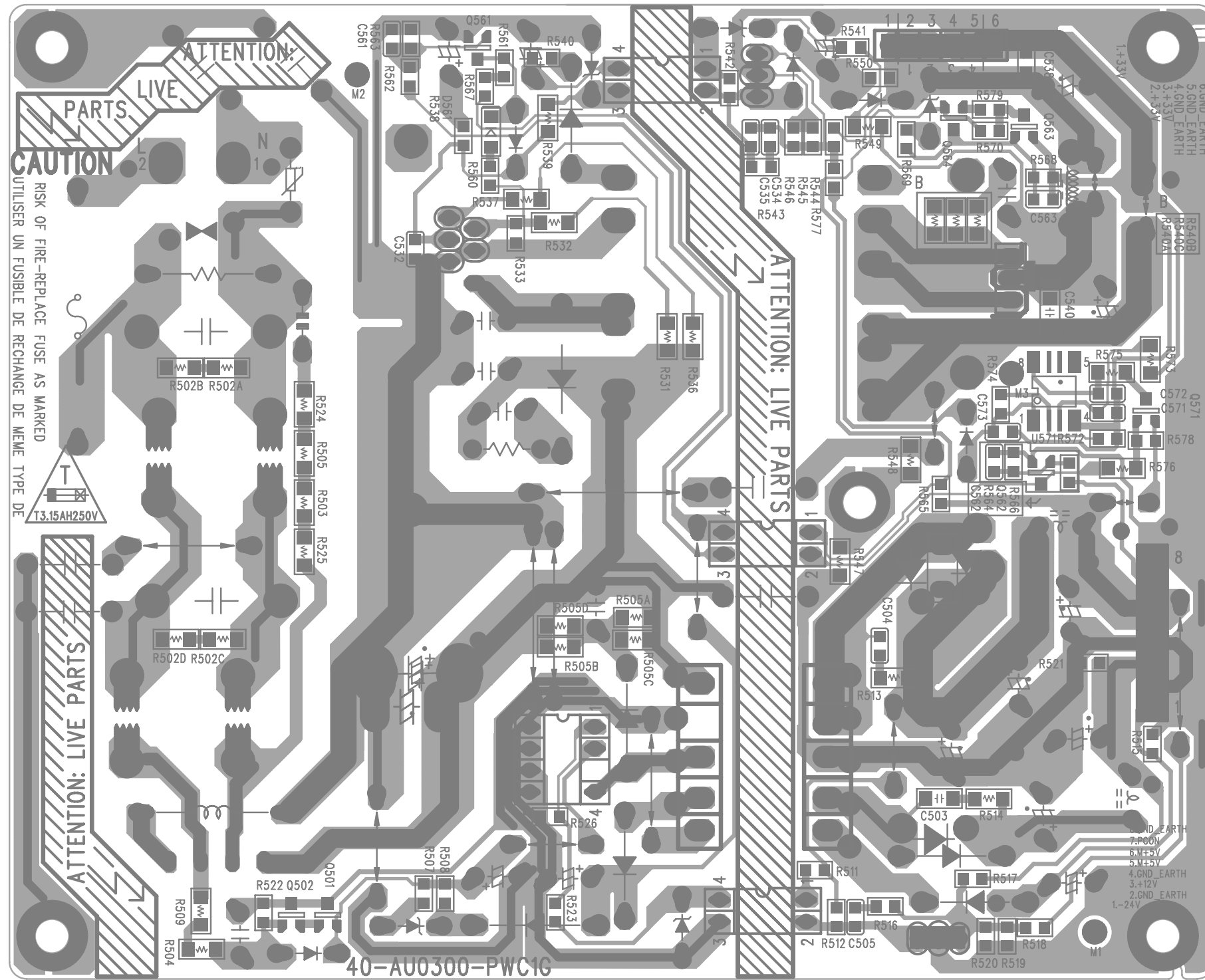
Amplifier Board Print-layout (top side):



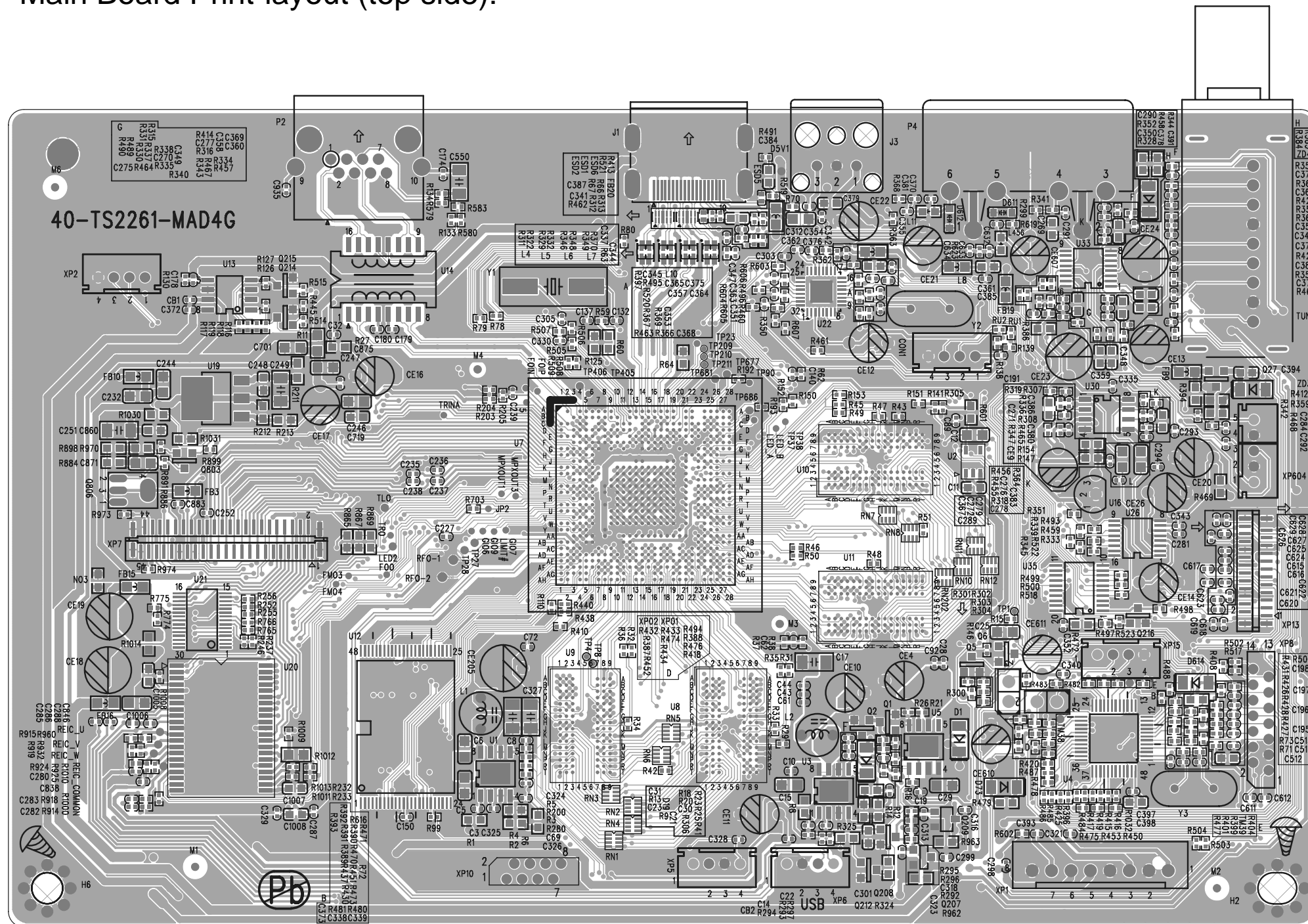
Amplifier Board Print-layout (bottom side):



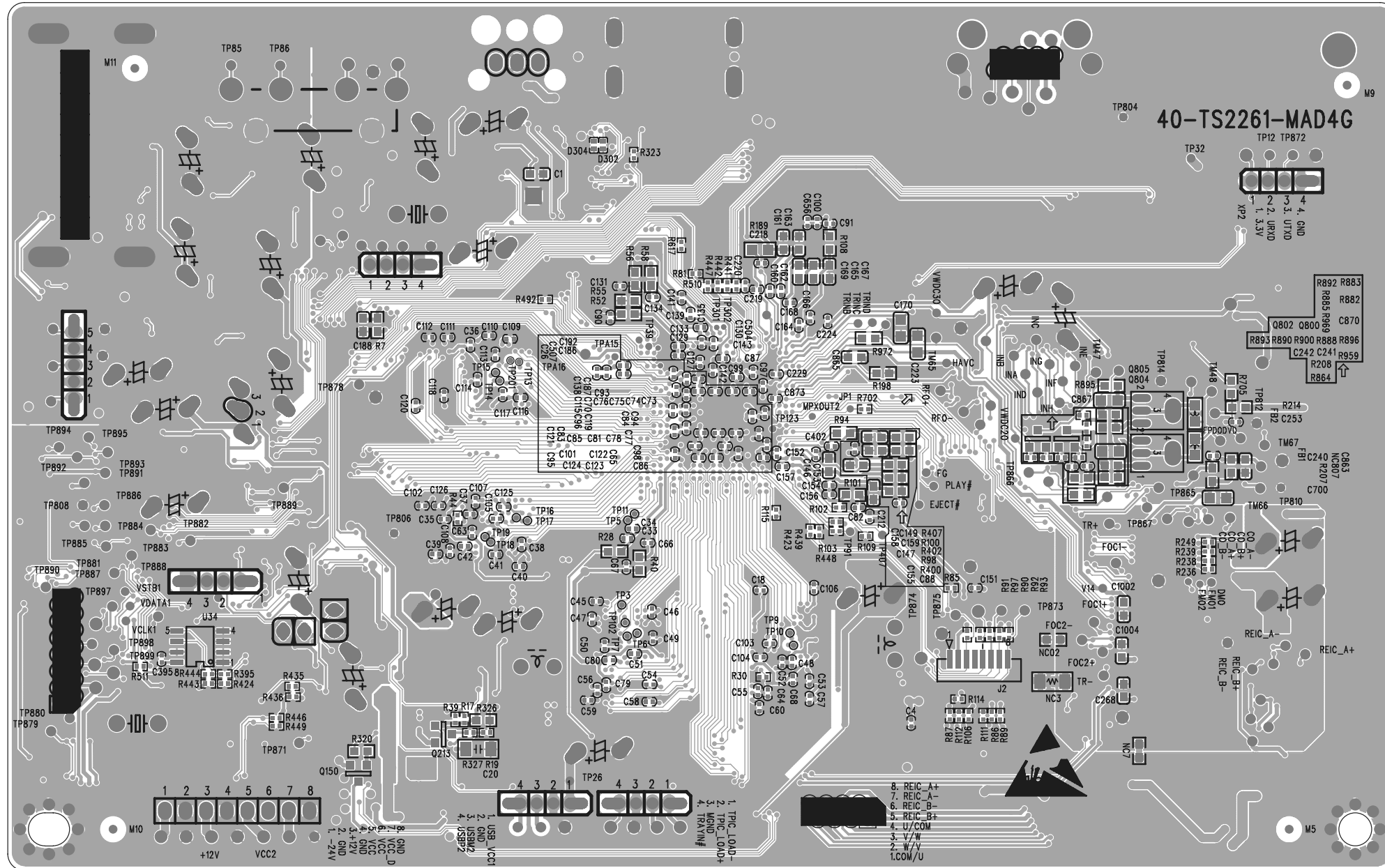
Power Supply Print-layout (top side):



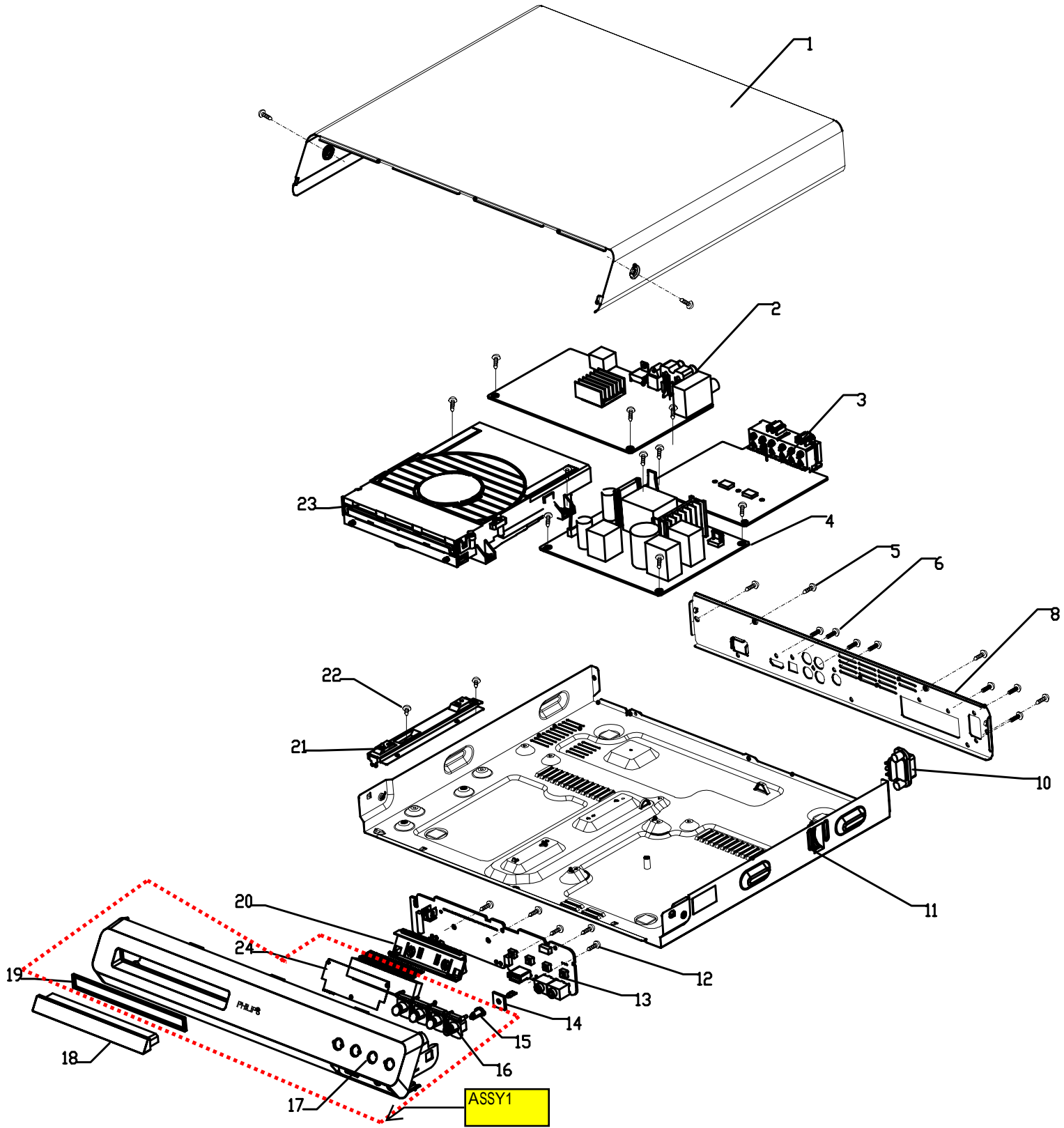
Main Board Print-layout (top side):



Main Board Print-layout (bottom side):



EXPLODED VIEW FOR HTS3541/05/12/51/55/78/93/98/79/X78:



This is general mechanical exploded view .Please refer to the model set for the detailed information.
ASSY1 includes components :15,16,17,19,24

REVISION LIST

Version 1.0

* Initial release for HTS3541/05/12/51/55/78/93/98

Version 1.1

* Initial release for HTS3541/79

Version 1.2

* Initial release for HTS3541X/78