



Blu-Ray Disc Player

Chassis : Blu- Ray

BASIC : BD-P1500

**Application Model
: BD-P1500**

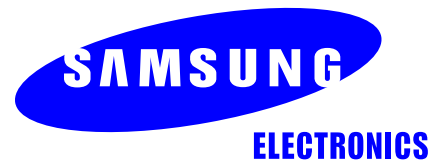
Application Area

: XAA, XAC, AFS, XAX, XAZ, STR

SERVICE MANUAL

SERVICE MANUAL

BD-P1500



If you want to know additional information which is not included on this Service Manual, Please refer to the SKP(Samsung Knowledge Portal) web site.

Area	Web Site
North America	URL ; http://service.samsungportal.com
Latin America	URL ; http://latin.samsungportal.com
CIS	URL ; http://cis.samsungportal.com
Europe	URL ; http://europe.samsungportal.com
China	URL ; http://china.samsungportal.com
Asia	URL ; http://asia.samsungportal.com
Mideast & Africa	URL ; http://mea.samsungportal.com

SERVICE

Manual

Blu-Ray Disc Player



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1. Precautions

1-1 Safety Precautions

1) Before returning an instrument to the customer, always make a safety check of the entire instrument, including, but not limited to, the following items:

- (1) Be sure that no built-in protective devices are defective or have been defeated during servicing.
- (1) Protective shields are provided to protect both the technician and the customer. Correctly replace all missing protective shields, including any removed for servicing convenience.
- (2) When reinstalling the chassis and/or other assembly in the cabinet, be sure to put back in place all protective devices, including, but not limited to, nonmetallic control knobs, insulating fish papers, adjustment and compartment covers/shields, and isolation resistor/capacitor networks. Do not operate this instrument or permit it to be operated without all protective devices correctly installed and functioning.

(2) Be sure that there are no cabinet openings through which adults or children might be able to insert their fingers and contact a hazardous voltage. Such openings include, but are not limited to, excessively wide cabinet ventilation slots, and an improperly fitted and/or incorrectly secured cabinet back cover.

(3) Leakage Current Hot Check-With the instrument completely reassembled, plug the AC line cord directly into a 230V(220V ~ 240V) AC outlet. (Do not use an isolation transformer during this test.) Use a leakage current tester or a metering system that complies with American National Standards Institute (ANSI) C101.1 Leakage Current for Appliances and Underwriters Laboratories (UL) 1270 (40.7). With the instrument's AC switch first in the ON position and then in the OFF position, measure from a known earth ground (metal water pipe, conduit, etc.) to all exposed metal parts of the instrument (antennas, handle brackets, metal cabinets, screwheads, metallic overlays, control shafts, etc.), especially any exposed metal parts that offer an electrical return path to the chassis. Any current measured must not exceed 0.5mA. Reverse the instrument power cord plug in the outlet and repeat the test. See Fig. 1-1.

Any measurements not within the limits specified herein indicate a potential shock hazard that must be eliminated before returning the instrument to the customer.

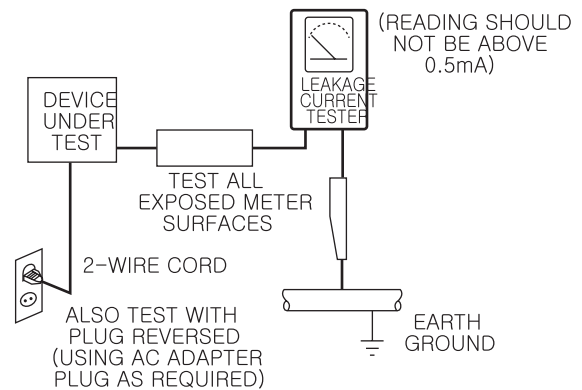


Fig. 1-1 AC Leakage Test

(4) Insulation Resistance Test Cold Check-(1) Unplug the power supply cord and connect a jumper wire between the two prongs of the plug. (2) Turn on the power switch of the instrument. (3) Measure the resistance with an ohmmeter between the jumpered AC plug and all exposed metallic cabinet parts on the instrument, such as screwheads, antenna, control shafts, handle brackets, etc. When an exposed metallic part has a return path to the chassis, the reading should be between 1 and 5.2 megohm. When there is no return path to the chassis, the reading must be infinite. If the reading is not within the limits specified, there is the possibility of a shock hazard, and the instrument must be repaired and rechecked before it is returned to the customer. See Fig. 1-2.

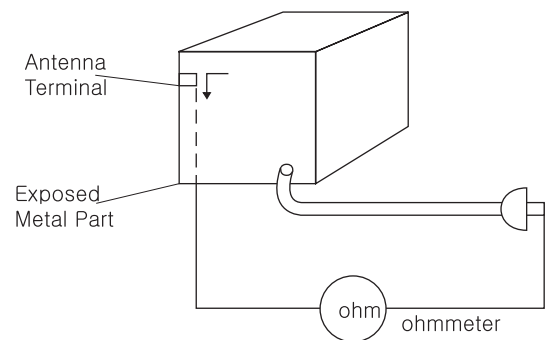


Fig. 1-2 Insulation Resistance Test

Precautions

- 2) Read and comply with all caution and safety related notes on or inside the cabinet, or on the chassis.
- 3) Design Alteration Warning-Do not alter or add to the mechanical or electrical design of this instrument.
Design alterations and additions, including but not limited to, circuit modifications and the addition of items such as auxiliary audio output connections, might alter the safety characteristics of this instrument and create a hazard to the user. Any design alterations or additions will make you, the servicer, responsible for personal injury or property damage resulting therefrom.
- 4) Observe original lead dress. Take extra care to assure correct lead dress in the following areas: (1) near sharp edges, (2) near thermally hot parts (be sure that leads and components do not touch thermally hot parts), (3) the AC supply, (4) high voltage, and (5) antenna wiring. Always inspect in all areas for pinched, out-of-place, or frayed wiring. Do not change spacing between a component and the printed-circuit board. Check the AC power cord for damage.
- 5) Components, parts, and/or wiring that appear to have overheated or that are otherwise damaged should be replaced with components, parts and/ or wiring that meet original specifications. Additionally, determine the cause of overheating and/or damage and, if necessary, take corrective action to remove any potential safety hazard.
- 6) Product Safety Notice-Some electrical and mechanical parts have special safety-related characteristics which are often not evident from visual inspection, nor can the protection they give necessarily be obtained by replacing them with components rated for higher voltage, wattage, etc. Parts that have special safety characteristics are identified by shading, an (⚠) or a (⚡) on schematics and parts lists. Use of a substitute replacement that does not have the same safety characteristics as the recommended replacement part might create shock, fire and/or other hazards. Product safety is under review continuously and new instructions are issued whenever appropriate.

1-2 Servicing Precautions

CAUTION : Before servicing units covered by this service manual and its supplements, read and follow the Safety Precautions section of this manual.

Note : If unforeseen circumstances create conflict between the following servicing precautions and any of the safety precautions, always follow the safety precautions.

Remember: Safety First.

1-2-1 General Servicing Precautions

- (1) a. Always unplug the instrument's AC powercord from the AC power source before (1) re-moving or reinstalling any component, circuit board, module or any other instrument assembly, (2) disconnecting any instrument electrical plug or other electrical connection, (3) connecting a test substitute in parallel with an electrolytic capacitor in the instrument.
- b. Do not defeat any plug/socket B+ voltage interlocks with which instruments covered by this service manual might be equipped.
- c. Do not apply AC power to this instrument and /or any of its electrical assemblies unless all solid-state device heat sinks are correctly installed.
- d. Always connect a test instrument's ground lead to the instrument chassis ground before connecting the test instrument positive lead. Always remove the test instrument ground lead last.

Note : Refer to the Safety Precautions section ground lead last.

- (2) The service precautions are indicated or printed on the cabinet, chassis or components. When servicing, follow the printed or indicated service precautions and service materials.
- (3) The components used in the unit have a specified flame resistance and dielectric strength. When replacing components, use components which have the same ratings. Components identified by shading, by () or by () in the circuit diagram are important for safety or for the characteristics of the unit. Always replace them with the exact replacement components.

- (4) An insulation tube or tape is sometimes used and some components are raised above the printed wiring board for safety. The internal wiring is sometimes clamped to prevent contact with heating components. Install such elements as they were.
- (5) After servicing, always check that the removed screws, components, and wiring have been installed correctly and that the portion around the serviced part has not been damaged and so on. Further, check the insulation between the blades of the attachment plug and accessible conductive parts.

1-2-2 Insulation Checking Procedure

Disconnect the attachment plug from the AC outlet and turn the power ON. Connect the insulation resistance meter (500V) to the blades of the attachment plug. The insulation resistance between each blade of the attachment plug and accessible conductive parts(see note) should be more than 1 Megohm.

Note : Accessible conductive parts include metal panels, input terminals, earphone jacks, etc.

1-3 ESD Precautions

Electrostatically Sensitive Devices (ESD)

Some semiconductor (solid state) devices can be damaged easily by static electricity.

Such components commonly are called Electrostatically Sensitive Devices (ESD). Examples of typical ESD devices are integrated circuits and some field-effect transistors and semiconductor chip components. The following techniques should be used to help reduce the incidence of component damage caused by static electricity.

- (1) Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any electrostatic charge on your body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging wrist strap device, which should be removed for potential shock reasons prior to applying power to the unit under test.
- (2) After removing an electrical assembly equipped with ESD devices, place the assembly on a conductive surface such as aluminum foil, to prevent electrostatic charge buildup or exposure of the assembly.
- (3) Use only a grounded-tip soldering iron to solder or unsolder ESD devices.
- (4) Use only an anti-static solder removal device. Some solder removal devices not classified as "anti-static" can generate electrical charges sufficient to damage ESD devices.
- (5) Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ESD devices.
- (6) Do not remove a replacement ESD device from its protective package until immediately before you are ready to install it. (Most replacement ESD devices are packaged with leads electrically shorted together by conductive foam, aluminum foil or comparable conductive materials).
- (7) Immediately before removing the protective materials from the leads of a replacement ESD device, touch the protective material to the chassis or circuit assembly into which the device will be installed.

CAUTION : Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.

- (8) Minimize bodily motions when handling unpackaged replacement ESD devices. (Otherwise harmless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity sufficient to damage an ESD device).

1-4 Handling the optical pick-up

The laser diode in the optical pick up may suffer electrostatic breakdown because of potential static electricity from clothing and your body.

The following method is recommended.

- (1) Place a conductive sheet on the work bench (The black sheet used for wrapping repair parts.)
 - (2) Place the set on the conductive sheet so that the chassis is grounded to the sheet.
 - (3) Place your hands on the conductive sheet (This gives them the same ground as the sheet.)
 - (4) Remove the optical pick up block
 - (5) Perform work on top of the conductive sheet. Be careful not to let your clothes or any other static sources to touch the unit.
- ◆ Be sure to put on a wrist strap grounded to the sheet.
 - ◆ Be sure to lay a conductive sheet made of copper etc. Which is grounded to the table.

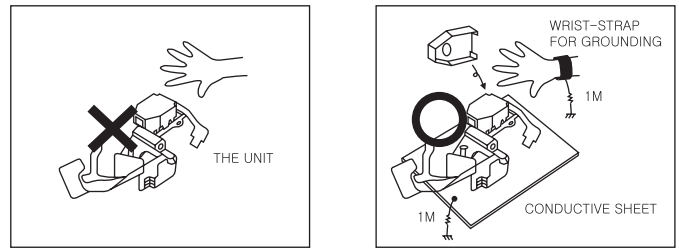


Fig.1-3

- (6) Short the short terminal on the PCB, which is inside the Pick-Up ASS'Y, before replacing the Pick-Up. (The short terminal is shorted when the Pick-Up Ass'y is being lifted or moved.)
- (7) After replacing the Pick-up, open the short terminal on the PCB.

MEMO

2. Product Specification

2-1 Product Specification

General	Power requirements	AC 120V ~ 60Hz
	Power consumption	29W
	Weight	9.3 lbs
	Dimensions	16.9 (W) x 12.8 (D) x 3.1 (H) inches
	Operating Temperature Range	+41°F to 95°F
	Operating Humidity Range	10 % to 75 %
Disc	BD	Reading Speed : 4.917m/sec
	DVD (Digital Versatile Disc)	Reading Speed : 3.49 ~ 4.06 m/sec. Approx. Play Time (Single Sided, Single Layer Disc) : 135 min.
	CD : 12cm (COMPACT DISC)	Reading Speed : 4.8 ~ 5.6 m/sec. Maximum Play Time : 74 min.
	CD : 8cm (COMPACT DISC)	Reading Speed : 4.8 ~ 5.6 m/sec. Maximum Play Time : 20 min.
Video Output	Composite Video	1 channel : 1.0 Vp-p (75 Ω load)
		Blu-ray Disc : 480i DVD : 480i
	Component Video	Y : 1.0 Vp-p (75 Ω load)
		Pr : 0.70 Vp-p (75 Ω load)
		Pb : 0.70 Vp-p (75 Ω load)
		Blu-ray Disc : 1080i, 720p, 480p, 480i DVD : 480p, 480i
S-Video	Luminance Signal : 1.0 Vp-p (75 Ω load)	
	Chrominance Signal : 0.3 Vp-p (75 Ω load)	
	Blu-ray Disc : 480i DVD : 480i	
Video/Audio	HDMI	480p, 720p, 1080i, 1080p
		PCM multichannel audio, bitstream audio, PCM audio
Audio Output	2 Channel	L(1/L), R(2/R)
	5.1 Channel	F/L, F/R, R/L, R/R, C/T, S/W
	Digital Audio Output	Optical/Coaxial
	*Frequency Response	48 kHz Sampling : 4 Hz to 22 kHz
		96 kHz Sampling : 4 Hz to 44 kHz
	*S/N Ratio	110 dB
	*Dynamic Range	100 dB
*Total Harmonic Distortion	0.003%	

2-1-1 Player Features

- Digital Photo Viewer (JPEG)
You can enjoy digital photos on your TV.
- MP3 Playback
This unit can play mp3 files from CD-R/-RW, DVD-R/-RW discs.
- HDMI (High Definition Multimedia Interface)
HDMI reduces picture noise by allowing a pure digital video/audio signal path from the player to your TV.
- Simplay HD
The BD-P1500 is Simplay HD™ verified.

2-1-2 Blu-ray Disc Features

Blu-ray Discs can store 25 GB (single layer) or 50 GB (dual layer) on a single sided disc - about 5 to 10 times the capacity of a DVD. Blu-ray Discs also support the highest quality HD video available in the industry (up to 1920 x 1080 at 40 Mbit/sec) - Large capacity means no compromise on video quality. Furthermore, a Blu-ray Disc has the same familiar size and look as DVD.

* The following Blu-ray Disc features are disc dependant and will vary. Appearance and navigation of features will also vary from disc to disc. Not all discs will have the features described below.

- Video highlights
The BD-ROM format for movie distribution supports three highly advanced video codecs, including AVC, VC-1, and MPEG-2.
HD video resolutions are also available:
 - 1920 x 1080 HD
 - 1280 x 720 HD
- For High-Definition Playback
To view high-definition contents in BD discs, an HDTV (High Definition Television) is required. Some discs may require using the player's HDMI OUT to view high-Definition content. The ability to view high-Definition content on BD discs may be limited depending on the resolution of your TV.
- Graphic planes
Two individual, full HD resolution (1920x1080) video layers are available, on top of the HD video layer. One layer is assigned to video-related graphics (like subtitles), and the other layer is assigned to interactive elements, such as buttons or menus. Various wipes, fades and scroll effects may be available on both layers.
- Menu graphics
Support 256 full color resolution graphics and animation, thereby greatly surpassing the capabilities of DVD-Video. Unlike DVD, Menus can be accessed during video playback.
- Menu sounds
When you highlight or select a menu option on a Blu-ray disc, sounds can be heard such as button clicks or a voiceover explaining the highlighted menu choice.
- Multi-page/PopUp Menus
With DVD-Video, playback is interrupted each time a new menu screen is accessed. Due to Blu-ray Disc's ability to preload data from the disc without interrupting playback, a menu may consist of several pages. You can browse through the menu pages or select different menu paths, while the audio and video remain playing in the background.
- Interactivity

Certain Blu-ray Discs may contain Animated menus and Trivia games.

- User Browsable Slideshows

With Blu-ray Discs, you can browse through various still pictures while the audio remains playing.

- Subtitles

Depending on what is contained on the Blu-ray Disc, you may be able to select different font styles, sizes and colors for the subtitles, Subtitles may also be animated, scrolled or faded in and out.

2-1-3 Disc types that can be played

Disc Types	Recorded content	Disc Shape	Max. Playing minute
BD-ROM, BD-R, BD-RE	AUDIO + VIDEO	Single sided (25GB/50GB)	–
DVD-VIDEO	AUDIO + VIDEO	Single sided(5 inches)	240
		Double sided(5 inches)	480
		Single sided(3 1/2 inches)	80
		Double sided(3 1/2 inches)	160
AUDIO-CD	AUDIO	Single sided(5 inches)	74
		Single sided(3 1/2 inches)	20
DVD-RW(V mode and fi nalized only)	AUDIO + VIDEO	5 inches (4.7GB)	480(EX : Extended Play)
DVD-R(V mode and fi nalized only)	AUDIO + VIDEO	5 inches (4.7GB)	480(EX : Extended Play)
CD-R/-RW DVD-RW/-R	JPEG MP3	–	–

BD-ROM	Blu-ray Disc Read Only Memory. A BD-ROM disc contains pre-recorded data. Although a BD-ROM may contain any form of data, most BD-ROM discs will contain movies in High Definition format, for playback on Blu-ray disc players. This unit can play back pre-recorded commercial BD-ROM discs.
DVD-Video	A digital versatile disc (DVD) can contain up to 135-minutes of images, 8 audio languages and 32 subtitle languages. It is equipped with MPEG-2 picture compression and Dolby Digital surround, allowing you to enjoy vivid and clear theatre quality images. When switching from the fi rst layer to the second layer of a dual-layered DVD Video disc, there may be momentary distortion in the image and sound. This is not a malfunction of the unit. Once a DVD-RW/-R recorded in Video Mode is fi nalized, it becomes DVD-Video. Pre-recorded (prestamped) commercial DVDs with movies are also referred to as DVD-Videos. This unit can play back pre-recorded commercial DVD discs (DVD-Video discs) with movies.
AUDIO-CD	An audio disc on which 44.1kHz PCM Audio is recorded. This unit can play back CD-DA format audio CD-R and CD-RW discs. The unit may not be able to play some CD-R or CD-RW discs due to the condition of the recording.
DVD-RW(V mode and fi nalized only)	Use a 700MB(80 minutes) CD-R/-RW disc. If possible, do not use a 800MB(90 minutes) or above disc, as the disc may not play back. If the CD-R/-RW disc was not recorded as a closed session, you may experience a delay in the early playback time, all recorded fi les may not play. Some CD-R/-RW discs may not be playable with this unit, depending on the device which was used to burn them. For contents recorded on CD-R/-RW media from CDs for your personal use, playability may vary depending on contents and discs.
DVD-R(V mode and fi nalized only)	Once a DVD-R recorded in Video Mode is fi nalized, it becomes DVD-Video. This unit can play back DVD-R discs recorded and fi nalized with a Samsung DVD video recorder. It may not be able to play some DVD-R discs depending on the disc and the condition of the recording.
CD-R/-RW DVD-RW/-R	Playback can be performed with DVD-RW discs in the Video Mode and fi nalized only. Once a DVD-RW recorded in Video Mode is fi nalized, it becomes DVD-Video. Ability to play back may depend on recording conditions

2-1-4 Discs that cannot be played

- Blu-ray Discs with a region code other than "Region A".
- BD-R, BD-RE
- HD DVD Disc
- DVD-Video with a region number other than "1" or "ALL"
- DVD-RAM
- 3.9 GB DVD-R Disc for Authoring.
- DVD-RW(VR mode)
- DVD-ROM/PD/MV-Disc, etc
- CVD/CD-ROM/CDV/CD-G/CD-I/LD



[Note]

- Some commercial discs and DVD discs purchased outside your region may not be playable with this product. When these discs are played, either "No disc." or "Please check the regional code of the disc." will be displayed.
- If a DVD-R/-RW disc has not been recorded properly in DVD video format, it will not be playable.

2-1-5 Region code

Both the Blu-ray disc player and the discs are coded by region. These regional codes must match in order to play the disc. If the codes do not match, the disc will not play.

The Region Number for this Blu-ray disc player is described on the rear panel of the Blu-ray disc player.




Disc Type	Blu-ray	DVD-Video
Region code		

BD Region Code	Area
A	North America, Central America, South America, Korea, Japan, Taiwan, Hong Kong and South East Asia.
B	Europe, Greenland, French territories, Middle East, Africa, Australia and New Zealand.
C	India, China, Russia, Central and South Asia.

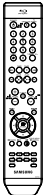
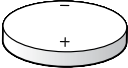
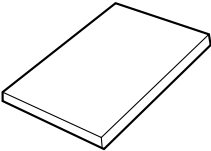
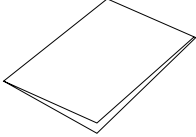
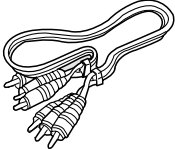
2-1-6 Blu-ray Disc Compatibility

Blu-ray Disc is a new and evolving format. Accordingly, disc compatibility issues are possible. Not all discs are compatible and not every disc will play back. For additional information, refer to the Compliance and Compatibility Notice section of this Manual. If you encounter compatibility problems, please contact the SAMSUNG customer care center. This Samsung Blu-ray disc player (BD-P1500) supports only the BDRM Profile 1 version 1.0 specification. If you want to play later version discs, you may need to update player's firmware. Please refer to <http://www.samsung.com> or contact SAMSUNG customer care center at 1-800 SAMSUNG.

2-2 Chassis Product Specification

General	Features	BD-P1200	BD-P1400	BD-P1500
Chassis				
Input / Output	CVBS Output	1CH	1CH	1CH
	S-Video Output	1CH	1CH	1CH
	YPbPr Output	1CH	1CH	1CH
	HDMI	0	0	0
	Digital Audio Output(Optical/Coaxial)	O/O	O/O	O/O
	Analog Audio Output (2ch/5.1ch)	1/1	1/1	1/X
	HDMI CEC	0	0	0
Audio/Video Decoder	Video Decoder(Maker : DAC)	BCM7438	SMP8634	BCM7440
	Video DAC	10bit	10bit	10bit
	Audio DAC	24bit 192kHz	24bit 192kHz	24bit 192kHz
Loader	BD-ROM	0	0	0
	BD-RE / BD-R	0	X	0
	DVD-RAM	0	X	X
	DVD-RW	0	0	0
	DVD-ROM	0	0	0
	DVD-R	0	0	0
	DVD+R	X	X	X
	DVD+RW	X	X	X
	CD-ROM	0	0	0
	CD-R	0	0	0
	CD-RW	0	0	0
AV Playable Media	BD-ROM	0	0	0
	BD-RE / BD-R	0	X	0
	DVD-Video	0	0	0
	DVD-Audio	X	X	X
	DVD-VR	0	X	X
	Not finalized DVD-V Mode	X	X	X
	VCD 1.1/2.0	X	X	X
	SVCD/CVD	X	X	X
	CD-DA	0	0	0
	DTS CD	0	0	0
	HDCD	X	X	X
	SACD	X	X	X
	SACD CD Layer	0	0	0
	Picture CD	0	0	0
DivX	X	X	X	
Miscellaneous	Front Display	VFD	VFD	VFD
	Screen capture	X	X	X
	Closed Caption pass through from disc	0	0	0
	Main Menu (including Setup Menu)	0	0	0

2-3 Option Product Specification

Description Fig	Description	Parts No	Remark
	Remote Control	AK59-00070D	Model Standard of BD-P1500/XAA
	Batteries for Remote Control	4301-001035	Model Standard of BD-P1500/XAA S.N.A
	Instruction Manual	AK68-01608A	Model Standard of BD-P1500/XAA
	Quick Guide	AK68-01610A	Model Standard of BD-P1500/XAA S.N.A
	Component Cable	AC39-42001R	Model Standard of BD-P1500/XAA

3. Disassembly and Reassembly

3-1 Cabinet and PCB

CAUTION : Connector Must be remove with care

3-1-1 Top Cabinet Removal

- 1) Remove 5 Screws ❶, ❷.
- 2) Lift up the Top Cabinet ❸ in direction of arrow.

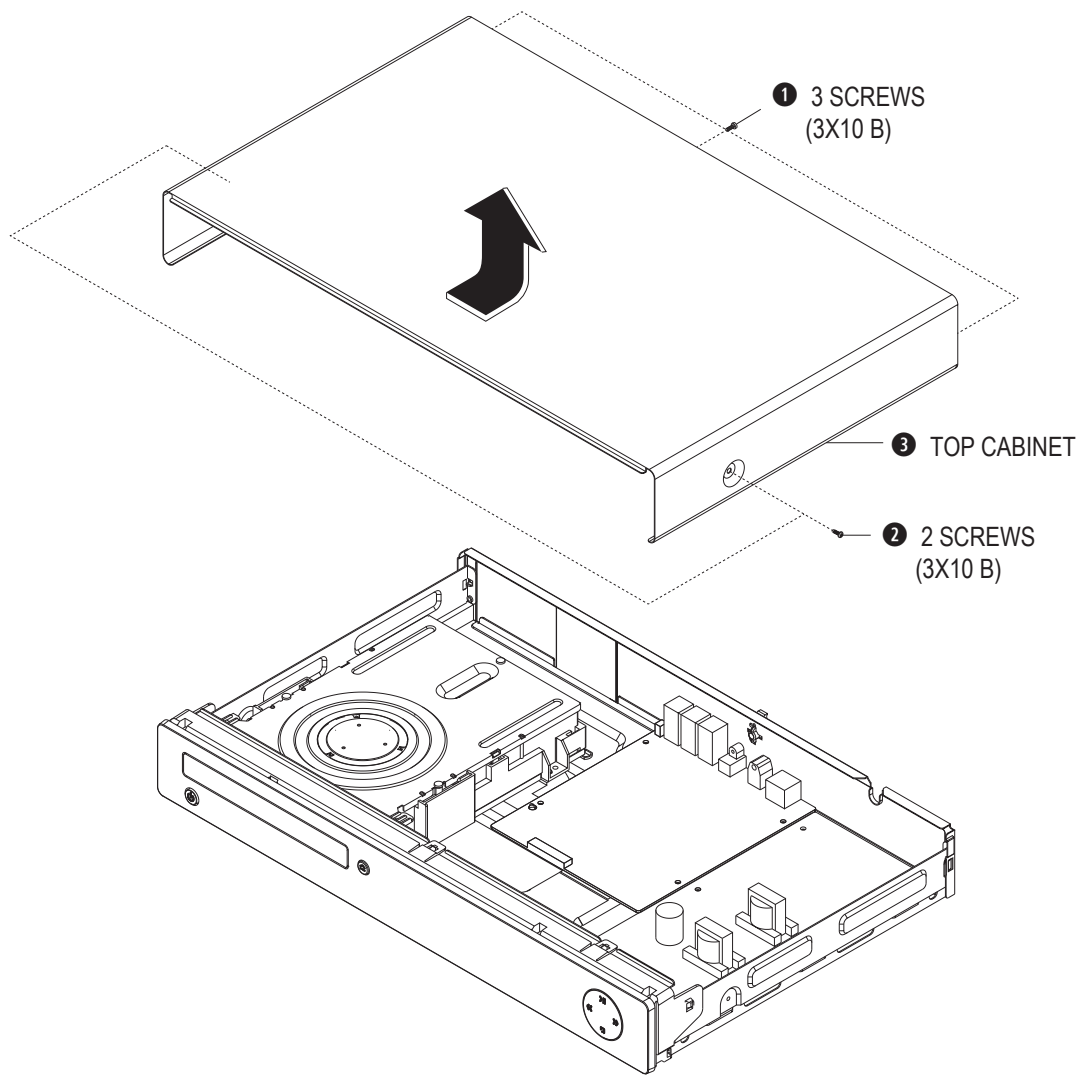


Fig. 3-1 Top Cabinet Removal

3-1-2 Ass'y Front-Cabinet Removal

1) Release 7 Hooks ①, ②, ③, ④ and Ass'y Front-Cabinet ⑤.

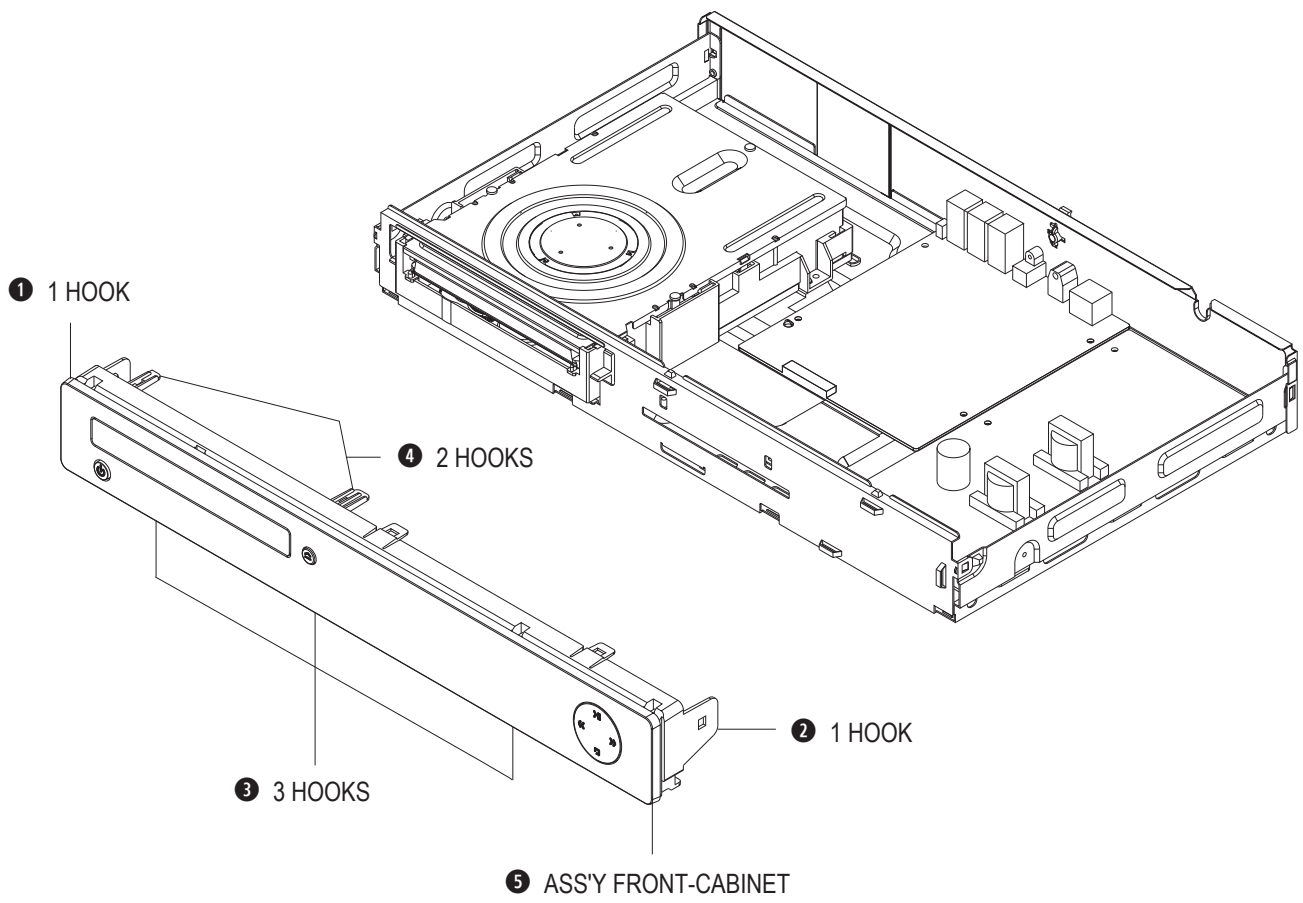


Fig. 3-2 Ass'y Front-Cabinet Removal

3-1-3 Ass'y Deck Removal

1) Remove 4 Screws ❶ from the Ass'y Deck ❷ and lift it up.

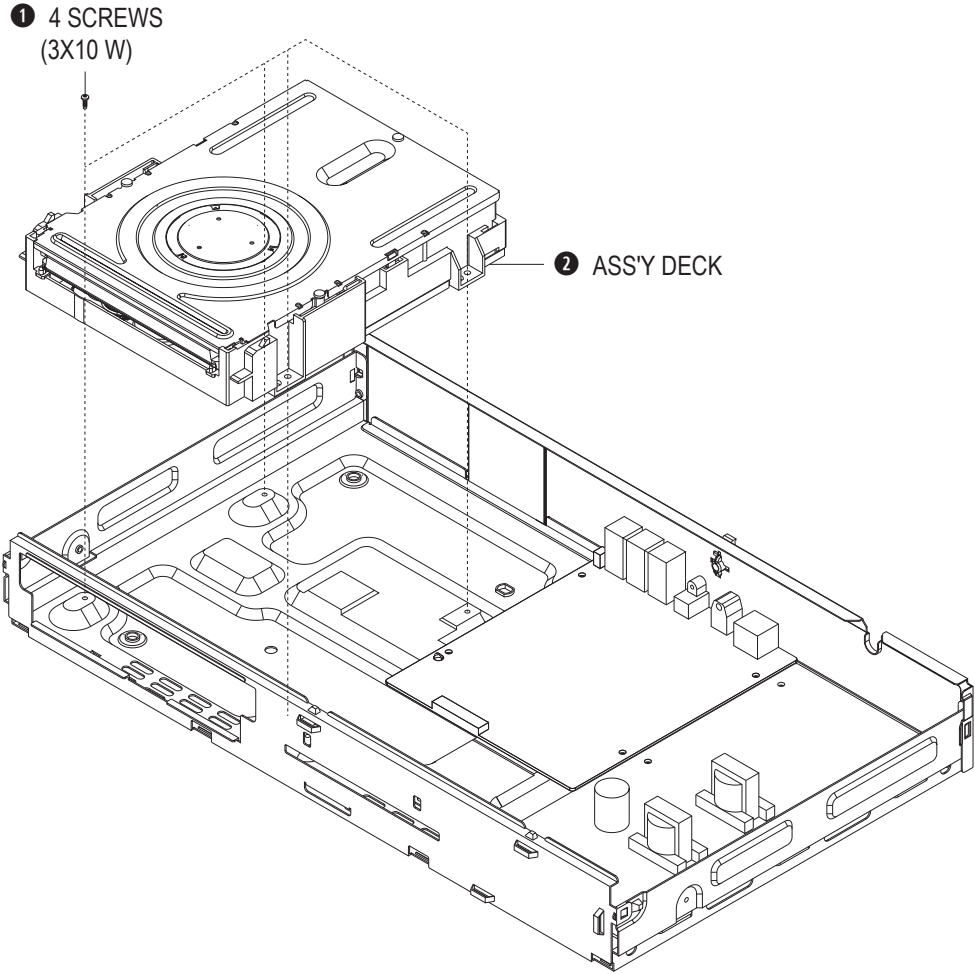


Fig. 3-3 Ass'y Deck Removal

3-1-4 S.M.P.S PCB Removal

1) Remove 3 Screws ❶, from the S.M.P.S PCB ❷ and lift it up.

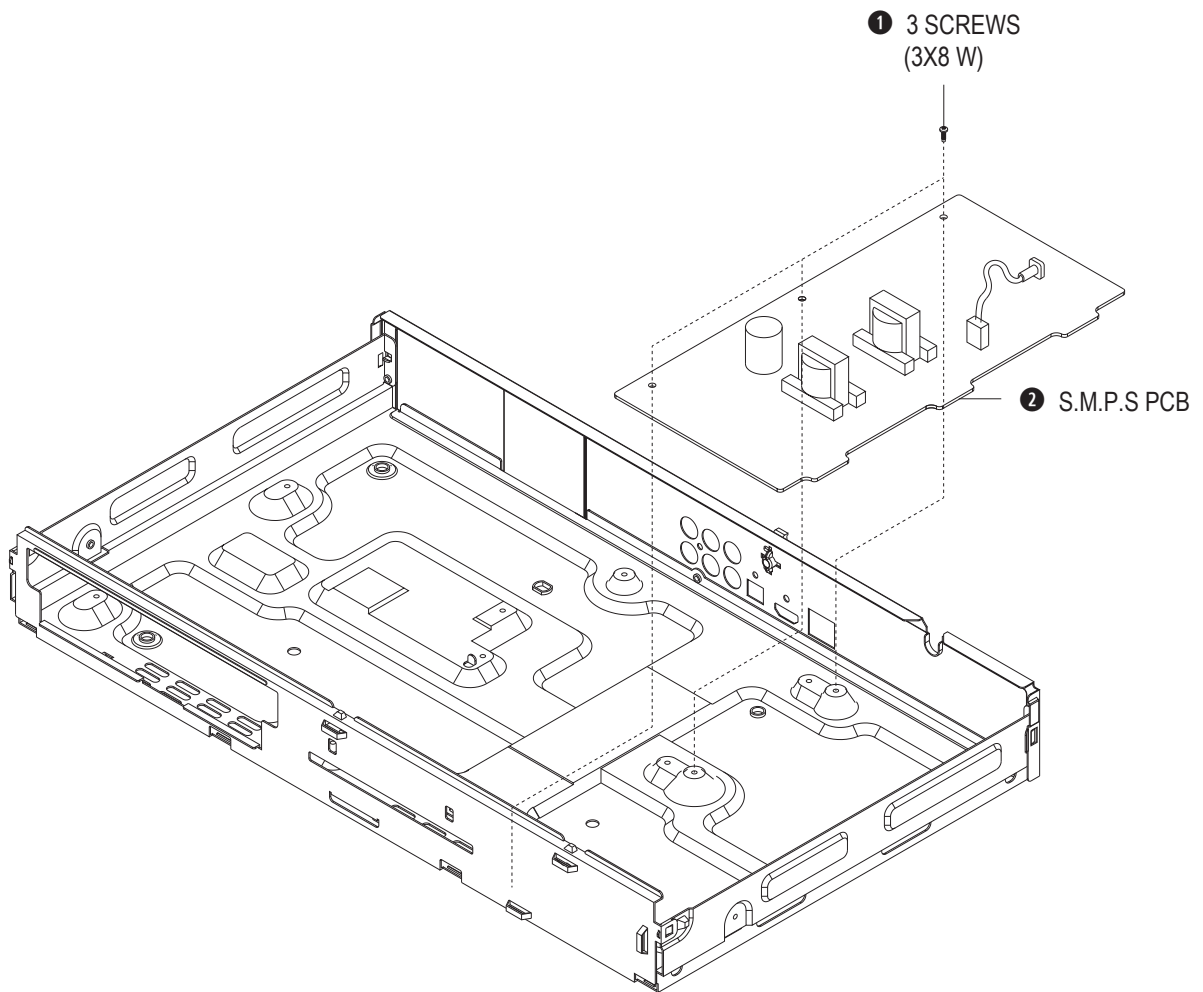


Fig. 3-4 S.M.P.S PCB Removal

3-1-5 Main PCB Removal

1) Remove 7 Screws ❶, ❷ from the Main PCB ❸ and lift it up.

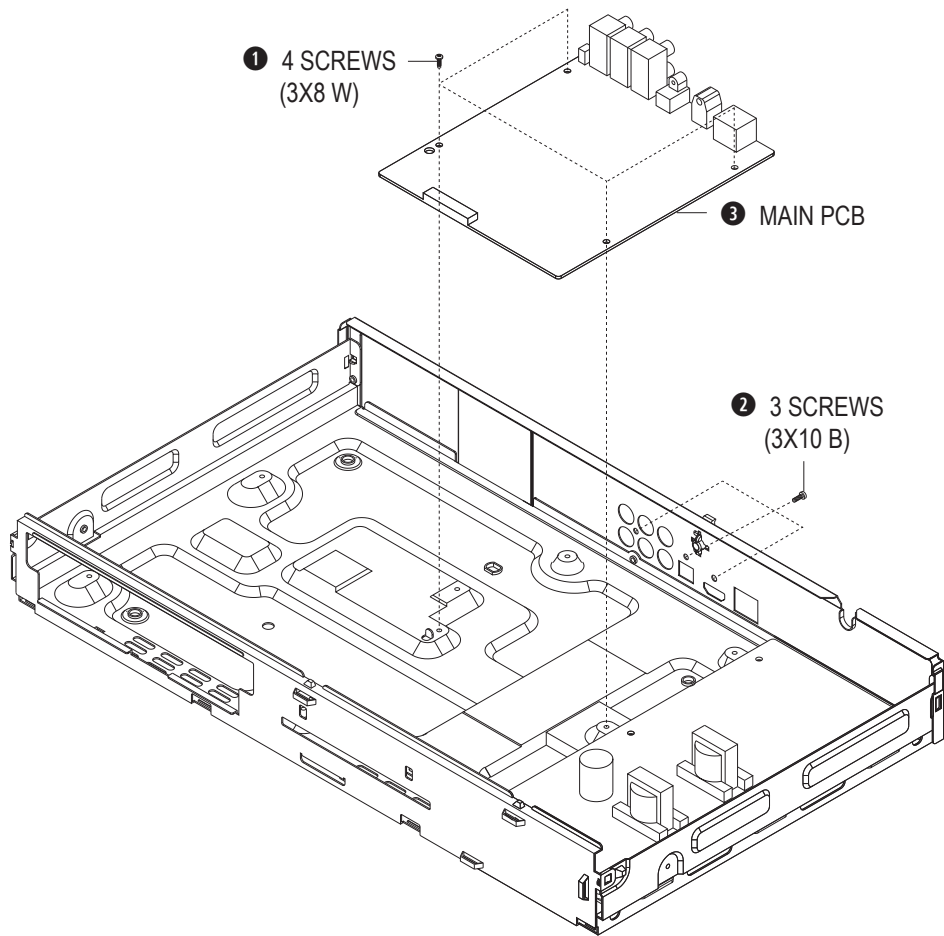


Fig. 3-5 Main PCB Removal

3-2 PCB Location

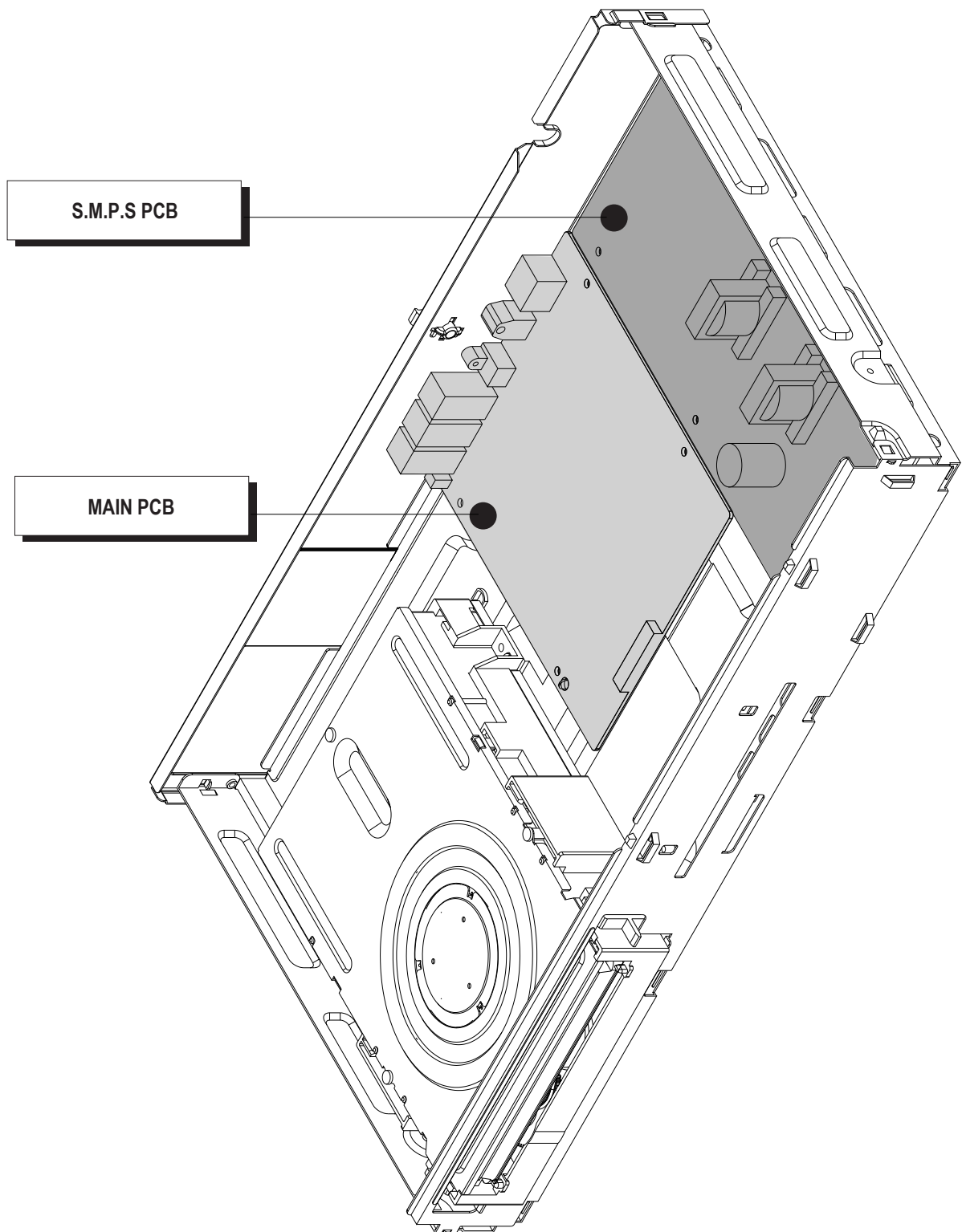


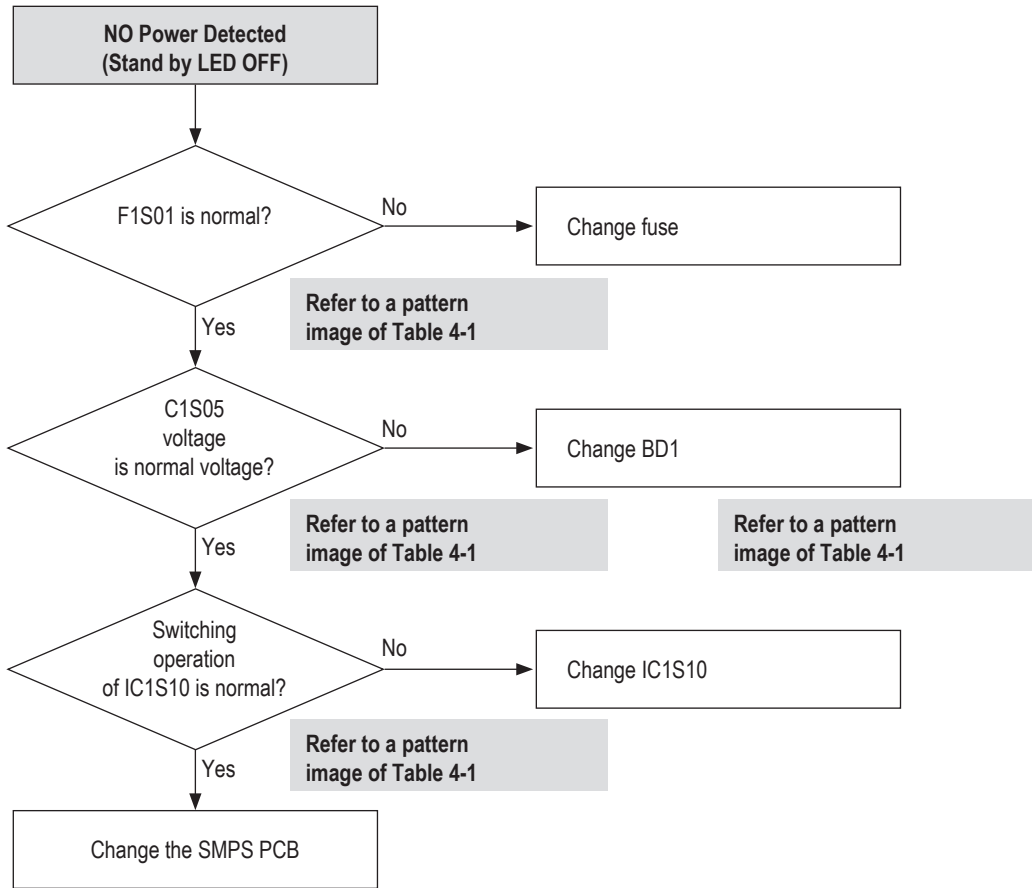
Fig. 3-6 PCB Location

4. Trouble Shooting

4-1 Trouble Shooting **4-2**

4-2 Software Update..... **4-21**

4-1 Trouble Shooting



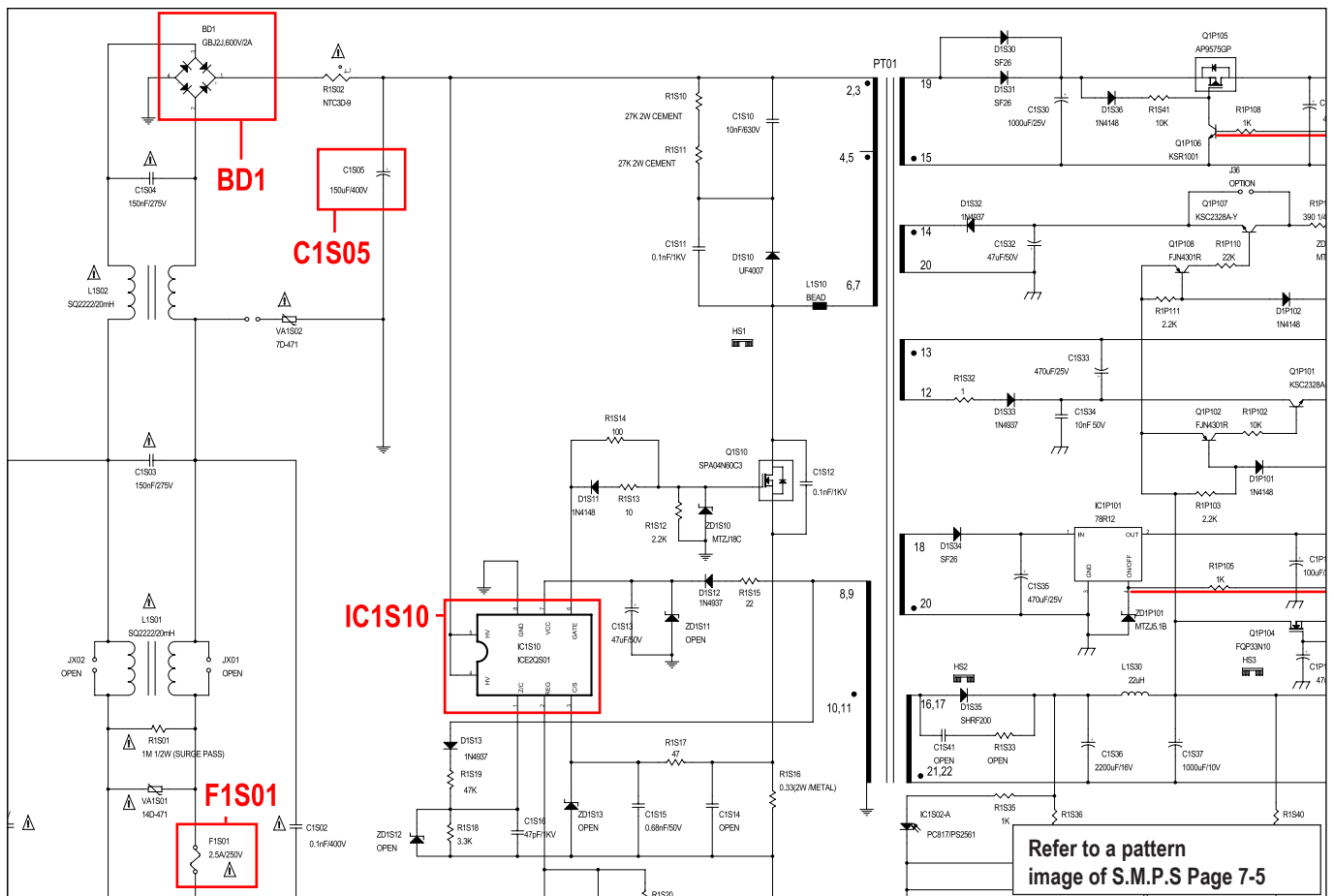
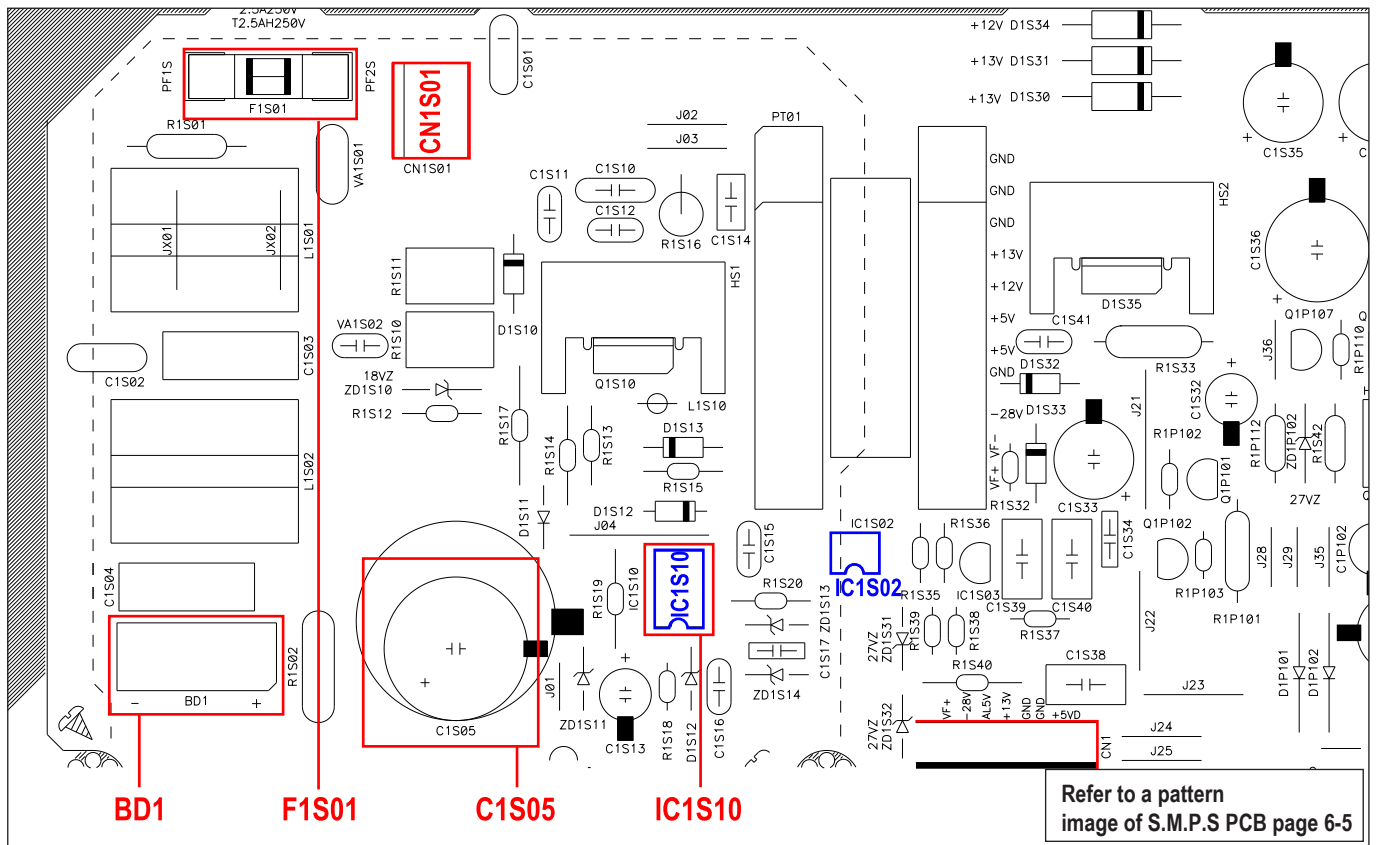
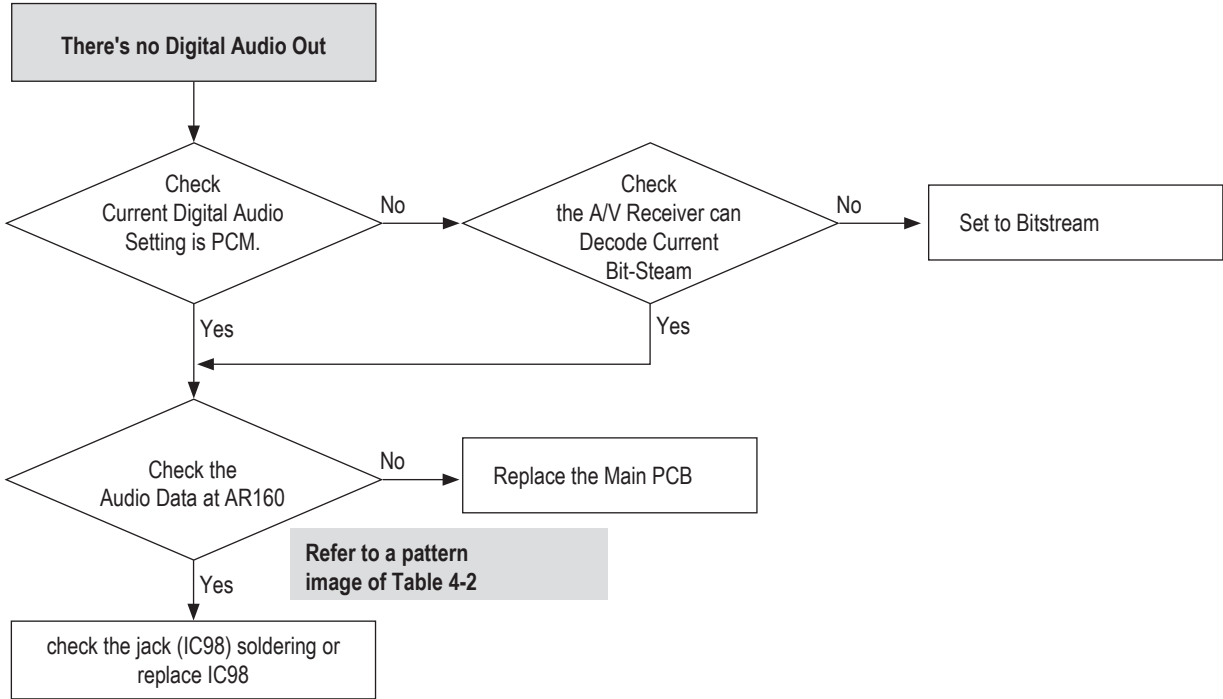


Fig. 4-1



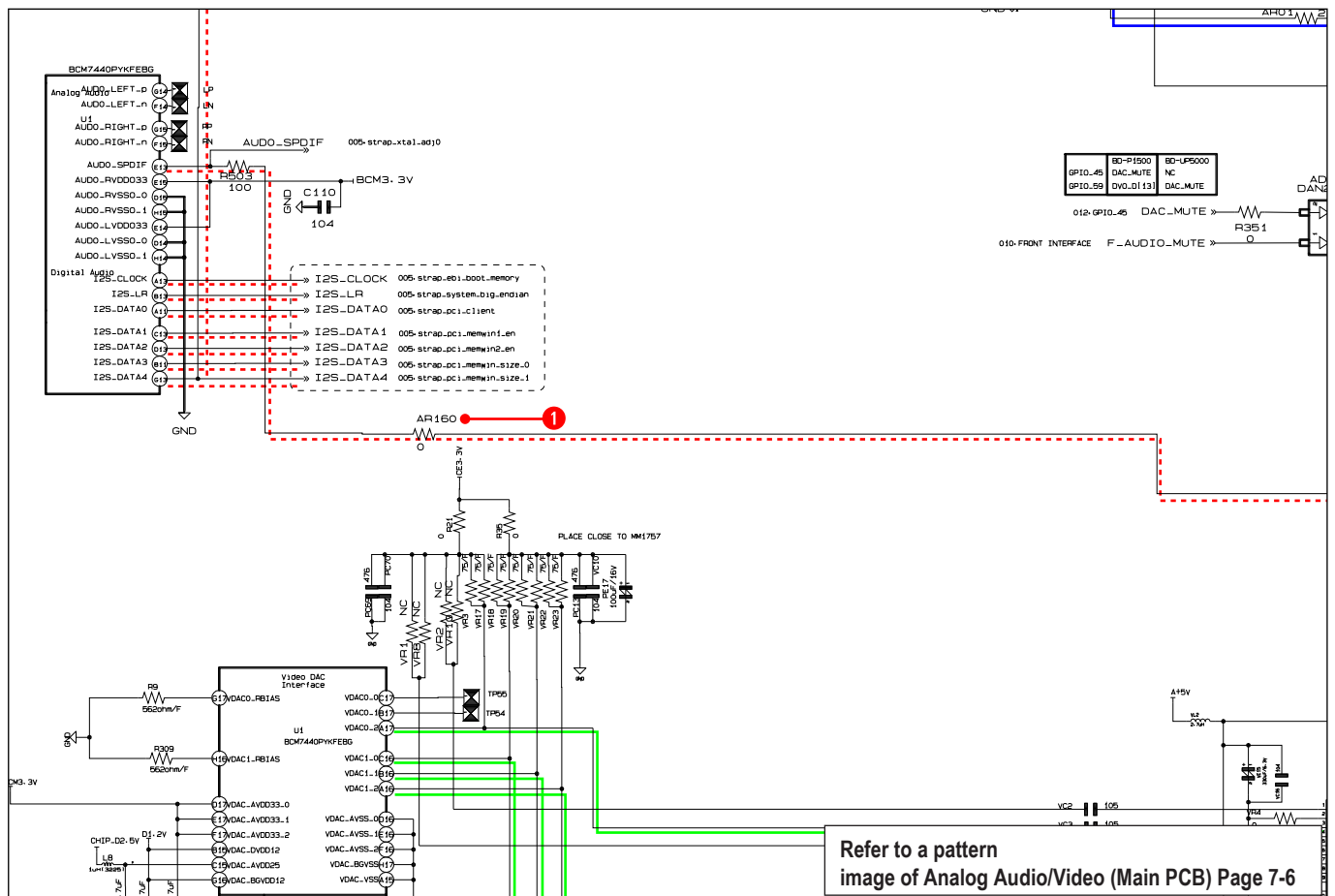
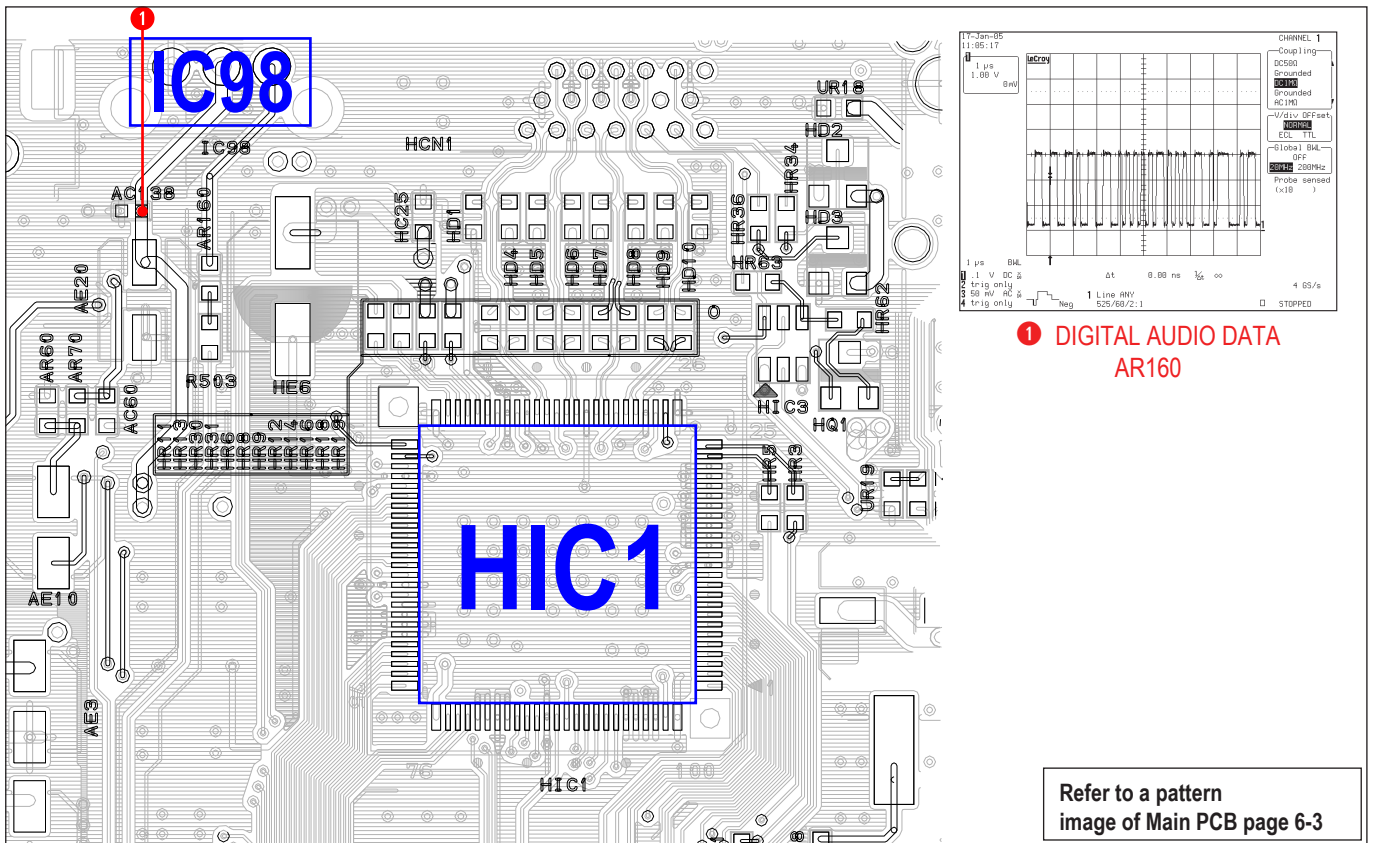
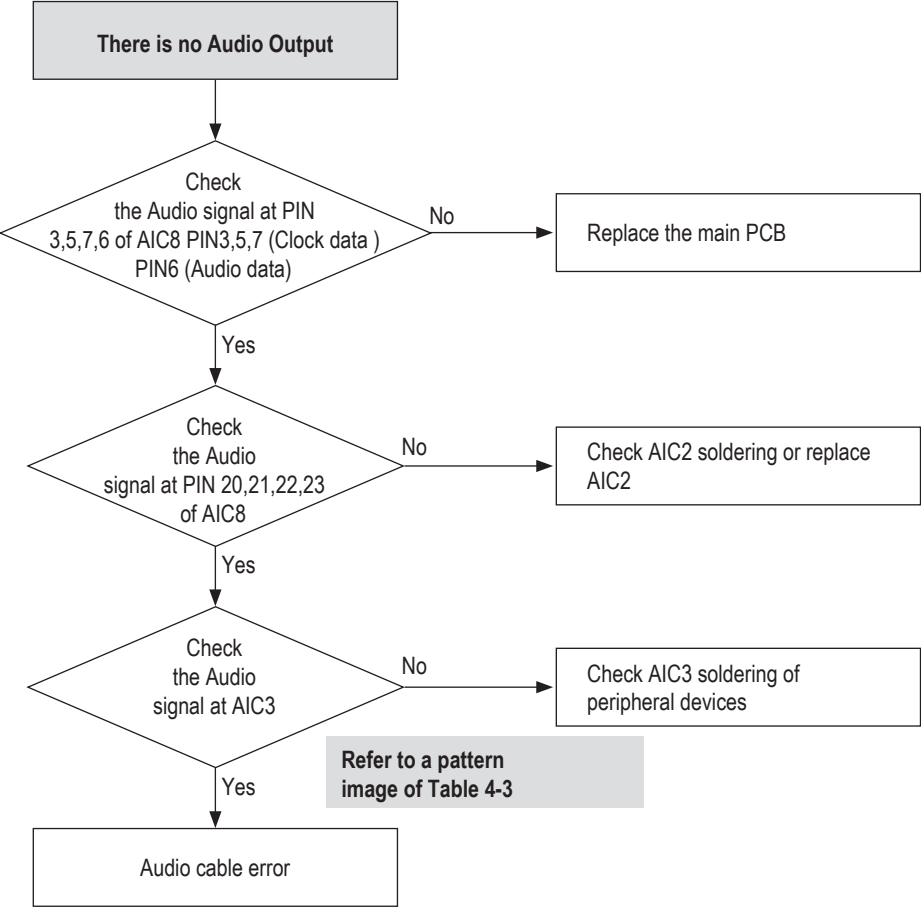


Fig. 4-2



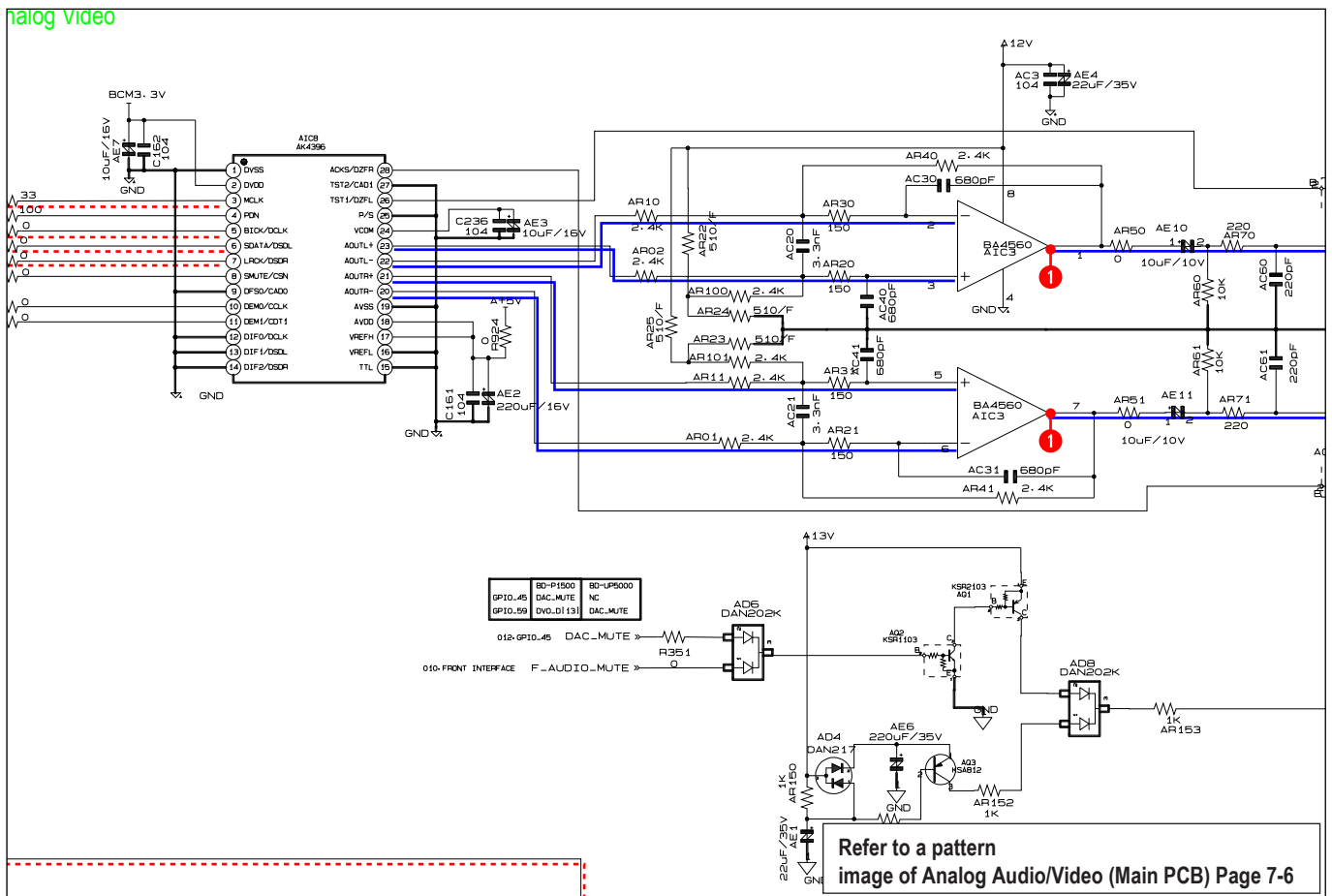
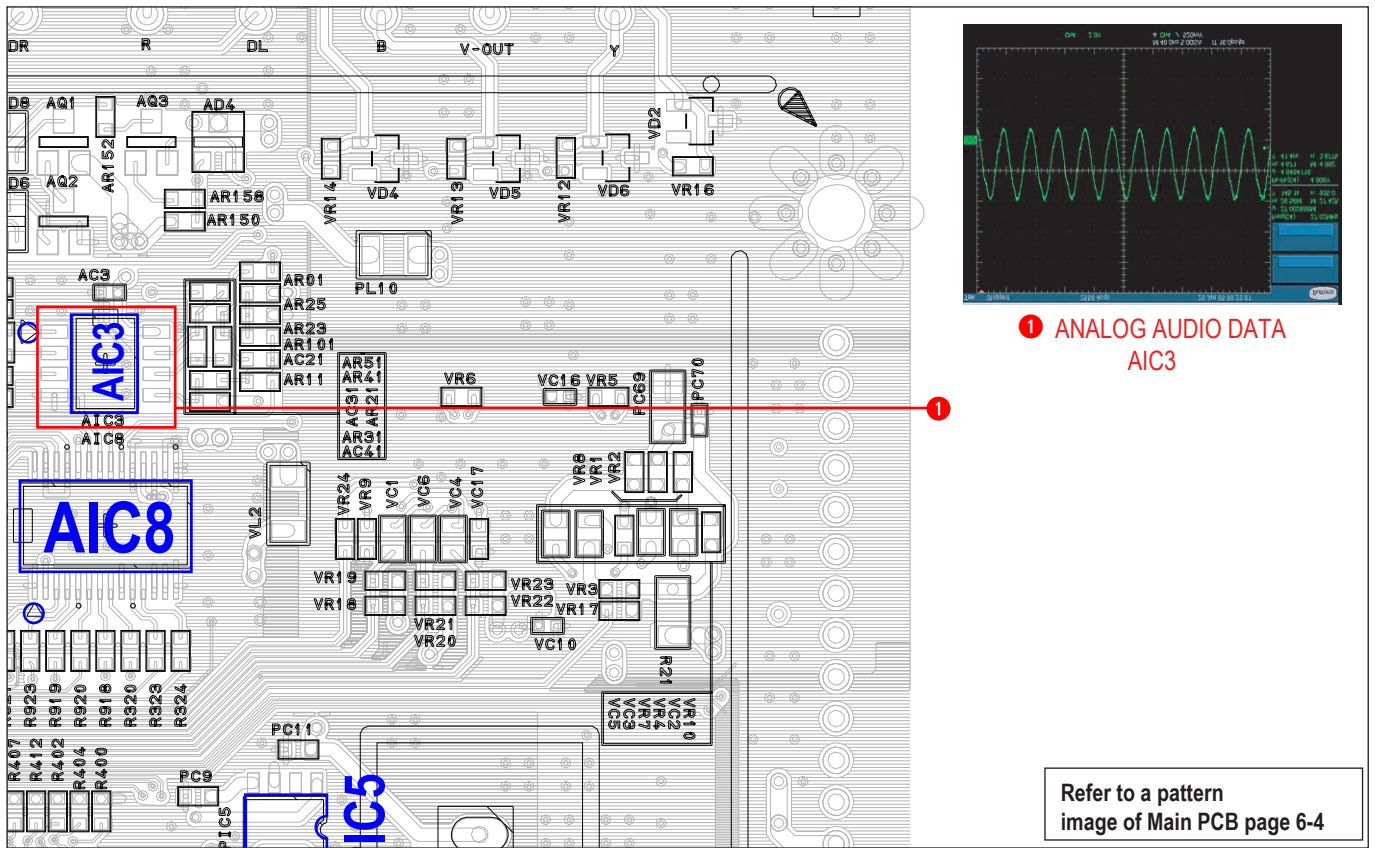
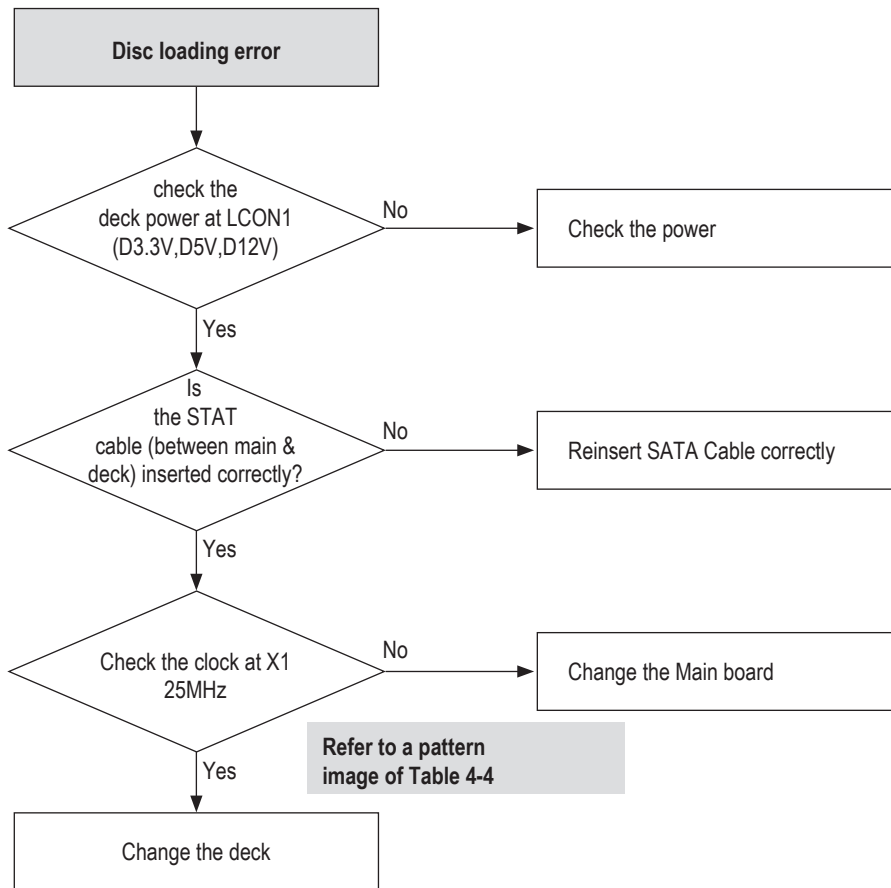


Fig. 4-3



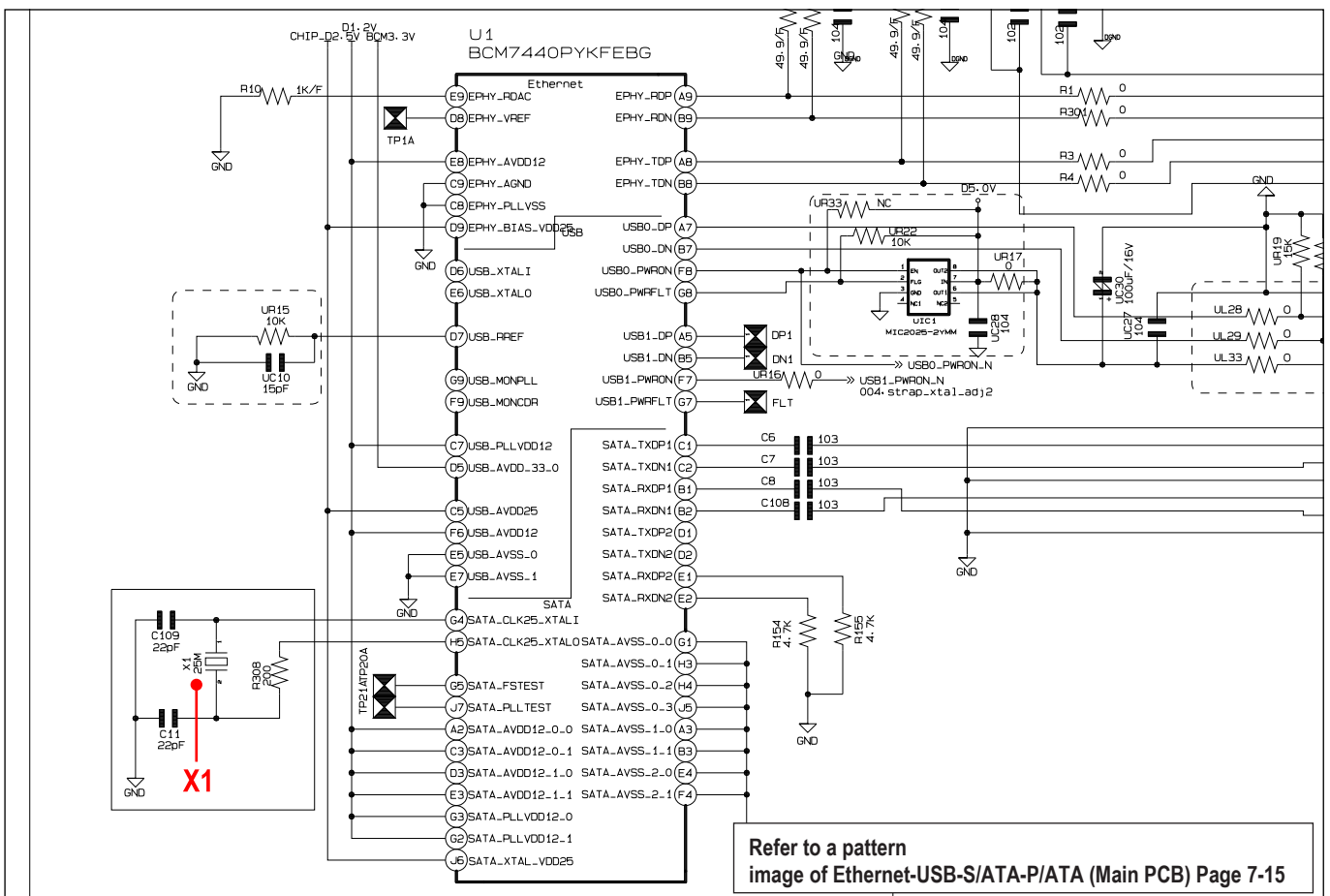
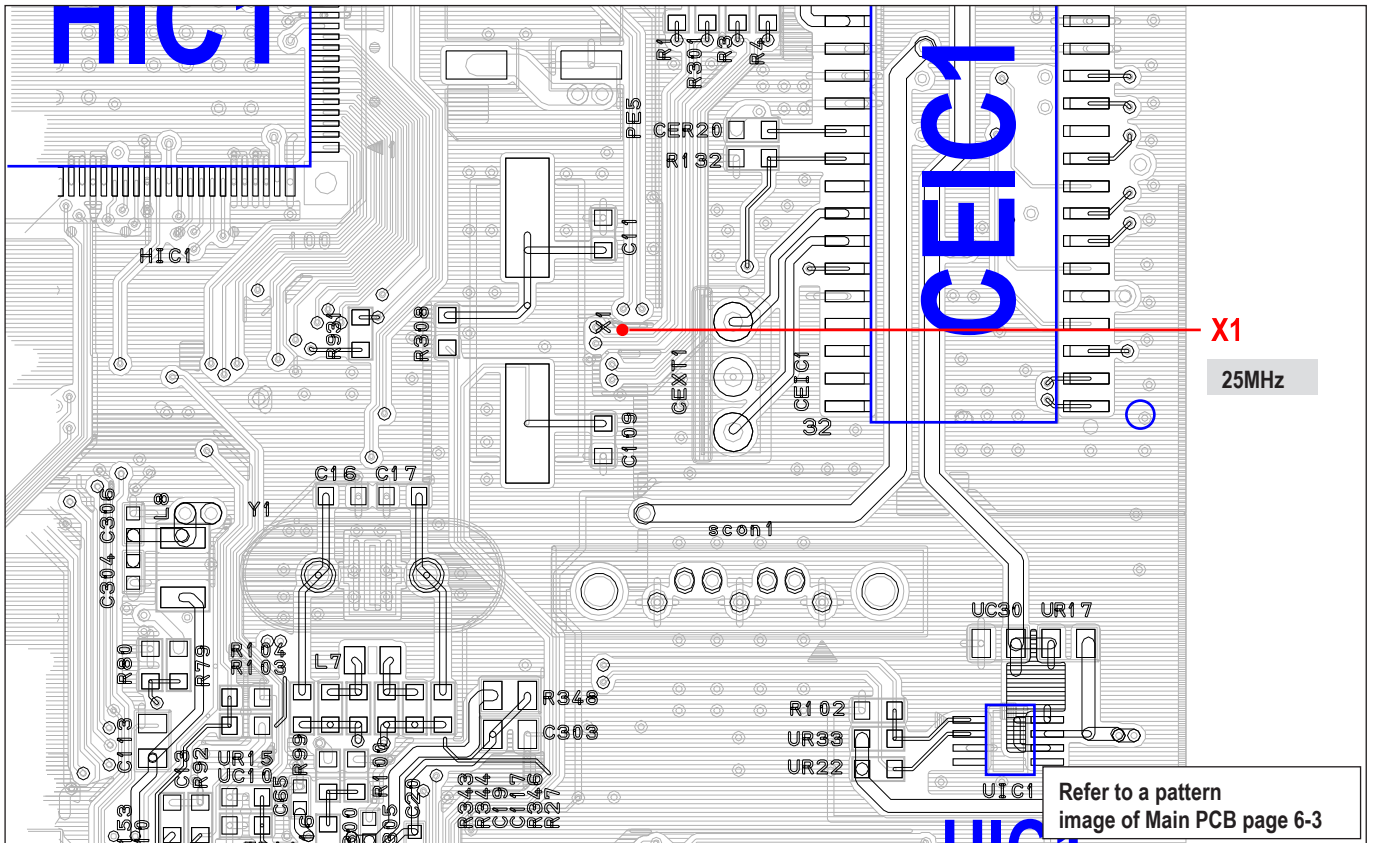
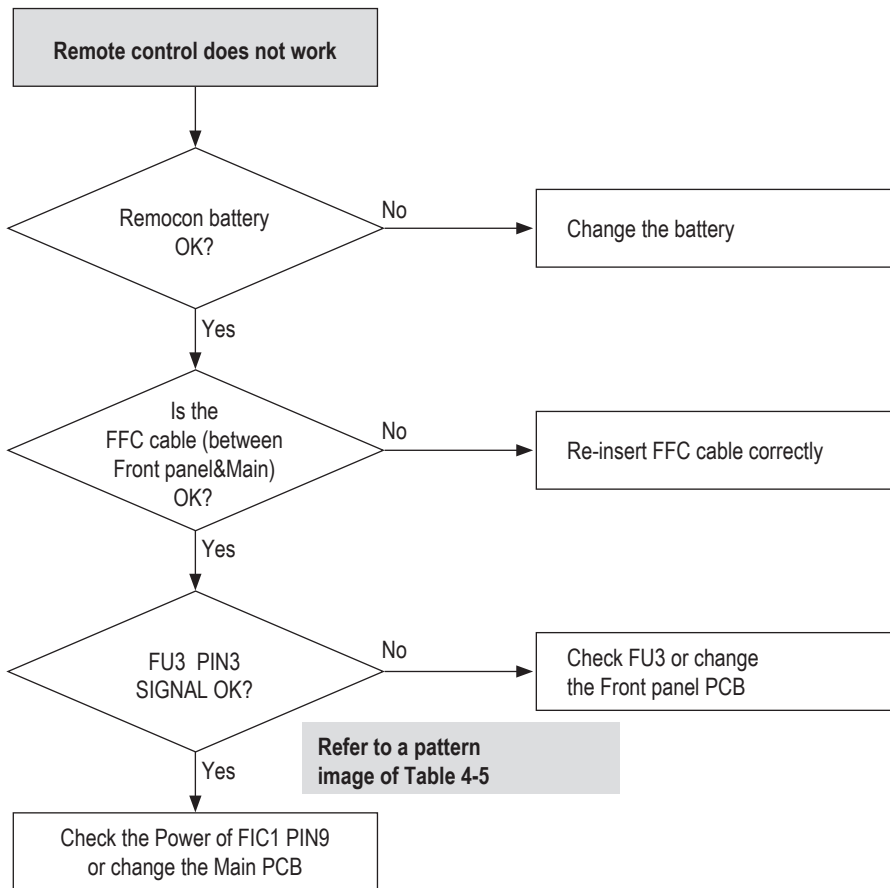


Fig. 4-4



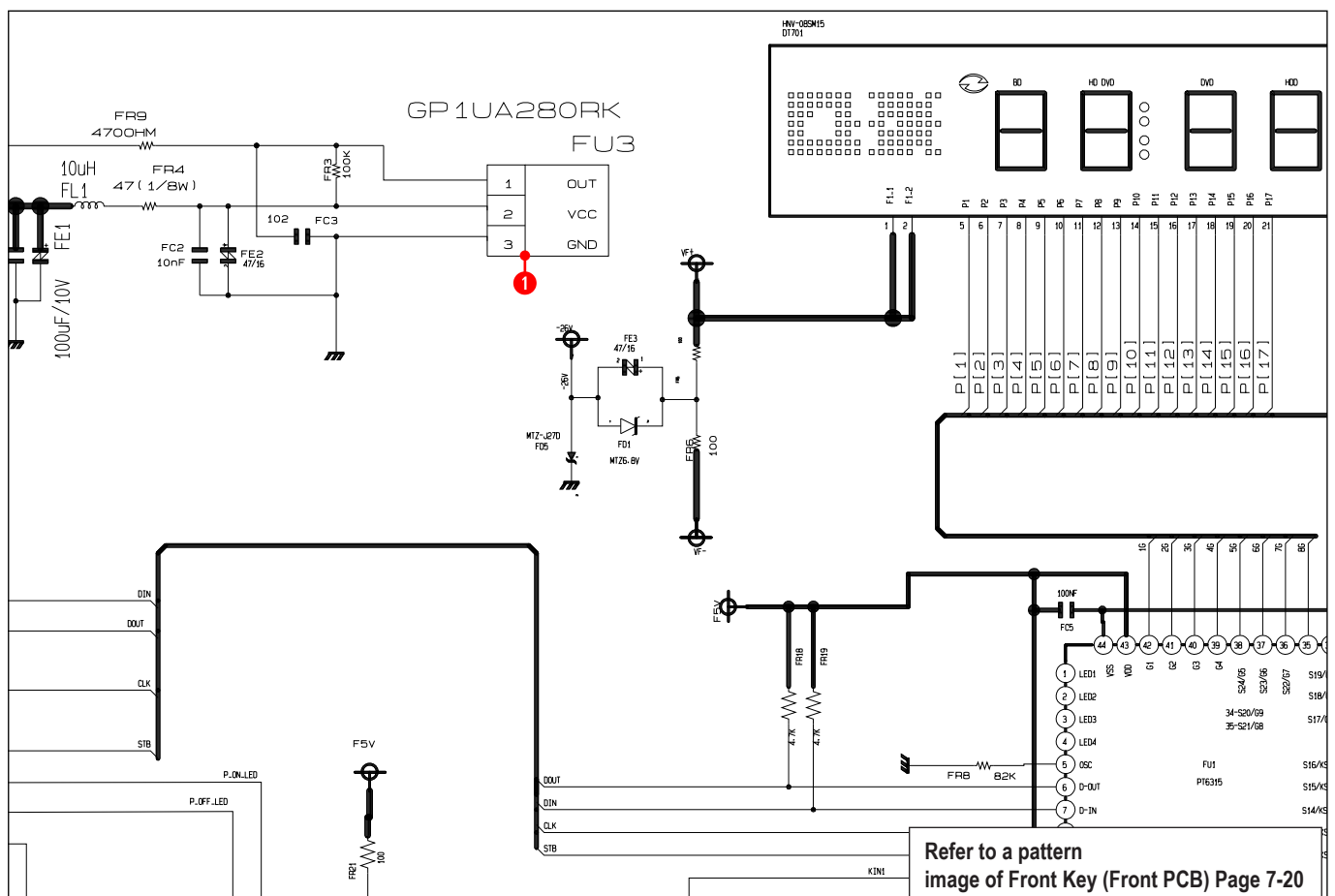
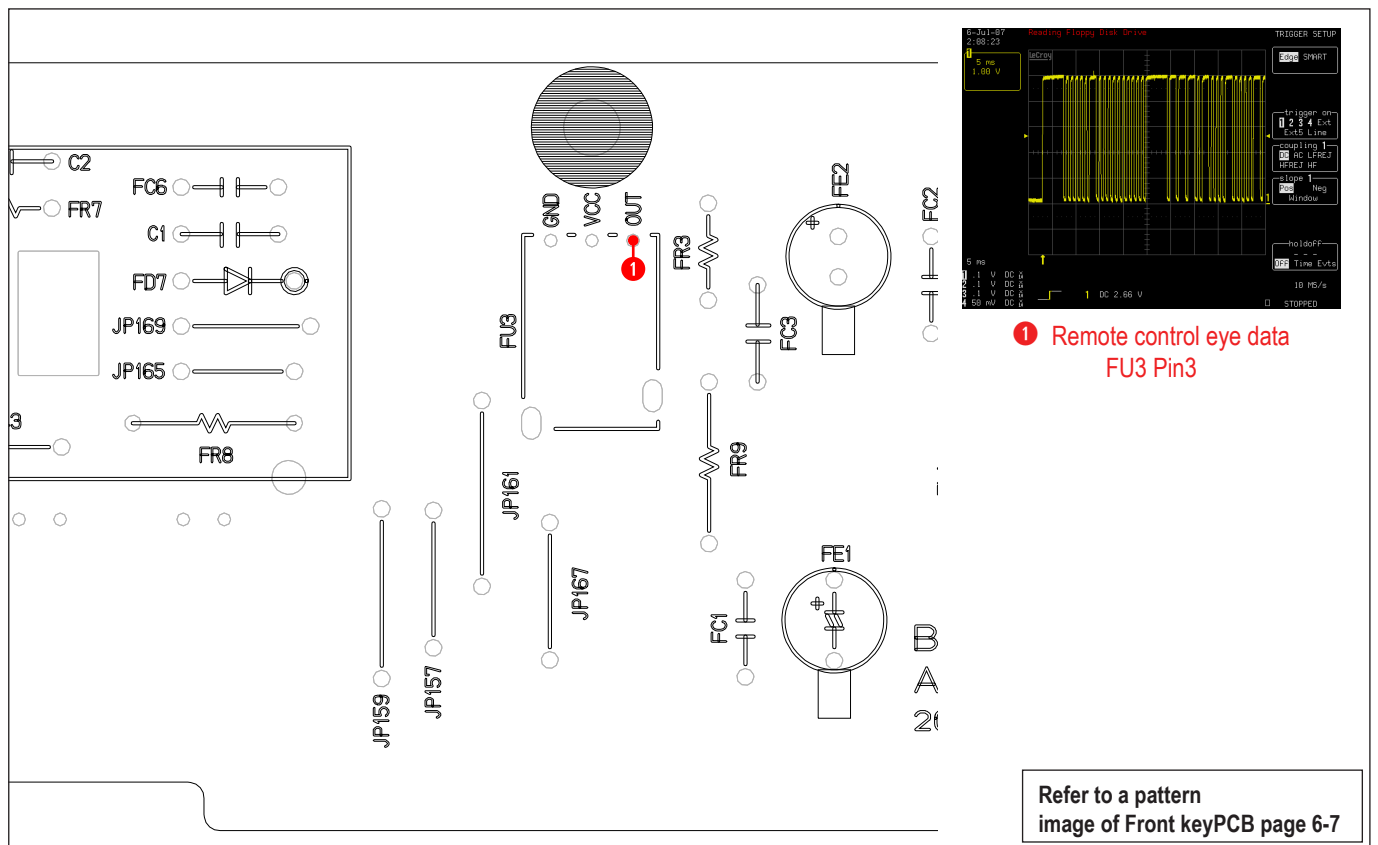
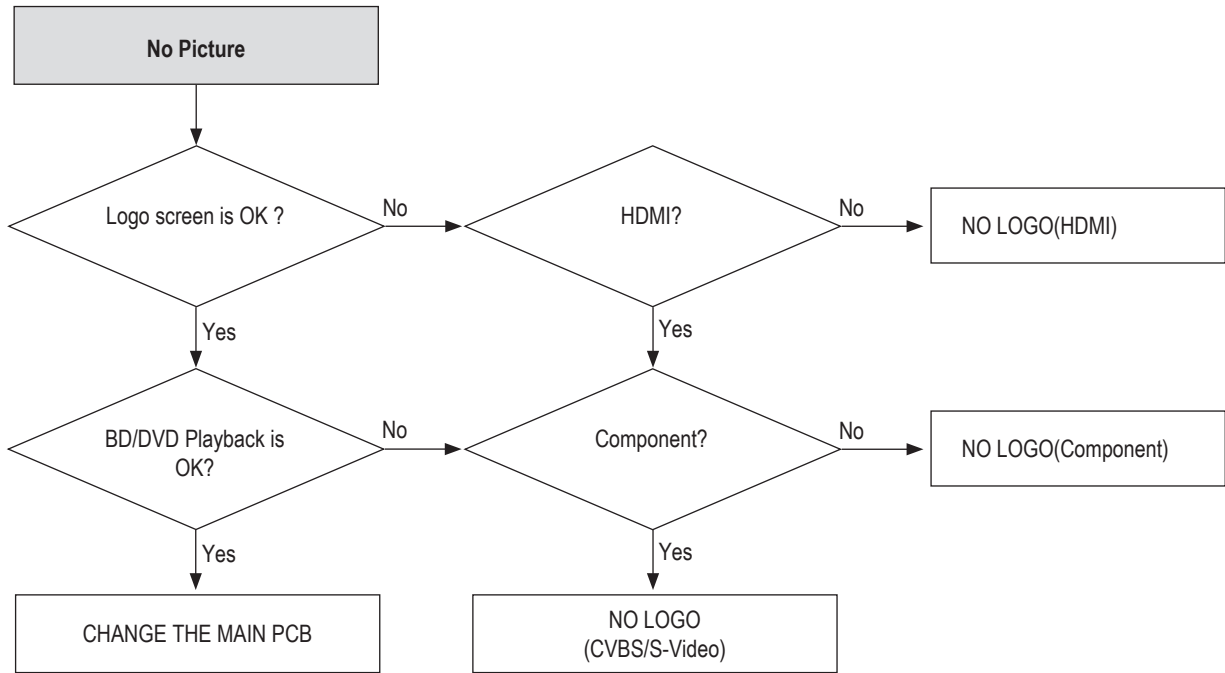
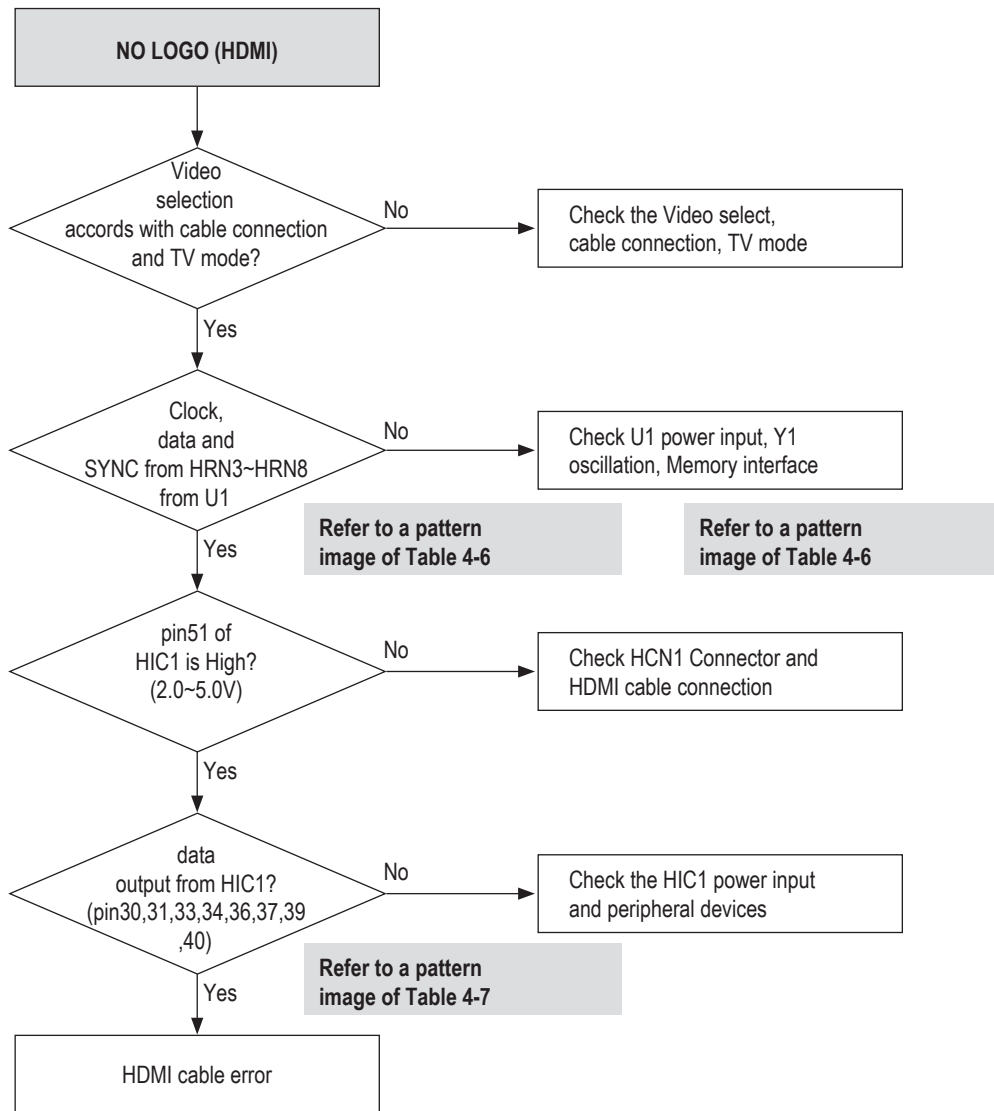
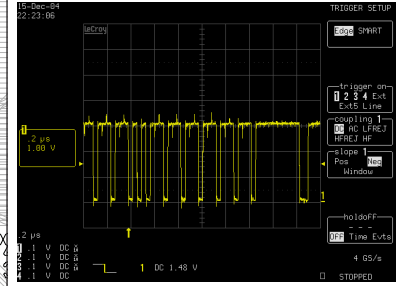
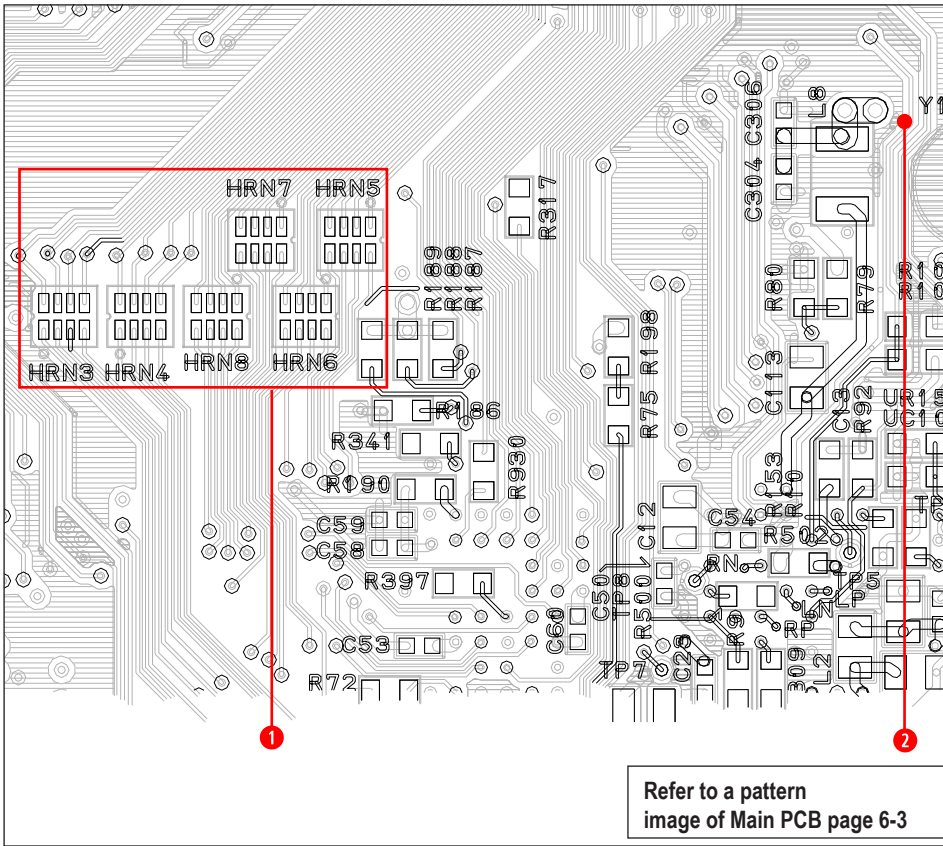


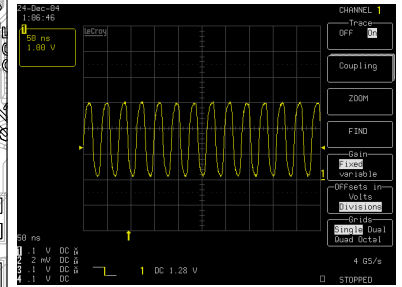
Fig. 4-5







① Digital Video signal U1(HRN3 ~ HRN8)



② Y1_CLOCK SIGNAL (54MHz)

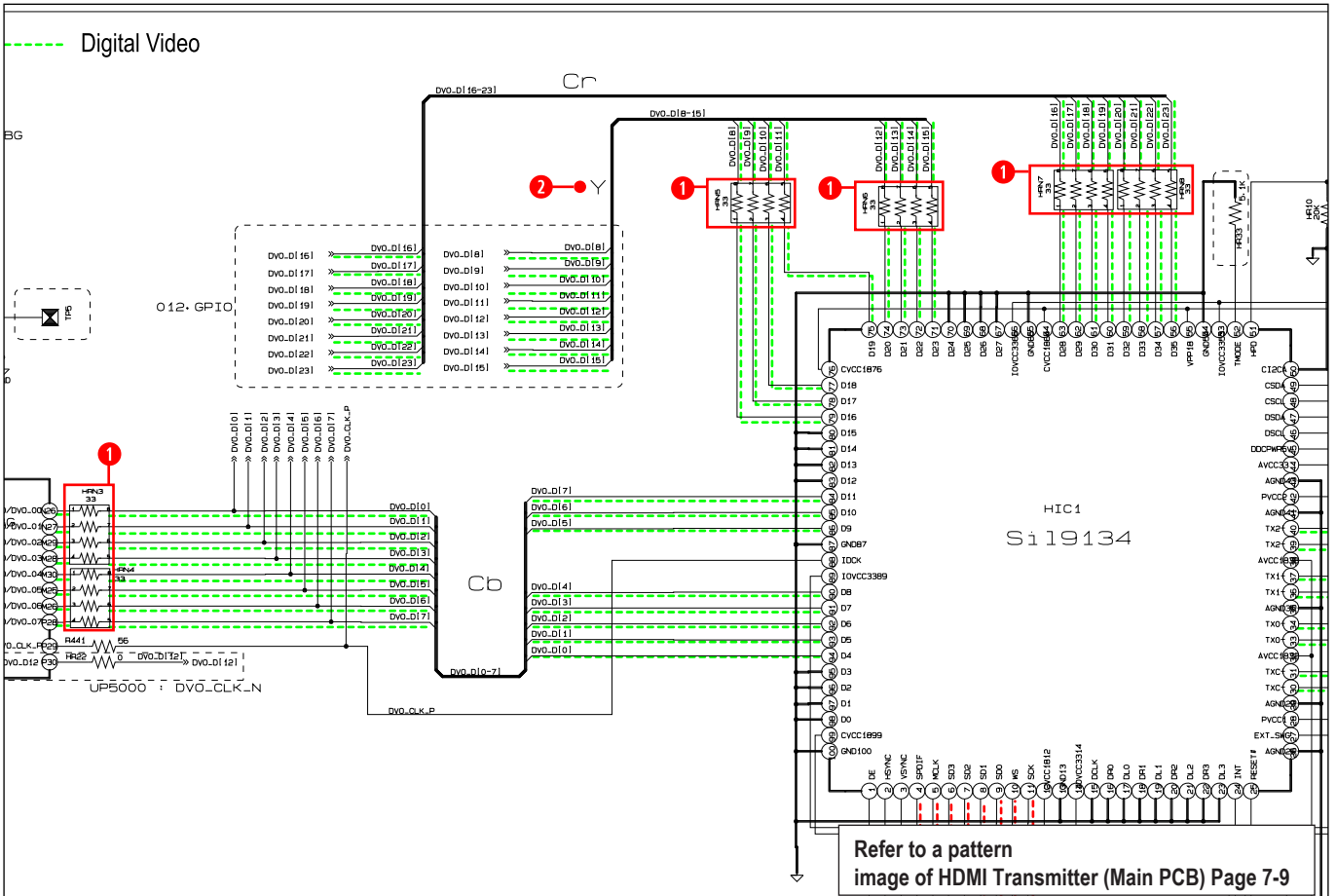
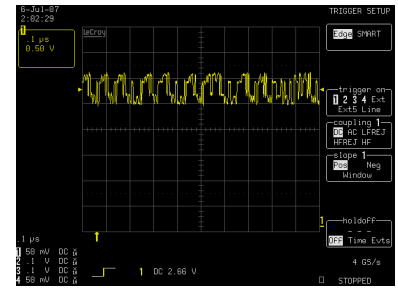
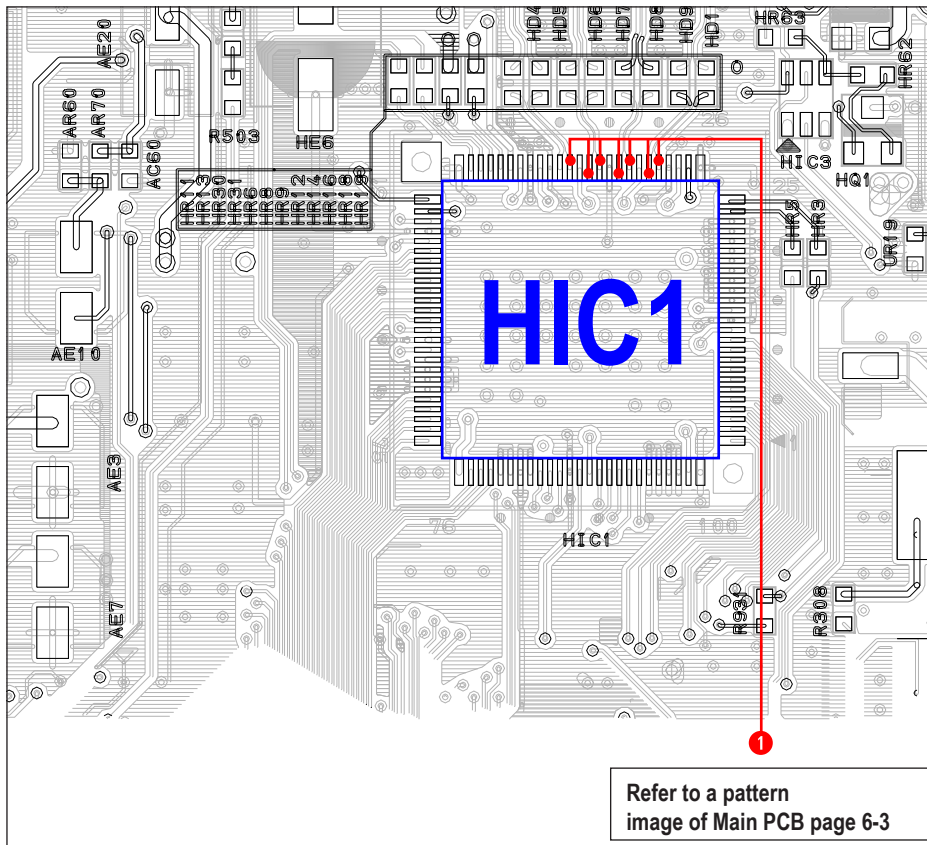


Fig. 4-6



1 HDMI OUTPUT DATA
HIC1 (pin30,31,33,34,36,37,39,40)

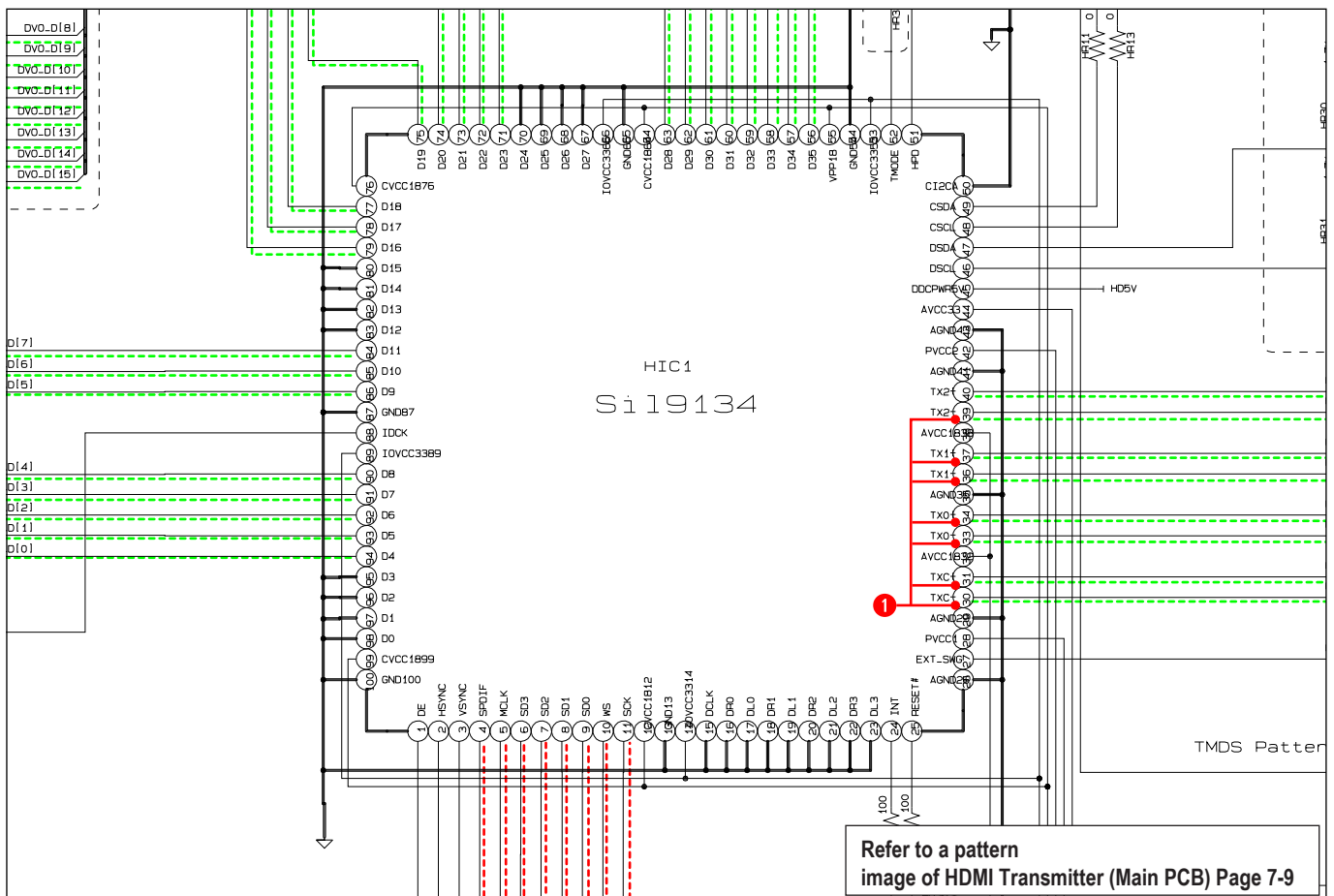
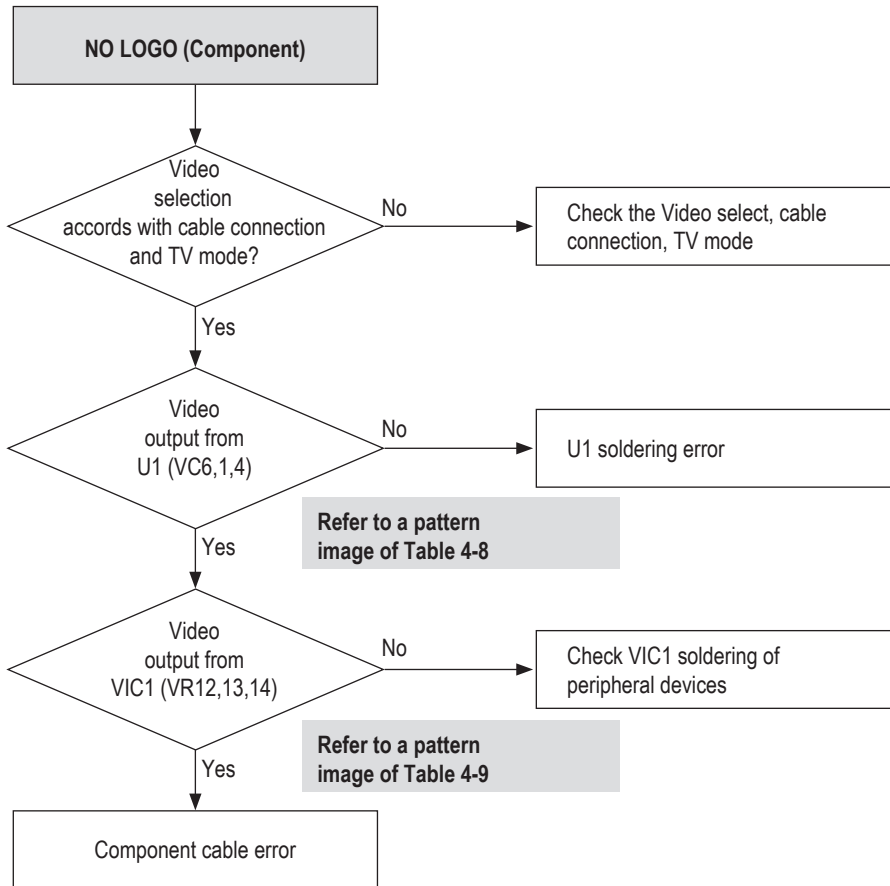


Fig. 4-7



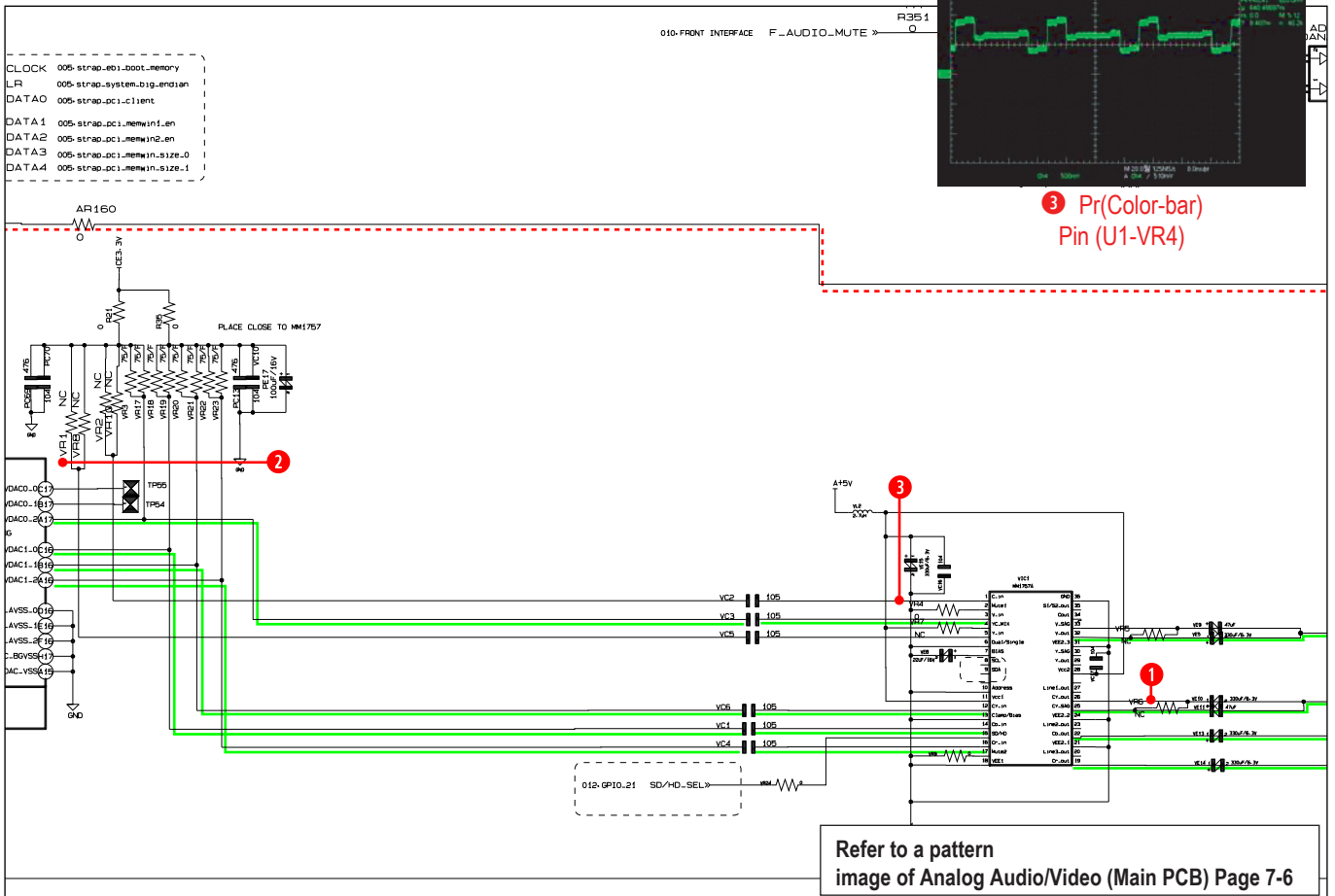
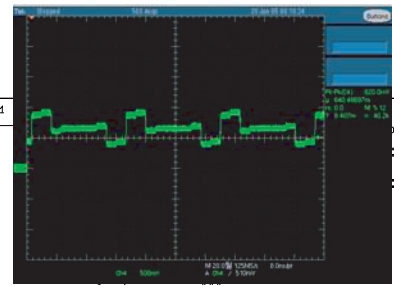
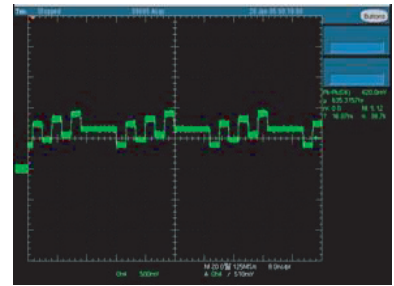
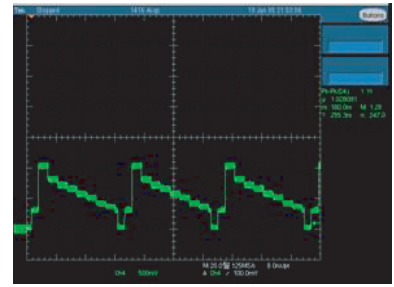
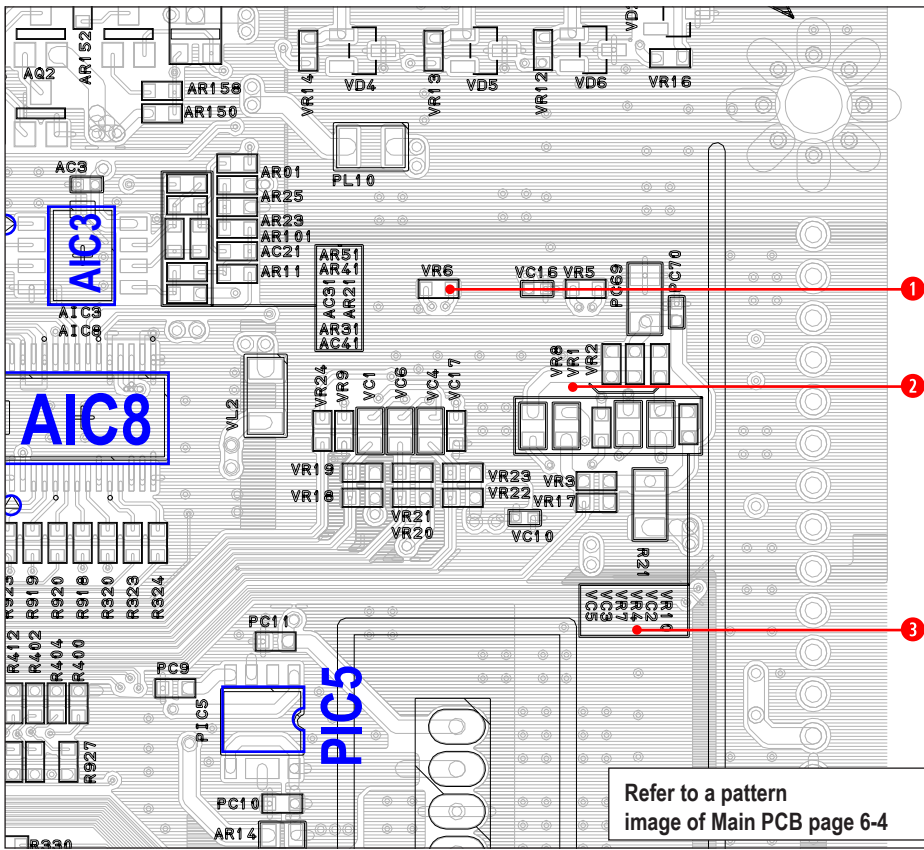
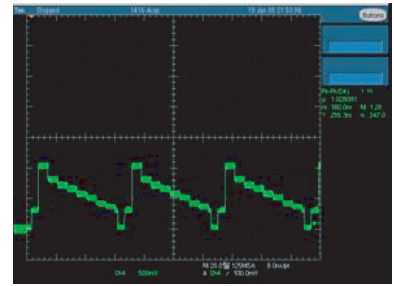
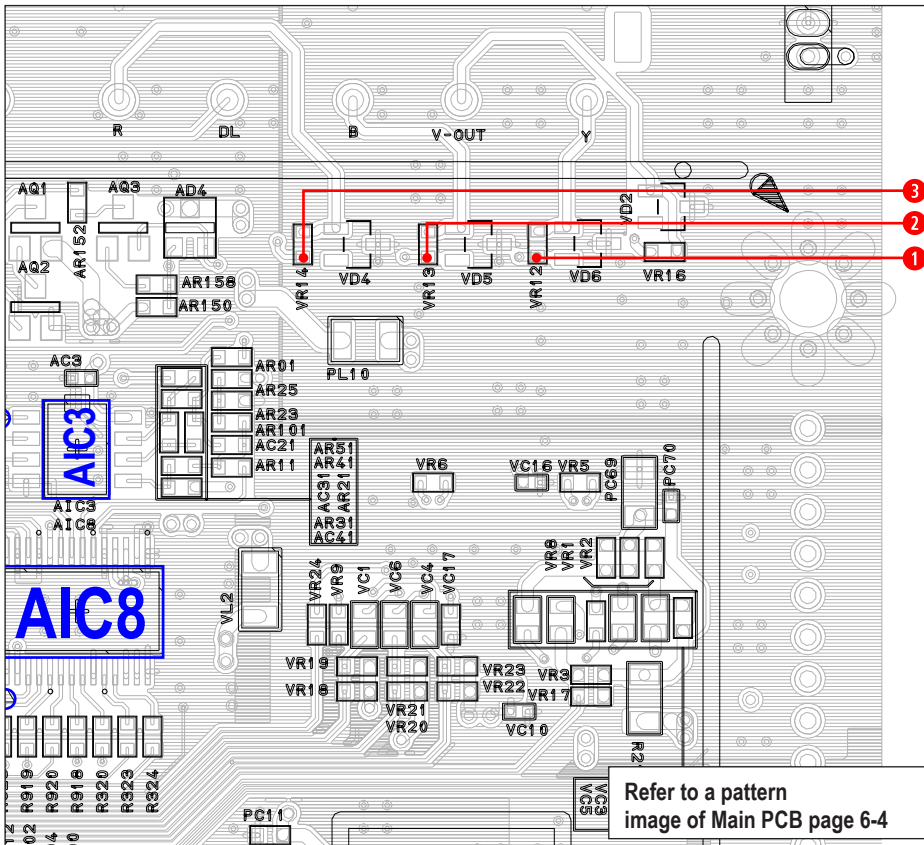
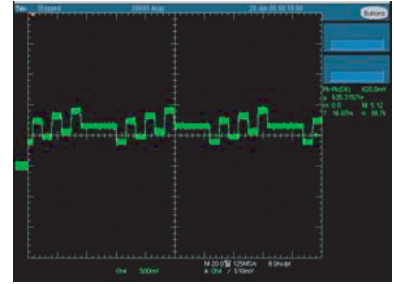


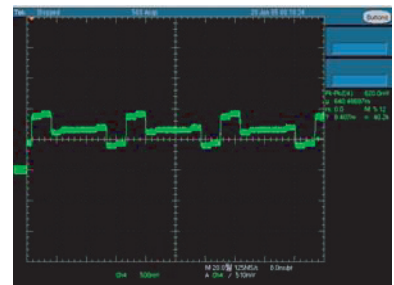
Fig. 4-8



① Y(Color-bar)
Pin-VR12



② Pb(Color-bar)
Pin-VR13



③ Pr(Color-bar)
Pin-VR14

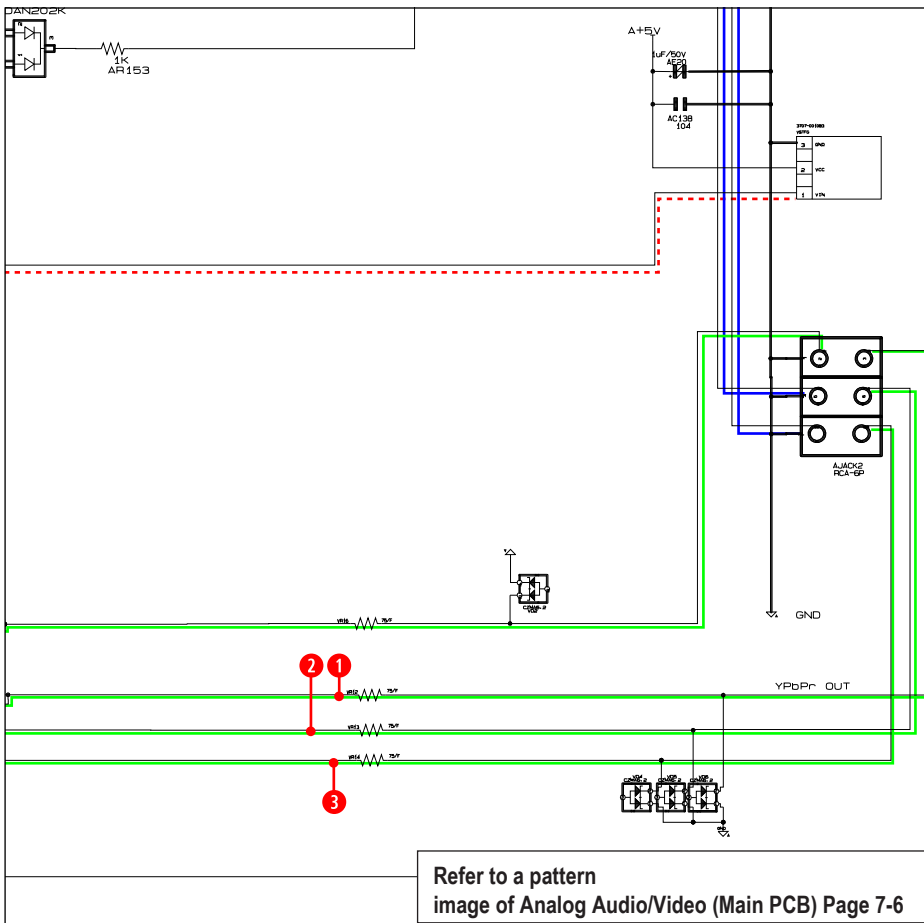
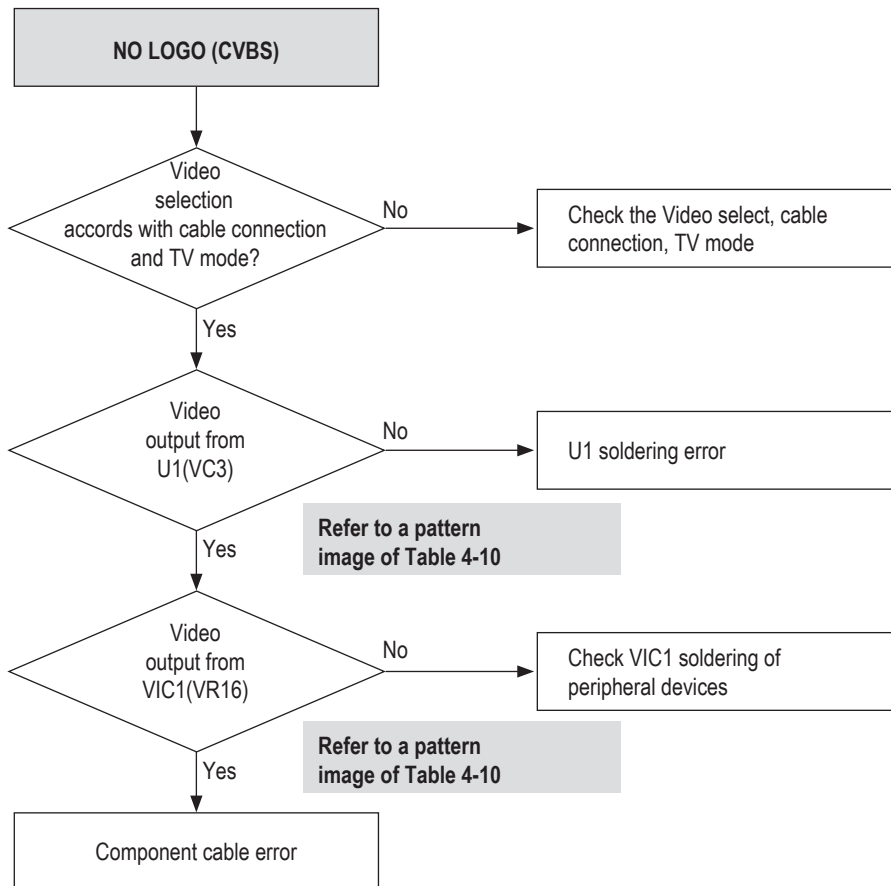
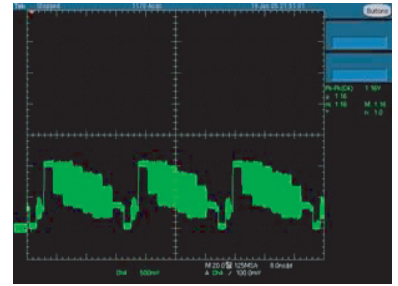
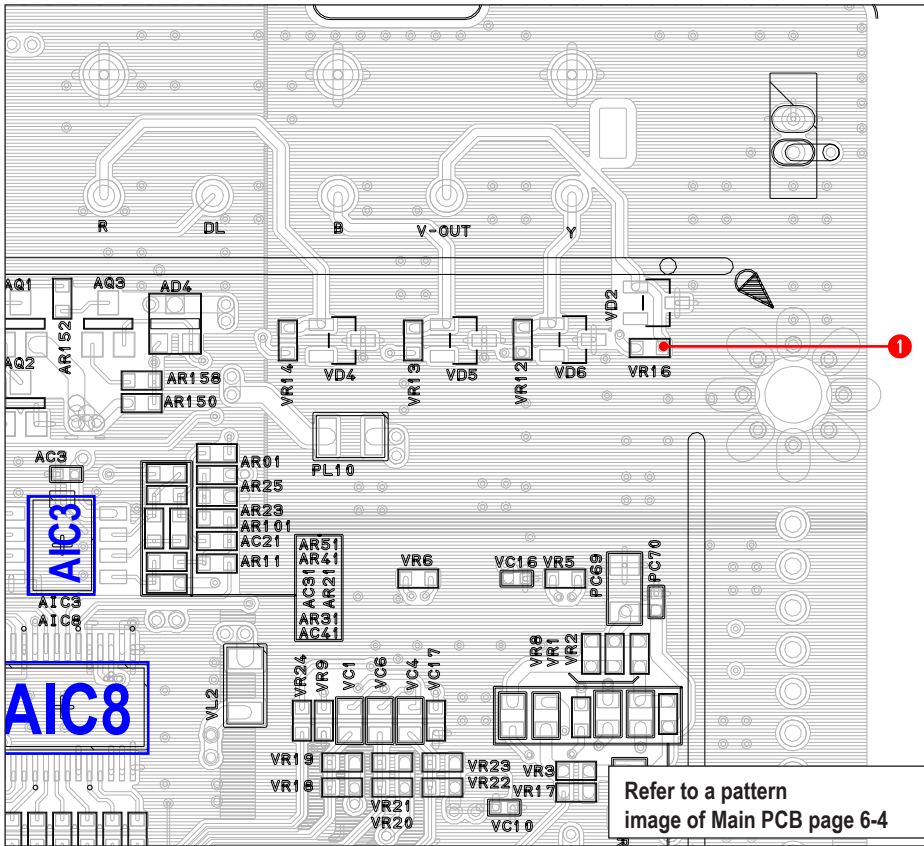


Fig. 4-9





① CVBS(Color-bar)
Pin (VC 3, VR16)

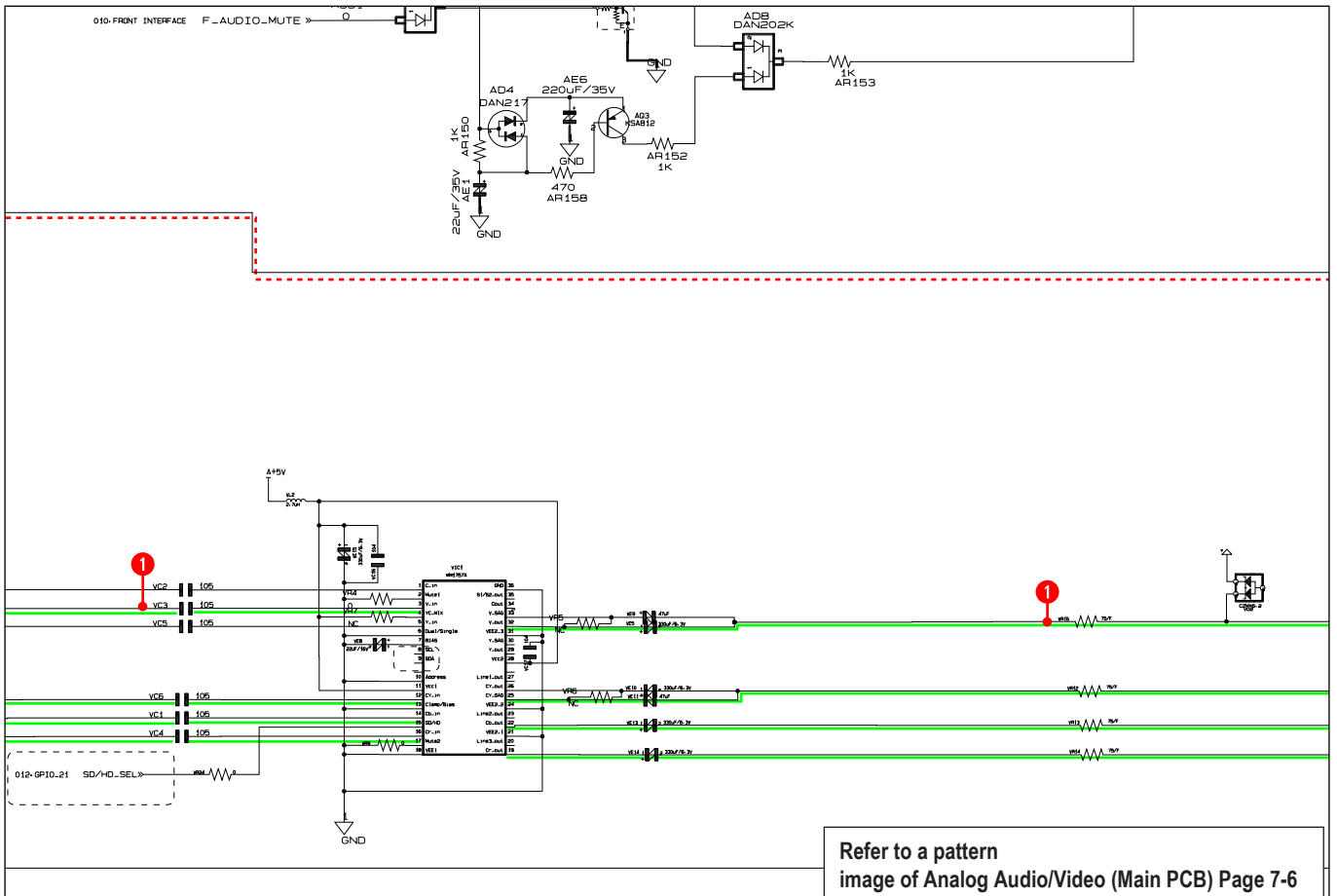


Fig. 4-10

4-2 Software Update

4-2-1 Main F/W Update Method

1) Insert update CD and close the tray.

4) When finished , power goes off automatically.



Fig. 4-11

2) Tray opened automatically, then Press YES if the update CD you insert is a later one than before.

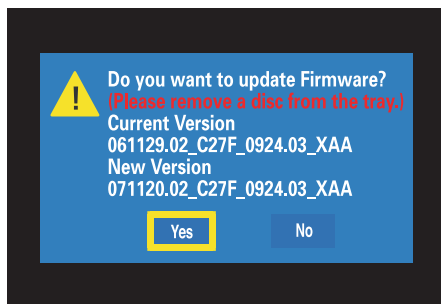


Fig. 4-12

3) Wait about 7 minutes.

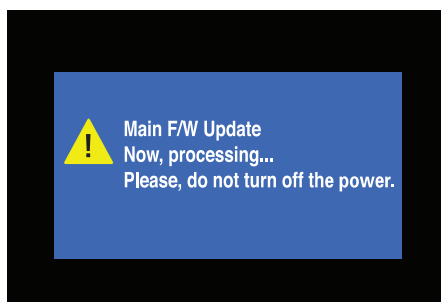


Fig. 4-13

4-2-2 Loader F/W Update Method (for Disc Physical Problem)

- 1) Insert update CD and close the tray.
- 2) Tray opened automatically, then Press YES if the update CD you insert is a later one than before.

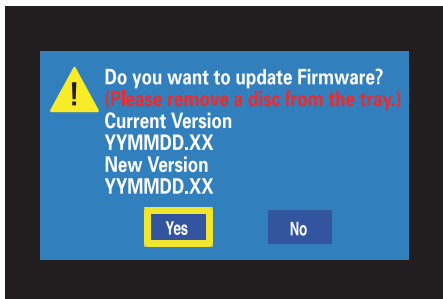


Fig. 4-14

- 3) Wait about 1~2 minutes.

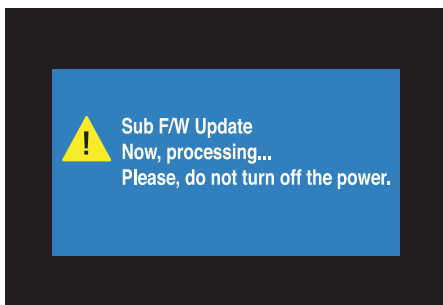


Fig. 4-15

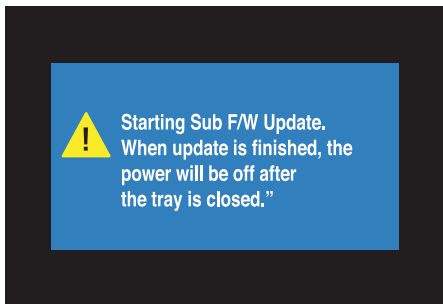


Fig. 4-16

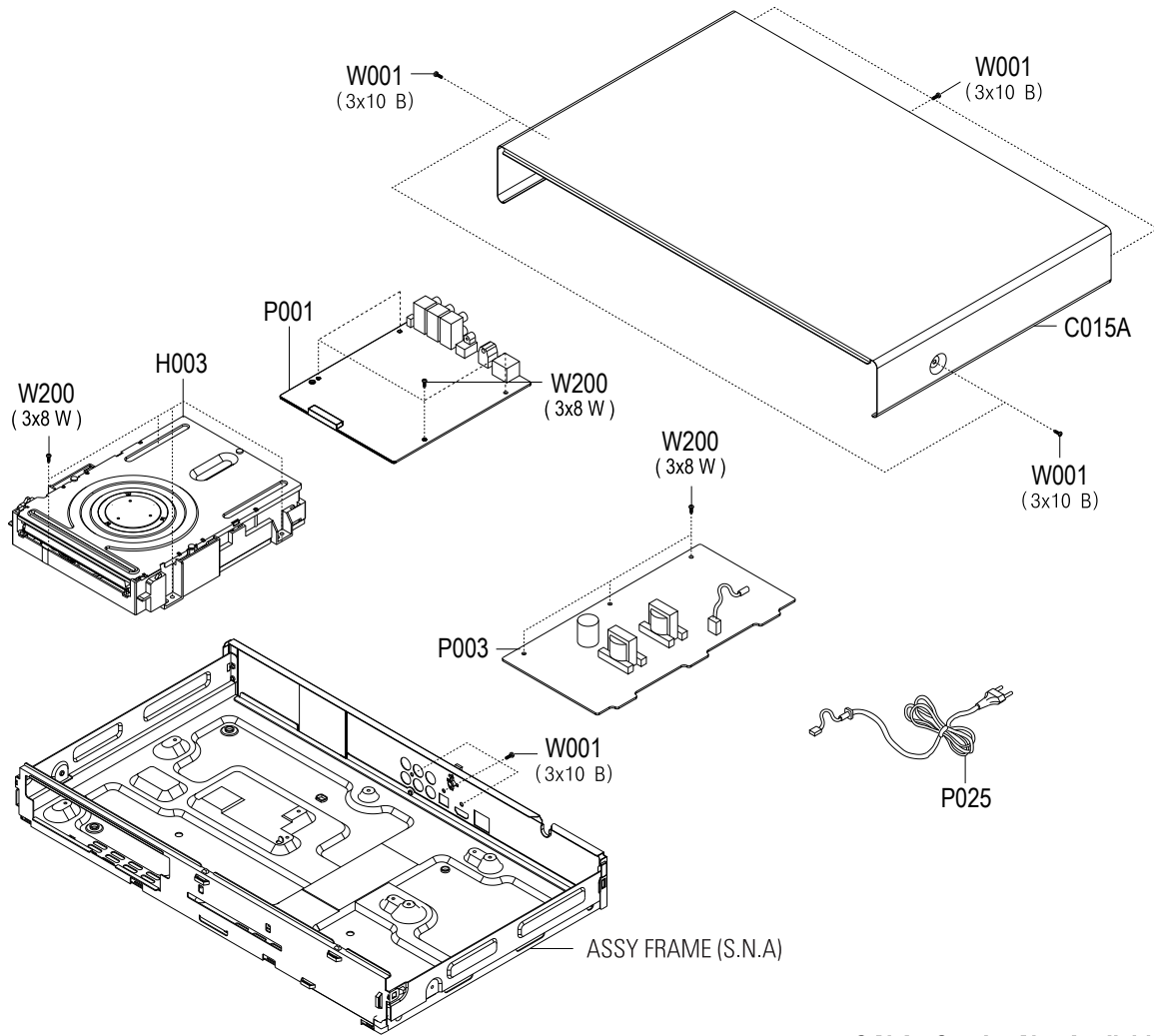
- 4) When finished , power goes off automatically.

5. Exploded View and Parts List

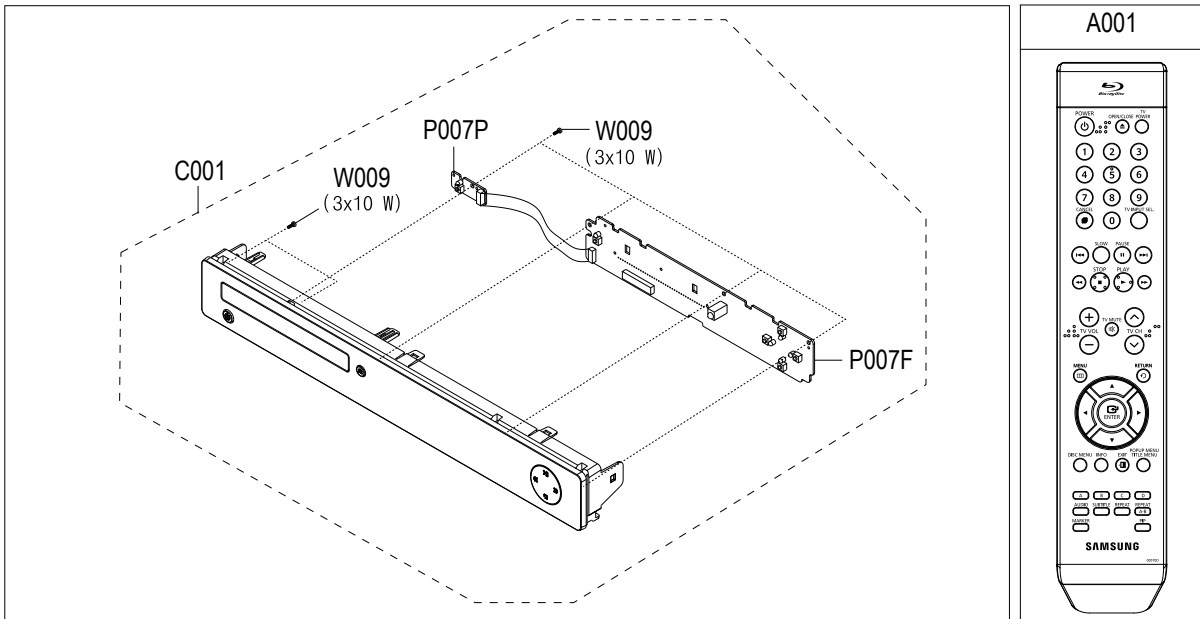
5-1 Cabinet Assembly----- 5-2

5-2 Electrical Parts List----- 5-4

5-1 Cabinet Assembly



● S.N.A.: Service Not Available



Loc. No	Parts No.	Description ; Specification	Q ty	SNA	Remark
A001	AK59-00070D	REMOCON-ASSY;BD-P1500/XAA,SEC,240*4	1	SA	
C001	AK97-02209A	ASSY-FRONT CABINET;HIPS 94 V2,BD-P1	1	SA	
C015A	AK97-02253A	ASSY-COVER TOP;ASSY,BD-P1500,ASSY	1	SA	
H003	AK97-02218A	ASSY-BDP LOADER NEC;- ,BD-P1500,ASSY	1	SA	
P001	AK92-01649A	ASSY PCB-MAIN;BD-P1500/XAA,ASSY PCB	1	SA	
P003	AK92-01655A	ASSY PCB-SMPS;BD-P1500/XAA,ASSY PCB	1	SA	
P007F	AK92-01650A	ASSY PCB-FRONT KEY;BD-P1500/XAA,ASS	1	SA	
P007P	AK92-01651A	ASSY PCB-POWER KEY;BD-P1500/XAA,ASS	1	SA	
P025	AC39-10200N	CBF-POWER CORD;AT,US,EP2/Y,HOUSING(	1	SA	
W001	6003-000275	SCREW-TAPTITE;BH,+,-,B,M3,L10,ZPC(B	9	SA	
W009	6003-000276	SCREW-TAPTITE;BH,+,-,B,M3,L10,ZPC(W	6	SA	
W200	6003-001375	SCREW-TAPTITE;BH,+,-,B,M3,L8,ZPC(WH	11	SA	

5-2 Electrical Parts List

Loc.No	Parts No.	Description : Specification	Q'ty	S.N.A	Remark	Loc.No	Parts No.	Description : Specification	Q'ty	S.N.A	Remark
P001	AK92-01649A	ASSY PCB-MAIN;BD-P1500/XAA,ASSY PCB	1	SA		AR26	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	1	SA	
AC138	2203-006048	C-CER,CHIP;100nF,10%,10V,X7R,1005	1	SA		AR27	2007-000208	R-CHIP;1.1Kohm,1%,1/10W,TP,1608	1	SA	
AC20	2203-000715	C-CER,CHIP;3.3nF,10%,50V,X7R,1608	1	SA		AR28	2007-000683	R-CHIP;3.3Kohm,1%,1/10W,TP,1608	1	SA	
AC21	2203-000715	C-CER,CHIP;3.3nF,10%,50V,X7R,1608	1	SA		AR30	2007-000040	R-CHIP;150ohm,1%,1/10W,TP,1608	1	SA	
AC3	2203-002711	C-CER,CHIP;100nF,10%,25V,X7R,1608	1	SA		AR31	2007-000040	R-CHIP;150ohm,1%,1/10W,TP,1608	1	SA	
AC30	2203-005105	C-CER,CHIP;0.68nF,5%,50V,COG,1608	1	SA		AR40	2007-000512	R-CHIP;2.4Kohm,5%,1/10W,TP,1608	1	SA	
AC31	2203-005105	C-CER,CHIP;0.68nF,5%,50V,COG,1608	1	SA		AR41	2007-000512	R-CHIP;2.4Kohm,5%,1/10W,TP,1608	1	SA	
AC40	2203-005105	C-CER,CHIP;0.68nF,5%,50V,COG,1608	1	SA		AR50	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	1	SA	
AC41	2203-005105	C-CER,CHIP;0.68nF,5%,50V,COG,1608	1	SA		AR51	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	1	SA	
AC60	2203-001607	C-CER,CHIP;0.22nF,5%,50V,NP0,1608	1	SA		AR60	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	1	SA	
AC61	2203-001607	C-CER,CHIP;0.22nF,5%,50V,NP0,1608	1	SA		AR61	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	1	SA	
AD10	0407-000114	DIODE-ARRAY;-80V,100mA,CA2-3,SOT-2	1	SA		AR70	2007-000075	R-CHIP;220ohm,5%,1/10W,TP,1608	1	SA	
AD11	0407-000114	DIODE-ARRAY;-80V,100mA,CA2-3,SOT-2	1	SA		AR71	2007-000075	R-CHIP;220ohm,5%,1/10W,TP,1608	1	SA	
AD4	0401-000008	DIODE-SWITCHING;DAN217,80V,100MA,SO	1	SA		AR80	2007-000078	R-CHIP;1Kohm,5%,1/10W,TP,1608	1	SA	
AD6	0407-000114	DIODE-ARRAY;-80V,100mA,CA2-3,SOT-2	1	SA		AR81	2007-000078	R-CHIP;1Kohm,5%,1/10W,TP,1608	1	SA	
AD8	0407-000114	DIODE-ARRAY;-80V,100mA,CA2-3,SOT-2	1	SA		AR91	2007-000643	R-CHIP;270ohm,5%,1/10W,TP,1608	1	SA	
AE1	2402-000210	C-AL,SMD;22uF,20%,35V,WT,TP,6.6x6.6	1	SA		BR2	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	1	SA	
AE10	2402-001269	C-AL,SMD;10uF,20%,10V,WT(BP),REEL,4	1	SA		C1	2203-006048	C-CER,CHIP;100nF,10%,10V,X7R,1005	1	SA	
AE11	2402-001269	C-AL,SMD;10uF,20%,10V,WT(BP),REEL,4	1	SA		C101	2203-006048	C-CER,CHIP;100nF,10%,10V,X7R,1005	1	SA	
AE2	2402-001181	C-AL,SMD;100uF,20%,16V,HR,TP,6.6x6.6	1	SA		C108	2203-000257	C-CER,CHIP;10nF,10%,50V,X7R,TP,1608	1	SA	
AE20	2402-000170	C-AL,SMD;1uF,20%,50V,GP,TP,4.3x4.3x	1	SA		C109	2203-000626	C-CER,CHIP;0.022nF,5%,50V,COG,1608	1	SA	
AE3	2402-000204	C-AL,SMD;10uF,20%,16V,WT,TP,4.3x4.3	1	SA		C11	2203-000626	C-CER,CHIP;0.022nF,5%,50V,COG,1608	1	SA	
AE4	2402-000210	C-AL,SMD;22uF,20%,35V,WT,TP,6.6x6.6	1	SA		C110	2203-006048	C-CER,CHIP;100nF,10%,10V,X7R,1005	1	SA	
AE6	2402-001303	C-AL,SMD;220uF,+20%,35V,-,REEL,8.	1	SA		C111	2203-000257	C-CER,CHIP;10nF,10%,50V,X7R,TP,1608	1	SA	
AE7	2402-000204	C-AL,SMD;10uF,20%,16V,WT,TP,4.3x4.3	1	SA		C112	2203-006048	C-CER,CHIP;100nF,10%,10V,X7R,1005	1	SA	
AIC3	1201-000163	IC-OP AMP;4560,SOP,8P,173MIL,DUAL,1	1	SA		C113	2203-005692	C-CER,CHIP;4700nF,+80-20%,16V,Y5V,T	1	SA	
AIC5	1203-002183	IC-SWITCH VOL. REG.;278R12,TO-220F-	1	SA		C117	2203-000384	C-CER,CHIP;0.015nF,5%,50V,COG,1608	1	SA	
AIC8	1002-001537	IC-D/A CONVERTER;AK4396,24Bit,VSOP,	1	SA		C12	2203-005692	C-CER,CHIP;4700nF,+80-20%,16V,Y5V,T	1	SA	
AJACK2	3722-002696	JACK-PIN;6P,Silver/Nickel,RED,WHI,B	1	SA		C121	2203-006048	C-CER,CHIP;100nF,10%,10V,X7R,1005	1	SA	
AQ1	0504-000156	TR-DIGITAL;KSR2103,PNP,200MW,22K/22	1	SA		C123	2203-006048	C-CER,CHIP;100nF,10%,10V,X7R,1005	1	SA	
AQ10	0501-000341	TR-SMALL SIGNAL;KSC1623-L,NPN,200mW	1	SA		C13	2203-005692	C-CER,CHIP;4700nF,+80-20%,16V,Y5V,T	1	SA	
AQ11	0501-000341	TR-SMALL SIGNAL;KSC1623-L,NPN,200mW	1	SA		C14	2203-006048	C-CER,CHIP;100nF,10%,10V,X7R,1005	1	SA	
AQ2	0504-000128	TR-DIGITAL;-NPN,200MW,22K/22K,SOT-	1	SA		C15	2203-005148	C-CER,CHIP;100nF,10%,16V,X7R,TP,160	1	SA	
AQ3	0501-000002	TR-SMALL SIGNAL;KSA812,PNP,150MW,SO	1	SA		C16	2203-000681	C-CER,CHIP;0.027nF,5%,50V,COG,1608	1	SA	
AQ6	0504-000156	TR-DIGITAL;KSR2103,PNP,200MW,22K/22	1	SA		C161	2203-006048	C-CER,CHIP;100nF,10%,10V,X7R,1005	1	SA	
AQ7	0504-000128	TR-DIGITAL;-NPN,200MW,22K/22K,SOT-	1	SA		C162	2203-006048	C-CER,CHIP;100nF,10%,10V,X7R,1005	1	SA	
AQ8	0504-000128	TR-DIGITAL;-NPN,200MW,22K/22K,SOT-	1	SA		C17	2203-000681	C-CER,CHIP;0.027nF,5%,50V,COG,1608	1	SA	
AQ9	0504-000156	TR-DIGITAL;KSR2103,PNP,200MW,22K/22	1	SA		C177	2203-006048	C-CER,CHIP;100nF,10%,10V,X7R,1005	1	SA	
AR01	2007-000512	R-CHIP;2.4Kohm,5%,1/10W,TP,1608	1	SA		C178	2203-006048	C-CER,CHIP;100nF,10%,10V,X7R,1005	1	SA	
AR02	2007-000512	R-CHIP;2.4Kohm,5%,1/10W,TP,1608	1	SA		C19	2203-000384	C-CER,CHIP;0.015nF,5%,50V,COG,1608	1	SA	
AR10	2007-000512	R-CHIP;2.4Kohm,5%,1/10W,TP,1608	1	SA		C2	2203-006048	C-CER,CHIP;100nF,10%,10V,X7R,1005	1	SA	
AR100	2007-000512	R-CHIP;2.4Kohm,5%,1/10W,TP,1608	1	SA		C20	2203-006048	C-CER,CHIP;100nF,10%,10V,X7R,1005	1	SA	
AR101	2007-000512	R-CHIP;2.4Kohm,5%,1/10W,TP,1608	1	SA		C21	2203-006048	C-CER,CHIP;100nF,10%,10V,X7R,1005	1	SA	
AR11	2007-000512	R-CHIP;2.4Kohm,5%,1/10W,TP,1608	1	SA		C23	2203-006048	C-CER,CHIP;100nF,10%,10V,X7R,1005	1	SA	
AR14	2007-000029	R-CHIP;0ohm,5%,1/8W,TP,2012	1	SA		C236	2203-006048	C-CER,CHIP;100nF,10%,10V,X7R,1005	1	SA	
AR150	2007-000078	R-CHIP;1Kohm,5%,1/10W,TP,1608	1	SA		C25	2203-006048	C-CER,CHIP;100nF,10%,10V,X7R,1005	1	SA	
AR152	2007-000078	R-CHIP;1Kohm,5%,1/10W,TP,1608	1	SA		C253	2203-006048	C-CER,CHIP;100nF,10%,10V,X7R,1005	1	SA	
AR153	2007-000078	R-CHIP;1Kohm,5%,1/10W,TP,1608	1	SA		C254	2203-006048	C-CER,CHIP;100nF,10%,10V,X7R,1005	1	SA	
AR158	2007-000077	R-CHIP;470ohm,5%,1/10W,TP,1608	1	SA		C2626	2203-005692	C-CER,CHIP;4700nF,+80-20%,16V,Y5V,T	1	SA	
AR160	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	1	SA		C2627	2203-005692	C-CER,CHIP;4700nF,+80-20%,16V,Y5V,T	1	SA	
AR20	2007-000040	R-CHIP;150ohm,1%,1/10W,TP,1608	1	SA		C265	2203-006474	C-CER,CHIP;22000nF,20%,6.3V,X5R,201	1	SA	
AR21	2007-000040	R-CHIP;150ohm,1%,1/10W,TP,1608	1	SA		C266	2203-006474	C-CER,CHIP;22000nF,20%,6.3V,X5R,201	1	SA	
AR22	2007-000120	R-CHIP;680ohm,5%,1/10W,TP,1608	1	SA		C27	2203-006048	C-CER,CHIP;100nF,10%,10V,X7R,1005	1	SA	
AR23	2007-000120	R-CHIP;680ohm,5%,1/10W,TP,1608	1	SA		C28	2203-006048	C-CER,CHIP;100nF,10%,10V,X7R,1005	1	SA	
AR24	2007-000120	R-CHIP;680ohm,5%,1/10W,TP,1608	1	SA		C29	2203-006048	C-CER,CHIP;100nF,10%,10V,X7R,1005	1	SA	
AR25	2007-000120	R-CHIP;680ohm,5%,1/10W,TP,1608	1	SA		C3	2203-000440	C-CER,CHIP;1nF,10%,50V,X7R,1608	1	SA	

Exploded Views and Parts List

Loc.No	Parts No.	Description : Specification	Q'ty	S.N.A	Remark	Loc.No	Parts No.	Description : Specification	Q'ty	S.N.A	Remark
PR37	2007-000033	R-CHIP;0ohm,5%,1/4W,TP,3216	1	SA		R192	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	1	SA	
PR7	2007-000052	R-CHIP;10Kohm,1%,1/10W,TP,1608	1	SA		R197	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	1	SA	
PR8	2007-000078	R-CHIP;1Kohm,5%,1/10W,TP,1608	1	SA		R198	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	1	SA	
						R2	2007-000779	R-CHIP;33ohm,1%,1/10W,TP,1608	1	SA	
PR9	2007-002987	R-CHIP;4.75Kohm,1%,1/10W,TP,1608	1	SA		R20	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	1	SA	
R1	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	1	SA		R21	2007-000033	R-CHIP;0ohm,5%,1/4W,TP,3216	1	SA	
R10	2007-000043	R-CHIP;1Kohm,1%,1/10W,TP,1608	1	SA		R214	2007-000123	R-CHIP;1.5Kohm,5%,1/10W,TP,1608	1	SA	
R100	2007-000123	R-CHIP;1.5Kohm,5%,1/10W,TP,1608	1	SA		R215	2007-000123	R-CHIP;1.5Kohm,5%,1/10W,TP,1608	1	SA	
R102	2007-000123	R-CHIP;1.5Kohm,5%,1/10W,TP,1608	1	SA		R216	2007-000123	R-CHIP;1.5Kohm,5%,1/10W,TP,1608	1	SA	
R104	2007-000123	R-CHIP;1.5Kohm,5%,1/10W,TP,1608	1	SA		R217	2007-000123	R-CHIP;1.5Kohm,5%,1/10W,TP,1608	1	SA	
R106	2007-000123	R-CHIP;1.5Kohm,5%,1/10W,TP,1608	1	SA		R227	2007-000086	R-CHIP;5.6Kohm,5%,1/10W,TP,1608	1	SA	
R107	2011-001261	R-NETWORK;33ohm,5%,1/16W,L,CHIP,8P,	1	SA		R230	2007-000115	R-CHIP;82ohm,5%,1/10W,TP,1608	1	SA	
R108	2011-001261	R-NETWORK;33ohm,5%,1/16W,L,CHIP,8P,	1	SA		R232	2007-000115	R-CHIP;82ohm,5%,1/10W,TP,1608	1	SA	
R109	2011-001261	R-NETWORK;33ohm,5%,1/16W,L,CHIP,8P,	1	SA		R24	2007-000078	R-CHIP;1Kohm,5%,1/10W,TP,1608	1	SA	
R11	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	1	SA		R241	2007-000084	R-CHIP;4.7Kohm,5%,1/10W,TP,1608	1	SA	
R110	2011-001261	R-NETWORK;33ohm,5%,1/16W,L,CHIP,8P,	1	SA		R242	2007-000084	R-CHIP;4.7Kohm,5%,1/10W,TP,1608	1	SA	
R111	2011-001261	R-NETWORK;33ohm,5%,1/16W,L,CHIP,8P,	1	SA		R243	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	1	SA	
R112	2011-001261	R-NETWORK;33ohm,5%,1/16W,L,CHIP,8P,	1	SA		R244	2007-000115	R-CHIP;82ohm,5%,1/10W,TP,1608	1	SA	
R113	2011-001261	R-NETWORK;33ohm,5%,1/16W,L,CHIP,8P,	1	SA		R245	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	1	SA	
R114	2011-001261	R-NETWORK;33ohm,5%,1/16W,L,CHIP,8P,	1	SA		R25	2007-000084	R-CHIP;4.7Kohm,5%,1/10W,TP,1608	1	SA	
R115	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	1	SA		R26	2007-000113	R-CHIP;33ohm,5%,1/10W,TP,1608	1	SA	
R116	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	1	SA		R27	2007-000591	R-CHIP;22ohm,1%,1/10W,TP,1608	1	SA	
R117	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	1	SA		R28	2007-000078	R-CHIP;1Kohm,5%,1/10W,TP,1608	1	SA	
R118	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	1	SA		R3	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	1	SA	
R119	2007-000116	R-CHIP;120ohm,5%,1/10W,TP,1608	1	SA		R300	2007-000729	R-CHIP;300ohm,5%,1/10W,TP,1608	1	SA	
R12	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	1	SA		R301	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	1	SA	
R122	2007-000116	R-CHIP;120ohm,5%,1/10W,TP,1608	1	SA		R304	2007-007226	R-CHIP;49.9ohm,1%,1/10W,TP,1608	1	SA	
R13	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	1	SA		R305	2007-007226	R-CHIP;49.9ohm,1%,1/10W,TP,1608	1	SA	
R132	2007-000084	R-CHIP;4.7Kohm,5%,1/10W,TP,1608	1	SA		R306	2007-007226	R-CHIP;49.9ohm,1%,1/10W,TP,1608	1	SA	
R137	2007-000113	R-CHIP;33ohm,5%,1/10W,TP,1608	1	SA		R307	2007-007226	R-CHIP;49.9ohm,1%,1/10W,TP,1608	1	SA	
R138	2007-000113	R-CHIP;33ohm,5%,1/10W,TP,1608	1	SA		R308	2007-000539	R-CHIP;200ohm,5%,1/10W,TP,1608	1	SA	
R14	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	1	SA		R309	2007-007441	R-CHIP;562ohm,1%,1/10W,TP,1608	1	SA	
R143	2007-000113	R-CHIP;33ohm,5%,1/10W,TP,1608	1	SA		R312	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	1	SA	
R144	2007-000113	R-CHIP;33ohm,5%,1/10W,TP,1608	1	SA		R316	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	1	SA	
R145	2007-000113	R-CHIP;33ohm,5%,1/10W,TP,1608	1	SA		R317	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	1	SA	
R146	2007-000084	R-CHIP;4.7Kohm,5%,1/10W,TP,1608	1	SA		R318	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	1	SA	
R15	2007-000084	R-CHIP;4.7Kohm,5%,1/10W,TP,1608	1	SA		R320	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	1	SA	
R150	2007-000113	R-CHIP;33ohm,5%,1/10W,TP,1608	1	SA		R323	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	1	SA	
R151	2007-000123	R-CHIP;1.5Kohm,5%,1/10W,TP,1608	1	SA		R324	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	1	SA	
R152	2007-000123	R-CHIP;1.5Kohm,5%,1/10W,TP,1608	1	SA		R326	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	1	SA	
R153	2007-000084	R-CHIP;4.7Kohm,5%,1/10W,TP,1608	1	SA		R33	2007-000084	R-CHIP;4.7Kohm,5%,1/10W,TP,1608	1	SA	
R154	2007-000084	R-CHIP;4.7Kohm,5%,1/10W,TP,1608	1	SA		R330	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	1	SA	
R155	2007-000084	R-CHIP;4.7Kohm,5%,1/10W,TP,1608	1	SA		R34	2007-000084	R-CHIP;4.7Kohm,5%,1/10W,TP,1608	1	SA	
R156	2007-000116	R-CHIP;120ohm,5%,1/10W,TP,1608	1	SA		R341	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	1	SA	
R157	2007-000116	R-CHIP;120ohm,5%,1/10W,TP,1608	1	SA		R343	2007-000591	R-CHIP;22ohm,1%,1/10W,TP,1608	1	SA	
R16	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	1	SA		R344	2007-000729	R-CHIP;300ohm,5%,1/10W,TP,1608	1	SA	
R17	2007-000084	R-CHIP;4.7Kohm,5%,1/10W,TP,1608	1	SA		R345	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	1	SA	
R18	2007-000113	R-CHIP;33ohm,5%,1/10W,TP,1608	1	SA		R346	2007-000729	R-CHIP;300ohm,5%,1/10W,TP,1608	1	SA	
R181	2007-000084	R-CHIP;4.7Kohm,5%,1/10W,TP,1608	1	SA		R348	2007-000502	R-CHIP;2.2ohm,5%,1/8W,TP,2012	1	SA	
R182	2007-000102	R-CHIP;100Kohm,5%,1/10W,TP,1608	1	SA		R35	2007-000033	R-CHIP;0ohm,5%,1/4W,TP,3216	1	SA	
R183	2007-000074	R-CHIP;100ohm,5%,1/10W,TP,1608	1	SA		R351	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	1	SA	
R184	2007-000074	R-CHIP;100ohm,5%,1/10W,TP,1608	1	SA		R36	2007-000084	R-CHIP;4.7Kohm,5%,1/10W,TP,1608	1	SA	
R185	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	1	SA		R362	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	1	SA	
R186	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	1	SA		R364	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	1	SA	
R187	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	1	SA		R366	2007-000123	R-CHIP;1.5Kohm,5%,1/10W,TP,1608	1	SA	
R188	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	1	SA		R37	2007-000084	R-CHIP;4.7Kohm,5%,1/10W,TP,1608	1	SA	
R189	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	1	SA		R38	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	1	SA	
R19	2007-000084	R-CHIP;4.7Kohm,5%,1/10W,TP,1608	1	SA		R391	2007-000084	R-CHIP;4.7Kohm,5%,1/10W,TP,1608	1	SA	
R190	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	1	SA		R396	2007-000123	R-CHIP;1.5Kohm,5%,1/10W,TP,1608	1	SA	
R191	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	1	SA							

Loc.No	Parts No.	Description : Specification	Q'ty	S.N.A	Remark	Loc.No	Parts No.	Description : Specification	Q'ty	S.N.A	Remark
R397	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	1	SA		UC27	2203-006048	C-CER,CHIP;100nF,10%,10V,X7R,1005	1	SA	
R398	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	1	SA		UC28	2203-005148	C-CER,CHIP;100nF,10%,16V,X7R,TP,160	1	SA	
R399	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	1	SA		UL28	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	1	SA	
R4	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	1	SA		UL29	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	1	SA	
R40	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	1	SA		UL33	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	1	SA	
R400	2007-000123	R-CHIP;1.5Kohm,5%,1/10W,TP,1608	1	SA		UR1	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	1	SA	
R402	2007-000123	R-CHIP;1.5Kohm,5%,1/10W,TP,1608	1	SA		UR10	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	1	SA	
R404	2007-000123	R-CHIP;1.5Kohm,5%,1/10W,TP,1608	1	SA		UR11	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	1	SA	
R406	2007-000084	R-CHIP;4.7Kohm,5%,1/10W,TP,1608	1	SA		UR12	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	1	SA	
R409	2007-000084	R-CHIP;4.7Kohm,5%,1/10W,TP,1608	1	SA		UR13	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	1	SA	
R413	2007-000084	R-CHIP;4.7Kohm,5%,1/10W,TP,1608	1	SA		UR14	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	1	SA	
R418	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	1	SA		UR15	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	1	SA	
R422	2007-000084	R-CHIP;4.7Kohm,5%,1/10W,TP,1608	1	SA		UR16	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	1	SA	
R427	2007-000123	R-CHIP;1.5Kohm,5%,1/10W,TP,1608	1	SA		UR17	2007-000029	R-CHIP;0ohm,5%,1/8W,TP,2012	1	SA	
R435	2007-000123	R-CHIP;1.5Kohm,5%,1/10W,TP,1608	1	SA		UR18	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	1	SA	
R439	2007-000123	R-CHIP;1.5Kohm,5%,1/10W,TP,1608	1	SA		UR19	2007-000092	R-CHIP;15Kohm,5%,1/10W,TP,1608	1	SA	
R441	2007-001042	R-CHIP;56ohm,1%,1/10W,TP,1608	1	SA		UR2	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	1	SA	
R442	2007-000123	R-CHIP;1.5Kohm,5%,1/10W,TP,1608	1	SA		UR20	2007-000092	R-CHIP;15Kohm,5%,1/10W,TP,1608	1	SA	
R453	2007-000070	R-CHIP;100ohm,5%,1/10W,TP,1608	1	SA		UR22	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	1	SA	
R5	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	1	SA		UR3	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	1	SA	
R501	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	1	SA		UR4	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	1	SA	
R502	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	1	SA		UR5	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	1	SA	
R503	2007-000074	R-CHIP;100ohm,5%,1/10W,TP,1608	1	SA		UR6	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	1	SA	
R504	2007-000033	R-CHIP;0ohm,5%,1/4W,TP,3216	1	SA		UR7	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	1	SA	
R505	2007-000084	R-CHIP;4.7Kohm,5%,1/10W,TP,1608	1	SA		UR8	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	1	SA	
R52	2007-000123	R-CHIP;1.5Kohm,5%,1/10W,TP,1608	1	SA		UR9	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	1	SA	
R56	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	1	SA		VC1	2203-000476	C-CER,CHIP;1000nF,+80-20%,16V,Y5V,2	1	SA	
R57	2007-000123	R-CHIP;1.5Kohm,5%,1/10W,TP,1608	1	SA		VC10	2203-006048	C-CER,CHIP;100nF,10%,10V,X7R,1005	1	SA	
R6	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	1	SA		VC16	2203-006048	C-CER,CHIP;100nF,10%,10V,X7R,1005	1	SA	
R60	2007-000075	R-CHIP;220ohm,5%,1/10W,TP,1608	1	SA		VC17	2203-005148	C-CER,CHIP;100nF,10%,16V,X7R,TP,160	1	SA	
R61	2007-000075	R-CHIP;220ohm,5%,1/10W,TP,1608	1	SA		VC2	2203-000476	C-CER,CHIP;1000nF,+80-20%,16V,Y5V,2	1	SA	
R62	2007-000033	R-CHIP;0ohm,5%,1/4W,TP,3216	1	SA		VC3	2203-000476	C-CER,CHIP;1000nF,+80-20%,16V,Y5V,2	1	SA	
R63	2007-000033	R-CHIP;0ohm,5%,1/4W,TP,3216	1	SA		VC4	2203-000476	C-CER,CHIP;1000nF,+80-20%,16V,Y5V,2	1	SA	
R7	2007-000779	R-CHIP;33ohm,5%,1/10W,TP,1608	1	SA		VC5	2203-000476	C-CER,CHIP;1000nF,+80-20%,16V,Y5V,2	1	SA	
R71	2007-000084	R-CHIP;4.7Kohm,5%,1/10W,TP,1608	1	SA		VC6	2203-000476	C-CER,CHIP;1000nF,+80-20%,16V,Y5V,2	1	SA	
R72	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	1	SA		VD2	0403-001412	DIODE-ZENER;-5.93-6.47V,200MW,SOT-	1	SA	
R74	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	1	SA		VD4	0403-001412	DIODE-ZENER;-5.93-6.47V,200MW,SOT-	1	SA	
R75	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	1	SA		VD5	0403-001412	DIODE-ZENER;-5.93-6.47V,200MW,SOT-	1	SA	
R79	2007-000123	R-CHIP;1.5Kohm,5%,1/10W,TP,1608	1	SA		VD6	0403-001412	DIODE-ZENER;-5.93-6.47V,200MW,SOT-	1	SA	
R8	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	1	SA		VE10	2402-001237	C-AL,SMD;330uF,#20%,6.3V,-,REEL.6.	1	SA	
R82	2007-000123	R-CHIP;1.5Kohm,5%,1/10W,TP,1608	1	SA		VE11	2402-000179	C-AL,SMD;47uF,20%,16V,GP,TP,6.6x6.6	1	SA	
R84	2007-000123	R-CHIP;1.5Kohm,5%,1/10W,TP,1608	1	SA		VE13	2402-001237	C-AL,SMD;330uF,#20%,6.3V,-,REEL.6.	1	SA	
R88	2007-000123	R-CHIP;1.5Kohm,5%,1/10W,TP,1608	1	SA		VE14	2402-001237	C-AL,SMD;330uF,#20%,6.3V,-,REEL.6.	1	SA	
R9	2007-007441	R-CHIP;562ohm,1%,1/10W,TP,1608	1	SA		VE15	2402-001237	C-AL,SMD;330uF,#20%,6.3V,-,REEL.6.	1	SA	
R910	2007-000643	R-CHIP;270ohm,5%,1/10W,TP,1608	1	SA		VE5	2402-001237	C-AL,SMD;330uF,#20%,6.3V,-,REEL.6.	1	SA	
R918	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	1	SA		VE8	2402-000209	C-AL,SMD;22uF,20%,16V,WT,TP,5.3x5.3	1	SA	
R919	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	1	SA		VE9	2402-001276	C-AL,SMD;47uF,20%,35V,-,TP,6.6x6.6x	1	SA	
R92	2007-000123	R-CHIP;1.5Kohm,5%,1/10W,TP,1608	1	SA		VC1	1201-002707	IC-VIDEO AMP;MM1757CHBE,HSOP-36A,36	1	SA	
R920	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	1	SA		VL2	2703-000166	INDUCTOR-SMD;2.7uH,5%,3225	1	SA	
R921	2007-000113	R-CHIP;33ohm,5%,1/10W,TP,1608	1	SA		VR12	2007-001164	R-CHIP;75ohm,1%,1/10W,TP,1608	1	SA	
R923	2007-000074	R-CHIP;100ohm,5%,1/10W,TP,1608	1	SA		VR13	2007-001164	R-CHIP;75ohm,1%,1/10W,TP,1608	1	SA	
R924	2007-000029	R-CHIP;0ohm,5%,1/8W,TP,2012	1	SA		VR14	2007-001164	R-CHIP;75ohm,1%,1/10W,TP,1608	1	SA	
R925	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	1	SA		VR16	2007-001164	R-CHIP;75ohm,1%,1/10W,TP,1608	1	SA	
R930	2007-000113	R-CHIP;33ohm,5%,1/10W,TP,1608	1	SA		VR17	2007-001164	R-CHIP;75ohm,1%,1/10W,TP,1608	1	SA	
R931	2007-000113	R-CHIP;33ohm,5%,1/10W,TP,1608	1	SA		VR18	2007-001164	R-CHIP;75ohm,1%,1/10W,TP,1608	1	SA	
R96	2007-000123	R-CHIP;1.5Kohm,5%,1/10W,TP,1608	1	SA		VR19	2007-001164	R-CHIP;75ohm,1%,1/10W,TP,1608	1	SA	
R98	2007-000123	R-CHIP;1.5Kohm,5%,1/10W,TP,1608	1	SA		VR20	2007-001164	R-CHIP;75ohm,1%,1/10W,TP,1608	1	SA	
scon1	3711-006512	CONNECTOR-HEADER;1WALL,7P,1R,1.27mm	1	SA		VR21	2007-001164	R-CHIP;75ohm,1%,1/10W,TP,1608	1	SA	
U1	1204-002900	IC-VIDEO DECODER;BCM7440PYKFEFG,FCB	1	SA		VR22	2007-001164	R-CHIP;75ohm,1%,1/10W,TP,1608	1	SA	
UC10	2203-000384	C-CER,CHIP;0.015nF,5%,50V,COG,1608	1	SA							

Loc.No	Parts No.	Description : Specification	Q'ty	S.N.A	Remark	Loc.No	Parts No.	Description : Specification	Q'ty	S.N.A	Remark
C1	2202-000863	C-CERAMIC,MLC-AXIAL;560pF,10%,50V,Y	1	SA		NO03	AK97-02218A	ASSY-BDP LOADER NEC.-BD-P1500,ASSY	1	SA	
C2	2202-000863	C-CERAMIC,MLC-AXIAL;560pF,10%,50V,Y	1	SA		C101	2203-001124	C-CER,CHIP;0.68nF,10%,50V,X7R,TP,10	1	SA	
DT701	AK07-00064A	VF DISPLAY;HNV-08SM15,DVD-R177,W110	1	SA		C102	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA	
DT701A	AK61-00821A	HOLDER-VFD;DVD-SH875,ABSS94HB,2,25,1	1	SA		C103	2203-002793	C-CER,CHIP;1000nF,+80-20%,25V,Y5V,2	1	SA	
						C105	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA	
FC1	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,+80-20%,5	1	SA		C111	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA	
FC2	2202-000797	C-CERAMIC,MLC-AXIAL;10nF,30%,16V,Y5	1	SA		C112	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA	
FC3	2202-000173	C-CERAMIC,MLC-AXIAL;1nF,10%,50V,Y5P	1	SA		C113	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA	
FC5	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,+80-20%,5	1	SA		C114	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA	
FC6	2202-002037	C-CERAMIC,MLC-AXIAL;100nF,+80-20%,5	1	SA		C115	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA	
FCN1	3708-000208	CONNECTOR-FPC/FFC/PIC;20P,1.25MM,ST	1	SA		C116	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA	
FCN2	3711-000988	HEADER-BOARD TO CABLE;BOX,5P,1R,2MM	1	SA		C117	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA	
FD1	0403-000718	DIODE-ZENER;MTZJ6.8B,6.52-6.79V,500	1	SA		C118	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA	
FD2	0401-000005	DIODE-SWITCHING;1N4148,75V,150mA,DO	1	SA		C119	2203-005692	C-CER,CHIP;4700nF,+80-20%,16V,Y5V,T	1	SA	
FD3	0401-000005	DIODE-SWITCHING;1N4148,75V,150mA,DO	1	SA		C121	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA	
FD4	0401-000005	DIODE-SWITCHING;1N4148,75V,150mA,DO	1	SA		C122	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA	
FD5	0403-000753	DIODE-ZENER;MTZJ27D,26.2-27.6V,500m	1	SA		C123	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA	
FD7	0403-000753	DIODE-ZENER;MTZJ27D,26.2-27.6V,500m	1	SA		C124	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA	
FE1	2401-000249	C-AL;100uF,20%,10V,GP,TP,6.3x5,5	1	SA		C125	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA	
FE2	2401-001502	C-AL;47uF,20%,16V,GP,TP,6.3x5,2.5	1	SA		C126	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA	
FE3	2401-001502	C-AL;47uF,20%,16V,GP,TP,6.3x5,2.5	1	SA		C127	2203-005692	C-CER,CHIP;4700nF,+80-20%,16V,Y5V,T	1	SA	
FL1	2701-000114	INDUCTOR-AXIAL;10UH,10%,2534	1	SA		C131	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA	
FL398	3809-002120	FFC CABLE-FLAT;30V,80,160mm,20P,1,2	1	SA		C132	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA	
FL399	AK39-00129A	LEAD CONNECTOR;BD-P1500,UL1007#26,U	1	SA		C133	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA	
FR11	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3	1	SA		C134	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA	
FR12	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3	1	SA		C135	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA	
FR13	2001-000857	R-CARBON;560ohm,5%,1/8W,AA,TP,1.8x3	1	SA		C136	2203-005692	C-CER,CHIP;4700nF,+80-20%,16V,Y5V,T	1	SA	
FR14	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3	1	SA		C141	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA	
FR16	2001-000734	R-CARBON;4.7Kohm,5%,1/8W,AA,TP,1.8x	1	SA		C142	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA	
FR17	2001-000734	R-CARBON;4.7Kohm,5%,1/8W,AA,TP,1.8x	1	SA		C143	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA	
FR18	2001-000734	R-CARBON;4.7Kohm,5%,1/8W,AA,TP,1.8x	1	SA		C144	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA	
FR19	2001-000734	R-CARBON;4.7Kohm,5%,1/8W,AA,TP,1.8x	1	SA		C145	2203-005692	C-CER,CHIP;4700nF,+80-20%,16V,Y5V,T	1	SA	
FR20	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3	1	SA		C149	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA	
FR21	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3	1	SA		C151	2203-003039	C-CER,CHIP;0.008nF,0.25pF,50V,NP0,T	1	SA	
FR3	2001-000273	R-CARBON;100Kohm,5%,1/8W,AA,TP,1.8x	1	SA		C152	2203-003039	C-CER,CHIP;0.008nF,0.25pF,50V,NP0,T	1	SA	
FR4	2001-000793	R-CARBON;47ohm,5%,1/8W,AA,TP,1.8x3	1	SA		C171	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA	
FR5	2001-000027	R-CARBON;100ohm,5%,1/4W,AA,TP,2.4x6	1	SA		C172	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA	
FR6	2001-000027	R-CARBON;100ohm,5%,1/4W,AA,TP,2.4x6	1	SA		C173	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA	
FR7	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3	1	SA		C174	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA	
FR8	2001-001000	R-CARBON;82Kohm,5%,1/8W,AA,TP,1.8x3	1	SA		C176	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA	
FR9	2001-000780	R-CARBON;470ohm,5%,1/8W,AA,TP,1.8x3	1	SA		C177	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA	
FS2	3404-000165	SWITCH-TACT;12V,50mA,160gf,6x6mm,SP	1	SA		C178	2203-002793	C-CER,CHIP;1000nF,+80-20%,25V,Y5V,2	1	SA	
FS3	3404-000165	SWITCH-TACT;12V,50mA,160gf,6x6mm,SP	1	SA		C182	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA	
FS5	3404-000165	SWITCH-TACT;12V,50mA,160gf,6x6mm,SP	1	SA		C201	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA	
FS6	3404-000165	SWITCH-TACT;12V,50mA,160gf,6x6mm,SP	1	SA		C202	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA	
FS7	3404-000165	SWITCH-TACT;12V,50mA,160gf,6x6mm,SP	1	SA		C203	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA	
FTR1	0504-000119	TR-DIGITAL;KSR1004,NPN,300MW,47K/47	1	SA		C204	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA	
FTR2	0504-000119	TR-DIGITAL;KSR1004,NPN,300MW,47K/47	1	SA		C205	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA	
FTR3	0504-000119	TR-DIGITAL;KSR1004,NPN,300MW,47K/47	1	SA		C206	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA	
FU1	1003-002129	IC-VFD;PT6315A,LQFP,44P,10x10mm,-,-	1	SA		C207	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA	
FU3	0609-001189	MODULE REMOCON;HORIZONTAL,16.4MM,TR	1	SC		C208	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA	
						C209	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA	
P007P	AK92-01651A	ASSY PCB-POWER KEY-BD-P1500/KAA,ASS	1	SA		C210	2203-006361	C-CER,CHIP;10000nF,10%,10V,X5R,2012	1	SA	
PLED	0601-002539	LED;ROUND,Red / Blue,5mm,3.15mm,5.	1	SA		C211	2203-006361	C-CER,CHIP;10000nF,10%,10V,X5R,2012	1	SA	
SCON1	3711-000988	HEADER-BOARD TO CABLE;BOX,5P,1R,2MM	1	SA		C212	2203-006361	C-CER,CHIP;10000nF,10%,10V,X5R,2012	1	SA	
SKEY1	3404-000165	SWITCH-TACT;12V,50mA,160gf,6x6mm,SP	1	SA		C214	2203-006361	C-CER,CHIP;10000nF,10%,10V,X5R,2012	1	SA	
						C215	2203-006361	C-CER,CHIP;10000nF,10%,10V,X5R,2012	1	SA	
						C216	2203-006361	C-CER,CHIP;10000nF,10%,10V,X5R,2012	1	SA	
						C218	2203-006361	C-CER,CHIP;10000nF,10%,10V,X5R,2012	1	SA	

Exploded Views and Parts List

Loc.No	Parts No.	Description : Specification	Q'ty	S.N.A	Remark	Loc.No	Parts No.	Description : Specification	Q'ty	S.N.A	Remark
C219	2203-006361	C-CER,CHIP;1000nF,10%,10V,X5R,2012	1	SA		C294	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA	
C220	2203-006347	C-CER,CHIP;330NF,+80-20%,25V,Y5V,TP	1	SA		C296	2203-005138	C-CER,CHIP;1.8nF,10%,50V,X7R,1005	1	SA	
C221	2203-000254	C-CER,CHIP;10nF,10%,16V,X7R,1005	1	SA		C299	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA	
C222	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA		C300	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA	
C223	2203-000940	C-CER,CHIP;0.47nF,10%,50V,X7R,1005	1	SA		C301	2402-001042	C-AL,SMD;100uF,20%,16V,GP,TP,6.6x6.	1	SA	
C224	2203-000940	C-CER,CHIP;0.47nF,10%,50V,X7R,1005	1	SA		C303	2402-001042	C-AL,SMD;100uF,20%,16V,GP,TP,6.6x6.	1	SA	
C225	2203-002982	C-CER,CHIP;6.8nF,10%,50V,X7R,1005	1	SA		C304	2404-001035	C-TA,CHIP;10uF,10%,25V,-,TP,6032	1	SA	
C226	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA		C305	2402-001042	C-AL,SMD;100uF,20%,16V,GP,TP,6.6x6.	1	SA	
C228	2203-006361	C-CER,CHIP;1000nF,10%,10V,X5R,2012	1	SA		C306	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA	
C229	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA		C309	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA	
C230	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA		C312	2203-005692	C-CER,CHIP;4700nF,+80-20%,16V,Y5V,T	1	SA	
C231	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA		C315	2203-000476	C-CER,CHIP;1000nF,+80-20%,16V,Y5V,2	1	SA	
C232	2203-005692	C-CER,CHIP;4700nF,+80-20%,16V,Y5V,T	1	SA		C316	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA	
C233	2203-005171	C-CER,CHIP;1000nF,10%,16V,X7R,2012	1	SA		C317	2203-005692	C-CER,CHIP;4700nF,+80-20%,16V,Y5V,T	1	SA	
C234	2203-000234	C-CER,CHIP;0.1nF,5%,50V,COG,TP,1005	1	SA		C318	2203-005692	C-CER,CHIP;4700nF,+80-20%,16V,Y5V,T	1	SA	
C235	2203-000234	C-CER,CHIP;0.1nF,5%,50V,COG,TP,1005	1	SA		C319	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA	
C236	2203-000234	C-CER,CHIP;0.1nF,5%,50V,COG,TP,1005	1	SA		C320	2404-000284	C-TA,CHIP;10uF,20%,16V,-,TP,3528	1	SA	
C237	2203-000234	C-CER,CHIP;0.1nF,5%,50V,COG,TP,1005	1	SA		C322	2404-000284	C-TA,CHIP;10uF,20%,16V,-,TP,3528	1	SA	
C238	2203-000234	C-CER,CHIP;0.1nF,5%,50V,COG,TP,1005	1	SA		C323	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA	
C239	2203-006047	C-CER,CHIP;33nF,10%,16V,X7R,1005	1	SA		C324	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA	
C240	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA		C326	2402-001042	C-AL,SMD;100uF,20%,16V,GP,TP,6.6x6.	1	SA	
C241	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA		C327	2203-000476	C-CER,CHIP;1000nF,+80-20%,16V,Y5V,2	1	SA	
C243	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA		C328	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA	
C244	2203-006361	C-CER,CHIP;1000nF,10%,10V,X5R,2012	1	SA		C501	2203-006047	C-CER,CHIP;33nF,10%,16V,X7R,1005	1	SA	
C245	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA		C502	2203-006047	C-CER,CHIP;33nF,10%,16V,X7R,1005	1	SA	
C246	2203-006361	C-CER,CHIP;1000nF,10%,10V,X5R,2012	1	SA		C503	2203-006047	C-CER,CHIP;33nF,10%,16V,X7R,1005	1	SA	
C252	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA		C504	2203-006047	C-CER,CHIP;33nF,10%,16V,X7R,1005	1	SA	
C253	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA		C505	2203-006047	C-CER,CHIP;33nF,10%,16V,X7R,1005	1	SA	
C254	2203-000438	C-CER,CHIP;1nF,10%,50V,X7R,1005	1	SA		C506	2203-006047	C-CER,CHIP;33nF,10%,16V,X7R,1005	1	SA	
C255	2203-000438	C-CER,CHIP;1nF,10%,50V,X7R,1005	1	SA		C511	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA	
C256	2203-002443	C-CER,CHIP;0.33nF,10%,50V,X7R,1005	1	SA		C512	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA	
C257	2203-006347	C-CER,CHIP;330NF,+80-20%,25V,Y5V,TP	1	SA		C514	2404-001035	C-TA,CHIP;10uF,10%,25V,-,TP,6032	1	SA	
C258	2203-002443	C-CER,CHIP;0.33nF,10%,50V,X7R,1005	1	SA		C515	2404-000284	C-TA,CHIP;10uF,20%,16V,-,TP,3528	1	SA	
C259	2203-006347	C-CER,CHIP;330NF,+80-20%,25V,Y5V,TP	1	SA		C516	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA	
C260	2203-000254	C-CER,CHIP;10nF,10%,16V,X7R,1005	1	SA		C517	2203-000254	C-CER,CHIP;10nF,10%,16V,X7R,1005	1	SA	
C261	2203-000438	C-CER,CHIP;1nF,10%,50V,X7R,1005	1	SA		C518	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA	
C262	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA		C519	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA	
C263	2203-006361	C-CER,CHIP;1000nF,10%,10V,X5R,2012	1	SA		C520	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA	
C264	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA		C521	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA	
C265	2203-006361	C-CER,CHIP;1000nF,10%,10V,X5R,2012	1	SA		C522	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA	
C266	2203-006361	C-CER,CHIP;1000nF,10%,10V,X5R,2012	1	SA		C523	2404-000284	C-TA,CHIP;10uF,20%,16V,-,TP,3528	1	SA	
C267	2203-006361	C-CER,CHIP;1000nF,10%,10V,X5R,2012	1	SA		C524	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA	
C268	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA		C525	2404-000284	C-TA,CHIP;10uF,20%,16V,-,TP,3528	1	SA	
C269	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA		C557	AK73-00053A	RUBBER-DECK;DP-R3.5,BUTYL,-,-,-,-,-	4	SNA	
C270	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA		C605	2203-000476	C-CER,CHIP;1000nF,+80-20%,16V,Y5V,2	1	SA	
C271	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA		C606	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA	
C272	2203-005627	C-CER,CHIP;470nF,10%,10V,X5R,1608	1	SA		C621	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA	
C273	2203-001554	C-CER,CHIP;1.8nF,10%,50V,X7R,1608	1	SA		C700	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA	
C274	2203-006361	C-CER,CHIP;1000nF,10%,10V,X5R,2012	1	SA		C701	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA	
C275	2203-000254	C-CER,CHIP;10nF,10%,16V,X7R,1005	1	SA		C702	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA	
C276	2203-000254	C-CER,CHIP;10nF,10%,16V,X7R,1005	1	SA		C710	2203-002982	C-CER,CHIP;6.8nF,10%,50V,X7R,1005	1	SA	
C279	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA		C711	2203-002982	C-CER,CHIP;6.8nF,10%,50V,X7R,1005	1	SA	
C282	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA		C712	2203-000812	C-CER,CHIP;.033nF,5%,50V,COG,-,1005	1	SA	
C283	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA		C713	2203-002834	C-CER,CHIP;22pF,5%,50V,CH,BK,1005,-	1	SA	
C284	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA		C714	2203-002834	C-CER,CHIP;22pF,5%,50V,CH,BK,1005,-	1	SA	
C285	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA		C715	2203-000254	C-CER,CHIP;10nF,10%,16V,X7R,1005	1	SA	
C287	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA		C716	2203-000254	C-CER,CHIP;10nF,10%,16V,X7R,1005	1	SA	
C289	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA		C717	2203-000254	C-CER,CHIP;10nF,10%,16V,X7R,1005	1	SA	
C293	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA		C718	2203-000254	C-CER,CHIP;10nF,10%,16V,X7R,1005	1	SA	

Loc.No	Parts No.	Description : Specification	Q'ty	S.N.A	Remark	Loc.No	Parts No.	Description : Specification	Q'ty	S.N.A	Remark
C719	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA		L401	2007-000113	R-CHIP;33ohm,5%,1/10W,TP,1608	1	SA	
C720	2203-005692	C-CER,CHIP;4700nF,+80-20%,16V,Y5V,T	1	SA		L402	2007-000113	R-CHIP;33ohm,5%,1/10W,TP,1608	1	SA	
C721	2203-005692	C-CER,CHIP;4700nF,+80-20%,16V,Y5V,T	1	SA		L501	3301-001309	BEAD-SMD;47ohm,1608,TP,-,-	1	SA	
						L502	3301-001309	BEAD-SMD;47ohm,1608,TP,-,-	1	SA	
C723	2203-000438	C-CER,CHIP;1nF,10%,50V,X7R,1005	1	SA							
C724	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA		L503	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	1	SA	
C727	2203-000654	C-CER,CHIP;0.27nF,10%,50V,X7R,1005	1	SA		L504	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	1	SA	
C728	2203-000812	C-CER,CHIP;.033nF,5%,50V,COG,-,1005	1	SA		P198	AK97-01646B	ASSY-PCB MOTOR;BD-P3,-,-	1	SNA	
C729	2203-000654	C-CER,CHIP;0.27nF,10%,50V,X7R,1005	1	SA		Q370	0501-000465	TR-SMALL SIGNAL;MMBT3904,NPN,350mW,	1	SA	
						Q371	0501-000465	TR-SMALL SIGNAL;MMBT3904,NPN,350mW,	1	SA	
C730	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA							
C731	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA		Q372	0501-000465	TR-SMALL SIGNAL;MMBT3904,NPN,350mW,	1	SA	
C732	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA		Q373	0501-000546	TR-SMALL SIGNAL;KSA1298,PNP,200mW,S	1	SA	
C733	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA		Q375	0504-000126	TR-DIGITAL;KSR1101,NPN,200mW,4.7K/4	1	SA	
C734	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA		R102	2007-000149	R-CHIP;12Kohm,5%,1/16W,TP,1005	1	SA	
						R103	2007-007001	R-CHIP;3.9Kohm,5%,1/16W,TP,1005	1	SA	
C735	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA							
C736	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA		R104	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	SA	
C737	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA		R105	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	SA	
C738	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA		R106	2007-000157	R-CHIP;47Kohm,5%,1/16W,TP,1005	1	SA	
C739	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA		R107	2007-000157	R-CHIP;47Kohm,5%,1/16W,TP,1005	1	SA	
						R108	2007-000157	R-CHIP;47Kohm,5%,1/16W,TP,1005	1	SA	
C740	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA							
C741	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA		R110	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	SA	
C742	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	1	SA		R114	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	SA	
C771	AK61-00840A	HOLDER-WIRE;SOH-BP4,PPS,-,W13.8,L8.	1	SNA		R175	2007-000157	R-CHIP;47Kohm,5%,1/16W,TP,1005	1	SA	
CF1	2801-004661	CRYSTAL-SMD;16.9344MHz,30ppm,-,18pF	1	SNA		R201	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	SA	
						R202	2007-000145	R-CHIP;6.2Kohm,5%,1/16W,TP,1005	1	SA	
CF2	2801-004655	CRYSTAL-SMD;25MHz,50ppm,SX-3,18pF,2	1	SA							
CN353	3708-001994	CONNECTOR-FPC/FPC/PIC;15P,1MM,SMD-A	1	SNA		R215	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	SA	
CON2	3708-002018	CONNECTOR-FPC/FPC/PIC;4P,1MM,SMD-A	1	SA		R217	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	SA	
CON3	3708-001878	CONNECTOR-FPC/FPC/PIC;6P,1MM,SMD-A	1	SA		R221	2007-000140	R-CHIP;1Kohm,5%,1/16W,TP,1005	1	SA	
CON4	3708-002067	CONNECTOR-FPC/FPC/PIC;12P,1mm,SMD-A	1	SA		R225	2007-000140	R-CHIP;1Kohm,5%,1/16W,TP,1005	1	SA	
						R301	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	SA	
CON5	3711-005293	HEADER-BOARD TO CABLE;BOX,6P,1R,2MM	1	SA							
CON6	3711-006546	CONNECTOR-HEADER;1WALL,7P,1R,1.27mm	1	SNA		R310	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	SA	
D100	0401-001099	DIODE-SWITCHING;1N4148WS,75V,150mA,	1	SA		R318	2007-001313	R-CHIP;330ohm,5%,1/16W,TP,1005	1	SA	
D101	0401-001099	DIODE-SWITCHING;1N4148WS,75V,150mA,	1	SA		R319	2007-000143	R-CHIP;4.7Kohm,5%,1/16W,TP,1005	1	SA	
D102	0401-001099	DIODE-SWITCHING;1N4148WS,75V,150mA,	1	SA		R320	2007-000143	R-CHIP;4.7Kohm,5%,1/16W,TP,1005	1	SA	
						R321	2007-000140	R-CHIP;1Kohm,5%,1/16W,TP,1005	1	SA	
D304	0407-000116	DIODE-ARRAY;KDS181, DAP202K,80V,100	1	SA							
FR01	2011-001432	R-NETWORK;82ohm,5%,1/16W,L,CHIP,8P,	1	SA		R326	2007-001325	R-CHIP;3.3Kohm,5%,1/16W,TP,1005	1	SA	
FR02	2011-001432	R-NETWORK;82ohm,5%,1/16W,L,CHIP,8P,	1	SA		R327	2007-000162	R-CHIP;100Kohm,5%,1/16W,TP,1005	1	SA	
FR03	2011-001432	R-NETWORK;82ohm,5%,1/16W,L,CHIP,8P,	1	SA		R328	2007-000143	R-CHIP;4.7Kohm,5%,1/16W,TP,1005	1	SA	
H103	AK66-00061A	GEAR-PULLEY;DP-RW,POM,-,-,-,-,-,BLK	1	SNA		R329	2007-000140	R-CHIP;1Kohm,5%,1/16W,TP,1005	1	SA	
						R334	2007-000141	R-CHIP;2.2Kohm,5%,1/16W,TP,1005	1	SA	
H104	AK97-01663A	ASSY-MOTOR LOAD;MOTOR+PULLEY,DP-R3H	1	SNA							
H105	6602-001076	BELT-RECTANGULAR;CR,T1.2,4.3%,1.2X2	1	SA		R363	2007-000157	R-CHIP;47Kohm,5%,1/16W,TP,1005	1	SA	
H106	AK66-00062A	GEAR-TRAY;DP-RW,POM,-,-,-,WHT,-,-,-	1	SNA		R364	2007-000157	R-CHIP;47Kohm,5%,1/16W,TP,1005	1	SA	
H108	AK63-00432A	TRAY-DISC;DP-R3,5,ABS,-,-,-,-,-,-,-	1	SNA		R365	2007-007107	R-CHIP;100Kohm,1%,1/16W,TP,1005	1	SA	
H203	AK66-00072A	SHAFT-PU;DP-RW2,SUS420J2,91.5,3,NAT	1	SNA		R366	2007-009138	R-CHIP;33Kohm,1%,1/16W,TP,1005	1	SA	
						R367	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	SA	
H207	AK31-00036A	MOTOR SPINDLE;BD-P2,8500,9.8mN.m,DC	1	SNA							
H209	AK64-01462A	CHASSIS-SUB;DP-R3H,ABS,T2,W114,L54,	1	SNA		R369	2007-000157	R-CHIP;47Kohm,5%,1/16W,TP,1005	1	SA	
H211	AK97-02248A	ASSY-PICK UP,-,SOH-BP4,BD-PLAYER	1	SNA		R370	2007-000152	R-CHIP;20Kohm,5%,1/16W,TP,1005	1	SA	
H212	AK61-00738A	HOLDER-CHUCK;DP-R3,5,ABS,-,-,-,-,-,-	1	SNA		R371	2007-007141	R-CHIP;240ohm,5%,1/16W,TP,1005	1	SA	
H265	AK61-00736A	BRACKET-SHAFT PU;DP-R3.5,SUS T1.0,-	4	SNA		R507	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	SA	
						R508	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	SA	
H268	AK61-00452A	SPRING ETC-HINGE PU;DP-R2,SUS304W/PB	1	SNA							
H271	AK61-00850A	HINGE-PU;BD-P4,POM,W16.4,D38,H8.4,-	1	SNA		R509	2007-000170	R-CHIP;1Mohm,5%,1/16W,TP,1005	1	SA	
H401	AK61-00783A	FRAME-MAIN;BD-P3,ABS,BLK,W151,D192.	1	SNA		R510	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	SA	
IC4	1003-001881	IC-MOTOR DRIVER;BD7956FS,HSSOP,54P,	1	SA		R511	2007-002429	R-CHIP;1.5ohm,5%,1/10W,TP,1608	1	SNA	
IC7	1003-001515	IC-MOTOR DRIVER;BA6846FV,SSOP,14P,1	1	SA		R512	2007-002429	R-CHIP;1.5ohm,5%,1/10W,TP,1608	1	SNA	
						R513	2007-002429	R-CHIP;1.5ohm,5%,1/10W,TP,1608	1	SNA	
J1	3708-002203	CONNECTOR-FPC/FPC/PIC;40P,0.5mm,SMD	1	SA							
L301	2901-001281	FILTER-EMI SMD;16V,2A,-,220000pF,2.	1	SA		R514	2007-002429	R-CHIP;1.5ohm,5%,1/10W,TP,1608	1	SNA	
L303	2901-001281	FILTER-EMI SMD;16V,2A,-,220000pF,2.	1	SA		R515	2007-000695	R-CHIP;3.3ohm,5%,1/10W,TP,1608	1	SA	
L305	2901-001281	FILTER-EMI SMD;16V,2A,-,220000pF,2.	1	SA		R516	2007-000695	R-CHIP;3.3ohm,5%,1/10W,TP,1608	1	SA	
L306	2901-001281	FILTER-EMI SMD;16V,2A,-,220000pF,2.	1	SA		R517	2007-000163	R-CHIP;120Kohm,5%,1/16W,TP,1005	1	SNA	
						R518	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	SA	
L307	2901-001281	FILTER-EMI SMD;16V,2A,-,220000pF,2.	1	SA							

Exploded Views and Parts List

Loc.No	Parts No.	Description : Specification	Q'ty	S.N.A	Remark	Loc.No	Parts No.	Description : Specification	Q'ty	S.N.A	Remark
R519	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	SA		R770	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	SA	
R520	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	SA		R771	2007-001301	R-CHIP;68ohm,5%,1/16W,TP,1005	1	SA	
R521	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	SA		R772	2007-000157	R-CHIP;47Kohm,5%,1/16W,TP,1005	1	SA	
R525	2007-000143	R-CHIP;4.7Kohm,5%,1/16W,TP,1005	1	SA		R773	2007-001217	R-CHIP;82ohm,5%,1/16W,TP,1005	1	SA	
R530	2007-000695	R-CHIP;3.3ohm,5%,1/10W,TP,1608	1	SA		R775	2007-001292	R-CHIP;33ohm,5%,1/16W,TP,1005	1	SA	
R531	2007-000695	R-CHIP;3.3ohm,5%,1/10W,TP,1608	1	SA		S.N.A	AK97-02258A	ASSY-BD PLAYER DECK;ASSY,BD-P4,-	1	SNA	
R533	2007-000157	R-CHIP;47Kohm,5%,1/16W,TP,1005	1	SA		S.N.A	AK41-00779A	FFC-PU CABLE;BD-P4,B TYPE,0.5PITCH,	1	SNA	
R621	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	SA		S.N.A	AK61-00849A	BRACKET-DECK;BD-P4,SECC T1.6,W110,D	1	SNA	
R623	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	SA		S.N.A	AK97-01877B	ASSY-HOLDER CHUCK;ABS+POM,BD-P4,-	1	SNA	
R701	2007-000141	R-CHIP;2.2Kohm,5%,1/16W,TP,1005	1	SA		S.N.A	AK97-01331C	ASSY-CLAMPER;POM+SECC,BD-P4,-	1	SNA	
R702	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	1	SA		S.N.A	AK61-00739A	BRACKET-CLAMPER;DP-R3,5L,SECC T0.6,	1	SNA	
R703	2007-000309	R-CHIP;10ohm,5%,1/10W,TP,1608	1	SA		S.N.A	AK61-00858A	BODY-CLAMPER UPPER;BD-P4,POM,-,-,-	1	SNA	
R704	2007-000309	R-CHIP;10ohm,5%,1/10W,TP,1608	1	SA		S.N.A	AK68-00433B	LABEL-WARNING DRIVE;BD-P,-,ART PAPE	1	SNA	
R705	2007-000113	R-CHIP;33ohm,5%,1/10W,TP,1608	1	SA		S.N.A	AK97-02144B	ASSY-FRAME MAIN;ASSY,BD-P4,-	1	SNA	
R706	2007-000113	R-CHIP;33ohm,5%,1/10W,TP,1608	1	SA		S.N.A	0205-001033	GREASE;PL-30G,W050030019,-	0.1	SNA	
R707	2007-000113	R-CHIP;33ohm,5%,1/10W,TP,1608	1	SA		S.N.A	3403-001026	SWITCH-PUSH;5V,0.7mA,DPST,OFF-ON-OFF	1	SA	
R708	2007-000113	R-CHIP;33ohm,5%,1/10W,TP,1608	1	SA		S.N.A	AK41-00400B	FFC-DECK;BD-P3,-,PET,6P,T0.11,L83.3	1	SA	
R710	2007-002796	R-CHIP;510ohm,5%,1/16W,TP,1005	1	SA		S.N.A	AK41-00546B	PCB-DECK;BD-P3,PHENOL,-,00,1.6T,28.	1	SNA	
R711	2007-002796	R-CHIP;510ohm,5%,1/16W,TP,1005	1	SA		S.N.A	AK31-00024A	MOTOR STEP-FEED,-,DP-RW,727 mA,2000	1	SNA	
R712	2007-000157	R-CHIP;47Kohm,5%,1/16W,TP,1005	1	SA		S.N.A	AK66-00050A	SHAFT-PU L98;BD-P,SUS420J2,L98,OD3,	1	SNA	
R713	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	SA		S.N.A	AK61-00848A	BRACKET-EMI;BD-P3,SECC T0.5,-,-,-,-	1	SNA	
R714	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	SA		T037	AK66-00079A	SLIDER-CAM;DP-R3H,POM,T10,W89,L18.7	1	SNA	
R715	2007-000170	R-CHIP;1Mohm,5%,1/16W,TP,1005	1	SA		U101	0903-001523	IC-MICROCONTROLLER;uPD63410,LQFP,25	1	SNA	
R716	2007-007314	R-CHIP;5.6Kohm,1%,1/16W,TP,1005	1	SA		U171	1105-001397	IC-DRAM;K4S641632,-,64Mbit,1Mx16x4B	1	SA	
R717	2007-007589	R-CHIP;68Kohm,1%,1/16W,TP,1005	1	SA		U182	1107-001600	IC-NOR FLASH;MX25L1605A,16Mbit,2Mx8	1	SA	
R722	2007-007107	R-CHIP;100Kohm,1%,1/16W,TP,1005	1	SA		U201	AK13-00030A	IC ASIC;uPC3360GC-YEB-A,BD-P1400,12	1	SNA	
R723	2007-009138	R-CHIP;33Kohm,1%,1/16W,TP,1005	1	SA		U303	1001-001482	IC-ANALOG SWITCH;MAX4610CUD,SPST CM	1	SNA	
R724	2007-002429	R-CHIP;1.5ohm,5%,1/10W,TP,1608	1	SNA		U306	1001-001482	IC-ANALOG SWITCH;MAX4610CUD,SPST CM	1	SNA	
R725	2007-000695	R-CHIP;3.3ohm,5%,1/10W,TP,1608	1	SA		U307	1203-001816	IC-POSIFIXED REG,-;78M08,T0-252,3P,	1	SA	
R726	2007-000695	R-CHIP;3.3ohm,5%,1/10W,TP,1608	1	SA		U309	1201-000166	IC-OP AMP;LM358,SOP,ST,8P,150MIL,DU	1	SA	
R740	2007-001217	R-CHIP;82ohm,5%,1/16W,TP,1005	1	SA		U310	1203-002882	IC-POSIFIXED REG,-;1117-1.5,SOT-223	1	SA	
R741	2007-001217	R-CHIP;82ohm,5%,1/16W,TP,1005	1	SA		U311	1203-002842	IC-POSIFIXED REG,-;AP1117D-33A,T0-2	1	SA	
R742	2007-001217	R-CHIP;82ohm,5%,1/16W,TP,1005	1	SA		U312	0801-002097	IC-CMOS LOGIC;7S708,AND GATE,SOP,5P	1	SA	
R743	2007-001217	R-CHIP;82ohm,5%,1/16W,TP,1005	1	SA		U313	1203-003177	IC-VOL DETECTOR;BD5326G,SSOP,5P,2.	1	SA	
R744	2007-001217	R-CHIP;82ohm,5%,1/16W,TP,1005	1	SA		U314	1201-000166	IC-OP AMP;LM358,SOP,ST,8P,150MIL,DU	1	SA	
R745	2007-001217	R-CHIP;82ohm,5%,1/16W,TP,1005	1	SA		W012	6002-001086	SCREW-TAPPING;PH,+,-,B,M1.7,L5.0,ZP	1	SA	
R746	2007-001217	R-CHIP;82ohm,5%,1/16W,TP,1005	1	SA		W018	6003-001450	SCREW-TAPTITE;PH,+,-,S,M2.6,L5,ZPC(	2	SA	
R747	2007-001217	R-CHIP;82ohm,5%,1/16W,TP,1005	1	SA		W274	6001-001730	SCREW-MACHINE;BH,+,-,M1.7,L2.5,ZPC(	2	SA	
R748	2007-001217	R-CHIP;82ohm,5%,1/16W,TP,1005	1	SA		W291	6001-001348	SCREW-MACHINE;CH,+,-,M1.7,L3.5,ZPC(	1	SA	
R749	2007-001217	R-CHIP;82ohm,5%,1/16W,TP,1005	1	SA		W350	6001-001003	SCREW-MACHINE;BH,+,-,M2.6,L6,ZPC(BLK)	4	SA	
R750	2007-001217	R-CHIP;82ohm,5%,1/16W,TP,1005	1	SA		W353	6003-001199	SCREW-TAPTITE;PWH,+,-,B,M2,L7,ZPC(W	4	SA	
R751	2007-001217	R-CHIP;82ohm,5%,1/16W,TP,1005	1	SA		W376	6001-000805	SCREW-MACHINE;CH,+,-,M1.7,L3,Ni PLT	4	SA	
R752	2007-001217	R-CHIP;82ohm,5%,1/16W,TP,1005	1	SA		W377	6001-001291	SCREW-MACHINE;CH(0.5),+,-,M1.7,L4,Z	3	SA	
R753	2007-001217	R-CHIP;82ohm,5%,1/16W,TP,1005	1	SA		W377	6001-001291	SCREW-MACHINE;CH(0.5),+,-,M1.7,L4,Z	2	SA	
R754	2007-001217	R-CHIP;82ohm,5%,1/16W,TP,1005	1	SA		W382	6003-001478	SCREW-TAPTITE;PH,+,-,B,M2.6,L8,ZPC(	2	SA	
R755	2007-001217	R-CHIP;82ohm,5%,1/16W,TP,1005	1	SA		AK92-01648A	ASSY PCB-NEC;BD-P1500,FRONT-END PCB	1	SNA		
R756	2007-001217	R-CHIP;82ohm,5%,1/16W,TP,1005	1	SA		AC99-40336C	ASSY PCB-MAIN VCR,cDVD-V6700,XAC,H	1	SNA		
R757	2007-001217	R-CHIP;82ohm,5%,1/16W,TP,1005	1	SA		0202-001221	SOLDER-CREAM;PF305-116H(OA)-,25-45	0.99	SNA		
R758	2007-001217	R-CHIP;82ohm,5%,1/16W,TP,1005	1	SA		AK41-00776A	PCB-FRONT END NEC;BD-P1500,EPOXY,4L	0.5	SNA		
R759	2007-001217	R-CHIP;82ohm,5%,1/16W,TP,1005	1	SA		AC99-90339A	ASSY PCB-NEC,m;BD-P1500,FRONT-END P	1	SNA		
R760	2007-001217	R-CHIP;82ohm,5%,1/16W,TP,1005	1	SA		0202-001214	SOLDER-WIRE FLUX;HI-ALMIT HR19M LFM	0.397	SNA		
R761	2007-001217	R-CHIP;82ohm,5%,1/16W,TP,1005	1	SA		AH31-00025A	MOTOR-LOADING;RF-300EA-1D390,DP-7,1	1	SNA		
R762	2007-002429	R-CHIP;1.5ohm,5%,1/10W,TP,1608	1	SNA		AK66-00038A	PULLEY MOTOR;DP-R1,POM,-,BLK,1.95,7	1	SNA		
R763	2007-000143	R-CHIP;4.7Kohm,5%,1/16W,TP,1005	1	SA		0201-000169	ADHESIVE-CYA;ARCN-A501F,NTR	0.01	SNA		
R764	2007-000143	R-CHIP;4.7Kohm,5%,1/16W,TP,1005	1	SA		0201-001081	ADHESIVE-AA;1401C,RED,-,BOND-LOCK S	0.01	SNA		
R765	2007-000143	R-CHIP;4.7Kohm,5%,1/16W,TP,1005	1	SA		0201-001525	ADHESIVE-UV;8840L,YEL,TRANS,23000,D	0.02	SNA		
R766	2007-000143	R-CHIP;4.7Kohm,5%,1/16W,TP,1005	1	SA		0201-001553	ADHESIVE-TP;G-800-A.GRY,220##40Pa.S	0.06	SNA		
R767	2007-000157	R-CHIP;47Kohm,5%,1/16W,TP,1005	1	SA		0201-001819	ADHESIVE-UV;8833M,YELLOW,21000mPas,	0.09	SNA		
R768	2007-000157	R-CHIP;47Kohm,5%,1/16W,TP,1005	1	SA		0202-001499	SOLDER-WIRE FLUX;SR34 SUPER LFM-48,	0.05	SNA		
R769	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	1	SA							

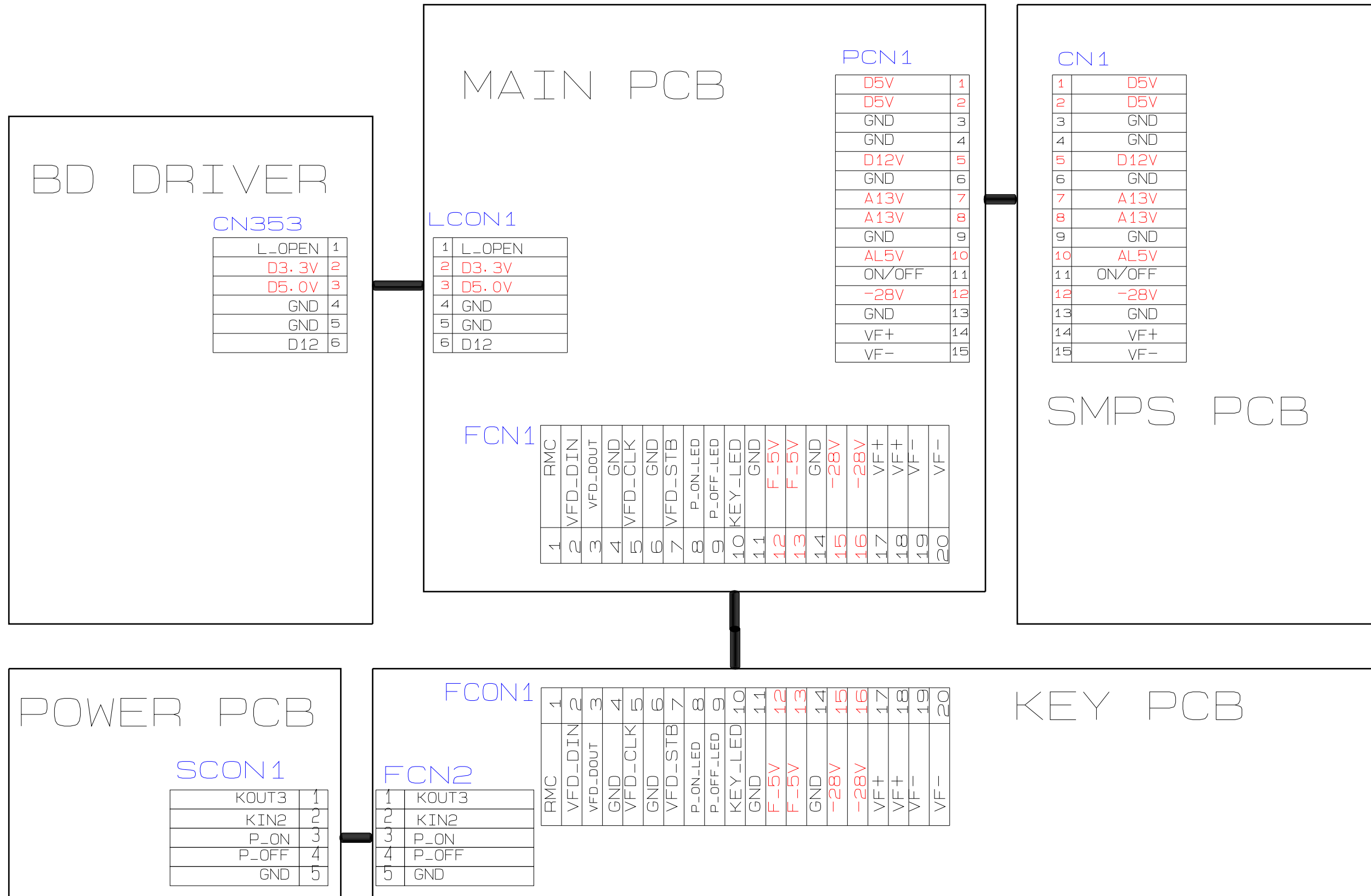
Loc.No	Parts No.	Description : Specification	Q'ty	S.N.A	Remark	Loc.No	Parts No.	Description : Specification	Q'ty	S.N.A	Remark
	AK97-02207A	ASSY-ACT-;SOH-BP4,BD-PLAYER	1	SNA		1209-001426	IC-OSCILLATOR;EL6203,SOT-23,5P,63MI	1	SNA		
	0201-001081	ADHESIVE-AA;1401C,RED,-,BOND-LOCK S	0.005	SNA		1404-001328	THERMISTOR-NTC;10Kohm,-,3370K,-,-,-	1	SNA		
	0201-001230	ADHESIVE-CYA,LOCTITE 480,BLK,300,-	0.005	SNA		2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	4	SA		
	0201-001371	ADHESIVE-SIL,KE3494,GRAY,50 PA,OL P	0.005	SNA		2007-000096	R-CHIP;30Kohm,5%,1/10W,TP,1608	1	SA		
	0201-001525	ADHESIVE-UV;8840L,YEL,TRANS,23000,D	0.05	SNA		2007-000140	R-CHIP;1Kohm,5%,1/16W,TP,1005	2	SA		
	0201-001537	ADHESIVE-UV;SDM-378,WHT,11000mPas,-	0.05	SNA		2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	2	SA		
	0201-001709	ADHESIVE-UV;8839L,YEL,24500mPa.s,-	0.01	SNA		2007-000287	R-CHIP;100ohm,1%,1/10W,TP,1608	1	SA		
	0201-001793	ADHESIVE-UV;8791L3,WHITE,20000mPa.s	0.01	SNA		2007-000962	R-CHIP;5.1Kohm,1%,1/10W,TP,1608	1	SA		
	0202-001499	SOLDER-WIRE FLUX;SR34 SUPER LFM-48,	1	SNA		2104-001087	VR-SMD;2.2Kohm,25%,0.15W,TOP	3	SA		
	3302-001727	MAGNET-RARE EARTH;- ,14400Gauss,50MG	1	SNA		2203-000189	C-CER,CHIP;100nF,+80-20%,25V,Y5V,16	2	SA		
	3812-001419	WIRE-NO SHEATH CU;SCW,0V,18.5mm,1/0	2	SNA		2203-000233	C-CER,CHIP;0.1nF,5%,50V,C0G,1005	1	SA		
	AK62-00022A	YOKE-ACT;SOH-BP4,SFCC,T1.2,W16.8,L2	1	SNA		2203-006048	C-CER,CHIP;100nF,10%,25V,X5R,1608	2	SA		
	AK63-00506A	COVER-ACT;SOH-BP4,SUS304,T0.3,W14.4	1	SNA		3301-000314	BEAD-SMD;120ohm,1.6x0.8x0.8mm,-,-,-	6	SA		
	AK67-00046A	LENS-PHOE;SOH-BP1,B270,NTR,3.5*3.5,	1	SNA		3301-001808	BEAD-SMD;120ohm,1005,TP,530ohm390M	1	SA		
	AK67-00050A	LENS-OL DVD CD;SOH-BP1,PLASTIC,NTR,	1	SNA		3708-001175	CONNECTOR-FPC/FFC/PIC;8P,0.5MM,SMD-	1	SA		
	AK97-02181A	ASSY-BLADE;SOH-BP4,-	1	SNA		AK41-00799A	FPC-BDP4;SOH-BDP4,1.6,####FPCB,40,T	1	SNA		
	AK66-00127A	BLADE;SOH-BP4,E5006L,-,-,BEIGE,-	1	SNA		0603-001213	PHOTO-RECEIVER;5.7V,23mA,405nm,-	1	SNA		
	3812-001456	WIRE-NO SHEATH CU;SCM,-,18.5,-,-,YE	4	SNA		0202-001221	SOLDER-CREAM;PF305-116HO(A)-,25-45	0.05	SNA		
	AK67-00064A	LENS-OL BD;SOH-BP1,GLASS,NTR,P14,4,	1	SNA		3708-002203	CONNECTOR-FPC/FFC/PIC;40P,0.5mm,SMD	1	SA		
	AK97-02249A	ASSY-OPT-;SOH-BP4,BD-PLAYER	1	SNA		2007-007768	R-CHIP;13Kohm,1%,1/10W,TP,1608	1	SA		
	0201-001081	ADHESIVE-AA;1401C,RED,-,BOND-LOCK S	0.01	SNA		AK41-00800A	FPC-BDP4 CLD;SOH-BDP4,1.6,####FPCB,	1	SNA		
	0201-001388	ADHESIVE-CYA,LOCTITE 460,WHT,45 MPA	0.005	SNA		AK63-00518A	COVER-FPCB;SOH-BP4,SUS304,T0.15,W3.	1	SNA		
	0201-001525	ADHESIVE-UV;8840L,YEL,TRANS,23000,D	0.02	SNA							
	0201-001709	ADHESIVE-UV;8839L,YEL,24500mPa.s,-	0.01	SNA							
	0201-001819	ADHESIVE-UV;8833M,YELLOW,21000mPas,	0.04	SNA							
	0201-001988	ADHESIVE-AA;EX-0136,WHT,20000-40000	0.05	SNA							
	0201-002022	ADHESIVE-UV;8833G,YELLOW,26000mPa.s	0.02	SNA							
	0202-001499	SOLDER-WIRE FLUX;SR34 SUPER LFM-48,	0.05	SNA							
	0205-001226	GREASE;FLOIL KG-513,WHT,1KG	0.02	SNA							
	0602-001158	DIODE-LASER;6mW,2,655nm,CAN	1	SNA							
	0602-001159	DIODE-LASER;20mW,2,405nm,CAN	1	SNA							
	0604-001302	PHOTO-INTERRUPTER;TR,-,100mW,-,-	1	SA							
	AK31-00030A	MOTOR STEP-CLD-;SOH-BP1,-,-,-,2.5-	1	SNA							
	AK61-00545A	SPRING ETC-CLD;SOH-BP1,STS304-WBP,0	1	SNA							
	AK61-00742A	SPRING ETC-DVD GT;SOH-DR4,Cu,-,2,8,	2	SNA							
	AK61-00828A	PLATE-PD BD;SOH-BP4,Zn,T2.1,W13,L7.	1	SNA							
	AK61-00829A	PLATE-PD DVD;SOH-BP4,Zn,T1.4,W11.8,	1	SNA							
	AK61-00830A	HOLDER-GT BD;SOH-BP4,Zn,T1.85,D5.6,	1	SNA							
	AK61-00831A	HOLDER-GT CD;SOH-BP4,Zn,T1.85,D5.6,	1	SNA							
	AK61-00832A	HOLDER-CL;SOH-BP4,PPS,-,-,-,BLK,-	1	SNA							
	AK61-00833A	HOLDER-LD BD;SOH-BP4,Zn,T4.0,W15.2,	1	SNA							
	AK61-00834A	BASE-PICK UP;SOH-BP4,PPS,T9,W44,L55	1	SNA							
	AK61-00842A	SPRING ETC-PBS BD;SOH-BP4,SUS,-,-,-	1	SNA							
	AK61-00843A	SPRING ETC-PBS DVD;SOH-BP4,SUS,-,-,-	1	SNA							
	AK63-00503A	COVER BASE;SOH-BP4,PBS,T0.2,-,-,-,-	1	SNA							
	AK66-00076A	SHAFT-MAIN CLD;SOH-BP1,SUS303C,25.5	1	SNA							
	AK66-00077A	SHAFT-SUB CLD;SOH-BP1,SUS303C,12.5,	1	SNA							
	AK67-00044A	LENS-CL DVD;SOH-BP1,PLASTIC,NTR,P15	1	SNA							
	AK67-00080A	LENS-CL BD;BD-P1500,Glass(Zeonex340	1	SNA							
	AK67-00082A	LENS-PBS BD;SOH-BP4,GLS,WHT,7.2*5.	1	SNA							
	AK67-00083A	LENS-PBS DVD;SOH-BP4,GLS,WHT,7.8*5	1	SNA							
	AK67-00084A	LENS-BD MR;SOH-BP4,GLS,WHT,6*6.7,T1	1	SNA							
	AK67-00085A	LENS-DVD MR;SOH-BP4,GLS,WHT,4.7*8.0	1	SNA							
	AK67-00086A	LENS-ASL BD;SOH-BP4,Z330R,None,Pi	1	SNA							
	AK67-00087A	LENS-ASL DVD;SOH-BP4,ZE48R,None,Pi	1	SNA							
	AK67-00089A	LENS-BD GT;Grating,B270,None,3.0*2.	1	SNA							
	AK67-00090A	LENS-CD GT;Grating,B270,None,3.3*2.	1	SNA							
	AK97-02266A	ASSY-BD4 FPCB;- ,SOH-BP4,BD-PLAYER	1	SNA							
	0603-001215	PHOTO DIODE;-V,650-780nm,REEL	1	SNA							
	C002	AK64-02242A	DOOR-TRAY;BD-P1500,ABS+PMMA,T2,H22.	1	SA						
	C011	AK61-00519A	SPRING ETC-DOOR;DVD-SR420,STS304WBP	1	SA						
	C-AV	AC39-42001R	CABLE-AV;PVC,-,-,3P,-,-,-	1	SA						
	FL400	AK39-00130A	LEAD CONNECTOR;BD-P1500,UL1007#24,U	1	SA						
	FL401	AK39-00127A	DATA LINK CABLE;BD-P1500,7P,7P,240m	1	SA						
	I/B	AK68-01608A	MANUAL USERS;BD-P1500/XAA,-,ENG,-,M	1	SA						
	P-CASE	AK69-00606A	PACKING CASE;BD-P1500/XAA,CB,SW2, A	1	SA						
	W001	6003-000275	SCREW-TAPTITE;BH,+,-,B,M3,L10,ZPC(B	9	SA						
	W009	6003-000276	SCREW-TAPTITE;BH,+,-,B,M3,L10,ZPC(W	6	SA						
	W200	6003-001375	SCREW-TAPTITE;BH,+,-,B,M3,L8,ZPC(WH	4	SA						
	W275	6003-001561	SCREW-TAPTITE;BH,+,-,B,M3,L6,ZPC(WH	4	SA						
	W348	6003-000255	SCREW-TAPTITE;BWH,+,-,B,M3,L8,ZPC(W	3	SA						

MEMO

6. PCB Diagrams

6-1 Wiring Diagram	6-2
6-2 Main PCB	6-3
6-3 S.M.P.S PCB	6-5
6-4 Front key PCB	6-7
6-5 Power Key PCB	6-8

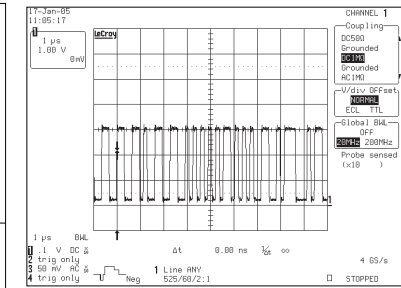
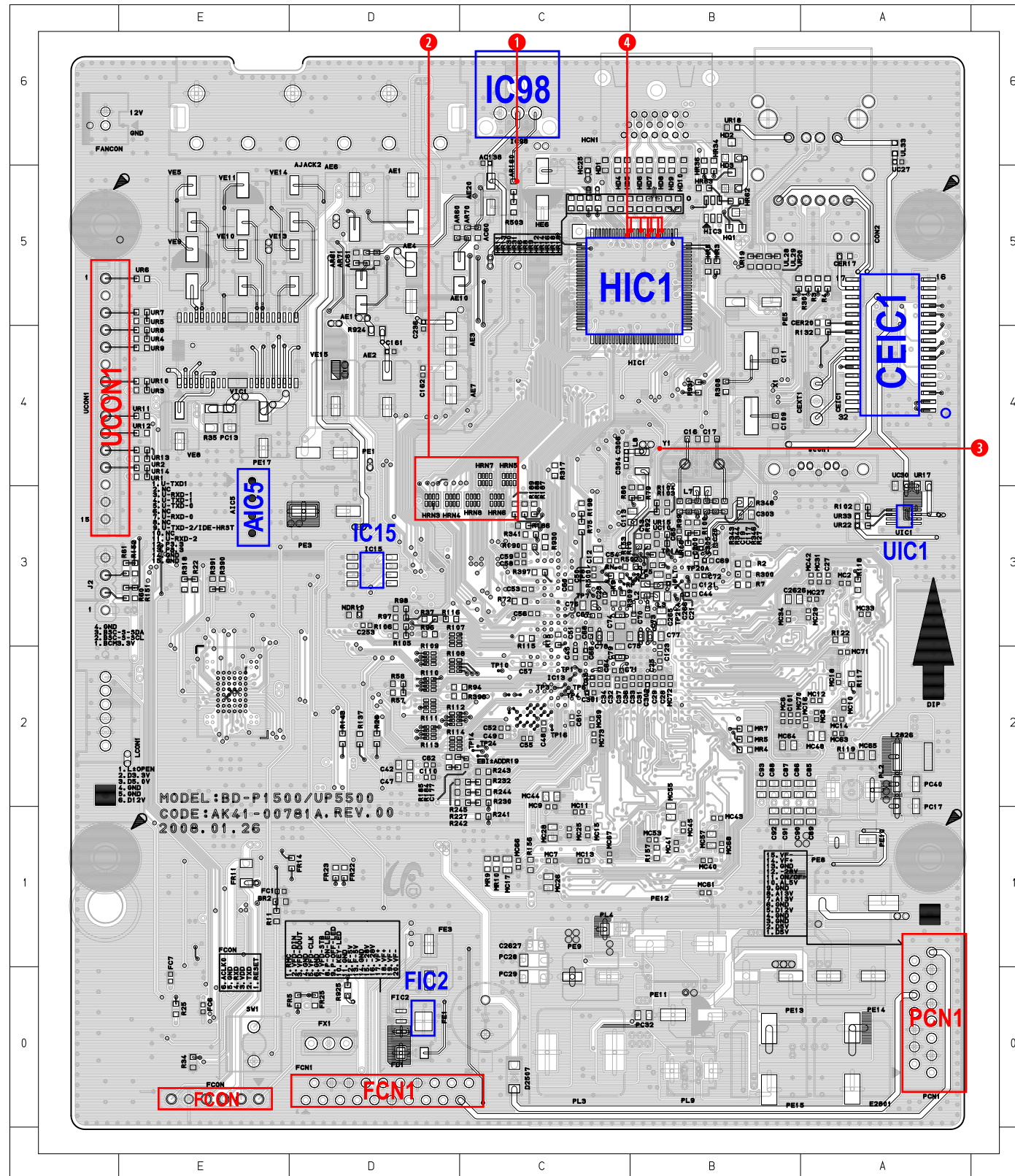
6-1 Wiring Diagram



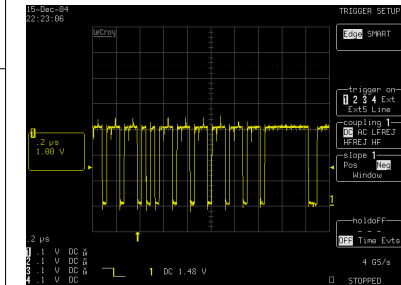
6-2 Main PCB

COMPONENT SIDE

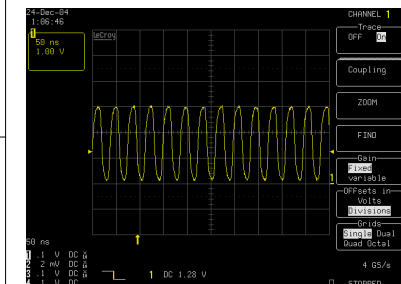
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IC15	D-3
FCON	E-0
AIC5	E-3
UCON1	E-3



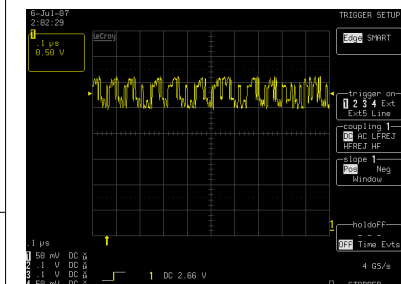
1 DIGITAL AUDIO DATA
AR160



2 Digital Video signal
U1(HRN3 ~ HRN8)



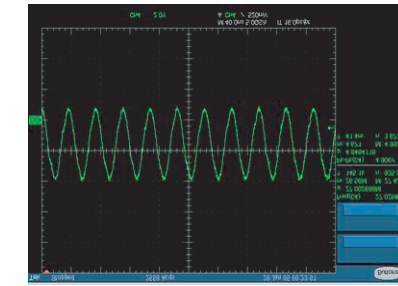
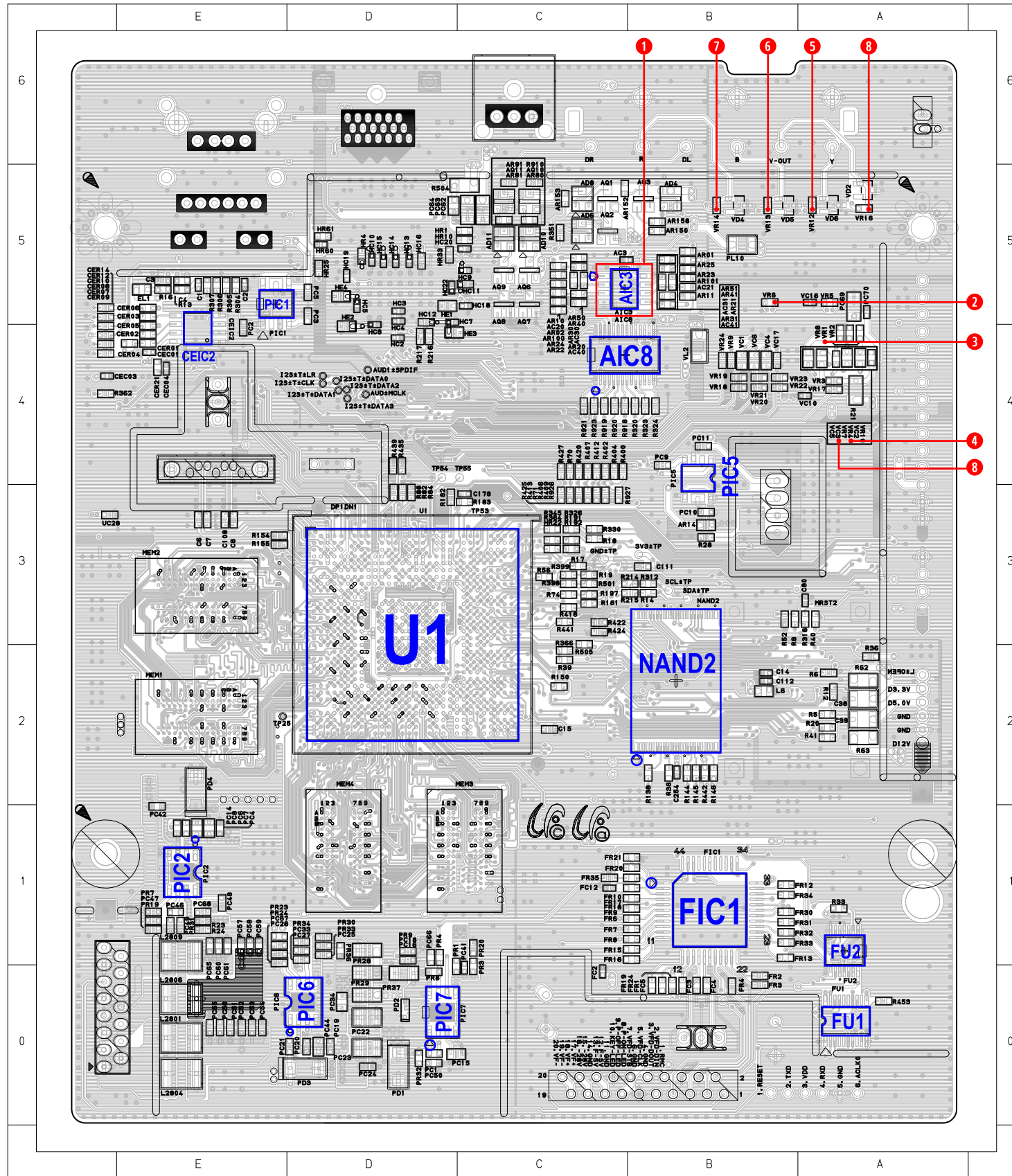
3 Y1_CLOCK SIGNAL (54MHz)



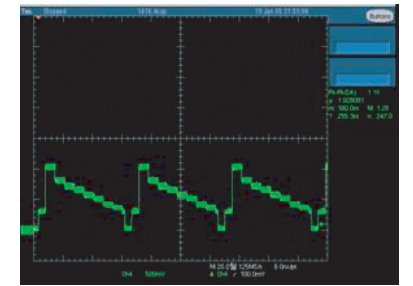
4 HDMI OUTPUT DATA
HIC1 (pin30,31,33,34,36,37,39,40)

CONDUCTOR SIDE

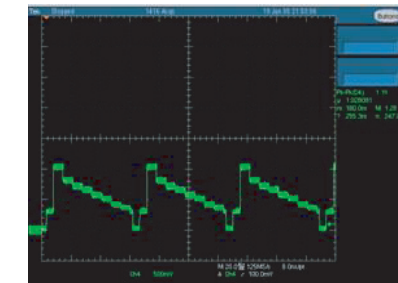
LOC.NO	X-Y
FU1	A-0
FU2	A-1
FIC1	B-1
NAND2	B-2
PIC5	B-4
AIC8	B-4
U1	C-2
PIC7	D-0
PIC6	D-0
PIC2	E-1
CEIC2	E-4
PIC1	E-5



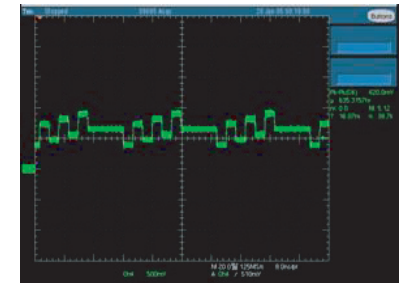
1 ANALOG AUDIO DATA
AIC3



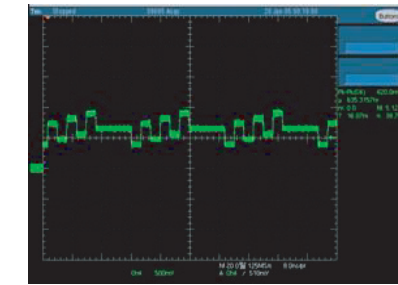
5 Y(Color-bar)
Pin-VR12



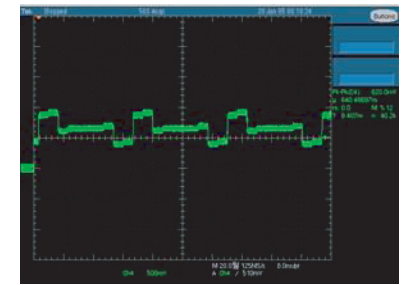
2 Y(Color-bar)
Pin (U1-VR6)



6 Pb(Color-bar)
Pin-VR13



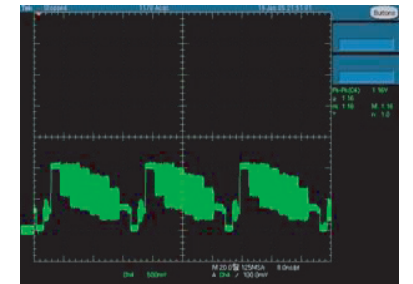
3 Pb(Color-bar)
Pin (U1-VR1)



7 Pr(Color-bar)
Pin-VR14



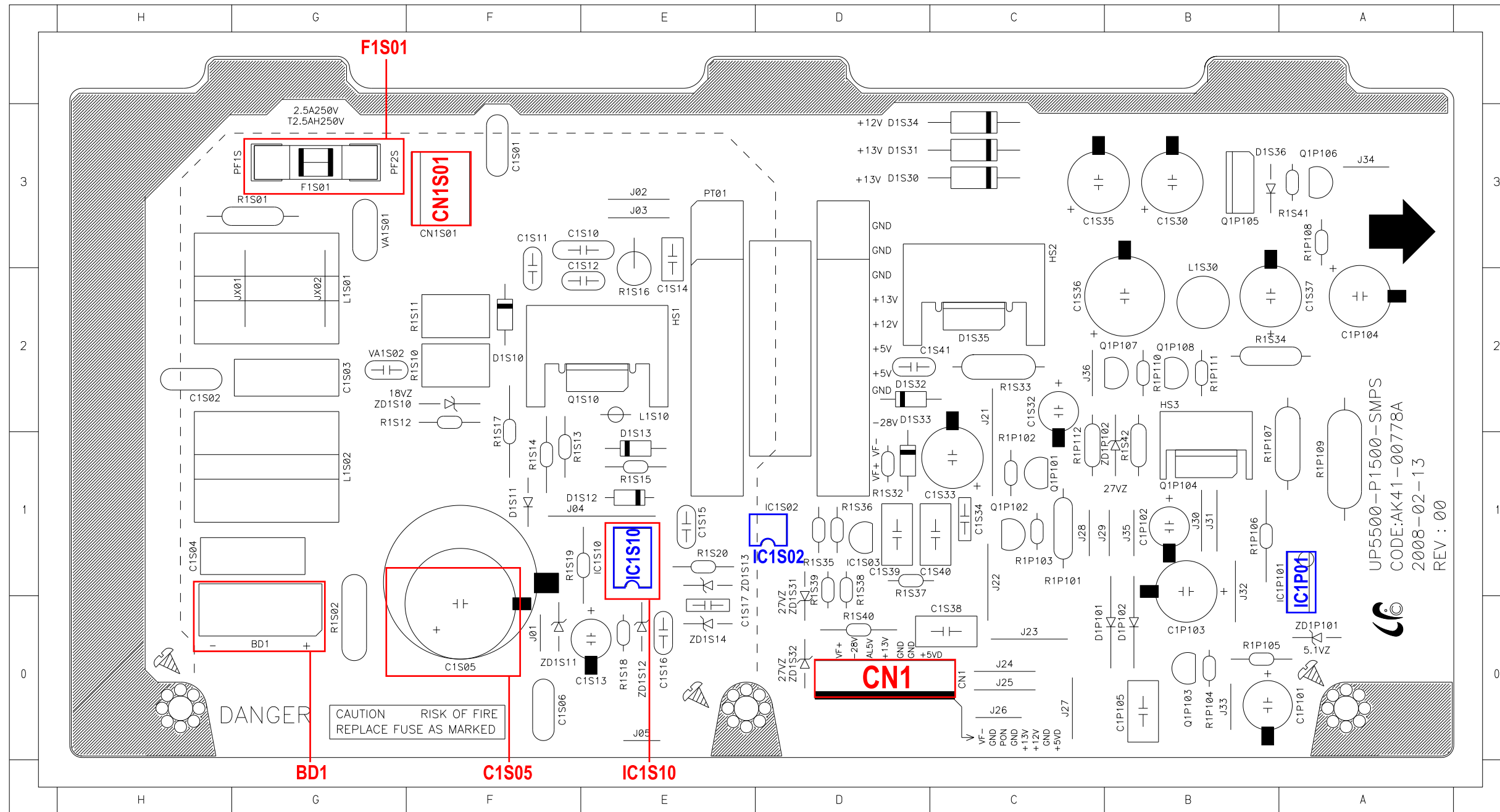
4 Pr(Color-bar)
Pin (U1-VR4)



8 CVBS(Color-bar)
Pin (VC 3, VR16)

6-3 S.M.P.S PCB

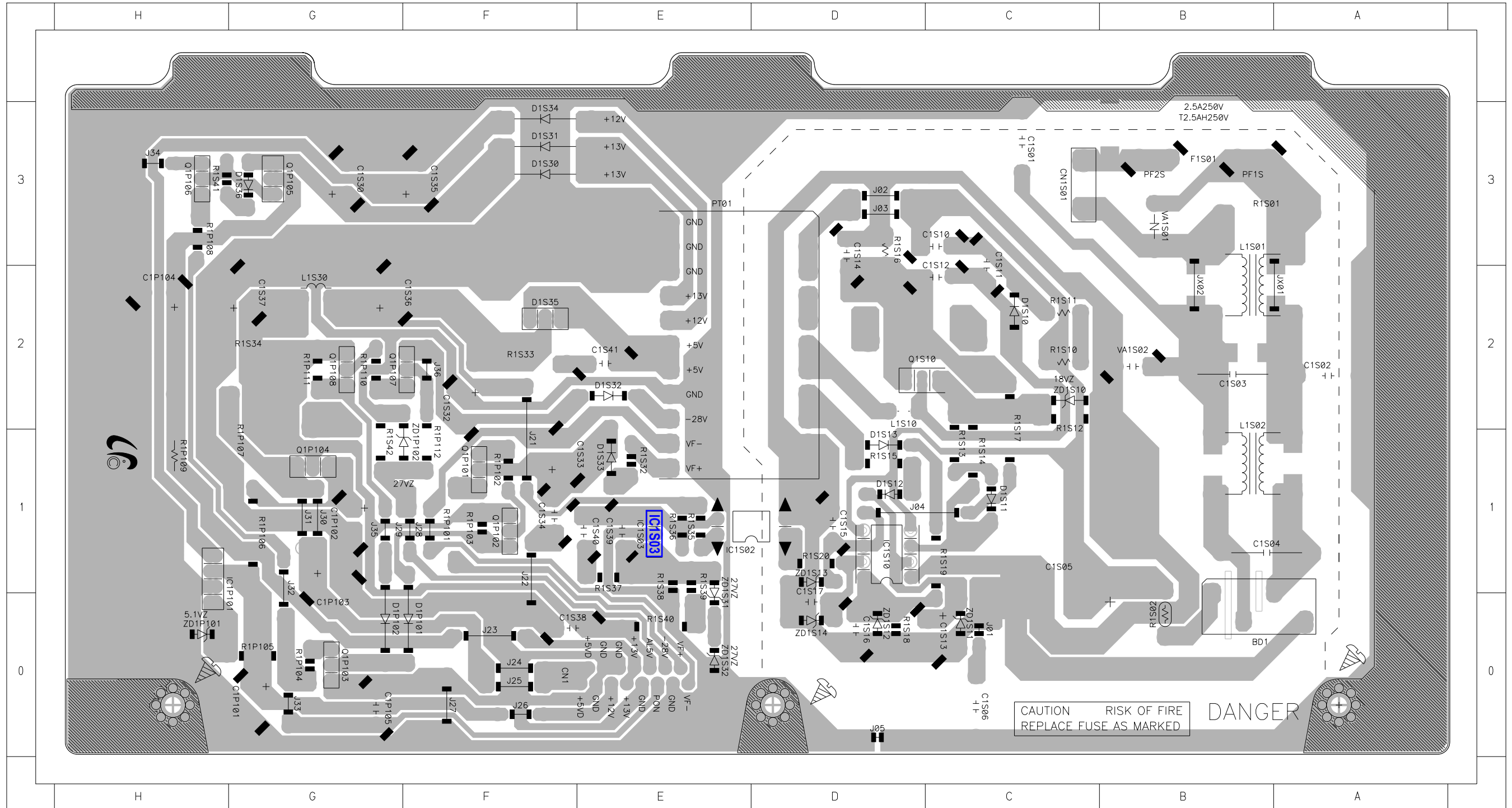
COMPONENT SIDE



LOC.NO	X-Y
IC1P01	A-0
CN1	D-0
IC1S02	D-1
IC1S10	E-1
CN1S01	F-3

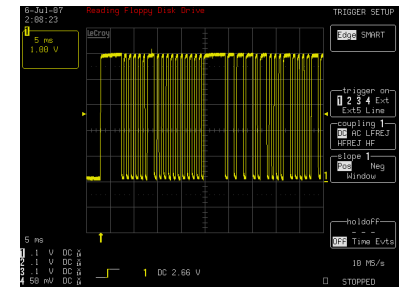
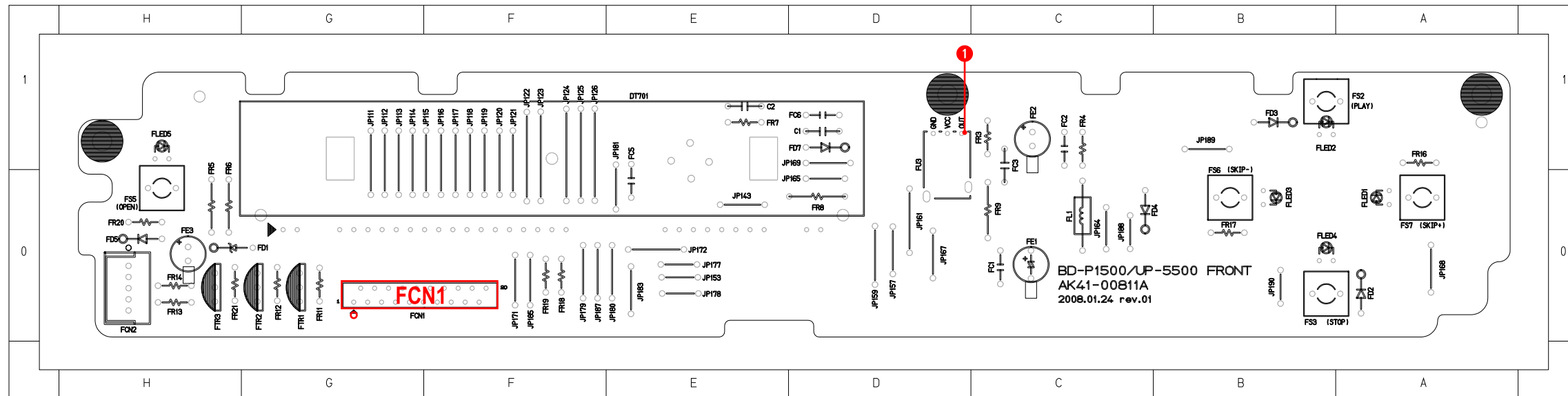
UP5500-P1500-SMPS
 CODE:AK41-00778A
 2008-02-13
 REV : 00

CONDUCTOR SIDE



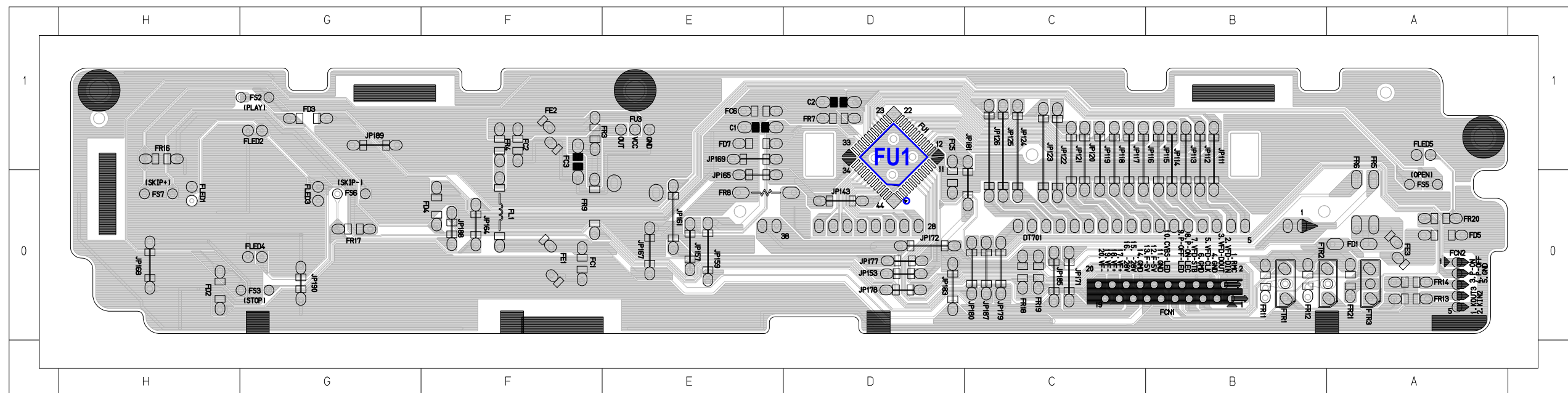
6-4 Front key PCB

COMPONENT SIDE



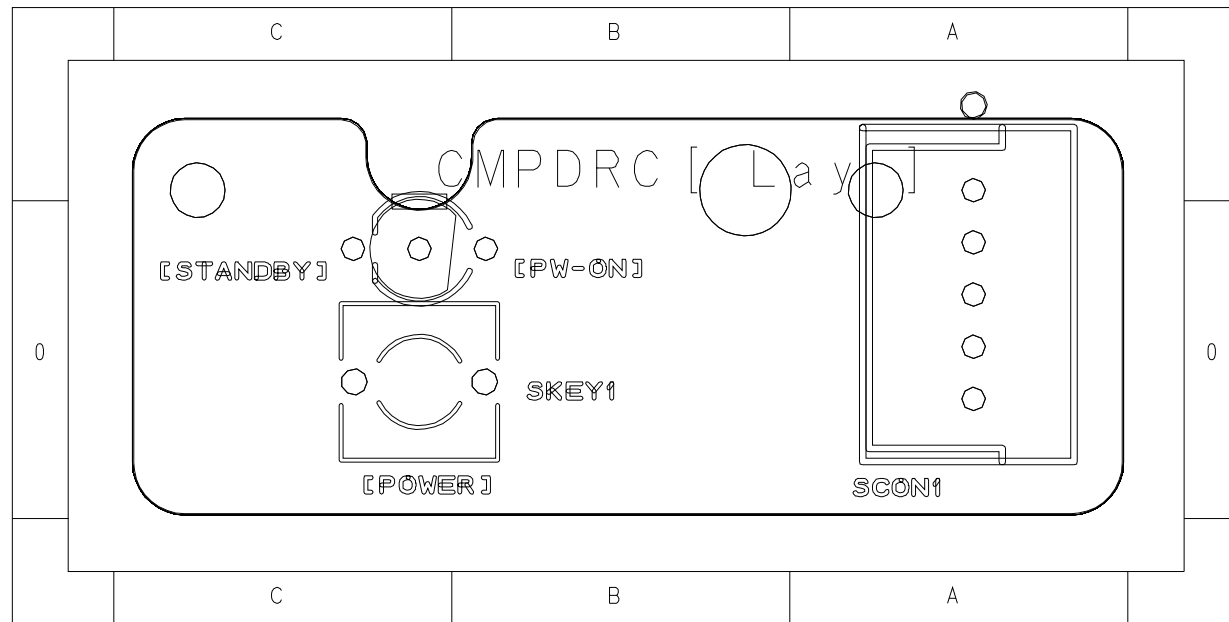
1 Remote control eye data
FU3 Pin3

CONDUCTOR SIDE

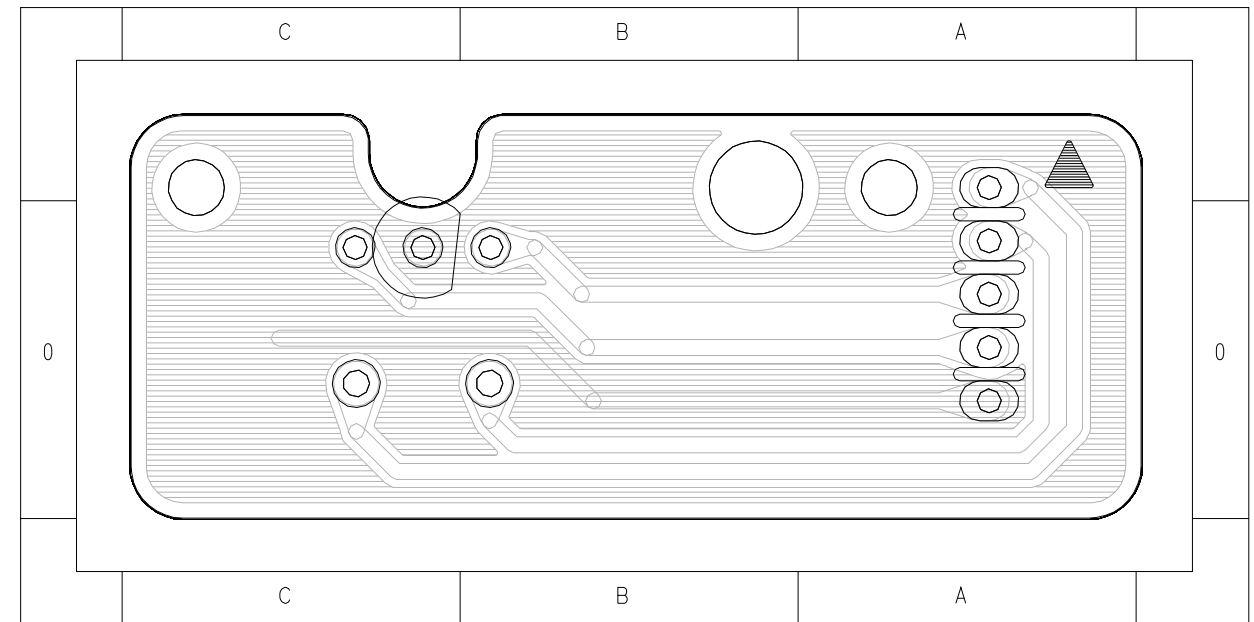


6-5 Power Key PCB

COMPONENT SIDE



CONDUCTOR SIDE



7. Schematic Diagrams

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Note

- For schematic Diagram
- Resistors are in ohms, 1/8W unless otherwise noted.


Special note :

Most semiconductor devices are electrostatically sensitive and therefore require the special handling techniques described under the "electrostatically sensitive (ES) devices" section of this service manual.

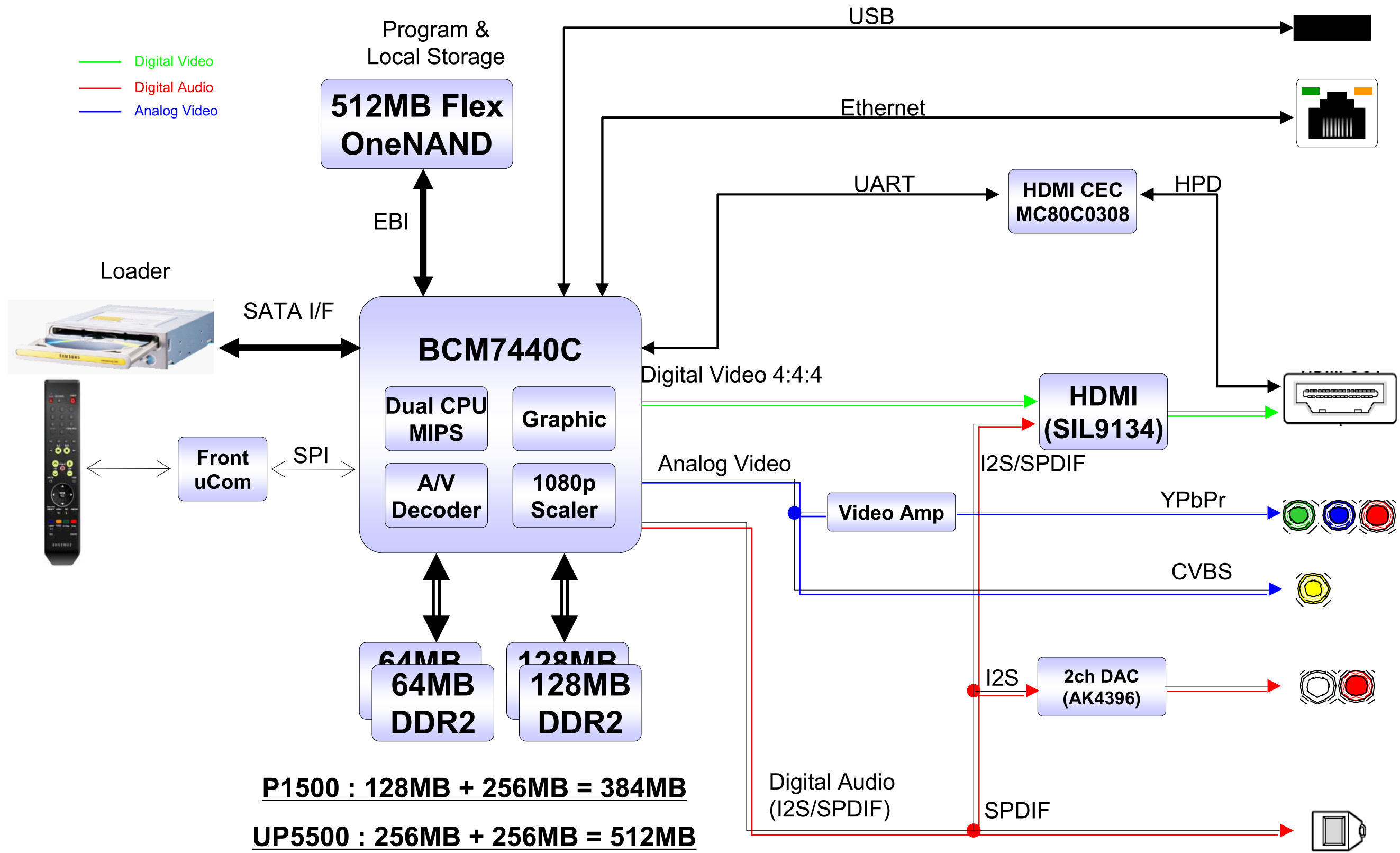
Note :

Do not use the part number shown on this drawing for ordering. The correct part number is shown in the parts list (may be slightly different or amended since this drawing was prepared).

Important safety notices :

Components identified with the mark  have the special characteristics for safety. When replacing any of these components. Use only the same type.

7-1 All block Diagram



7-2 Power

7-2-1 About S.M.P.S (Ringing Choke Converter Method)

◆ Terms

- 1) 1st : Common power input to 1st winding.
- 2) 2nd : Circuit followings output winding of transformer.
- 3) f (Frequency) : Switching frequency (T : Switching cycle)
- 4) Duty : $(T_{on}/T) \times 100$

7-2-2 Circuit description [FLY-Back RCC(Ringing Choke Converter)] Control

(a) AC Power Rectification/Smoothing Terminal

- 1) A01~04 : Convert AC power to DC (Wave rectification).
- 2) CIS01 : Smooth the voltage converted to DC.
- 3) LIS01, LIS02, CIS04, CIS05 : Noise removal at power input/output.
- 4) RIS04 : Rush current limit resistance at the moment of power cord insertion.
 - Without PLRU1, the bridge diode might be damaged as the rush current increases.

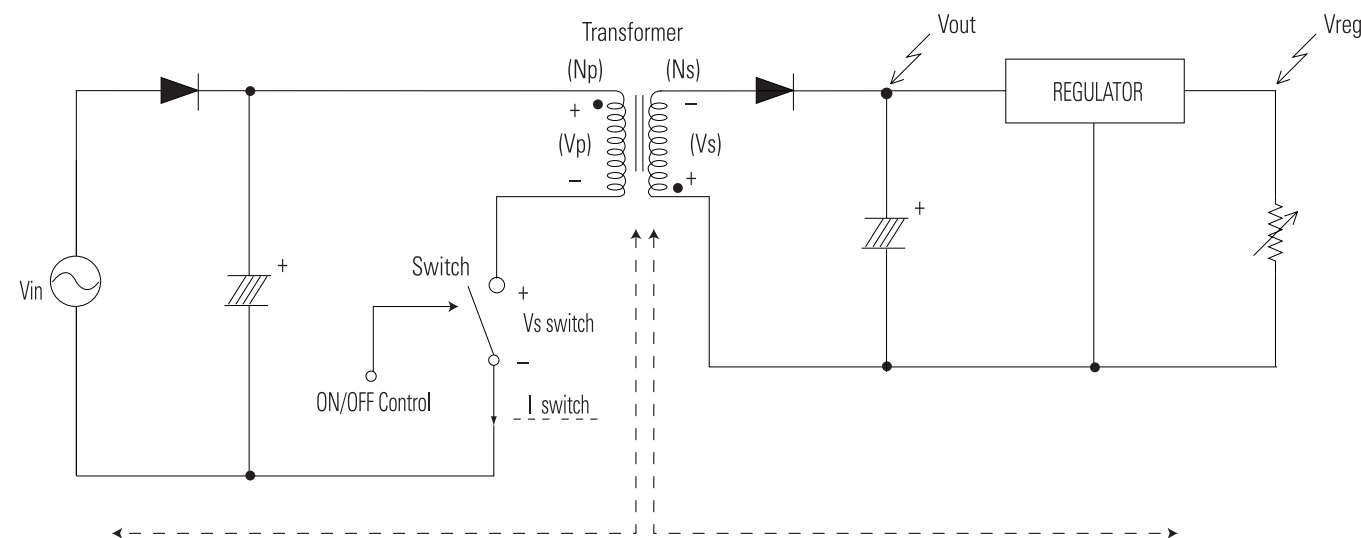
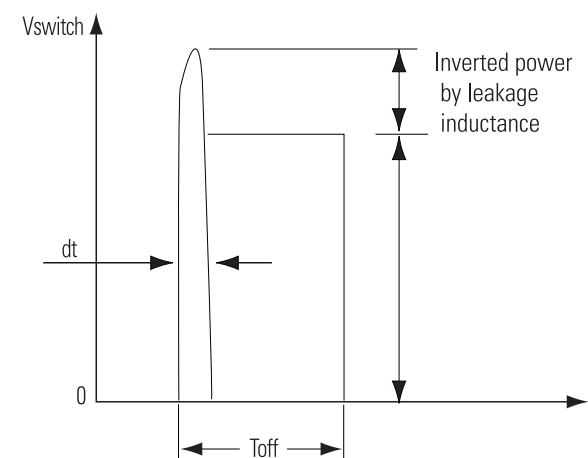


Fig. 7-1



(b) SNUBBER Circuit : RIS02, RIS03, CIS08, CIS07, DIS05

- 1) Prevent residual high voltage at the terminals of switch during switch off/Suppress noise. High inverted power occurs at switch off, because of the 1st winding of transformer : $(V = -L1 \times di/dt)$. $L1$: Leakage Inductance
A very high residual voltage exist on both terminals of ICIS01 because dt is a very short.
- 2) SNUBBER circuit protects ICIS01 from damage through leakage voltage suppression by RC, (Charges the leakage voltage to DIS05 and CIS08 and discharges to RIS03, RIS02).
- 3) CIS07 : For noise removal

Fig. 7-2

(c) ICIS01 Vcc circuit

- 1) ICIS01, RIS05, RIS07, RIS08 : ICIS01 driving resistance (ICIS01 works through driving resistance at power cord in)
- 2) ICIS01 Vcc : RIS05, RIS07, RIS08
 - ① Use the output of transformer as Vcc, because the current starts to flow into transformer while ICIS01 is active
 - ② Rectify to DIS07 and smooth to CIS09.
 - ③ Use the output of transformer as ICIS01 Vcc : The loads are different before and after ICIS01 driving. (Vcc of ICIS01 decreases below OFF voltage, using only the resistance due to load increase after ICIS01 driving.)

(d) Feedback Control Circuit

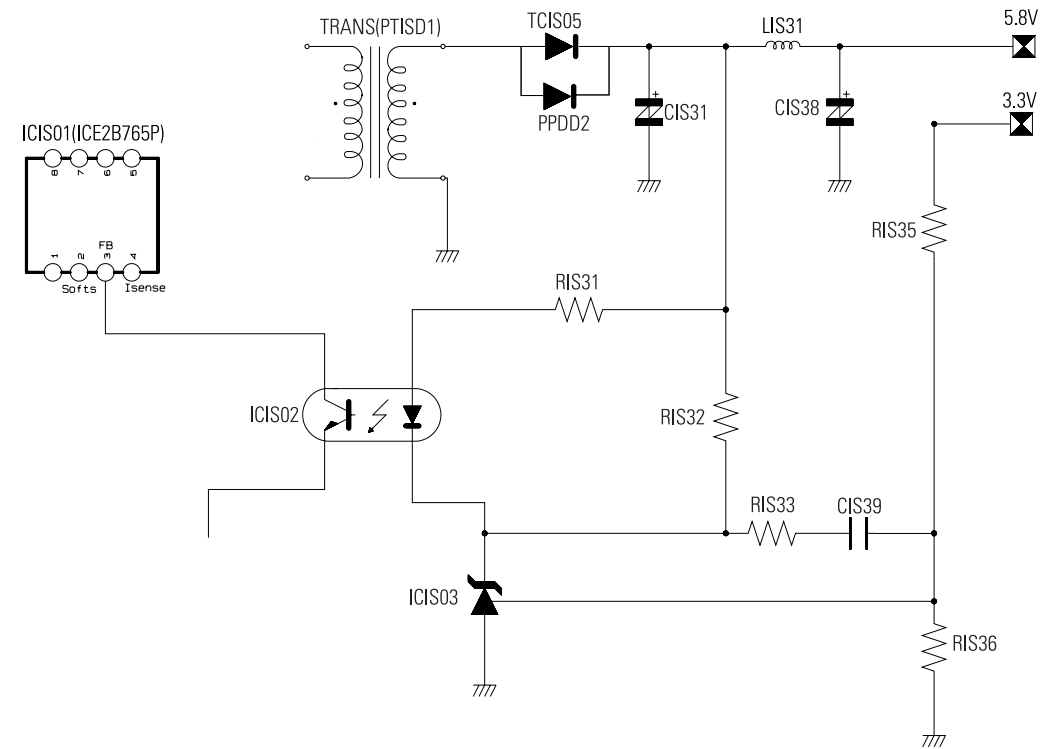


Fig. 7-3

- 1) F/B terminal of PQIZ1 determines output duty cycle.
- 2) C-E (Collector-Emitter) of PQIZ1 and F/B potential of PQIZ1 are same.

7-2-3 Internal Block Diagram (Internal Block Diagram of S.M.P.S Circuit)

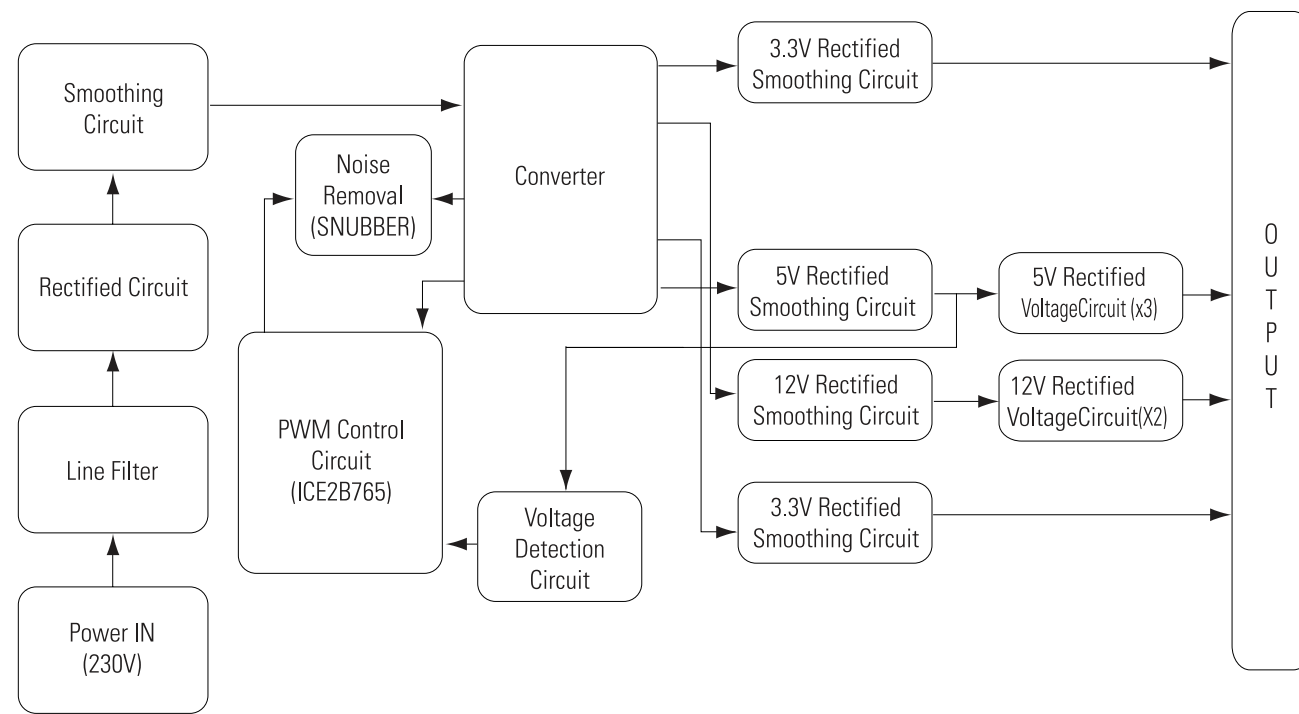
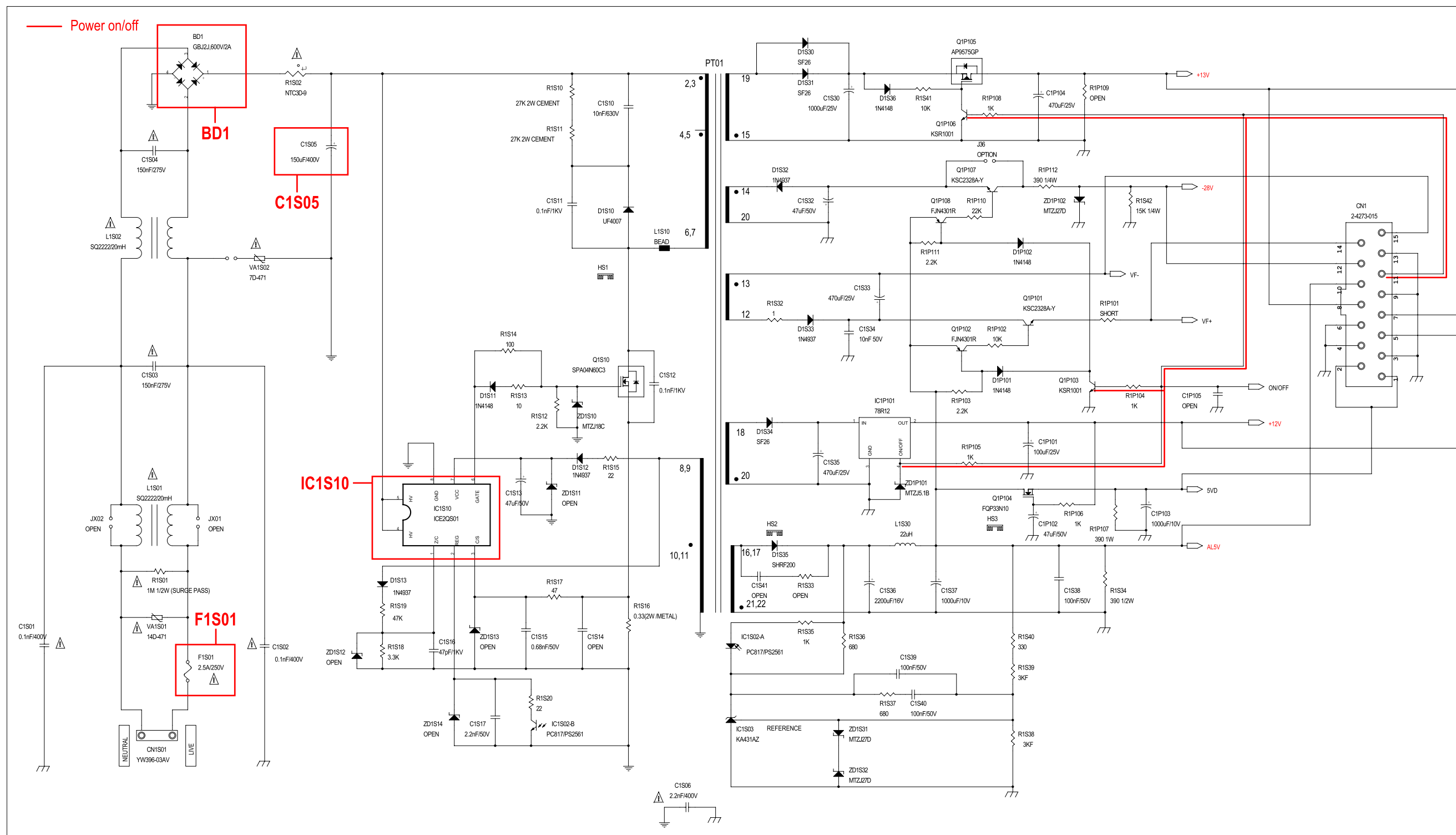
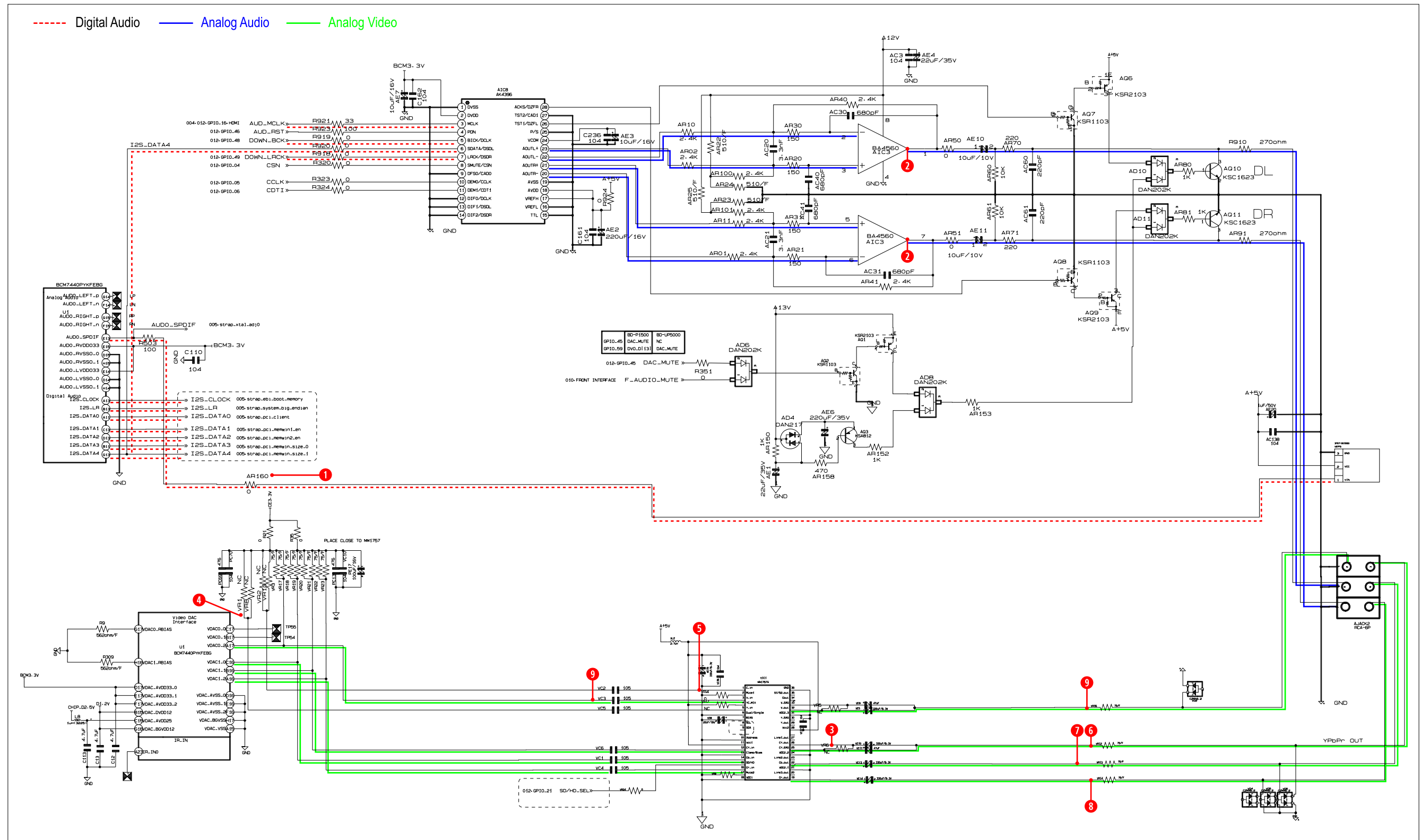


Fig. 7-4

7-3 S.M.P.S (S.M.P.S PCB)



7-4 Analog Audio/Video (Main PCB)



Refer to a pattern image of Table 7-5 **◆** These are the waveforms of BD-P1500 Caution There can be some differences (Voltage, Frequency, etc.) among cameras.

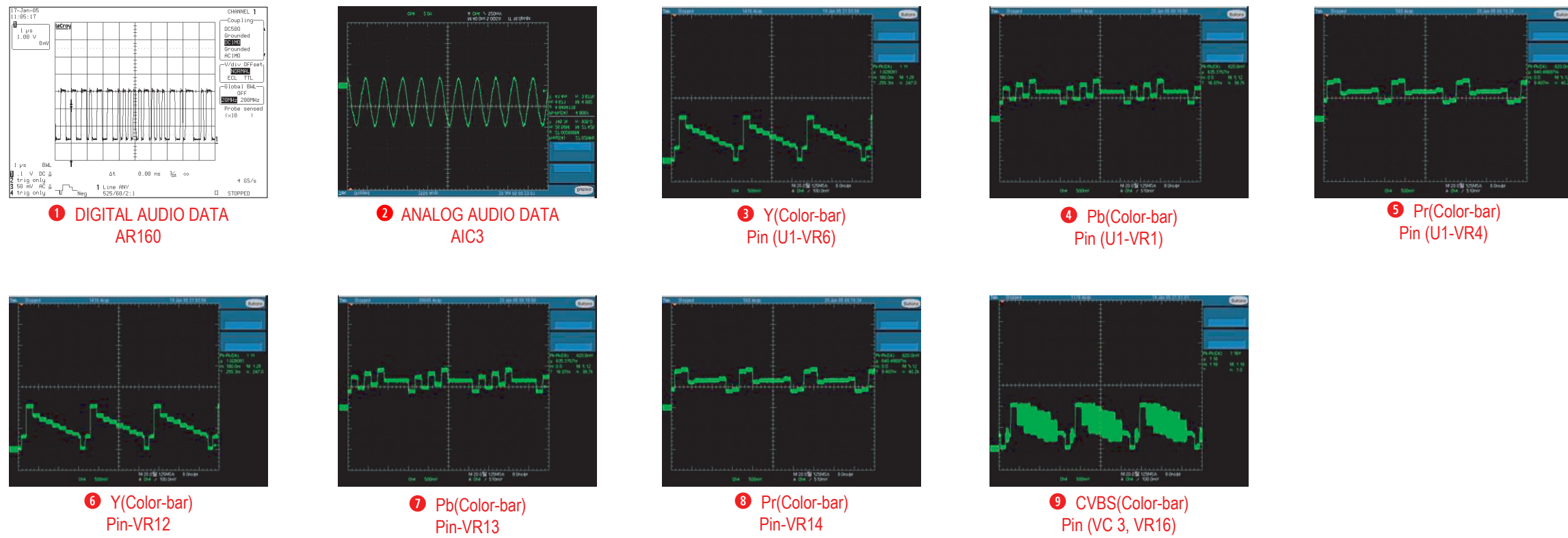
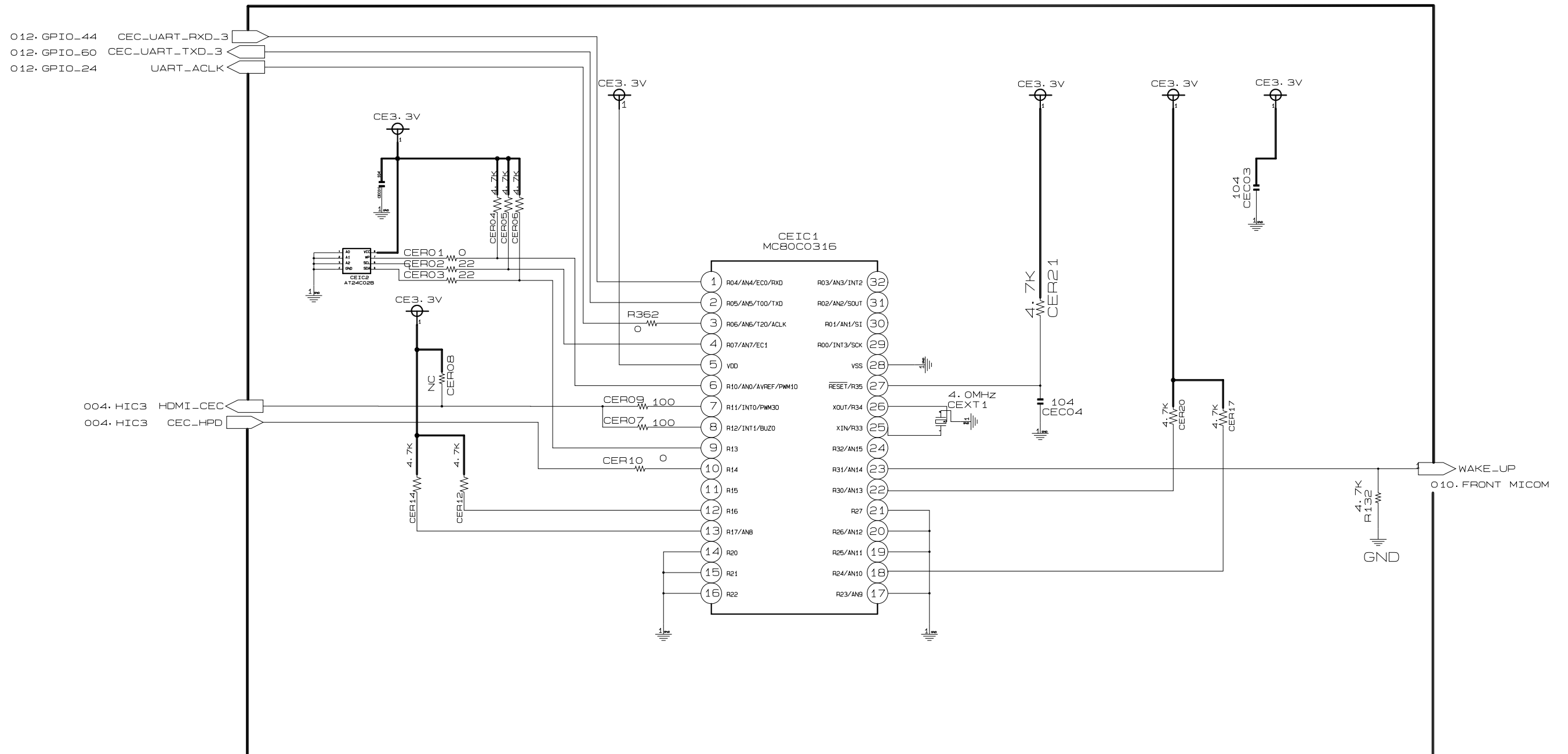
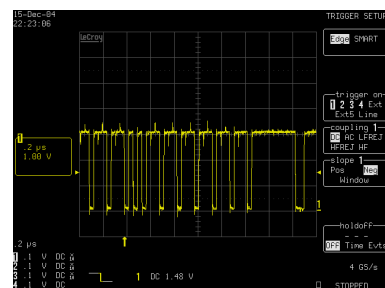
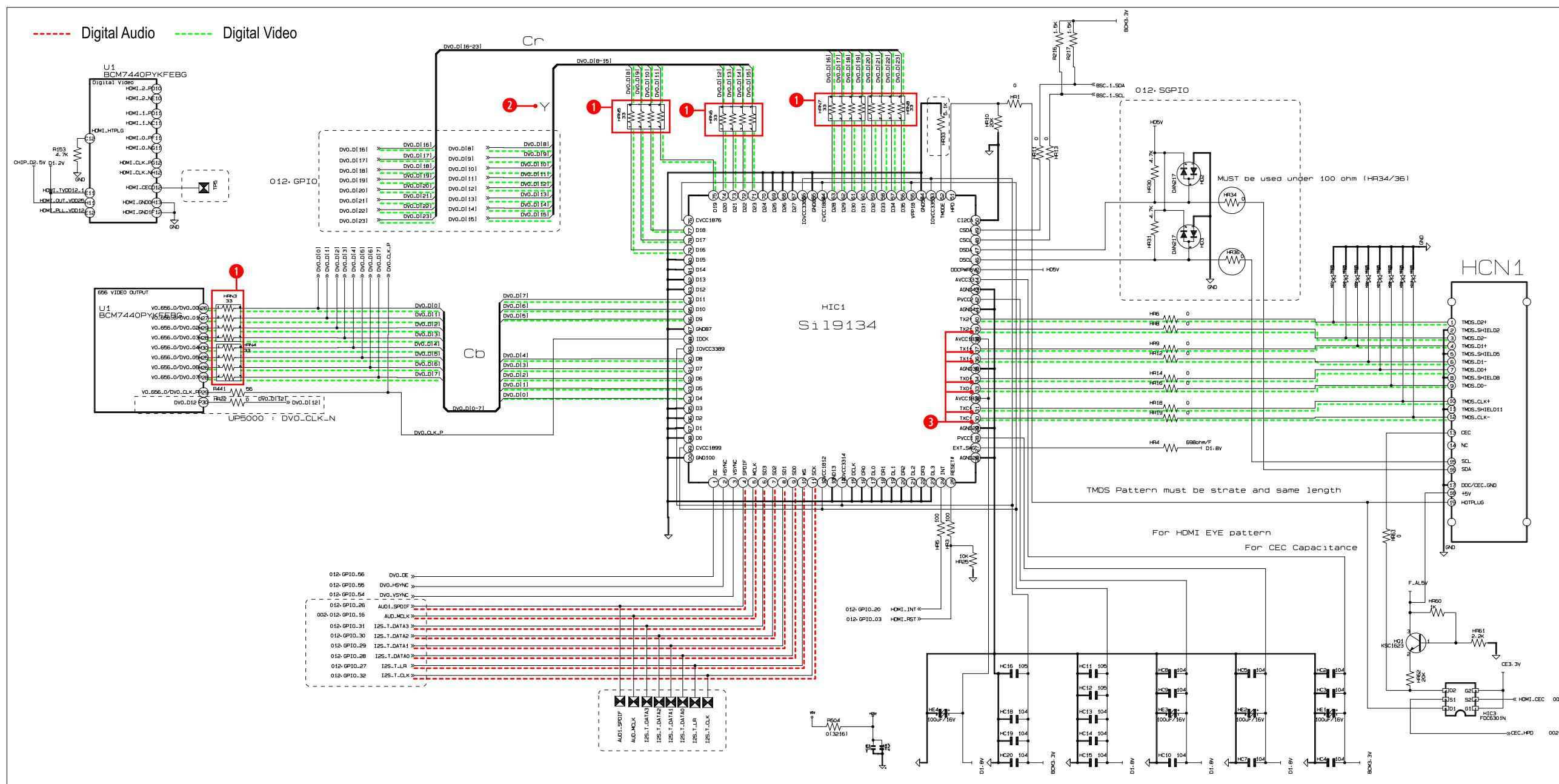


Fig. 7-5

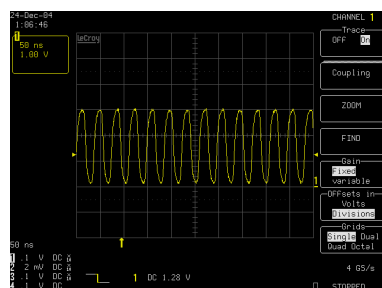
7-5 HDMI-CEC (Main PCB)



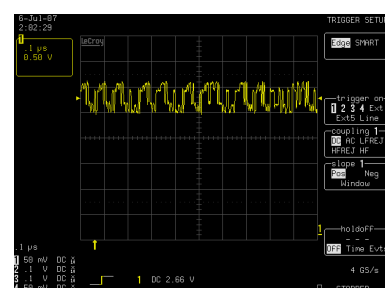
7-6 HDMI Transmitter (Main PCB)



1 Digital Video signal U1(HRN3 ~ HRN8)



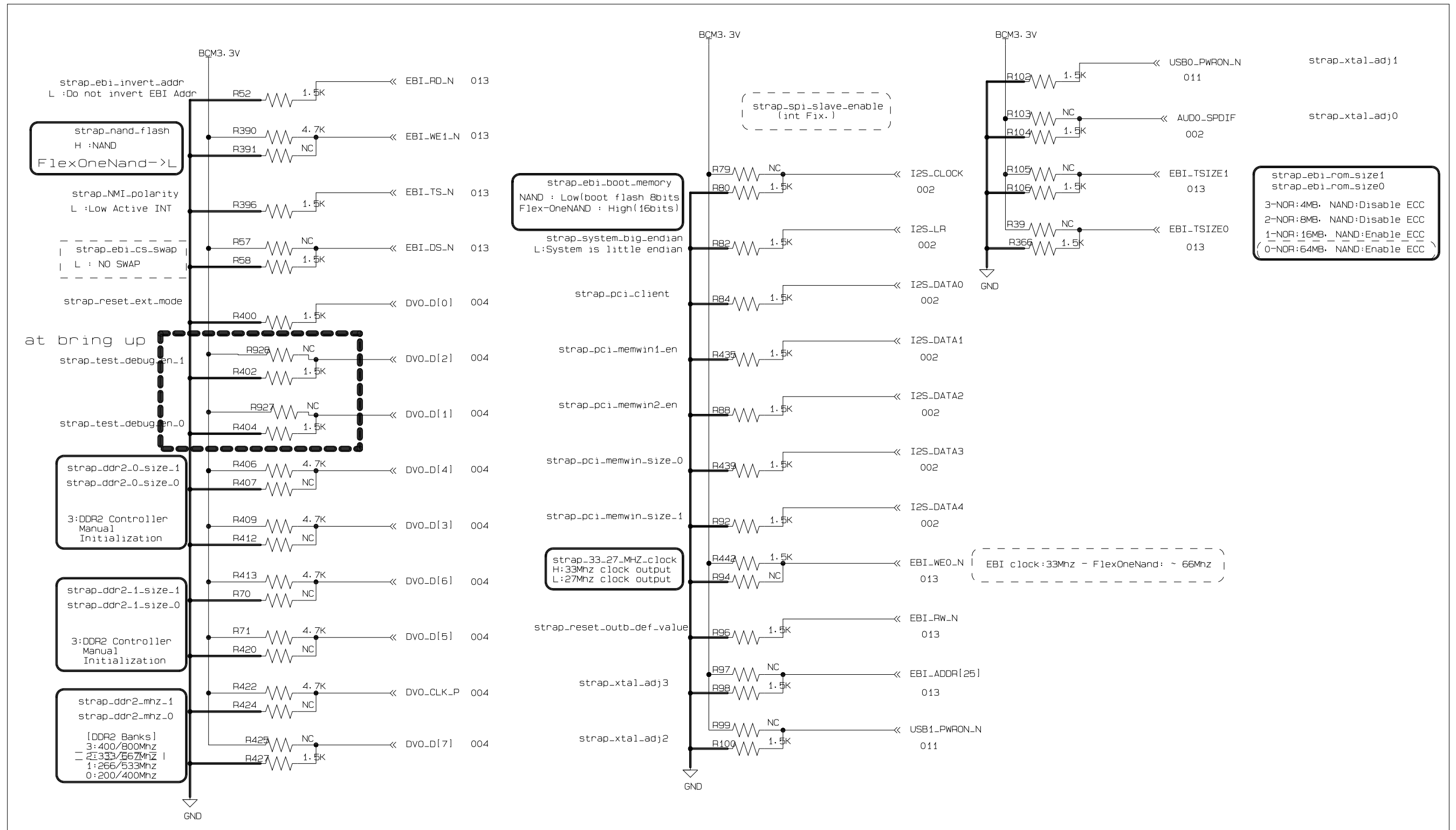
2 Y1_CLOCK SIGNAL (54MHz)



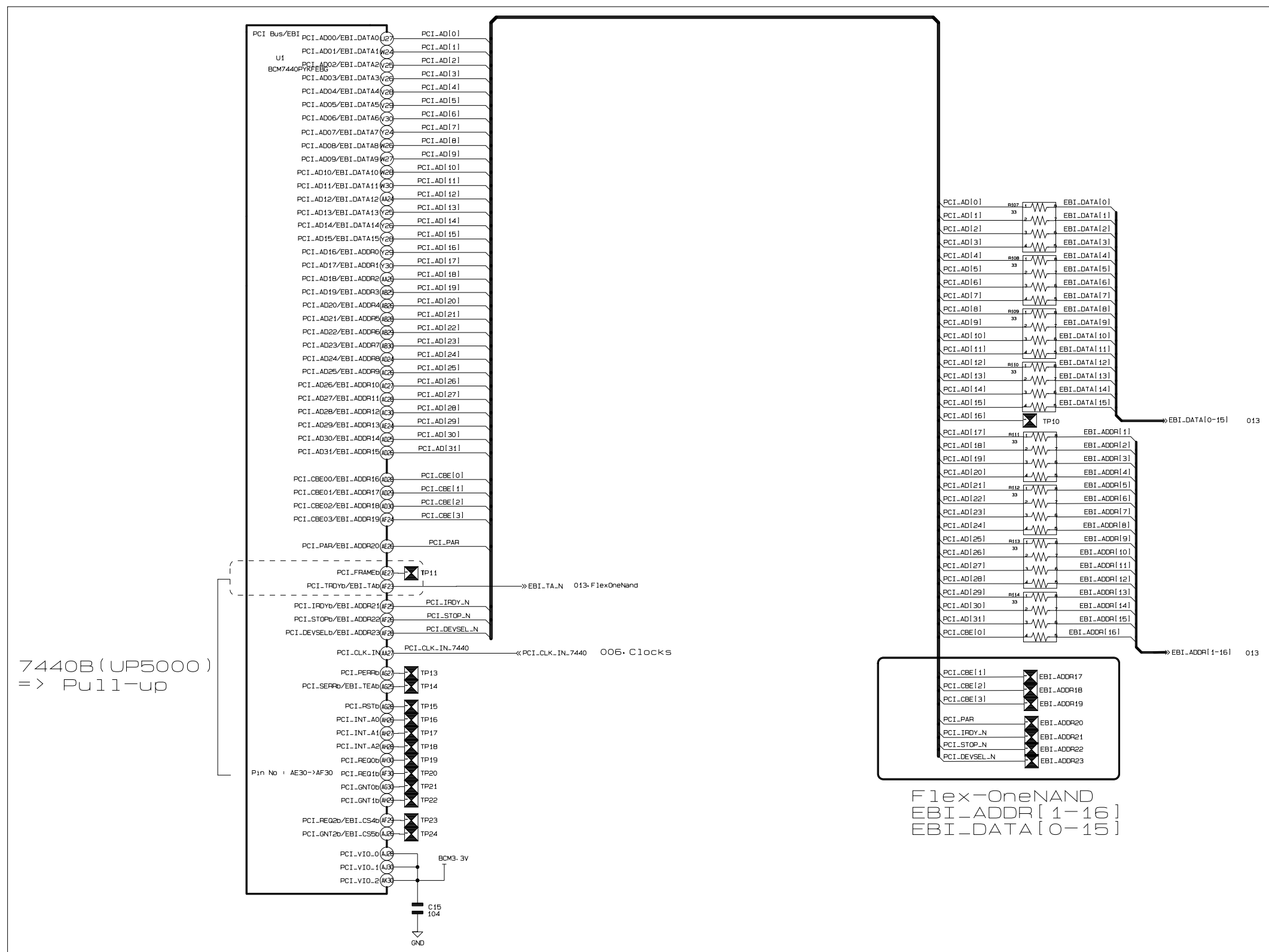
3 HDMI OUTPUT DATA HIC1 (pin30,31,33,34,36,37,39,40)

◆ These are the waveforms of BD-P1500
 Caution There can be some differences (Voltage, Frequency, stc.) among cameras.

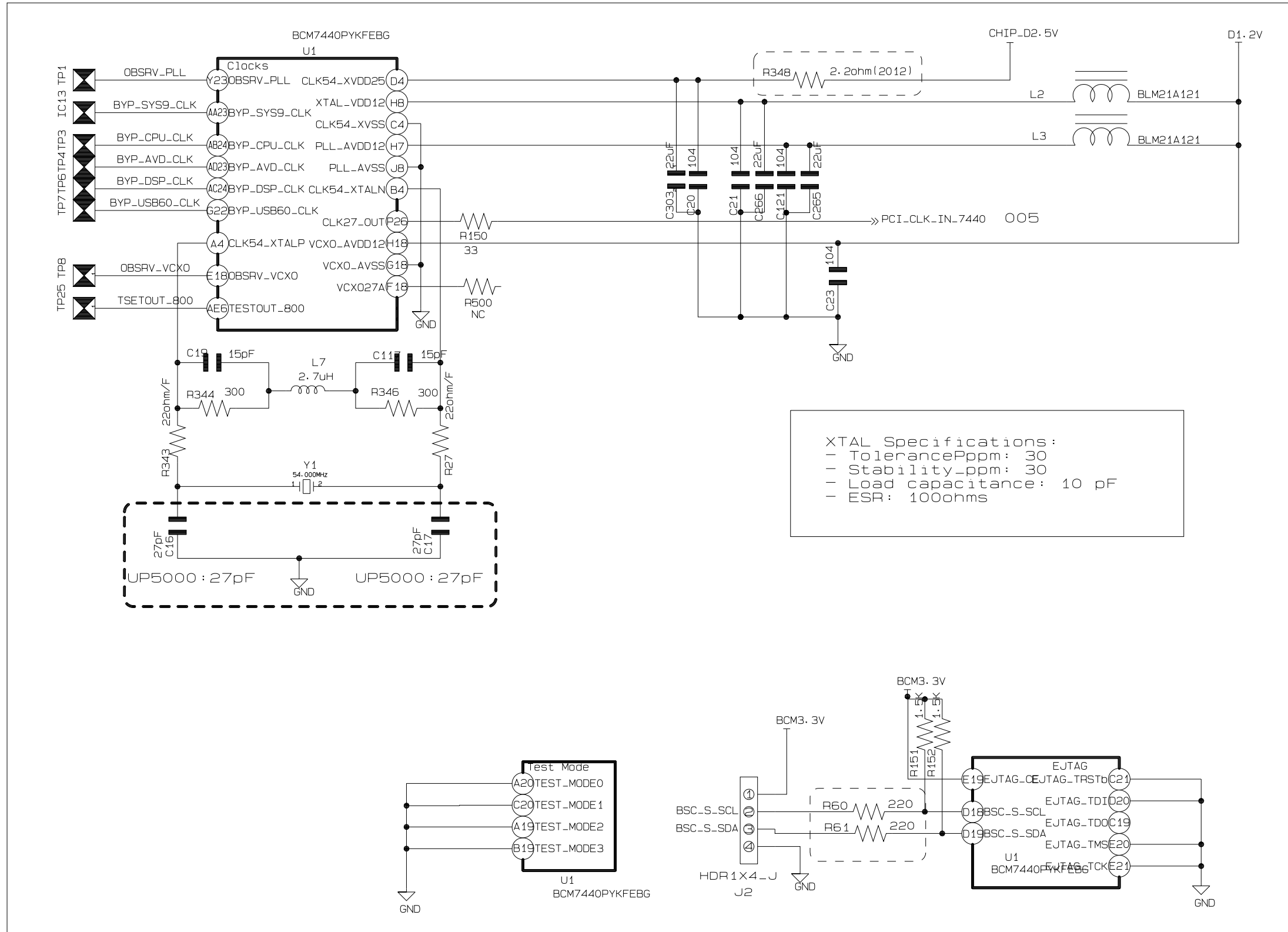
7-7 7440 Boot Strap Option (Main PCB)



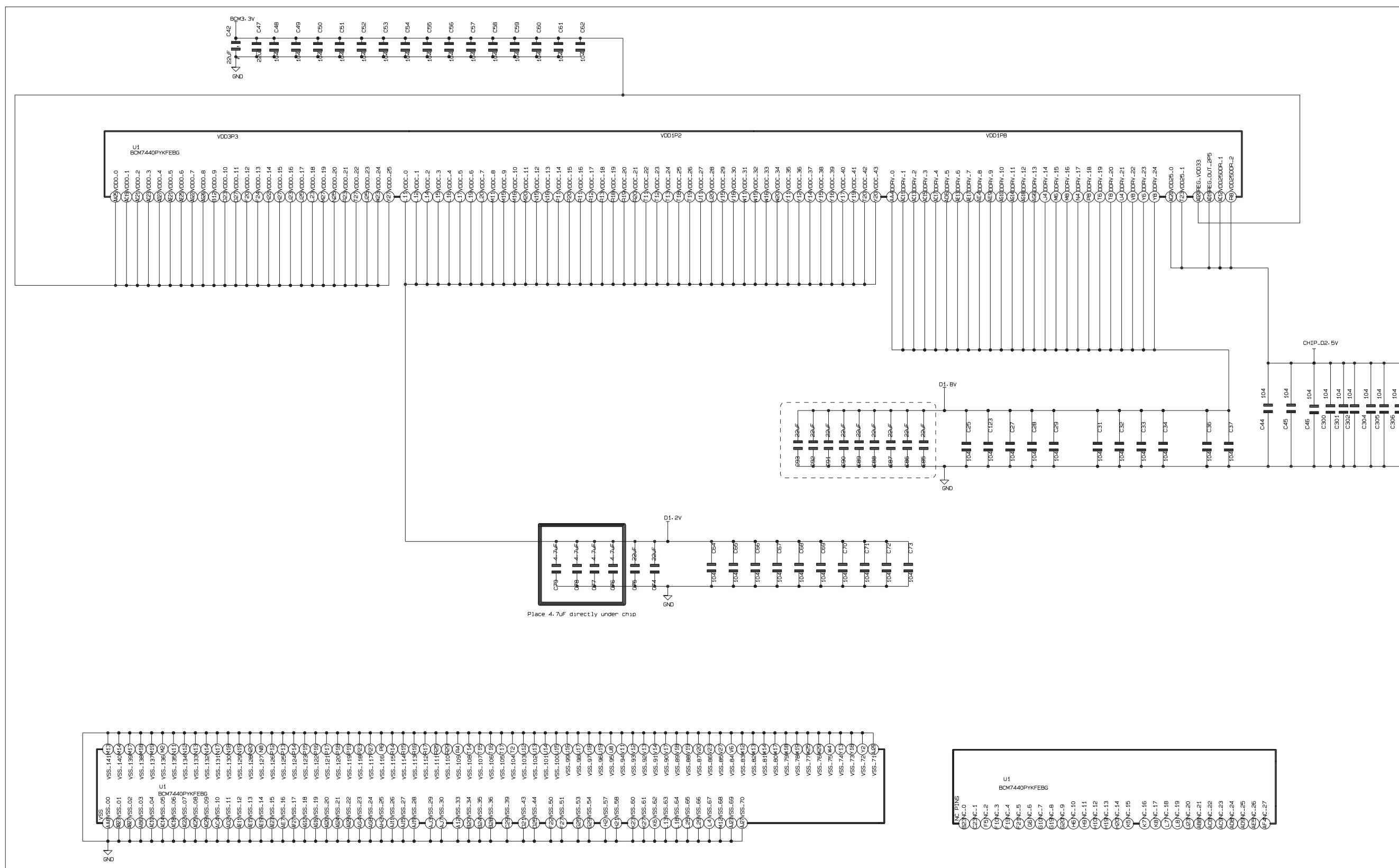
7-8 7440 EBI/ADDR-EBI/DATA (Main PCB)



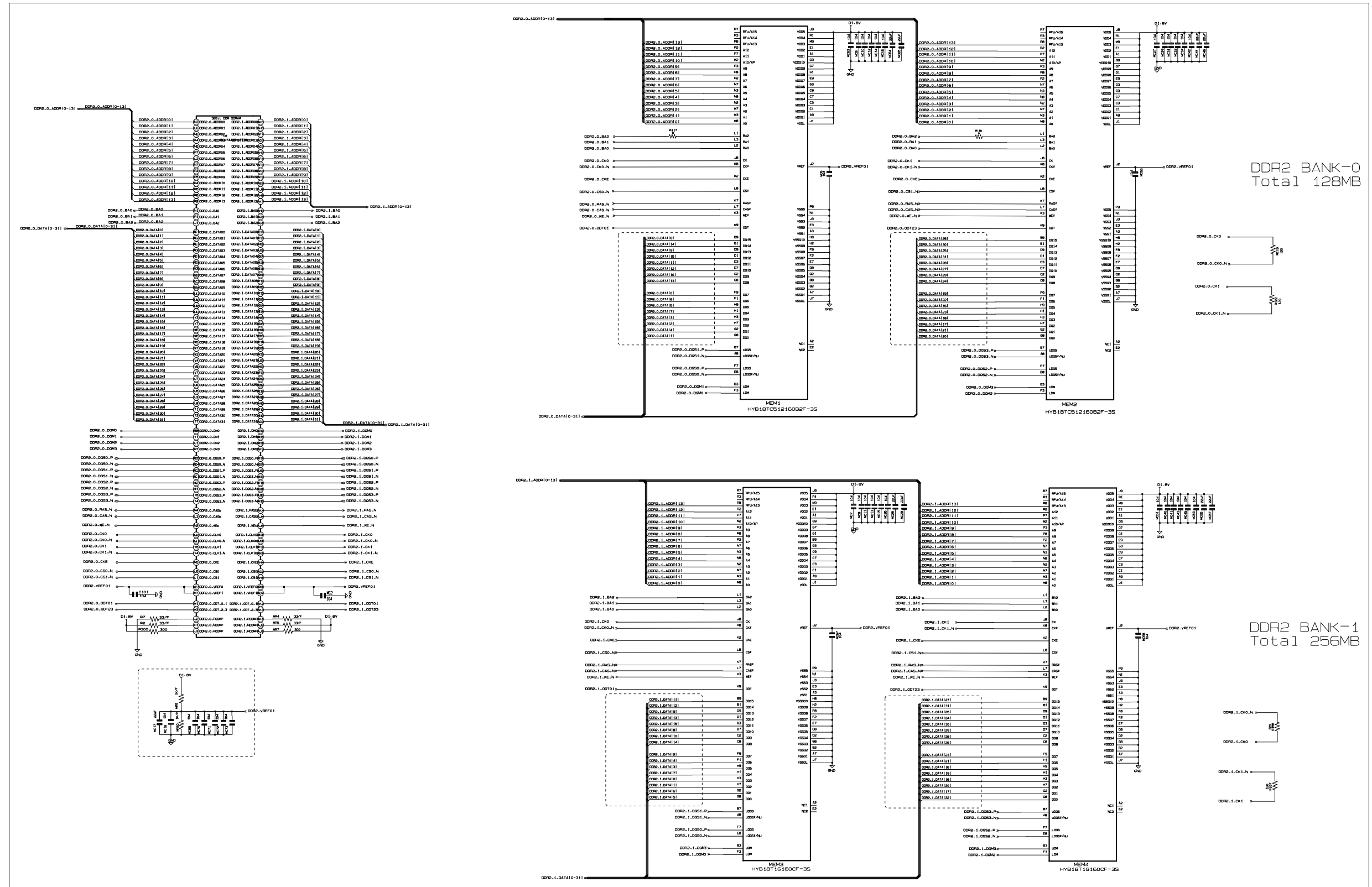
7-9 7440 Clocks-BBS (Main PCB)



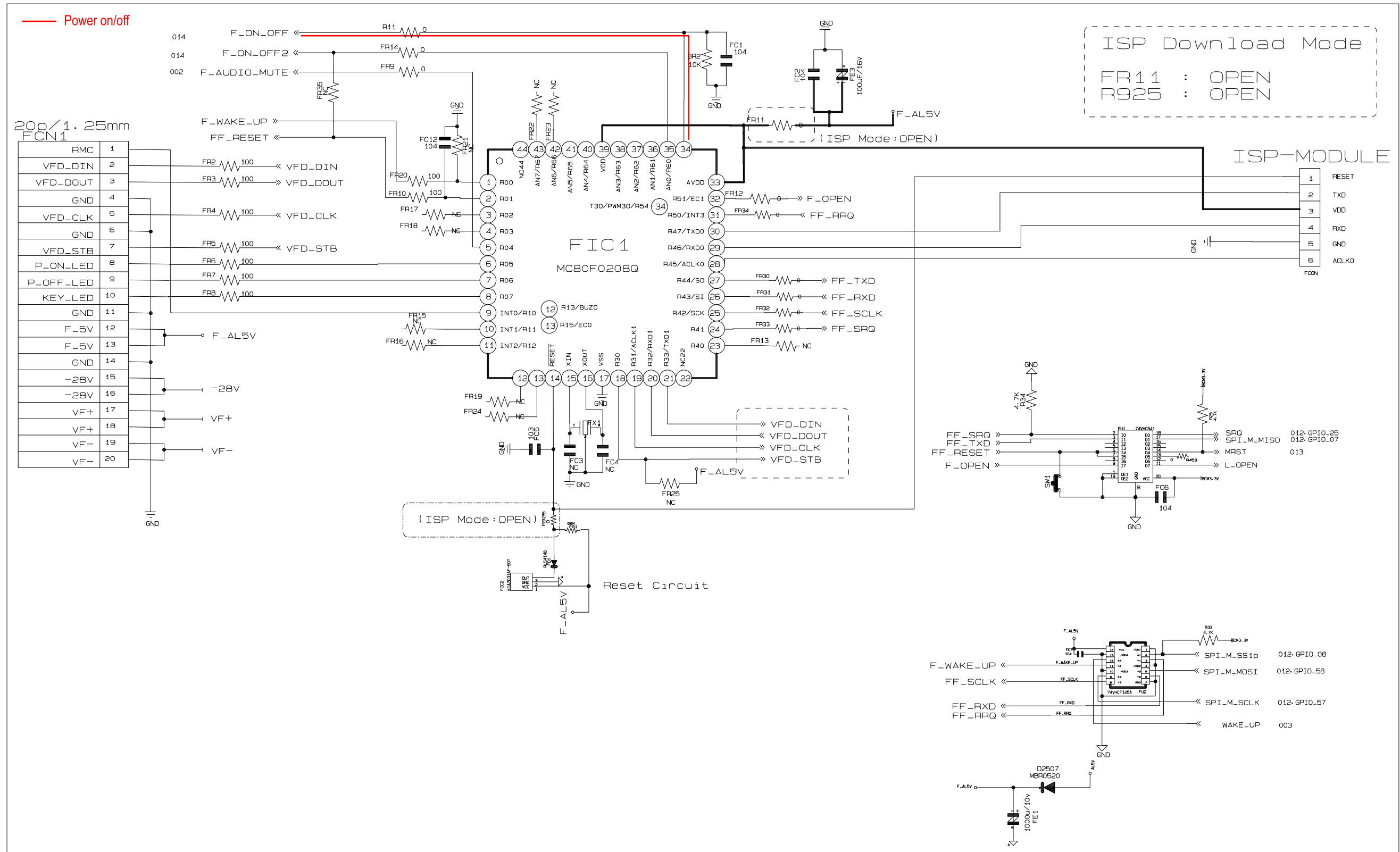
7-10 7440 Power-Decoupling (Main PCB)



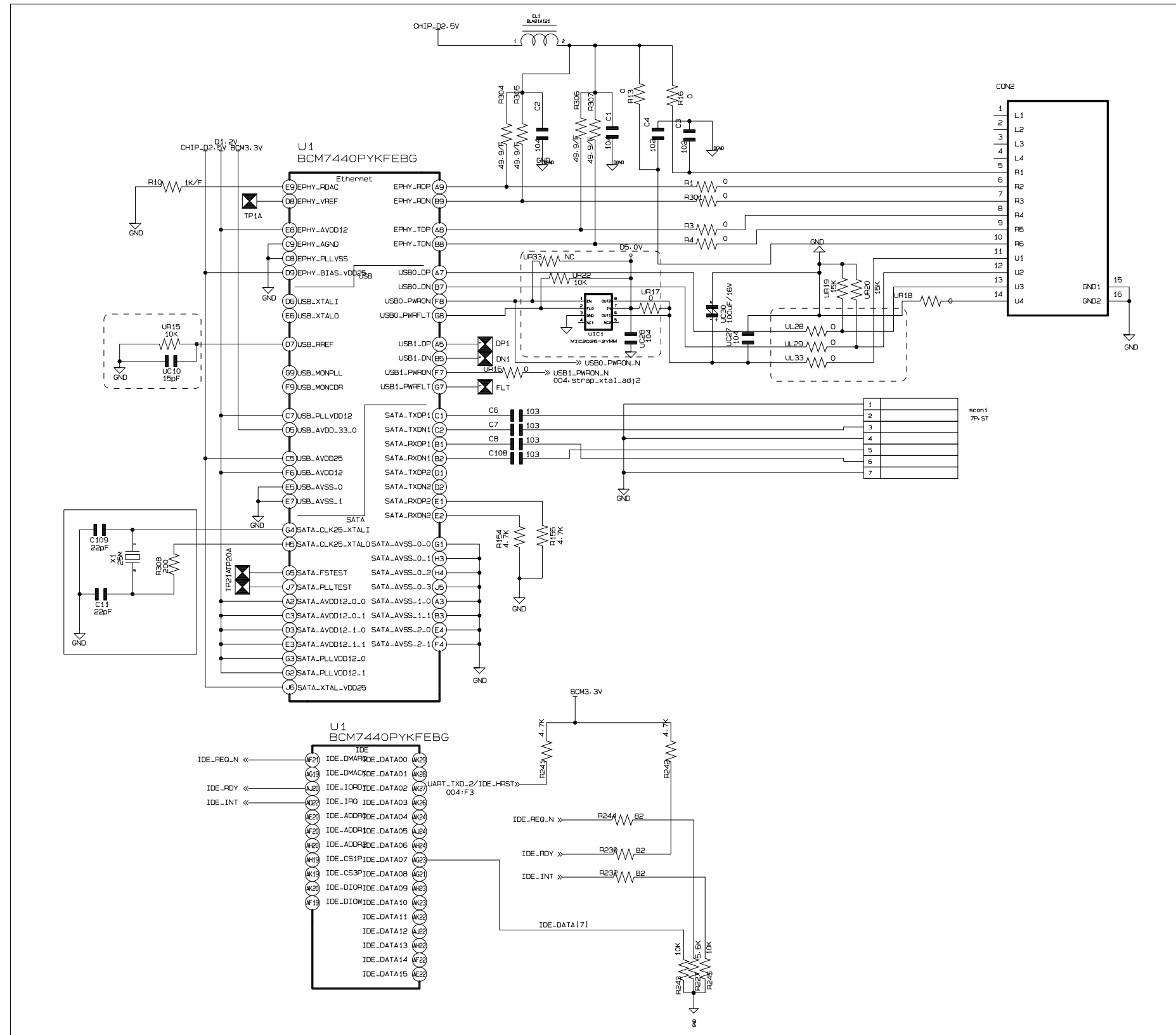
7-11 DDR2 BANK0-BANK1 (Main PCB)



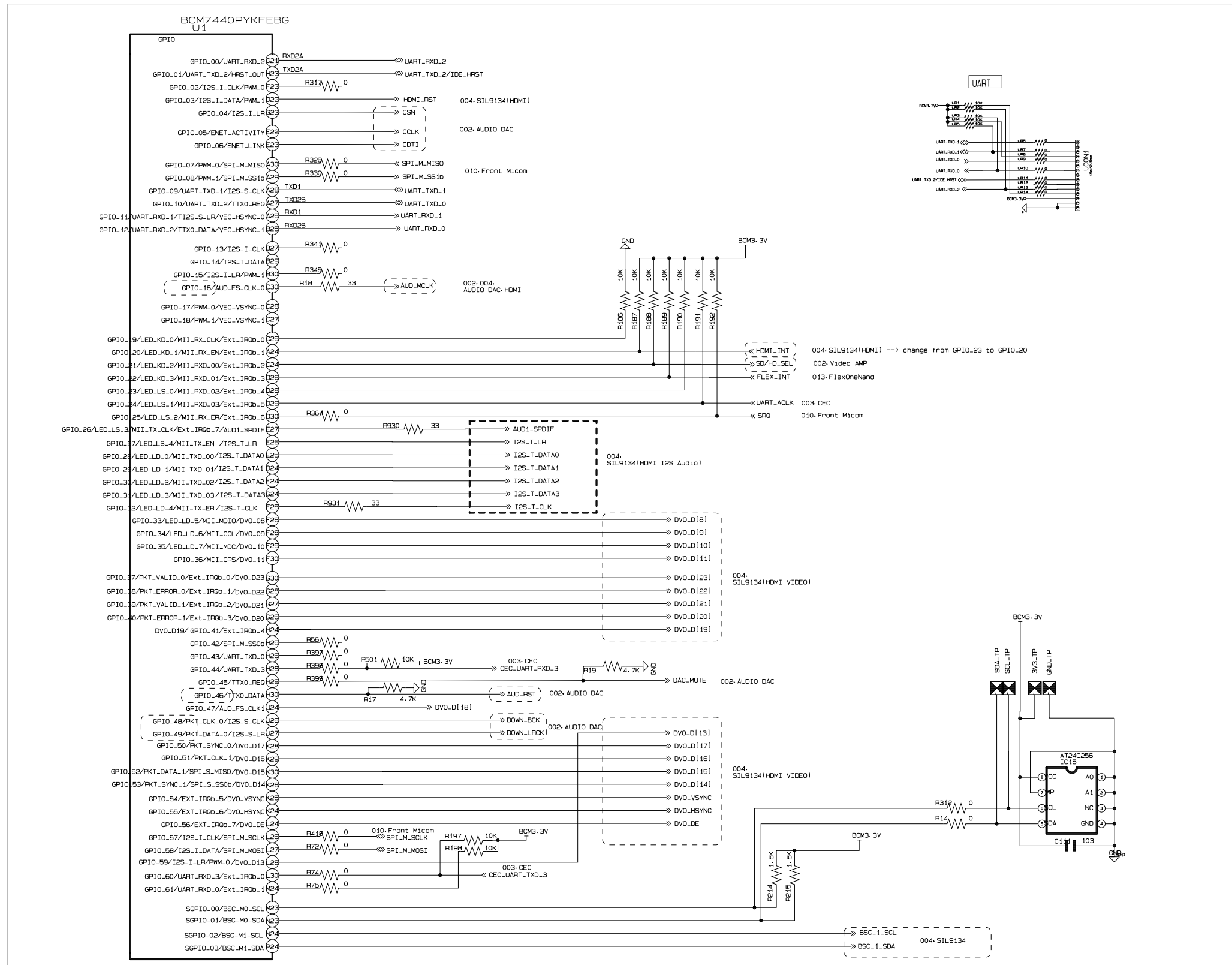
7-12 Front Micom (Main PCB)



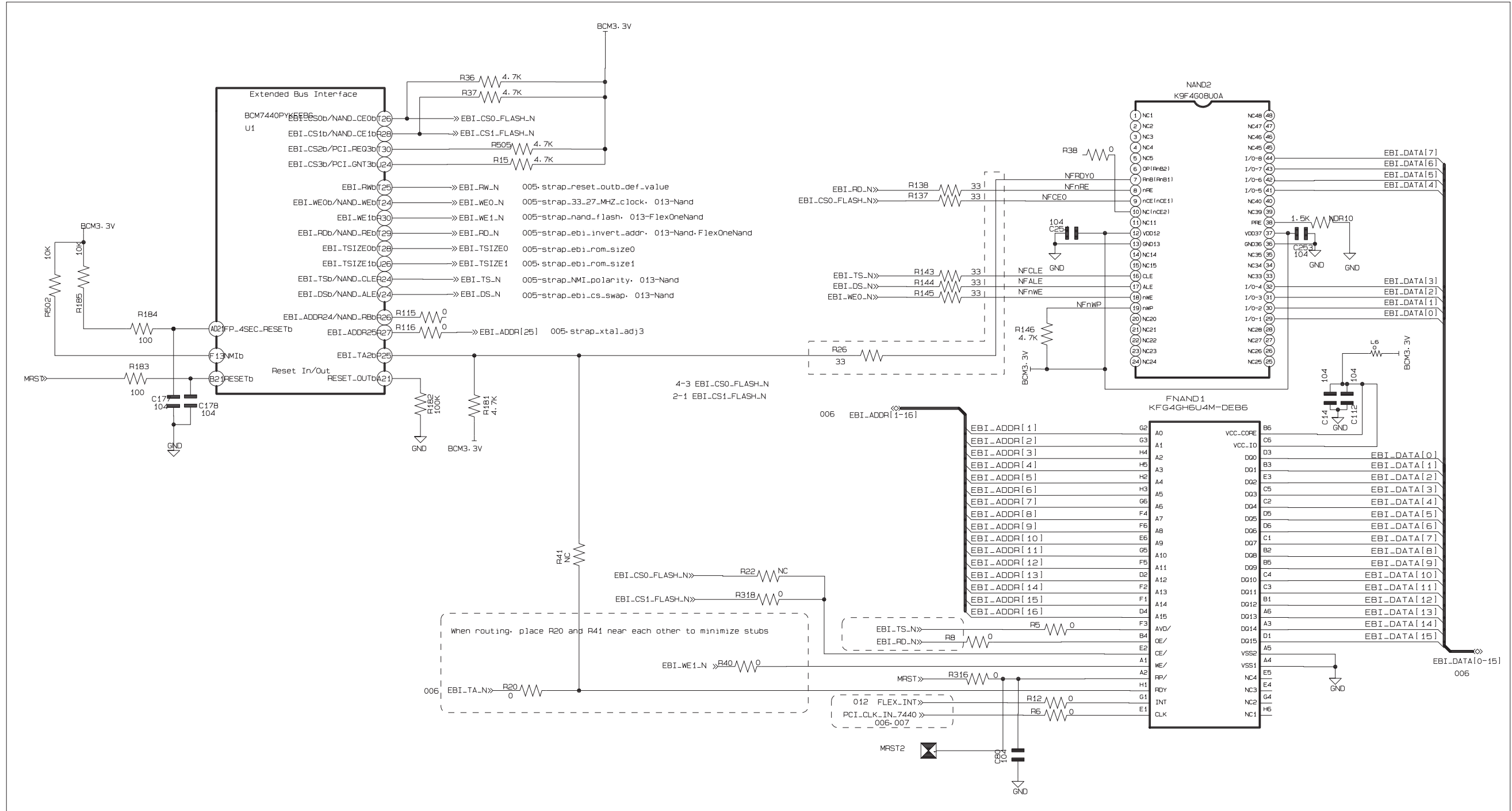
7-13 Ethernet-USB-S/ATA-P/ATA (Main PCB)



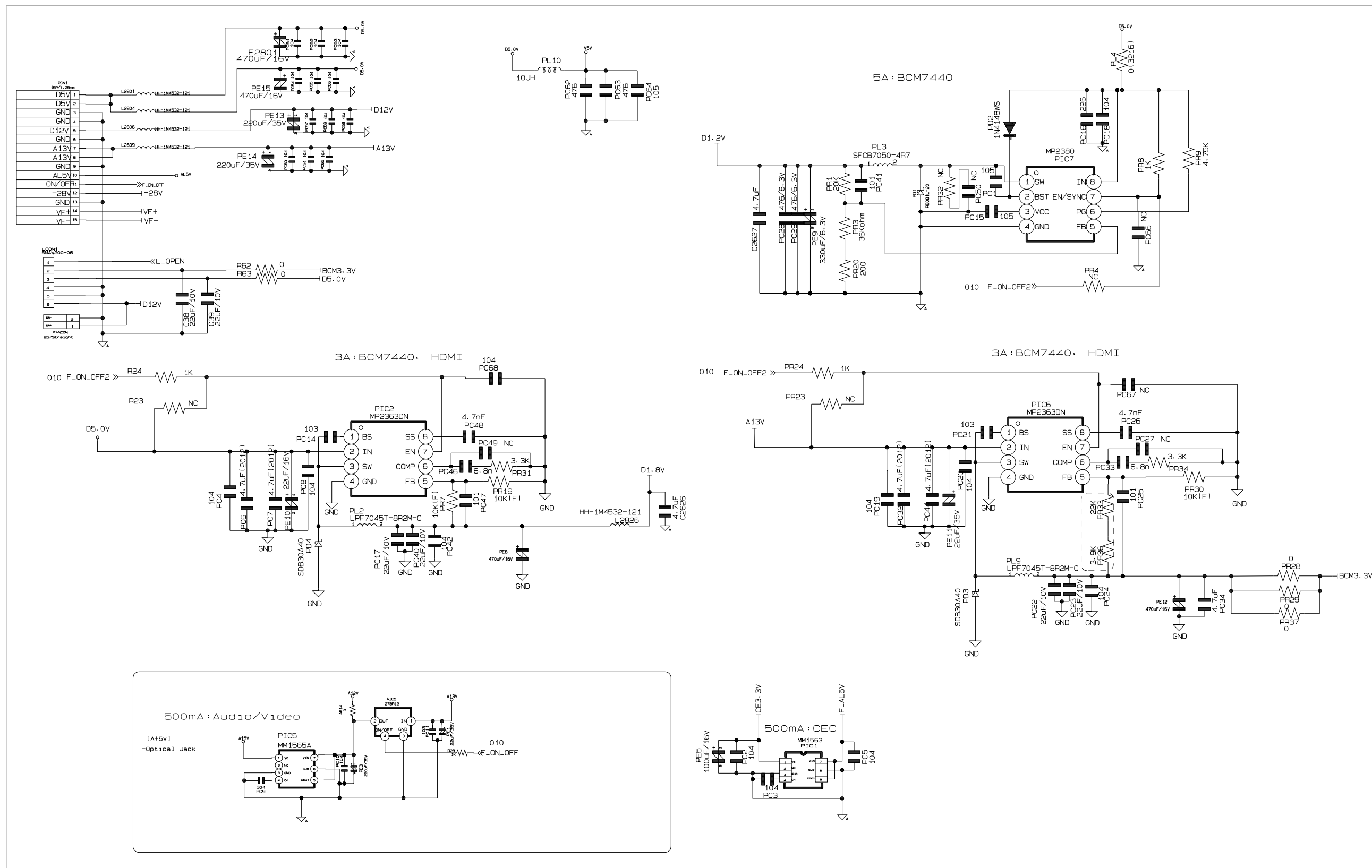
7-14 7440 GPIO Block (Main PCB)



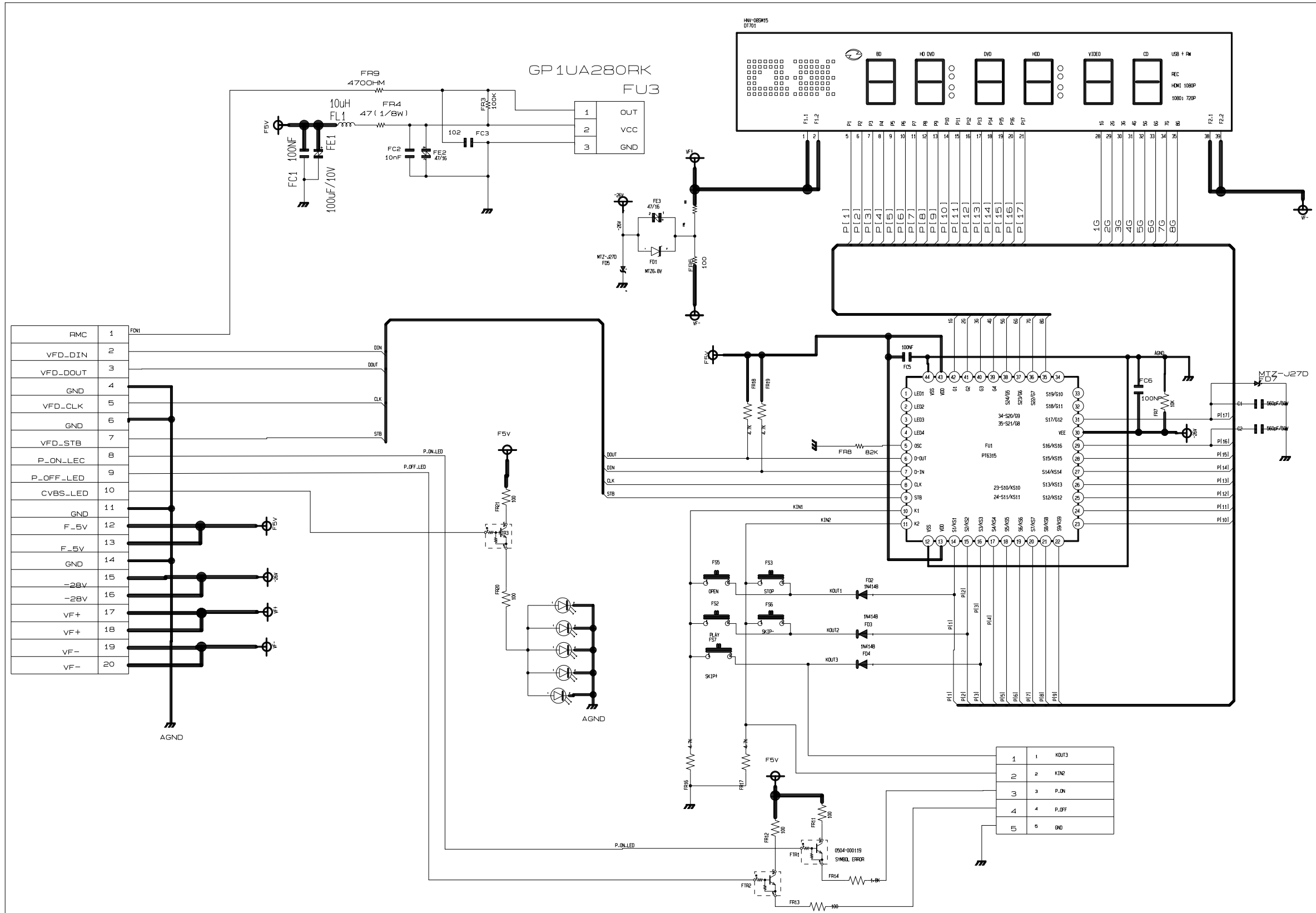
7-15 NAND Flash-Fleconenand (Main PCB)



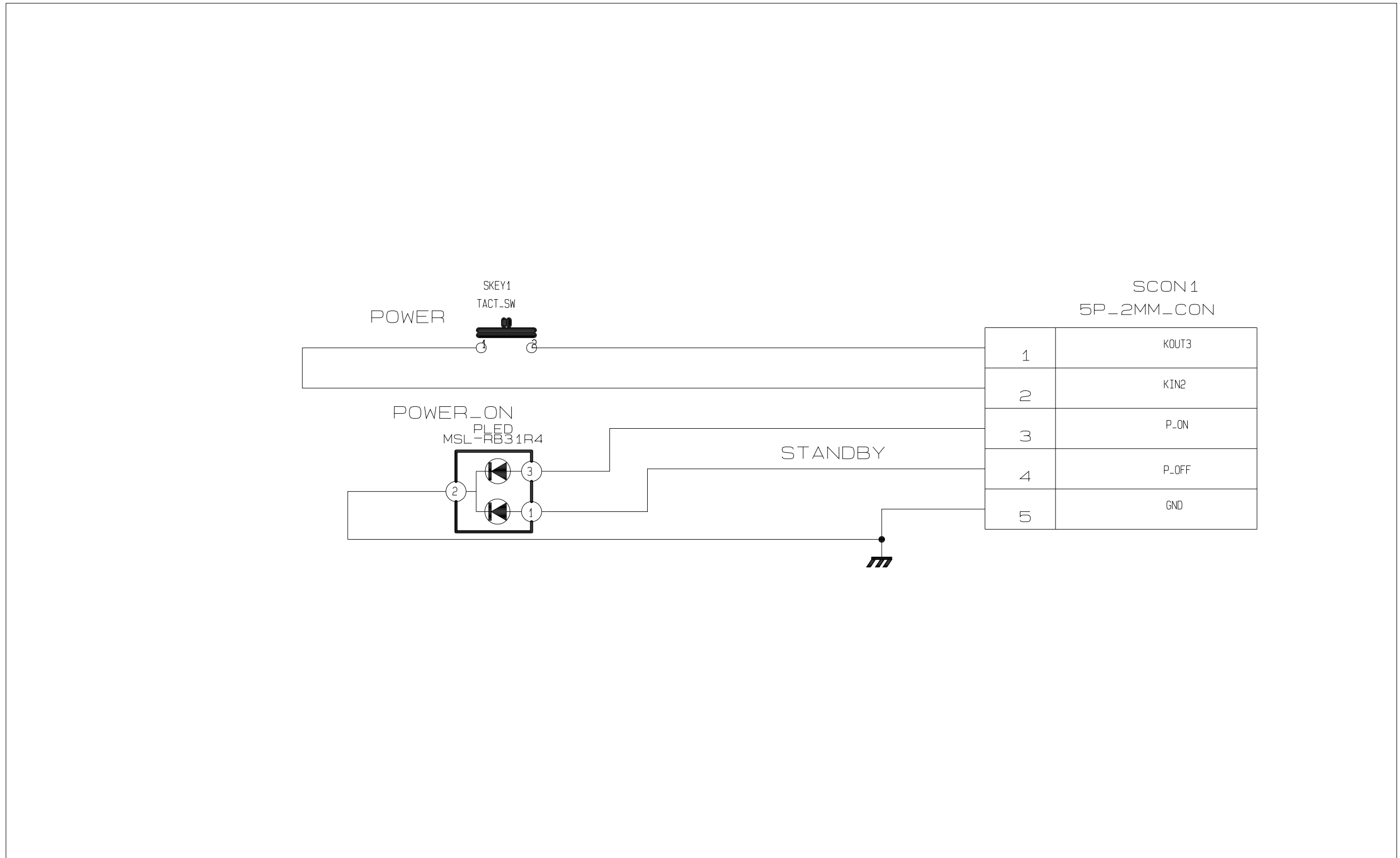
7-16 Main Power (Main PCB)



7-17 Front Key (Front PCB)



7-18 Power Key (Power PCB)



MEMO