

Service
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Service Manual

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Remark: 1) BDP2600 not need alignment between Blu-ray Loader and Main Board, you can replace the defective loader or Main Board by new one directly.

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**CLASS 1
LASER PRODUCT**

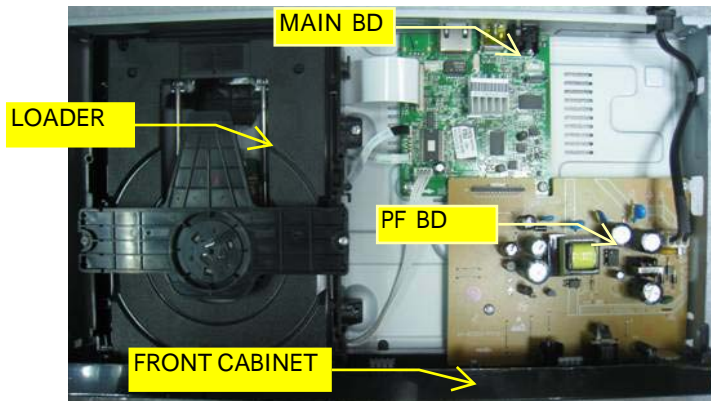
GB 314178536534

Version 1.4



PHILIPS

LOCATION OF PCBS:



VERSION VARIATIONS

| Type / Versions Service Police | | BDP2600 | | | | | | | | BDP2610 |
|-----------------------------------|--|----------------------------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|---------|
| | | /12 | /51 | /94 | /55 | /93 | /F8 | /05 | /98 | /93 |
| Board in used | | | | | | | | | | |
| MAIN BOARD | | M | M | C/M | C/M | C/M | C/M | C | C/M | C/M |
| PF BOARD | | C | C | C | C | C/M | C | C/M | C/M | C/M |
| LOADER | | M | M | M | M | M | M | M | M | M |
| FRONT CABINET | | M | M | M | M | M | M | M | M | M |
| * Tips: | | C -- Component Lever Repair M -- Module Lever Repair X -- Used | | | | | | | | |

Specifications



Note

- Specifications are subject to change without notice

Region code

This player can play discs with the following region codes.

| DVD | Blu-ray | Countries |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---------------|
|   |  | Russia, India |

Playable media

- BD-Video
- DVD-Video, DVD+R/+RW, DVD-R/-RW, DVD+R/-R DL (Dual Layer)
- VCD/SVCD
- Audio CD, CD-R/CD-RW, MP3 media, JPEG files
- DivX (Ultra)/DivX Plus HD media, MKV media
- USB storage device

File format

- Video: .avi, .divx, .mp4, .mkv
- Audio: .mp3, .wav
- Picture: .jpg, .gif, .png

Video

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

Audio

- HDMI output
- Digital output: 0.5 Vp-p (75 ohm)
 - Coaxial
- Sampling frequency:
 - MP3: 32 kHz, 44.1 kHz, 48 kHz
- Constant bit rate:
 - MP3: 112 kbps - 320 kbps

Specifications



Note

- Specifications are subject to change without notice

Region code

This player can play discs with the following region codes.

| DVD | Blu-ray | Countries |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---------------|
|   |  | Russia, India |

USB

- Compatibility: Hi-Speed USB (2.0)
- Class support: USB Mass Storage Class (UMS)
- File system: FAT16, FAT32
- Support HDD (a portable hard drive disc): an external power source may be needed.

Main unit

- Power supply rating: AC 110-240V, 50/60 Hz
- Power consumption: 14 W
- Power consumption in standby mode: < 1 W
- Dimensions (w x h x d): 360 x 44 x 210 (mm)
- Net Weight: 1.26 kg

Accessories supplied

- Remote control and a battery
- HDMI cable
- User manual

Laser Specification

- Laser Type (Diode): AlGaInN (BD), AlGaInP (DVD/CD)
- Wave length: 405+7nm/-7nm (BD), 655+10nm/-10nm (DVD), 790+10/-20nm (CD)
- Output power (max ratings): 1.7mW (BD), 0.19mW (DVD), 0.25mW (CD)

2. Safety Instructions, Warnings, Notes, and Abbreviation List

Index of this chapter:

[2.1 Safety Instructions](#)

[2.2 Warnings](#)

[2.3 Notes](#)

[2.4 Abbreviation List](#)

2.1 Safety Instructions

Safety regulations require the following **during** a repair:

- Connect the set to the Mains/AC Power via an isolation transformer (> 800 VA).
- 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, 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 Mains/AC Power lead for external damage.
- Check the strain relief of the Mains/AC Power cord for proper function.
- Check the electrical DC resistance between the Mains/AC Power plug and the secondary side (only for sets that have a Mains/AC Power isolated power supply):
 1. Unplug the Mains/AC Power cord and connect a wire between the two pins of the Mains/AC Power plug.
 2. Set the Mains/AC Power switch to the "on" position (keep the Mains/AC Power cord unplugged!).
 3. Measure the resistance value between the pins of the Mains/AC Power plug and the metal shielding of the tuner or the aerial connection on the set. The reading should be between 4.5 MΩ and 12 MΩ.
 4. Switch "off" the set, and remove the wire between the two pins of the Mains/AC Power plug.
- Check the cabinet for defects, to prevent touching of any inner parts by the customer.

2.2 Warnings

- 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 connected with the same potential as the mass of the set by a wristband with resistance. Keep components and tools also at this same potential.
- Be careful during measurements in the high voltage section.
- Never replace modules or other components while the unit is switched "on".
- When you align the set, use plastic rather than metal tools. This will prevent any short circuits and the danger of a circuit becoming unstable.

2.3 Notes

2.3.1 General

- Measure the voltages and waveforms with regard to the chassis (= tuner) ground (⊥), or hot ground (↗), depending on the tested area of circuitry. The voltages and waveforms shown in the diagrams are indicative. Measure them in the Service Default Mode (see chapter 5) with a colour bar signal and stereo sound (L: 3 kHz, R: 1 kHz unless stated otherwise) and picture carrier at 475.25 MHz for PAL, or 61.25 MHz for NTSC (channel 3).

- Where necessary, measure the waveforms and voltages with (⊥) and without (↗) aerial signal. Measure the voltages in the power supply section both in normal operation (⊥) and in stand-by (↗). These values are indicated by means of the appropriate symbols.

2.3.2 Schematic Notes

- All resistor values are in ohms, and the value multiplier is often used to indicate the decimal point location (e.g. 2K2 indicates 2.2 kΩ).
- Resistor values with no multiplier may be indicated with either an "E" or an "R" (e.g. 220E or 220R indicates 220 Ω).
- All capacitor values are given in micro-farads ($\mu = \times 10^{-6}$), nano-farads ($n = \times 10^{-9}$), or pico-farads ($p = \times 10^{-12}$).
- Capacitor values may also use the value multiplier as the decimal point indication (e.g. 2p2 indicates 2.2 pF).
- An "asterisk" (*) indicates component usage varies. Refer to the diversity tables for the correct values.
- The correct component values are listed in the Spare Parts List. Therefore, always check this list when there is any doubt.

2.3.3 BGA (Ball Grid Array) ICs

Introduction

For more information on how to handle BGA devices, visit this URL: www.atyourservice.ce.philips.com (needs subscription, not available for all regions). After login, select "Magazine", then go to "Repair downloads". Here you will find Information on how to deal with BGA-ICs.

BGA Temperature Profiles

For BGA-ICs, you **must** use the correct temperature-profile, which is coupled to the 12NC. For an overview of these profiles, visit the website www.atyourservice.ce.philips.com (needs subscription, but is not available for all regions)

You will find this and more technical information within the "Magazine", chapter "Repair downloads".

For additional questions please contact your local repair help desk.

2.3.4 Lead-free Soldering

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

- Use only lead-free soldering tin Philips SAC305 with order code 0622 149 00106. If lead-free solder paste is required, please contact the manufacturer of your soldering 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 soldering tin. The solder tool must be able:
 - To reach a solder-tip temperature of at least 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 of 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 increase drastically and flux-fluid will be destroyed. To avoid wear-out of tips, switch "off" unused equipment or reduce heat.
- Mix of lead-free soldering tin/parts with leaded soldering tin/parts is possible but PHILIPS recommends strongly to **avoid** mixed regimes. If this cannot be avoided, carefully clear the solder-joint from old tin and re-solder with new tin.

Safety Instructions, Warnings, Notes, and Abbreviation List

2.3.5 Alternative BOM identification

It should be noted that on the European Service website, "Alternative BOM" is referred to as "Design variant".

The **third digit** in the serial number (example: KX2B0835000001) indicates the number of the alternative B.O.M. (Bill Of Materials) that has been used for producing the specific AV set. In general, it is possible that the same AV model on the market is produced with e.g. two different types of display, coming from two different suppliers. This will then result in sets which have the same CTN (Commercial Type Number; e.g. MCM394/12) but which have a different B.O.M. number.

Also, it is possible that same model on the market is produced with two production centers, however their partslist is the same. In such case, no alternative B.O.M. will be created.

By looking at the third digit of the serial number, one can identify which B.O.M. is used for the set he is working with. If the third digit of the serial number contains the number "1" (example: KX1B033500001), then the set has been manufactured according to B.O.M. number 1. If the third digit is a "2" (example: KX2B033500001), then the set has been produced according to B.O.M. no. 2. This is important for ordering the correct spare parts! For the third digit, the numbers 1...9 and the characters A...Z can be used, so in total: 9 plus 26= 35 different B.O.M.s can be indicated by the third digit of the serial number.

Identification: The bottom line of a type plate gives a 14-digit serial number. Digits 1 and 2 refer to the production centre (e.g. LM is Arts), digit 3 refers to the B.O.M. code, digit 4 refers to the Service version change code, digits 5 and 6 refer to the production year, and digits 7 and 8 refer to production week (in example below it is 2008 week 50). The 6 last digits contain the serial number.



Figure 2-1 Serial number (example)

2.3.6 Module Level Repair (MLR) or Component Level Repair (CLR)

If a board is defective, consult your repair procedure to decide if the board has to be exchanged or if it should be repaired on component level.

If your repair procedure says the board should be exchanged completely, do not solder on the defective board. Otherwise, it cannot be returned to the O.E.M. supplier for back charging!

2.3.7 Practical Service Precautions

- **It makes sense to avoid exposure to electrical shock.** While some sources are expected to have a possible dangerous impact, others of quite high potential are of limited current and are sometimes held in less regard.
- **Always respect voltages.** While some may not be dangerous in themselves, they can cause unexpected reactions that are best avoided. Before reaching into a powered TV set, it is best to test the high voltage insulation. It is easy to do, and is a good service precaution.

2.4 Abbreviation List

| | |
|----------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| 0/6/12 | SCART switch control signal on A/V board. 0 = loop through (AUX to TV), 6 = play 16 : 9 format, 12 = play 4 : 3 format |
| 2DNR | Spatial (2D) Noise Reduction |
| 3DNR | Temporal (3D) Noise Reduction |
| AARA | Automatic Aspect Ratio Adaptation: algorithm that adapts aspect ratio to remove horizontal black bars; keeps the original aspect ratio |
| ACI | Automatic Channel Installation: algorithm that installs TV channels directly from a cable network by means of a predefined TXT page |
| ADC | Analogue to Digital Converter |
| AFC | Automatic Frequency Control: control signal used to tune to the correct frequency |
| AGC | Automatic Gain Control: algorithm that controls the video input of the feature box |
| AM | Amplitude Modulation |
| ANR | Automatic Noise Reduction: one of the algorithms of Auto TV |
| AP | Asia Pacific |
| AR | Aspect Ratio: 4 by 3 or 16 by 9 |
| ASF | Auto Screen Fit: algorithm that adapts aspect ratio to remove horizontal black bars without discarding video information |
| ATSC | Advanced Television Systems Committee, the digital TV standard in the USA |
| ATV | See Auto TV |
| Auto TV | A hardware and software control system that measures picture content, and adapts image parameters in a dynamic way |
| AV | External Audio Video |
| AVC | Audio Video Controller |
| AVIP | Audio Video Input Processor |
| B/G | Monochrome TV system. Sound carrier distance is 5.5 MHz |
| BLR | Board-Level Repair |
| BTSC | Broadcast Television Standard Committee. Multiplex FM stereo sound system, originating from the USA and used e.g. in LATAM and AP-NTSC countries |
| B-TXT | Blue Teletext |
| C | Centre channel (audio) |
| CEC | Consumer Electronics Control bus: remote control bus on HDMI connections |
| CL | Constant Level: audio output to connect with an external amplifier |
| CLR | Component Level Repair |
| COLUMBUS | COLOR LUMinance Baseband Universal Sub-system |
| ComPair | Computer aided rePair |
| CP | Connected Planet / Copy Protection |
| CSM | Customer Service Mode |
| CTI | Color Transient Improvement: manipulates steepness of chroma transients |
| CVBS | Composite Video Blanking and Synchronization |
| DAC | Digital to Analogue Converter |
| DBE | Dynamic Bass Enhancement: extra low frequency amplification |
| DDC | See "E-DDC" |

Safety Instructions, Warnings, Notes, and Abbreviation List

| | | | |
|------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| D/K | Monochrome TV system. Sound carrier distance is 6.5 MHz | | lines. The fields are written in "pairs", causing line flicker. |
| DFI | Dynamic Frame Insertion | IR | Infra Red |
| DFU | Directions For Use: owner's manual | IRQ | Interrupt Request |
| DMR | Digital Media Reader: card reader | ITU-656 | The ITU Radio communication Sector (ITU-R) is a standards body |
| DMSD | Digital Multi Standard Decoding | | subcommittee of the International Telecommunication Union relating to radio communication. ITU-656 (a.k.a. SDI), is a digitized video format used for broadcast grade video. |
| DNM | Digital Natural Motion | | Uncompressed digital component or digital composite signals can be used. The SDI signal is self-synchronizing, uses 8 bit or 10 bit data words, and has a maximum data rate of 270 Mbit/s, with a minimum bandwidth of 135 MHz. |
| DNR | Digital Noise Reduction: noise reduction feature of the set | | |
| DRAM | Dynamic RAM | | |
| DRM | Digital Rights Management | | |
| DSP | Digital Signal Processing | | |
| DST | Dealer Service Tool: special remote control designed for service technicians | | |
| DTCP | Digital Transmission Content Protection; A protocol for protecting digital audio/video content that is traversing a high speed serial bus, such as IEEE-1394 | ITV | Institutional TeleVision; TV sets for hotels, hospitals etc. |
| DVB-C | Digital Video Broadcast - Cable | JOP | Jaguar Output Processor |
| DVB-T | Digital Video Broadcast - Terrestrial | LS | Last Status; The settings last chosen by the customer and read and stored in RAM or in the NVM. They are called at start-up of the set to configure it according to the customer's preferences |
| DVD | Digital Versatile Disc | | Latin America |
| DVI(-d) | Digital Visual Interface (d= digital only) | | Liquid Crystal Display |
| E-DDC | Enhanced Display Data Channel (VESA standard for communication channel and display). Using E-DDC, the video source can read the EDID information from the display. | LCD | |
| EDID | Extended Display Identification Data (VESA standard) | LED | Light Emitting Diode |
| EEPROM | Electrically Erasable and Programmable Read Only Memory | L/L' | Monochrome TV system. Sound carrier distance is 6.5 MHz. L' is Band I, L is all bands except for Band I |
| EMI | Electro Magnetic Interference | LORE | Local Regression approximation |
| EPLD | Erasable Programmable Logic Device | | noise reduction |
| EU | Europe | LPL | LG.Philips LCD (supplier) |
| EXT | EXternal (source), entering the set by SCART or by cinches (jacks) | LS | Loudspeaker |
| FBL | Fast BLanking: DC signal accompanying RGB signals | LVDS | Low Voltage Differential Signalling |
| FDS | Full Dual Screen (same as FDW) | Mbps | Mega bits per second |
| FDW | Full Dual Window (same as FDS) | M/N | Monochrome TV system. Sound carrier distance is 4.5 MHz |
| FLASH | FLASH memory | MIPS | Microprocessor without Interlocked Pipeline-Stages; A RISC-based microprocessor |
| FM | Field Memory or Frequency Modulation | MOP | Matrix Output Processor |
| FPGA | Field-Programmable Gate Array | MOSFET | Metal Oxide Silicon Field Effect Transistor, switching device |
| FTV | Flat TeleVision | | |
| Gb/s | Giga bits per second | MPEG | Motion Pictures Experts Group |
| G-TXT | Green TeleteXT | MPIF | Multi Platform InterFace |
| H | H_sync to the module | MUTE | MUTE Line |
| HD | High Definition | NC | Not Connected |
| HDD | Hard Disk Drive | NICAM | Near Instantaneous Compounded Audio Multiplexing. This is a digital sound system, mainly used in Europe. |
| HDCP | High-bandwidth Digital Content Protection: A "key" encoded into the HDMI/DVI signal that prevents video data piracy. If a source is HDCP coded and connected via HDMI/DVI without the proper HDCP decoding, the picture is put into a "snow vision" mode or changed to a low resolution. For normal content distribution the source and the display device must be enabled for HDCP "software key" decoding. | NTC | Negative Temperature Coefficient, non-linear resistor |
| HDMI | High Definition Multimedia Interface | NTSC | National Television Standard Committee. Color system mainly used in North America and Japan. Color carrier NTSC M/N= 3.579545 MHz, NTSC 4.43= 4.433619 MHz (this is a VCR norm, it is not transmitted off-air) |
| HP | HeadPhone | | |
| I | Monochrome TV system. Sound carrier distance is 6.0 MHz | NVM | Non-Volatile Memory: IC containing TV related data such as alignments |
| I ² C | Inter IC bus | O/C | Open Circuit |
| I ² D | Inter IC Data bus | OSD | On Screen Display |
| I ² S | Inter IC Sound bus | OTC | On screen display Teletext and Control; also called Artistic (SAA5800) |
| IF | Intermediate Frequency | | |
| Interlaced | Scan mode where two fields are used to form one frame. Each field contains half the number of the total amount of | P50 | Project 50: communication protocol between TV and peripherals |
| | | PAL | Phase Alternating Line. Color system mainly used in West Europe (color carrier= 4.433619 MHz) and South America (color carrier PAL M= |

Safety Instructions, Warnings, Notes, and Abbreviation List

| | | | |
|------------------|----------------------------------------------------------------------------------------------------------------------------------|---------|---------------------------------------------------------------------------------------|
| | 3.575612 MHz and PAL N= 3.582056 MHz) | V | V-sync to the module |
| PCB | Printed Circuit Board (same as "PWB") | VCR | Video Cassette Recorder |
| PCM | Pulse Code Modulation | VESA | Video Electronics Standards Association |
| PDP | Plasma Display Panel | VGA | 640x480 (4:3) |
| PFC | Power Factor Corrector (or Pre-conditioner) | VL | Variable Level out: processed audio output toward external amplifier |
| PIP | Picture In Picture | VSB | Vestigial Side Band; modulation method |
| PLL | Phase Locked Loop. Used for e.g. FST tuning systems. The customer can give directly the desired frequency | WYSIWYR | What You See Is What You Record: record selection that follows main picture and sound |
| POR | Power On Reset, signal to reset the uP | WXGA | 1280x768 (15:9) |
| Progressive Scan | Scan mode where all scan lines are displayed in one frame at the same time, creating a double vertical resolution. | XTAL | Quartz crystal |
| PTC | Positive Temperature Coefficient, non-linear resistor | XGA | 1024x768 (4:3) |
| PWB | Printed Wiring Board (same as "PCB") | Y | Luminance signal |
| PWM | Pulse Width Modulation | Y/C | Luminance (Y) and Chrominance (C) signal |
| QRC | Quasi Resonant Converter | YPbPr | Component video. Luminance and scaled color difference signals (B-Y and R-Y) |
| QTNR | Quality Temporal Noise Reduction | YUV | Component video |
| QVCP | Quality Video Composition Processor | | |
| RAM | Random Access Memory | | |
| RGB | Red, Green, and Blue. The primary color signals for TV. By mixing levels of R, G, and B, all colors (Y/C) are reproduced. | | |
| RC | Remote Control | | |
| RC5 / RC6 | Signal protocol from the remote control receiver | | |
| RESET | RESET signal | | |
| ROM | Read Only Memory | | |
| R-TXT | Red TeleteXT | | |
| SAM | Service Alignment Mode | | |
| S/C | Short Circuit | | |
| SCART | Syndicat des Constructeurs d'Appareils Radiorécepteurs et Téléviseurs | | |
| SCL | Serial Clock I ² C | | |
| SCL-F | CLock Signal on Fast I ² C bus | | |
| SD | Standard Definition | | |
| SDA | Serial Data I ² C | | |
| SDA-F | DAta Signal on Fast I ² C bus | | |
| SDI | Serial Digital Interface, see "ITU-656" | | |
| SDRAM | Synchronous DRAM | | |
| SECAM | SEquence Couleur Avec Mémoire. Color system mainly used in France and East Europe. Color carriers= 4.406250 MHz and 4.250000 MHz | | |
| SIF | Sound Intermediate Frequency | | |
| SMPS | Switched Mode Power Supply | | |
| SoC | System on Chip | | |
| SOG | Sync On Green | | |
| SOPS | Self Oscillating Power Supply | | |
| S/PDIF | Sony Philips Digital InterFace | | |
| SRAM | Static RAM | | |
| SRP | Service Reference Protocol | | |
| SSB | Small Signal Board | | |
| STBY | STand-BY | | |
| SVGA | 800x600 (4:3) | | |
| SVHS | Super Video Home System | | |
| SW | Software | | |
| SWAN | Spatial temporal Weighted Averaging Noise reduction | | |
| SXGA | 1280x1024 | | |
| TFT | Thin Film Transistor | | |
| THD | Total Harmonic Distortion | | |
| TMDs | Transmission Minimized Differential Signalling | | |
| TXT | TeleteXT | | |
| TXT-DW | Dual Window with TeleteXT | | |
| UI | User Interface | | |
| uP | Microprocessor | | |
| UXGA | 1600x1200 (4:3) | | |

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).

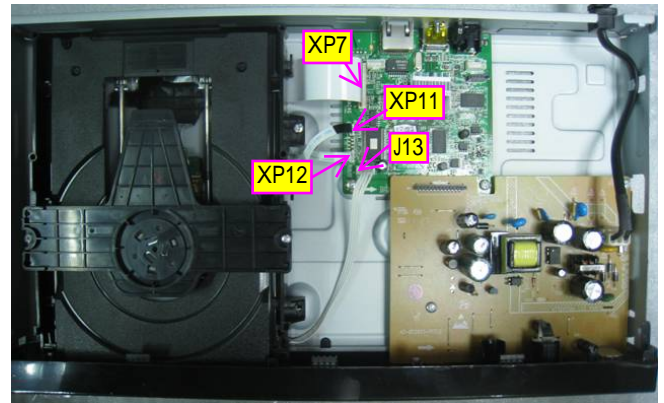


Figure 1

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: If the tray can't open in normal way, you can make it through the instruction as below (Figure 3).

Note: Make sure to operate gently otherwise the guider would be damaged.



Figure 3

Step4: Dismantling Front Panel, need release 2 snaps of Front Panel and 2 snaps of bottom cabinet, then gently pull the Panel out from the set. (Figure 4)



Figure 4

Mechanical and Dismantling Instructions

Dismantling Instruction

Detailed information please refer to the model set.

Step5: Dismantling Loader, disconnect the 4 connectors (XP7, XP11, XP12,J13)(Figure 1) aiming in the below figure, and remove 2 screws that connects the loader and the bottom cabinet. (Figure 5)

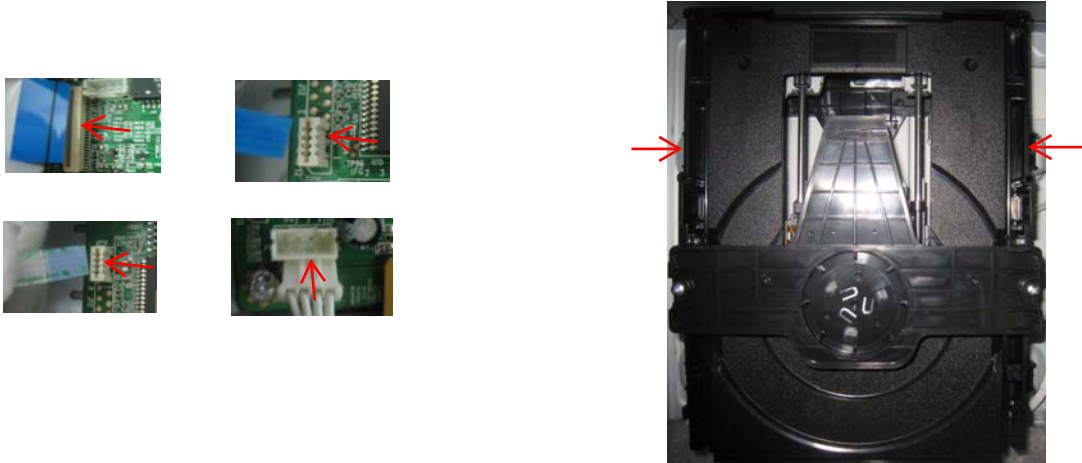


Figure 5

Step6: Dismantling Main Board , remove 4 screws. (Figure 6)

Step7: Remove 2 screws on PF Board at first, then dismantling DuPont connector to dismantle the Power Board from Main Board. (Figure 6)

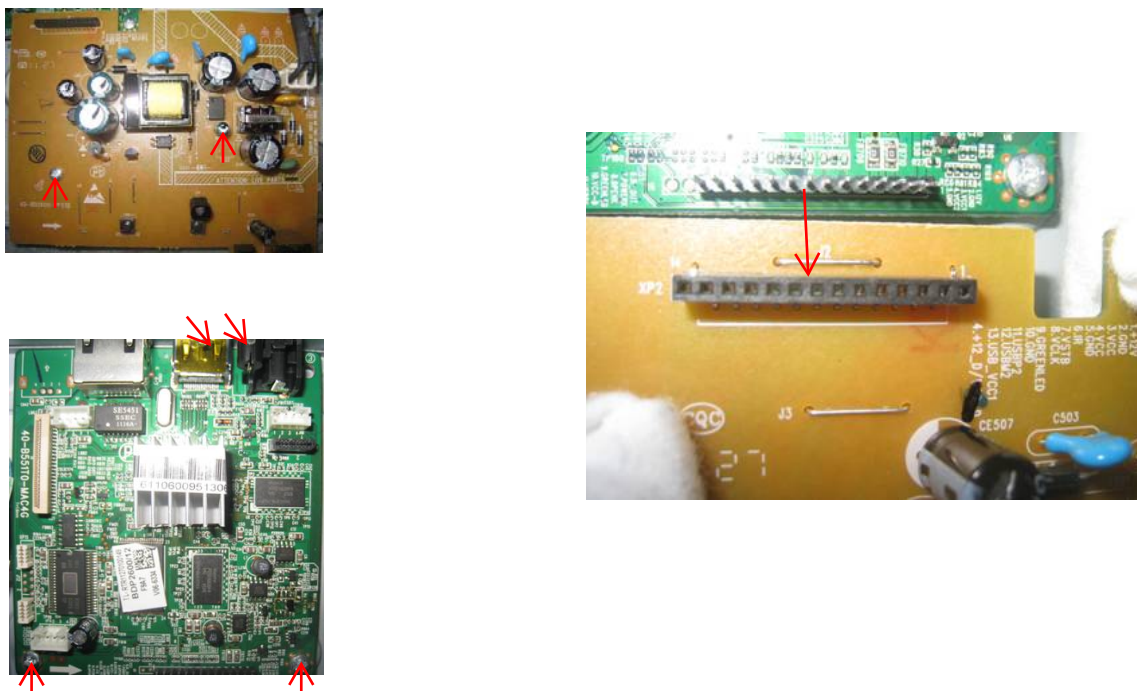


Figure 6

Software check and upgrade

Preparation to upgrade software

- 1) Start the CD burning software & create a folder named "UPG_ALL",
- 2) Then copy the Bin file (unify.bin.bin) into it,
- 3) Burn the data onto the blank CD.

A. Procedure for software upgrade

A) Upgrade software via Disc

- 1) Power on the set and insert the prepared Upgrade CDR.
- 2) The set will start reading disc & response with the following display on TV screen:
Now searching for upgrade software!
Please wait...!

Still

- 3) Press <ok> button to confirm, then screen will display :
Software upgrades for this player have been found, do you upgrade?

Cancel

Start

- 4) Press Right cursor button to choose "Start", then press <OK>;
- 5) The software will upgrade and screen will display as below:
Upgrade is ongoing, Please wait...
Please do not unplug or switch off the device.
- 6) The screen will display as below when upgrading complete:
Upgrade has completed successfully!
Power off after 1s.

Power Off

- 7) Restart the set.

B) Upgrade software via network:

- 1) Setup the network connection (See "Getting started">"Set up network").
- 2) In the Home menu, select <Setup>-<Advanced>-<Software update>-<Network>.
- * You are prompted to start upgrading processes if upgrade media is detected.
- 3) Follow the instructions on the TV screen to confirm update operation.
- * Once software update is complete, this player automatically turns off to standby.
- 4) Disconnect the power cord for a few seconds and connect again to turn on the player.

C) Update software via USB Flash Drive:

- 1) Go to www.philips.com/support to check if the latest software version is available for this player.
- 2) Download the software onto a USB flash drive.
- 3) Insert the USB flash drive to the USB jack of the rear panel.
- 4) In the Home menu, select <Setup>-<Advanced>-<Software Update>-<USB>.
- 5) Follow the instructions on the TV screen to confirm update operation.
- * Once software update is complete, this player automatically turns to standby.
- 6) Disconnect the power cord for a few seconds and connect again to turn on the player.

B. Read out the software versions to confirm upgrading

- 1) Power on the set and open the tray door.
- 2) Press <Home> button on the remote control.
- 3) Select <Setup>, then press <OK>.
- 4) Select <Advanced>, press right cursor to choose <Version Info.>, then press <OK>, the software version and other information will display on the TV screen as below:

Model:BDP2XXX

Versions

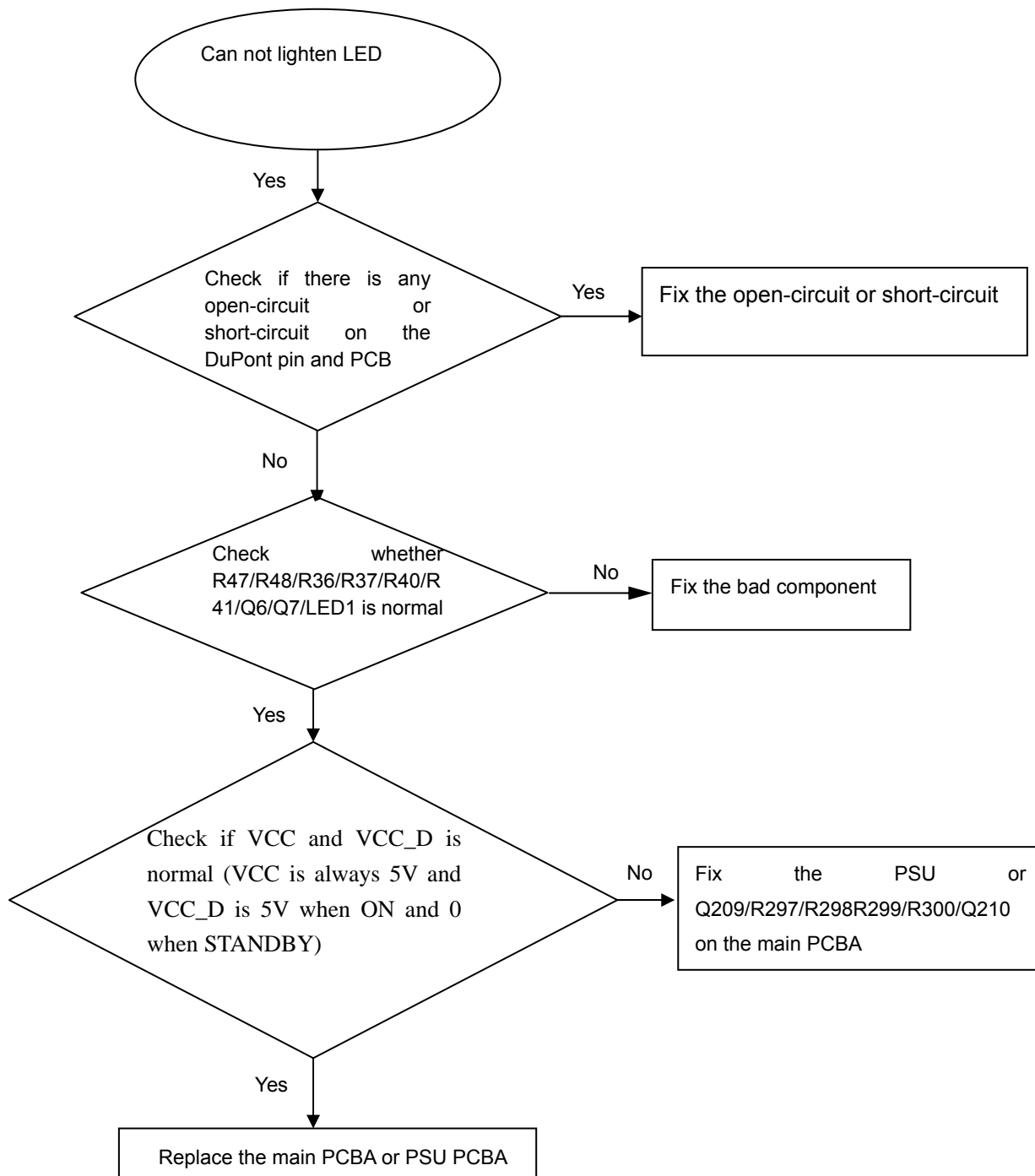
System SW:X.XX

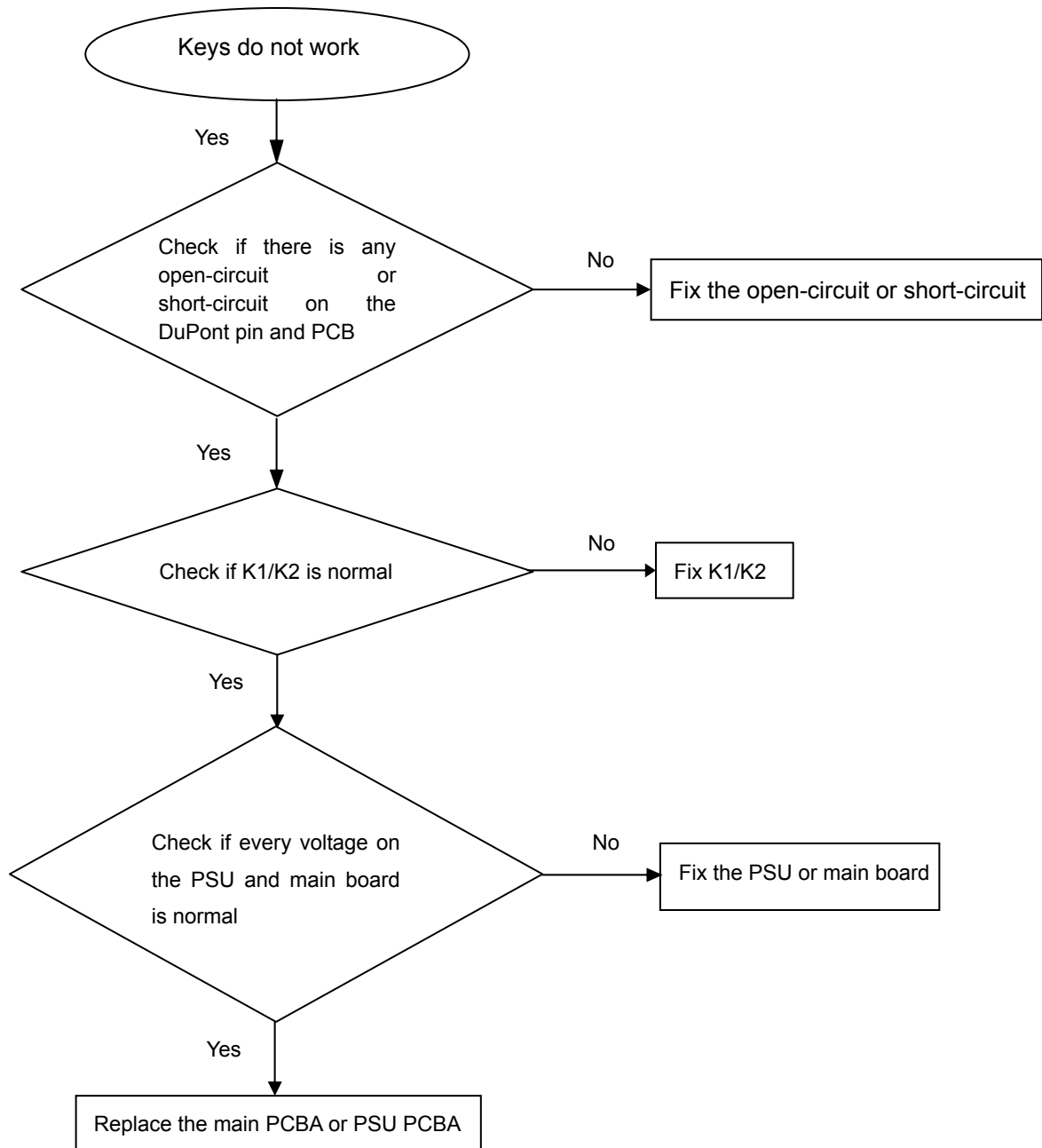
Ethernet MAC:XX-XX-XX-XX-XX-XX

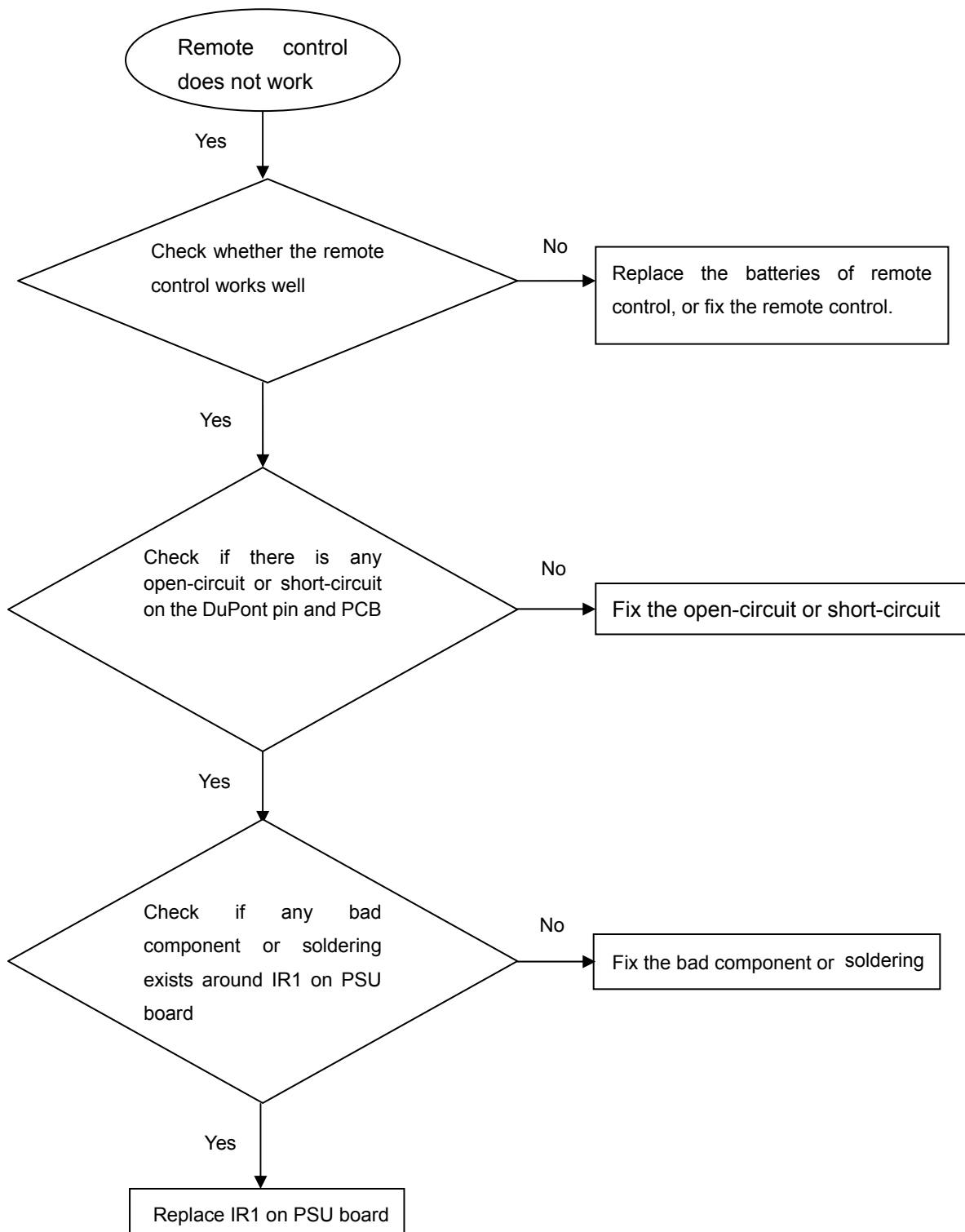
For more information, frequently asked questions and software updates, please visit www.philips.com/support

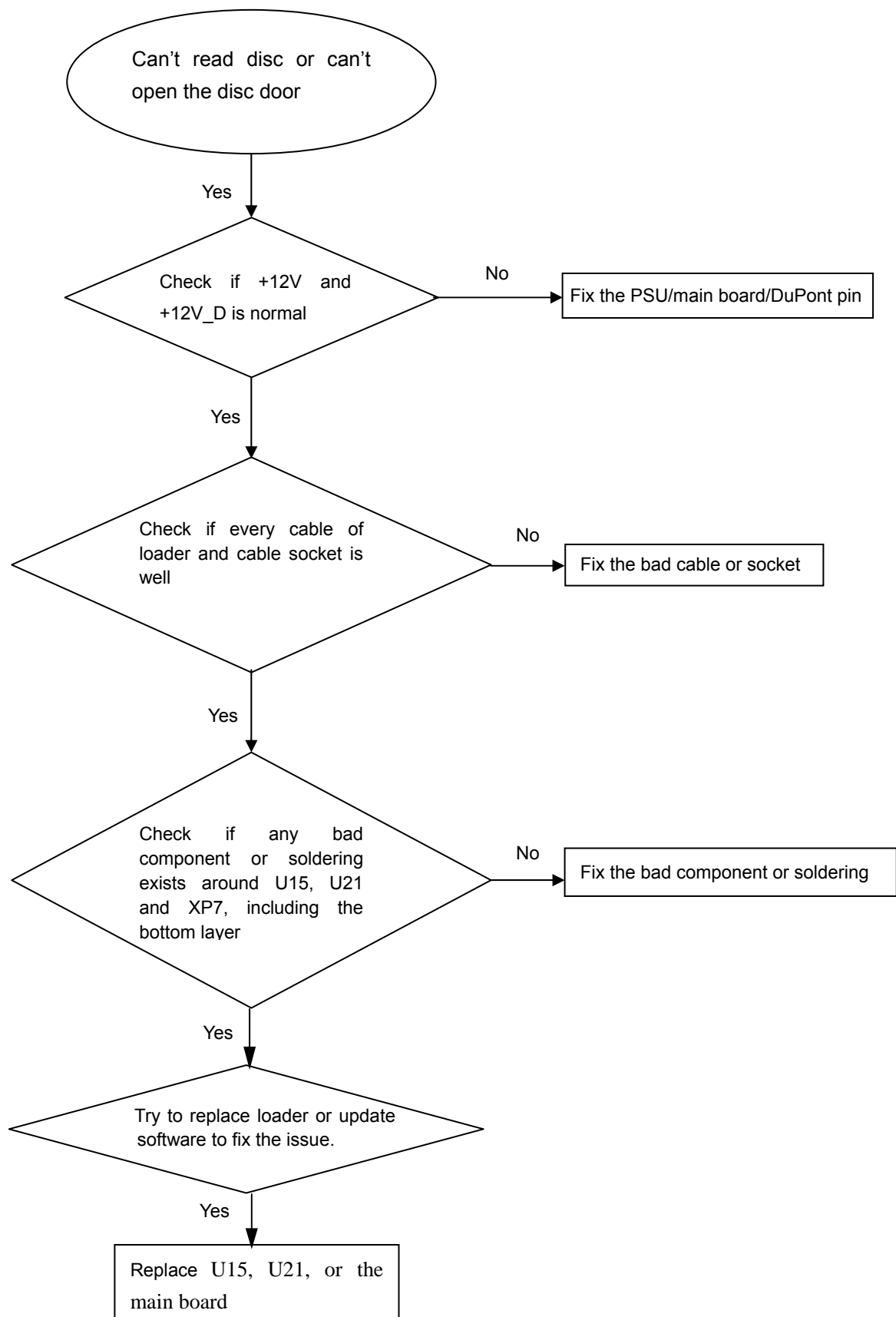
Caution: The set must not be power off during upgrading, otherwise the Main board will be damaged entirely.

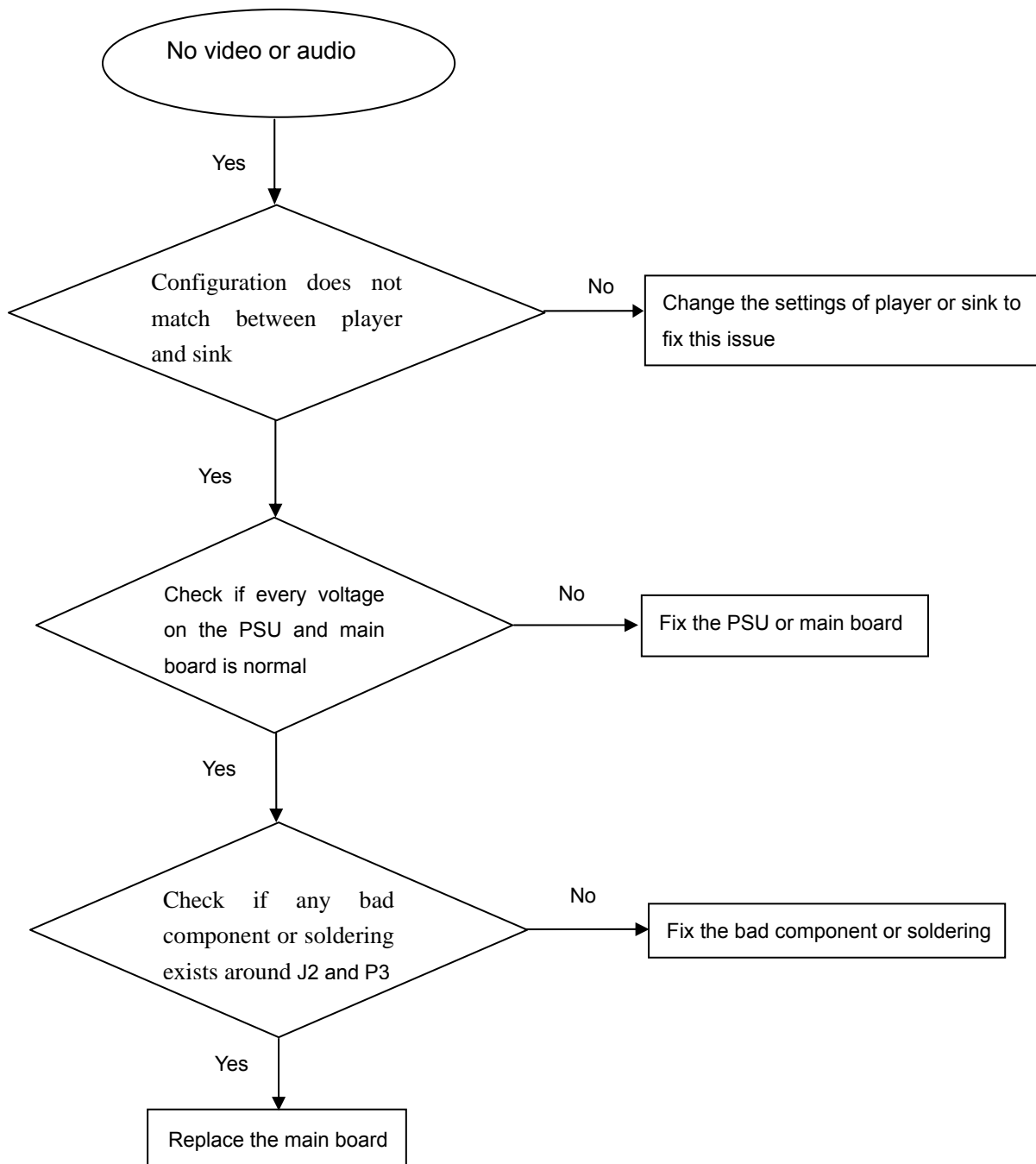
Can not lighten LED

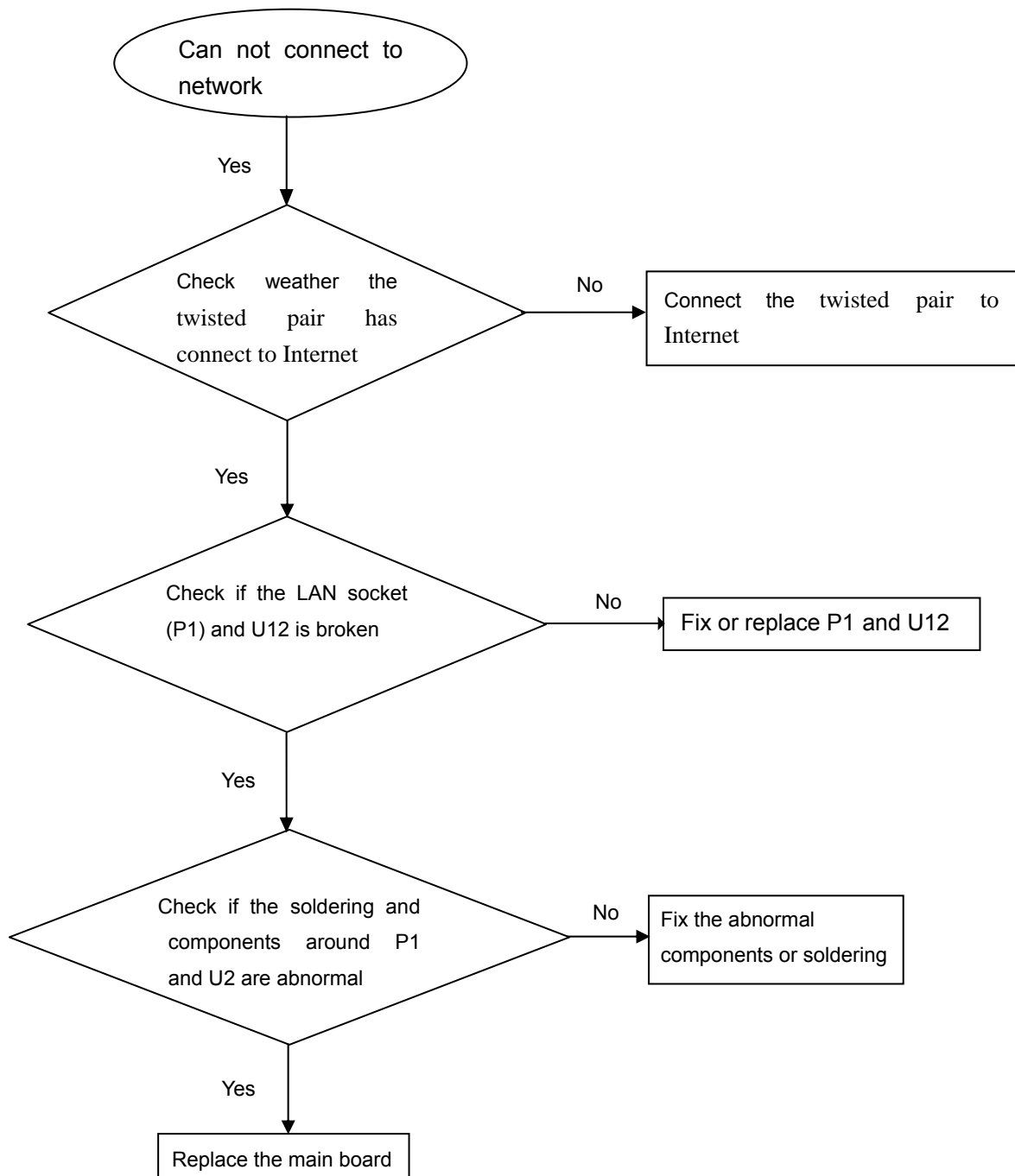


Keys do not work

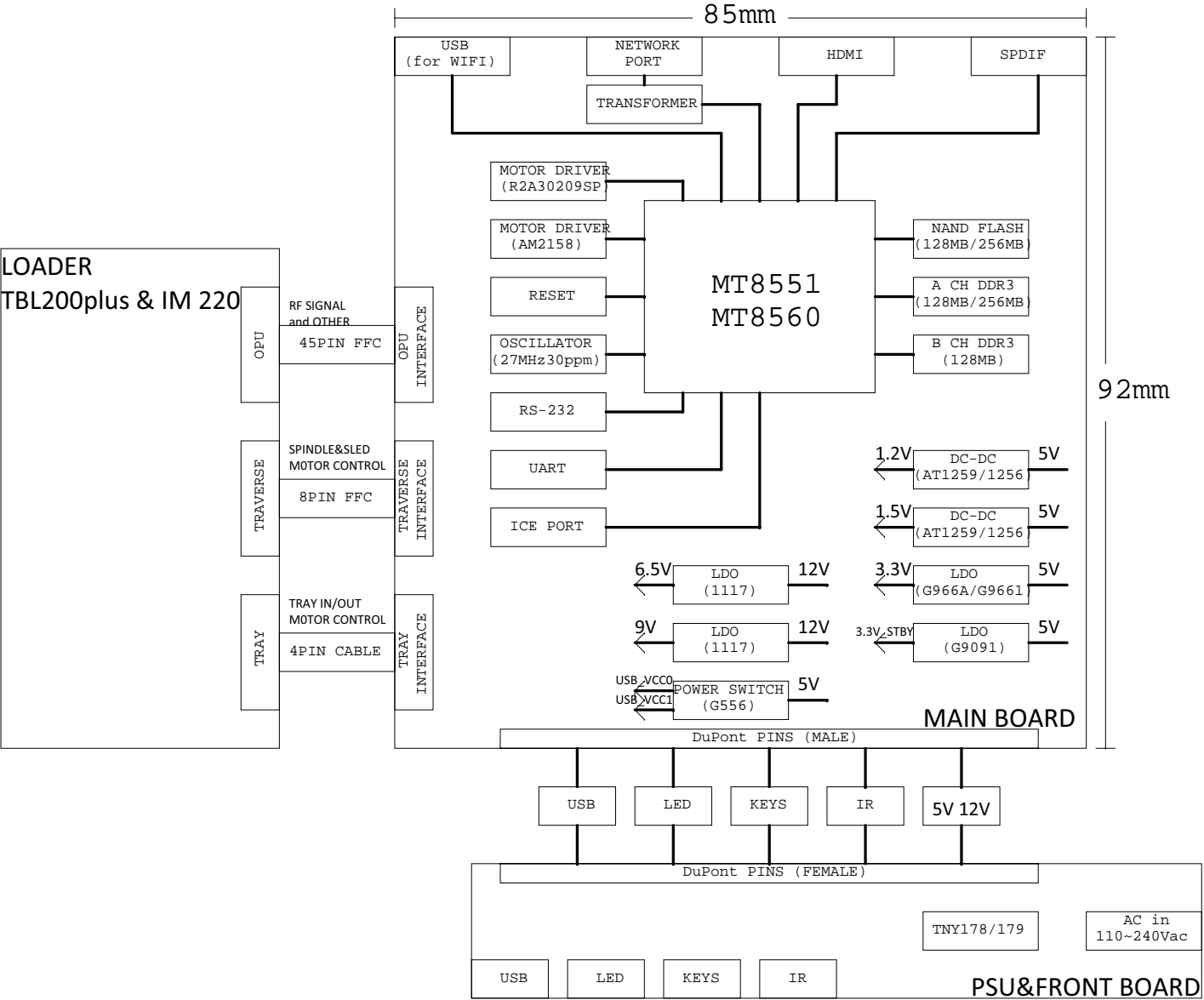
Remote control does not work

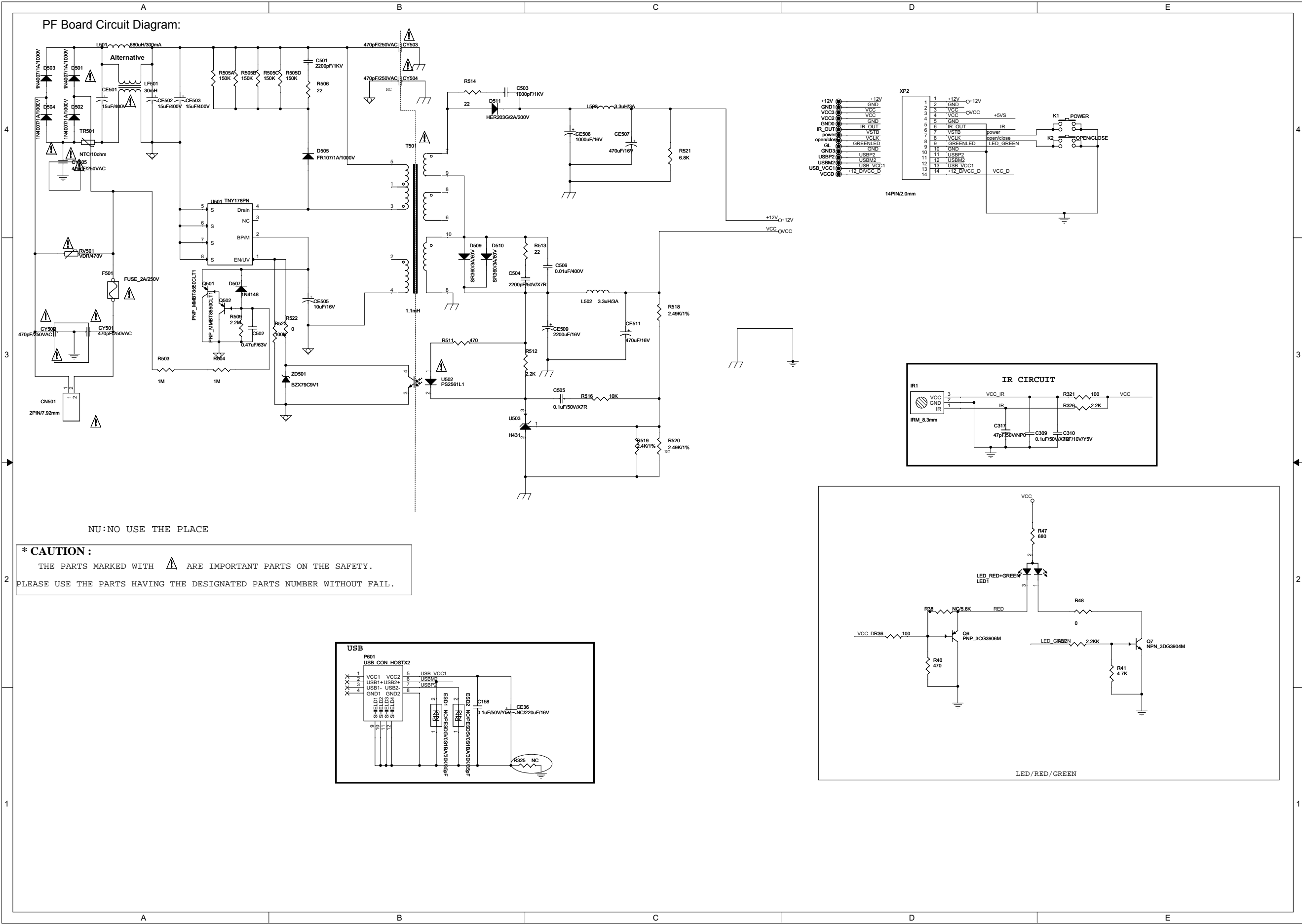
Can't read disc or can't open the disc door

No video or audio

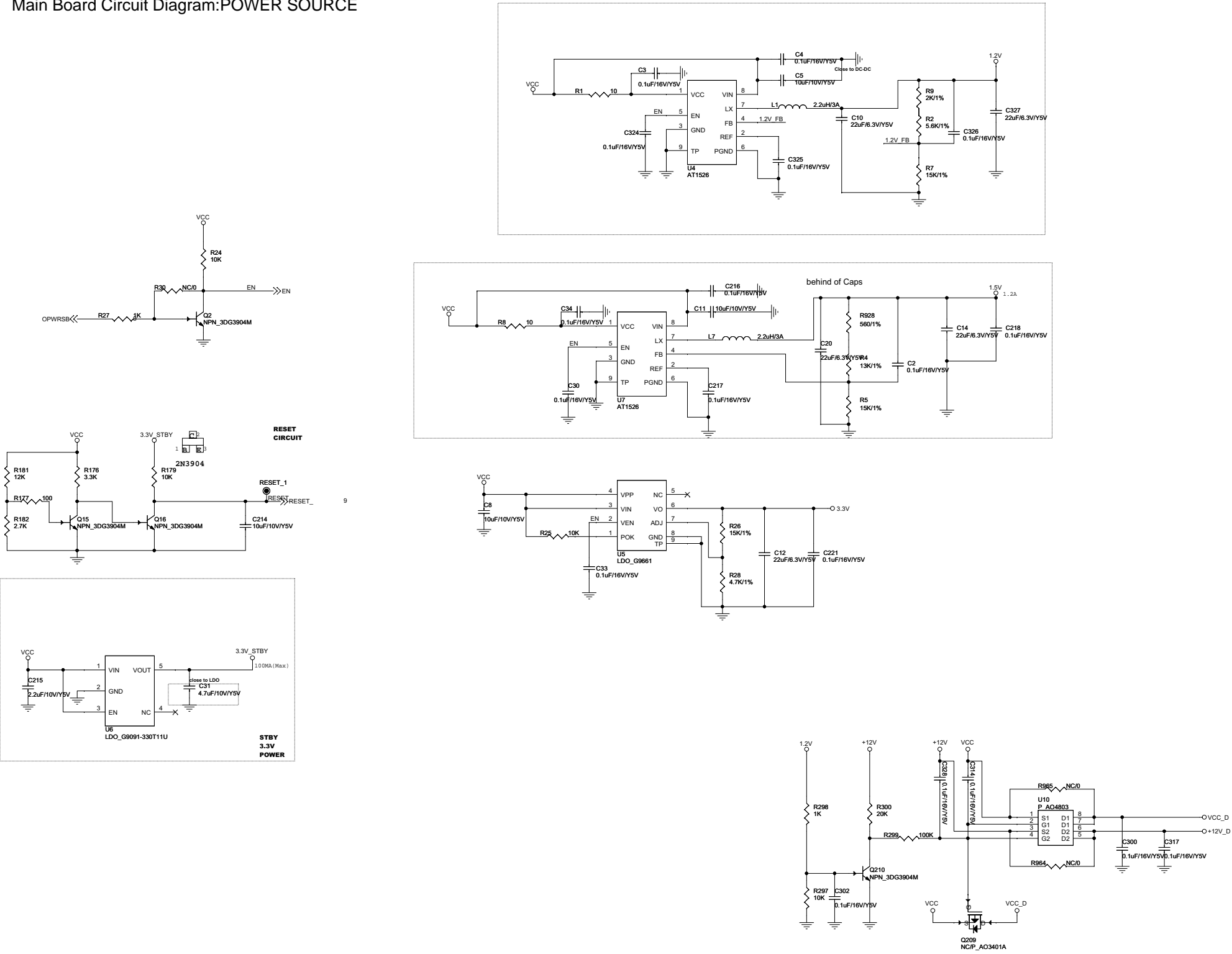
Can not connect to network

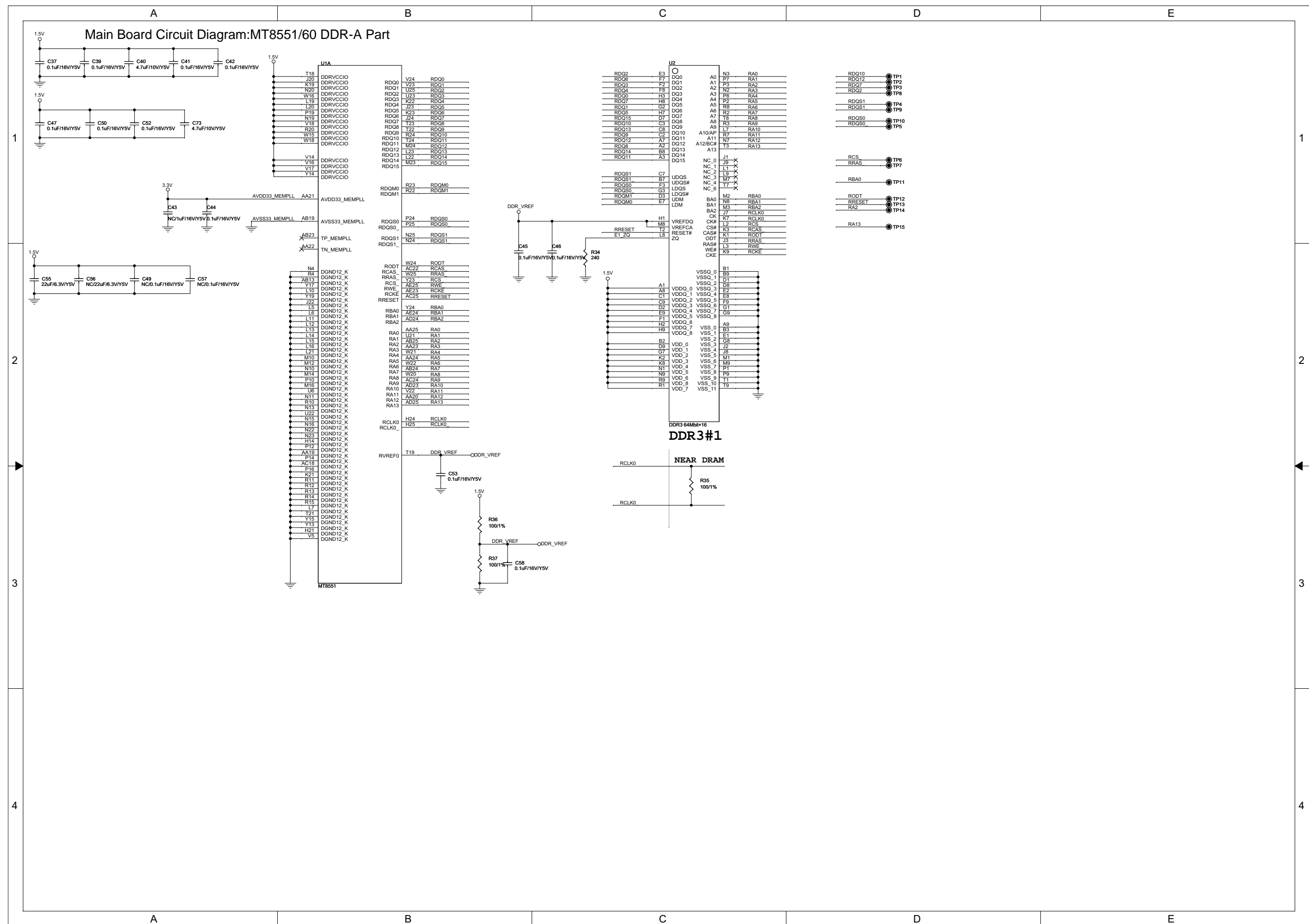
BDP2600/12 /51/55/94/93/F8/05 /98& BDP2610/93 Block Diagram

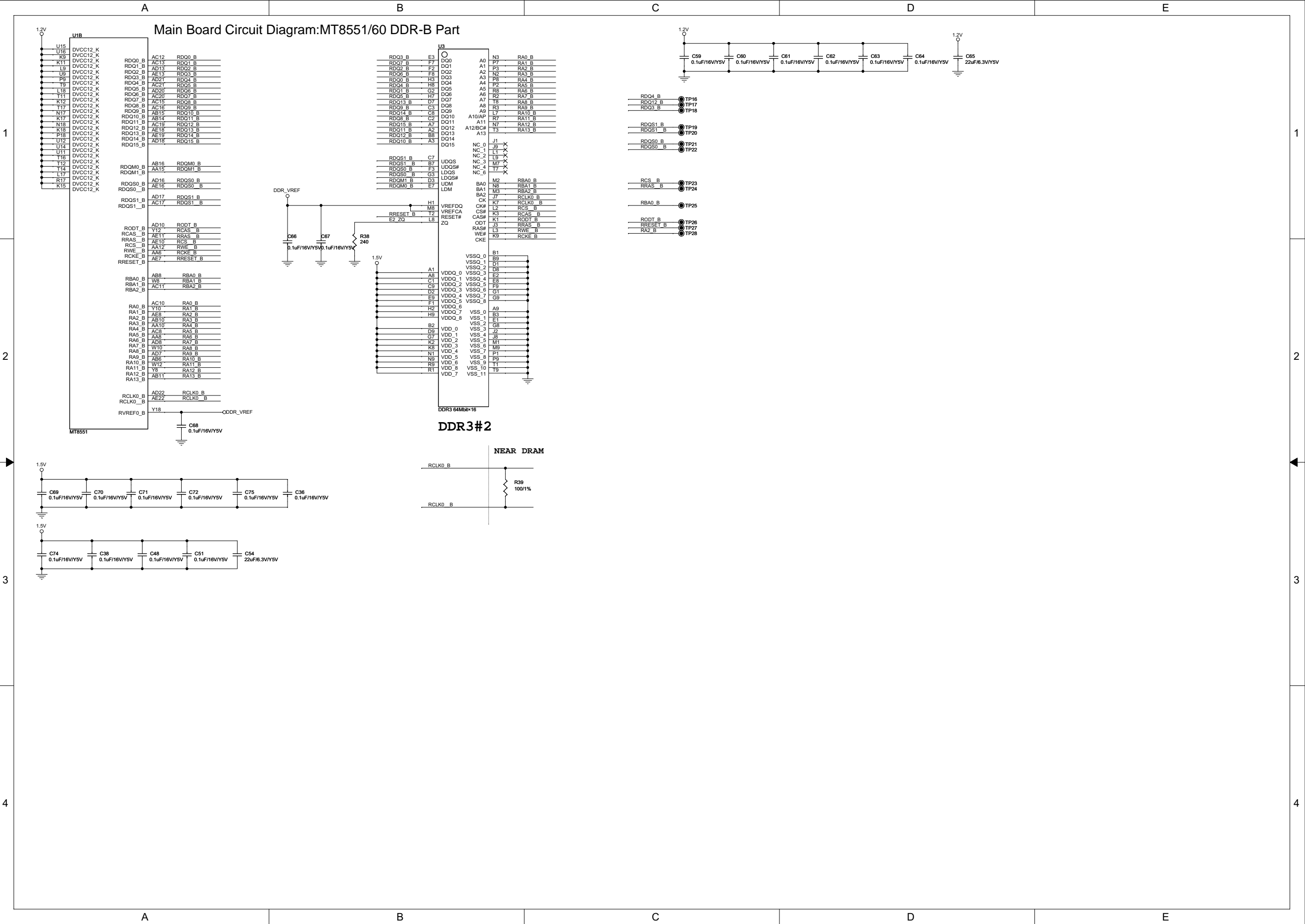


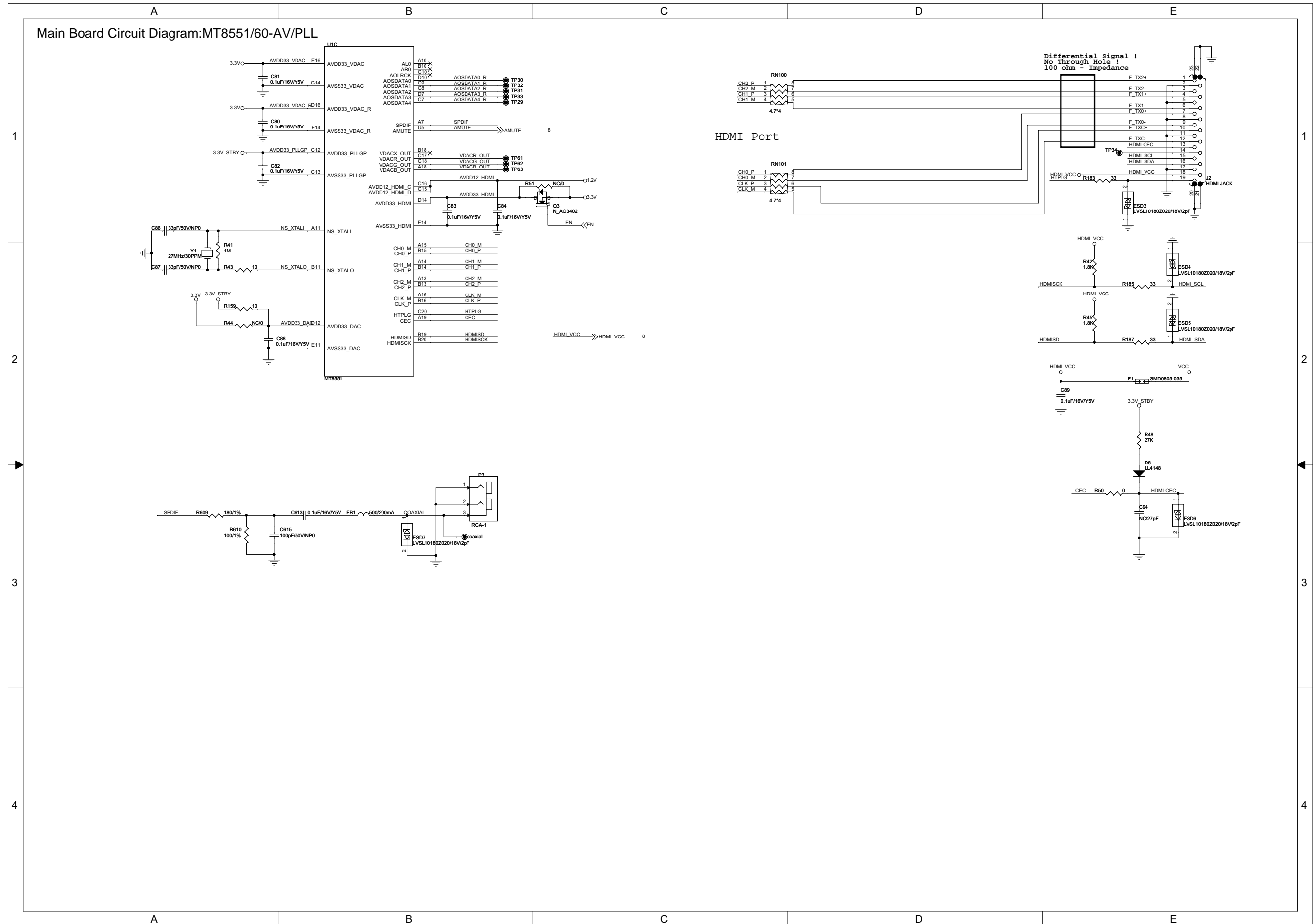


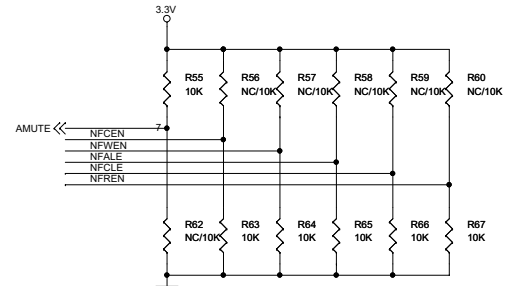
Main Board Circuit Diagram:POWER SOURCE





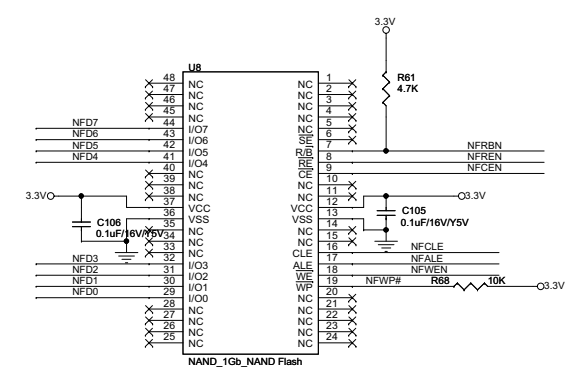




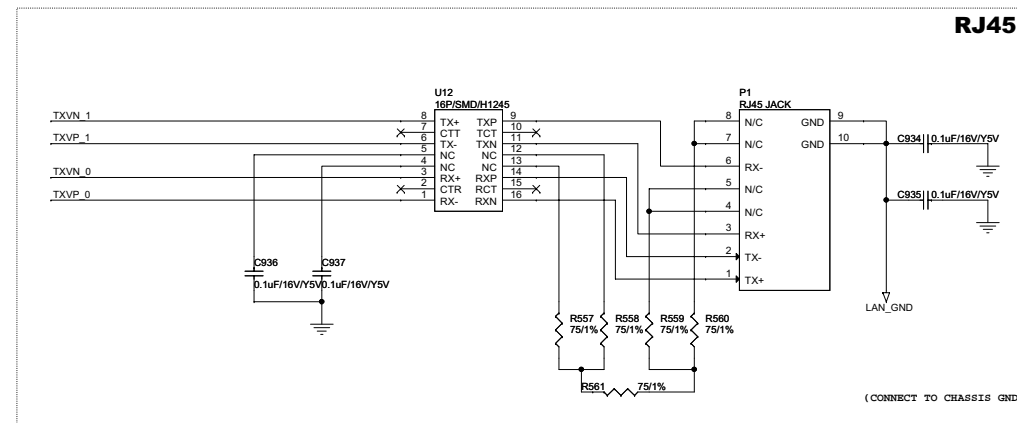
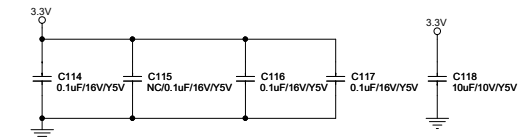
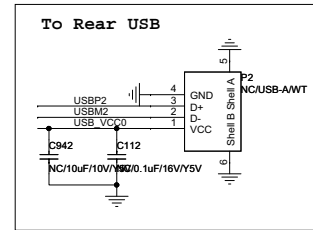
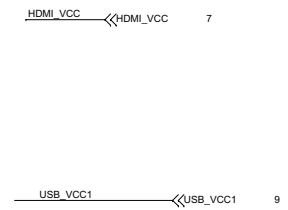
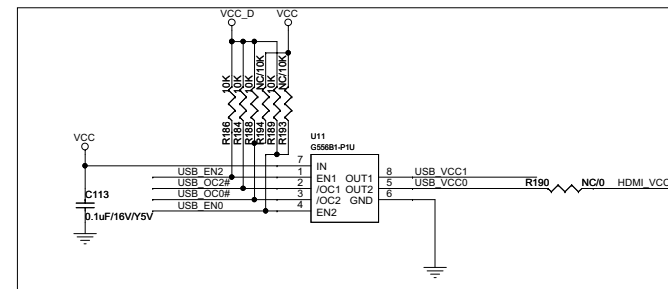
[illegible]

```
AMUTE: ICE mode Enable
[Nfcen , Nfwen]= [1, 0]test_cpum ,
[0, 0] normal mode, [1, 1] scan
mode
[Nfale, Nfcle]= [1, 0] OLT mode, [0,
1] ABIST mode, [0, 0] NAND from NDND
pin, [1, 1] NAND from digital video
output pin
```

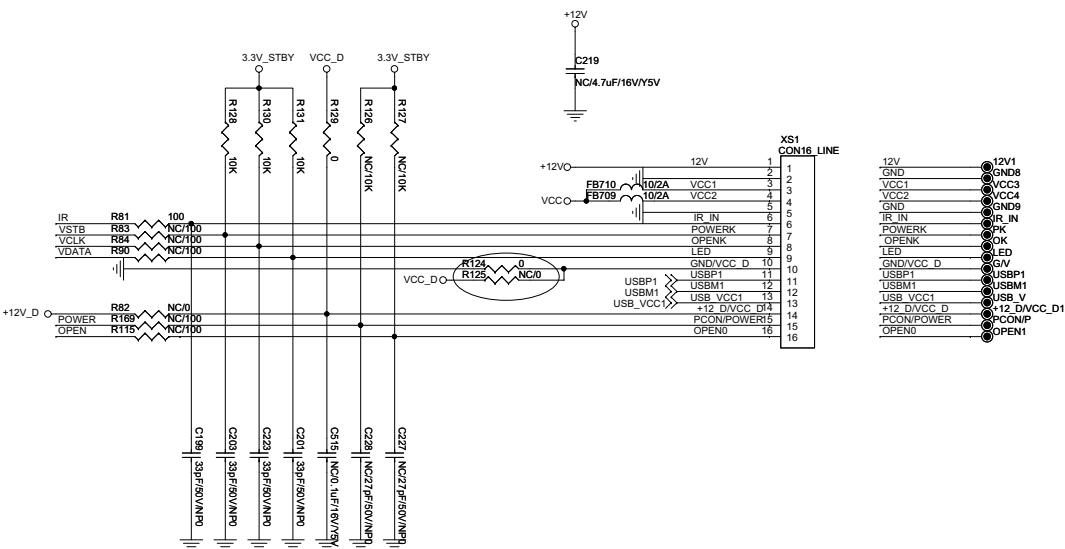
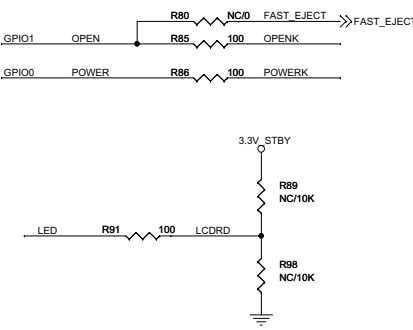
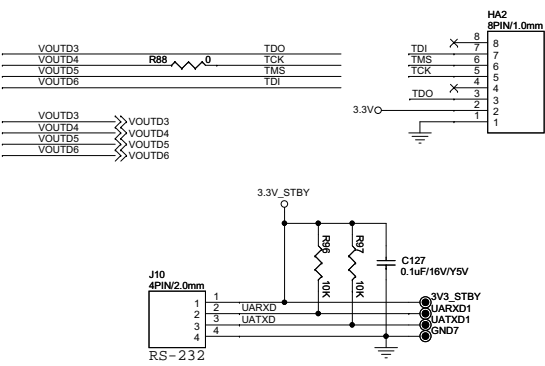
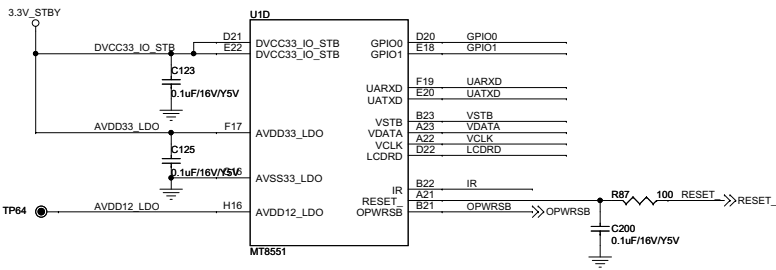
```
NFREN: mmc boot mode
```

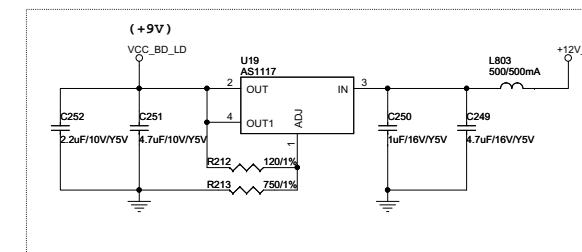
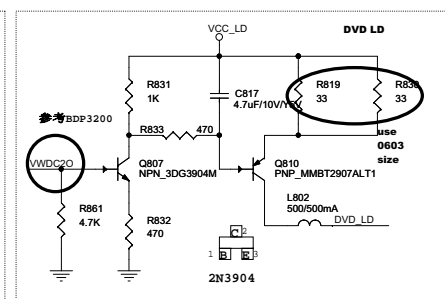
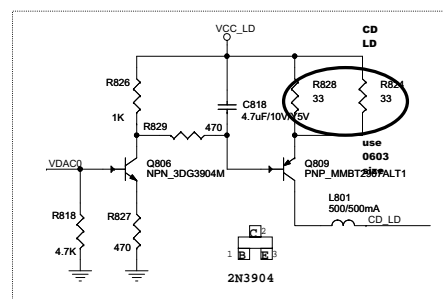
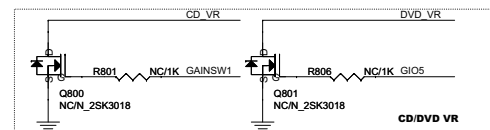
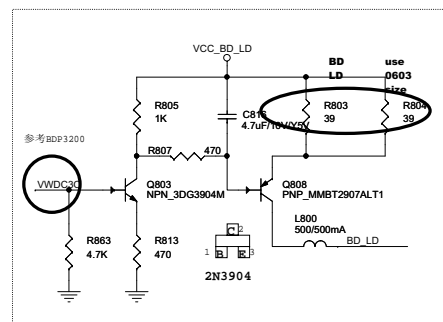
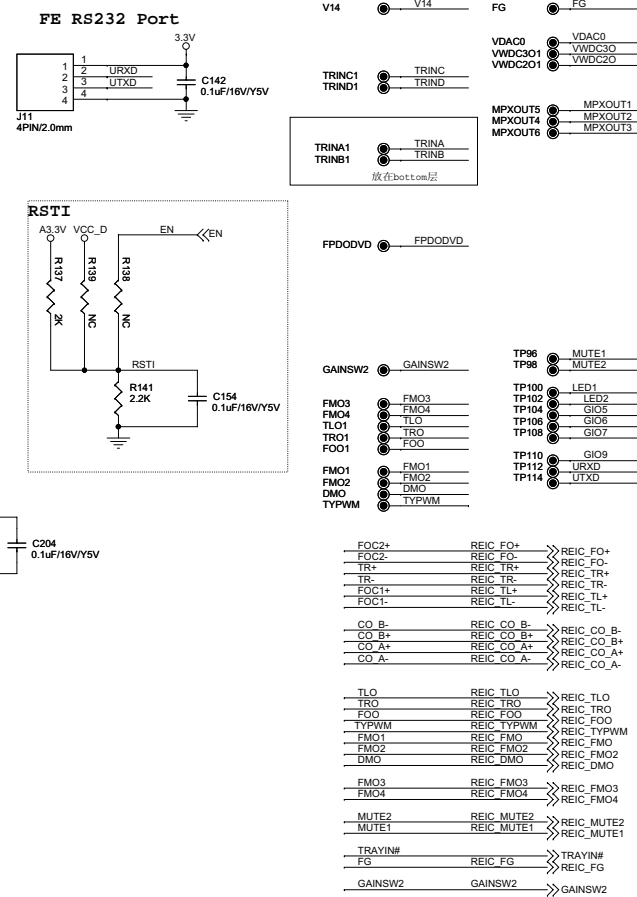
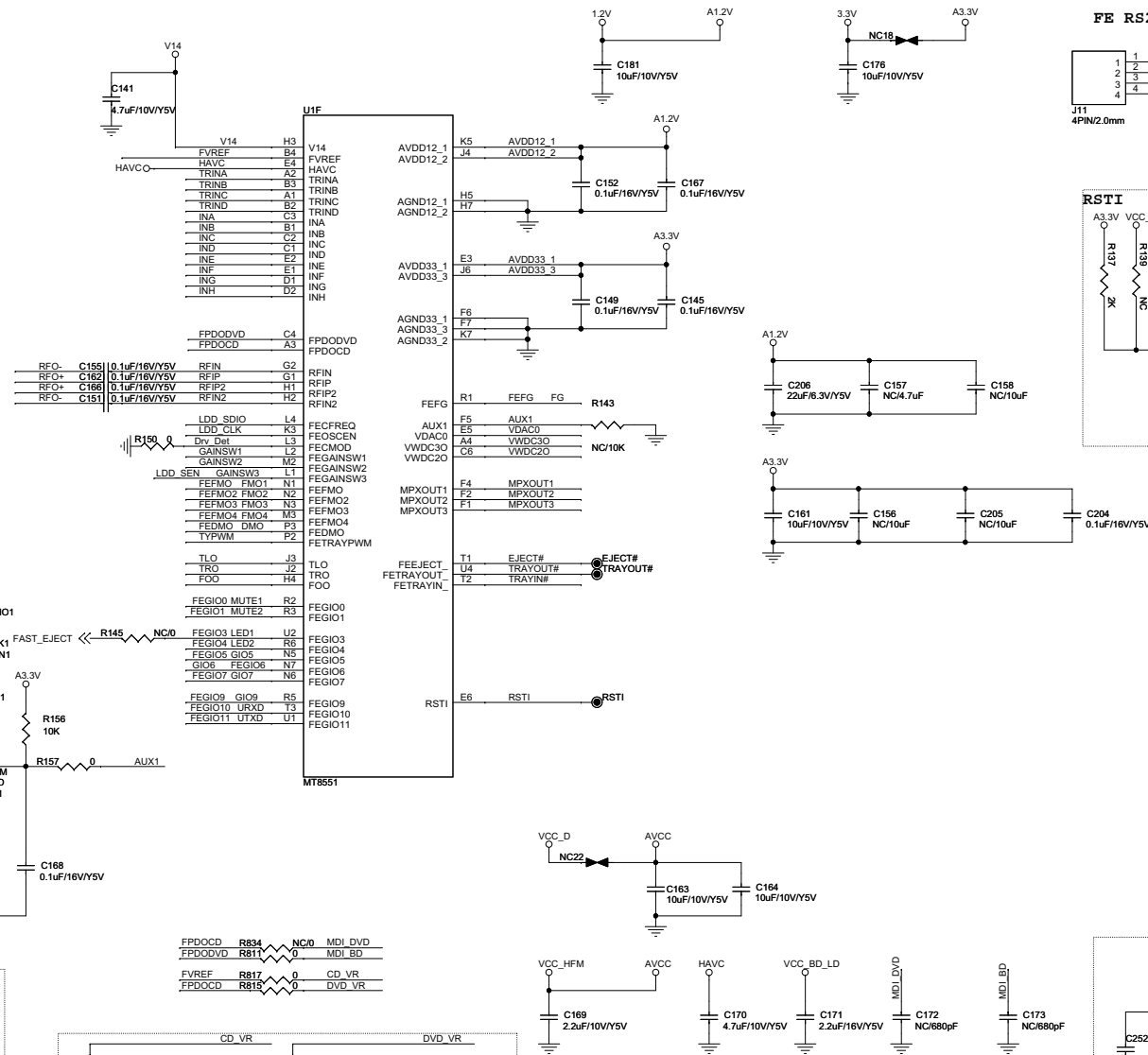


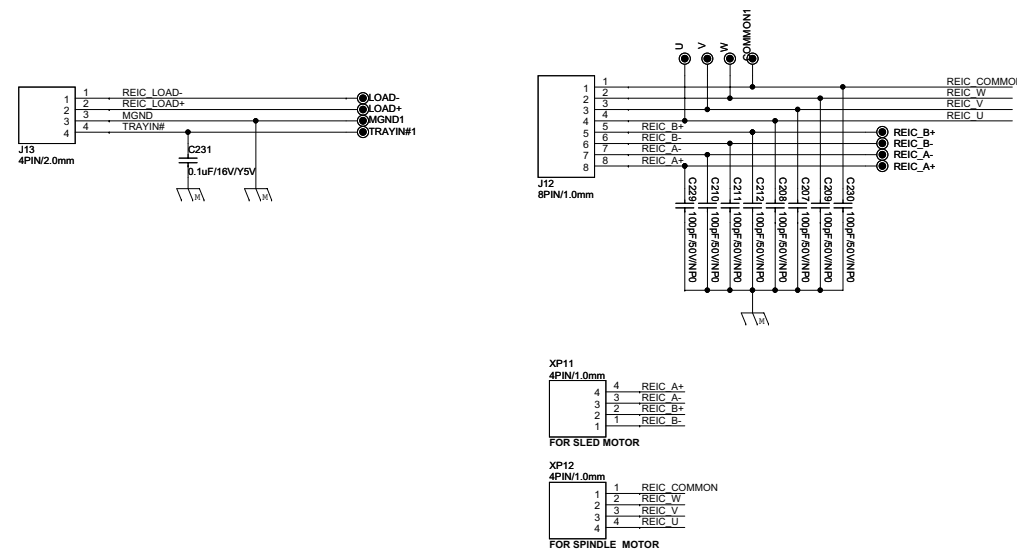
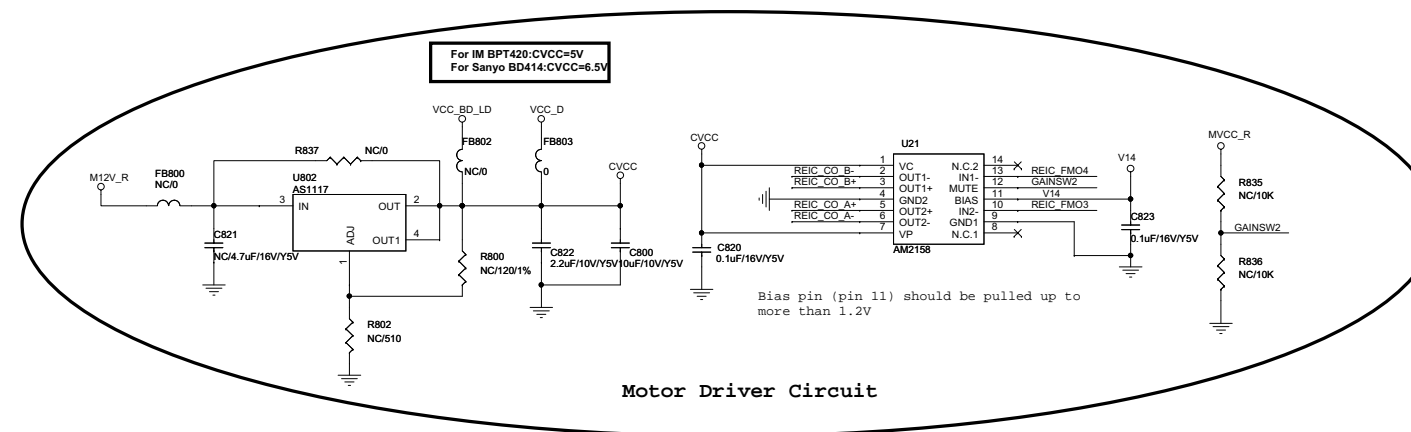
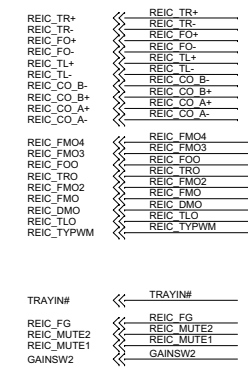
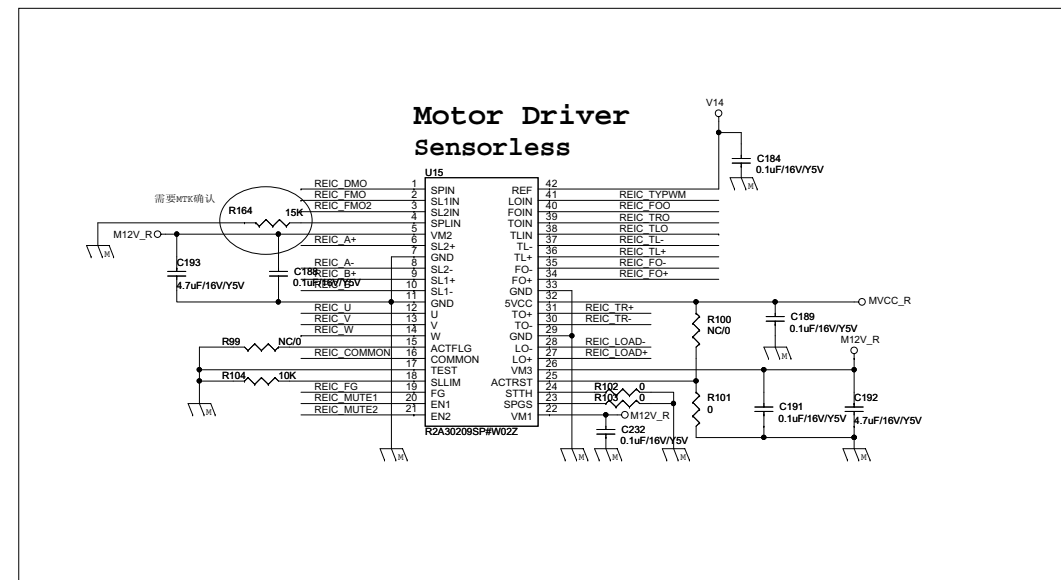
NAND Flash



Main Board Circuit Diagram:MT8551/60-Part4



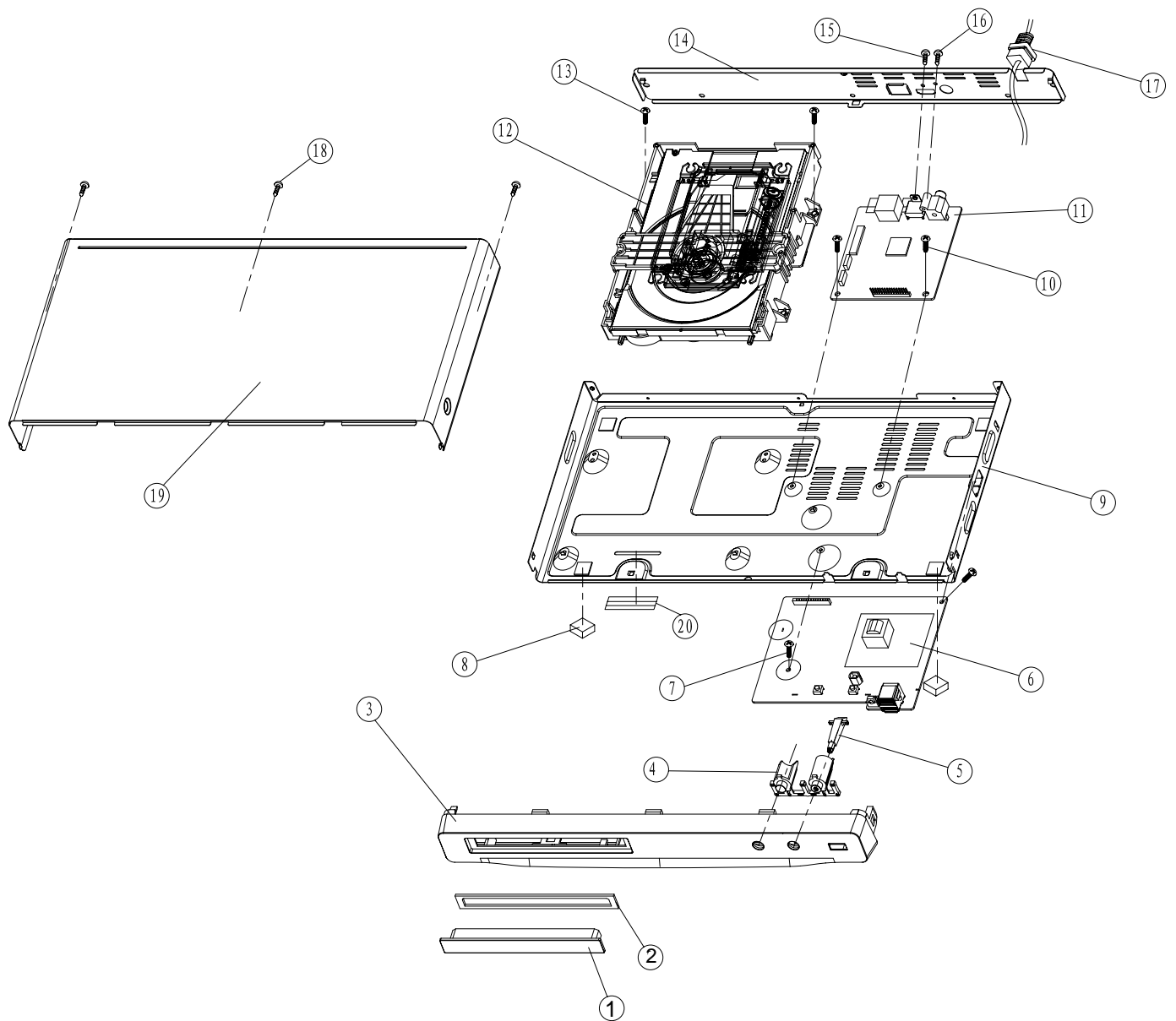
[illegible]



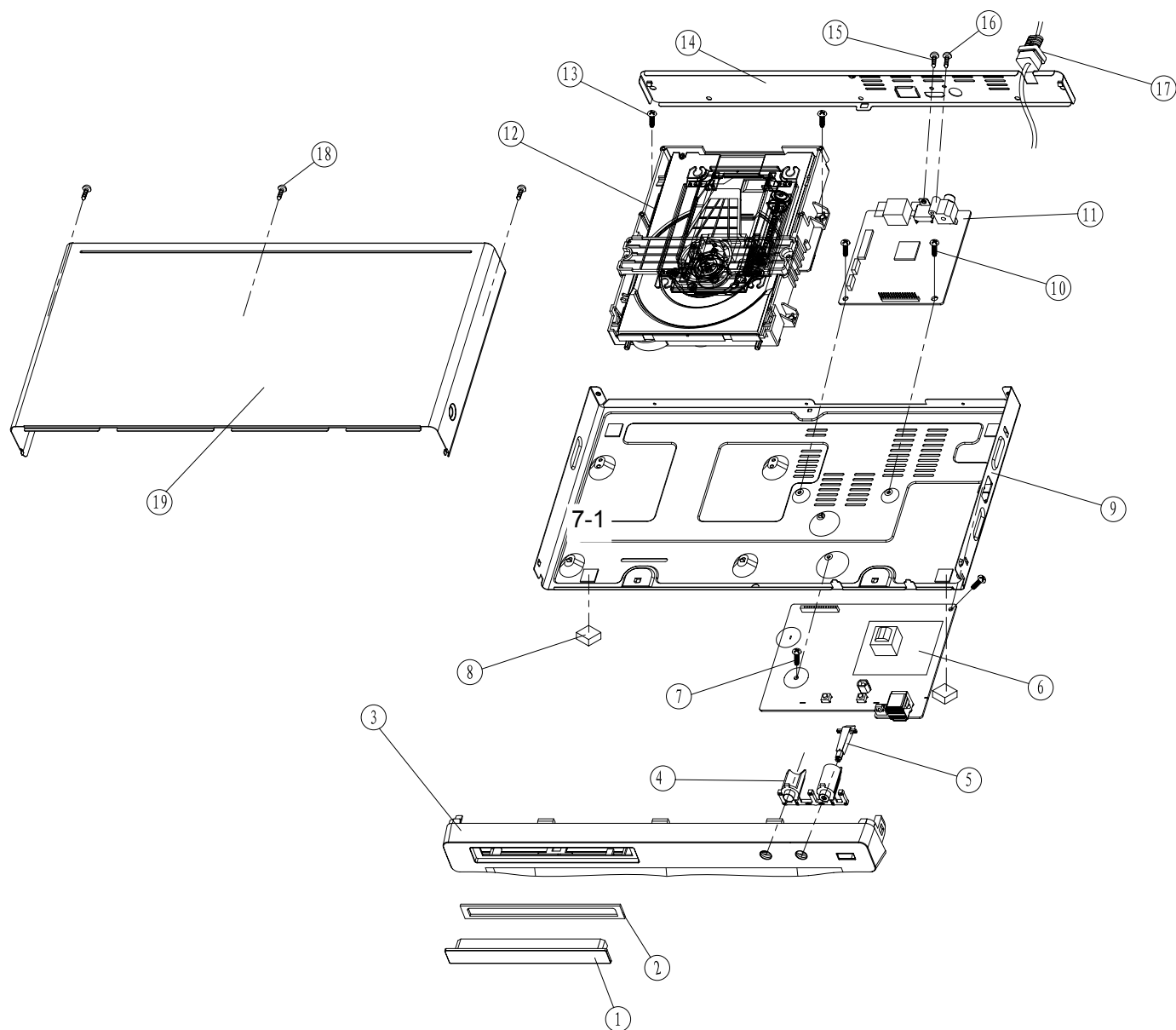
The image shows a top-down view of a printed circuit board (PCB) layout. The board is populated with various electronic components, including integrated circuits (ICs), capacitors, resistors, and connectors. Key features include:

- Connectors:** A USB port is located at the bottom center. A TRAYIN#1 connector is at the bottom right. There are also several other connectors along the edges.
- Test Points and Pads:** Numerous test points (labeled TP) and pads (labeled P) are distributed across the board for testing and assembly.
- Component Labels:** Various ICs and components are labeled with part numbers such as R804, R803, C937, C936, U19, R863, R803, R813, R829, C818, R826, R824, R827, R828, C165, VDAC0, R818, HA/C1, U802, R800, FOC1-, FOC1+, FOC2-, FOC2+, TR+, TR-, TRAYIN#1, LOAD+, LOAD-, COMMON, GND, CLSFT, M7, M6, COAXIAL, UATXD1, UARXD1, TP34, TP33, TP32, TP31, TP30, TP29, TP28, TP27, TP26, TP25, TP24, TP23, TP22, TP21, TP20, TP19, TP18, TP17, TP16, TP15, TP14, TP13, TP12, TP11, TP10, TP9, TP8, TP7, TP6, TP5, TP4, TP3, TP2, TP1, TP0, TP-1, TP-2, TP-3, TP-4, TP-5, TP-6, TP-7, TP-8, TP-9, TP-10, TP-11, TP-12, TP-13, TP-14, TP-15, TP-16, TP-17, TP-18, TP-19, TP-20, TP-21, TP-22, TP-23, TP-24, TP-25, TP-26, TP-27, TP-28, TP-29, TP-30, TP-31, TP-32, TP-33, TP-34.
- Other Components:** There are also labels for various other components like R557, R556, R555, R554, R553, R552, R551, R550, R549, R548, R547, R546, R545, R544, R543, R542, R541, R540, R539, R538, R537, R536, R535, R534, R533, R532, R531, R530, R529, R528, R527, R526, R525, R524, R523, R522, R521, R520, R519, R518, R517, R516, R515, R514, R513, R512, R511, R510, R509, R508, R507, R506, R505, R504, R503, R502, R501, R500, R499, R498, R497, R496, R495, R494, R493, R492, R491, R490, R489, R488, R487, R486, R485, R484, R483, R482, R481, R480, R479, R478, R477, R476, R475, R474, R473, R472, R471, R470, R469, R468, R467, R466, R465, R464, R463, R462, R461, R460, R459, R458, R457, R456, R455, R454, R453, R452, R451, R450, R449, R448, R447, R446, R445, R444, R443, R442, R441, R440, R439, R438, R437, R436, R435, R434, R433, R432, R431, R430, R429, R428, R427, R426, R425, R424, R423, R422, R421, R420, R419, R418, R417, R416, R415, R414, R413, R412, R411, R410, R409, R408, R407, R406, R405, R404, R403, R402, R401, R400, R399, R398, R397, R396, R395, R394, R393, R392, R391, R390, R389, R388, R387, R386, R385, R384, R383, R382, R381, R380, R379, R378, R377, R376, R375, R374, R373, R372, R371, R370, R369, R368, R367, R366, R365, R364, R363, R362, R361, R360, R359, R358, R357, R356, R355, R354, R353, R352, R351, R350, R349, R348, R347, R346, R345, R344, R343, R342, R341, R340, R339, R338, R337, R336, R335, R334, R333, R332, R331, R330, R329, R328, R327, R326, R325, R324, R323, R322, R321, R320, R319, R318, R317, R316, R315, R314, R313, R312, R311, R310, R309, R308, R307, R306, R305, R304, R303, R302, R301, R300, R299, R298, R297, R296, R295, R294, R293, R292, R291, R290, R289, R288, R287, R286, R285, R284, R283, R282, R281, R280, R279, R278, R277, R276, R275, R274, R273, R272, R271, R270, R269, R268, R267, R266, R265, R264, R263, R262, R261, R260, R259, R258, R257, R256, R255, R254, R253, R252, R251, R250, R249, R248, R247, R246, R245, R244, R243, R242, R241, R240, R239, R238, R237, R236, R235, R234, R233, R232, R231, R230, R229, R228, R227, R226, R225, R224, R223, R222, R221, R220, R219, R218, R217, R216, R215, R214, R213, R212, R211, R210, R209, R208, R207, R206, R205, R204, R203, R202, R201, R200, R199, R198, R197, R196, R195, R194, R193, R192, R191, R190, R189, R188, R187, R186, R185, R184, R183, R182, R181, R180, R179, R178, R177, R176, R175, R174, R173, R172, R171, R170, R169, R168, R167, R166, R165, R164, R163, R162, R161, R160, R159, R158, R157, R156, R155, R154, R153, R152, R151, R150, R149, R148, R147, R146, R145, R144, R143, R142, R141, R140, R139, R138, R137, R136, R135, R134, R133, R132, R131, R130, R129, R128, R127, R126, R125, R124, R123, R122, R121, R120, R119, R118, R117, R116, R115, R114, R113, R112, R111, R110, R109, R108, R107, R106, R105, R104, R103, R102, R101, R100, R99, R98, R97, R96, R95, R94, R93, R92, R91, R90, R89, R88, R87, R86, R85, R84, R83, R82, R81, R80, R79, R78, R77, R76, R75, R74, R73, R72, R71, R70, R69, R68, R67, R66, R65, R64, R63, R62, R61, R60, R59, R58, R57, R56, R55, R54, R53, R52, R51, R50, R49, R48, R47, R46, R45, R44, R43, R42, R41, R40, R39, R38, R37, R36, R35, R34, R33, R32, R31, R30, R29, R28, R27, R26, R25, R24, R23, R22, R21, R20, R19, R18, R17, R16, R15, R14, R13, R12, R11, R10, R9, R8, R7, R6, R5, R4, R3, R2, R1, R0.

Exploded View for BDP2600/94:



Exploded View for BDP2600/12/51/55/93/F8/05/98&BDP2610/93:



REVISION LIST

Version 1.0

* Initial release for BDP2600/12/94/51/55

Version 1.1

* Initial release for BDP2600/93

Version 1.2

* Initial release for BDP2600/05/98

Version 1.3

* Initial release for BDP2600/F8 & BDP2610/93

Version 1.4

* Adding remark on cover page