

Service
Service
Service

Part 2:

26MF337B/27
26MD357B/37
32MF337B/27
32MD357B/37
37MF337B/37
37PFL5332D/37
42MF337B/37



H_16643_001.eps
040507

Service Manual

Contents	Page
1 Technical Specifications, Connections, and Chassis Overview	2
2 Safety Instructions, Warnings, and Notes	4
3 Directions for Use	6
4 Mechanical Instructions	9
5 Service Modes, Error Codes, and Fault Finding	11
6 Block Diagrams, Test Point Overview, and Waveforms	
Wiring Diagram	18
Block Diagrams	19-20
7 Circuit Diagrams and PWB Layouts	Diagram
Scaler Board: Power (S-01)	21
Scaler Board: Power (S-02)	22
Scaler Board: Tuner (S-03)	23
Scaler Board: MT5112 ASIC (S-04)	24
Scaler Board: MT5372 ATSC (S-05)	25
Scaler Board: MT5371 Bypass Cap (S-06)	26
Scaler Board: Flash/MT5371 Peripheral (S-07)	27
Scaler Board: DDR Memory (S-08)	28
Scaler Board: AV1/Side AV YPbPr Input (S-09)	29
Scaler Board: AV1/AV2 Audio Input (S-10)	30
Scaler Board: Side AV/AV3 SPDIF Out (S-11)	31
Scaler Board: VGA/PC Audio Input (S-12)	32
Scaler Board: HDMI Input (S-13)	33
Scaler Board: Audio Coder (S-14)	34
Scaler Board: Audio Amplifier (S-15)	35
Scaler Board: LVDS Output (S-16)	36
Scaler Board: LVDS Interface (S-17)	37
Scaler Board: Pin Status Definition (S-18)	38
Test Point Overview	49
Power Board (26"-32") (P1)	51
Power Board (37") (P2)	52
Power Board (42") (P3)	53
Keyboard Control Panel (K)	60

Contents	Page
IR & LED Panel (26"-32") (I)	62
IR & LED Panel (37"-42") (I1)	63
Side AV Panel (26"-32"-37") (SI-1)	66
Side AV Panel (42") (SI-2)	67
DVD Key Control Board (for 19MD)	70
DVD LED Board (for 19MD)	72
8 Alignments (incl. ComPair)	74
9 Circuit Descriptions, Abbreviation List, and IC Data Sheets	
Sheets	94
Abbreviation List	95
IC Data Sheets	98
10 Spare Parts List	93/94
11 Revision List	104

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



1. Technical Specifications,Connections,and Chassis Overview

Index of this chapter:

- 1.1 Technical Specifications
- 1.2 Connections
- 1.3 Chassis Overview

Notes:

Figures below can deviate slightly from the actual situation,
due to the different set executions.
Specifications are indicative (subject to change)

1.1 Technical Specifications

1.1.1 Technical Specifications

Panel	:LPL
Active Area	:697.685mm (H) X 392.256mm (V) (31.51" diagonal)
Outline Dimension	:760.0mm (H) X 450.0mm (V) X 48.0mm (D)
Pixel Pitch	:0.17025mm(H) X 0.51075mm(V)
Pixel Format	:1366 X 768 (WXGA), RGB strip arrangement
Color Depth	:8-bit, 16.7M colors
Luminance	:500 cd/m ² (Typ)
Backlight	:18 EEFL
Response Time	:10msec.
Viewing Angle	:170/170 (L/R,U/D) (CR > 10)
Contrast Ratio	:800:1
Tuning system	:PLL
CCFL MTBF	:50,000 hrs (min.)
Supoorted video fomats	:720 x 480 @60i 720 x 240 @60p 640 x 480 @60p 720 x 480 @60p 800 x 600 @60p 1280 x 720 @60p 1024 x 768 @60p 1920 x 1080 @60i 1920 x 1080 @30P 1920 x 1080 @60P

1.1.2 Sound

Sound systems	: Mono / Stereo / Virtual Surround
Maximum power	: 2 x 5W

1.1.3 Miscellaneous

Power supply	
AC-input	: 90V ~ 264VAC, 50/60±3Hz
Normal Operation Power Consumption	: < 150W (LC320W01-SL06)
Standby power	: < 1W (110V/60Hz only)
Power cord length	: 1.8M
Power cord type	: 3 lead with earth plug , plugable (US type)
Power indicator	: LED (On: Green, Standby: No light, VGA mode Standby: Red)
Ambient conditions	
Temperature	: 0 to40°C
Humidity	: 10 to 90% (non --condensing)
Power consumption	
Normal Operation	: < 150W (LC320W01-SL06)
Standby power	: < 1W (110V/60Hz only)

AV IN3: Video3 (CVBS, RCA jack) and S-Video share with same audio R/L (RCA jack).

AV IN1: YPbPr component video1 (RCA jack) with audio R/L (RCA jack).

AV IN2: YPbPr component video2 (RCA jack) with audio R/L (RCA jack).

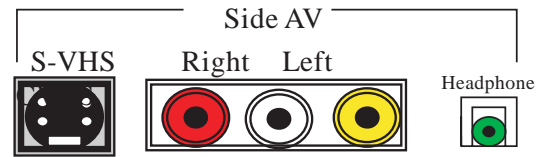
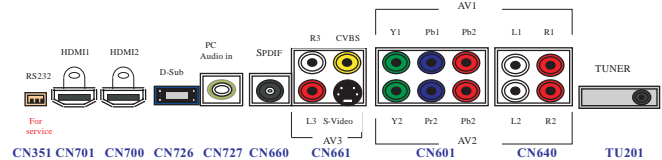
Side AV IN: Side Video (CVBS, RCA jack), Side S-Video and HDMI (DVI) share with same audio R/L (RCA jack).

Headphone OUT : Audio R/L out (mini-jack)

SPDIF OUT : RCA jack

PC VGA: D-SUB 15 pins

PC Audio: Mini-jack



1.2.2. Input signal

TV Signal type:

RF Signal : Aerial input / 10mV(80dBuV)

Video signal : Video(RCA CVBS input) / 1Vpp
(300mV-sync, 700mV-video.)

S video input / 1VppY-signal, 300mVpp C-signal

COMP Video (YPbPr input)/ 1Vpp Y signal,
350mVpp Pb, Pr signal

HDMI : Digital interface with 4 channels TMDS signal

Audio signal : Audio (1) R/L for AV IN1 (Comp-video1).

Level: - Nominal : 0.5 V rms.
- Maximum : 1.5 V rms.
- Impedance > 10 k ohm.

Audio (2) R/L for AV IN2 (Comp-video2).

Level: - Nominal : 0.5 V rms.
- Maximum : 1.5 V rms.
- Impedance > 10 k ohm.

Audio (3) R/L for AV IN3 (Video3 and S-video).

Level: - Nominal : 0.5 V rms.
- Maximum : 1.5 V rms.
- Impedance > 10 k ohm.

Side Audio R/L for Side AV IN (Side Video and S-video).

Level: - Nominal : 0.5 V rms.
- Maximum : 1.5 V rms.
- Impedance > 10 k ohm

PC Signal type:

Analog Video : 0.7 Vp-p linear, positive polarity

Separate Sync. : TTL level, separate, positive or negative polarity

Audio signal : Mini-jack audio input,
Level: - Nominal : 0.5 V rms.
- Maximum : 1.5 V rms.
- Impedance > 10 k ohm.

Signal source : Pattern generator format as attachment.

(table 1 to 11)

Reference generator: CHROMA 2200 or 2250

Headphone output :

Audio: R/L output -10mW at 32ohm.

3.5mm stereo jack with switch

Impedance is between 8 ohm and 600 ohm

SPDIF output:

Level 0.5V ~ 1V Square Wave

1.2 Connections

1.2.1 Signal connector

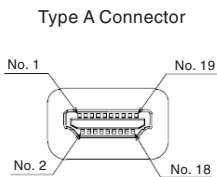
FL3-26W /32W /37W /42W /47W I/O function is located on TV module, including

Tuner: NAFTA.

HDMI IN1: HDMI input (TV digital interface support HDCP) with digital audio or with AV IN3 audio R/L.

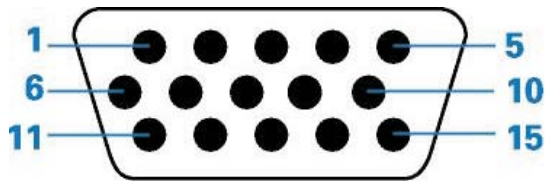
HDMI IN2: HDMI input (TV digital interface support HDCP) with digital audio or with AV IN3 audio R/L.

1.2.3 HDMI Pin assignment (Nafta only)



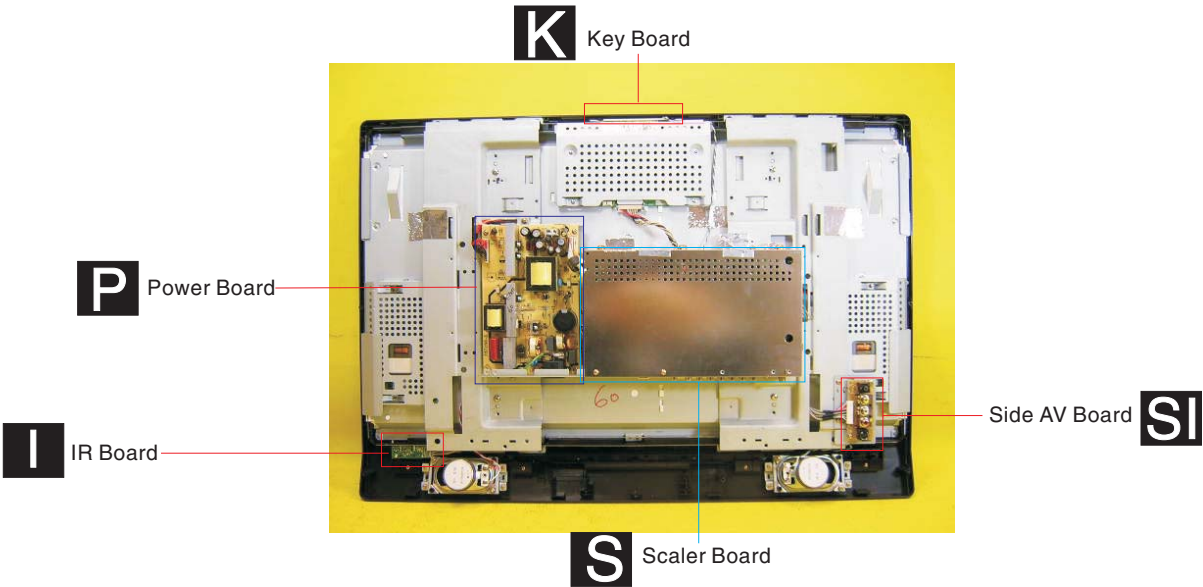
PIN No.	SIGNAL
1	TMDS Data2+
2	TMDS Data2 shield
3	TDMS Data2-
4	TMDS Data1+
5	TMDS Data1 shield
6	TMDS Data1-
7	TMDS Data0+
8	TMDS Data0 shield
9	TMDS Data0-
10	TMDS Clock+
11	TMDS Clock Shield
12	TMDS Clock-
13	CEC
14	Reserved (N.C. on device)
15	SCL
16	SDA
17	DDC/CEC Ground
18	+5V Power
19	Hot Plug Detect

1.2.4 VGA Pin assignment



PIN No.	SIGNAL
1	Red
2	Green
3	Blue
4	GND
5	Self test
6	Red GND
7	Green GND
8	Blue GND
9	+5V (Supply from PC)
10	Sync GND
11	GND
12	Bi-directional data(SDA)
13	H-sync
14	V-sync
15	Data clock(SCL)

1.3 Chassis Overview




2. Safety Instructions, Warnings, and Notes

Index of this chapter:

- 2.1 Safety Instructions
- 2.2 Warnings
- 2.3 Notes

2.1 Safety Instructions


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

- Connect the set to the Mains/AC Power via an isolation transformer (> 800 VA).
- Replace safety components, indicated by the symbol , only by components identical to the original ones. Any other component substitution (other than original type) may increase risk of fire or electrical shock hazard.

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



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

2.2 Warnings





- All ICs and many other semiconductors are susceptible to electrostatic discharges (ESD ) . Careless handling during repair can reduce life drastically. Make sure that, during repair, you are connected with the same potential as the mass of the set by a wristband with resistance. Keep components and tools also at this same potential. Available ESD protection equipment:
 - Complete kit ESD3 (small tablemat, wristband, connection box, extension cable and earth cable) 4822 310 10671.
 - Wristband tester 4822 344 13999.
- Be careful during measurements in the high voltage section.
- Never replace modules or other components while the unit is switched "ON".
- When you align the set, use plastic rather than metal tools. This will prevent any short circuits and the danger of a circuit becoming unstable.

2.3 Notes

2.3.1 General

- Measure the voltages and waveforms with regard to the chassis (= tuner) ground () , or hot ground () , depending on the tested area of circuitry. The voltages and waveforms shown in the diagrams are indicative. Measure them in the

Service Default Mode (see chapter 5) with a colour bar signal and stereo sound (L: 3 kHz, R: 1 kHz unless stated otherwise) and picture carrier at 475.25 MHz for PAL, or 61.25 MHz for NTSC (channel 3).

- Where necessary, measure the waveforms and voltages with () and without () aerial signal. Measure the voltages in the power supply section both in normal operation () and in stand-by () . These values are indicated by means of the appropriate symbols.
- The semiconductors indicated in the circuit diagram and in the parts lists, are interchangeable per position with the semiconductors in the unit, irrespective of the type indication on these semiconductors.
- Manufactured under license from Dolby Laboratories. "Dolby", "Pro Logic" and the "double-D symbol", are trademarks of Dolby Laboratories.

2.3.2 Schematic Notes

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

2.3.3 Lead-free Solder

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

Identification: The bottom line of a type plate gives a 14-digit serial number. Digits 5 and 6 refer to the production year, digits 7 and 8 refer to production week (in example below it is 2006 week 17).



E_06532_024.eps
130606

Figure 2-1 Serial number example

Regardless of the special lead-free logo (which is not always indicated), one must treat all sets from this date onwards according to the rules as described below.



Figure 2-2 Lead-free logo

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

- Use only lead-free soldering tin Philips SAC305 with order code 0622 149 00106. If lead-free solder paste is required, please contact the manufacturer of your soldering equipment. In general, use of solder paste within workshops should be avoided because paste is not easy to store and to handle.
- Use only adequate solder tools applicable for lead-free soldering tin. The solder tool must be able:
 - To reach a solder-tip temperature of at least 400°C.
 - To stabilise the adjusted temperature at the solder-tip.
 - To exchange solder-tips for different applications.
- Adjust your solder tool so that a temperature of around 360°C - 380°C is reached and stabilised at the solder joint. Heating time of the solder-joint should not exceed ~ 4 sec. Avoid temperatures above 400°C, otherwise wear-out of tips will increase drastically and flux-fluid will be destroyed. To avoid wear-out of tips, switch "off" unused equipment or reduce heat.
- Mix of lead-free soldering tin/parts with leaded soldering tin/parts is possible but PHILIPS recommends strongly to **avoid** mixed regimes. If this cannot be avoided, carefully clear the solder-joint from old tin and re-solder with new tin.
- Use only original spare-parts listed in the Service-Manuals. Not listed standard material (commodities) has to be purchased at external companies.
- For sets produced before 1.1.2005, containing leaded soldering tin and components, all needed spare parts will be available till the end of the service period. For the repair of such sets nothing changes.

In case of doubt whether the board is lead-free or not (or with mixed technologies), you can use the following method:

- Always use the highest temperature to solder, when using SAC305 (see also instructions below).
- De-solder thoroughly (clean solder joints to avoid mix of two alloys).

2.3.4 Alternative BOM identification

In September 2003, Philips CE introduced a change in the way the serial number (or production number, see Figure 2-1) is composed. From this date on, the **third digit** in the serial number (example: AG2B0335000001) indicates the number of

the alternative BOM (Bill of Materials used for producing the specific model of TV set). It is possible that the same TV model on the market is produced with e.g. two different types of displays, coming from two different O.E.M.s.

By looking at the third digit of the serial number, the service technician can see if there is more than one type of B.O.M. used in the production of the TV set he is working with. He can then consult the At Your Service Web site, where he can type in the Commercial Type Version Number of the TV set (e.g. 28PW9515/12), after which a screen will appear that gives information about the number of alternative B.O.M.s used. If the third digit of the serial number contains the number 1 (example: AG1B0335000001), then there is only one B.O.M. version of the TV set on the market. If the third digit is a 2 (example: AG2B0335000001), then there are two different B.O.M.s. Information about this is important for ordering the correct spare parts!

For the third digit, the numbers 1...9 and the characters A...Z can be used, so in total: 9 plus 26 = 35 different B.O.M.s can be indicated by the third digit of the serial number.

2.3.5 Board Level Repair (BLR) or Component Level Repair (CLR)

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

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

2.3.6 Practical Service Precautions

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

3. Directions for Use

You can download this information from the following websites:

<http://www.philips.com/support>

<http://www.p4c.philips.com>

Magnavox/Philips Digital UI-TV/AV1/AV2/AV3/Side/HDMI				
OSD Layer 1	2	3	4	5
Picture	Smart Picture	Personal Rich Natural Soft Power Saver		
	Contrast	slider		
	Brightness	slider		
	Color	slider		
	Sharpness	slider		
	Color temperature	Normal Warm Cool		
	Tint	slider		
	Noise Reduction	slider		
	Dynamic Contrast	OFF Medium Maximum		
	Picture format	Automatic Super zoom 4:3 Movie expand 14:9 Movie expand 16:9 16:9 subtitle Wide screen		
Sound	Smart sound	Personal Speech Movies	EQUALIZER EQUALIZER EQUALIZER	
	Sound mode	Mono Stereo Virtual Surround		
	Alternate audio	Main SAP		
	AVL	Off On		
Features	Closed captions	Off On On during mute		
	Caption service	CC-1 CC-2 CC-3 CC-4 T-1 T-2 T-3 T-4		
	Digital caption service	CS-1 CS-2 CS-3 CS-4 CS-5 CS-6		

	Digital caption options	Reset to default	Reset to default	
		Size	Default Small Standard Large	
		Style	Default Monospaced serif Serif Monospaced sans serif Sans serif Casual Cursive Small caps	
		Text	Color	Default Black White Red Green Blue Yellow Magenta Cyan
			Opacity	Default Solid Transparent Translucent Flashing
		Background	Color	Default Black White Red Green Blue Yellow Magenta Cyan
			Opacity	Default Solid Transparent Translucent Flashing
		Preferred channels		
		Sleeptimer	slider	
Parental Control (*)	Channel lock			
	TV ratings lock			
	Movie ratings lock			
	Region ratings lock			
	Clear Regions lock			
	Change Pin			
Installation	Language	English Francais Espanol		
	Autoprogram	AUTO Antenna Cable	Start now (Analog first then Digital)	
	Source	TV AV1 AV2 AV3 HDMI 1 HDMI 2 Side DVD PC		

3. Directions for Use

	HDMI Audio (**)	Auto HDMI Digital		
	Clock	Enter Time(Hrs,Mins) AM/PM		
	Weak channel Installation	(Current software Version)		
	Current Software Info			
	Reset AV settings		Start now	
EXIT	EXIT			

Magnavox/Philips Digital UI-PC				
1	2	3	4	5
Picture	Contrast	slider		
	Brightness	slider		
	Color temp	Normal Warm Cool		
	Picture format	Full screen 4:3		
Sound	Smart sound	Personal Speech Movie	Equalizer Equalizer Equalizer	
	Virtual surround	On Off		
Installation	Language	English Francais Espanol		
	Source	TV AV1 AV2 AV3 HDMI 1 HDMI 2 Side DVD PC		
	Picture Adjustment	Auto adjust	Yes	Yes No
			Store ?	
		Manual adjust	Phase Clock Horizontal Vertical	
	Factory reset	No		
		Yes		
EXIT	Exit			

4. Mechanical Instructions

Index of this chapter:

4.1 Assy/Panel Removal

4.2 Set Re-assembly

4.1 Assy/Panel Removal

Note: Please put your machine on a soft material to avoid to scrape panel when you disassemble it.

Front View



Back View



Step 1. Remove Base

Unscrew four screws as Fig1



Fig 1

Step 2. Remove Back cover assy

Unscrew ten screws as fig 2



Fig 2

Step 3. Remove Vase plate and Bracket-base

Unscrew fourteen screws as fig 3

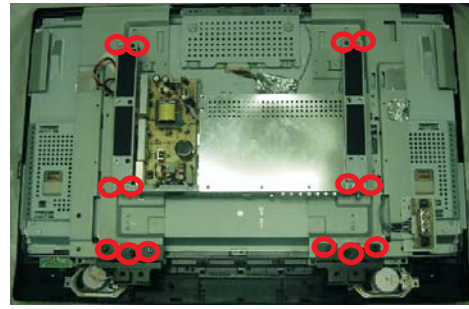


Fig 3

Step 4. Remove Shielding

Unscrew nine screws as fig 4 and unscrew nine screws as fig 5

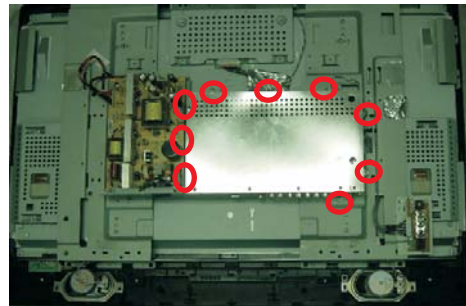


Fig 4



Fig 5

Step 5. Remove power board, scaler board, side AV board and IR board.

Unscrew seventeen screws and disconnect ten cables as fig 6

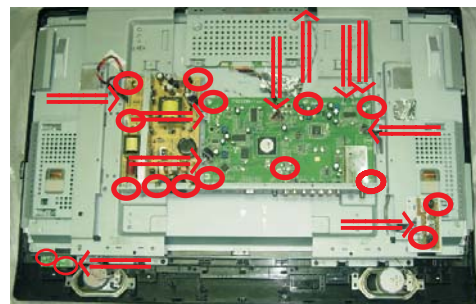


Fig 6

Step 6. Remove frame-PCB

Unscrew eight screws as fig 7

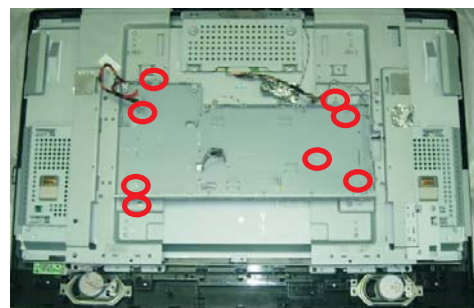


Fig 7

4. Mechanical Instructions

Step 7. Remove Metal frame

Unscrew sixteen screws as fig 8

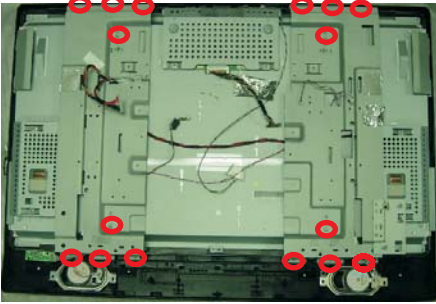


Fig 8

 In warranty, it is not allowed to disassembly the LCD panel, even the
 backlight unit defect.

Out of warranty, the replacment of backlight unit is a correct way
 when the defect is cused by backlight (CCFL,Lamp).

Step 8 Remove AL foil

Unscrew eight screws as fig 9



Fig 9



Fig 10



Fig 11

Service Position

Insulation material

4.2 Set Re-assembly

To re-assemble the whole set, execute all processes in reverse order.

Notes:

- While re-assembling, make sure that all cables are placed and connected in their original position.
- Pay special attention not to damage the EMC foams at the SSB shielding. Check that EMC foams are put correctly on their places.

5. Service Modes, Error Codes and Fault Finding

index of this chapter:

5.1 CSM

5.2 Factory Mode

5.3 Repair Flow Chart

5.1 CSM

It can display CSM windows message when press 1-2 3-6 5-4 on the button (RC) remote control in normal operation mode.
The following information is displayed on screen:

CSM Item	Contents	Remark
1: Set Type	32MF337B/27	Model Name
2: Production code	BZ3A0704790027	14 digit production-code(serial number)
3: SW-naming main-processor	FL3 32MF337BU_V2.00	SW Version(FL= family,32MF337B=Model, U=Nafta region V=Version,2=SW main version,00=SW sub version)
4: Code 1	00 00 00 00 00	Error codes in NVM/EEPROM (5 last logged errors)
5: Code 2	00 00 00 00 00	Error codes in NVM/EEPROM (5 first logged errors)
6: Key (HDCP)	Invalid	HDMI information whether HDCP-key is valid
7: Digital signal quality ATSC		Digital signal level

About error code,Please refer to the table below.

Error code	Event
0x01	DDR error
0x02	IIC bus error
0x03	Tuner error
0x04	Demod error

5.2 Factory Mode

It can enter Factory Mode

1. Press "Menu" in normal operation mode to enter OSD.
2. Press "062596+Menu" on the button (RC) remote control in OSD.
3. Press "Menu" again. The screen will appear "FAC" in top right corner.

OSD behavior:

Before press number key change OSD item

Now remove previous function, press number key then press OK will change value

Item	Description	Range	method of operation	Status
//Action Items				
0	Exit Factory		press OK.	Pass
1	RESET_SPC	reset item SP_GAIN_BRI_XXX to SP_GAIN_CLR_XXX to default value	press OK.	Pass
2	RESET_CSM_CODE	Reset CSM ERROR Code to 0	press OK.	Pass
3	AUTO_COLOR	PC: any pattern has black and white YPbPr:SMPTEbar(color bar), any timing.	press OK. when autocolour, the OSD disappear, when finished. OSD appear.	Pass
//Switch Items				
4	VIRGIN Mode		On/Off	Pass
5	AGING MODE	turn<On> and no signal input	On/Off	Pass
6	GAMMA_TABLE	use gamma table or not	On/Off	
7	COLOR_ENHANCE		On/Off	Pass
8	SET_PIN		On/Off	Pass
9	ORT_MODE	if On, AC switch on/off turn on the TV	On/Off	Pass
//ADC Gain & Offset (values different by VGA and YPbPr) AutoColor changes those items				
10	ADC_GAIN_R	0~255	Press Left and Right to change value	Pass
11	ADC_GAIN_G	0~255		Pass
12	ADC_GAIN_B	0~255		Pass
13	ADC_OFFSET_R	0~127		Pass
14	ADC_OFFSET_G	0~127		Pass
15	ADC_OFFSET_B	0~127		Pass
//Color Temperature (values different by AV,VGA,DTV,HDMI,YPbPr)				
16	CLR_TEMP_R	0~255	Press Left and Right to change value	Pass
17	CLR_TEMP_G	0~255		Pass
18	CLR_TEMP_B	0~255		Pass
//Smart Picture (values different by smart picture)				
19	SP_MODE_3DNR	Except YPbPr 720P above timing	0~5	Press Left and Right to change value
20	SP_MODE_PWM	(when Dynamic contrast Off)	0~255	Pass
//Smart Picture Default (values different by AV,DTV,HDMI,YPbPr) Front-End, because each source has the same smart picture setting, for different between each source				
21	SP_GAIN_BRI_DTV	Brightness	0~255	Press Left and Right to change value
22	SP_GAIN_BRI_AV		0~255	Pass
23	SP_GAIN_BRI_YPBPR		0~255	Pass
24	SP_GAIN_BRI_HDMI		0~255	Pass
25	SP_GAIN_BRI_VGA		0~255	
26	SP_GAIN_CNT_DTV	Contrast	0~255	Pass
27	SP_GAIN_CNT_AV		0~255	Pass
28	SP_GAIN_CNT_YPBPR		0~255	Pass
29	SP_GAIN_CNT_HDMI		0~255	Pass
30	SP_GAIN_CNT_VGA		0~255	
31	SP_GAIN_TINT_DTV	Color	0~255	Pass
32	SP_GAIN_TINT_AV		0~255	Pass
33	SP_GAIN_TINT_YPBPR		0~255	Pass
34	SP_GAIN_TINT_HDMI		0~255	Pass
35	SP_GAIN_CLR_DTV	Color	0~255	Pass
36	SP_GAIN_CLR_AV		0~255	Pass

39	VIDEO_PWM_NORMAL		0~255		Pass
40	VIDEO_PWM_MEDIUM		0~255		Pass
41	VIDEO_PWM_MAXIMUN		0~255		Pass
42	VGA_PWM_MIN	to limit PC brightness range	0~255	Dark	Pass
43	VGA_PWM_MAX		0~255	Bright	Pass
	//YPbPr H/V Position	(value different by each timing)			
44	YPBPR_POS_H				Pass
45	YPBPR_POS_V	interlace no effect, only progressive can be adjusted			Pass
46	YPBPR_PHASE	Manual adjust HDMI phase			Pass
	//Audio				
		volume different between audio source, for each source volume to be the same			
47	AUD_GAIN_TV		64~-64		Pass
48	AUD_GAIN_DTV		64~-64		Pass
49	AUD_GAIN_HDMI		64~-64		Pass
50	AUD_GAIN_SCART		64~-64		Pass
51	AUD_GAIN_DVD				
52	AUD_HEADPHONE_VOL		12~-64		Pass
53	AUD_BALANCE	amplifier left and right volume	-50~50	Press Left and Right to change value	Pass
	//Tuner & Panel Id				
		4 is PHILIPS_FQA1236, 5 is Forward, 6 is PHILIPS_FQA1236_E, 7 is ALPS_TDQU4			
54	TUNER_ID		4,5,6,7		Pass
55	PANEL_ID	value the same to CLI command			Pass

Select Smart picture to display a list of predefined picture settings, each corresponding with specific factory settings.

Personal refers to the personal preference settings of picture in the picture menu.

Note: This Magnavox TV has been set at the factory to look best in bright store environments, which typically use fluorescent lighting. As your home will likely not be as well lit as a store, we recommend that you cycle through the various smart picture modes to find the one that best suits your own viewing conditions. Most consumers will find that Natural is the correct choice.

You can press the Smart picture button on the remote control repeatedly to select either Personal, Rich, Natural, Soft, or Powersaver picture settings.

Note:

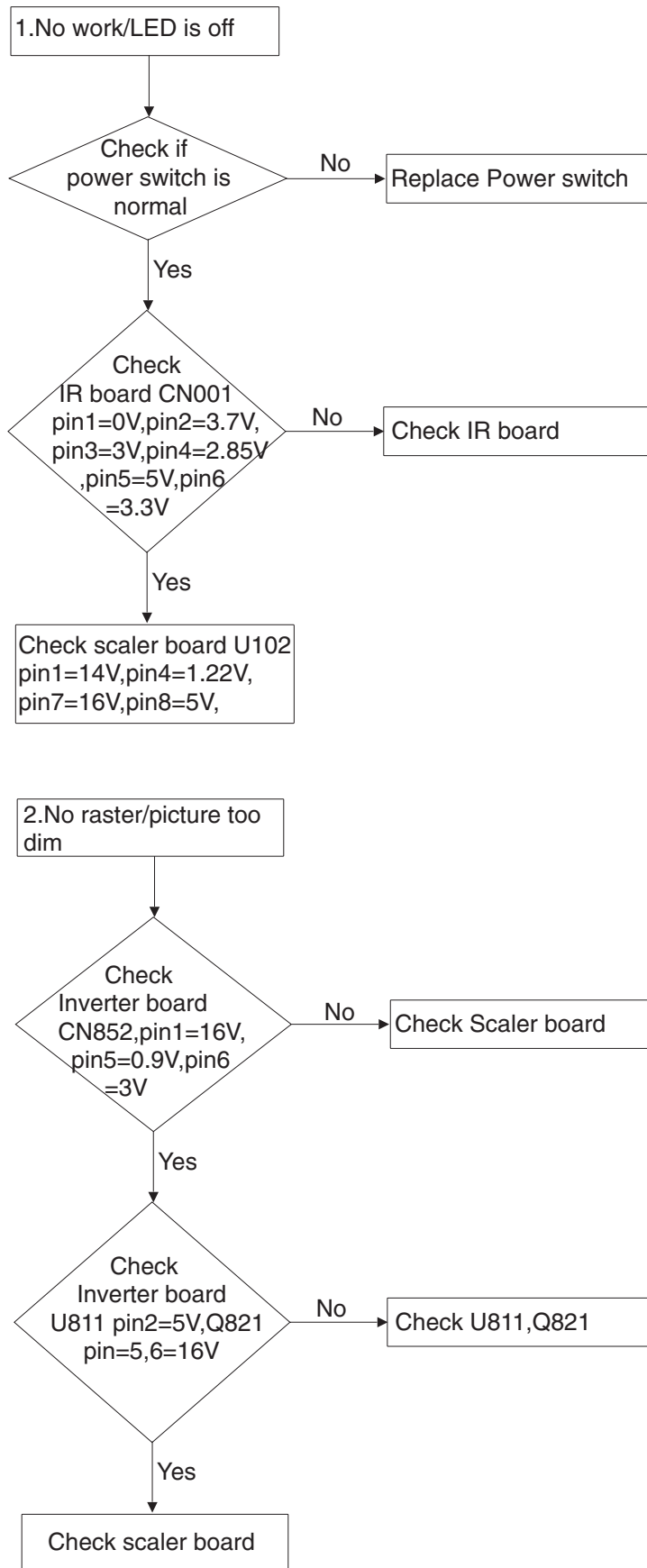
- When you watch programs by Composite Video signal, it's recommended to select Soft or Power saving Mode via Smart picture.

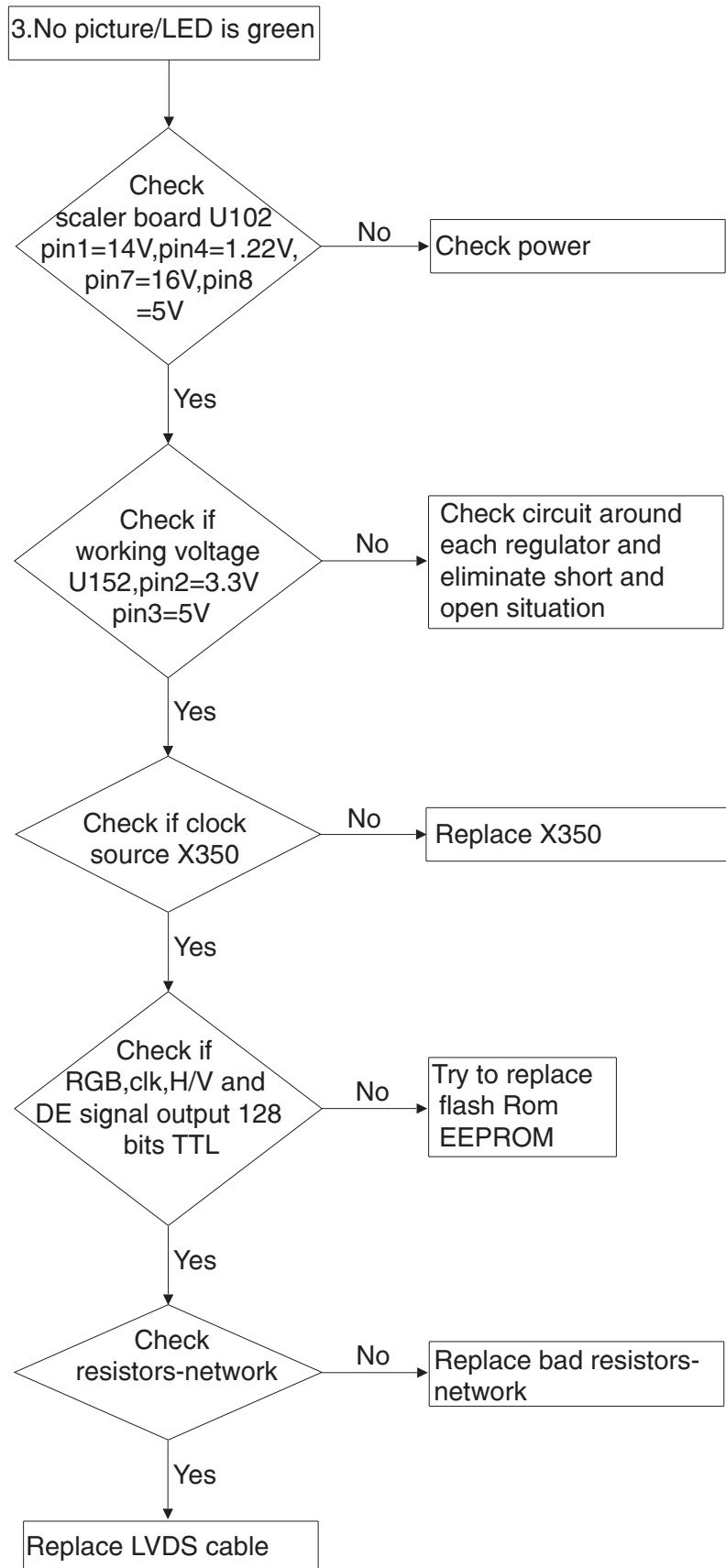
- The moment you are in a predefined Smart picture setting and you modify the Picture menu, all values of the menu will overwrite those previously made in personal setting.

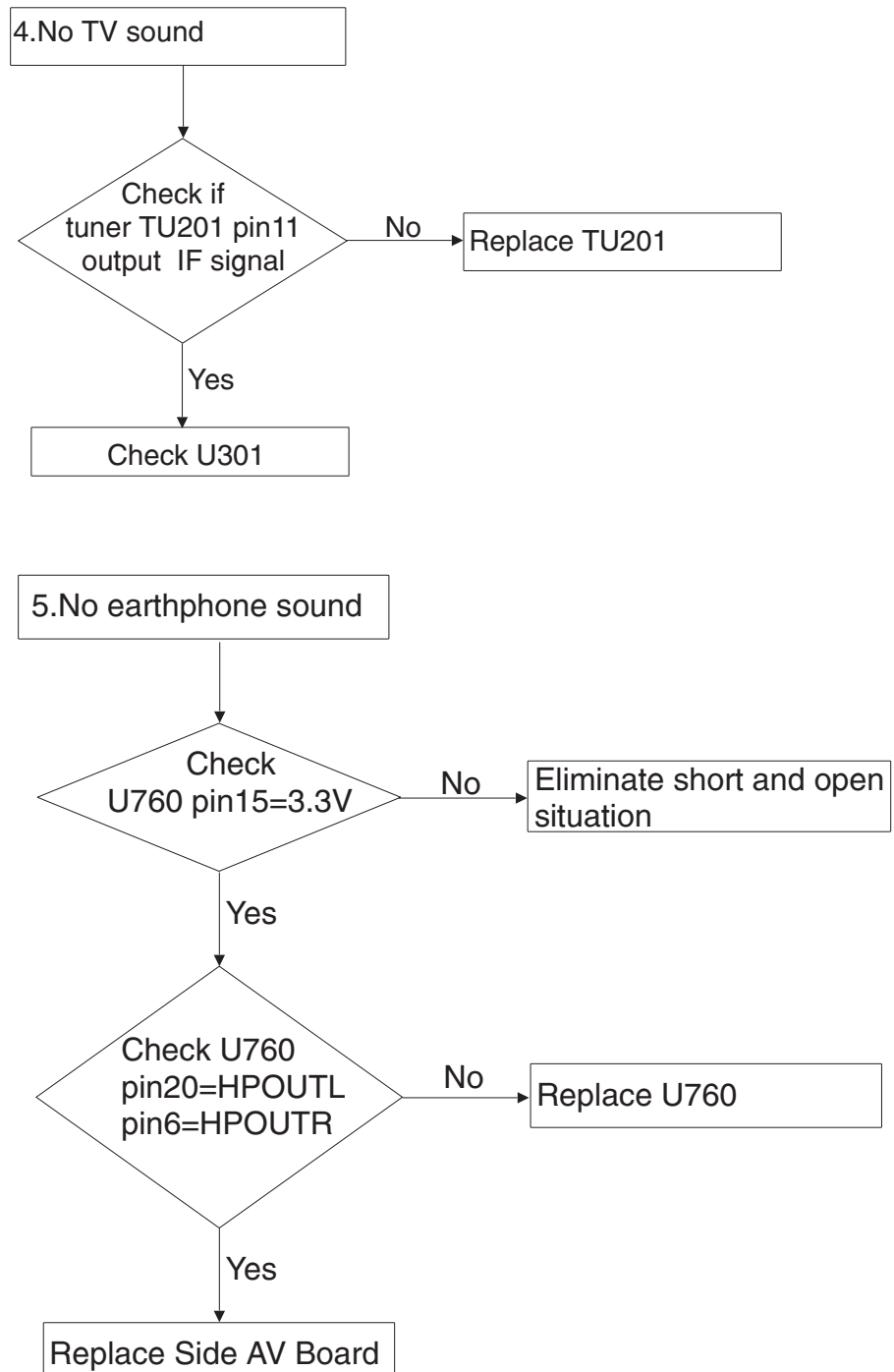
Smart picture control items: (values different by smart picture)

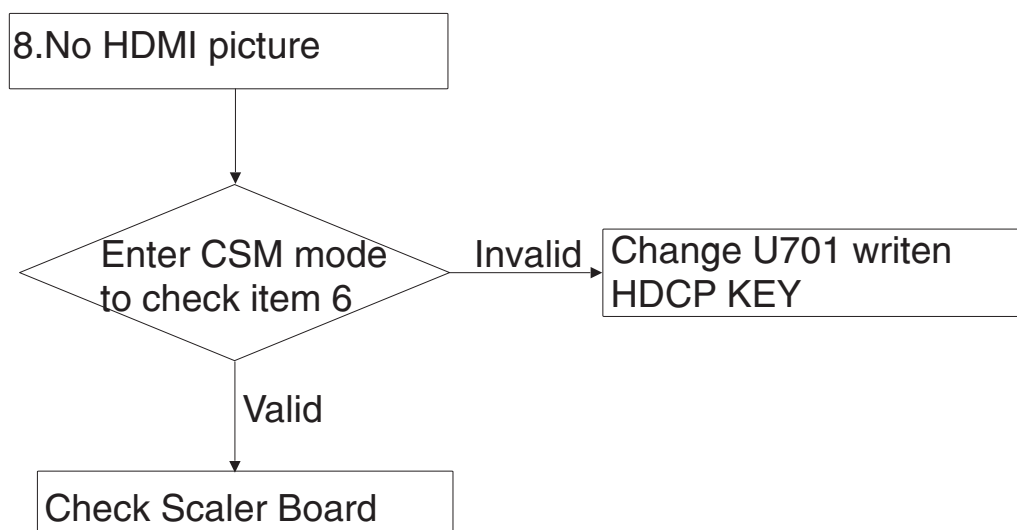
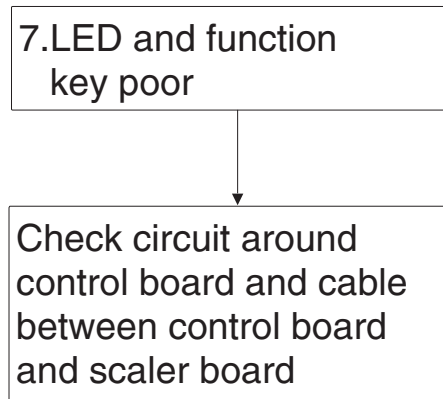
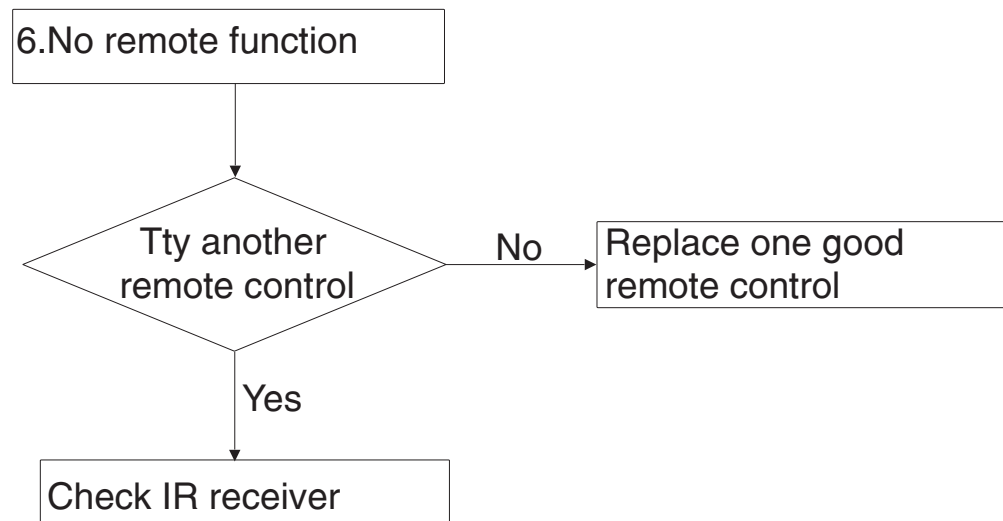
	User Menu OSD:(Back-End)	can be changed when factory mode
	Contrast	
	Brightness	
	Color	
	Sharpness	
	color temperature	
	Tint	
	Noise Reduction	
	Dynamic Contrast	
	Factory menu OSD	can be changed when factory mode
	SP_MODE_PWM (when Dynamic contrast Off)	
	SP_MODE_3DNR (range 0 to 5)	

5.3 Repair Flow Chart





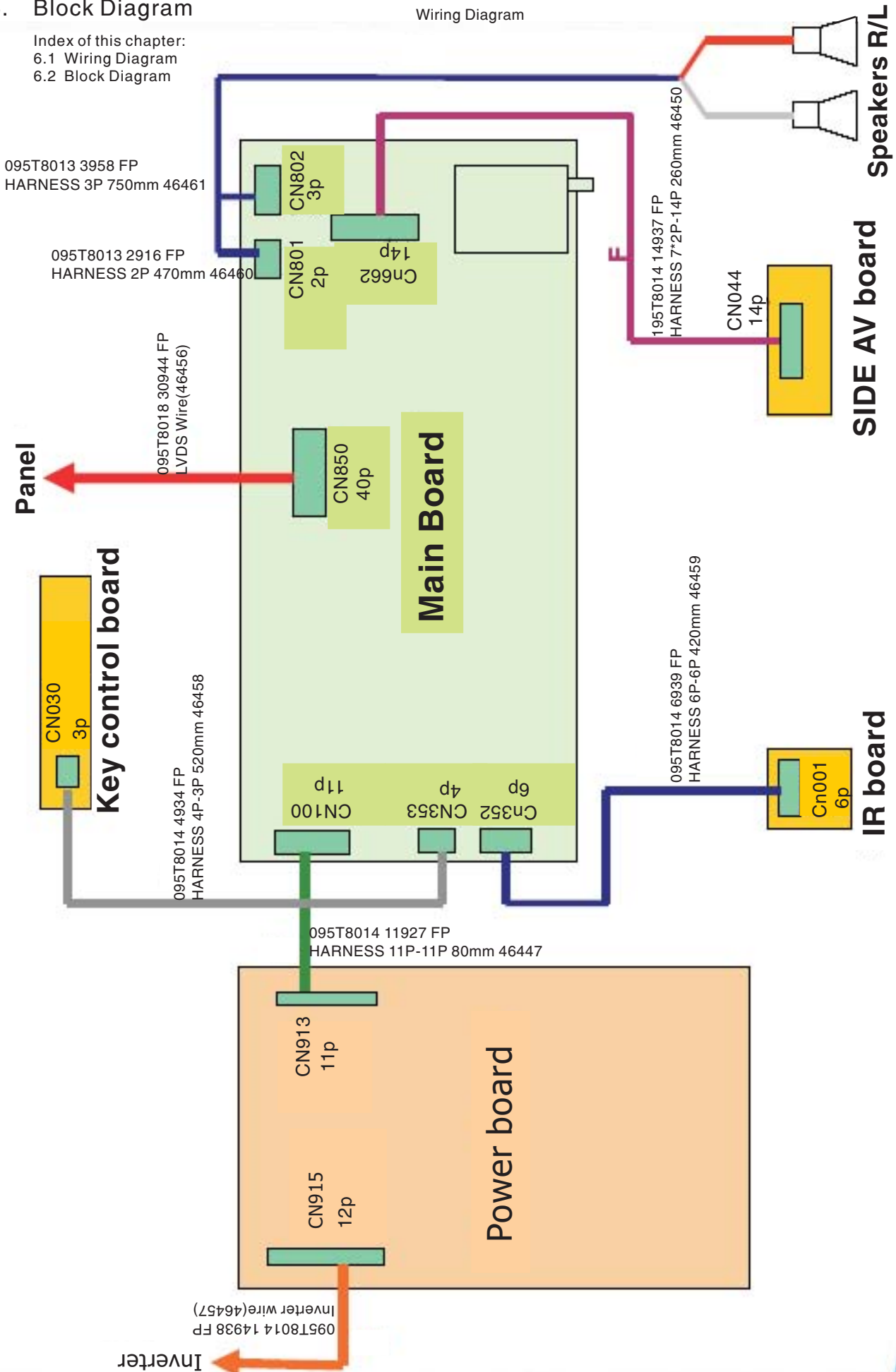




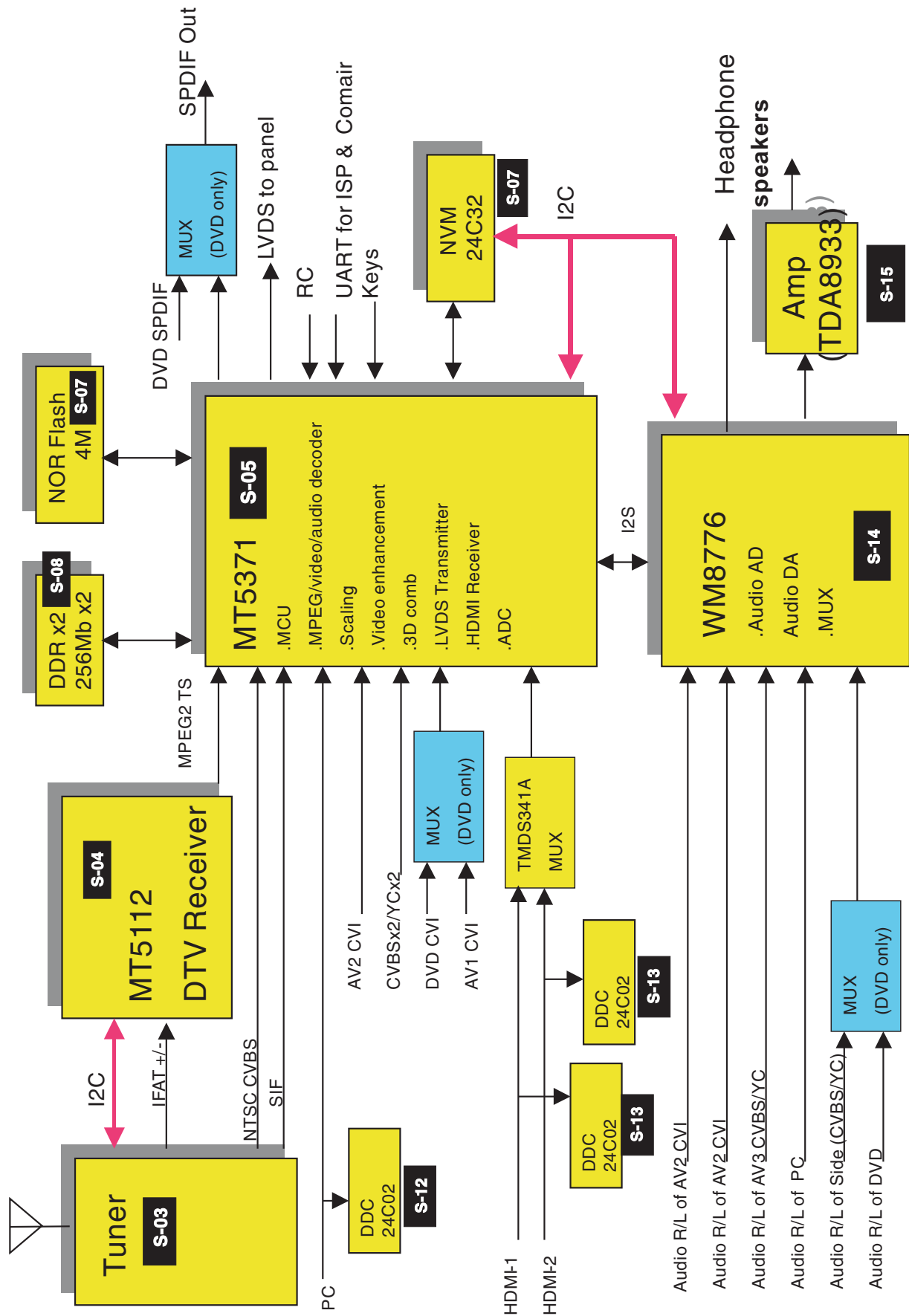
6. Block Diagram

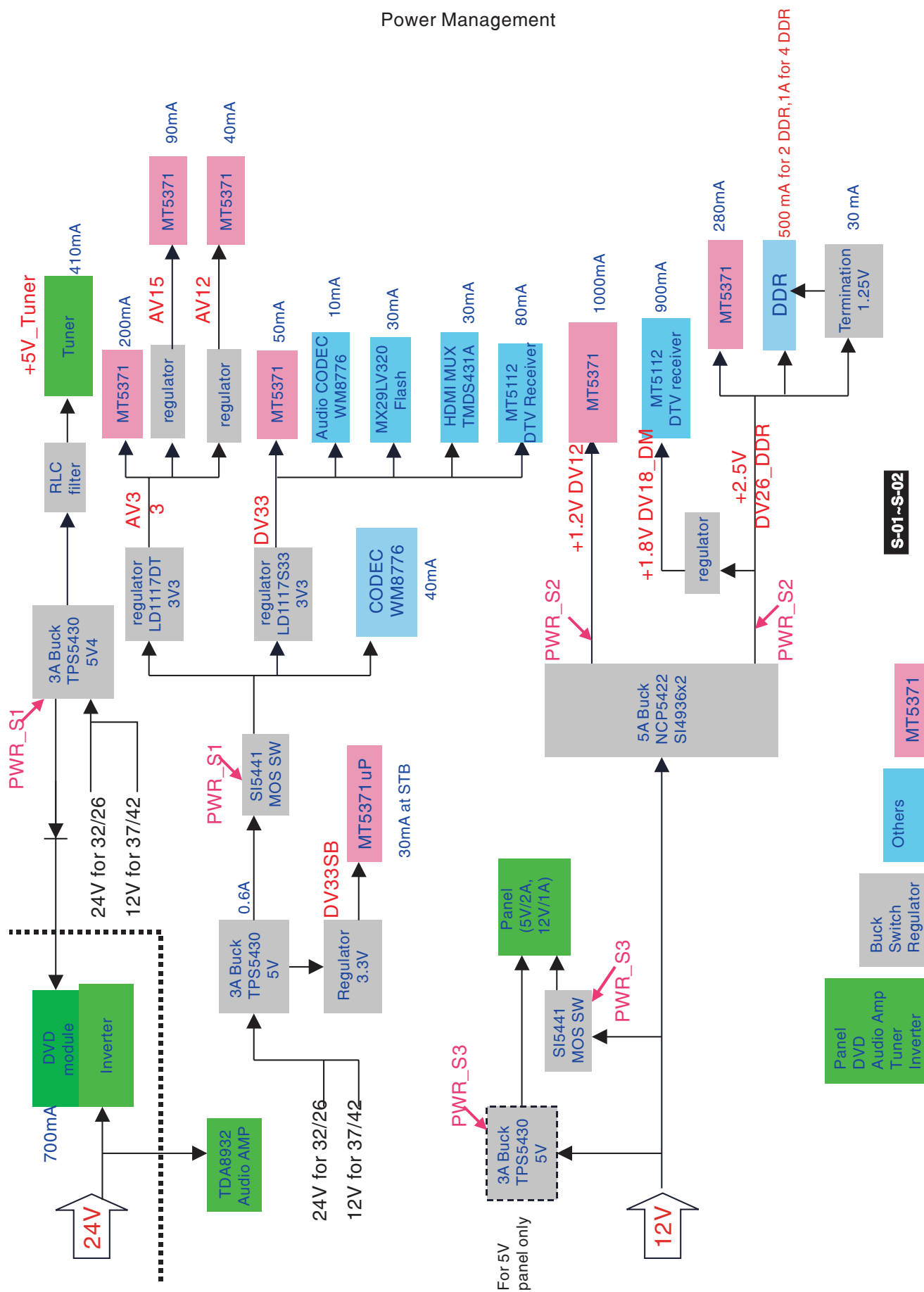
Wiring Diagram

Index of this chapter:
6.1 Wiring Diagram
6.2 Block Diagram



Function Block of Main Board

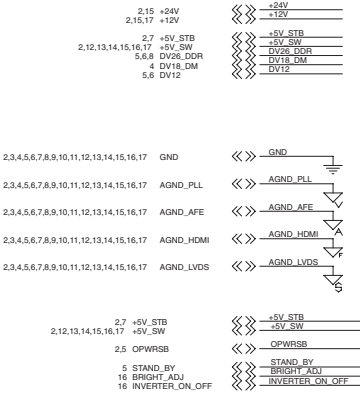
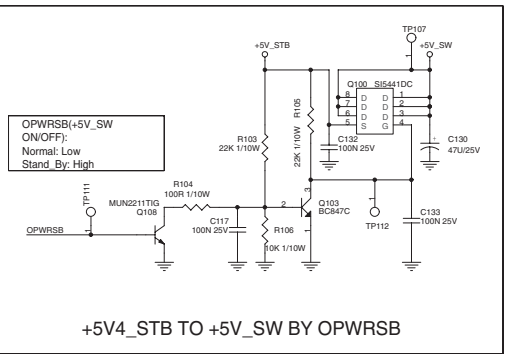
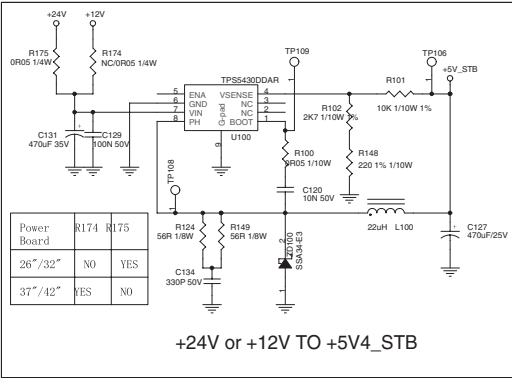
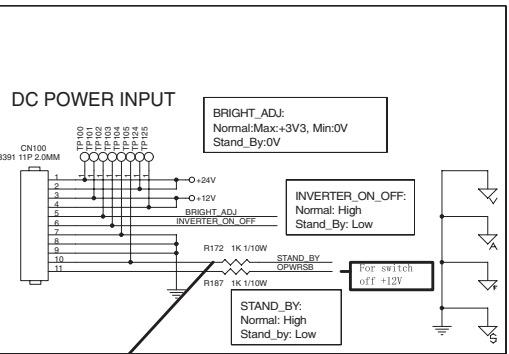




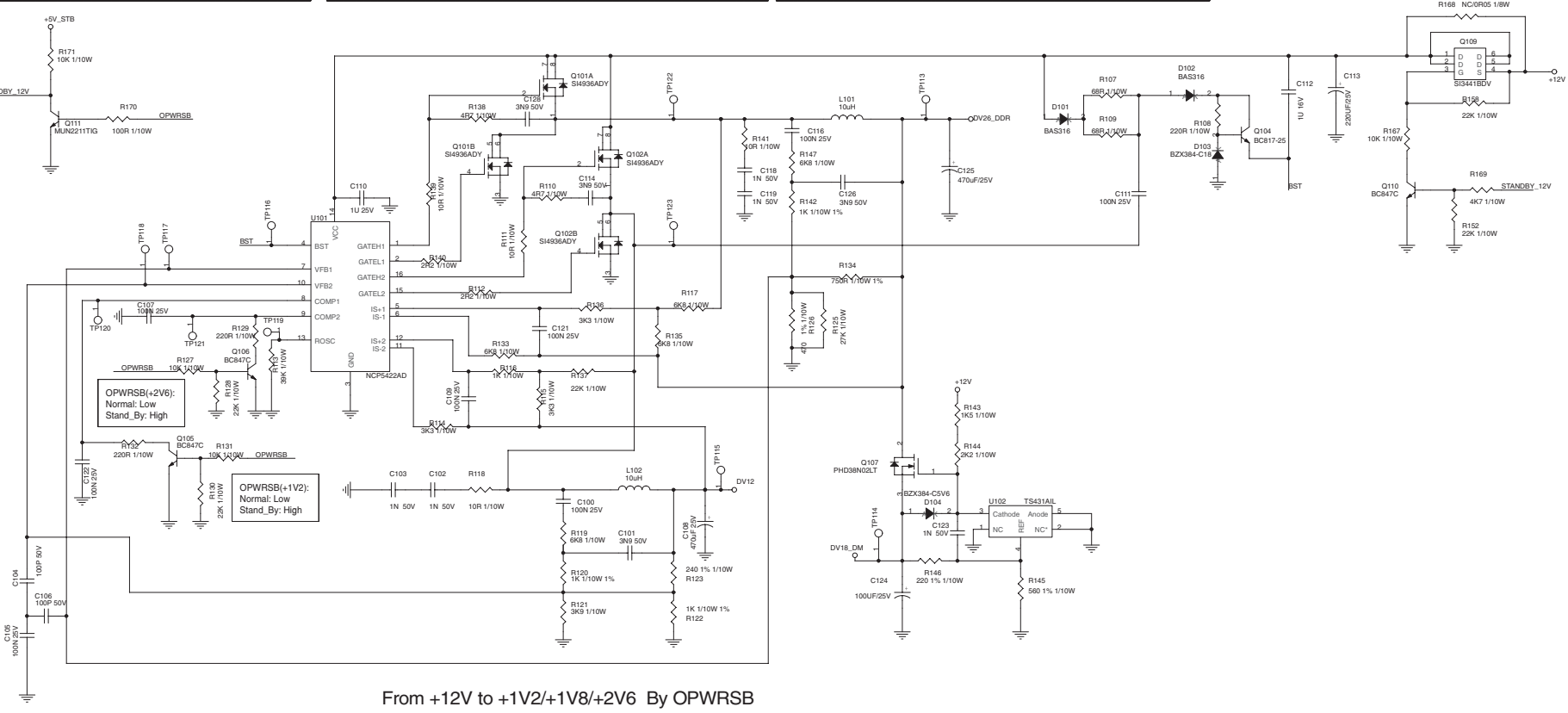
Scaler Board Schematic Diagram-Power

DL MT5371 / MT5112 - 4 LAYERS

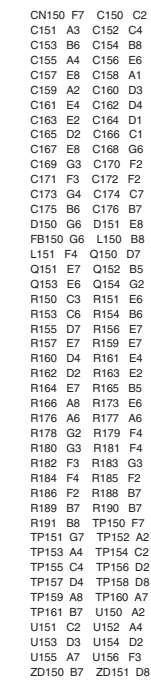
S-01



- CN100 B1 C100 G5
- C101 G6 C102 G5
- C103 G4 C104 G2
- C105 H2 C106 H2
- C107 F3 C108 G6
- C109 F5 C110 E4
- C111 E9 C112 D10
- C113 D11 C114 E4
- C116 D7 C117 C8
- C118 E7 C119 E7
- C120 B6 C121 F5
- C122 G2 C123 G8
- C124 G6 C125 E8
- C126 E7 C127 C8
- C128 D5 C129 B4
- C130 B9 C131 B4
- C132 B9 C133 C9
- C134 C5 D101 D5
- D102 D10 D103 E10
- D104 G8 L100 C6
- L101 D7 L102 G6
- Q100 B9 Q101A D5
- Q101B E5 Q102A E6
- Q103B E8 Q103 C9
- Q104 D10 Q105 G3
- Q106 F3 Q107 G8
- Q108 C9 D100 D12
- Q110 E11 Q111 D2
- R100 B6 R101 B6
- R102 B6 R103 B6
- R104 C8 R105 B9
- R106 C9 R107 D5
- R108 D10 R109 C9
- R110 E5 R111 E5
- R112 E5 R113 F3
- R114 F5 R115 F5
- R116 F5 R117 F6
- R118 G5 R119 G5
- R120 G5 R121 H5
- R122 H6 R123 G6
- R124 C5 R125 F7
- R126 F7 R127 F3
- R128 F3 R129 F3
- R130 G3 R131 G3
- R132 F2 R133 F5
- R134 E7 R135 F6
- R136 F6 R137 F6
- R138 D5 R139 E5
- R140 E5 R141 D7
- R142 E7 R143 F6
- R144 G8 R145 G9
- R146 G8 R147 E7
- R148 B6 R149 C5
- R152 E12 R158 D12
- R167 D11 R168 D12
- R169 E12 R170 D2
- R171 D2 R172 C2
- R174 B4 R175 B4
- R187 C2 TP100 B1
- TP101 B1 TP102 B1
- TP103 B1 TP104 B1
- TP105 B1 TP106 B6
- TP107 B9 TP108 B5
- TP109 B6 TP111 C7
- TP112 C9 TP113 D8
- TP114 G8 TP115 G7
- TP116 E3 TP117 E3
- TP118 E3 TP119 F3
- TP120 F2 TP121 F3
- TP122 D6 TP123 E6
- TP124 G2 TP125 B2
- U100 B5 U101 E4
- U102 G8 ZD100 C6



Panel VCC=5V

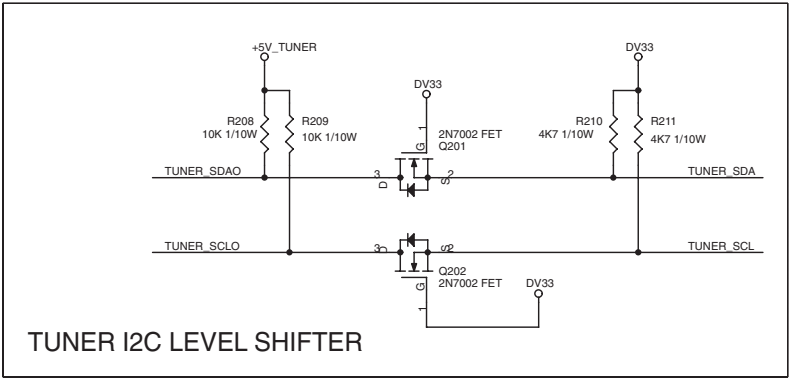
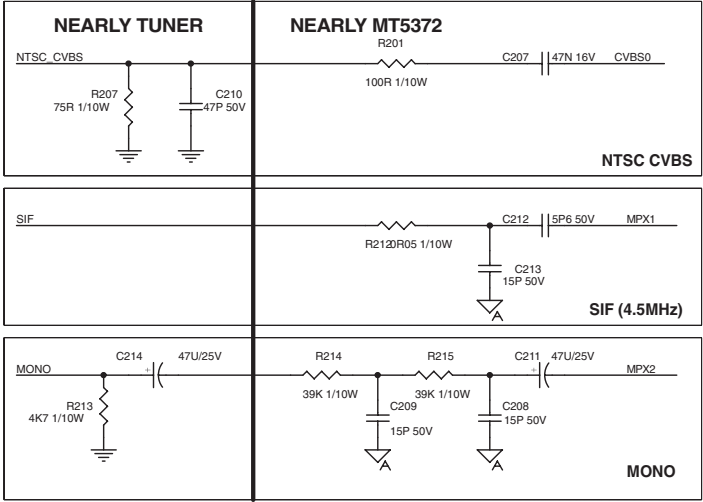
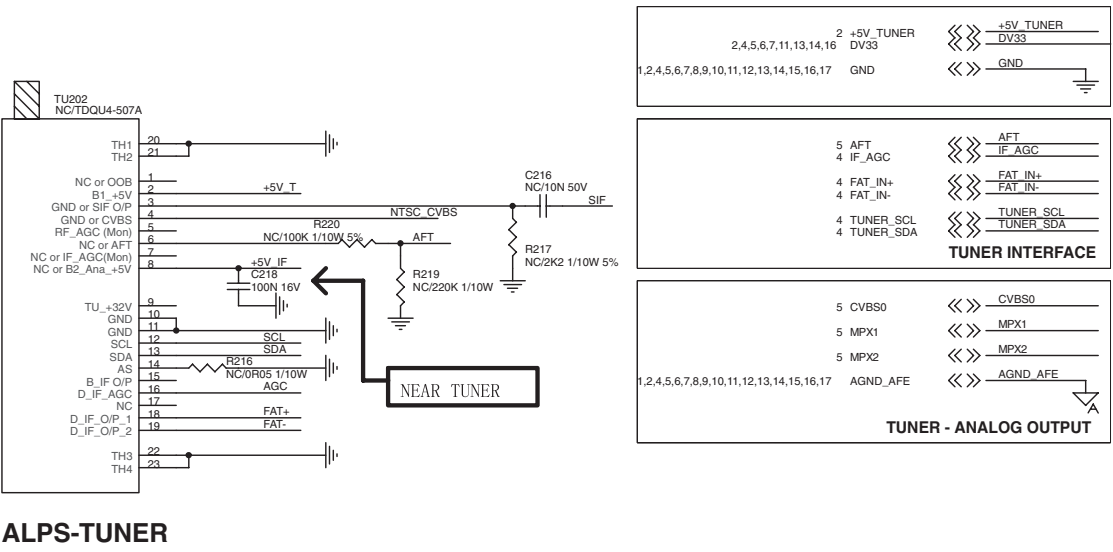
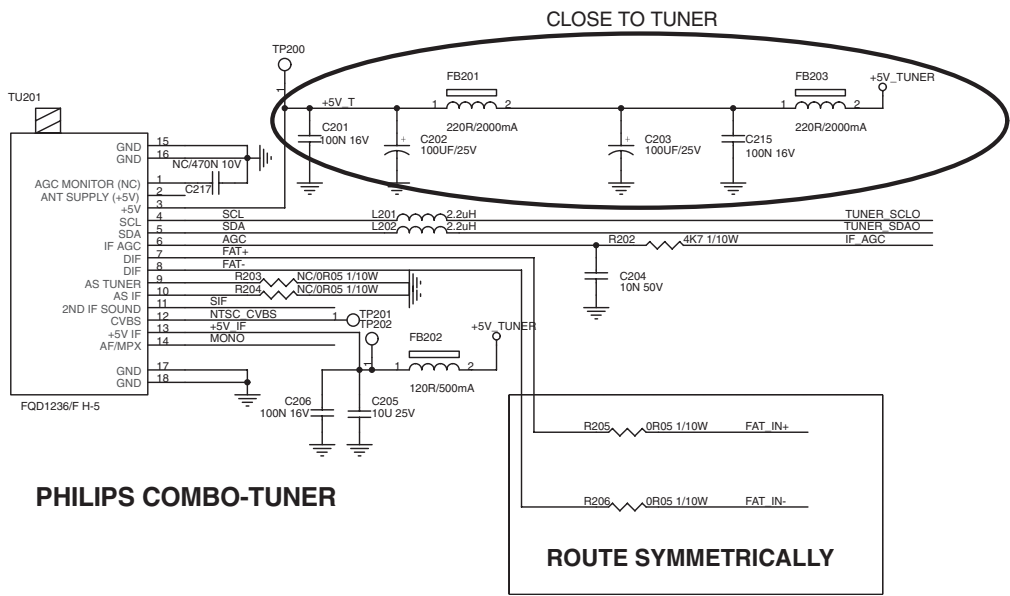


Scaler Board Schematic Diagram-Tuner

S-03

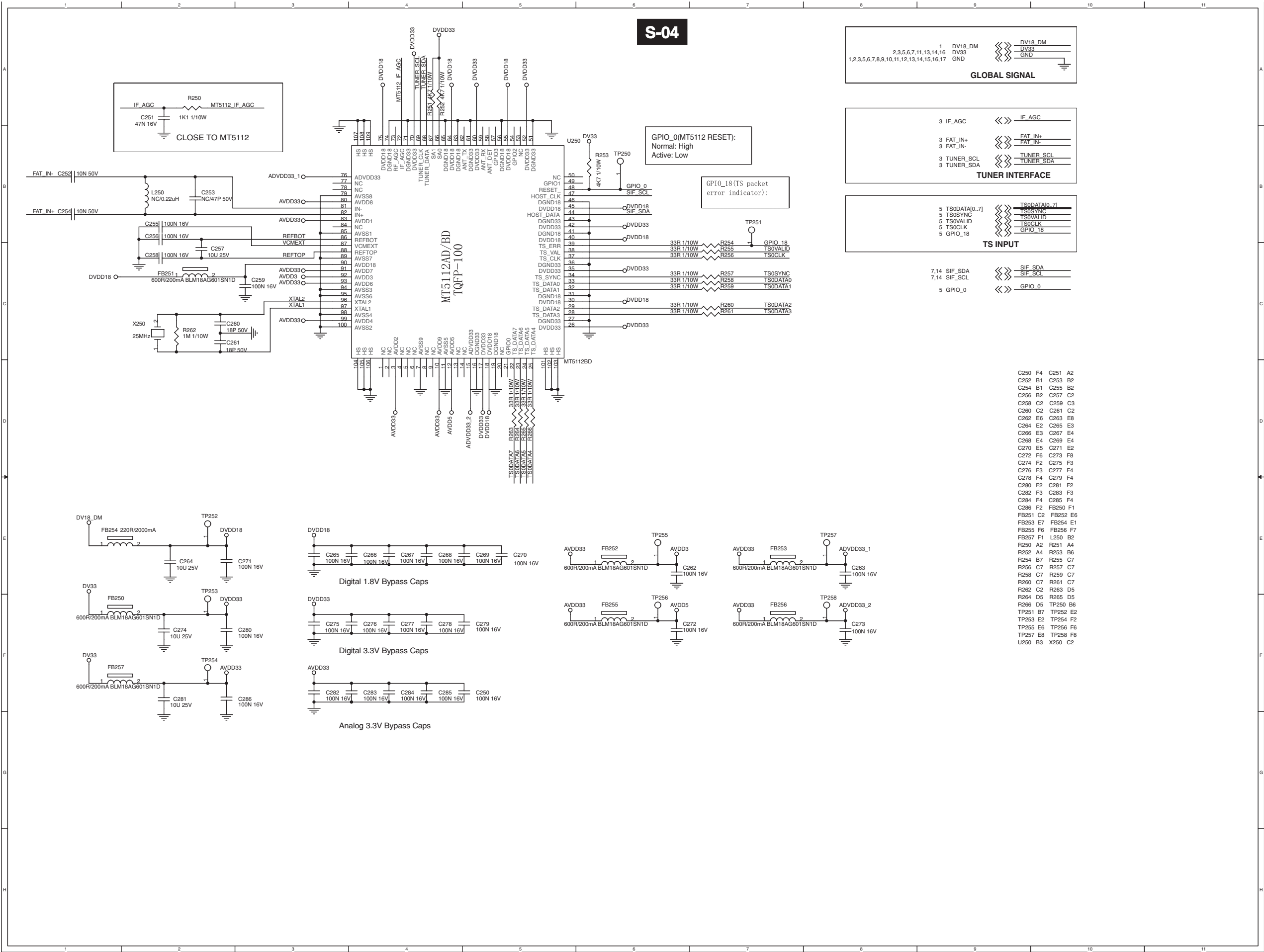
TU201 AND TU202 IS SAME LOCATION

TUNER	TU201	TU202	C216	R217	R207	R219	R220	C218	R216
PHILIPS	FQD1236	NC	NC	NC	75R	NC	NC	NC	NC
ALPS	NC	TDUQ2	10N	2K2	NC	220K	100K	100N	0R

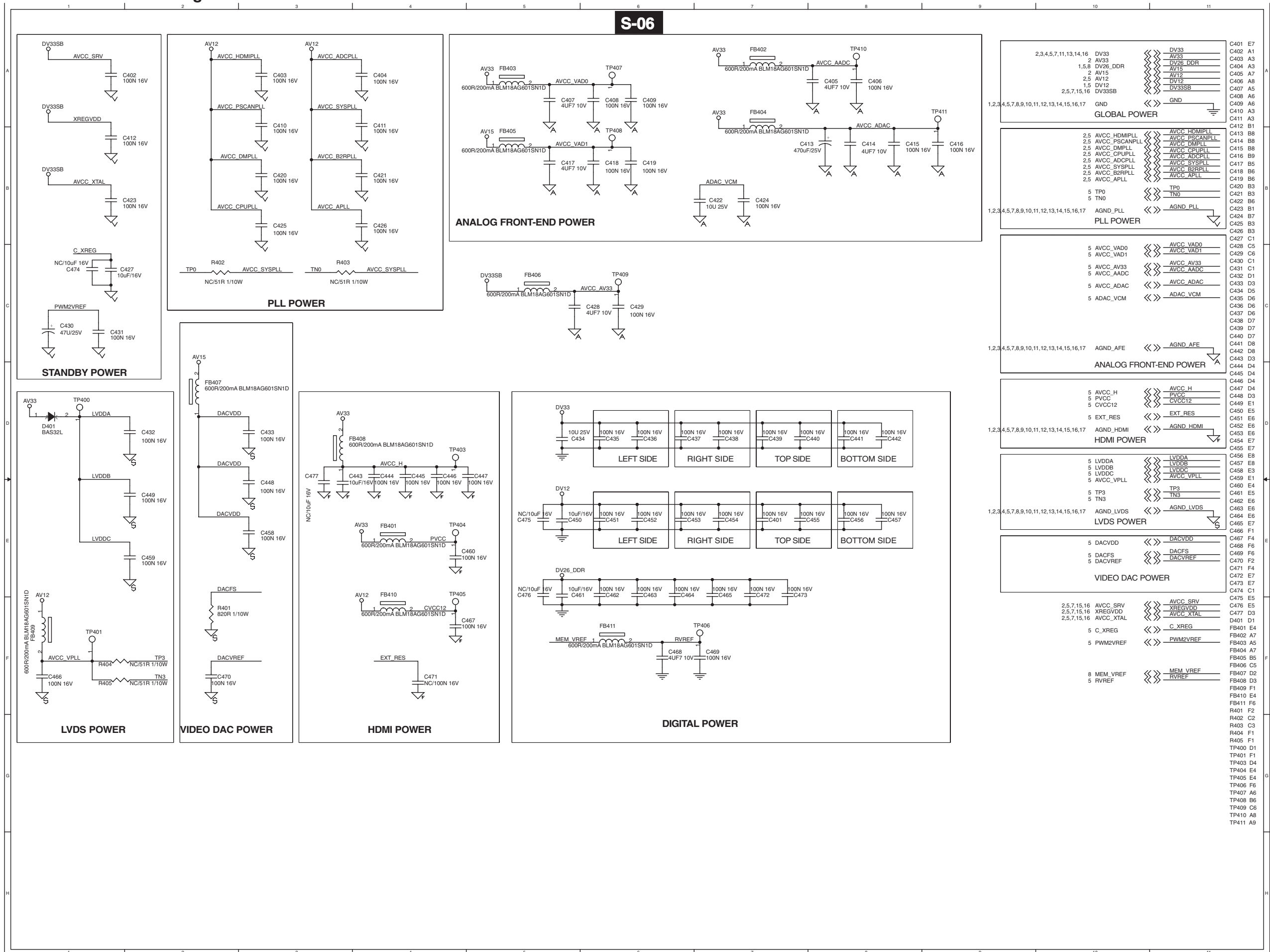


- C201 C3 C202 C3
- C203 C4 C204 C4
- C205 D3 C206 D3
- C207 E4 C208 G4
- C209 G3 C210 F3
- C211 G4 C212 F4
- C213 F4 C214 G2
- C215 C5 C216 C9
- C217 C2 C218 C7
- FB201 B3 FB202 D3
- FB203 B5 L201 C3
- L202 C3 Q201 F8
- Q202 F8 R201 E3
- R202 C4 R203 C3
- R204 C3 R205 D4
- R206 D4 R207 F2
- R208 F7 R209 F7
- R210 F9 R211 F9
- R212 F3 R213 G2
- R214 G3 R215 G4
- R216 D7 R217 C9
- R219 C8 R220 C8
- TP200 B3 TP201 C3
- TP202 D3 TU201 C1

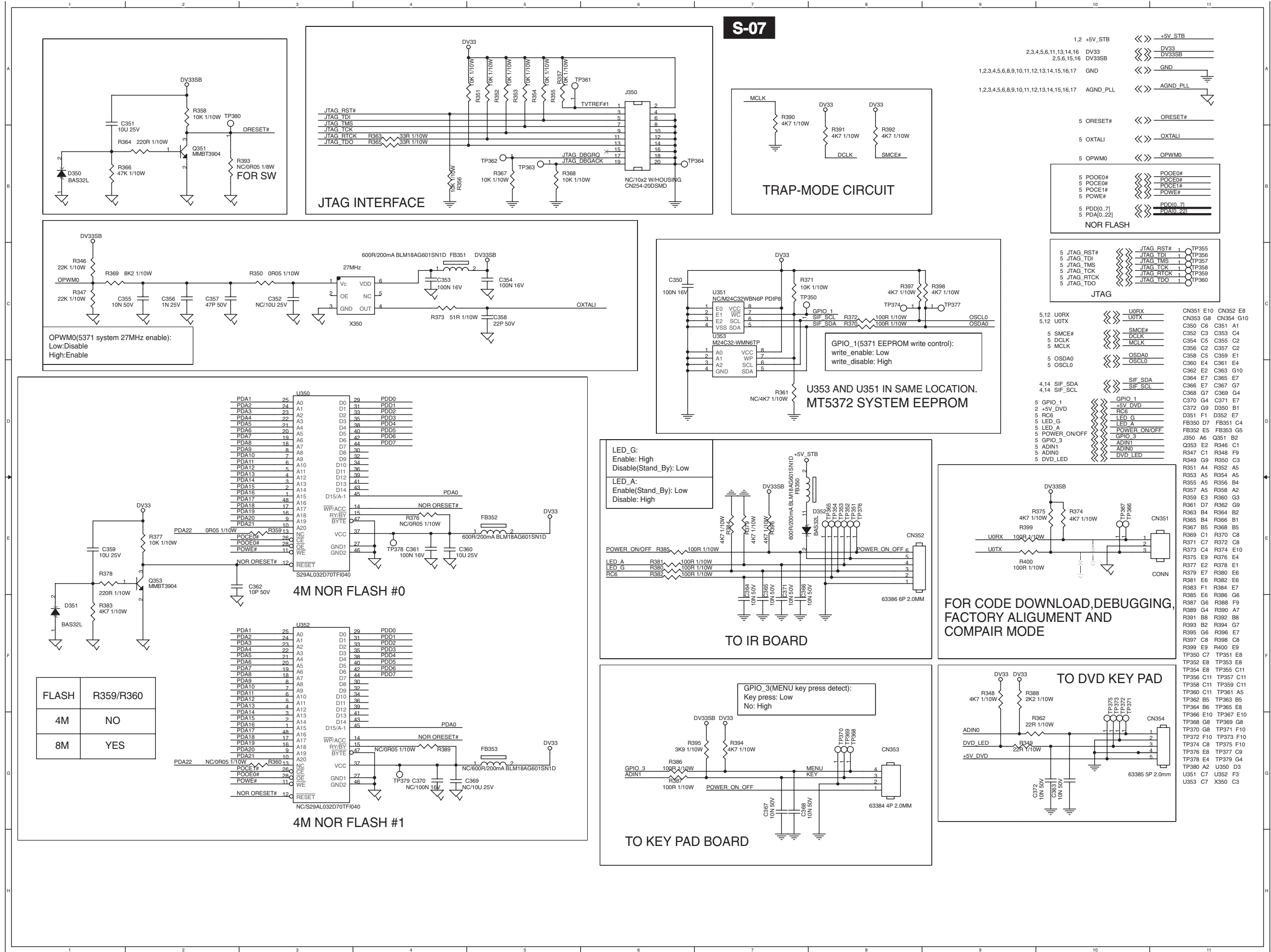
Scaler Board Schematic Diagram-ASIC



S-06

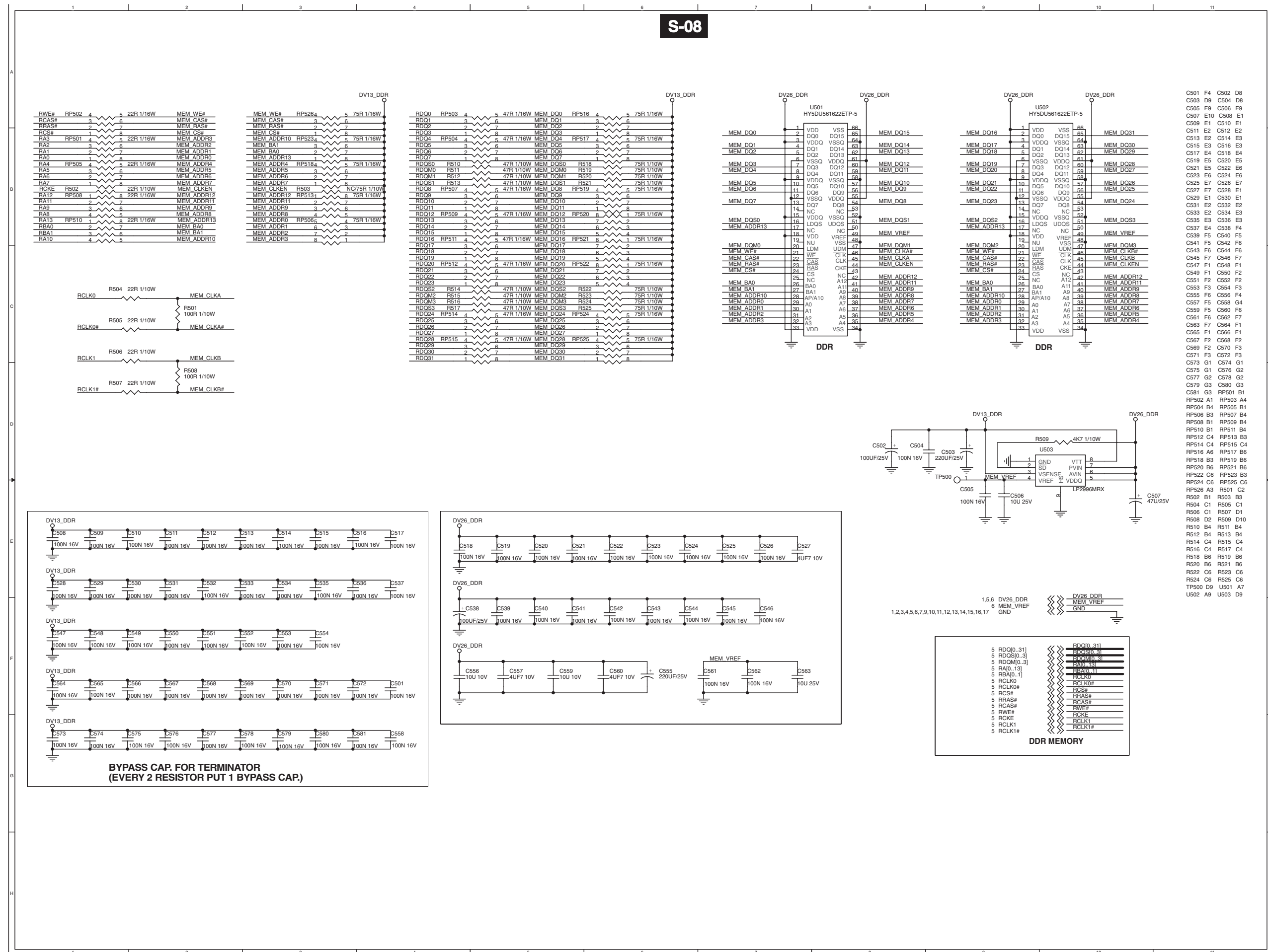


Scaler Board Schematic Diagram-Flash

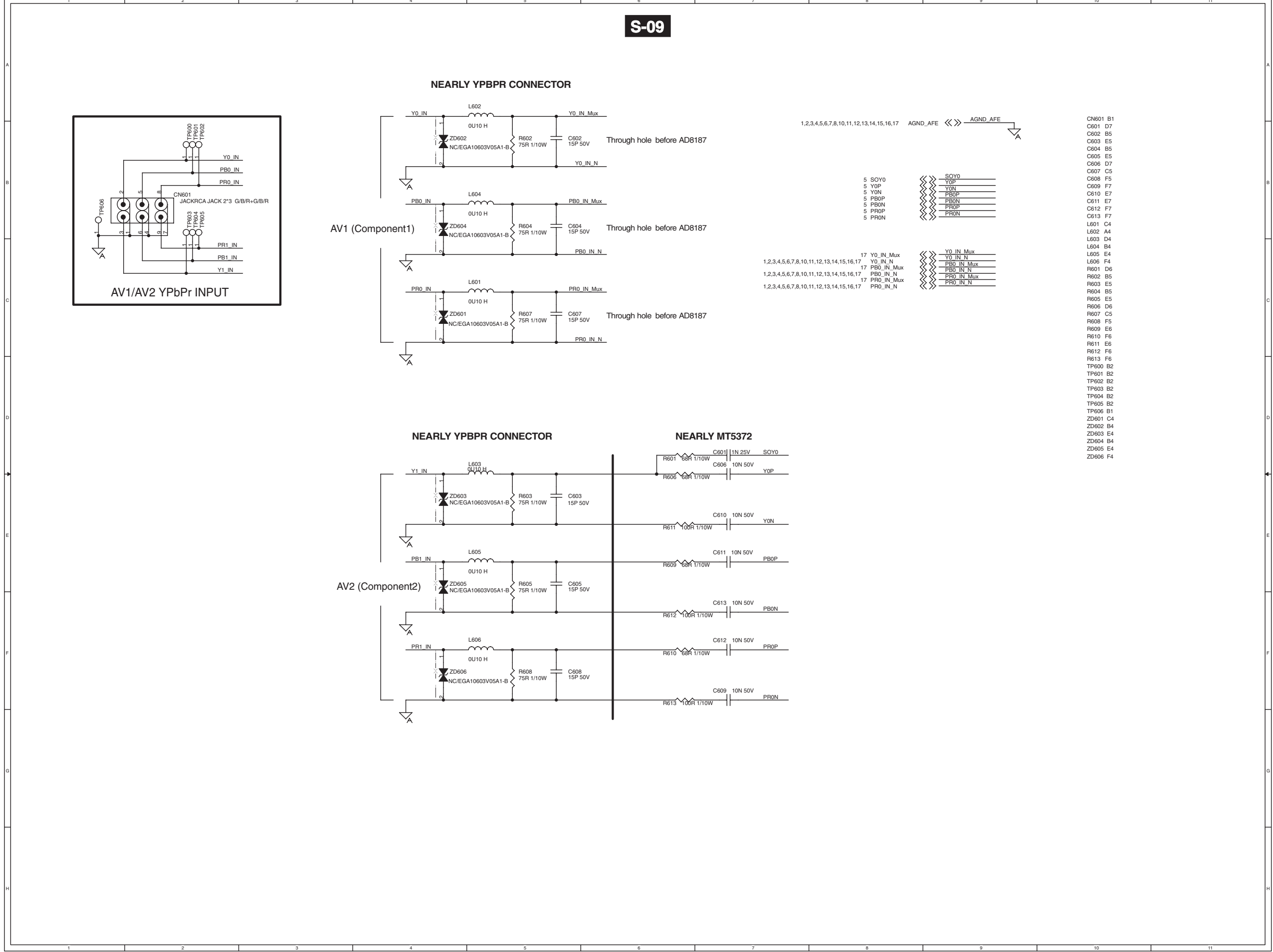


S-08

**BYPASS CAP. FOR TERMINATOR
(EVERY 2 RESISTOR PUT 1 BYPASS CAP.)**

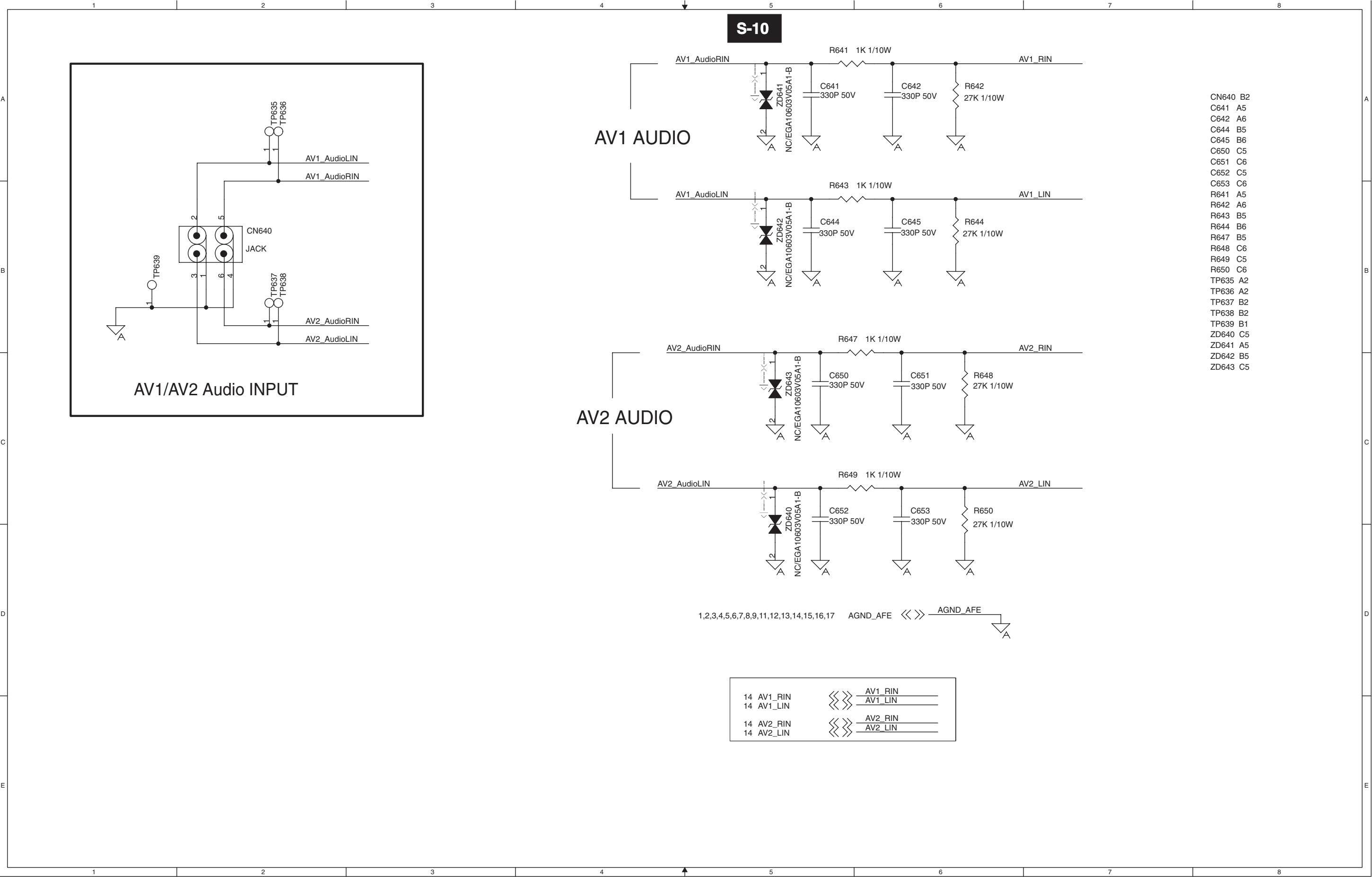


Scaler Board Scematic Diagram-AV1/AV2 YFbPrint

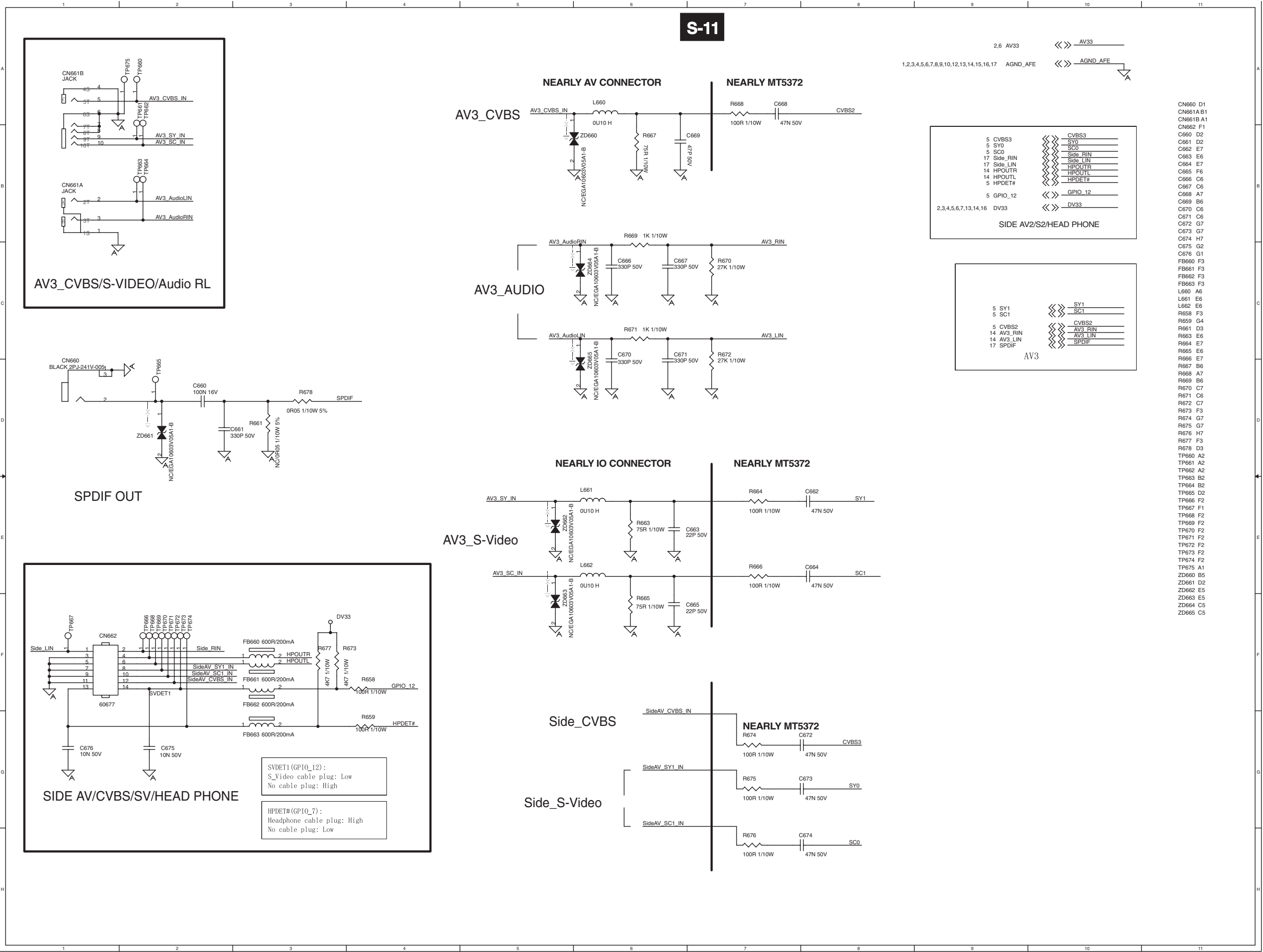


7. Circuit Diagrams and PWB Layouts

Scaler Board Schematic Diagram-AV1/AV2 Audio Input



Scaler Board Schematic Diagram-Side AV/AV3/SPDIF OUT



The schematic diagram illustrates the PC audio input section, featuring two main input paths: D-SUB INPUT and PC AUDIO INPUT.

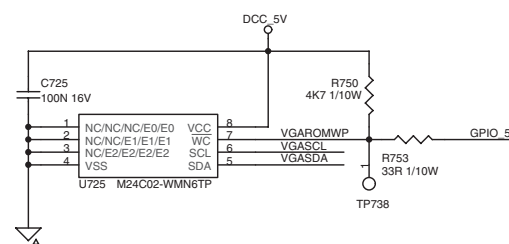
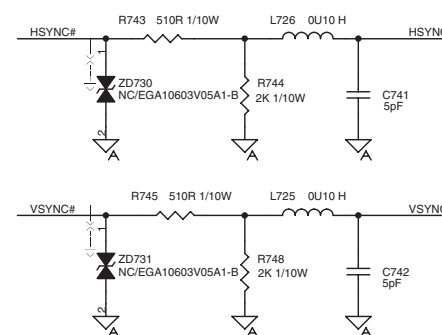
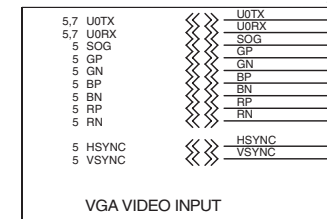
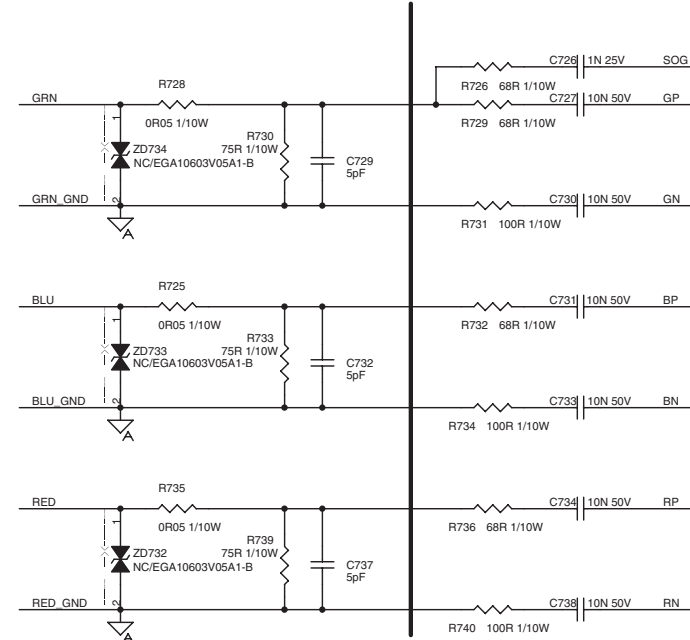
D-SUB INPUT: This section shows a D-sub connector (DB15 CN726) with pins 1 through 15. The connections are as follows:

- Pins 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, and 15 are connected to various input signals: VASCL_IN, VSYNC#, HSYNC#, VASDA_IN, and others.
- Pins 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, and 15 are connected to various input signals: VASCL_IN, VSYNC#, HSYNC#, VASDA_IN, and others.
- Pins 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, and 15 are connected to various input signals: VASCL_IN, VSYNC#, HSYNC#, VASDA_IN, and others.

PC AUDIO INPUT: This section shows a 25J-P523-A04 connector (CN727) with pins 1, 2, and 3. The connections are as follows:

- Pin 1 is connected to a 25J-P523-A04 connector (CN727).
- Pin 2 is connected to a 25J-P523-A04 connector (CN727).
- Pin 3 is connected to a 25J-P523-A04 connector (CN727).

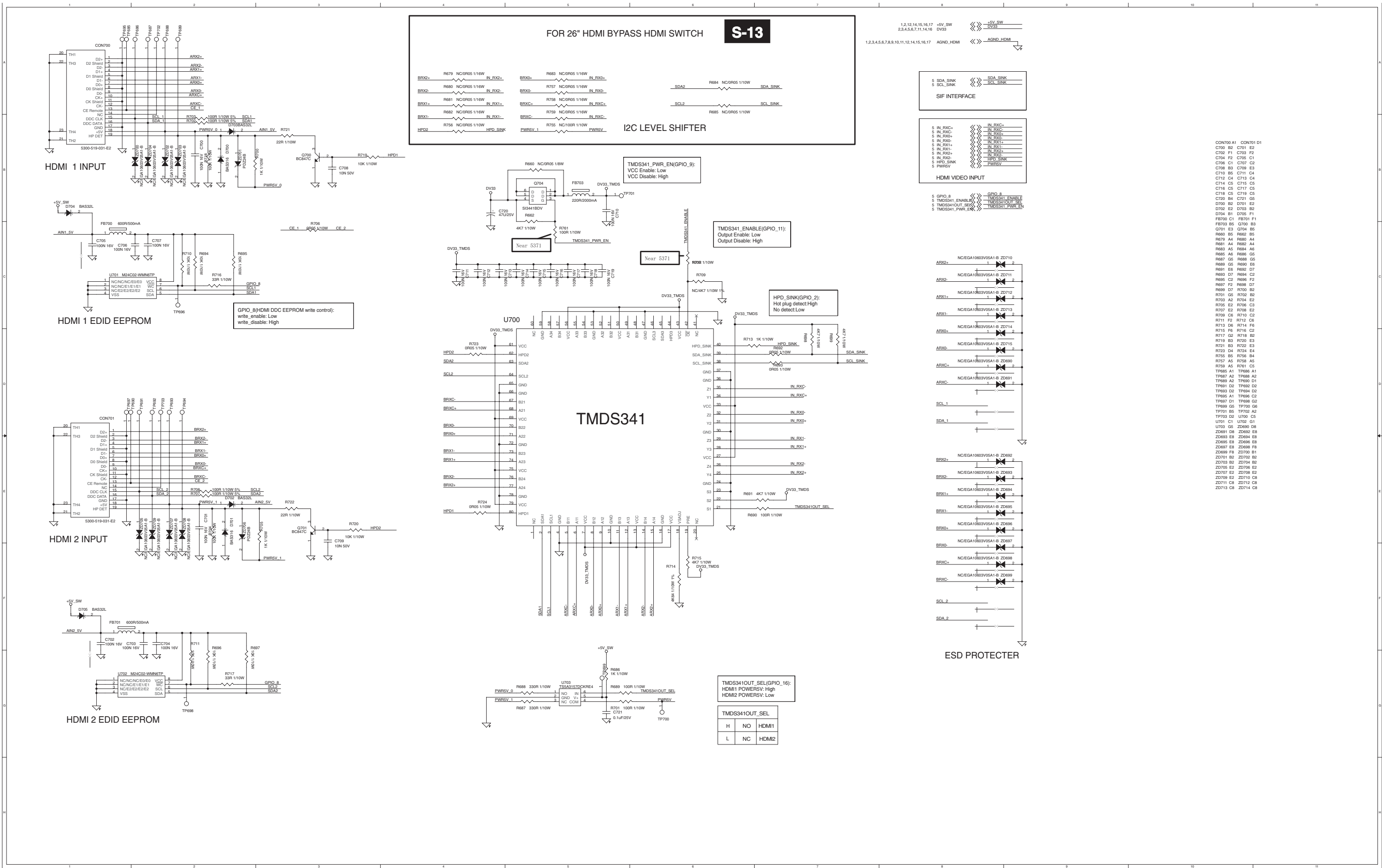
NEARLY MT5372



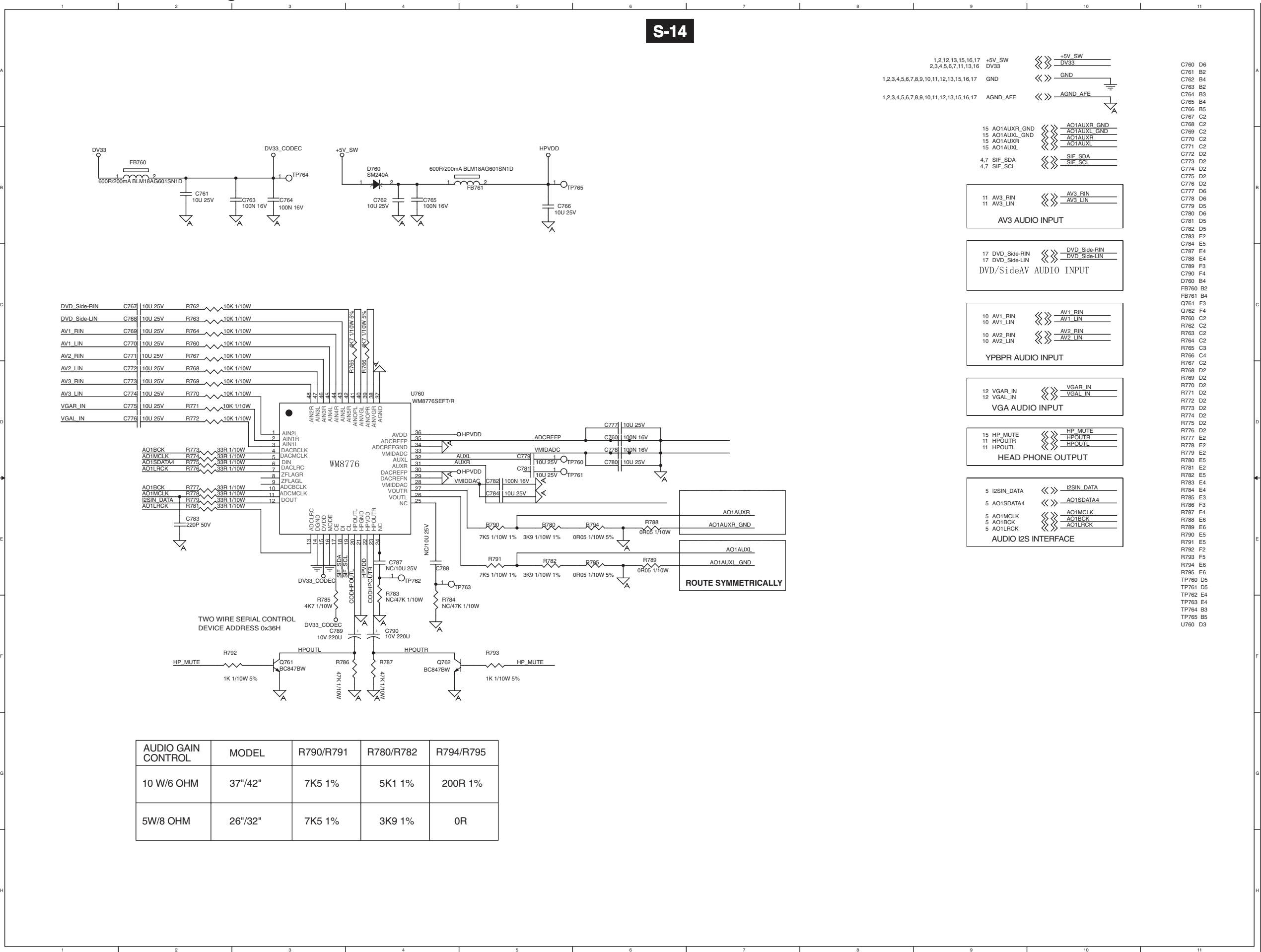
GPIO_5(PC DDC EEPROM write control):
write_enable: Low
write_disable: High

- CN726 B2
CN727 C1
C725 G5
C726 A8
C727 B8
C728 B4
C729 B6
C730 B8
C731 B8
C732 C6
C733 C8
C734 C8
C735 C3
C736 C3
C737 D6
C738 D8
C739 D3
C740 D3
C741 E7
C742 F7
C743 G2
C744 F2
D725 B4
D726 A4
FB725 C3
FB726 D3
LB725 E5
L726 E7
L727 E7
R726 A7
R727 B3
R728 B6
R729 B7
R730 B6
R731 B7
R732 B7
R733 C6
R734 C7
R735 C6
R736 C7
R737 C3
R738 C4
R739 D6
R740 D7
R741 D3
R742 D4
R743 E6
R744 E7
R745 E7
R746 E2
R747 A3
R748 E7
R749 E7
R750 G7
R751 F2
R752 B1
R753 G7
R754 G2
T725 A2
T726 A2
T727 A2
T728 A2
T729 A2
T730 A1
T731 A1
T732 A1
T733 A1
T734 C2
T735 D2
T736 A2
T737 B3
T738 B3
T739 B6
T740 G6
T742 B3
T743 B6
T744 B6
T745 B6
T746 B6
T747 B6
T748 B6
T749 B6
T750 B6
T751 B6
T752 B6
T753 B6
T754 B6
T755 B6
T756 B6
T757 B6
T758 B6
T759 B6
T760 B6
T761 B6
T762 B6
T763 B6
T764 B6
T765 B6
T766 B6
T767 B6
T768 B6
T769 B6
T770 B6
T771 B6
T772 B6
T773 B6
T774 B6
T775 B6
T776 B6
T777 B6
T778 B6
T779 B6
T780 B6
T781 B6
T782 B6
T783 B6
T784 B6
T785 B6
T786 B6
T787 B6
T788 B6
T789 B6
T790 B6
T791 B6
T792 B6
T793 B6
T794 B6
T795 B6
T796 B6
T797 B6
T798 B6
T799 B6
T800 B6
T801 B6
T802 B6
T803 B6
T804 B6
T805 B6
T806 B6
T807 B6
T808 B6
T809 B6
T810 B6
T811 B6
T812 B6
T813 B6
T814 B6
T815 B6
T816 B6
T817 B6
T818 B6
T819 B6
T820 B6
T821 B6
T822 B6
T823 B6
T824 B6
T825 B6
T826 B6
T827 B6
T828 B6
T829 B6
T830 B6
T831 B6
T832 B6
T833 B6
T834 B6
T835 B6
T836 B6
T837 B6
T838 B6
T839 B6
T840 B6
T841 B6
T842 B6
T843 B6
T844 B6
T845 B6
T846 B6
T847 B6
T848 B6
T849 B6
T850 B6
T851 B6
T852 B6
T853 B6
T854 B6
T855 B6
T856 B6
T857 B6
T858 B6
T859 B6
T860 B6
T861 B6
T862 B6
T863 B6
T864 B6
T865 B6
T866 B6
T867 B6
T868 B6
T869 B6
T870 B6
T871 B6
T872 B6
T873 B6
T874 B6
T875 B6
T876 B6
T877 B6
T878 B6
T879 B6
T880 B6
T881 B6
T882 B6
T883 B6
T884 B6
T885 B6
T886 B6
T887 B6
T888 B6
T889 B6
T890 B6
T891 B6
T892 B6
T893 B6
T894 B6
T895 B6
T896 B6
T897 B6
T898 B6
T899 B6
T900 B6
T901 B6
T902 B6
T903 B6
T904 B6
T905 B6
T906 B6
T907 B6
T908 B6
T909 B6
T910 B6
T911 B6
T912 B6
T913 B6
T914 B6
T915 B6
T916 B6
T917 B6
T918 B6
T919 B6
T920 B6
T921 B6
T922 B6
T923 B6
T924 B6
T925 B6
T926 B6
T927 B6
T928 B6
T929 B6
T930 B6
T931 B6
T932 B6
T933 B6
T934 B6
T935 B6
T936 B6
T937 B6
T938 B6
T939 B6
T940 B6
T941 B6
T942 B6
T943 B6
T944 B6
T945 B6
T946 B6
T947 B6
T948 B6
T949 B6
T950 B6
T951 B6
T952 B6
T953 B6
T954 B6
T955 B6
T956 B6
T957 B6
T958 B6
T959 B6
T960 B6
T961 B6
T962 B6
T963 B6
T964 B6
T965 B6
T966 B6
T967 B6
T968 B6
T969 B6
T970 B6
T971 B6
T972 B6
T973 B6
T974 B6
T975 B6
T976 B6
T977 B6
T978 B6
T979 B6
T980 B6
T981 B6
T982 B6
T983 B6
T984 B6
T985 B6
T986 B6
T987 B6
T988 B6
T989 B6
T990 B6
T991 B6
T992 B6
T993 B6
T994 B6
T995 B6
T996 B6
T997 B6
T998 B6
T999 B6
T1000 B6
T1001 B6
T1002 B6
T1003 B6
T1004 B6
T1005 B6
T1006 B6
T1007 B6
T1008 B6
T1009 B6
T1010 B6
T1011 B6
T1012 B6
T1013 B6
T1014 B6
T1015 B6
T1016 B6
T1017 B6
T1018 B6
T1019 B6
T1020 B6
T1021 B6
T1022 B6
T1023 B6
T1024 B6
T1025 B6
T1026 B6
T1027 B6
T1028 B6
T1029 B6
T1030 B6
T1031 B6
T1032 B6
T1033 B6
T1034 B6
T1035 B6
T1036 B6
T1037 B6
T1038 B6
T1039 B6
T1040 B6
T1041 B6
T1042 B6
T1043 B6
T1044 B6
T1045 B6
T1046 B6
T1047 B6
T1048 B6
T1049 B6
T1050 B6
T1051 B6
T1052 B6
T1053 B6
T1054 B6
T1055 B6
T1056 B6
T1057 B6
T1058 B6
T1059 B6
T1060 B6
T1061 B6
T1062 B6
T1063 B6
T1064 B6
T1065 B6
T1066 B6
T1067 B6
T1068 B6
T1069 B6
T1070 B6
T1071 B6
T1072 B6
T1073 B6
T1074 B6
T1075 B6
T1076 B6
T1077 B6
T1078 B6
T1079 B6
T1080 B6
T1081 B6
T1082 B6
T1083 B6
T1084 B6
T1085 B6
T1086 B6
T1087 B6
T1088 B6
T1089 B6
T1090 B6
T1091 B6
T1092 B6
T1093 B6
T1094 B6
T1095 B6
T1096 B6
T1097 B6
T1098 B6
T1099 B6
T1100 B6
T1101 B6
T1102 B6
T1103 B6
T1104 B6
T1105 B6
T1106 B6
T1107 B6
T1108 B6
T1109 B6
T1110 B6
T1111 B6
T1112 B6
T1113 B6
T1114 B6
T1115 B6
T1116 B6
T1117 B6
T1118 B6
T1119 B6
T1120 B6
T1121 B6
T1122 B6
T1123 B6
T1124 B6
T1125 B6
T1126 B6
T1127 B6
T1128 B6
T1129 B6
T1130 B6
T1131 B6
T1132 B6
T1133 B6
T1134 B6
T1135 B6
T1136 B6
T1137 B6
T1138 B6
T1139 B6
T1140 B6
T1141 B6
T1142 B6
T1143 B6
T1144 B6
T1145 B6
T1146 B6
T1147 B6
T1148 B6
T1149 B6
T1150 B6
T1151 B6
T1152 B6
T1153 B6
T1154 B6
T1155 B6
T1156 B6
T1157 B6
T1158 B6
T1159 B6

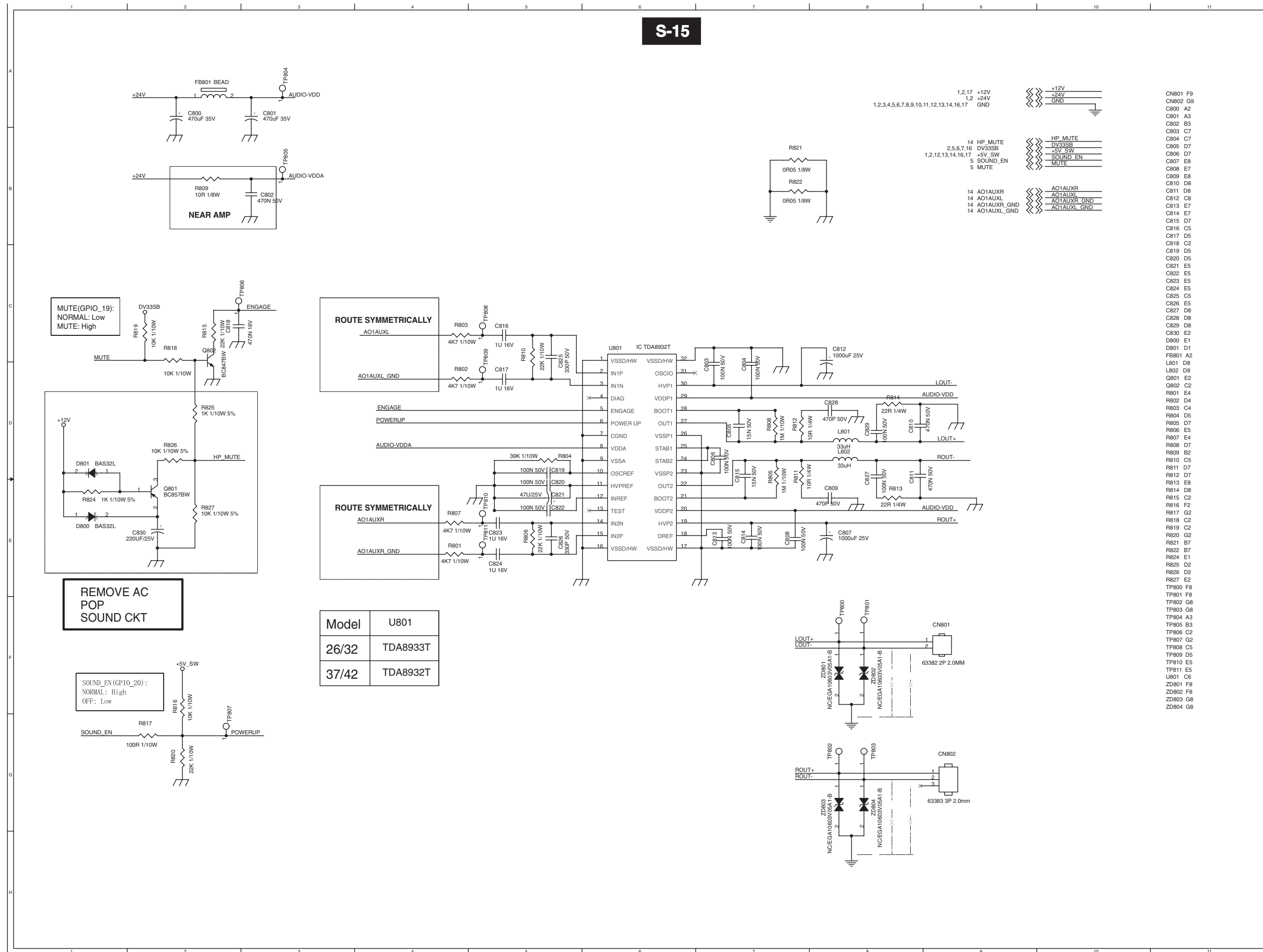
Scaler Board Schematic Diagram-HDMI INPUT



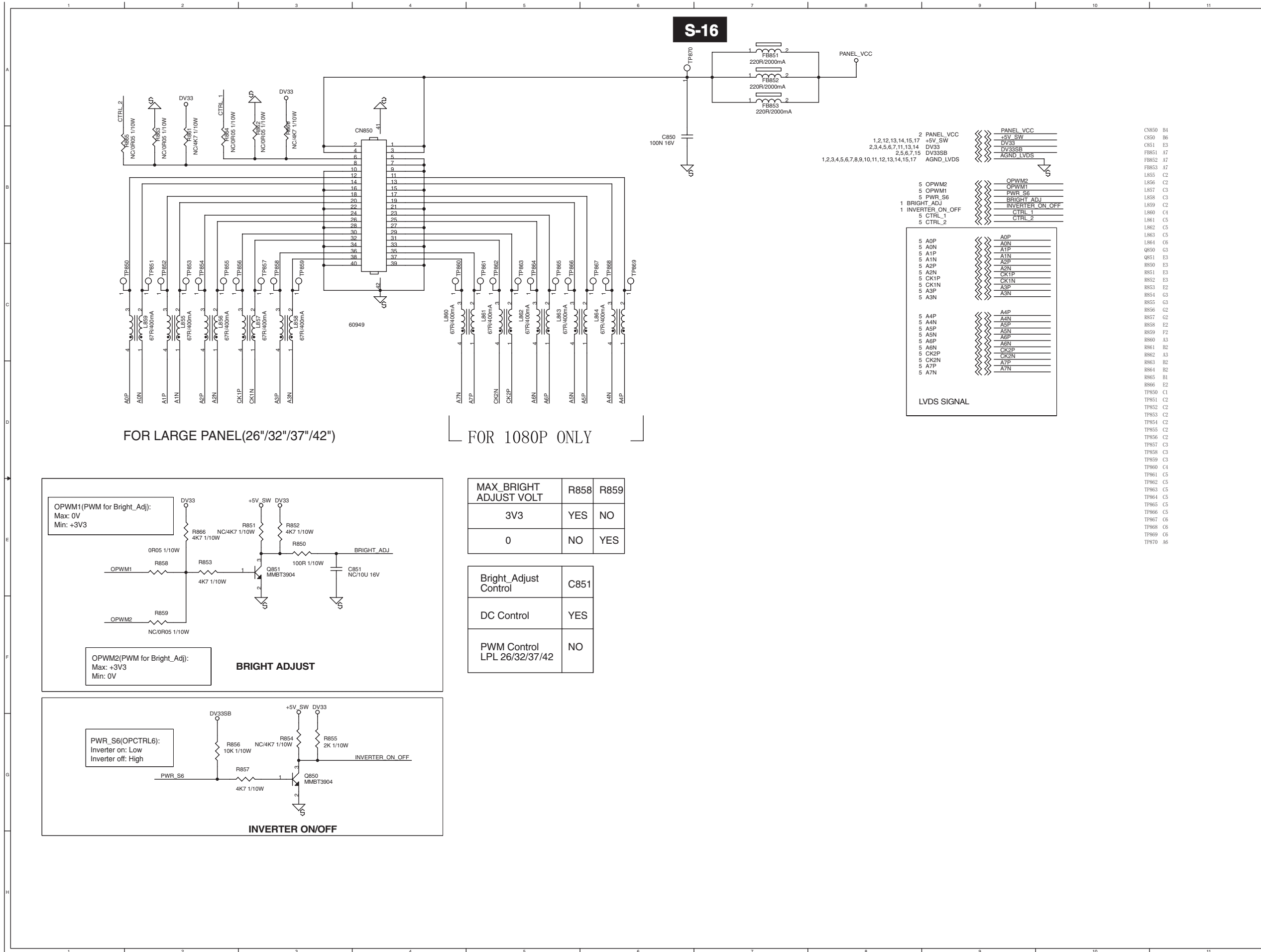
Scaler Board Schematic Diagram-AUDIO CODER



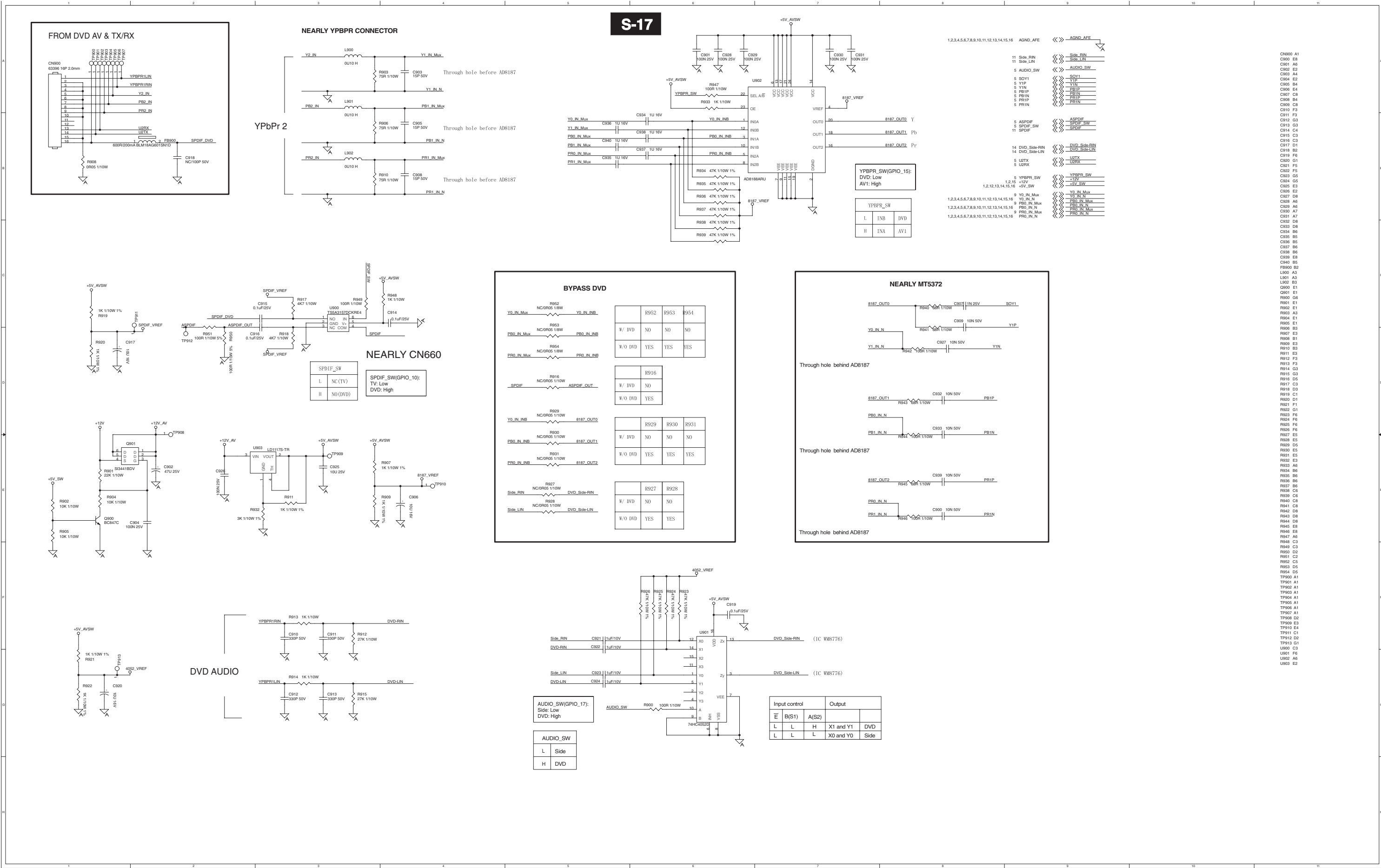
Scaler Board Schematic Diagram-AUDIO AMP



Scaler Board Schematic Diagram-LVDS INPUT



Scaler Board Schematic Diagram-DVD Interface



Scaler Board Schematic Diagram-PIN STATUS DEFINITION

S-18

PWR PINS STATUS

PWR	OPWRSB	OPCTRL0	OPCTRL1	OPCTRL2	OPCTRL3	OPCTRL4	OPCTRL5	OPCTRL6	OPCTRL7
Net name	OPWRSB	LED_G	PWR_ON/OFF	MUTE	PWR_S2	STAND_BY	DVD_LED	PWR_S6	LED_A
Function	+5V_SW/+2V6 /+1V2 enable	LED green light drive	POWER key press detect	MUTE enable	Panel_Vcc ON/OFF	Inverter_Vcc ON/OFF	DVD LED green light drive	Inverter ON/OFF	LED amber light drive
Low	Enable <Normal>	Disable <Stand_by>	Yes	Normal	Enable <Normal>	Disable <Stand_by>	Disable <Stand_by>	Enable <Normal>	Enable <Stand_by>
High	Disable <Stand_by>	Enable <Normal>	No	MUTE	Disable <Stand_by>	Enable <Normal>	Enable <Normal>	Disable <Stand_by>	Disable <Normal>

PWM PINS STATUS

PWM	OPWM0	OPWM1	OPWM2
Net name	OPWM0	OPWM1	OPWM2
Function	27MHz Enable	Bright Adj PWM (Max:3V3)	Bright Adj PWM (Max:0V)
Low	Disable <Stand_by>	Max Brightness	Min Brightness
High	Enable <Normal>	Min Brightness	Max Brightness

GPIO PINS STATUS

GPIO	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Net name			HPD_SINK		CTRL_1		CTRL_2	HPDET#		TMDS341_PWR_EN	SPDIF_SW	TMDS341_ENABLE	SVDET1			YPBPR_SW	TMDS341OUT_SEL	AUDIO_SW			SOUND_EN
Function	MTS112 RESET	5371 EEPROM write control	HDMI hot plug detect	MENU KEY press detect	Panel pin special setup	PC EEPROM write control	Panel pin special setup	Headphone plug detect	HDMI EEPROM write control	TMDS341 VCC enable	TV/DVD SPDIF switch	TMDS341 output enable	S_VIDEO detect			AV1/DVD YPBPR switch	HDMI_1/HDMI_2 switch	SIDE/DVD audio switch	TS packet error indicator		SOUND engage
Low	Active	Enable	No	Yes		Enable		No	Enable	Enable	TV	Enable	Yes			DVD	HDMI_2	SIDE			OFF
High	Normal	Disable	Yes	No		Disable		Yes	Disable	Disable	DVD	Disable	No			AV1	HDMI_1	DVD			Normal

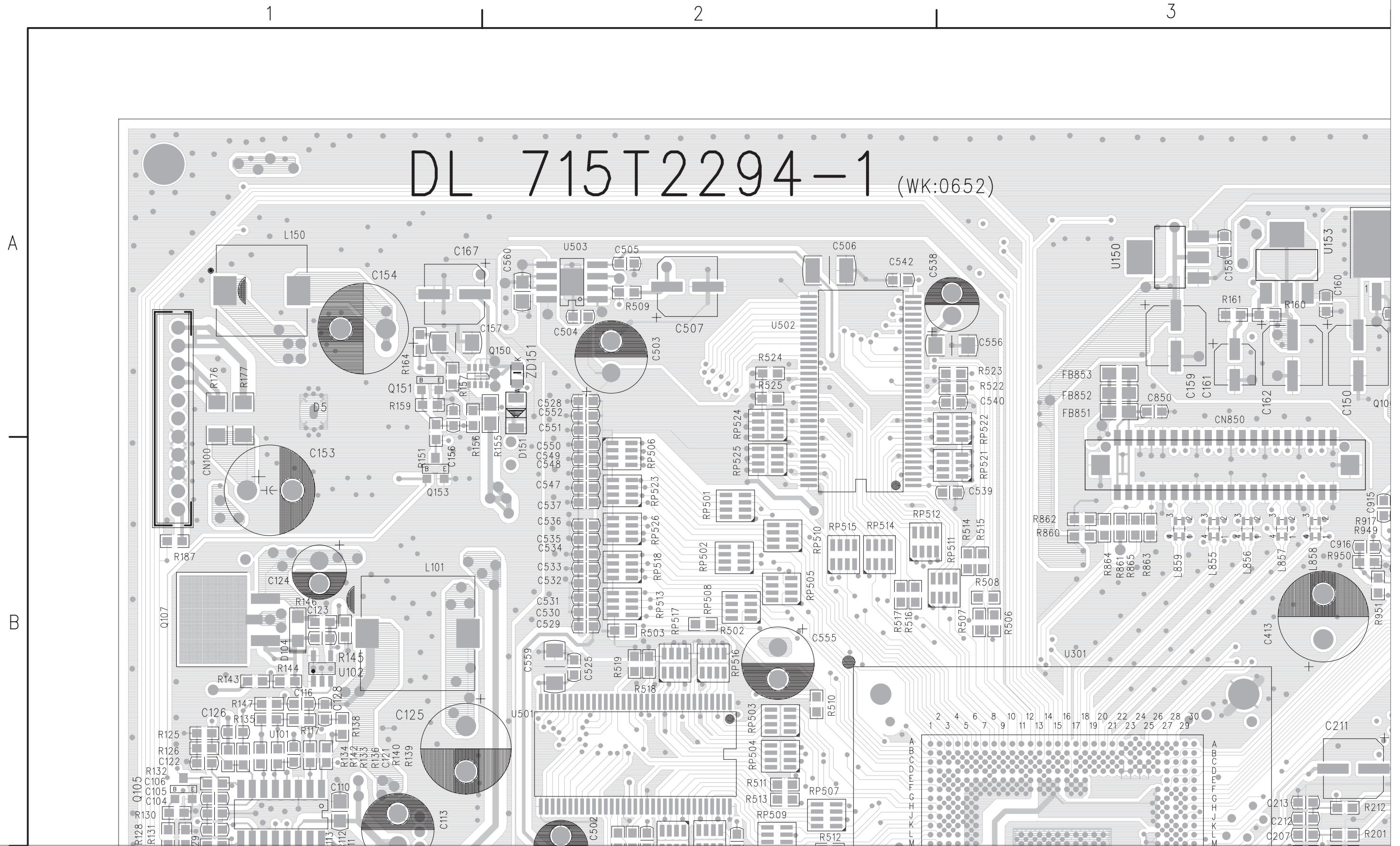
IR PINS STATUS

IR	OIRI	OIRO
Net name	RC6	
Function	Remote control RC6 code input	
Low	Disable <Stand_by>	
High	Enable <Normal>	

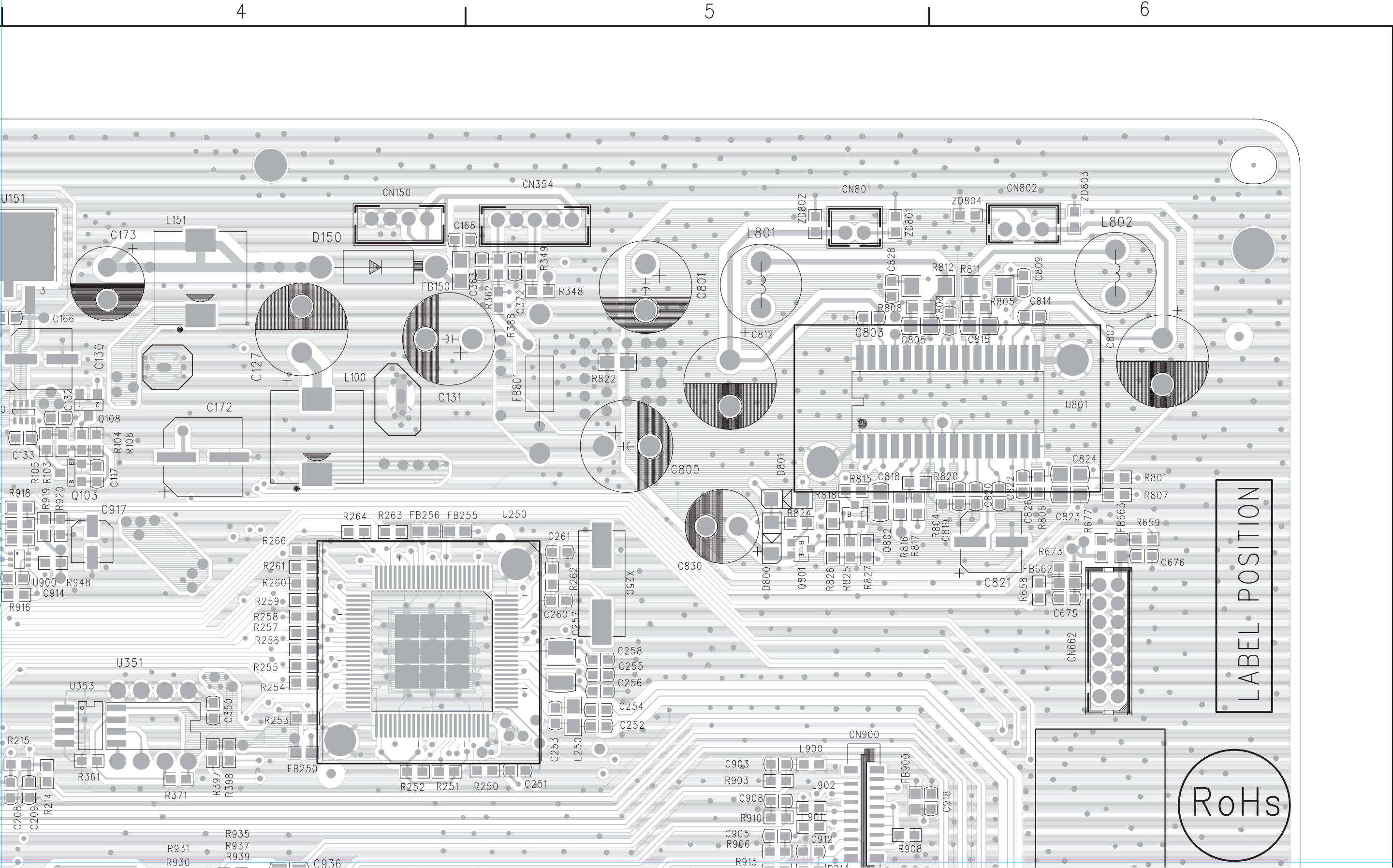
TPM1.0U LA 39

C100	C1	C364	C1	C737	C2	CN604	D4	Q762	C3	R260	B4	R675	C3	R861	B3	RF519	R2
C101	C1	C365	C1	C737	D2	CN610	D5	Q801	B5	R261	B4	R676	C3	R862	B3	RF520	C2
C102	C1	C366	C1	C741	D2	CN616	D6	Q820	B4	R262	B4	R677	C3	R863	B3	RF521	C2
C103	C1	C367	C1	C742	D2	CN622	D6	Q900	D4	R263	B4	R678	D3	R864	B3	RF522	B3
C104	B1	C368	C1	C742	D42	CN662	B6	Q901	D4	R264	B4	R679	D1	R865	B3	RF523	B2
C105	C1	C369	C1	C743	D42	CN668	D6	Q902	D4	R265	B4	R680	D1	R866	B3	RF524	B2
C106	B1	C370	A5	C744	D742	CN727	D4	R104	A4	R348	A5	R681	D1	R901	B3	RF525	B2
C107	C1	C371	C3	C745	D42	CN733	D6	R105	A4	R349	A5	R682	D1	R902	B3	RF526	B2
C108	C1	C372	C3	C746	D42	CN739	D6	R106	A4	R350	A5	R683	D1	R903	B5	TU201	D6
C109	C1	C373	C3	C749	C5	CN802	A6	R104	C2	R348	C2	R683	C1	R903	B5	TU201	D6
C110	C1	C374	C3	C800	B5	CN850	B3	R107	C1	R361	B4	R684	C1	R904	B3	TU202	D6
C111	C1	C375	C3	C801	B5	CN856	B3	R107	C1	R362	B4	R685	C1	R905	B3	TU203	D6
C111	C1	C504	A2	C803	A5	CN700	D2	R109	C1	R374	B4	R686	C1	R906	B5	U102	R1
C112	C1	C505	A2	C804	A5	CN706	D2	R110	C1	R375	B4	R687	C1	R907	B5	U103	R1
C114	C1	C505	A2	C806	A6	D103	C1	R111	C1	R375	D1	R688	C1	R908	B5	U151	A4
C115	C1	C506	A2	C807	A6	D104	C1	R112	C1	R376	D1	R689	C1	R909	B5	U152	A4
C11	B4	C507	A2	C808	A6	D105	C2	R113	C1	R377	C1	R690	C2	R910	B5	U153	C3
C121	B1	C518	B2	C812	A5	D151	A1	R116	C1	R380	C1	R691	C2	R912	C5	U250	B4
C122	B1	C519	B2	C813	A5	D152	A1	R117	C1	R381	C1	R692	C2	R913	C5	U251	B4
C123	B1	C520	B2	C815	A5	D151	A2	R116	C1	R382	C1	R693	C1	R914	C5	U350	C2
C124	B1	C521	B2	C816	A5	D152	A2	R117	C1	R383	C1	R694	C1	R915	C5	U351	C2
C125	B1	C520	B2	C819	B16	D725	D2	R118	C1	R385	C1	R699	C2	R916	B4	U353	B4
C126	B1	C520	B2	C820	B6	D726	D2	R119	C1	R386	C1	R701	C1	R917	B4	U501	B2
C127	B1	C521	B2	C821	B6	D727	D2	R120	C1	R387	C1	R702	C1	R918	B4	U502	A2
C128	B1	C532	B2	C822	B801	B5	R121	C1	R388	A5	R712	C1	R919	B4	U503	A2	
C129	B1	C533	B2	C823	B802	B5	R122	C1	R389	A5	R713	C1	R920	B4	U504	A2	
C131	A4	C534	B2	C824	B6	FB201	D5	R123	C1	R395	C1	R714	D2	R921	D5	U703	C1
C134	A4	C535	B2	C826	B6	FB202	C3	R125	B1	R396	C1	R715	D2	R922	D5	U801	A6
C135	A4	C536	B2	C827	B6	FB203	C3	R126	B1	R397	C1	R716	D2	R923	D5	U802	A6
C150	A3	C537	B2	C830	B350	FB250	B4	R127	C1	R398	B4	R726	C3	R924	B5	U901	D5
C151	A3	C538	B2	C831	B350	FB251	B4	R128	C1	R399	B4	R727	C3	R925	B5	U902	D5
C153	B1	C539	B3	C900	C3	FB256	B4	R139	B1	R502	B2	R728	D2	R926	D5	U903	A3
C154	B1	C540	B3	C901	C3	FB257	B4	R140	B1	R503	B2	R729	D2	R927	D5	U904	A3
C155	C2	C542	A2	C902	C3	FB266	B6	R131	B1	R504	C2	R730	D2	R928	D5	X350	C3
C156	A1	C547	B2	C903	B5	FB663	B6	R132	B1	R505	C2	R731	C3	R929	A4	ZD151	A2
C157	A1	C548	B2	C904	B5	FB664	B6	R133	B1	R506	C2	R732	C3	R930	A4	ZD152	A2
C158	A3	C549	B2	C905	B5	FB665	B6	R134	B1	R507	B3	R733	D2	R931	C4	ZD602	A4
C159	A3	C550	B2	C906	B5	FB666	B6	R135	B1	R508	B3	R734	D2	R932	C4	ZD603	A4
C160	A3	C551	A2	C907	C3	FB852	A3	R136	B1	R509	A2	R735	D2	R933	C4	ZD604	A4
C161	A3	C552	A2	C908	B5	FB853	A3	R137	B1	R510	A2	R736	C3	R934	C4	ZD605	A4
C162	A3	C553	A2	C909	B5	FB854	A3	R138	B1	R511	A2	R737	C3	R935	C4	ZD606	A4
C163	C3	C556	A2	C910	C5	L100	A4	R139	B1	R512	C2	R740	C3	R936	C4	ZD661	C3
C164	C3	C557	A2	C911	C5	L101	A4	R140	B1	R513	C2	R741	C3	R937	C4	ZD662	C3
C165	C4	C556	A2	C912	B5	L102	C1	R142	B1	R514	B3	R744	D3	R938	C4	ZD663	A4
C166	A4	C601	C3	C913	C5	L150	A1	R143	B1	R515	B3	R745	D2	R939	C4	ZD690	A4
C167	A4	C602	C3	C914	C5	L151	A1	R144	B1	R516	B3	R746	D2	R940	C4	ZD691	A4
C168	A4	C603	C3	C915	C5	L250	B5	R145	B1	R517	B2	R747	D2	R941	C3	ZD692	D1
C169	A4	C604	C3	C916	C5	L251	B5	R146	B1	R518	B2	R748	D2	R942	C3	ZD693	D1
C173	A4	C606	C3	C917	B4	L602	D4	R147	B1	R519	B2	R749	D2	R943	C3	ZD694	D1
C200	C3	C607	C3	C918	B4	L603	D4	R148	B1	R520	B2	R750	D2	R944	C3	ZD695	D1
C202	D5	C609	C3	C919	B4	L604	D4	R151	B1	R521	C2	R752	D2	R945	C3	ZD696	D1
C203	D5	C610	C3	C920	B4	L605	D4	R155	A2	R522	C3	R754	D2	R946	C3	ZD697	D1
C204	D5	C611	C3	C921	B4	L606	D4	R156	A2	R523	C3	R755	D2	R947	C3	ZD698	D1
C206	C5	C612	C3	C922	D5	L660	D4	R157	A2	R524	A2	R757	C1	R948	B4	ZD699	D1
C207	C5	C613	C3	C923	D5	L661	D4	R158	A2	R525	A2	R758	C1	R949	B4	ZD700	D1
C208	A4	C650	D5	C924	C2	L726	D3	R160	A3	R601	C3	R759	D1	R950	B3	ZD711	D2
C209	A4	C650	D5	C925	C4	L801	A5	R161	A3	R602	D4	R761	D2	R951	B3	ZD712	D2
C210	A4	C651	D5	C926	C4	L802	A5	R162	A3	R603	D4	R762	D2	R952	B3	ZD713	D2
C212	B3	C661	D4	C927	C2	L855	B3	R166	C1	R604	D4	R793	C5	R953	C4	ZD714	D2
C213	B3	C662	D4	C928	C2	L856	B3	R167	C1	R605	D4	R794	C5	R954	C4	ZD715	D2
C214	C5	C665	D4	C929	C4	L857	B3	R176	A4	R607	D5	R804	B6	RF501	B2	ZD725	D2
C215	C5	C669	D4	C930	C4	L858	B3	R177	A4	R608	C2	R805	A6	RF502	B2	ZD726	D2
C216	C5	C670	D4	C931	C4	L859	B3	R178	A4	R609	C2	R806	A6	RF503	B2	ZD727	D2
C251	B5	C673	C3	C932	C3	L900	B5	R201	B3	R611	C3	R807	B6	RF504	B2	ZD730	D3
C252	B5	C674	C3	C933	C3	L901	B5	R202	B3	R612	C3	R808	B6	RF505	B2	ZD731	D3
C253	B5	C676	B6	C934	C4	L902	B5	R213	C3	R613	C3	R811	A6	RF506	B2	ZD732	D2
C254	B5	C677	B6	C935	C4	L903	B5	R214	C3	R614	C3	R812	A6	RF507	B2	ZD733	D2
C255	B5	C710	D2	C936	C4	L1003	B4	R215	B4	R615	B6	R815	B5	RF508	B2	ZD734	D2
C256	B5	C720	D2	C937	C4	L1014	C1	R250	B5	R656	B6	R816	B5	RF509	C2	ZD735	D2
C257	B5	C721	D2	C938	C4	L1015	C1	R251	B5	R657	B6	R817	B5	RF510	C2	ZD736	D2
C258	B5	C726	C3	C939	C3	Q106	C1	R252	B5	R660	C2	R818	B5	RF511	B2	ZD801	A5
C259	B5	C727	C3	C940	C3	Q107	C1	R253	B5	R661	C2	R819	B5	RF512	B2	ZD802	A5
C261	B5	C728	D2	CN100	A1	Q108	A4	R254	B4	R662	C2	R822	A5	RF513	B2	ZD803	A6
C350	A4	C729	D2	CN150	A4	Q150	A1	R255	B4	R663	D4	R824	B5	RF514	B2	ZD804	A6
C351	A4	C730	D2	CN151	A4	Q151	A1	R256	B4	R664	D4	R825	B5	RF515	B2	ZD805	A6
C359	C2	C731	C3	CN352	C1	Q153	B5	R257	B5	R674	D4	R826	B5	RF516	B2	ZD806	A6
C360	C2	C732	C3	CN353	C1	Q154	B5	R258	B5	R675	D4	R827	B5	RF517	B2	ZD807	A6
C363	A5	C733	C3	CN354	A5	Q761	C5	R259	B4	R674	C3	R860	B3	RF518	B2		

Scaler Board Layout-(TOP LEFT)

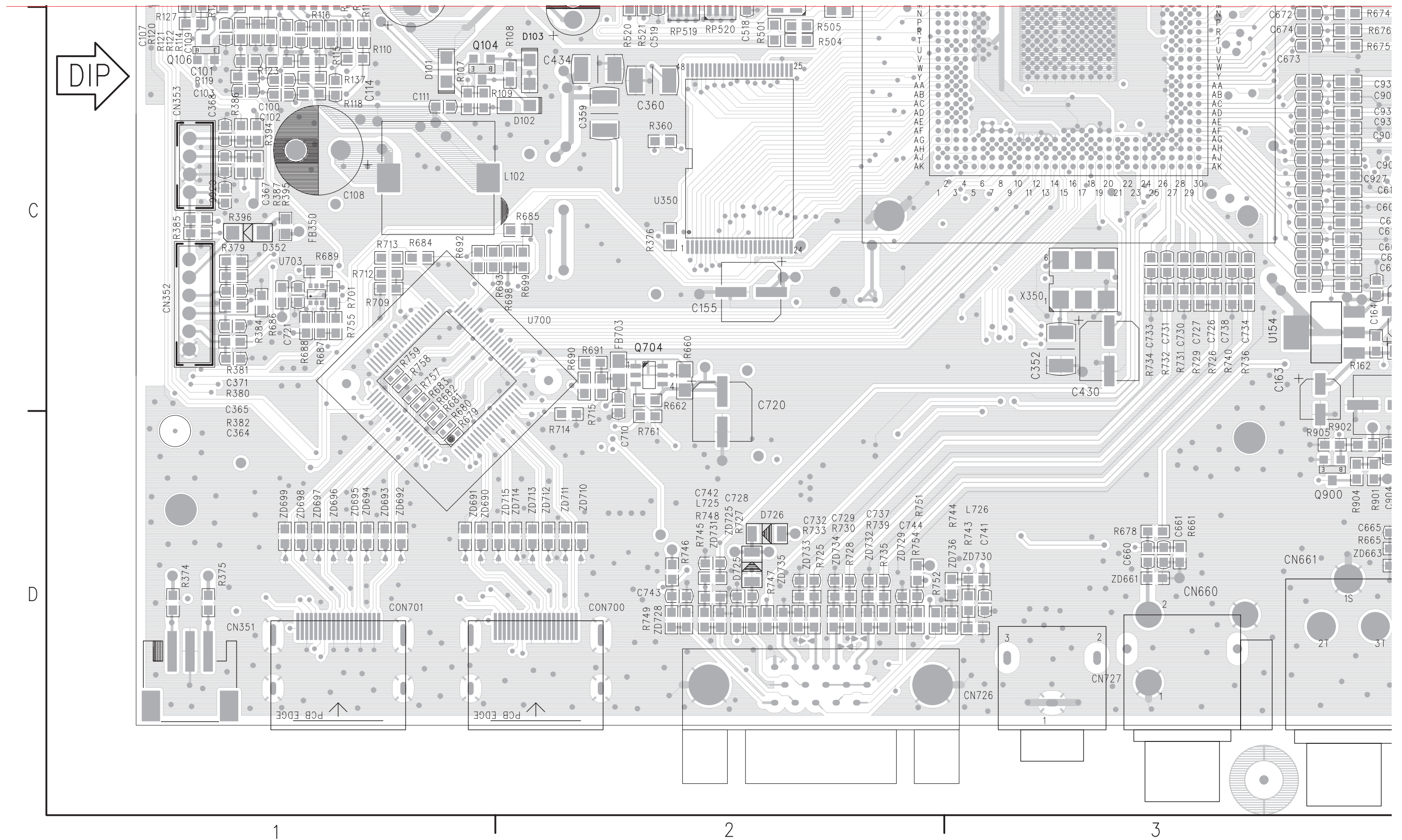


Printer Board Layout(TOP RIGHT)

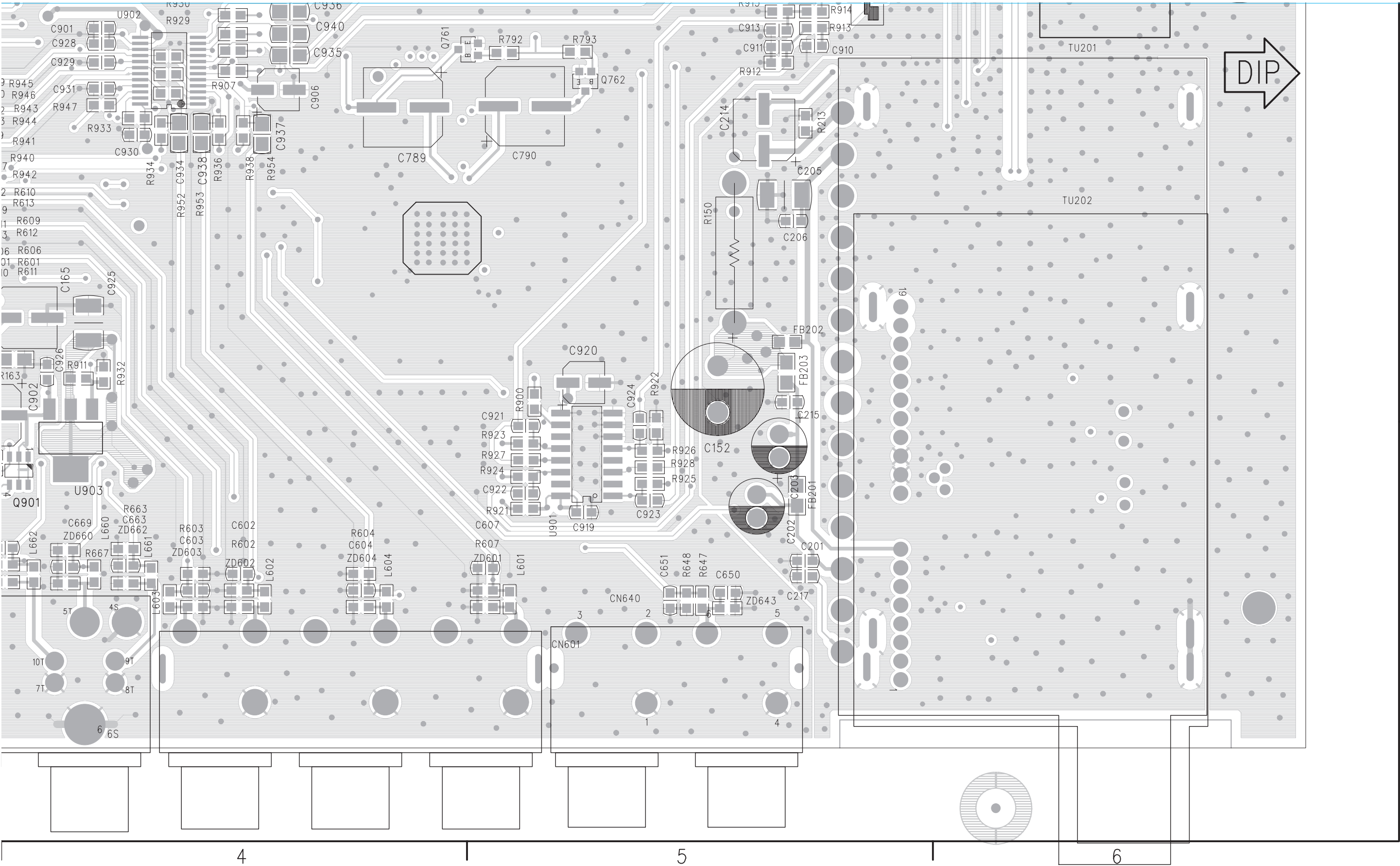


7. Circuit Diagrams and PWB Layouts

Scaler Board Layout-(BOTTOM LEFT)

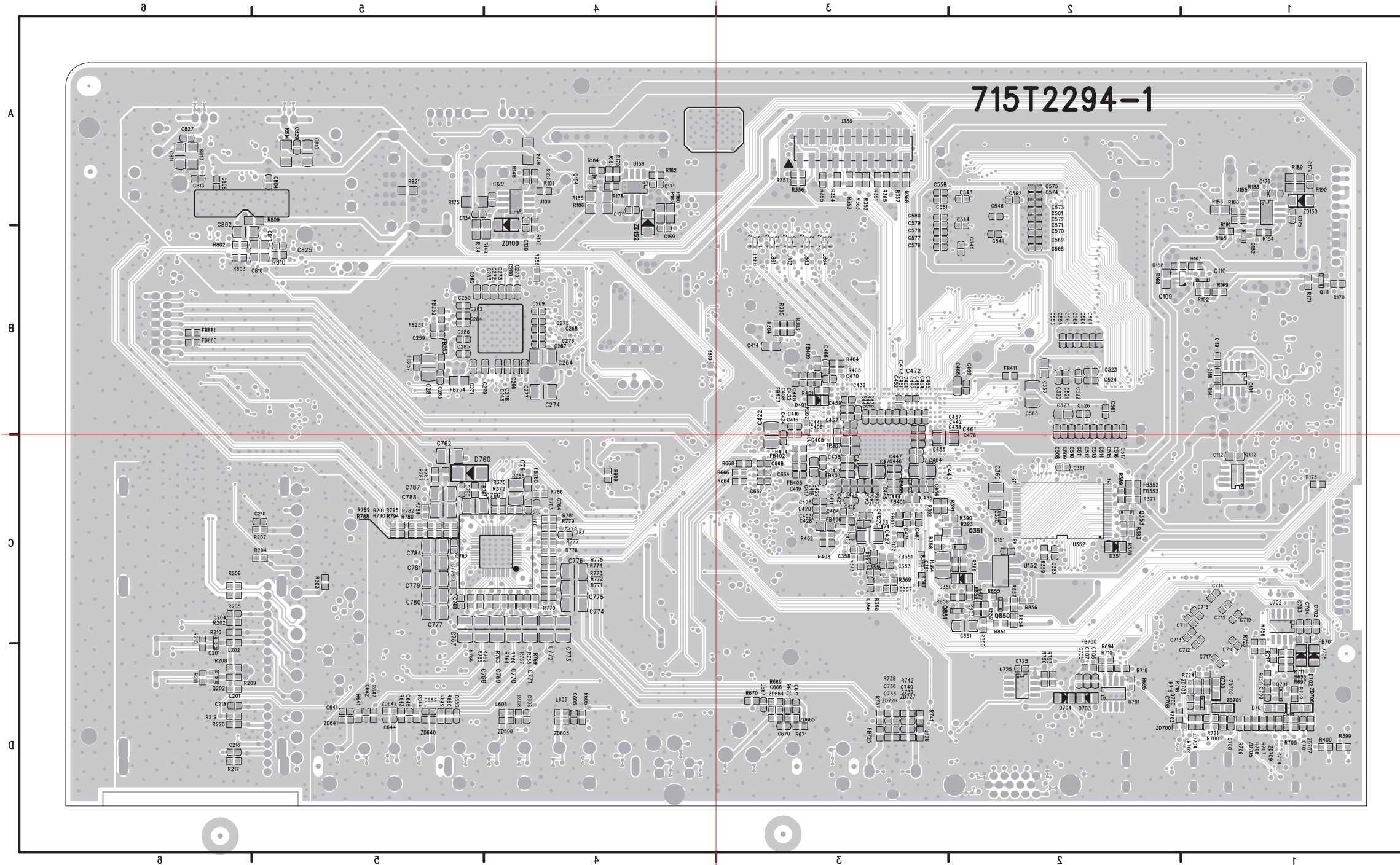


Scaler Board Layout(BOTTOM RIGHT)



7. Circuit Diagrams and PWB Layouts

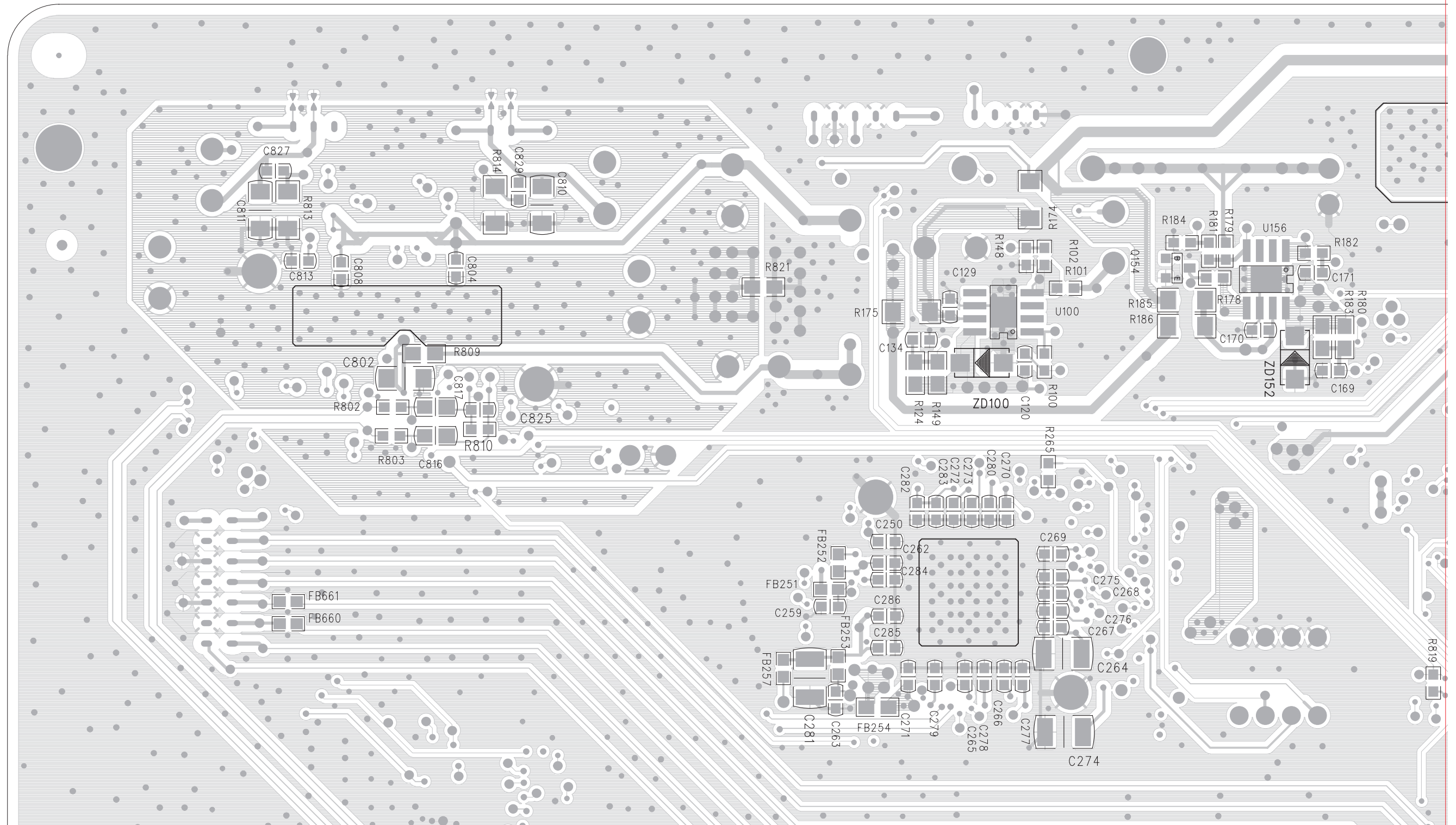
Scaler Board Layout-2



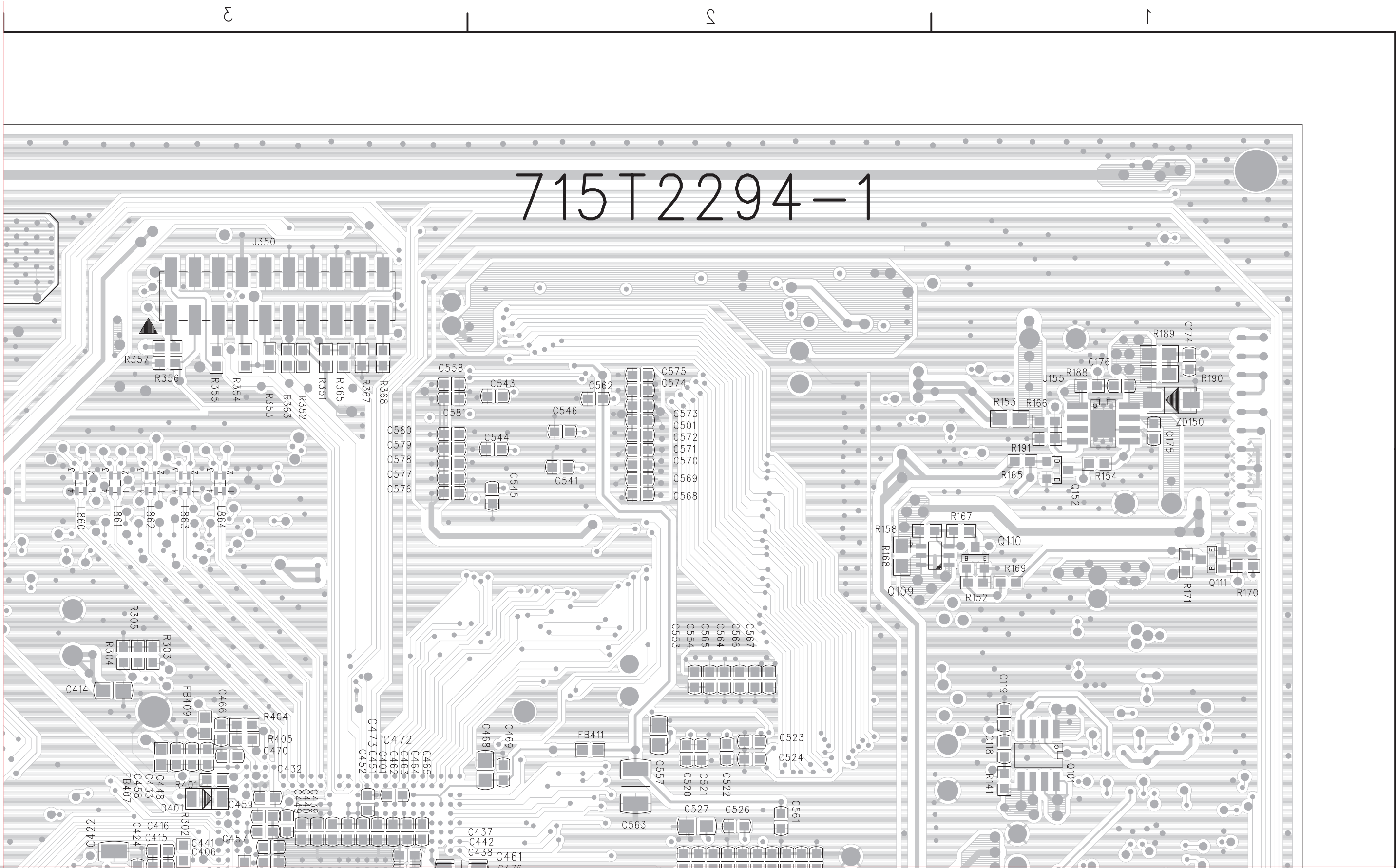
A	C112	C1	C414	B3	C512	C2	C709	D1	B254	B5	R172	C3	R399	D1	R776	C4
	C118	B1	C415	B3	C513	C2	C711	C1	B255	B5	R173	C1	R400	D1	R777	C4
	C119	B1	C416	B3	C514	C2	C712	D1	FB351	C3	R174	A4	R401	B3	R778	C4
	C120	A4	C417	C3	C515	C2	C713	C1	FB352	C2	R175	A5	R402	C3	R779	C4
	C121	A4	C418	C3	C516	C2	C714	C1	FB353	C2	R176	A5	R403	C3	R780	C4
	C134	A5	C419	C3	C517	C2	C715	C1	FB401	C3	R179	A4	R404	B3	R781	C4
	C151	C2	C420	C3	C520	B2	C716	C1	FB402	C3	R180	A4	R405	B3	R782	C5
	C169	B4	C421	C3	C521	B2	C717	D1	FB403	C3	R181	A4	R605	D4	R783	C5
	C170	A4	C422	C3	C522	B2	C718	D1	FB404	C3	R182	A4	R608	D1	R784	C5
	C171	A4	C423	C3	C523	B2	C719	D1	FB405	C3	R183	A4	R610	D1	R785	C5
B	C174	A1	C424	C3	C524	B2	C725	D1	FB406	C3	R184	A4	R642	D5	R786	C4
	C175	A1	C425	C3	C526	B2	C735	D3	FB407	B3	R185	A4	R643	D5	R787	C5
	C176	A1	C426	C3	C527	B2	C736	D3	FB408	C3	R186	A4	R644	D5	R788	C5
	C177	A1	C427	C3	C528	B2	C737	D3	FB409	C3	R187	A4	R645	D5	R789	C5
	C210	C5	C428	C3	C543	B2	C740	D3	FB410	C3	R189	A1	R650	D5	R790	C5
	C216	D6	C429	C3	C544	B2	C760	C5	FB411	B2	R190	A1	R664	C3	R791	C5
	C218	D6	C431	C3	C545	B2	C761	C4	FB660	B6	R191	A1	R666	C3	R794	C5
	C230	B5	C432	B3	C546	A2	C762	C5	FB661	B6	R202	C6	R668	C3	R795	C5
	C231	B5	C433	B3	C547	A2	C763	C5	FB662	B6	R203	C6	R669	C3	R796	C5
	C262	B5	C435	C3	C554	B2	C764	C4	FB701	C1	R204	C5	R670	C3	R803	B6
C	C263	B5	C436	C3	C557	B2	C765	C5	FB725	D3	R205	C6	R671	D3	R809	A5
	C264	B4	C437	B3	C558	A3	C766	C5	FB726	D3	R206	C6	R672	D3	R810	B5
	C265	B4	C438	C3	C561	B2	C767	C5	FB760	C4	R207	C5	R694	D2	R813	A6
	C266	B4	C439	C3	C562	B2	C768	C5	FB761	C4	R208	C5	R695	D2	R814	A6
	C267	B4	C440	B3	C563	B2	C769	C4	J350	A3	R209	D6	R696	D1	R819	B4
	C268	B4	C441	B3	C564	B2	C770	C4	L201	D6	R210	C6	R697	D1	R821	A5
	C269	B4	C442	C3	C565	B2	C771	C4	L202	C6	R211	D6	R700	D1	R850	C2
	C270	B4	C443	C3	C566	B2	C772	A4	L605	D4	R216	C6	R702	D1	R851	C2
	C272	B5	C444	C3	C567	B2	C773	A4	L606	D4	R217	C6	R703	D2	R852	C2
	C273	B4	C445	C3	C568	B2	C774	C4	L860	B3	R219	D6	R704	D1	R853	C2
D	C274	B4	C446	C3	C569	B2	C775	C4	L861	B3	R220	D6	R705	D1	R854	C2
	C275	B4	C447	C3	C570	B2	C776	C4	L862	B3	R265	B4	R706	D1	R855	C2
	C276	B4	C448	C3	C571	B2	C777	C4	L863	B3	R266	B4	R707	D1	R856	C2
	C277	B4	C449	B3	C572	A2	C778	C5	L864	B3	R302	B3	R708	D1	R857	C2
	C277	B4	C450	C3	C573	A2	C779	C5	Q101	B1	R303	B3	R710	D2	R858	C2
	C278	B4	C451	B3	C574	A2	C780	C5	Q102	C1	R304	B3	R711	D1	R859	C2
	C279	B4	C452	B3	C575	A2	C781	C5	Q109	B1	R305	B3	R716	D2	R866	C2
	C280	B4	C453	B3	C576	A2	C782	C5	Q110	B1	R306	B3	R717	D2	R867	C2
	C281	B5	C454	C3	C577	B3	C783	C4	Q111	B1	R347	C3	R718	D1	U100	A4
	C282	B5	C455	C3	C578	B3	C784	C5	Q152	B1	R350	C3	R719	D1	U152	C2
E	C283	B4	C456	C3	C579	A3	C787	C5	Q154	A4	R351	A3	R720	D1	U155	A1
	C284	B5	C457	B3	C580	A3	C788	C5	Q200	B3	R352	A3	R721	D1	U156	A4
	C285	B4	C458	C3	C581	A3	C789	C5	Q202	D6	R353	A3	R722	D1	U157	A4
	C286	B5	C459	B3	C605	D4	C804	A5	Q351	C2	R354	A3	R723	D1	U701	D2
	C333	C3	C460	C3	C608	D4	C808	A6	Q352	C2	R355	A3	R724	D1	U702	C1
	C333	C3	C461	C3	C641	D5	C810	A5	Q700	D1	R356	A3	R737	D3	U725	D2
	C335	C3	C462	C3	C642	D5	C811	A5	Q701	D1	R357	A3	R738	D3	U726	D2
	C335	C3	C463	B3	C644	D5	C813	A6	Q850	C2	R358	C3	R741	D3	ZD100	A4
	C336	C3	C464	B3	C645	D5	C816	B5	Q851	C2	R359	C2	R742	D3	ZD150	A1
	C357	C3	C465	B3	C652	D5	C817	B5	R100	A4	R363	A3	R750	D2	ZD152	A4
F	C358	C3	C466	B3	C653	D5	C825	B5	R101	A4	R364	C2	R753	D2	ZD605	D4
	C362	C2	C467	B3	C654	D5	C826	A4	R102	A4	R365	C2	R754	D2	ZD606	D4
	C362	C2	C468	B2	C664	C3	C829	A5	I124	B5	R366	C2	R760	C4	ZD640	D5
	C369	C2	C469	B2	C666	D3	C851	C2	I141	B1	R367	A3	R762	C4	ZD641	D5
	C370	C2	C470	B3	C667	D3	D350	C2	I148	A4	R368	A3	R763	C4	ZD642	D5
	C401	B3	C471	C3	C668	C3	D351	C2	I149	B4	R369	C3	R764	C4	ZD654	D3
	C402	B3	C472	C3	C669	C3	D352	C2	I150	B4	R370	C3	R765	C4	ZD655	D3
	C403	C3	C473	B3	C671	D3	D700	D1	I153	A1	R372	C4	R766	C5	ZD700	D1
	C404	C3	C474	C3	C700	D1	D701	D1	I154	B1	R373	C3	R767	C4	ZD701	D1
	C405	C3	C475	C3	C701	D1	D702	D1	I158	B1	R377	C2	R768	C4	ZD702	D1
G	C406	B3	C476	C3	C702	D1	D703	D1	I160	B1	R378	C3	R769	C4	ZD703	D1
	C407	C3	C477	C3	C703	C1	D704	D2	I166	B1	R383	C3	R770	C4	ZD704	D1
	C408	C3	C501	A2	C704	C1	D705	D1	I167	B1	R389	C2	R771	C4	ZD705	D1
	C409	C3	C508	C2	C705	D2	D760	C5	I168	B2	R390	C3	R772	C4	ZD706	D1
	C410	C3	C509	C2	C706	D2	FB251	B5	I169	B1	R391	C3	R773	C4	ZD707	D1
	C411	C3	C510	C2	C707	D2	FB252	B5	I170	B1	R392	C3	R774	C4	ZD708	D1
	C412	C3	C511	C2	C708	D1	FB253	B5	I171	B1	R393	C3	R775	C4	ZD709	D1
	Zd726	D3	Zd727	D3												



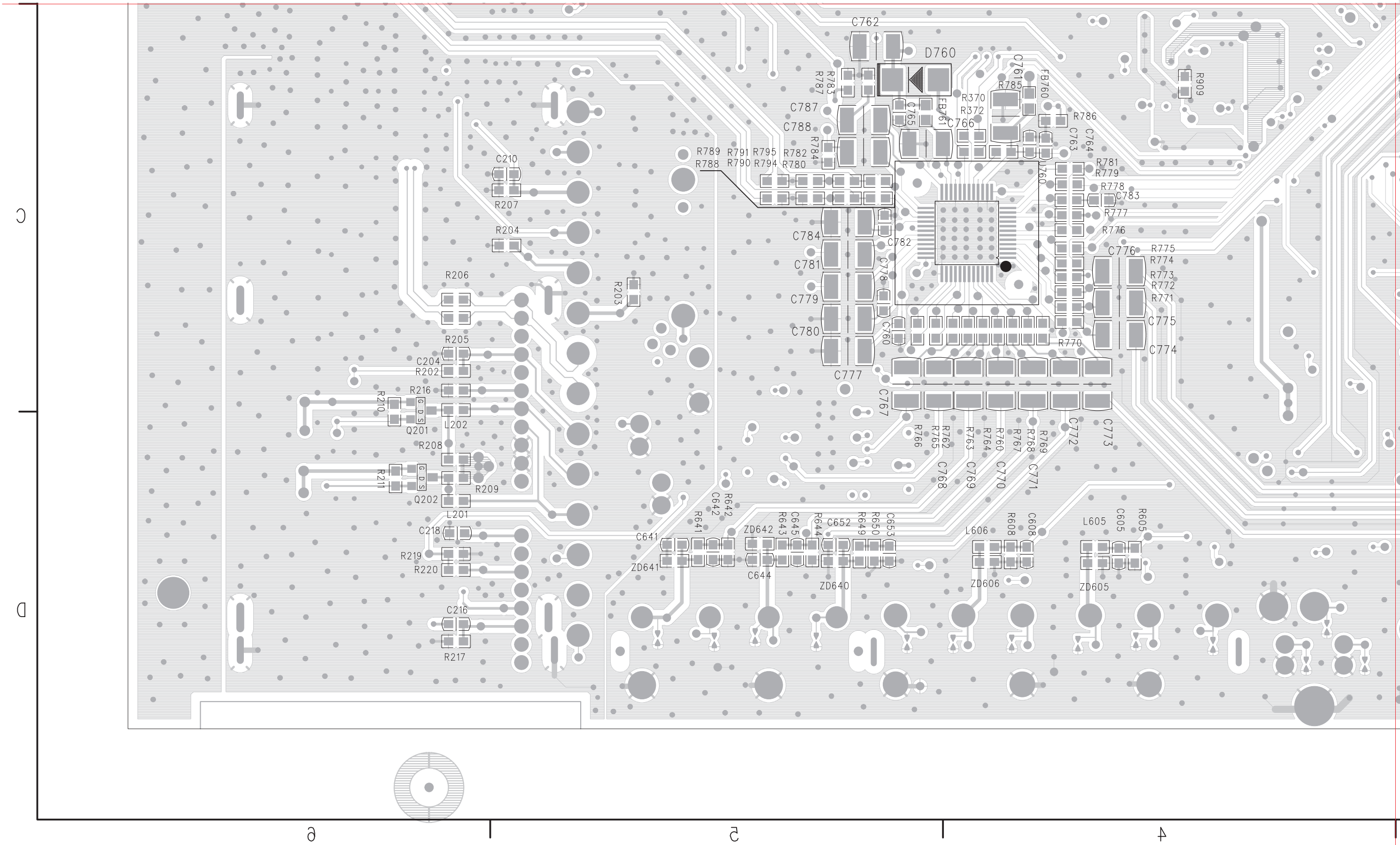
B



Scaler Board Layout-2(TOP RIGHT)

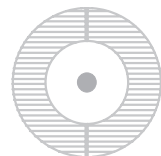
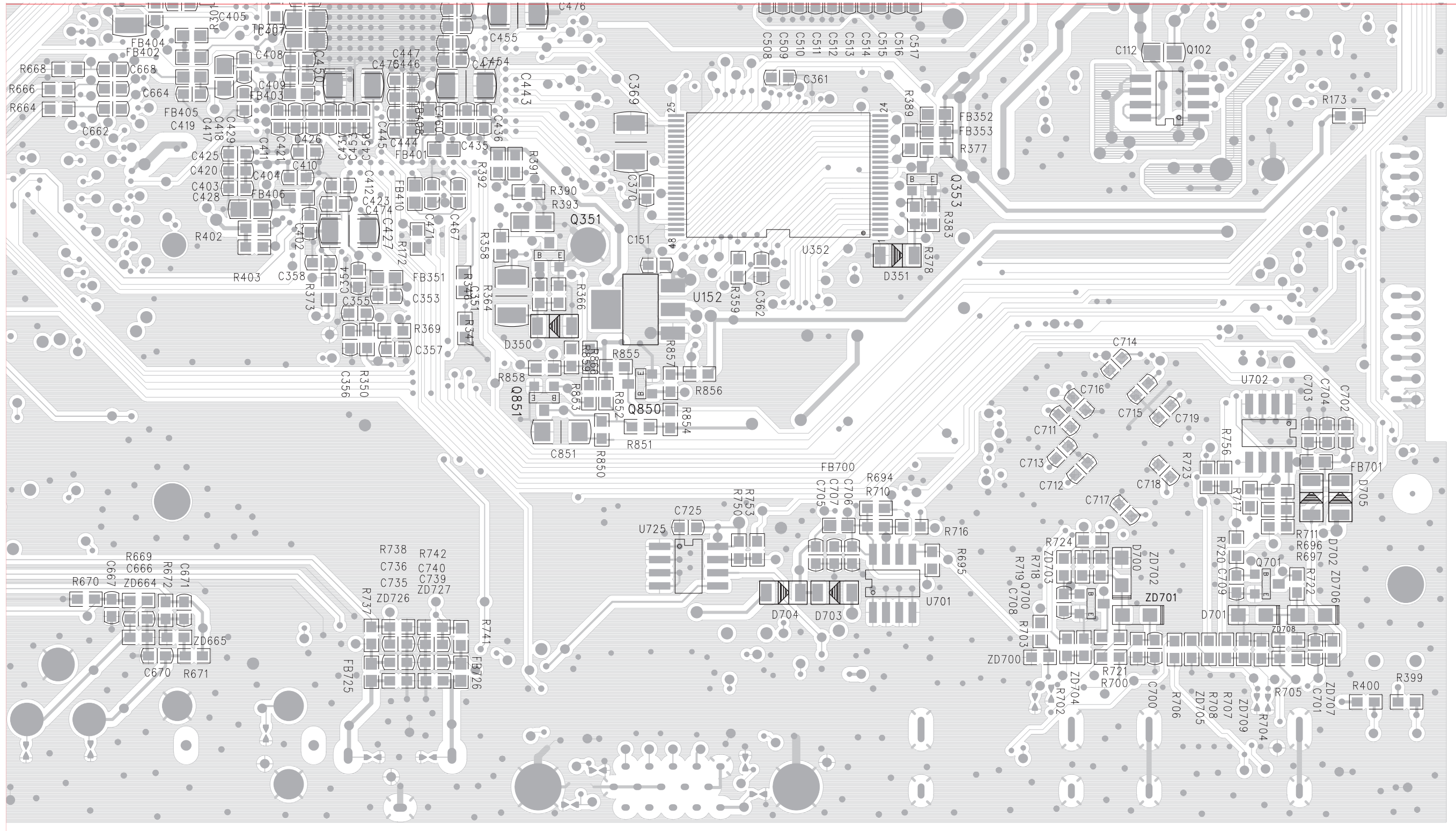


Scaler Board Layout-2(BUTTOM LEFT)



7. Circuit Diagrams and PWB Layouts

Scaler Board Layout-2(BOTTOM RIGHT)

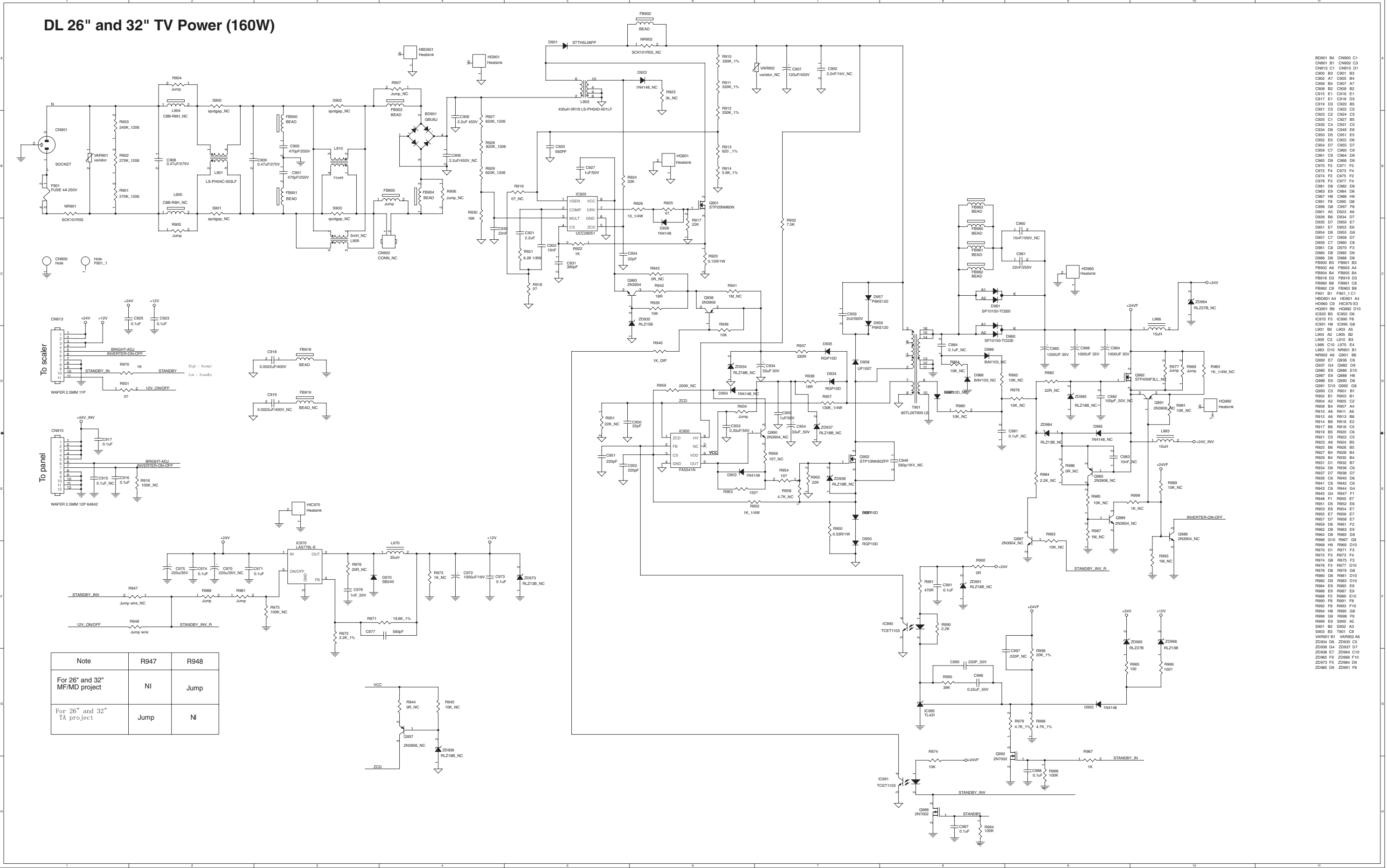


7. Circuit Diagrams and PWB Layouts

The screenshot shows a circuit simulation waveform viewer. The top horizontal axis represents time, with markers at 0, 1, and 2. The vertical axis represents voltage. A single horizontal yellow line is plotted at 25.0V, labeled 'Q1.DVS 25.0V'. The bottom status bar displays '0V 11.1V' and 'Q1.DVS A 0V 25.0V'. The date 'Mar. 2002' is visible in the bottom right corner.

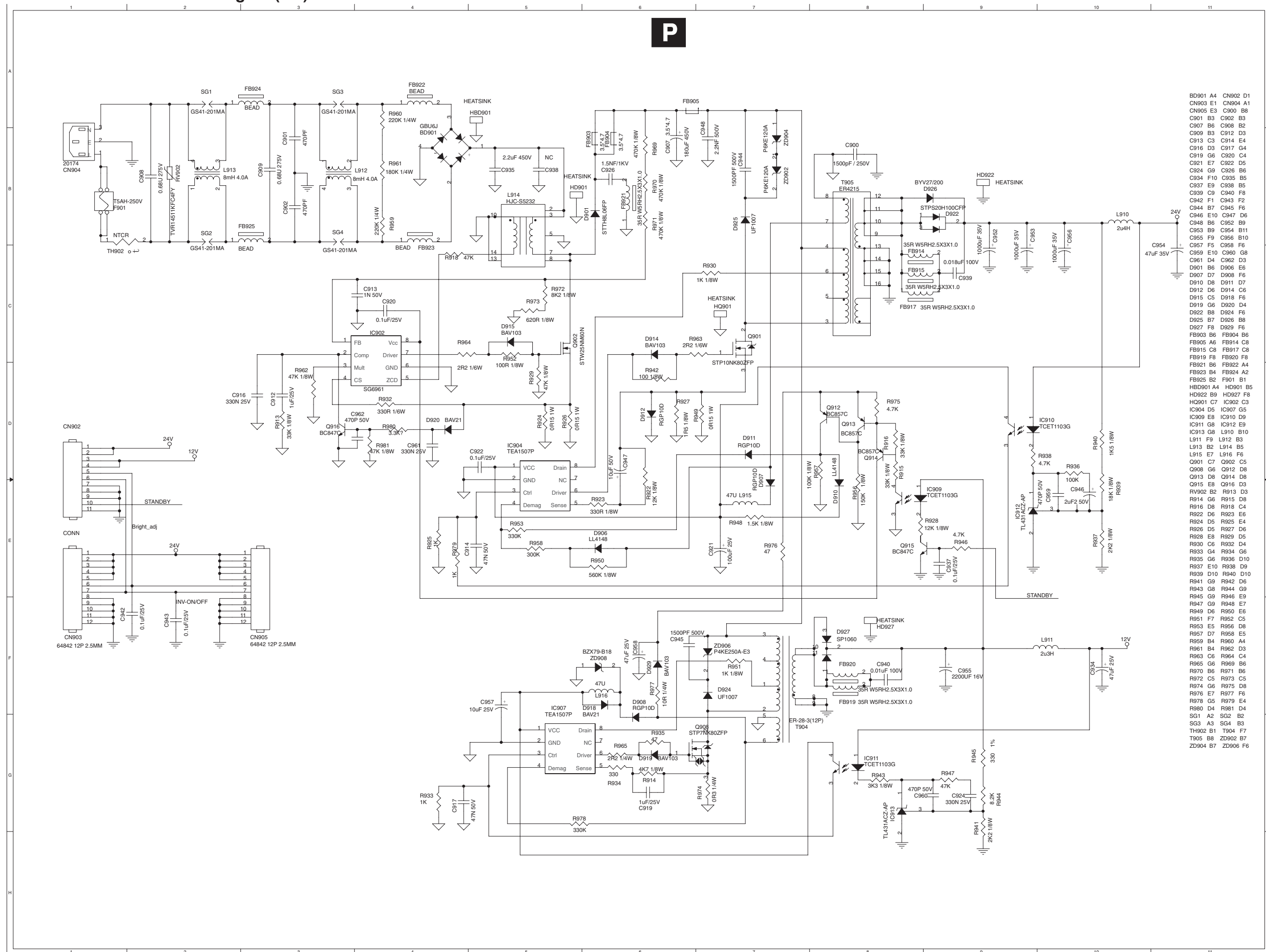
The screenshot shows a digital multimeter (DMM) interface. At the top, there is a scale bar with a red vertical line indicating the measurement range. Below the scale bar, a yellow horizontal bar spans the width of the display. The main display area shows the measurement value '21.1 V'. To the right of the display, the text 'CH1: 21.1 V' is visible. At the bottom left, the text '21.1 V' is displayed. At the bottom center, the text '1000 Hz' is shown. At the bottom right, the date and time '24 Jun 2007 13:24:20' are displayed.

Power Board Schematic Diagram(26" 32")



7. Circuit Diagrams and PWB Layouts

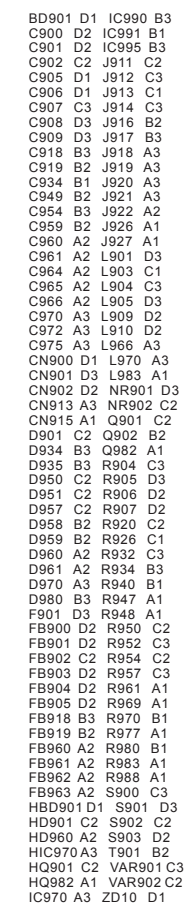
Power Board Schematic Diagram(37")



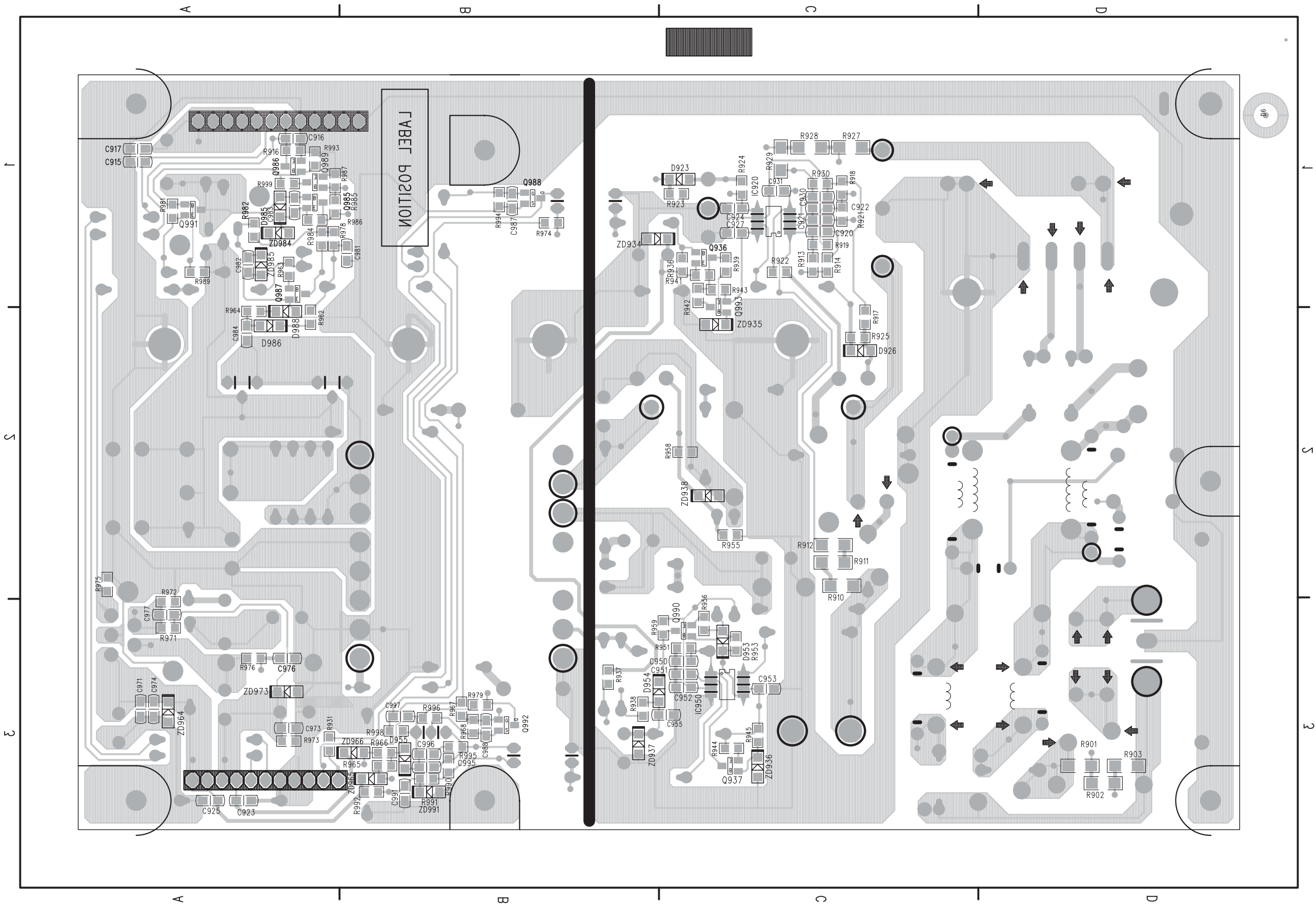
The schematic illustrates a multi-stage power supply and control system. It begins with a transformer (T901) providing primary AC input. This is followed by several rectification stages using bridge rectifiers (BD901, FB901-FB1000) and filter capacitors (C901-C999). The output of these stages is regulated by a series of transistors (Q901-Q999) and integrated circuits (IC901-IC999), including operational amplifiers (IC902, IC903, IC904, IC905, IC906, IC907, IC908, IC909, IC910, IC911, IC912, IC913, IC914, IC915, IC916, IC917, IC918, IC919, IC920, IC921, IC922, IC923, IC924, IC925, IC926, IC927, IC928, IC929, IC930, IC931, IC932, IC933, IC934, IC935, IC936, IC937, IC938, IC939, IC940, IC941, IC942, IC943, IC944, IC945, IC946, IC947, IC948, IC949, IC950, IC951, IC952, IC953, IC954, IC955, IC956, IC957, IC958, IC959, IC960, IC961, IC962, IC963, IC964, IC965, IC966, IC967, IC968, IC969, IC970, IC971, IC972, IC973, IC974, IC975, IC976, IC977, IC978, IC979, IC980, IC981, IC982, IC983, IC984, IC985, IC986, IC987, IC988, IC989, IC990, IC991, IC992, IC993, IC994, IC995, IC996, IC997, IC998, IC999, IC1000) and comparators (IC901, IC902, IC903, IC904, IC905, IC906, IC907, IC908, IC909, IC910, IC911, IC912, IC913, IC914, IC915, IC916, IC917, IC918, IC919, IC920, IC921, IC922, IC923, IC924, IC925, IC926, IC927, IC928, IC929, IC930, IC931, IC932, IC933, IC934, IC935, IC936, IC937, IC938, IC939, IC940, IC941, IC942, IC943, IC944, IC945, IC946, IC947, IC948, IC949, IC950, IC951, IC952, IC953, IC954, IC955, IC956, IC957, IC958, IC959, IC960, IC961, IC962, IC963, IC964, IC965, IC966, IC967, IC968, IC969, IC970, IC971, IC972, IC973, IC974, IC975, IC976, IC977, IC978, IC979, IC980, IC981, IC982, IC983, IC984, IC985, IC986, IC987, IC988, IC989, IC990, IC991, IC992, IC993, IC994, IC995, IC996, IC997, IC998, IC999, IC1000). The final output is a regulated DC voltage, which can be adjusted via a potentiometer (P901) or a digital-to-analog converter (DAC901). The schematic also includes a standby section (STANDBY) and a reset section (RESET).

Ref	Description	Value	Part No.
C901	Capacitor	1N 50V	
C902	Capacitor	0.1uF/25V	
C903	Capacitor	330N 25V	
C904	Capacitor	33K 18W	
C905	Capacitor	470P 50V	
C906	Capacitor	33K 18W	
C907	Capacitor	47K 18W	
C908	Capacitor	330N 25V	
C909	Capacitor	0.1uF/25V	
C910	Capacitor	33K 18W	
C911	Capacitor	470P 50V	
C912	Capacitor	33K 18W	
C913	Capacitor	47K 18W	
C914	Capacitor	330N 25V	
C915	Capacitor	0.1uF/25V	
C916	Capacitor	33K 18W	
C917	Capacitor	470P 50V	
C918	Capacitor	33K 18W	
C919	Capacitor	47K 18W	
C920	Capacitor	330N 25V	
C921	Capacitor	0.1uF/25V	
C922	Capacitor	33K 18W	
C923	Capacitor	470P 50V	
C924	Capacitor	33K 18W	
C925	Capacitor	47K 18W	
C926	Capacitor	330N 25V	
C927	Capacitor	0.1uF/25V	
C928	Capacitor	33K 18W	
C929	Capacitor	470P 50V	
C930	Capacitor	33K 18W	
C931	Capacitor	47K 18W	
C932	Capacitor	330N 25V	
C933	Capacitor	0.1uF/25V	
C934	Capacitor	33K 18W	
C935	Capacitor	470P 50V	
C936	Capacitor	33K 18W	
C937	Capacitor	47K 18W	
C938	Capacitor	330N 25V	
C939	Capacitor	0.1uF/25V	
C940	Capacitor	33K 18W	
C941	Capacitor	470P 50V	
C942	Capacitor	33K 18W	
C943	Capacitor	47K 18W	
C944	Capacitor	330N 25V	
C945	Capacitor	0.1uF/25V	
C946	Capacitor	33K 18W	
C947	Capacitor	470P 50V	
C948	Capacitor	33K 18W	
C949	Capacitor	47K 18W	
C950	Capacitor	330N 25V	
C951	Capacitor	0.1uF/25V	
C952	Capacitor	33K 18W	
C953	Capacitor	470P 50V	
C954	Capacitor	33K 18W	
C955	Capacitor	47K 18W	
C956	Capacitor	330N 25V	
C957	Capacitor	0.1uF/25V	
C958	Capacitor	33K 18W	
C959	Capacitor	470P 50V	

Power Board layout(26",32")



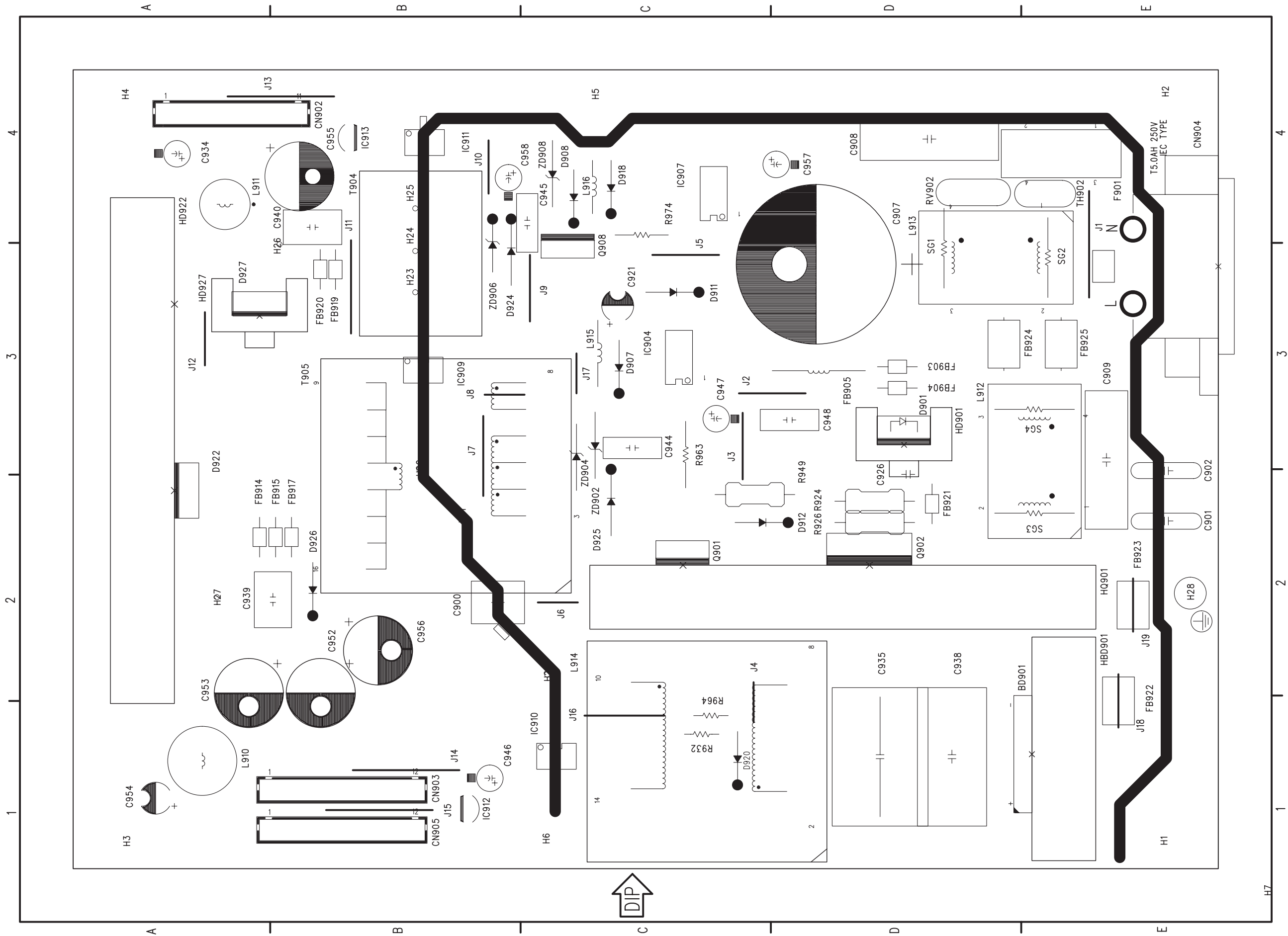
Power Board Layout(26",32")-1



C915	A1	R922	C1
C916	A1	R923	C1
C917	A1	R924	C1
C920	C1	R925	C2
C921	C1	R927	C1
C922	C1	R928	C1
C923	A3	R929	C1
C924	C1	R930	C1
C925	A3	R931	A3
C927	C1	R936	C1
C930	C1	R937	B3
C931	C1	R938	B3
C950	C3	R939	C1
C951	C3	R941	C1
C952	C3	R942	C1
C953	C3	R943	C1
C955	C3	R944	C3
C971	A3	R945	C3
C973	A3	R951	C3
C974	A3	R953	C3
C976	A3	R955	C2
C977	A3	R956	C3
C981	B1	R958	C2
C982	A1	R959	C3
C983	A1	R962	A2
C984	A2	R963	A1
C987	B1	R964	A2
C988	B3	R965	B3
C991	B3	R966	B3
C995	B3	R967	B3
C996	B3	R968	B3
C997	B3	R971	A3
D923	C1	R972	A3
D926	C2	R973	A3
D953	C3	R974	B1
D954	B3	R975	A2
D955	B3	R976	A3
D985	A1	R978	A1
D986	A2	R979	B3
D988	A2	R981	A1
IC920	C1	R982	A1
IC950	C3	R984	A1
Q936	C1	R985	A1
Q937	C3	R986	A1
Q985	A1	R987	A1
Q986	A1	R989	A1
Q987	A1	R990	B3
Q988	B1	R991	B3
Q989	A1	R992	B3
Q990	C3	R993	A1
Q991	A1	R994	B1
Q992	B3	R995	B3
Q993	C2	R996	B3
R901	D3	R998	B3
R902	D3	R999	A1
R903	D3	ZD934	B1
R910	C2	ZD935	C2
R911	C2	ZD936	C3
R912	C2	ZD937	B3
R913	C1	ZD938	C2
R914	C1	ZD964	A3
R916	A1	ZD965	B3
R917	C2	ZD966	B3
R918	C1	ZD973	A3
R919	C1	ZD984	A1
R921	C1	ZD985	A1
Zd991	B3		

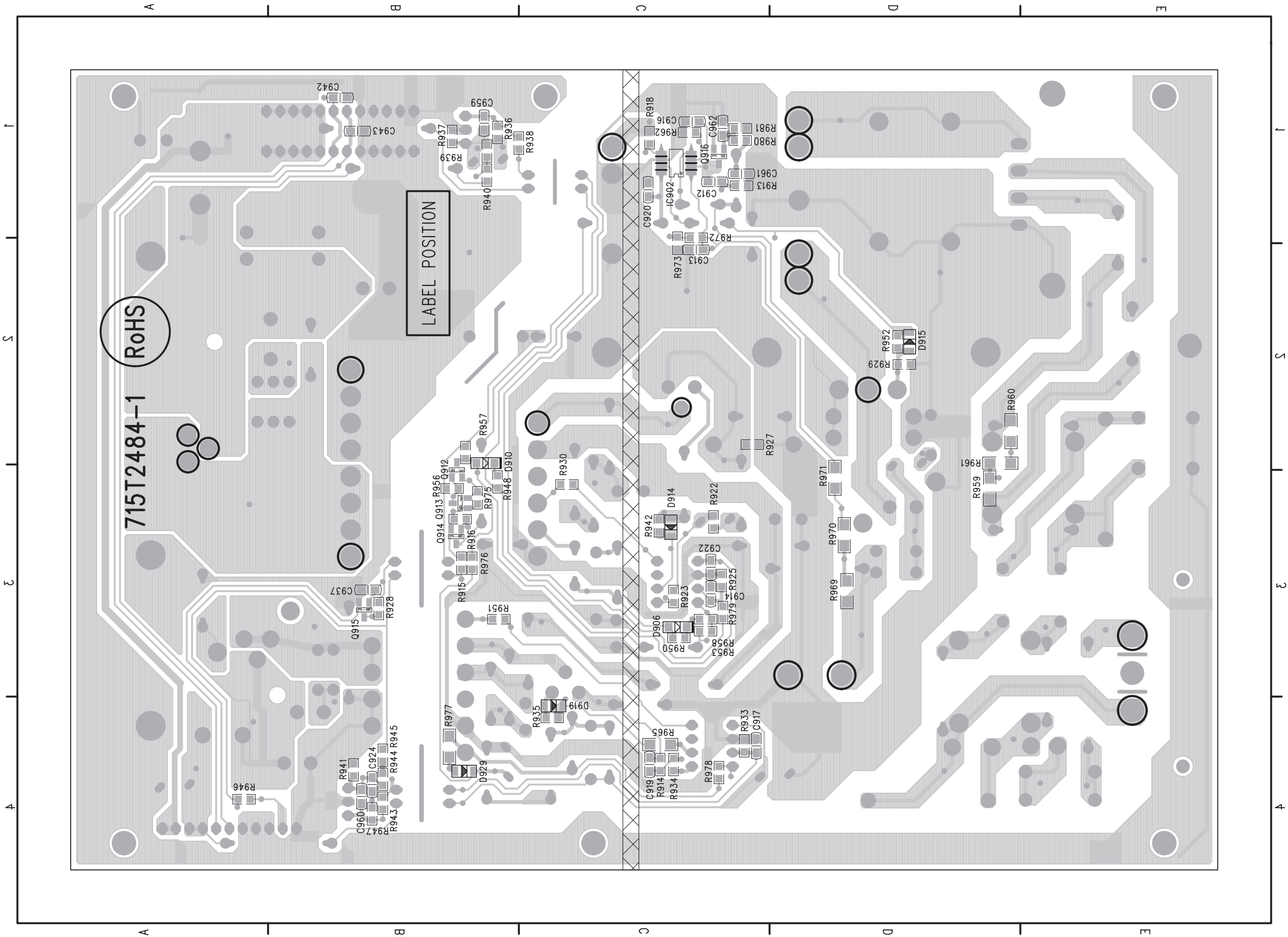
7. Circuit Diagrams and PWB Layouts

Power Board Layout(37")



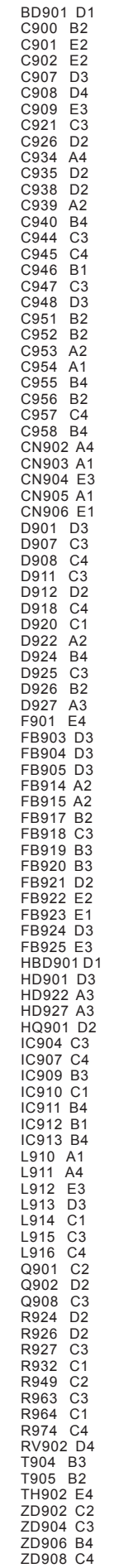
- | | | | |
|-------|----|--------|----|
| BD901 | D1 | FB915 | B2 |
| C900 | B2 | FB917 | B2 |
| C901 | E2 | FB919 | B3 |
| C902 | E2 | FB920 | B3 |
| C907 | D3 | FB921 | D2 |
| C908 | D4 | FB922 | E2 |
| C909 | E3 | FB923 | E2 |
| C921 | C3 | FB924 | D3 |
| C926 | D2 | FB925 | E3 |
| C934 | A4 | HBD901 | E1 |
| C935 | D1 | HD901 | D3 |
| C938 | D1 | HD922 | A3 |
| C939 | B2 | HD927 | A3 |
| C940 | B4 | HQ901 | D2 |
| C944 | C3 | IC904 | C3 |
| C945 | C4 | IC907 | C4 |
| C946 | B1 | IC909 | B3 |
| C947 | C3 | IC910 | C1 |
| C948 | D3 | IC911 | B4 |
| C952 | B2 | IC912 | B1 |
| C953 | A2 | IC913 | B4 |
| C954 | A1 | L910 | A1 |
| C955 | B4 | L911 | A4 |
| C956 | B2 | L912 | E3 |
| C957 | D4 | L913 | D3 |
| C958 | B4 | L914 | C1 |
| CN902 | A4 | L915 | C3 |
| CN903 | A1 | L916 | C4 |
| CN904 | E3 | Q901 | C2 |
| CN905 | A1 | Q902 | D2 |
| D901 | D3 | Q908 | C3 |
| D907 | C3 | R924 | D2 |
| D908 | C4 | R926 | D2 |
| D911 | C3 | R932 | C1 |
| D912 | D2 | R949 | C2 |
| D918 | C4 | R963 | C3 |
| D920 | C1 | R964 | C1 |
| D922 | A2 | R974 | C4 |
| D924 | B4 | RV902 | D4 |
| D925 | C3 | T904 | B3 |
| D926 | B2 | T905 | B2 |
| D927 | A3 | TH902 | E4 |
| F901 | E4 | ZD902 | C2 |
| FB903 | D3 | ZD904 | C3 |
| FB904 | D3 | ZD906 | B4 |
| FB905 | D3 | ZD908 | C4 |
| FB914 | A2 | | |

Power Board Layout(37")-1



C912	C1	R933	C4
C913	C2	R934	C4
C914	C3	R935	C4
C916	C1	R936	B1
C917	C4	R937	B1
C919	C4	R938	B1
C920	C1	R939	B1
C922	C3	R940	B1
C924	B4	R941	B4
C937	B3	R942	C3
C942	B1	R943	B4
C943	B1	R944	B4
C959	B1	R945	B4
C960	B4	R946	A4
C961	C1	R947	B4
C962	C1	R948	B3
D906	C3	R950	C3
D910	B2	R951	B3
D914	C3	R952	D2
D915	D2	R953	C3
D919	C4	R956	B3
D929	B4	R957	B2
IC902	C1	R958	C3
Q912	B3	R959	D3
Q913	B3	R960	D2
Q914	B3	R961	D2
Q915	B3	R962	C1
Q916	C1	R965	C4
R913	C1	R969	D3
R914	C4	R970	D3
R915	B3	R971	D3
R916	B3	R972	C1
R918	C1	R973	C2
R922	C3	R975	B3
R923	C3	R976	B3
R925	C3	R977	B4
R927	C2	R978	C4
R928	B3	R979	C3
R929	D2	R980	C1
R930	C3	R981	C1

Power Board Layout(42")

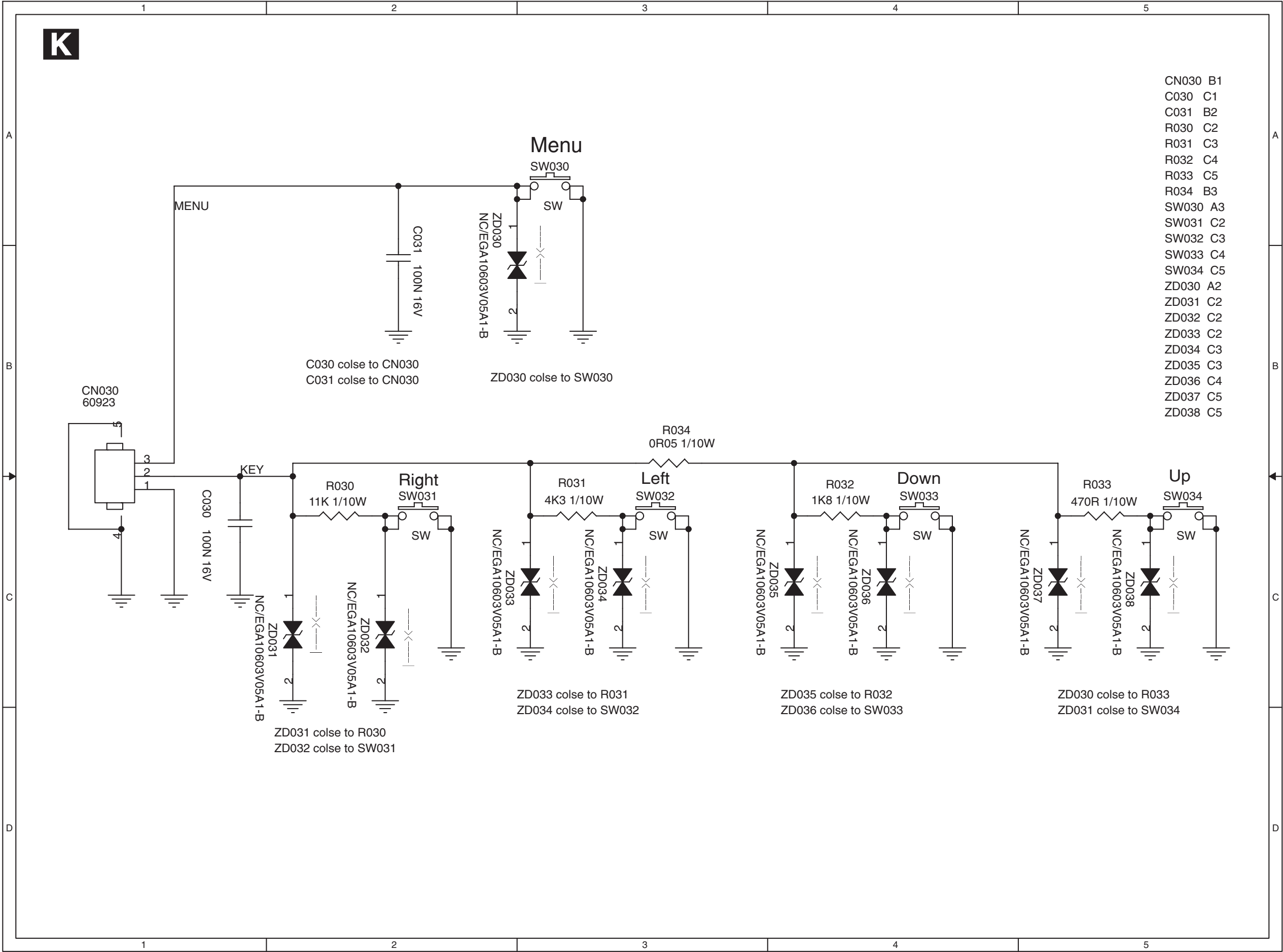


BD901 D1
C900 B2
C901 E2
C902 E2
C907 D3
C908 D4
C909 E3
C921 C3
C926 D2
C934 A4
C935 D2
C938 D2
C939 A2
C940 B4
C944 C3
C945 C4
C946 B1
C947 C3
C948 D3
C951 B2
C952 B2
C953 A2
C954 A1
C955 B4
C956 B2
C957 C4
C958 B4
CN902 A4
CN903 A1
CN904 E3
CN905 A1
CN906 E1
D901 D3
D907 C3
D908 C4
D911 C3
D912 D2
D918 C4
D920 C1
D922 A2
D924 B4
D925 C3
D926 B2
D927 A3
F901 E4
FB903 D3
FB904 D3
FB905 D3
FB914 A2
FB915 A2
FB917 B2
FB918 C3
FB919 B3
FB920 B3
FB921 D2
FB922 E2
FB923 E1
FB924 D3
FB925 E3
HBD901 D1
HD901 D3
HD922 A3
HD927 A3
HQ901 D2
IC904 C3
IC907 C4
IC909 B3
IC910 C1
IC911 B4
IC912 B1
IC913 B4
L910 A1
L911 A4
L912 E3
L913 D3
L914 C1
L915 C3
L916 C4
Q901 C2
Q902 D2
Q908 C3
R924 D2
R926 D2
R927 C3
R932 C1
R949 C2
R963 C3
R964 C1
R974 C4
RV902 D4
T904 B3
T905 B2
TH902 E4
ZD902 C2
ZD904 C3
ZD906 B4
ZD908 C4

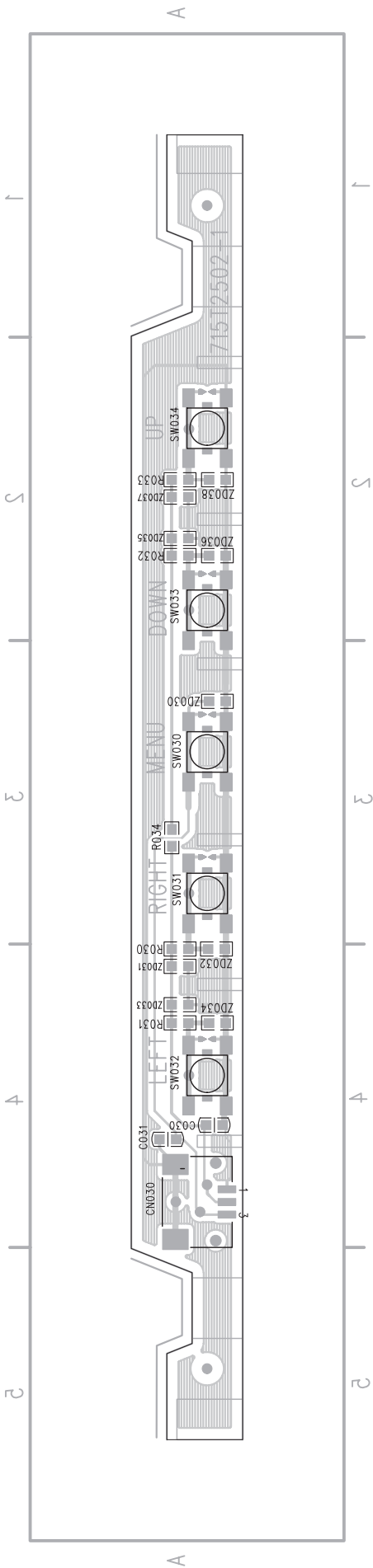
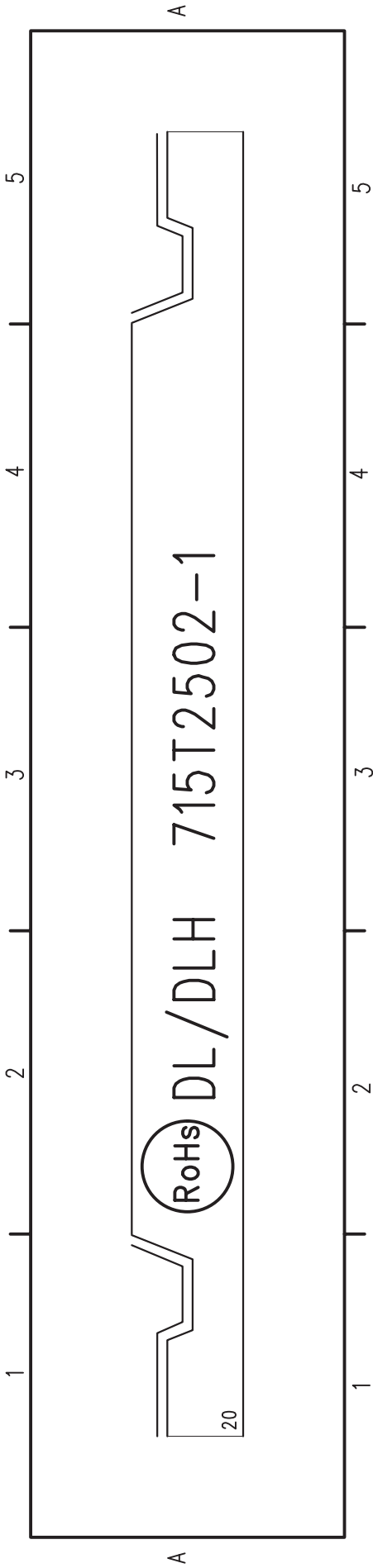
C912	C1
C913	C2
C914	C3
C916	C1
C917	C4
C919	C4
C920	C1
C922	C3
C924	B4
C937	B3
C943	B1
C959	B1
C960	B4
C961	C1
C962	C1
D906	C3
D910	B2
D914	C3
D915	D2
D919	C4
D929	B4
IC902	C1
Q912	B3
Q913	B3
Q914	B3
Q915	B3
Q916	C1
R913	C1
R914	C4
R915	B3
R916	B3
R918	C1
R922	C3
R923	C3
R925	C3
R928	B3
R929	D2
R930	C3
R933	C4
R934	C4
R935	C4
R936	B1
R937	B1
R938	B1
R939	B1
R940	B1
R941	B4
R942	C3
R943	B4
R944	B4
R945	B4
R946	A4
R947	B4
R948	B3
R950	C3
R951	B3
R952	D2
R953	C3
R956	B3
R957	B2
R958	C3
R959	D3
R960	D2
R961	D2
R962	C1
R965	C4
R969	D3
R970	D3
R971	D3
R972	C1
R973	C2
R975	B3
R976	B3
R977	B4
R978	C4
R979	C3
R980	C1
R981	C1

7. Circuit Diagrams and PWB Layouts

Key Board Schematic Diagram

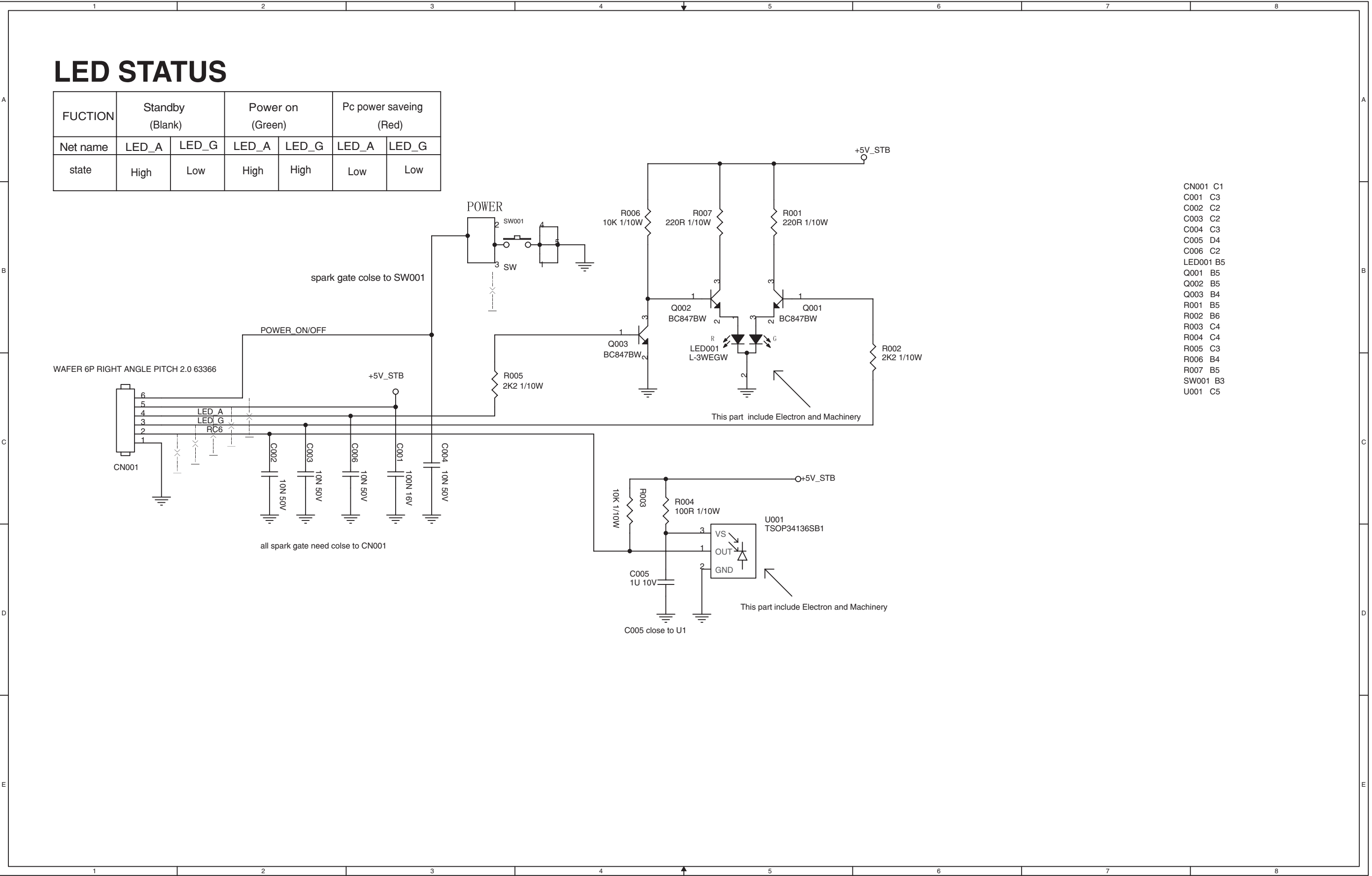


Key Board Layout

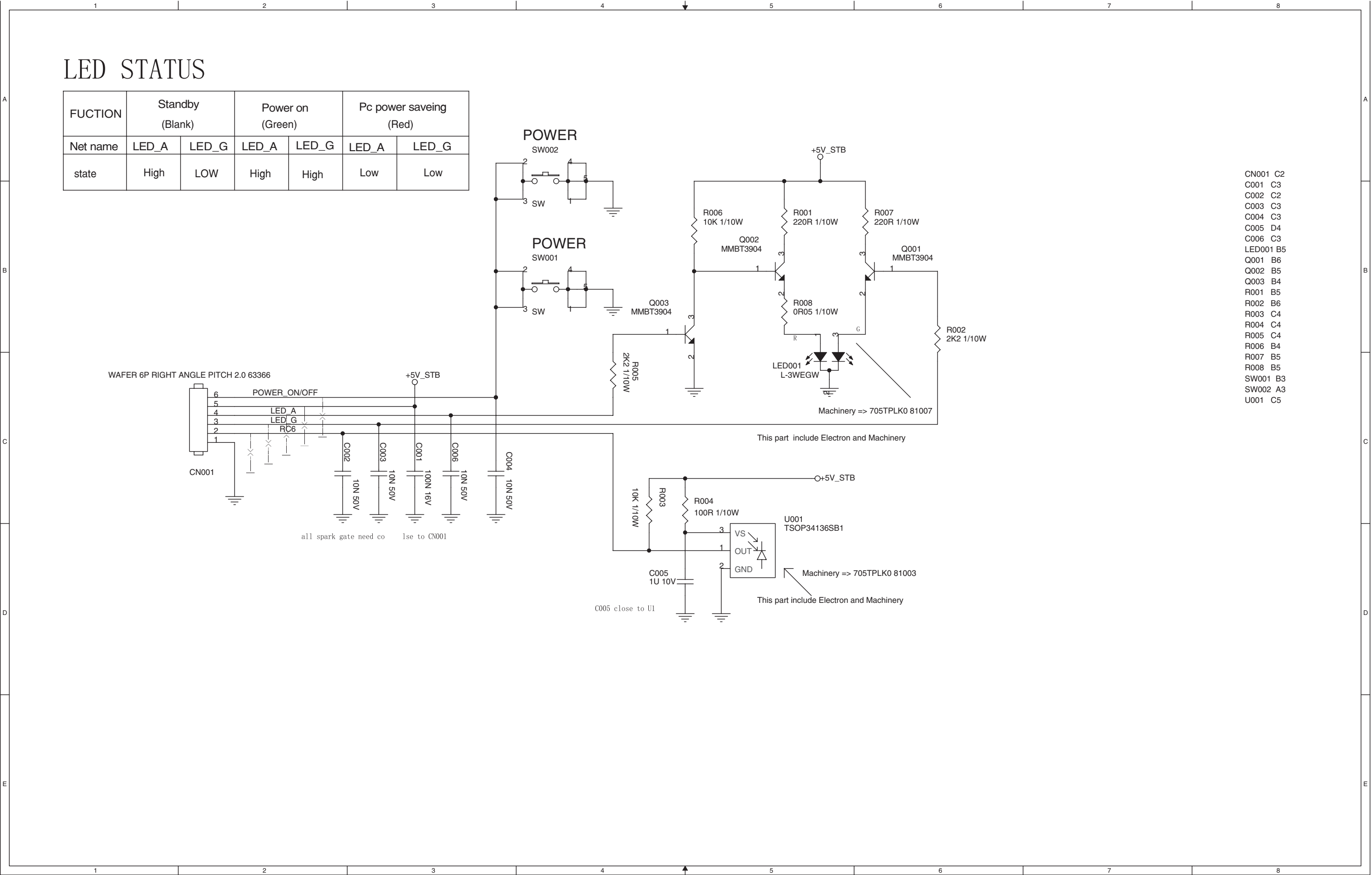


C030 A4 SW14 A3
C031 A4 SW15 A3
CN030 A4 SW16 A2
R030 A4 SW17 A2
R031 A4 ZD030 A3
R032 A2 ZD031 A4
R033 A2 ZD032 A4
R034 A3 ZD033 A4
SW030 A3 ZD034 A4
SW031 A3 ZD035 A2
SW032 A4 ZD036 A2
SW033 A2 ZD037 A2
SW034 A2 ZD038 A2
SW13 A4

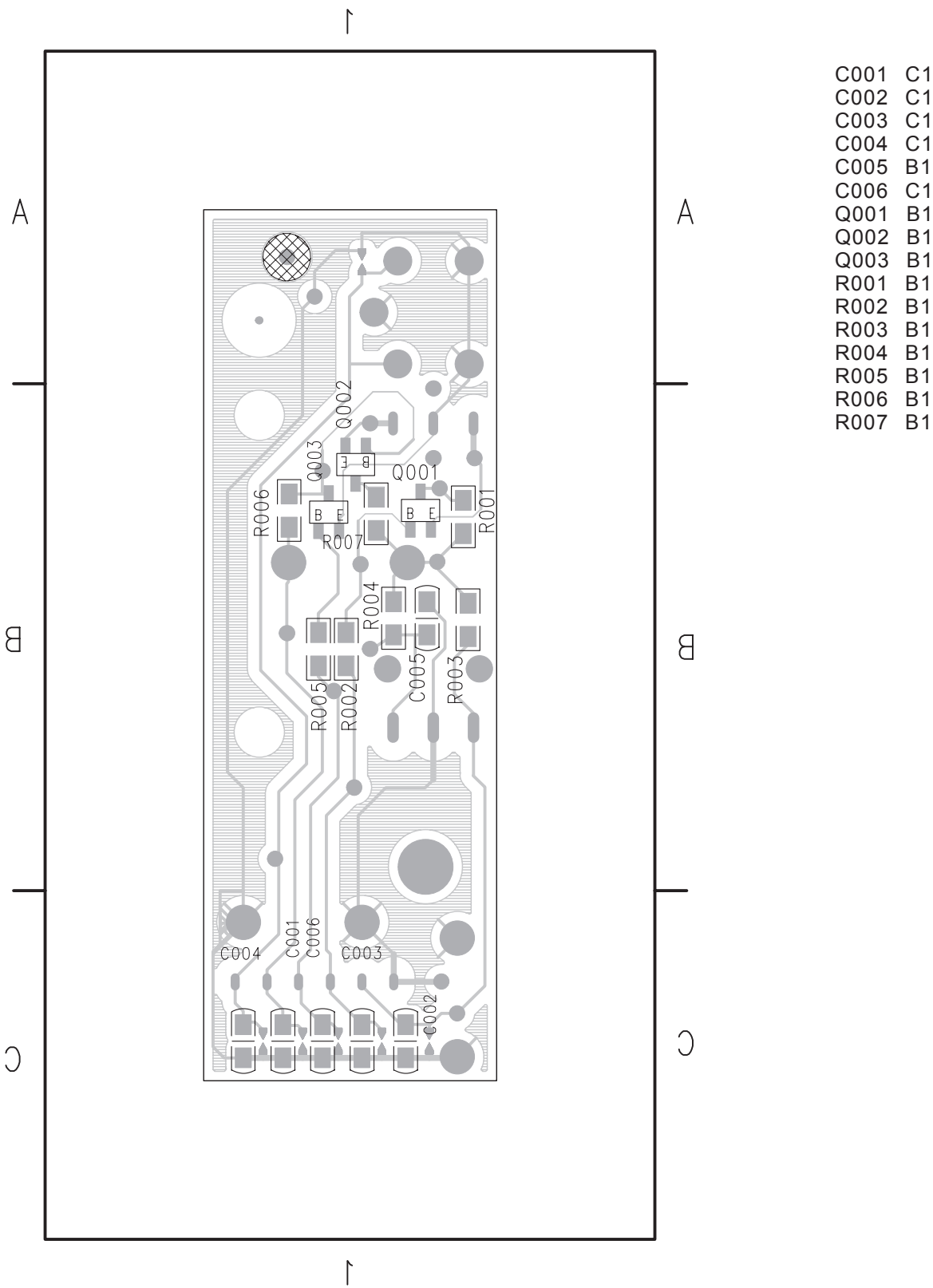
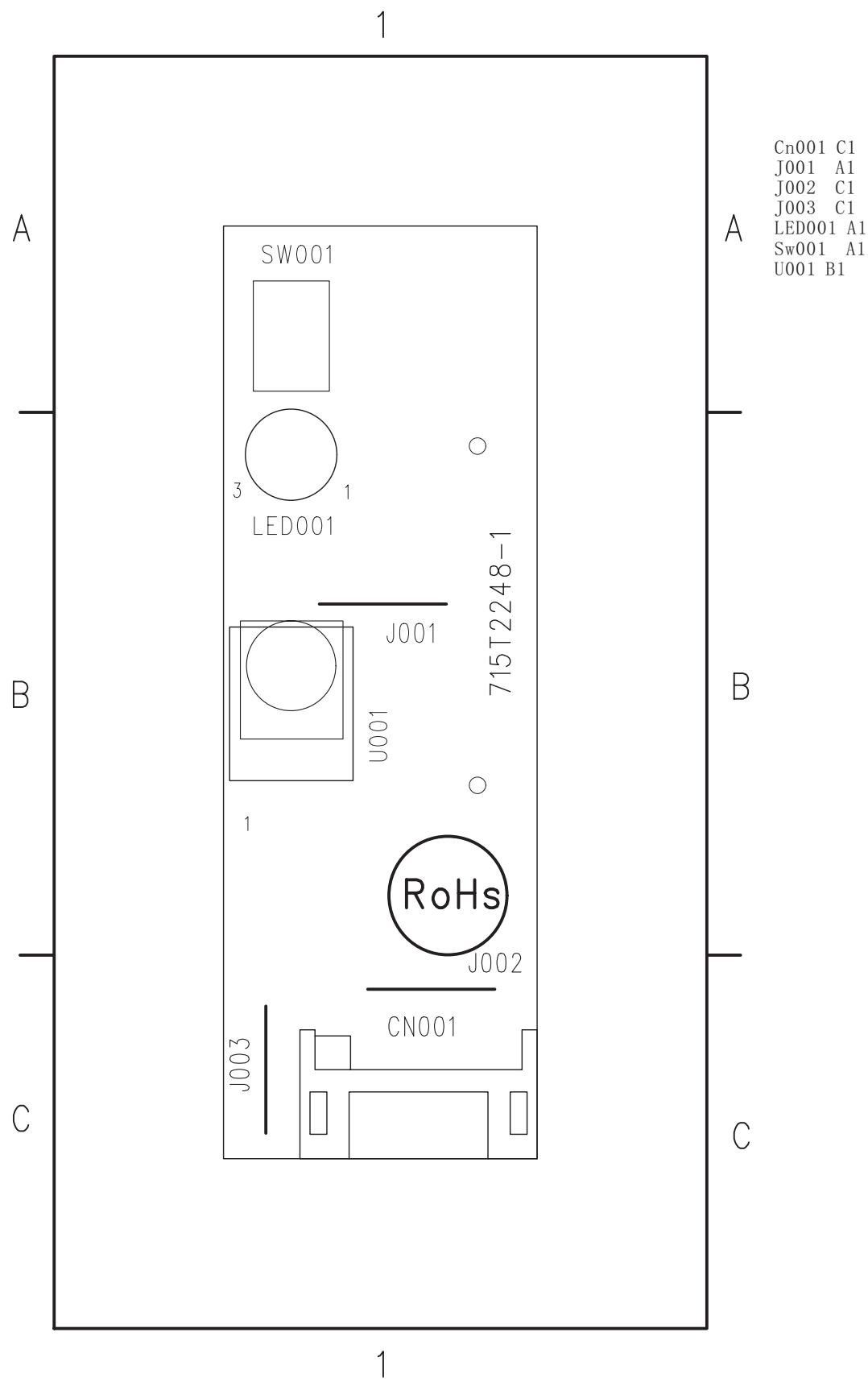
IR Board Schematic Diagram(26",32")



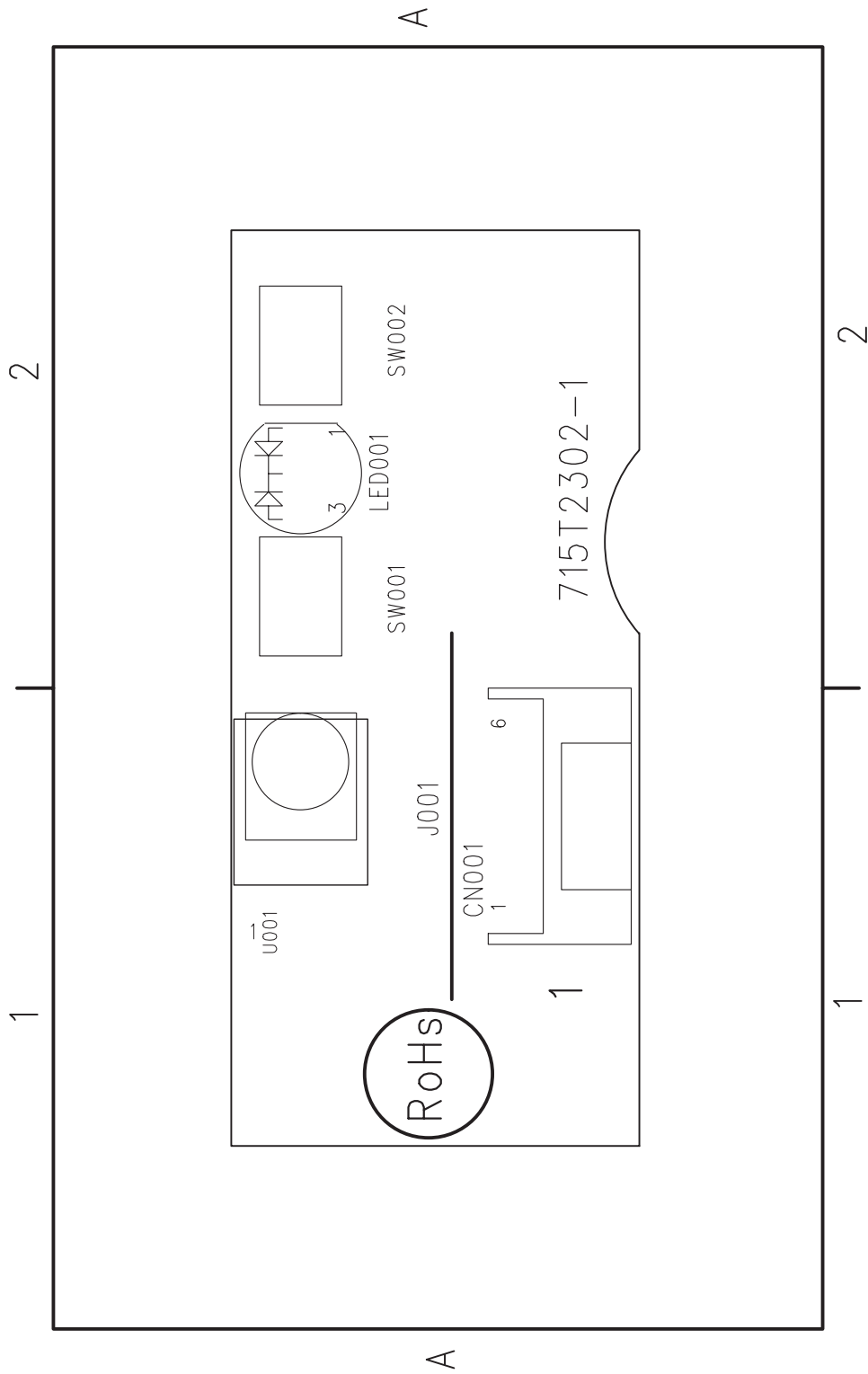
IR Board Schematic Diagram(37",42")



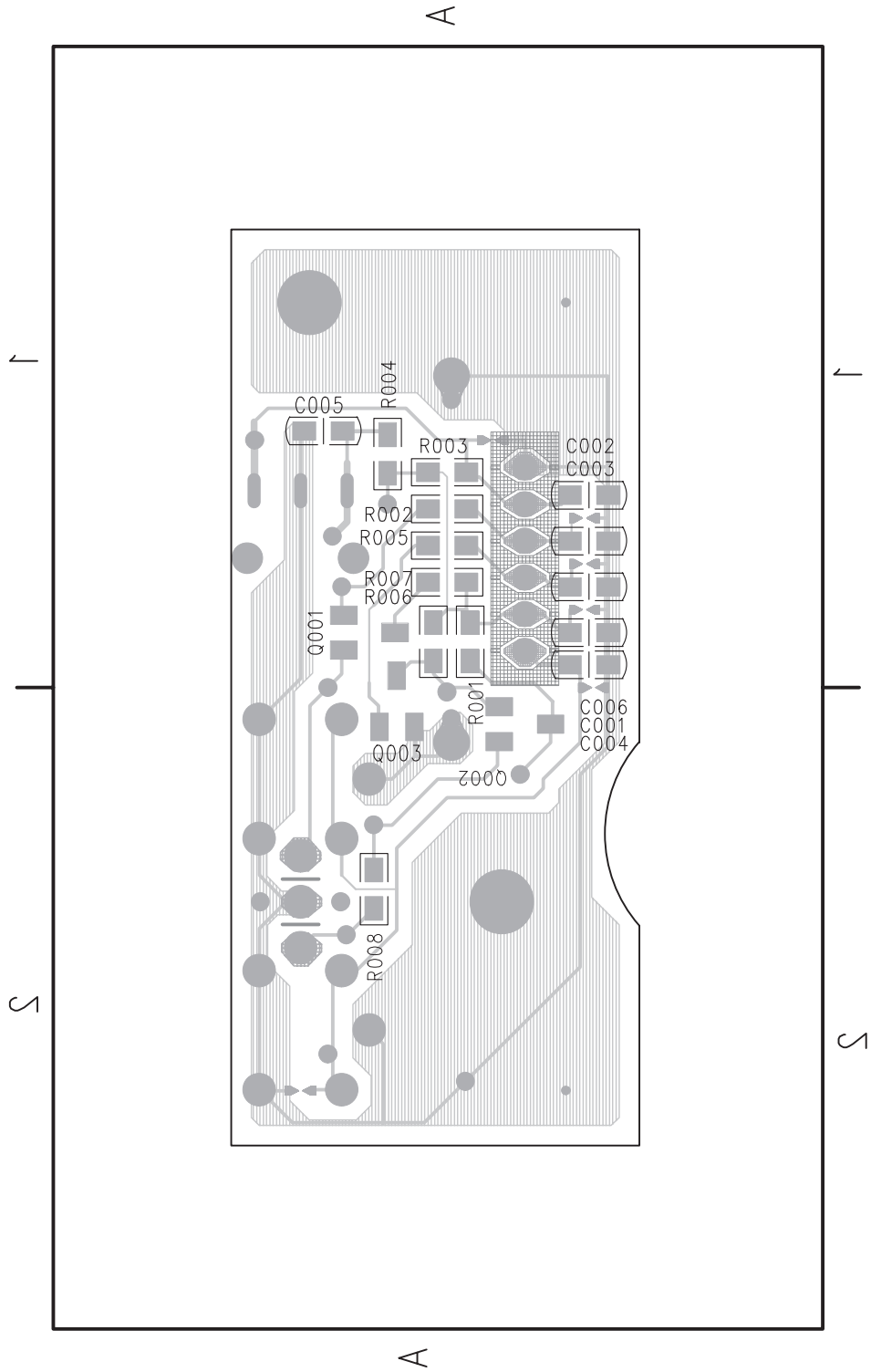
IR Board Layout(26"32")



IR Board Layout(37",42")



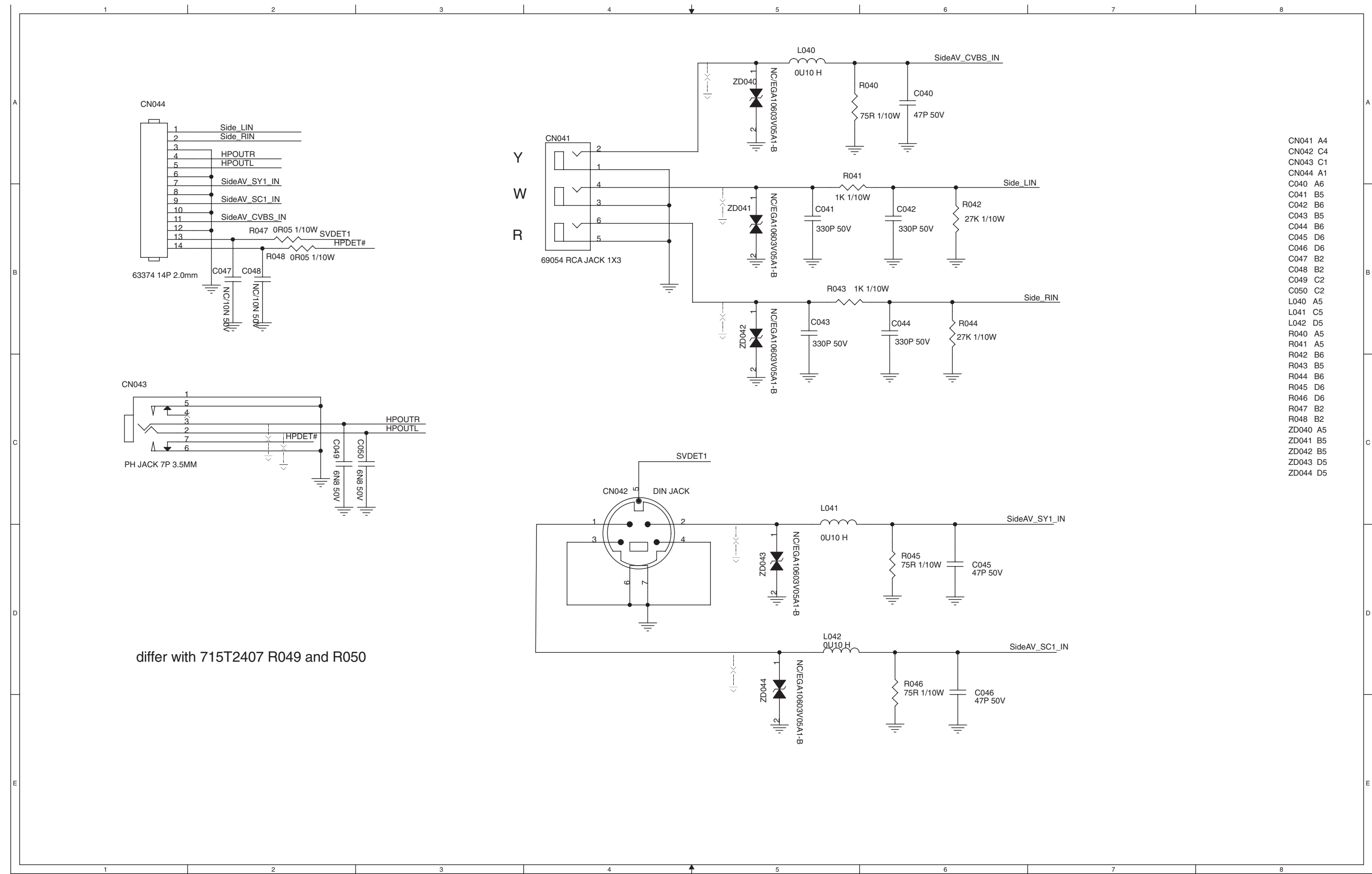
Cn001 A1
J001 A1
LED001 A2
Sw001 A2
Sw001 A2
U001 A1



C001 A1
C002 A1
C003 A1
C004 A1
C005 A1
C006 A1
Q001 A1
Q002 A2
Q003 A2
R001 A1
R002 A1
R003 A1
R004 A1
R005 A1
R006 A1
R007 A1
R008 A2

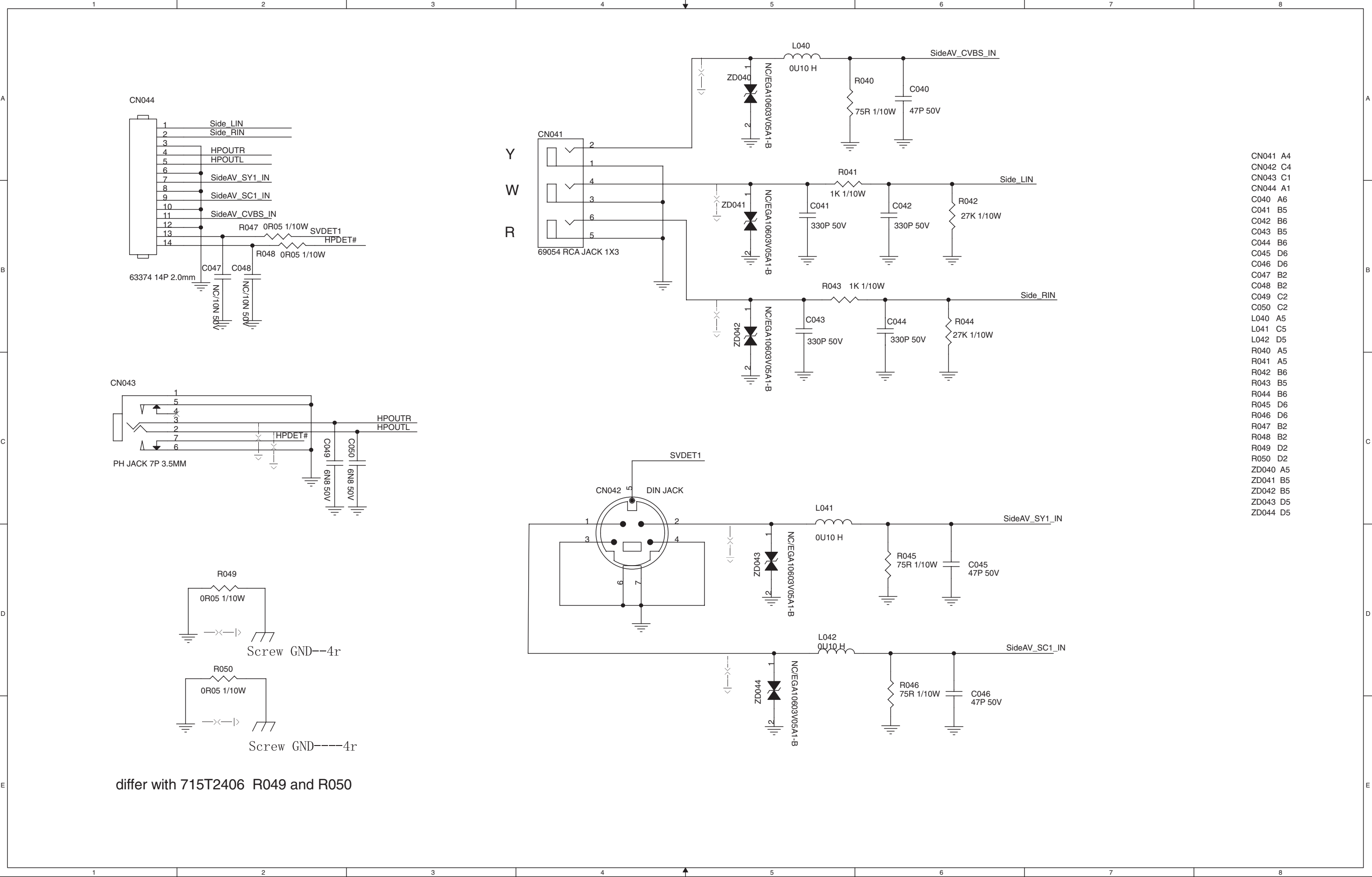
7. Circuit Diagrams and PWB Layouts

Side AV Board Schematic Diagram(26",32",37")

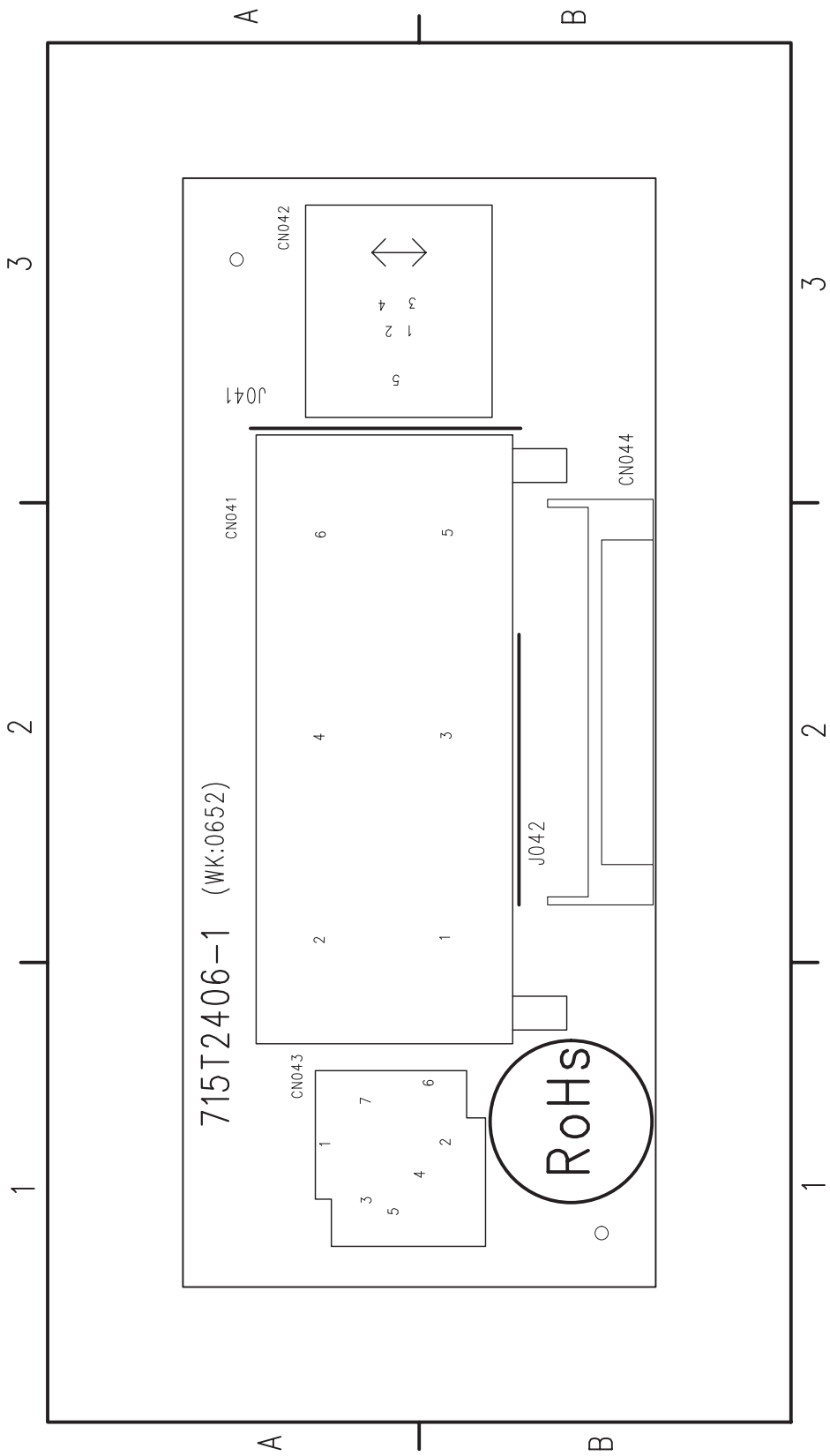


differ with 715T2407 R049 and R050

Side AV Board Schematic Diagram(42")

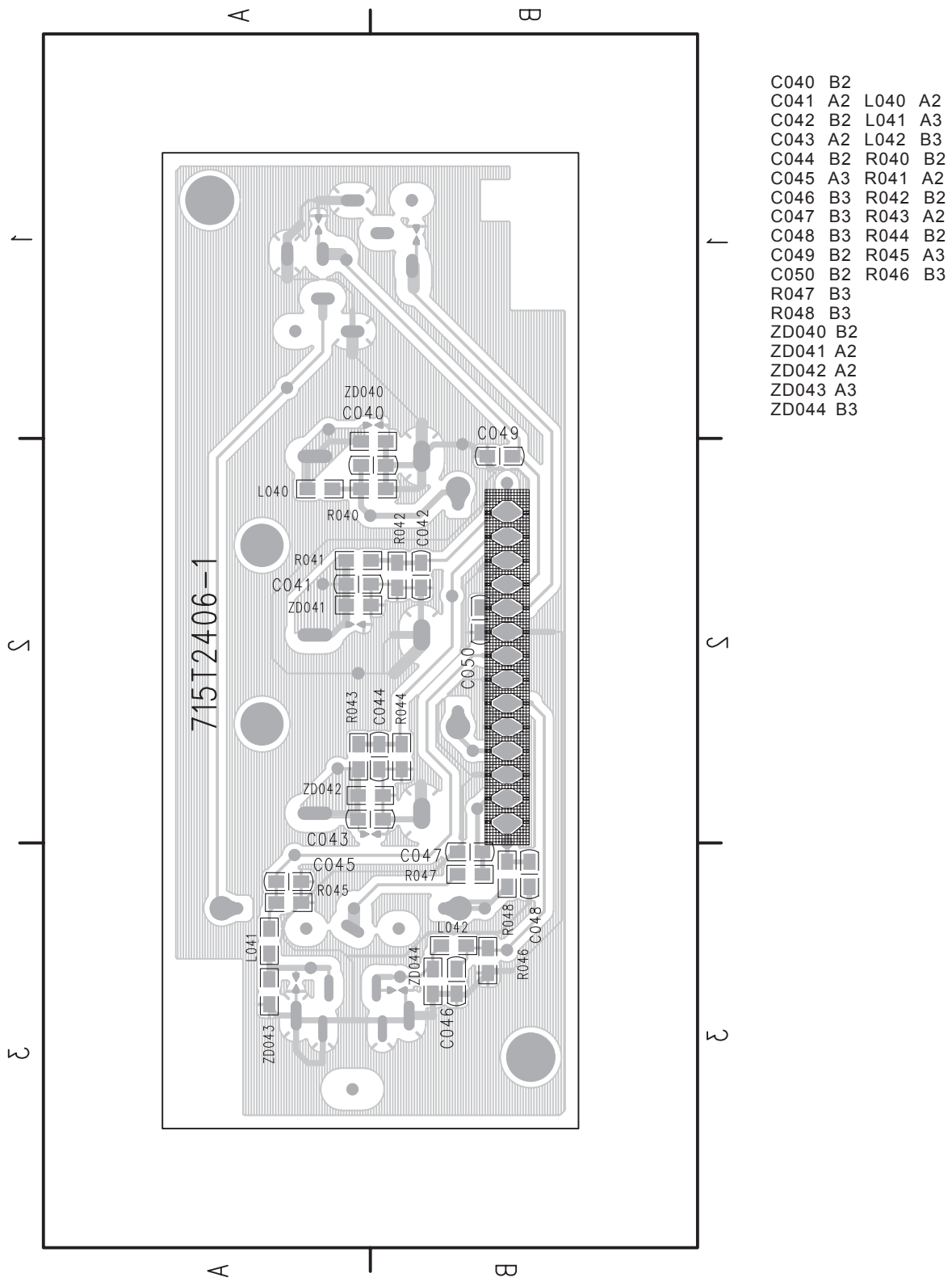


Side AV Board Layout(26",32",37")

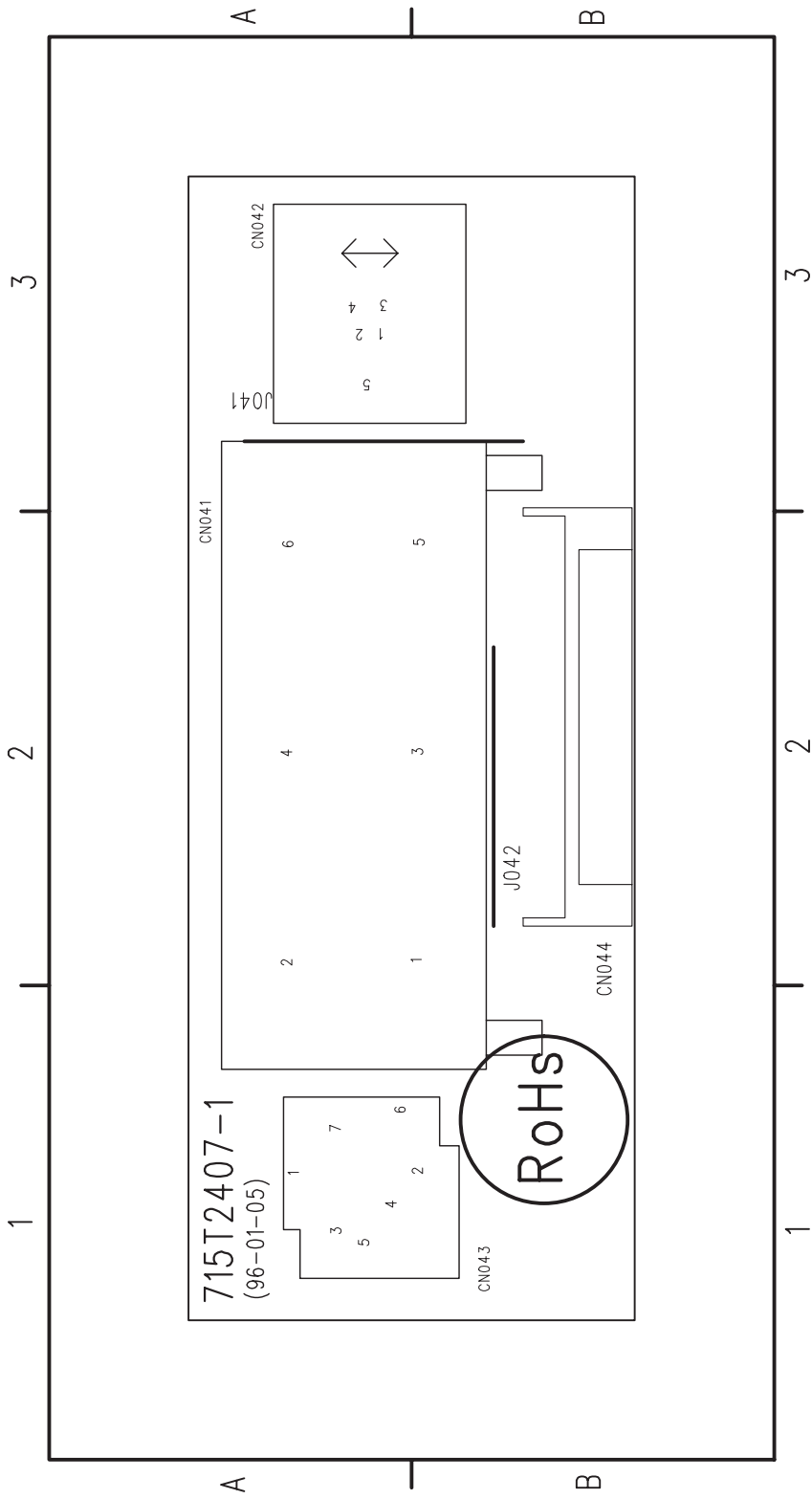


- Cn041 A2
- Cn042 A3
- Cn043 A1
- Cn044 B2
- J041 B3
- J042 B2

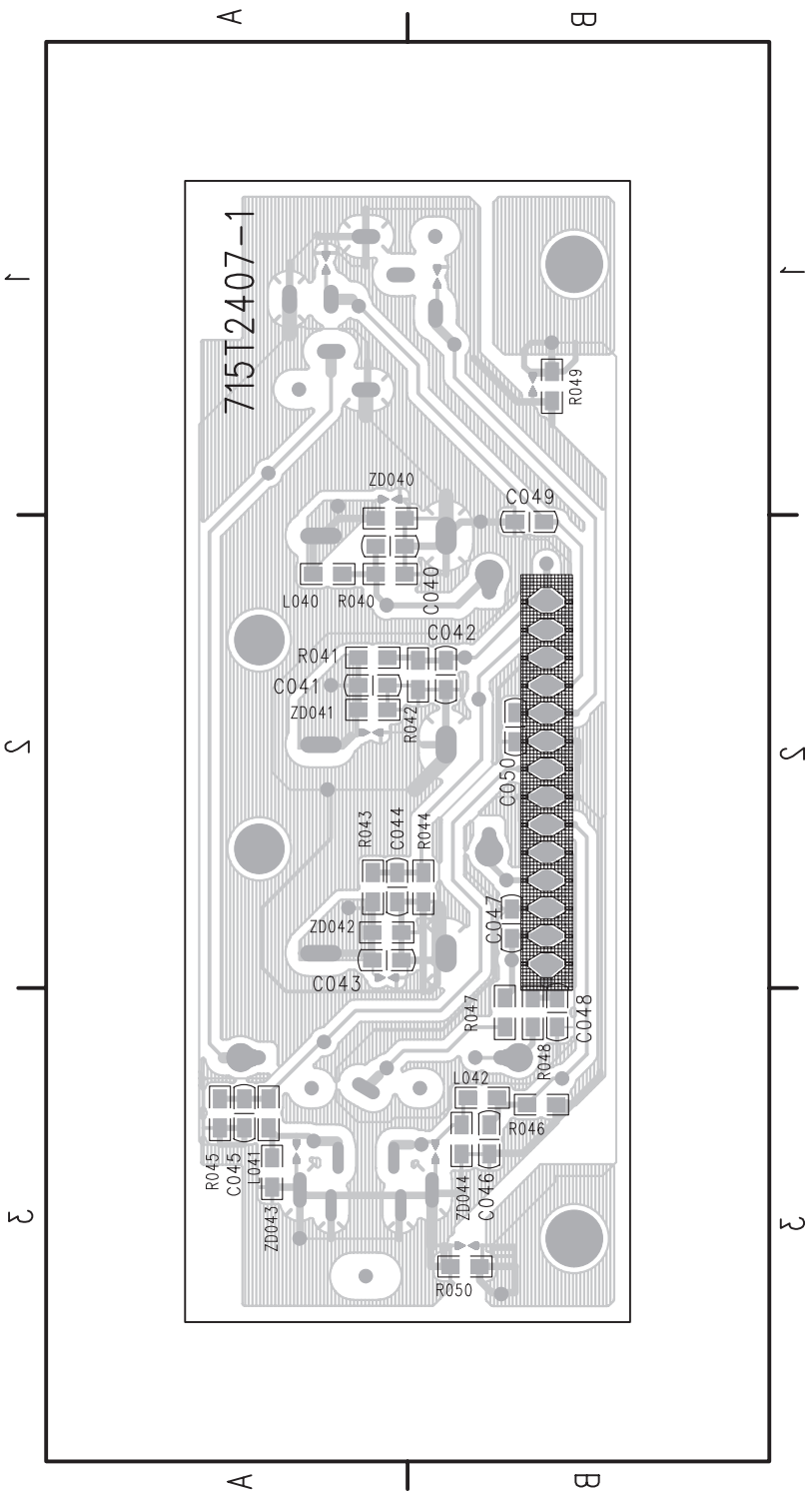
7. Circuit Diagrams and PWB Layouts



Side AV Board Layout(42")

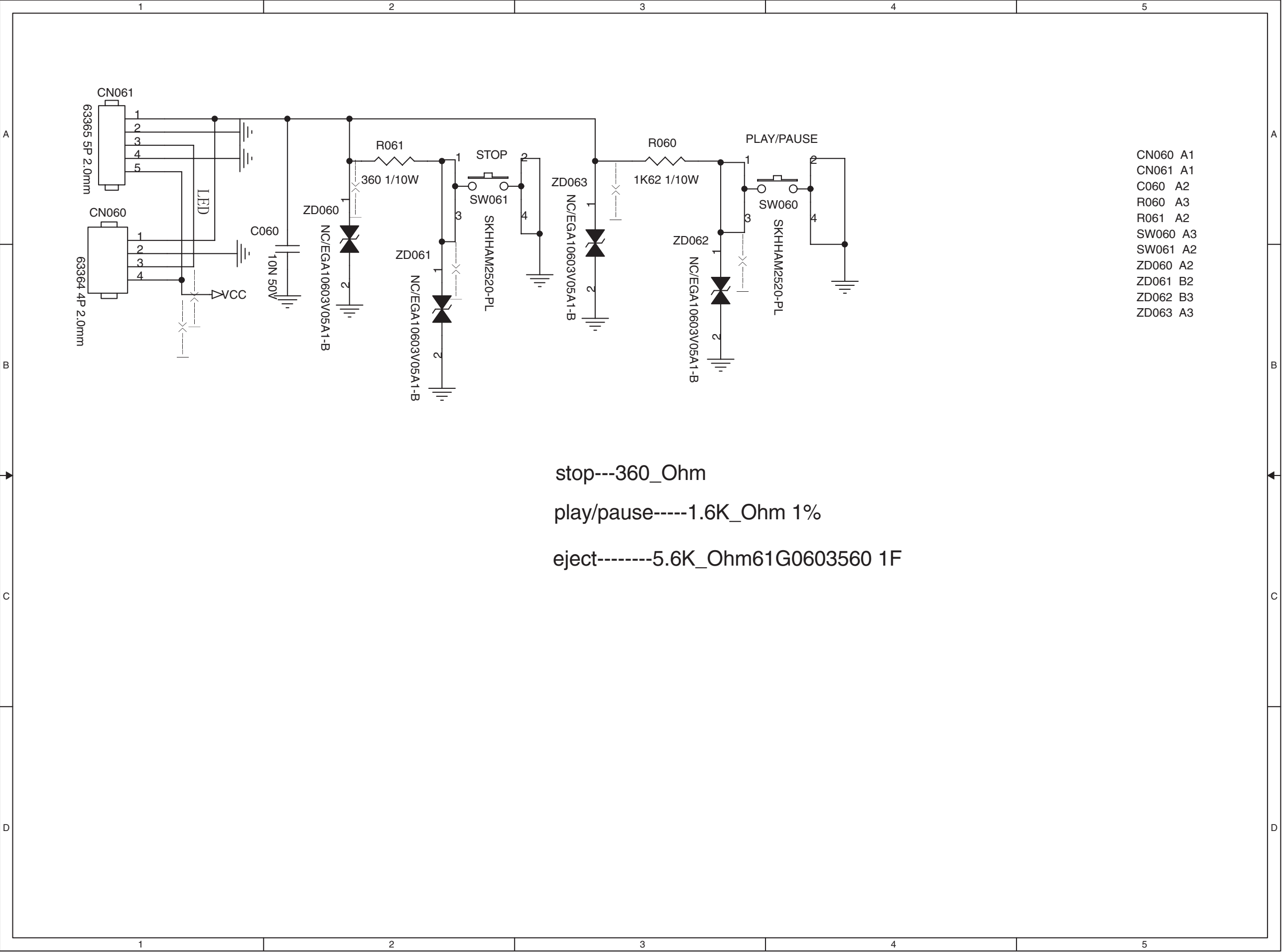


CN041 A2
CN042 A3
CN043 A1
CN044 B2
J041 B3
J042 B2

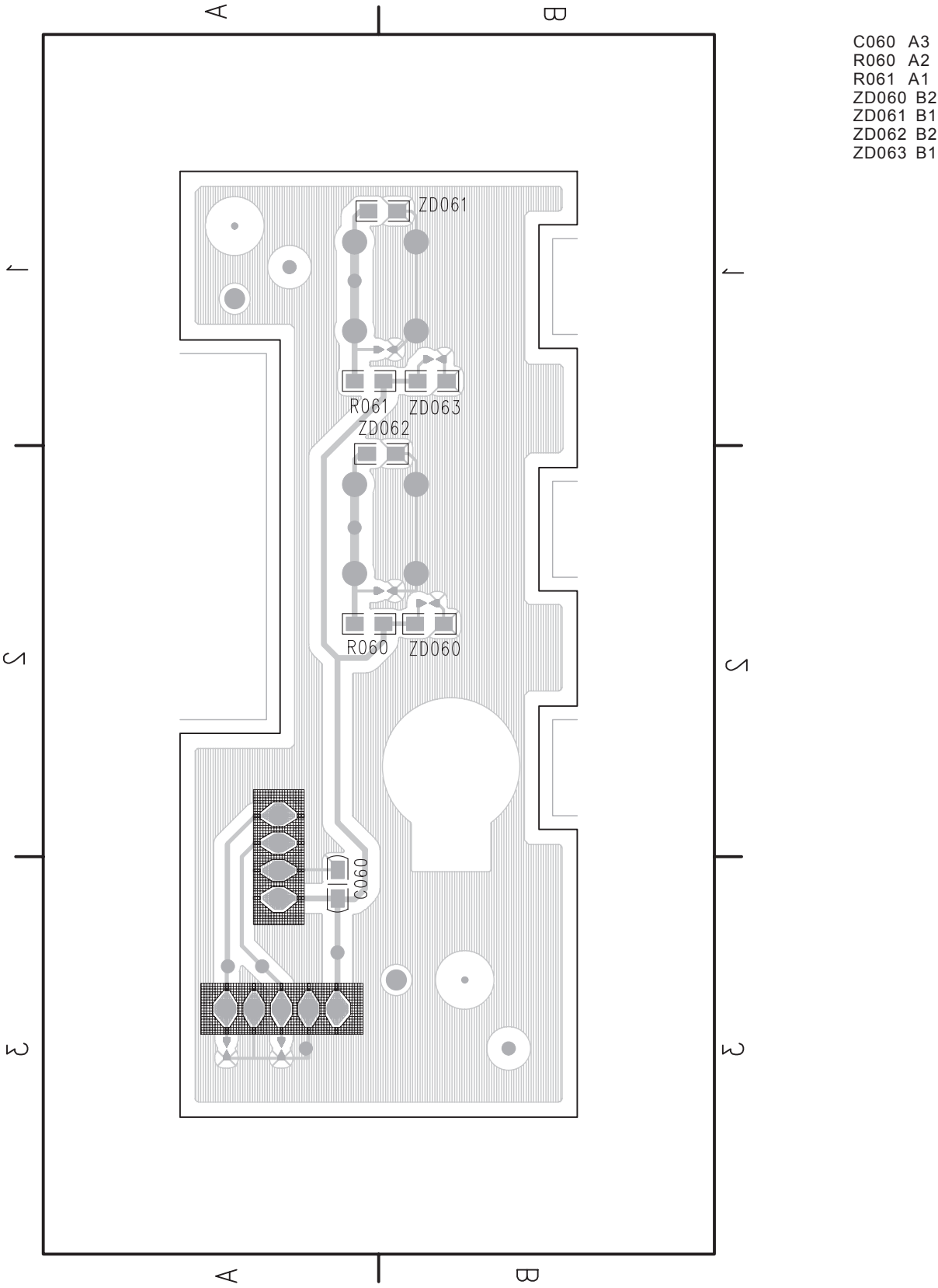
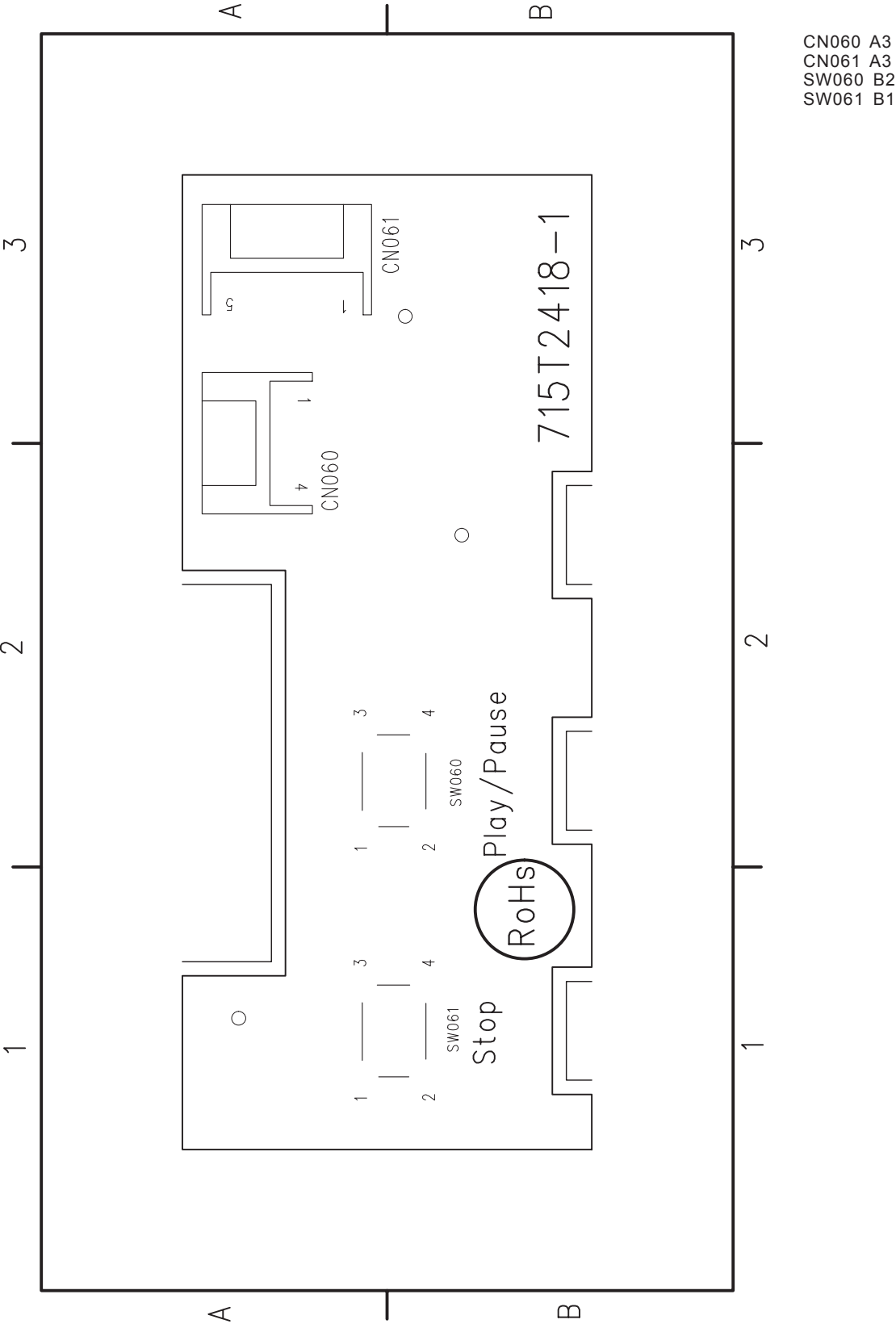


C040 A2 R041 A2
C041 A2 R042 B2
C042 B2 R043 A2
C043 A2 R044 B2
C044 A2 R045 A3
C045 A3 R046 B3
C046 B3 R047 B3
C047 B2 R048 B3
C048 B3 R049 B1
C049 B2 R050 B3
C050 B2 ZD040 A2
L040 A2 ZD041 A2
L041 A3 ZD042 A2
L042 B3 ZD043 A3
R040 A2 ZD044 B3

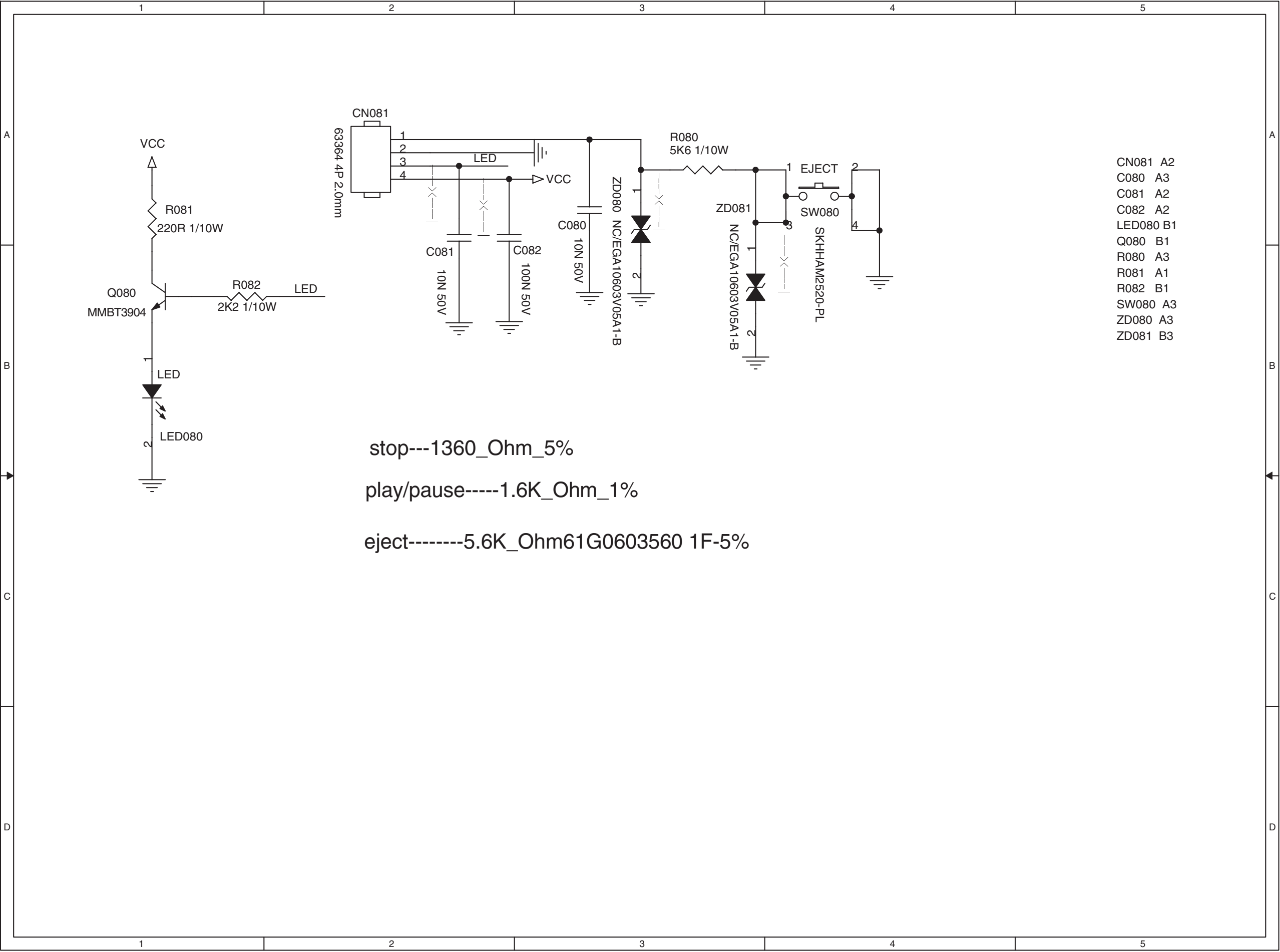
DVD Key Control Board Schematic Diagram(26MD357,32MD357)



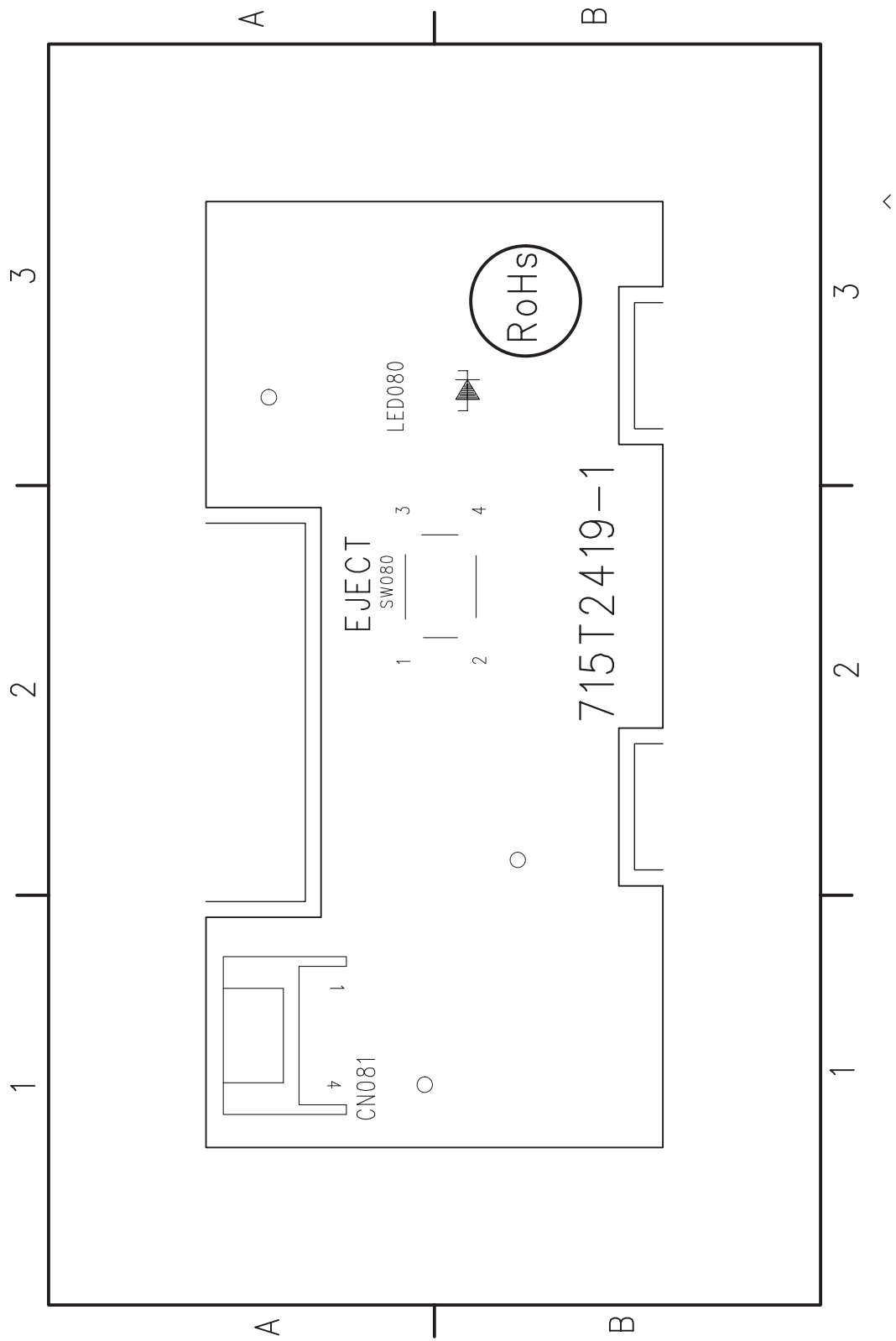
DVD Key Control Board Layout(26MD357, 32MD357)



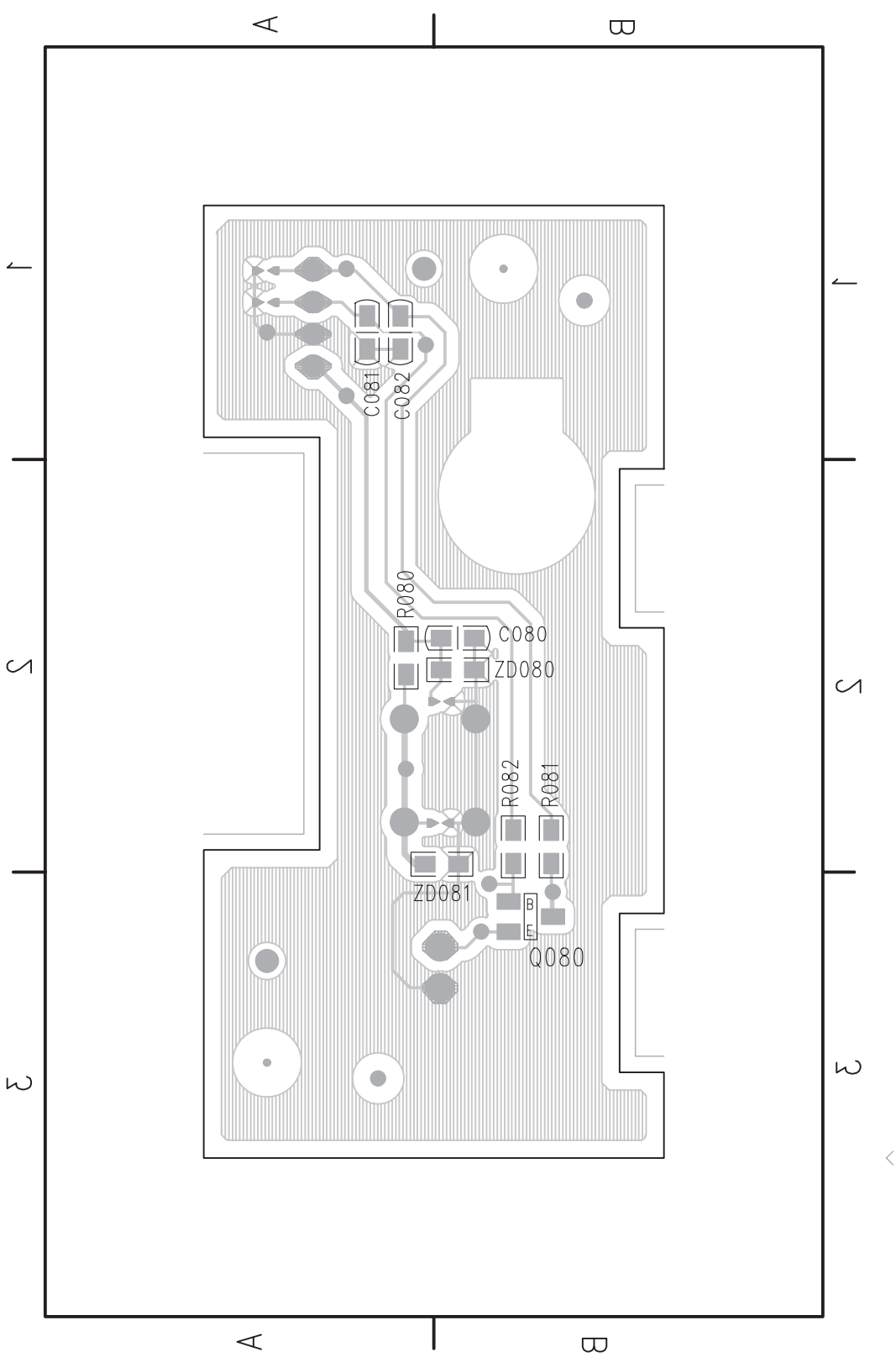
DVD LED Board Schematic Diagram(26MD357,32MD357)



DVD LED Board Layout(26MD357,32MD357)



CN081 A1
LED080 B3
SW080 B2



C080 B2
C081 A1
C082 A1
Q080 B3
R080 A2
R081 B2
R082 B2
ZD080 B2
ZD081 B2

8. Alignments

Index of this chapter:

- 8.1 Electrical Instructions
- 8.2 ISP Instructions
- 8.3 Serial Number Definition
- 8.4 WriteMTK_CSM_No_HDCP and WriteMTKHDCPKey Instructions

Notes: You could adjust the LCD/TV following this chapter when the LCD/TV has the below defect.

1. Change panel. 2. Change or repair main board. 3. LCD/TV color is not right. 4. The settings are disabled.

8.1 Electrical Instructions

8.1.1. Analog TV Mode display adjustment

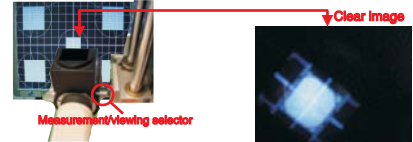
8.1.1.1 White balance adjustment (B)

General set-up :

Equipment Requirements: Minolta CA-110 or Equivalent Color analyzer
Fluke 54200 or equivalent TV RF signal generator

Input requirements:

- Input Signal Type : RF signal
1. Set to NTSC system, frequency=187.25MHZ(for NAFTA model), with White pattern of 100%
 2. Select Smart picture to **Personal** mode and check the x, y data.



Input Signal Strength : 10mV (80 dBuV) terminal voltage.

Input Injection Point : TV Tuner input

Alignment method:

Initial Set-up:

1. Select source as "TV".
2. Set Smart picture as "**Personal**" and to be Contrast =**50 (LPL)**, Brightness=**50 (LPL)**, at normal menu mode.
3. Apply "100% Full White" pattern by TV pattern generator.
4. Enter factory mode menu: press MENU + Numeric keys "062596" + MENU key (**FAC mode menu**). Then select "Factory" item.

Alignment:

1. Set color temperature to "NORMAL".
2. At **FAC mode menu**, adjust the CLR TEMP R, CLR TEMP G, CLR TEMP B values to meet "NORMAL" color coordinates specification below. Then store those values to NVM.
3. Set color temperature to "WARM".
4. At **FAC mode menu**, adjust the CLR TEMP R, CLR TEMP G, CLR TEMP B values to meet "WARM" color coordinates specification below. Then store those values to NVM.
5. Set color temperature to "COOL".
6. At **FAC mode menu**, adjust the CLR TEMP R, CLR TEMP G, CLR TEMP B values to meet "COOL" color coordinates specification below. Then store those values to NVM.

Color temperature Normal/Warm/Cool (x, y) co-ordinates specification:

Picture Mode	x	y
Normal (8500°K)	0.291±0.005	0.302±0.005
WARM (6500°K)	0.314±0.005	0.324±0.005
COOL (11500°K)	0.273±0.005	0.280±0.005

Table 5: Reading with Minolta CA-110.

If you have not CA-110, the following R, G and B values are for your reference.

	Normal/(8500°K)	Cool/(11500°K)	Warm/(6500°K)
R	117	144	118
G	112	130	116
B	108	123	144

7. Check the gray pattern should be distinguished and color bar is correct

Note:

1. Use Minolta CA-110 for color coordinates and luminance check.
2. Luminance > **400 cd/m²** in the center of the screen when CLR TEMP R, CLR TEMP G, CLR TEMP B set to **128** and Brightness control at **100**; Contrast control at **100**
3. Reset AV setting, smart picture shall be recalled to be "**Rich**" and Contrast=**60 (LPL)**, Brightness=**55 (LPL)**.

8.1.2. PC mode display adjustment

8.1.2.1 Display quality adjustment

Use timing mode as describe in 2.2, and use the POPO (pixel on pixel off) pattern

to adjust the clock until no stripe and adjust the phase until clear picture.

("Auto" will be done every time switching to PC mode and mode change)

Check all preset 6 modes.

8.1.2.2 WHITE-D adjustment (B)

General set-up :

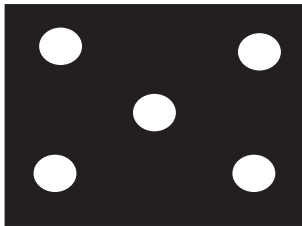
Equipment Requirements: Minolta CA-110 or Equivalent Color analyzer
Chroma 2250 or equivalent PC signal generator

Input requirements:

Input Signal Type : PC VGA signal
1. 1024X768/60Hz PC mode with 5 white block pattern. (see pattern-1)
2. Select Smart picture to **Normal** mode and check the x, y data.

Input Signal Strength : 0.7 Vp-p linear voltage.

Input Injection Point : PC D-SUB input



OR



Pattern-1

Alignment method:

Initial Set-up:

1. Select source as "PC".
2. Set Contrast = **50 (LPL)** and Brightness=**50 (LPL)** , at normal menu mode.
3. Apply "5 white block" pattern by VGA pattern generator.
4. Enter factory mode menu: press MENU + Numeric keys "062596" + MENU key (**FAC mode menu**). Then select "Factory" item.

Alignment:

1. At **FAC mode menu**, select AUTO_COLOR item. Then press "OK" key to adjust ADC_GAIN_R, ADC_GAIN_G, ADC_GAIN_B and ADC_OFFSET_R, ADC_OFFSET_G, ADC_OFFSET_B. Then store those values to NVM.
2. Set color temperature to "NORMAL".
3. At **FAC mode menu**, adjust the CLR TEMP R, CLR TEMP G, CLR TEMP B values to meet "NORMAL" color coordinates specification below. Then store those values to NVM.
4. Set color temperature to "WARM".
5. At **FAC mode menu**, adjust the CLR TEMP R, CLR TEMP G, CLR TEMP B values to meet "WARM" color coordinates specification below. Then store those values to NVM.
6. Set color temperature to "COOL".
7. At **FAC mode menu**, adjust the CLR TEMP R, CLR TEMP G, CLR TEMP B values to meet "COOL" color coordinates specification below. Then store those values to NVM.

Color temperature Normal/Warm/Cool (x, y) co-ordinates specification:

	X	Picture Mode	y
Normal (8500°K)	0.291±0.005		0.302±0.005
WARM (6500°K)	0.314±0.005		0.324±0.005
COOL(11500°K)	0.273±0.005		0.280±0.005

Readings with Minolta CA-110.

8.1.2.3 Check grayscale

Apply 32 gray pattern.

Check the color poor & noise condition of 32 gray pattern.

8. Alignments

8.1.3. YPbPr mode display adjustment

8.1.3.1 White Balance adjustment (B)

General set-up :

Equipment Requirement: Minolta CA-110 or Equivalent Color analyzer
Quantum Data Pattern Generator 801GD or 802G or Fluke 54200

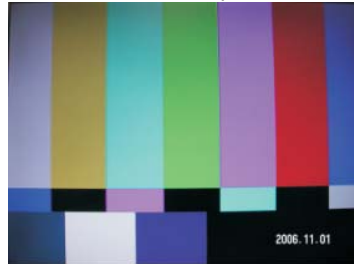
Input requirements:

- Input Signal Type : YPbPr signal
1. 1080i mode, SMPTE color pattern by 801GD or 802G.or 576i (PAL system), color bar with black/white pattern by Fluke 54200.
 2. Select Smart picture to **Personal** mode and check the x, y data.

Input Signal Strength : 1 Vpp for Y signal ; 350 mVpp for Pb & Pr signal

Input Injection Point : AV1 YPbPr (RAC jack)

1080i, SMPTE color pattern.



576i (PAL system), color bar with black and white pattern



Alignment method:

Initial Set-up:

1. Select source as "AV1".
2. Set Smart picture as "**Personal**" and to be Contrast =50 (LPL), Brightness=50 (LPL) , at normal menu mode.
3. Apply "SMPTE color" pattern or "color bar with black & white" pattern by signal generator.
4. Enter factory mode menu: press MENU + Numeric keys "062596" + MENU key (**FAC mode menu**). Then select "Factory" item.

Alignment:

1. At **FAC mode menu**, select AUTO_COLOR item. Then press "OK" key to adjust ADC_GAIN_R, ADC_GAIN_G, ADC_GAIN_B and ADC_OFFSET_R, ADC_OFFSET_G, ADC_OFFSET_B. Then store those values to NVM.
2. Apply full white pattern.
3. Set color temperature to "NORMAL".
4. Copy CLR_TEMP_R, CLR_TEMP_G and CLR_TEMP_B values from "NORMAL" color temperature in Analog TV mode. Check whether (x,y) color coordinates meet "NORMAL" color specification below. If color coordinates are out of specification, fine-tune CLR_TEMP_R, CLR_TEMP_G and CLR_TEMP_B values. Then store those values to NVM.
5. Set color temperature to "WARM".
6. Copy CLR_TEMP_R, CLR_TEMP_G and CLR_TEMP_B values from "WARM" color temperature in Analog TV mode. Check whether (x,y) color coordinates meet "WARM" color specification below. If color coordinates are out of specification, fine-tune CLR_TEMP_R, CLR_TEMP_G and CLR_TEMP_B values. Then store those values to NVM.
7. Set color temperature to "COOL".
8. Copy CLR_TEMP_R, CLR_TEMP_G and CLR_TEMP_B values from "COOL" color temperature in Analog TV mode. Check whether (x,y) color coordinates meet "COOL" color specification below. If color coordinates are out of specification, fine-tune CLR_TEMP_R, CLR_TEMP_G and CLR_TEMP_B values. Then store those values to NVM.

Color temperature Normal/Warm/Cool (x, y) co-ordinates specification:

Picture Mode	x	y
Normal (8500°K)	0.291±0.010	0.302±0.010
WARM (6500°K)	0.314±0.010	0.324±0.010
COOL(11500°K)	0.273±0.010	0.280±0.010

8.1.3.2 Check grayscale

Apply 32 gray pattern.

Check the color poor & noise condition of 32 gray pattern

8.1.4. HDMI mode display adjustment

8.1.4.1 White Balance adjustment (B)

General set-up :

Equipment Requirement: Minolta CA-110 or Equivalent Color analyzer
Quantum Data Pattern Generator 802BT or 881

Input requirements:

Input Signal Type : HDMI signal

1. 1080i mode, full white pattern.
2. Select Smart picture to **Personal** mode and check the x, y data.

Input Signal Strength : 4 channels TMDS signal

Input Injection Point : HDMI1 input.

Alignment method:

Initial Set-up:

1. Select source as "HDMI1".
2. Set Smart picture as "**Personal**" and to be Contrast =50 (LPL), Brightness=50 (LPL) , at normal menu mode.
3. Apply full white pattern by Quantum Data signal generator.
4. Enter factory mode menu: press MENU + Numeric keys "062596" + MENU key (FAC mode menu). Then select "Factory" item.

Alignment:

1. Set color temperature to "NORMAL".
2. Copy CLR_TEMP_R, CLR_TEMP_G and CLR_TEMP_B values from "NORMAL" color temperature in Analog TV mode. Check whether (x,y) color coordinates meet "NORMAL" color specification below. If color coordinates are out of specification, fine-tune CLR_TEMP_R, CLR_TEMP_G and CLR_TEMP_B values. Then store those values to NVM.
3. Set color temperature to "WARM".
4. Copy CLR_TEMP_R, CLR_TEMP_G and CLR_TEMP_B values from "WARM" color temperature in Analog TV mode. Check whether (x,y) color coordinates meet "WARM" color specification below. If color coordinates are out of specification, fine-tune CLR_TEMP_R, CLR_TEMP_G and CLR_TEMP_B values. Then store those values to NVM.
5. Set color temperature to "COOL".
6. Copy CLR_TEMP_R, CLR_TEMP_G and CLR_TEMP_B values from "COOL" color temperature in Analog TV mode. Check whether (x,y) color coordinates meet "COOL" color specification below. If color coordinates are out of specification, fine-tune CLR_TEMP_R, CLR_TEMP_G and CLR_TEMP_B values. Then store those values to NVM.

Color temperature Normal/Warm/Cool (x, y) co-ordinates specification:

Picture Mode	x	y
Normal (8500°K)	0.291± 0.010	0.302± 0.010
WARM (6500°K)	0.314± 0.010	0.324± 0.010
COOL(11500°K)	0.273± 0.010	0.280± 0.010

8.1.5. DTV (ATSC) mode display adjustment

8.1.5.1 White Balance adjustment (B)

General set-up :

Equipment Requirement: Minolta CA-110 or Equivalent Color analyzer.
ATSC signal generator - Sencore ATSC997 or equivalent generator

Input requirements:

Input Signal Type : RF signal

1. Set center frequency=69MHz, playing transport stream with white pattern.
2. Select Smart picture to **Personal** mode and check the x, y data.

Input Signal Strength : 60 dBuV

Input Injection Point : RF input

Alignment method:

Initial Set-up:

1. Select source as "TV".
2. Set Smart picture as "**Personal**" and to be Contrast =50 (LPL), Brightness=50 (LPL) , at normal menu mode.
3. Apply white pattern by ATSC997 signal generator.
4. Enter factory mode menu: press MENU + Numeric keys "062596" + MENU key (FAC mode menu). Then select "Factory" item.

8. Alignments

Alignment:

1. Set color temperature to "NORMAL".
 2. Copy CLR_TEMP_R, CLR_TEMP_G and CLR_TEMP_B values from "NORMAL" color temperature in Analog TV mode. Check whether (x,y) color coordinates meet "NORMAL" color specification below. If color coordinates are out of specification, fine-tune CLR_TEMP_R, CLR_TEMP_G and CLR_TEMP_B values. Then store those values to NVM.
 3. Set color temperature to "WARM".
 4. Copy CLR_TEMP_R, CLR_TEMP_G and CLR_TEMP_B values from "WARM" color temperature in Analog TV mode. Check whether (x,y) color coordinates meet "WARM" color specification below. If color coordinates are out of specification, fine-tune CLR_TEMP_R, CLR_TEMP_G and CLR_TEMP_B values. Then store those values to NVM.
 5. Set color temperature to "COOL".
 6. Copy CLR_TEMP_R, CLR_TEMP_G and CLR_TEMP_B values from "COOL" color temperature in Analog TV mode. Check whether (x,y) color coordinates meet "COOL" color specification below. If color coordinates are out of specification, fine-tune CLR_TEMP_R, CLR_TEMP_G and CLR_TEMP_B values. Then store those values to NVM.
- Color temperature Normal/Warm/Cool (x, y) co-ordinates specification:

Picture Mode	x	y
Normal (8500°K)	0.291±0.010	0.302±0.010
WARM (6500°K)	0.314±0.010	0.324±0.010
COOL(11500°K)	0.273±0.010	0.280±0.010

8.1.6. HDMI HDCP Key Download

8.1.6.1 HDCP Key Encryption

The handling of HDCP keys must be done in the most secure way.

The HDCP keys purchased / delivered from Digital Content Protection, LLC are first encrypted by MTK encryption software. Then the encrypted keys are stored in secure room or secure PC in production line.

8.1.6.2 HDCP Key Downloading to Set

In production line PC, execute HDCP key programming software to load encrypted key data from secureroom or secure PC to specific positions of set's NVM via UART interface of MT537x chip.

8.1.6.3 Test HDCP Key

- 8.1.6.3.1. Use QuantumData 802BT or equivalent instrument with HDCP test pattern to verify HDCP key loaded in the set. The "PASS" information will be shown in the lower center block of the screen when HDCP key is correctly loaded.
- 8.1.6.3.2 Use DVD player Pioneer DVD player xxx or equivalent DVD player with HDMI output to verify HDCP key loaded in the set. The video should be smoothly displayed when HDCP key is correctly loaded

8.2 Service Tools

8.2.1 ComPair

Introduction

ComPair (Computer Aided Repair) is a Service tool for Philips Consumer Electronics products. and offers the following:

1. ComPair helps you to quickly get an understanding on how to repair the chassis in a short and effective way.
2. ComPair allows very detailed diagnostics and is therefore capable of accurately indicating problem areas. You do not have to know anything about I²C or UART commands yourself, because ComPair takes care of this.
3. ComPair speeds up the repair time since it can automatically communicate with the chassis (when the uP is working) and all repair information is directly available.
4. ComPair features TV software upgrade possibilities.

Specifications

ComPair consists of a Windows based fault finding program and an interface box between PC and the (defective) product. The (new) ComPair II interface box is connected **to the PC** via an USB cable. For the TV chassis, the ComPair interface box and the TV communicate via a bi-directional cable via the service connector(s).

How to Connect

This is described in the ComPair chassis fault finding database.

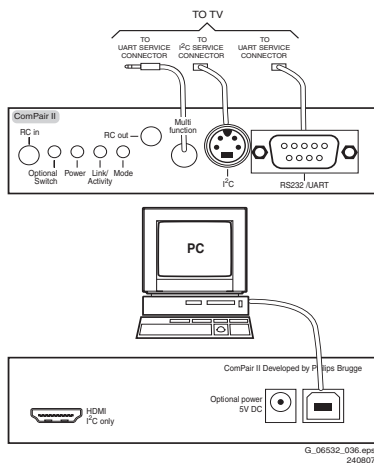


Figure 8-1 ComPair II interface connection

Caution: It is compulsory to connect the TV to the PC as shown in the picture above (with the ComPair interface in between), as the ComPair interface acts as a level shifter. If one connects the TV directly to the PC (via UART), ICs will be blown!

How to Order

ComPair II order codes:

- ComPair II interface: 3122 785 91020.
- ComPair32 CD (update): 3122 785 60160.
- ComPair I²C interface cable: 3122 785 90004 (to be used with chassis L01, A02, A10, EMx, TPM1.xA, etc ...).
- ComPair I²C interface extension cable: 3139 131 03791 (to be used with chassis L01, A02, A10, L04, LC4, LC7.1, LC7.2).
- ComPair UART interface cable: 3122 785 90630 (to be used with chassis LC4, EJ3, BJ2, BL2, BP2, ...).
- ComPair RS232 cable: 3104 311 12742 (to be used with chassis Q52x).
- ComPair I²C interface cable (3.5 mm Jack-to-SVHS plug): 9965 100 07325 (to be used with chassis LC7.5).
- **Note:** For I²C it is **compulsory** to use this particular cable.
- ComPair UART interface cable (3.5 mm Jack-to-Jack): 3138 188 75051 (to be used with chassis LC7.5).

Note: For UART it is also allowed to use a standard "Jack-to-Jack" cable.

Note: If you encounter any problems, contact your local support desk.

8.2.2 LVDS Tool

Support of the LVDS Tool has been discontinued.

9. Circuit Descriptions, Abbreviations List and IC Data Sheets

Index of this chapter

9.1 Circuit Descriptions

9.2 Abbreviations List

9.3 IC Data Sheets

9.1 Circuit Descriptions

This is a new TV chasis, specifically developed for NTSC/ATSC/QAM reception. The key components are :

MT537x: DTV backend decoder and TV controller (MT5371 for WXGA & MT5373 for full HD).

MT5112BD: Channel Decoder

WM8776S: Stereo Audio Codec

Chassis Function Description

Terrestrial Reception

The TV receives multimedia information by tuning to one of many 6 MHz input channels available via a terrestrial connection (including NTSC & ATSC).

When the input channel is an analog channel, the signal is processed via the NTSC decoder and the VBI data decoder. If the input channel is a digital channel, the signal is processed via the channel decoder and DTV backend decoder.

Cable Reception

The TV receives multimedia information by tuning to one of many 6 MHz input channels available via a cable connection (NTSC & Free QAM). When the input channel is a digital channel, it is processed via the QAM demodulator.

Signal Processing

The key part in the system, the MT537x, performs almost all key features, like video quality enhancement, smooth picture quality for motion deinterlacer, and others. The special color processing technology provided favorite and natural color for TV. It is a highly integrated SOC IC with an ARM microcontroller core. MT537x support transport de-multiplexer, MPEG-2 video decoder, AC3 audio decoder, LVDS transmitter, TV decoder and HDMI Receiver. It is also integrated with high speed VGA ADC, high resolution Video/Audio ADC, 90db Audio DAC and 12-bit Video DAC. It will provide very fine quality for TV.

The audio processing is processed in WM8776S. It is a high performance, stereo audio codec with 6 channel input selector and is ideal for surround sound processing. It supports fully independent sample for ADC and DAC. Its audio data interface supports I²S and DSP formats.

9.2 Abbreviations List

CSM	Customer Service Mode
ATSC	Advanced Television Systems Committee, the digital TV standard in the USA
DVD	Digital Versatile Disc
EEPROM	Electrically Erasable and Programmable Read Only Memory
3DNR	Temporal (3D) Noise Reduction
AGC	Automatic Gain Control: algorithm that controls the video input of the feature box
FM	Field Memory or Frequency Modulation
AM	Amplitude Modulation
AP	Asia Pacific
ASF	Auto Screen Fit: algorithm that adapts aspect ratio to remove horizontal black bars without discarding video information
ATV	See Auto TV
Auto TV	A hardware and software control system that measures picture content, and adapts image parameters in a dynamic way
AV	External Audio Video
AVIP	Audio Video Input Processor
B/G	Monochrome TV system. Sound carrier distance is 5.5 MHz
ComPair	Computer aided rePair
CP	Connected Planet / Copy Protection
CSS	Content Scrambling System; An encryption method for MPEG-2 video on DVDs. The algorithm and keys required to decode the disc are stored on the DVD-player
CVBS	Composite Video Blanking and Synchronization
DFU	Directions For Use: owner's manual
DNR	Digital Noise Reduction: noise reduction feature of the set
DSP	Digital Signal Processing
DST	Dealer Service Tool: special remote control designed for service technicians
DTCP	Digital Transmission Content Protection; A protocol for protecting digital audio/video content that is traversing a high speed serial bus, such as IEEE-1394
DVI(-d)	Digital Visual Interface (d= digital only)
EAS	Emergency Alert Signalling; A cable TV standard (SCTE18) to signal emergency information to digital terminal devices
E-DDC	Enhanced Display Data Channel (VESA standard for communication channel and display). Using E-DDC, the video source can read the EDID information from the display.
EDID	Extended Display Identification Data (VESA standard)
EMI	Electro Magnetic Interference
EMM	Entitlement Management Message
EPLD	Erasable Programmable Logic Device
EU	Europe
FBL	Fast BLanking: DC signal accompanying RGB signals
FDS	Full Dual Screen (same as FDW)
FDW	Full Dual Window (same as FDS)
FLASH	FLASH memory
FTV	Flat TeleVision
H	H_sync to the module
HD	High Definition
HDD	Hard Disk Drive

NTSC	National Television Standard Committee. Color system mainly used in North America and Japan. Color carrier NTSC M/N= 3.579545 MHz, NTSC 4.43= 4.433619 MHz (this is a VCR norm, it is not transmitted off-air)
NVM	Non-Volatile Memory: IC containing TV related data such as alignments
OSD	On Screen Display
PLL	Phase Locked Loop. Used for e.g.
LVDS	Low Voltage Differential Signalling
PAL	Phase Alternating Line. Color system mainly used in West Europe (color carrier= 4.433619 MHz) and South America (color carrier PAL M= 3.575612 MHz and PAL N= 3.582056MHz)
PCB	Printed Circuit Board (same as PWB)
PCM	Pulse Code Modulation
PWB	Printed Wiring Board (same as "PCB")
PWM	Pulse Width Modulation
QAM	Quadrature Amplitude Modulation; modulation method
RAM	Random Access Memory
RGB	Red, Green, and Blue. The primary color signals for TV. By mixing levels of R, G, and B, all colors (Y/C) are reproduced.
RC	Remote Control RC5 / RC6 Signal protocol from the remote control receiver
RESET	RESET signal
ROM	Read Only Memory
SAM	Service Alignment Mode
SCART	Syndicat des Constructeurs d'Appareils Radiorecepteurs et Televisieurs
SCL	Serial Clock I2C
SCL-F	CLock Signal on Fast I2C bus
SD	Standard Definition
SDA	Serial Data I2C
SDA-F	DAta Signal on Fast I2C bus
SDI	Serial Digital Interface, see "ITU-656"
SDRAM	Synchronous DRAM
SECAM	SEquence Couleur Avec Memoire. Color system mainly used in France and East Europe. Color carriers= 4.406250 MHz and 4.250000 MHz
SIF	Sound Intermediate Frequency
SMPS	Switched Mode Power Supply
SOG	Sync On Green
SOPS	Self Oscillating Power Supply
I2C	Integrated IC bus
I2D	Integrated IC Data bus
I2S	Integrated IC Sound bus
IB	In Band channel
IF	Intermediate Frequency
Interlaced	Scan mode where two fields are used to form one frame. Each field contains half the number of the total amount of lines. The fields are written in "pairs", causing line flicker.
IR	Infra Red
IRQ	Interrupt Request
LATAM	Latin America
LCD	Liquid Crystal Display
LED	Light Emitting Diode
LPL	LG.Philips LCD (supplier)
MUTE	MUTE Line

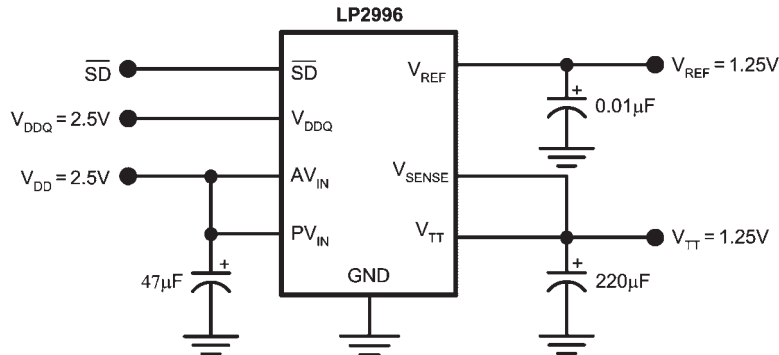
TFT	Thin Film Transistor
SRAM	Static RAM
STBY	STandBY
SOG	Sync On Green
SVGA	800x600 (4:3)
SVHS	Super Video Home System
SW	Software
SWAN	Spatial temporal Weighted Averaging Noise reduction
SXGA	1280x1024
TMD5	Transmission Minimized Differential Signalling
UXGA	1600x1200 (4:3)
V	V-sync to the module
VCR	Video Cassette Recorder
VESA	Video Electronics Standards Association
VGA	640x480 (4:3)
VL	Variable Level out: processed audio output toward external amplifier
VSB	Vestigial Side Band; modulation method
WYSIWYR	What You See Is What You Record: record selection that follows main picture and sound
WXGA	1280x768 (15:9)
XGA	1024x768 (4:3)
Y	Luminance signal
YPbPr	Component video. Luminance and scaled color difference signals (B-Y and R-Y)

9.3 IC Data Sheets

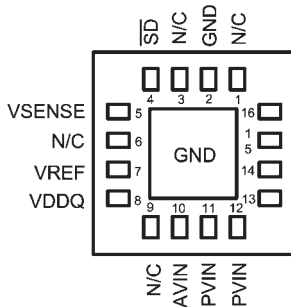
This section shows the internal block diagrams and pin configurations of ICs that are drawn as "black boxes" in the electrical diagrams (with the exception of "memory" and "logic" ICs).

9.3.1 IC Data Sheets-LP2996(U503)

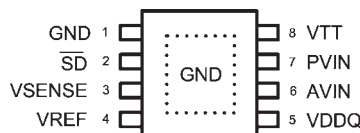
Typical Application Circuit



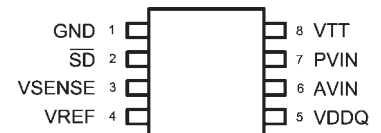
Pin Configuration



LLP-16 Layout



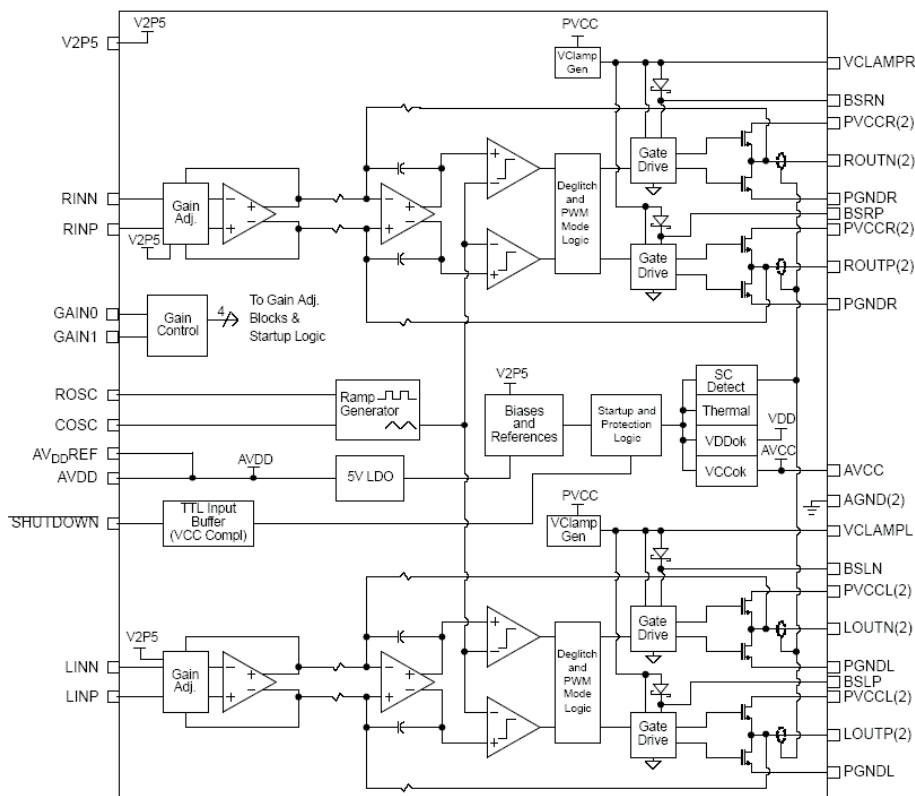
PSOP-8 Layout



SO-8 Layout

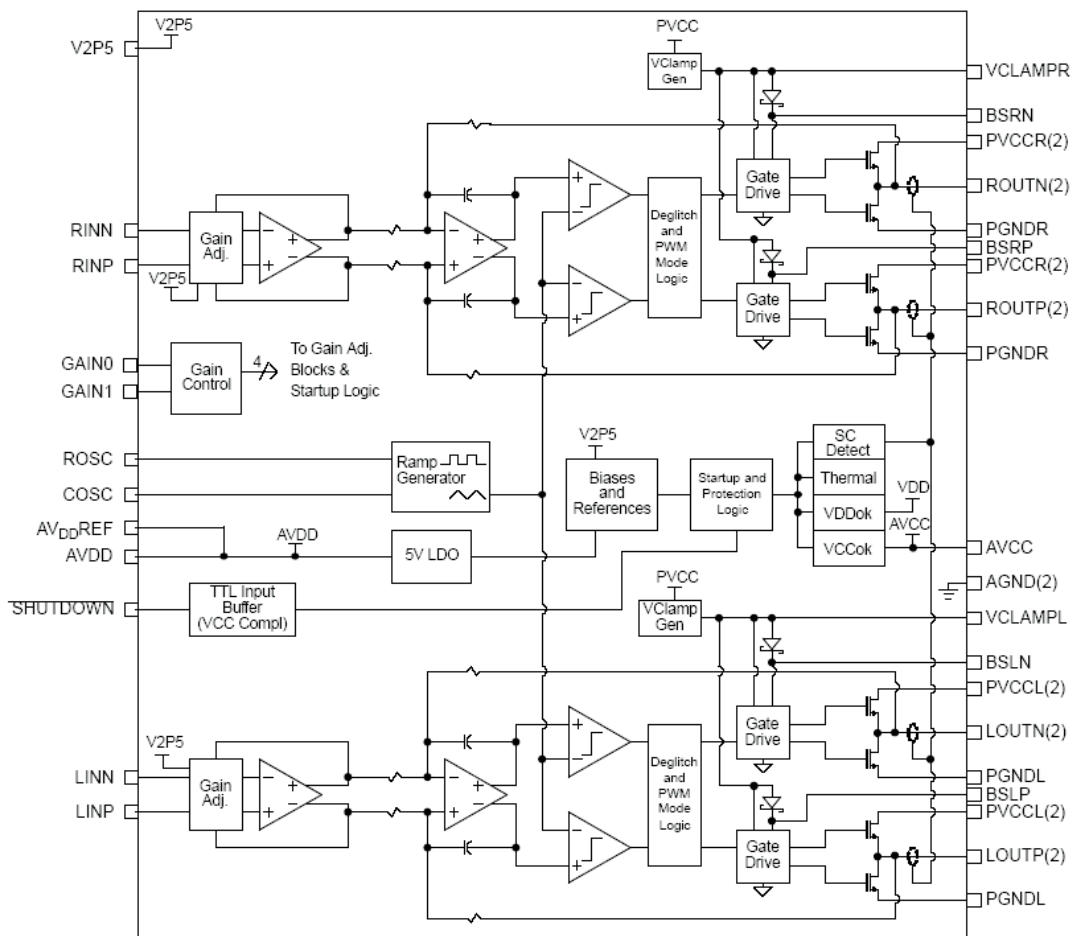
9.3.2 IC Data Sheets-TPA3005D2(U801)

FUNCTIONAL BLOCK DIAGRAM

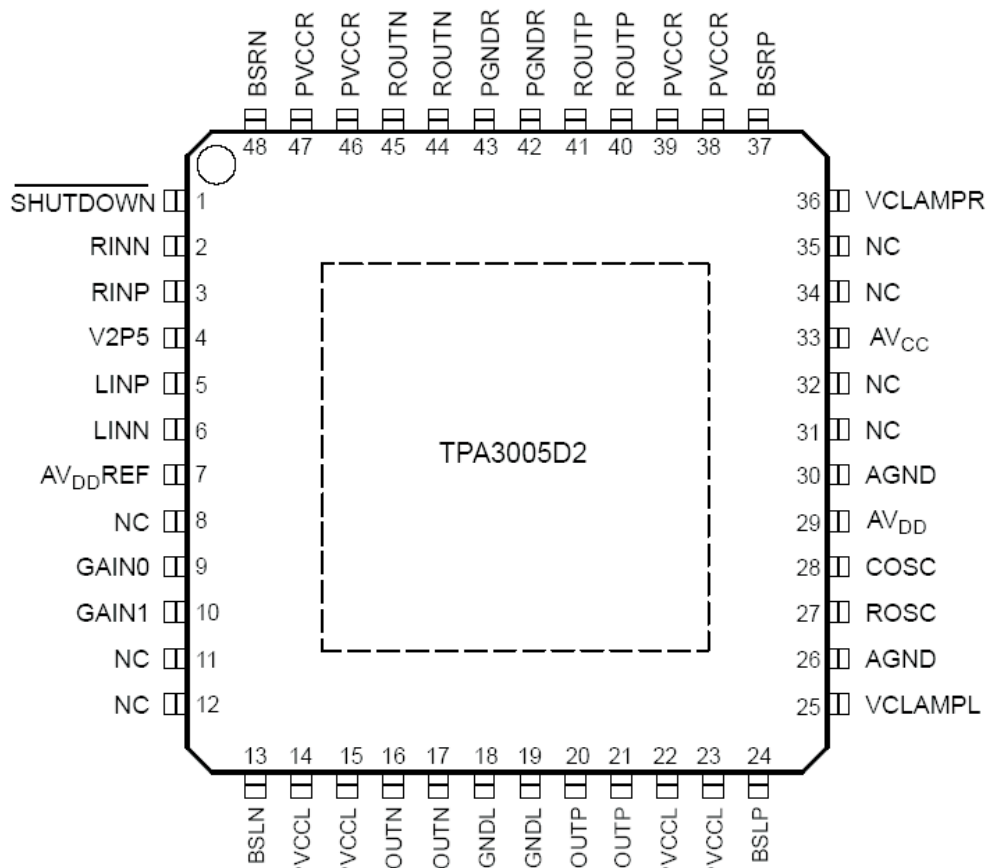


9.3.2 IC Data Sheets-TPA3005D2(U801)

FUNCTIONAL BLOCK DIAGRAM

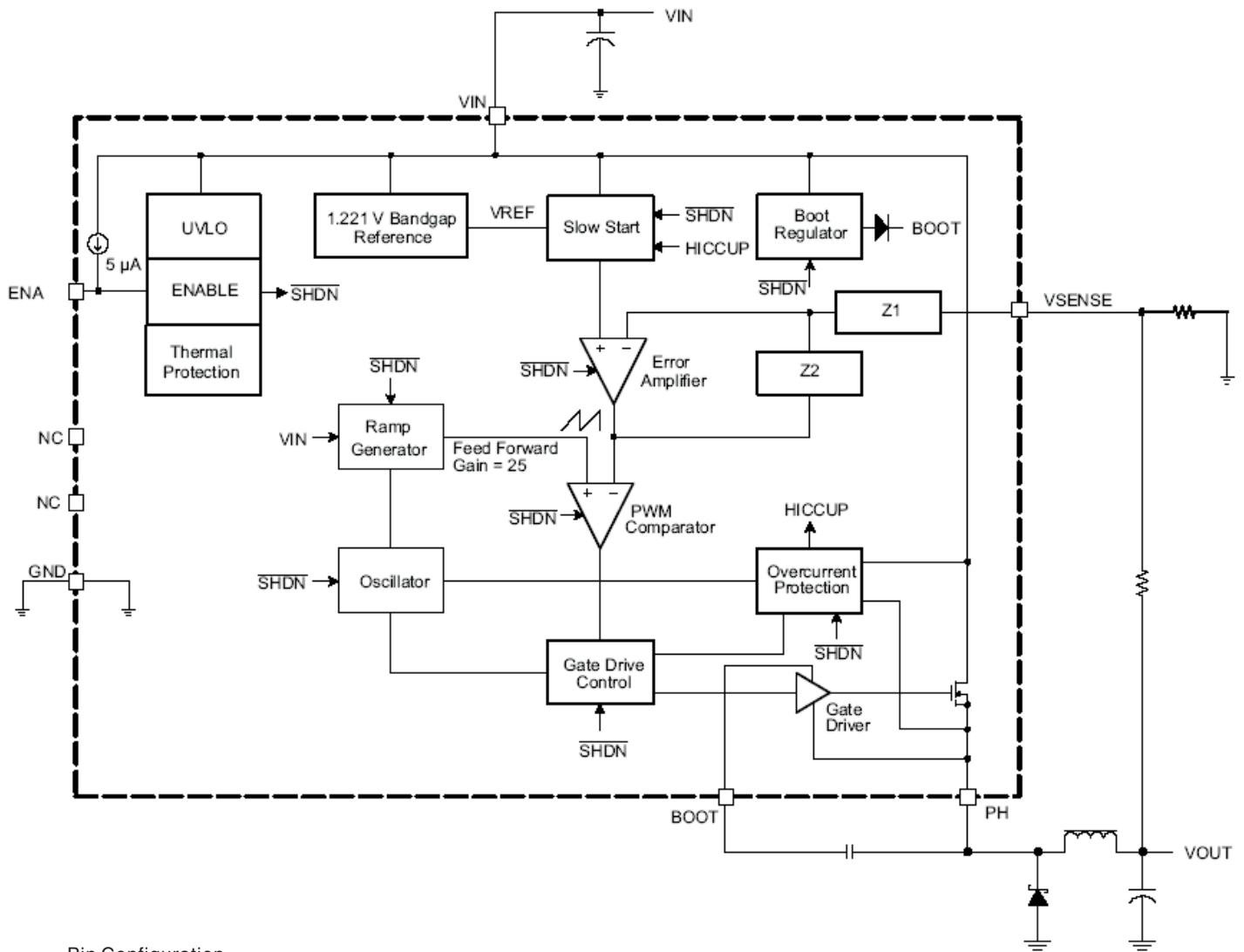


Pin Configuration

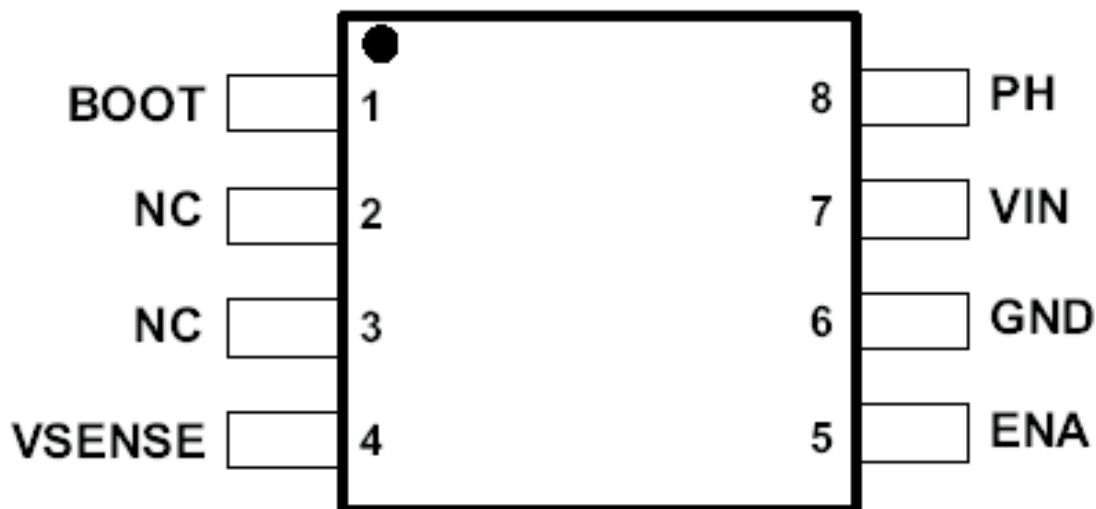


9.3.3 IC Data Sheets-TPS5420(U102)

Function Diagram

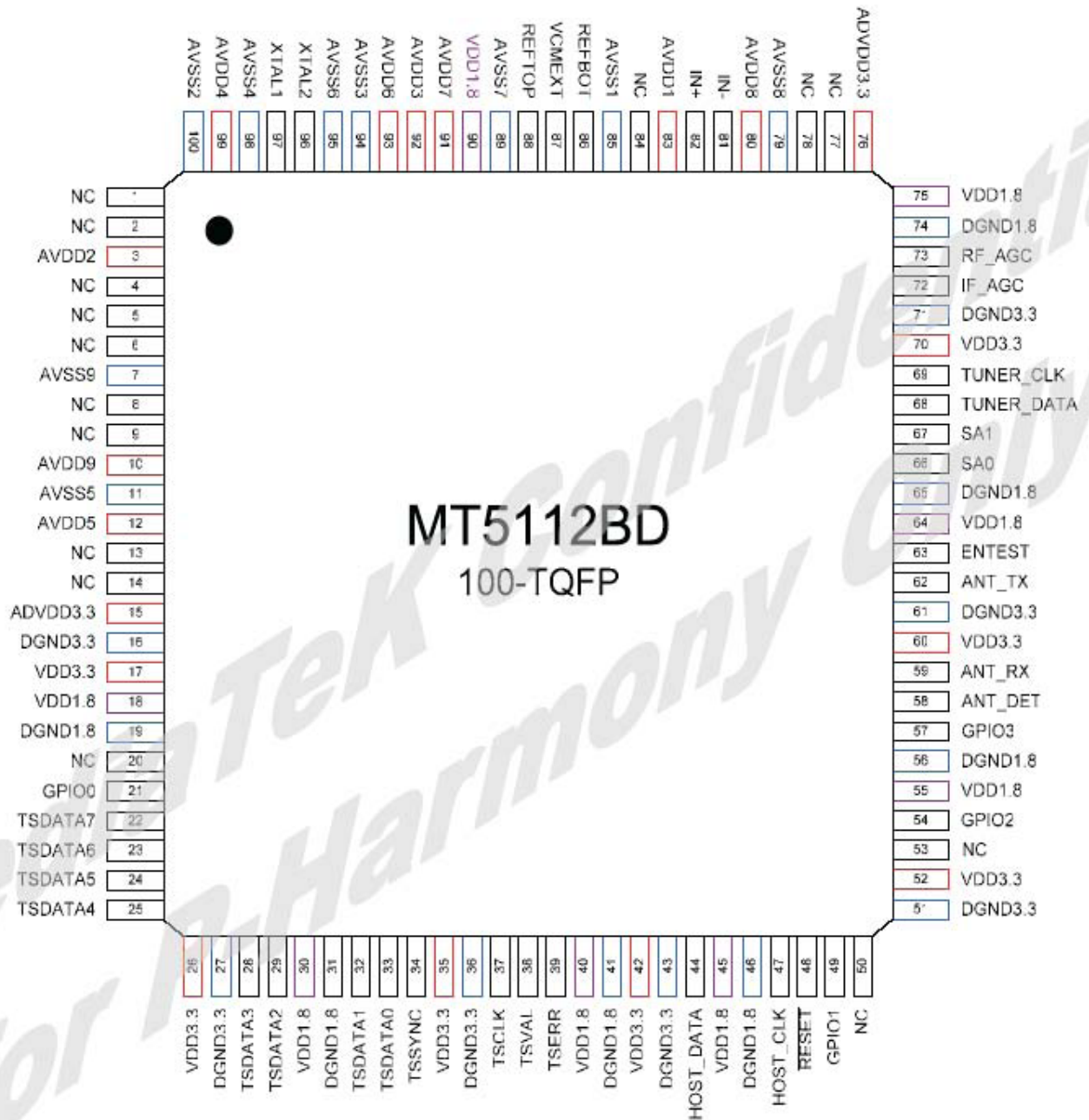


Pin Configuration



9.3.4 IC Data Sheets-MT5112BD(U250)

Pin Configuration




9.3.5 IC Data Sheets-MT5371AJ(U301)

PIN ASSIGNMENT (MT5372, MT5371)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
A	RA13	RA1	RA5	RA9	RA12	RDQ29	RDQS3_	RDQ25	RDQ21	RDQS2_	RCLK1	RDQ20	GPIO_3	GPIO7	GPIO_11
B	RA8	RA11	RA10	RA3	RA7	RDQ26	RDQS3	RDQ27	RDQ18	RDQS2	RCLK1_	GPIO_0	GPIO_4	GPIO_8	GPIO_12
C	RA4	RA6	RBA1	RRAS_	RCAS_	RDQ24	RDQM3	RDQ28	RDQ16	RDQM2	RDQ17	GPIO_1	GPIO_5	GPIO_9	JTRST_
D	RA0	RA2	RWE_	RBA0	RCS_	RDQ31	RDQ30	RVREF	RDQ23	RDQ22	RDQ19	GPIO_2	GPIO_6	GPIO_10	JTDI
E	RCKE	RODT	RDQ4	RDQ3	VCC2IO	VCC2IO	VCC2IO	VCC2IO	VCC2IO	VCC2IO	VCC2IO	VCC2IO	VCC2IO	VCC2IO	VCC2IO
F	RDQ1	RDQ6	RDQM0	RVREF	VCC2IO	VCC2IO	VCC2IO	VCC2IO	VCC2IO	VCC2IO	VCC2IO	VCC2IO	VCC2IO	VCC2IO	VCC2IO
G	RDQS0	RDQS0_	RDQ7	RDQ0	VCC2IO	VCC2IO									
H	RDQ2	RDQ5	RDQ12	RDQ11	VCC2IO	VCC2IO									
J	RDQ9	RDQ14	RDQS1_	RDQS1	VCC2IO	VCC2IO									
K	RDQM1	RDQ15	RDQ8	RDQ10	VCC2IO	VCC2IO									
L	RCLK0	RCLK0_	RDQ13	REXTUP	VCC2IO	VCC2IO									
M	REXTDN	PDCE1	PDCE1_	PDCE2	VCC2IO	VCC2IO									
N	PDVS1	PDOE_	PDIORD	PDIOWR	VCC3IO	VCC3IO									
P	PDWE_	PDIREQ_	PDCTRLVP	PDVS2	VCC3IO	VCC3IO									
R	PDRESET	PDWAIT	PDINPACK	PDREG_	VCC3IO	VCC3IO									
T	PDIOIS16	PDCE2_	PDENPOD	POCE2_	VCCCK	VCCCK									
U	POCE1_	POOE_	POCE0_	PDA1	VCCCK	VCCCK									
V	PDD0	PDD1	PDD2	PDD3	VCCCK	VCCCK									
W	PDD4	PDD5	PDD6	PDD7											
Y	PDA0	PDA17	PDA16	PDA15											
AA	PDA14	PDA13	PDA12	PDA11											
AB	PDA10	PDA9	PDA20	PDA21											
AC	POWE_	PDA22	PDA19	PDA18											
AD	PDA8	PDA7	PDA6	PDA5											
AE	PDA4	PDA3	PDA2	IDD8											
AF	IIORDY	IDD9	IDD10	IDD11		VCC3IO	VCC3IO	VCC3IO	VCC3IO						VCCCK
AG	IDD12	IDD13	IDD14	IDD15	MDATA0	SDIOD2	OPWM1	OSDA1	OWRP2	PGND	AVSS_HC	AVSS_H0	AVSS_H1	AVSS_H2	OPCTRL4
AH	IDIOR_	IDIOW_	IDA2	SDIOCMD	DCLK	SDIOD3	OPWM0	OSDA0	OSCL2	PVCC	AVCC_HC	AVCC_H0	AVCC_H1	AVCC_H2	OPCTRL5
AJ	IDA1	IINTRQ	IDA0	SDIOD0	MCLK	OIRO	PWR5V	OSCL0	OSDA2	CVCC12	RXCB	RX0B	RX1B	RX2B	OPCTRL6
AK	IRESET	ICS0_	ICS1_	SDIOCLK	SMCE_	MDATA1	SDIOD1	OPWM2	OSCL1	EXT_RES	RXC	RX0	RX1	RX2	OPCTRL7
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

	11	12	13	14	15
L					
M					
N					
P					
R					
T					
U					
V					
W					
Y					
	11	12	13	14	15

 DDR SIGNAL (120)


 VCCCK CORE POWER 1.2V

 xxxx Analog Power

 NOR Flash / POD (54)

 VCC2IO DDR POWER 2.5V / 1.8V

 xxxx Analog Ground

 ATA/CF/MS/SD/XD/SDIO (29)

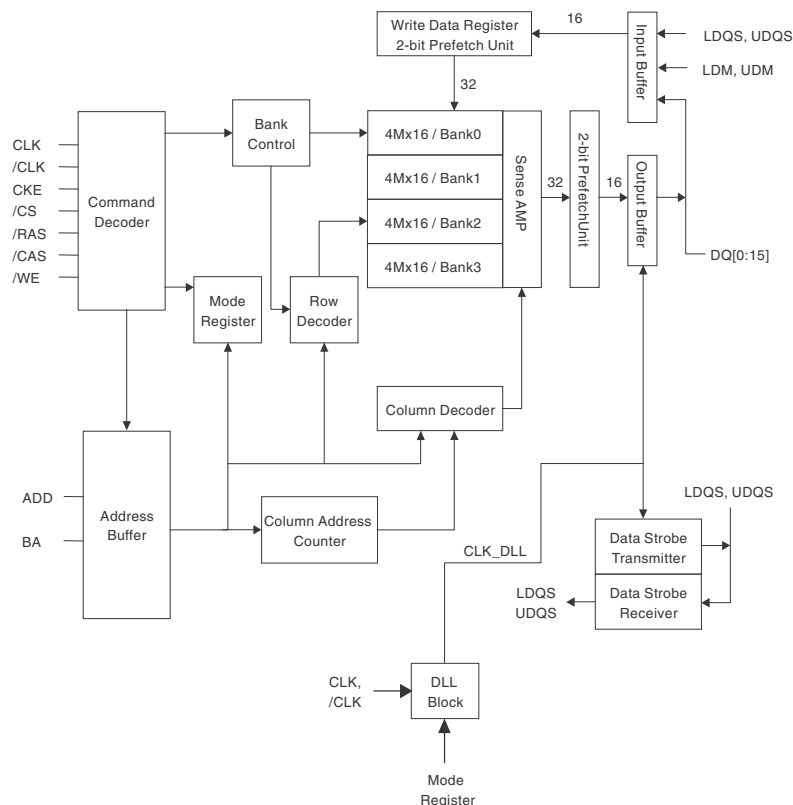
 VCC3IO IO POWER 3.3V

 GPIO

 Digital GND

9.3.6 IC Data Sheets-HY5DU561622ETP-5(U501)

Function Diagram

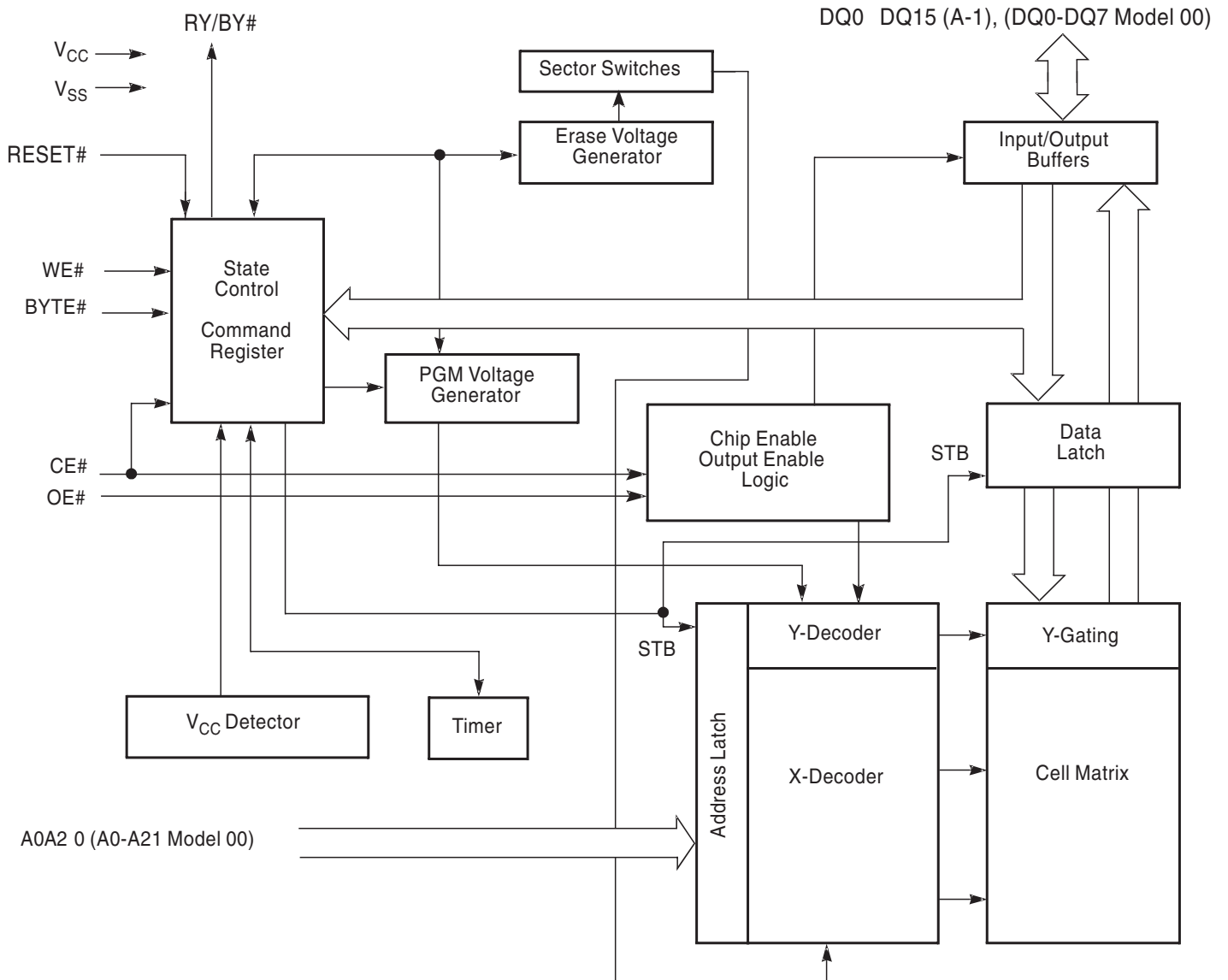


Pin Configuration

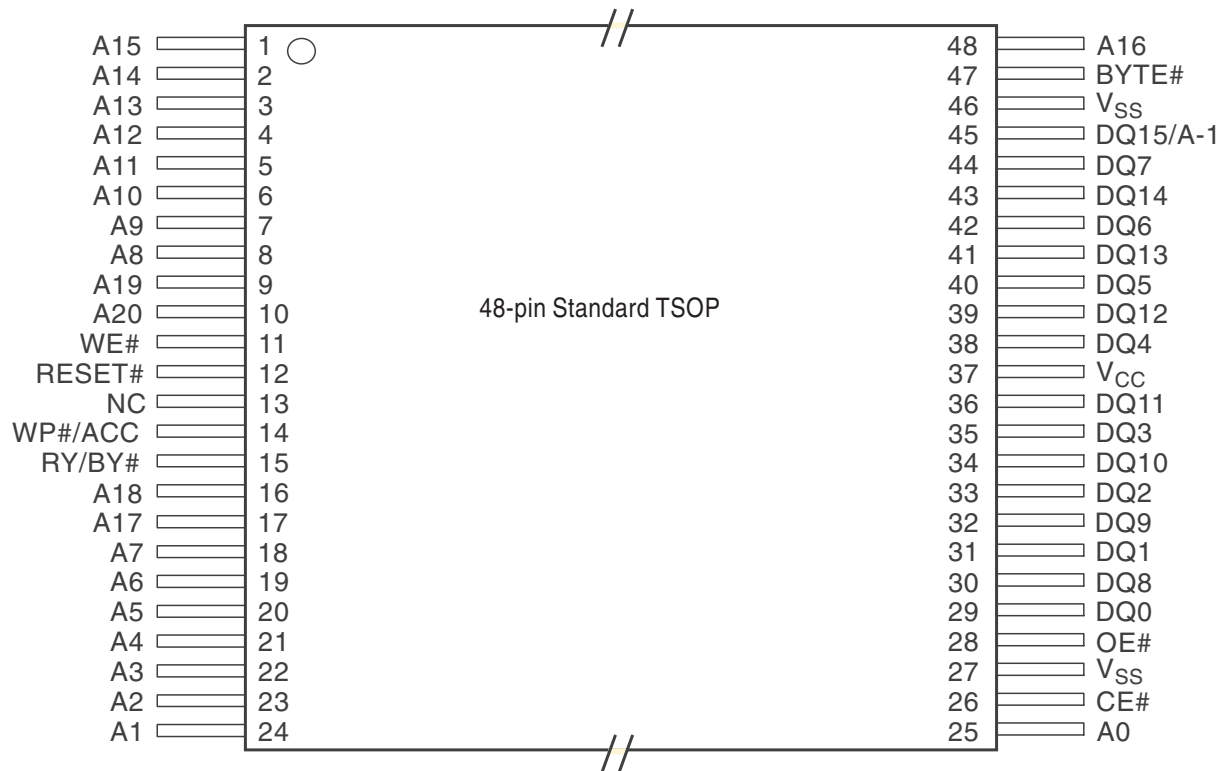
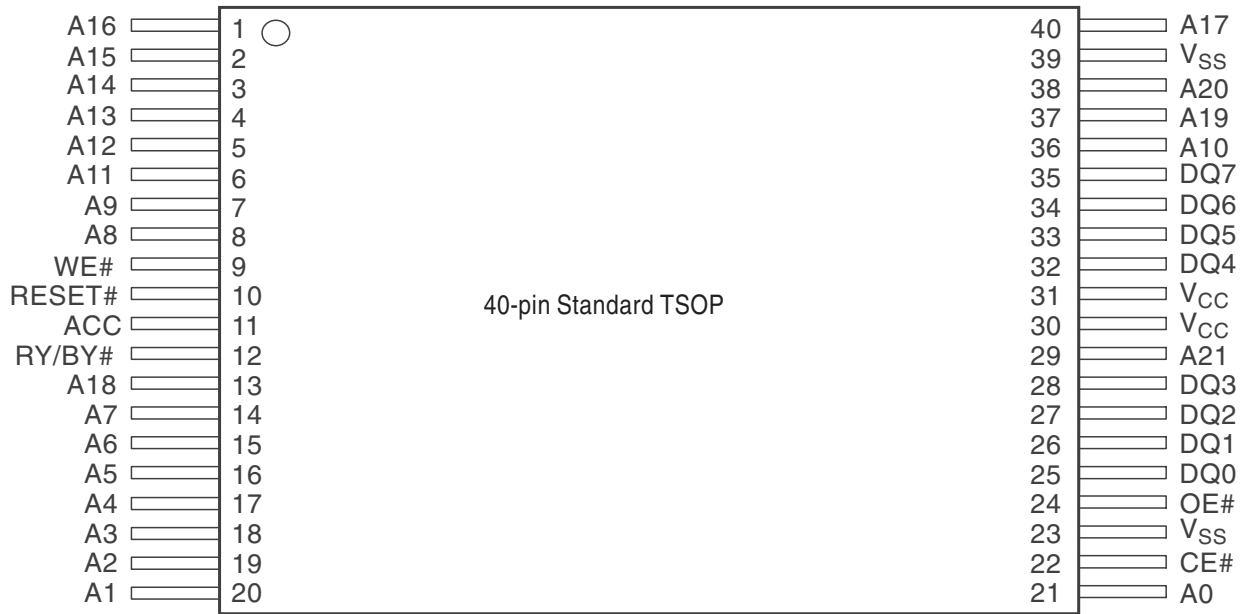
x8	x16					x16	x8
VDD	VDD	1		66	VSS	VSS	
DQ0	DQ0	2		65	DQ15	DQ7	
VDDQ	VDDQ	3		64	VSSQ	VSSQ	
NC	DQ1	4		63	DQ14	NC	
DQ1	DQ2	5		62	DQ13	DQ6	
VSSQ	VSSQ	6		61	VDDQ	VDDQ	
NC	DQ3	7		60	DQ12	NC	
DQ2	DQ4	8		59	DQ11	DQ5	
VDDQ	VDDQ	9		58	VSSQ	VSSQ	
NC	DQ5	10		57	DQ10	NC	
DQ3	DQ6	11		56	DQ9	DQ4	
VSSQ	VSSQ	12		55	VDDQ	VDDQ	
NC	DQ7	13		54	DQ8	NC	
NC	NC	14		53	NC	NC	
VDDQ	VDDQ	15	400mil X 875mil	52	VSSQ	VSSQ	
NC	LDQS	16	66pin TSOP -II	51	UDQS	DQS	
NC	NC	17	0.65mm pin pitch	50	NC	NC	
VDD	VDD	18		49	VREF	VREF	
NC	NC	19		48	VSS	VSS	
NC	LDM	20	(Lead free)	47	UDM	DM	
/WE	/WE	21		46	/CK	/CK	
/CAS	/CAS	22		45	CK	CK	
/RAS	/RAS	23		44	CKE	CKE	
/CS	/CS	24		43	NC	NC	
NC	NC	25		42	A12	A12	
BA0	BA0	26		41	A11	A11	
BA1	BA1	27		40	A9	A9	
A10/AP	A10/AP	28		39	A8	A8	
A0	A0	29		38	A7	A7	
A1	A1	30		37	A6	A6	
A2	A2	31		36	A5	A5	
A3	A3	32		35	A4	A4	
VDD	VDD	33		34	VSS	VSS	

9.3.7 IC Data Sheets-S29AL032D(U350)

Function Diagram



Pin Configuration



10.Recommended/Spare Parts List

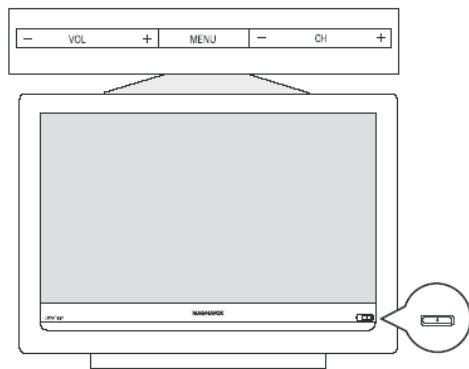
Index of this chapter

10.1 Styling Sheet

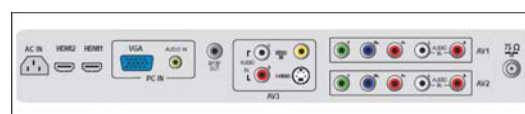
10.2 Recommended Parts List

10.3 Spare Parts List

10.1 Styling Sheet



26MF337B and 32MF337B



1050	9965 000 43790	LC320W01-SL06
1050	9965 100 05587	V315B1-L06 CMO
1053	9965 100 02816	Scaler assy [S]
1053	9965 100 06904	Scaler assy [S]
1054	9965 000 43800	Power board assy [P]
1054	9965 000 44171	Power board assy [P]
1055	9965 000 43799	Side AV assy [SA]
1056	9965 000 43802	IR & LED assy [I]
1057	9965 000 43803	Keyboard & Cntrl assy [K]
1058	9965 100 02881	DVD key assy [DK]
1059	9965 100 02884	DVD LED assy [DL]
1187	9965 000 44752	DVD 9KDR0850AP1S
1187	9965 100 02814	DVD 9KDR0850AP1S
8060	9965 000 44753	Cable 4p/290/4p
8150	9965 100 06900	Cable 4p/4p 530mm
8353	9965 100 05883	Cable 4p/460/3p
8354	9965 100 06901	Cable 5p/5p 500mm
8850	9965 100 05879	Cable 30p/170mm/40p
8900	9965 100 02815	FFC Cable 16p
8913	9965 100 05870	Cable 11p/85/11p
8915	9965 100 05875	Cable 12p/240/14p



1050	9965 100 03368	LC370WX1-SLB1
1050	9965 100 05888	L270XW02 V5 AUO
1050	9965 100 08855	LPL LC370WX4-SLB1
1053	9965 000 45006	Scaler assy [S]
1053	9965 100 05842	Scaler assy [S]
1053	9965 100 08857	Scaler assy [S]
1054	9965 100 03225	Power Supply assy [P]
1055	9965 000 45008	Side AV assy [SA]
1056	9965 000 44561	IR & LED assy [I]
1057	9965 000 43803	Keyboard & Cntrl assy [K]
8352	9965 000 45016	Cable 6p/6p 530mm
8353	9965 000 45017	Cable 4p/3p 505mm
8801	9965 000 45018	Cable 4p/3/2p 485mm
8662	9965 100 03388	Cable 7*2p/310/14p
8850	9965 100 03389	Cable LVDS 150mm
8850	9965 100 05877	LVDS 30p/20*2p 150mm
8850	9965 100 08853	Cable 30p/20*2p 200mm
8902	9965 100 03390	Cable 11p/90/11p
SZ002	9965 100 05871	Cable 12p/14p/10p
SZ002	9965 100 08852	Cable 12p/14p 200mm

1050	9965 100 03368	LC370WX1-SLB1
1050	9965 100 05888	T370XW02 V5 AUO
1050	9965 100 08855	LPL LC370WX4-SLB1
1050	9965 100 09951	T370XW02 V508 AUO
1053	9965 100 03391	Scaler assy [S]
1053	9965 100 08984	Scaler assy [S]
1053	9965 100 10029	Scaler assy [S]
1053	9965 100 10034	Scaler assy [S]
1054	9965 100 03225	Power Supply assy [P]
1055	9965 000 45008	Side AV assy [SA]
1056	9965 000 44561	IR & LED assy [I]
1057	9965 000 43803	Keyboard & Cntrl assy [K]
8352	9965 000 45016	Cable 6p/6p 530mm
8353	9965 000 45017	Cable 4p/3p 505mm
8662	9965 100 03388	Cable 7*2p/310/14p
8801	9965 000 45018	Cable 4p/3/2p 485mm
8850	9965 100 03389	Cable LVDS 150mm
8850	9965 100 05877	LVDS 30p/20*2p 150mm
8850	9965 100 08981	Cable 30p/20*2p 200mm
8902	9965 100 03390	Cable 11p/90/11p
8903	9965 100 05871	Cable 12p/14p/10p
SZ002	9965 100 08852	Cable 12p/14p 200mm

SW001	9965 000 35740	Tact Switch TSPB-2-NP
SW001	9965 000 44878	SFKHHPM25C0-PL
SW001	9965 100 02877	Switch
SW001	9965 100 02878	Switch GY
SW002	9965 000 35740	Tact Switch TSPB-2-NP
SW002	9965 000 44878	SFKHHPM25C0-PL

C001	9965 000 42228	100nF 16V X7R 0603
C002	9965 000 42673	10nF 50V Y5V 20% 0603
C003	9965 000 42673	10nF 50V Y5V 20% 0603
C004	9965 000 42673	10nF 50V Y5V 20% 0603
C005	9965 000 42400	1μF 10V Y5V 20% 0603
C006	9965 000 42673	10nF 50V Y5V 20% 0603

R001	9965 000 42218	220Ω 5% 1/10W
R002	9965 000 42219	2.2kΩ 5% 1/10W
R003	9965 000 42214	10kΩ 5% 1/10W
R004	9965 000 42213	100Ω 5% 1/10W
R005	9965 000 42219	2.2kΩ 5% 1/10W
R006	9965 000 42214	10kΩ 5% 1/10W
R007	9965 000 42218	220Ω 5% 1/10W
R008	9965 000 42212	0Ω 5% 1/10W

			
LED001	9965 100 02879	VS L-3WEGW	
<hr/>			
			
Q001	9965 000 43944	BC847BW 100mA/45V	
Q001	9965 100 02880	BC847BW 100mA/45V	
Q002	9965 000 43944	BC847BW 100mA/45V	
Q003	9965 000 43944	BC847BW 100mA/45V	
U001	9965 000 42727	TSOP34136SB1	

Keyboard & Control Panel [K]

Various

SW030	9965 000 42278	Switch Tact SKQGAB
SW030	9965 000 42279	Switch SFKQGMA2125
SW031	9965 000 42278	Switch Tact SKQGAB
SW031	9965 000 42279	Switch SFKQGMA2125
SW032	9965 000 42278	Switch Tact SKQGAB
SW032	9965 000 42279	Switch SFKQGMA2125
SW033	9965 000 42278	Switch Tact SKQGAB
SW033	9965 000 42279	Switch SFKQGMA2125
SW034	9965 000 42278	Switch Tact SKQGAB
SW034	9965 000 42279	Switch SFKQGMA2125

—||—

C031	9965 000 42228	100nF 16V X7R 0603
CN030	9965 000 45270	Connector 3p m

—WW—

R030	9965 000 44043	11kΩ 5% 1/10W
R031	9965 000 44045	4.3kΩ 5% 1/10W
R032	9965 000 44044	1.8kΩ 5% 1/10W
R033	9965 000 42224	470Ω 5% 1/10W
R034	9965 000 42212	0Ω 5% 1/10W

Power Supply Unit [P]

Various

F901	9965 000 43852	Fuse 250V 4A
F901	9965 100 02521	Fuse 5A 250V
F901	9965 100 05869	Fuse 4A 250V
FB900	9965 100 02511	Ferr. core 35Ω
FB901	9965 100 02511	Ferr. core 35Ω
FB902	9965 100 02511	Ferr. core 35Ω
FB903	9965 000 43357	Ferrite Bead
FB903	9965 000 43424	Bead coil
FB903	9965 000 43839	Ferrite Bead
FB904	9965 000 43357	Ferrite Bead
FB904	9965 000 43424	Bead coil
FB904	9965 000 43839	Ferrite Bead
FB905	9965 000 43424	Bead coil
FB914	9965 000 40066	Ferr. core BF30TA-2
FB914	9965 100 02511	Ferr. core 35Ω
FB915	9965 000 40066	Ferr. core BF30TA-2
FB915	9965 100 02511	Ferr. core 35Ω
FB917	9965 000 40066	Ferr. core BF30TA-2
FB917	9965 100 02511	Ferr. core 35Ω
FB918	9965 000 40066	Ferr. core BF30TA-2
FB918	9965 100 02511	Ferr. core 35Ω
FB919	9965 000 40066	Ferr. core BF30TA-2
FB919	9965 100 02511	Ferr. core 35Ω
FB920	9965 000 40066	Ferr. core BF30TA-2
FB920	9965 100 02511	Ferr. core 35Ω
FB921	9965 000 40066	Ferr. core BF30TA-2
FB921	9965 100 02511	Ferr. core 35Ω
FB922	9965 000 43357	Ferrite Bead
FB922	9965 000 43839	Ferrite Bead
FB923	9965 000 43357	Ferrite Bead
FB923	9965 000 43839	Ferrite Bead
FB924	9965 000 43357	Ferrite Bead
FB924	9965 000 43839	Ferrite Bead
FB925	9965 000 43357	Ferrite Bead
FB925	9965 000 43839	Ferrite Bead
FB960	9965 100 02511	Ferr. core 35Ω
FB961	9965 100 02511	Ferr. core 35Ω
FB962	9965 100 02511	Ferr. core 35Ω
FB963	9965 100 02511	Ferr. core 35Ω
S900	9965 000 43423	GS41-201MA
S901	9965 000 43423	GS41-201MA
S902	9965 000 43423	GS41-201MA
S903	9965 000 43423	GS41-201MA
SG1	9965 000 43423	GS41-201MA

SG2	9965 000 43423	GS41-201MA
SG3	9965 000 43423	GS41-201MA
SG4	9965 000 43423	GS41-201MA
ZD902	9965 000 43426	Trans Suppr 120V 5W
ZD902	9965 000 43434	P6KE120A DO-15
ZD904	9965 000 43426	Trans Suppr 120V 5W
ZD904	9965 000 43434	P6KE120A DO-15
ZD906	9965 000 44652	P4KE250A
ZD908	9965 000 43427	BZX79-B18 A
ZD908	9965 000 43430	BZX55-B18 A
ZD935	9965 000 43893	RLZ15B
ZD935	9965 000 43895	RLZ15B
ZD938	9965 000 43892	RLZ27B LLDS
ZD965	9965 000 43892	RLZ27B LLDS
ZD966	9965 000 39777	RLZ 13B LLDS
ZD966	9965 000 43894	RLZ13B SEMTECH

—||—

C900	9965 000 43824	470pF 10% 250VAC
C900	9965 000 43827	470pF 10% 250VAC
C900	9965 000 43828	470pF 10% 250VAC
C900	9965 000 44612	1500pF 250V
C901	9965 000 43824	470pF 10% 250VAC
C901	9965 000 43827	470pF 10% 250VAC
C901	9965 000 43828	470pF 10% 250VAC
C902	9965 000 43824	470pF 10% 250VAC
C902	9965 000 43906	2200pF 500V
C902	9965 000 43907	2200pF 500V
C902	9965 000 43908	2200pF 500V
C905	9965 000 43348	63G214J225GMC
C905	9965 000 43822	2.2μF 5% 450V
C907	9965 000 43354	220uF 450V
C907	9965 000 43829	120μF 450V
C907	9965 000 43832	120μF 450V
C907	9965 100 02508	220uF 450V
C907	9965 100 02509	220uF 450V
C907	9965 100 03542	180uF 450V
C907	9965 100 03543	180uF 450V
C908	9965 000 37794	Film Capacitor
C908	9965 000 43347	0.68uF 275V
C908	9965 000 43821	0.47μF 275VAC
C908	9965 000 43838	MPX-474K27B15L3
C909	9965 000 37794	Film Capacitor
C909	9965 000 43347	0.68uF 275V
C909	9965 000 43821	0.47μF 275VAC
C909	9965 000 43838	MPX-474K27B15L3
C912	9965 000 36073	1μF 25V 0805
C913	9965 000 44615	1nF 10% 50V 0805
C914	9965 000 36045	0.047uF -10% 50V
C916	9965 000 36041	0.1μF 50V X7R
C916	9965 000 36074	0.33μF 10% 25V 0805
C917	9965 000 36041	0.1μF 50V X7R
C917	9965 000 36045	0.047uF -10% 50V
C917	9965 100 03562	47nF 10% 50V 0805
C918	9965 000 39731	2200pF 20% 250Vac
C918	9965 000 43825	2200pF 20% 250VAC
C918	9965 000 43826	2200pF 20% 250VAC
C919	9965 000 36073	1μF 25V 0805
C920	9965 000 36040	0.1μF 10% 25V
C920	9965 000 43889	560pF 50V 0805
C920	9965 000 43890	560pF 50V 0805
C921	9965 000 43460	100UF -20% 25V
C921	9965 000 43886	2.2μF 16V
C922	9965 000 36040	0.1μF 10% 25V
C922	9965 100 04670	10nF 50V 0805
C923	9965 000 36041	0.1μF 50V X7R
C924	9965 000 36074	0.33μF 10% 25V 0805
C924	9965 000 43883	22pF 50V 0805
C925	9965 000 36041	0.1μF 50V X7R
C926	9965 000 43457	1500pF 1kV
C927	9965 000 37327	1μF 50V Y5V
C927	9965 000 42402	1mF 20% 25V 0805
C927	9965 000 43882	1μF Y5V 0805
C930	9965 000 43885	22nF 1% 25V 0805
C931	9965 000 36996	390pF 50V
C934	9965 000 43909	33μF 50V
C934	9965 000 43910	33μF 50V
C934	9965 100 02505	47uF 25V
C935	9965 000 43348	63G214J225GMC
C935	9965 000 43822	2.2μF 5% 450V
C937	9965 000 36040	0.1μF 10% 25V
C938	9965 000 44617	1uF 5% 450V
C938	9965 000 44618	1uF 5% 450V
C939	9965 100 02495	0.01uF 5% 100V
C939	9965 100 02496	0.01uF 5% 100V
C939	9965 100 03380	0.018uF 5% 100V
C939	9965 100 03381	0.018uF 5% 100V
C940	9965 100 02495	0.01uF 5% 100V
C940	9965 100 02496	0.01uF 5% 100V
C940	9965 100 03581	0.01uF 5% 100V
C942	9965 000 36040	0.1μF 10% 25V
C943	9965 000 36040	0.1μF 10% 25V

C944	9965 000 44620	200pF 10% 500V
C944	9965 100 03584	1500pF 10% 500V
C945	9965 000 43458	1.5nF 10% 500V
C945	9965 100 03584	1500pF 10% 500V
C946	9965 100 02510	2.2uF 50V
C947	9965 000 43462	6.8μF 50V
C947	9965 100 03586	10uF 50V
C948	9965 000 44620	200pF 10% 500V
C950	9965 000 44289	22pF 50V 0805
C951	9965 000 43355	1500uF 35V
C951	9965 000 43884	220pF 50V 0805
C951	9965 100 04045	1500uF 35V
C952	9965 000 43355	1500uF 35V
C952	9965 000 43884	220pF 50V 0805
C952	9965 000 44331	1000uF 35V
C952	9965 100 04045	1500uF 35V
C953	9965 000 43355	1500uF 35V
C953	9965 000 43887	0.33μF 50V
C953	9965 000 44331	1000uF 35V
C953	9965 100 04045	1500uF 35V
C953	9965 100 04695	330nF 10% 50V 0805
C954	9965 000 43461	47uF 35V
C954	9965 000 43909	33μF 50V
C954	9965 000 43910	33μF 50V
C954	9965 100 02507	47uF 35V
C955	9965 000 37327	1μF 50V Y5V
C955	9965 000 44623	2200uF 16V
C956	9965 000 44331	1000uF 35V
C956	9965 100 02498	22nF 5% 100V
C956	9965 100 03341	0.022uF 5% 100V
C957	9965 100 02506	10uF +/-20% 25V
C958	9965 100 02505	47uF 25V
C959	9965 000 43411	470pF 5% 50V
C959	9965 000 43906	2200pF 500V
C959	9965 000 43907	2200pF 500V
C959	9965 000 43908	2200pF 500V
C960	9965 000 43411	470pF 5% 50V
C961	9965 000 36074	0.33μF 10% 25V 0805
C961	9965 000 43823	0.022μF 5% 250V
C962	9965 000 43411	470pF 5% 50V
C964	9965 000 44331	1000uF 35V
C965	9965 000 44331	1000uF 35V
C966	9965 000 44331	1000uF 35V
C971	9965 000 36041	0.1μF 50V X7R
C972	9965 000 43463	1000μF 25V
C972	9965 000 43833	1000μF 16V
C972	9965 000 43834	1000μF 16V
C972	9965 000 43836	1000μF 25V
C973	9965 000 36041	0.1μF 50V X7R
C974	9965 000 36041	0.1μF 50V X7R
C975	9965 000 42603	220μF 35V
C975	9965 000 43830	220μF 35V
C977	9965 000 36997	560pF 50V NPO 0805
C987	9965 000 36041	0.1μF 50V X7R
C987	9965 000 44292	0.1uF 50V 0805
C988	9965 000 36041	0.1μF 50V X7R
C988	9965 000 44292	0.1uF 50V 0805
C991	9965 000 36041	0.1μF 50V X7R
C995	9965 000 43884	220pF 50V 0805
C996	9965 000 43888	0.22μF 50V
CN901	9965 100 04668	Socket AC
CN915	9965 000 43344	Connector 12p m

—WW—

R901	9965 000 43879	270kΩ 5% 1/4W
R902	9965 000 43879	270kΩ 5% 1/4W
R903	9965 000 43878	240kΩ 5% 1/4W
R910	9965 000 43880	330kΩ 1% 1/4W
R911	9965 000 43880	330kΩ 1% 1/4W
R912	9965 000 43880	330kΩ 1% 1/4W
R913	9965 000 43395	33kΩ 5% 1/8W
R913	9965 000 43400	620Ω 1% 1/8W
R914	9965 000 43398	5.6kΩ 1% 1/8W
R914	9965 000 43876	4.7kΩ 5% 1/8W
R915	9965 000 43395	33kΩ 5% 1/8W
R916	9965 000 43395	33kΩ 5% 1/8W
R917	9965 000 43390	22kΩ 5% 1/8W
R918	9965 000 39756	47k Ohm 5% 1/8W
R918	9965 000 42284	0Ω 1/10W
R918	9965 000 42735	47kΩ 5% 1/8W
R920	9965 000 43902	0.15Ω 1% 1W
R921	9965 000 43877	6.2kΩ 5% 1/8W
R922	9965 000 43380	1kΩ 1/10W
R922	9965 000 43384	12k Ohm -5% 1/8W
R923	9965 000 43393	330Ω 5% 1/8W
R924	9965 000 43395	33kΩ 5% 1/8W
R924	9965 000 43902	0.15Ω 1% 1W
R924	9965 000 44638	0.12Ohm 1% 1W
R925	9965 000 36963	1kΩ 5% 0.1W
R925	9965 000 43874	47Ω 5%

R926	9965 000 38141	10 Ω 5% 1/6W	R991	9965 000 43876	4.7k Ω 5% 1/8W	D935	9965 000 40067	RGP10-DO-204AL
R926	9965 000 43902	0.15 Ω 1% 1W	R992	9965 000 42284	0 Ω 1/10W	D935	9965 000 43435	BYT42D
R926	9965 000 44638	0.120 Ω 1% 1W	R994	9965 000 39749	100k Ω 0805	D935	9965 000 43436	RGP10D
R927	9965 000 43881	820k Ω 5% 1/4W	R995	9965 000 43873	39k Ω 1% 1/8W	D950	9965 000 40067	RGP10-DO-204AL
R927	9965 000 44639	180 Ω 5% 2W	R996	9965 000 43875	4.7k Ω 1% 1/8W	D950	9965 000 43435	BYT42D
R927	9965 100 03556	1.5k Ω 5% 1/8W	R998	9965 100 04669	20.5k Ω 1% 1/8W	D950	9965 000 43436	RGP10D
R928	9965 000 43881	820k Ω 5% 1/4W	RV902	9965 000 43346	VDR DC 1MA/510 845V	D951	9965 000 40067	RGP10-DO-204AL
R928	9965 000 44642	8.2k Ω 1% 1/10W	RV902	9965 100 02714	TVR14511KFC4FY	D951	9965 000 43435	BYT42D
R929	9965 000 42735	47k Ω 5% 1/8W	VAR901	9965 100 02714	TVR14511KFC4FY	D951	9965 000 43436	RGP10D
R929	9965 000 43881	820k Ω 5% 1/4W				D953	9965 000 43891	MLL4148 SMD
R930	9965 000 36963	1k Ω 5% 0.1W				D953	9965 100 03321	LL4148-GSO8
R930	9965 000 43868	16k Ω 5% 1/8W				D953	9965 100 05242	LL4148WP
R931	9965 000 42284	0 Ω 1/10W				D955	9965 000 36035	LL4148WP
R932	9965 000 43898	7.5k Ω 5% 1/4W	L901	9965 000 43847	Line Filter 6mH 1.8A	D955	9965 000 39775	LL4148-GS08
R932	9965 000 43901	7.5k Ω 5% 1/6W	L901	9965 000 43848	Line Filter 6mH 2.0A	D955	9965 000 43891	MLL4148 SMD
R932	9965 100 02482	330 Ω 5% 1/6W	L903	9965 000 43840	Choke coil 430mH 0.19W	D955	9965 100 03321	LL4148-GSO8
R933	9965 000 36963	1k Ω 5% 0.1W	L903	9965 000 43843	Choke coil 430 μ H 0.19 Ω	D955	9965 100 05242	LL4148WP
R934	9965 000 43393	330 Ω 5% 1/8W	L903	9965 100 04967	Choke coil 430 μ H 0.19 Ω	D957	9965 000 43426	Trans Suppr 120V 5W
R935	9965 000 43874	47 Ω 5% 1/8W	L910	9965 000 43849	Line Filter 11mH 3.5A	D957	9965 000 43434	P6KE120A DO-15
R936	9965 000 36965	100k Ω 5% 0.1W	L910	9965 000 43850	Line Filter 11mH 3.5A	D958	9965 000 43437	UF1007 1A 1000V
R936	9965 000 43381	10k Ω 1/10W	L910	9965 000 44634	Coil 2.4 μ H 20% 4.5M Ω	D958	9965 000 43438	STTH110
R937	9965 000 43389	2.2k Ω 1% 1/8W	L911	9965 000 44635	Coil 2.3uH 20% 7.2M Ω	D959	9965 000 43426	Trans Suppr 120V 5W
R937	9965 000 43393	330 Ω 5% 1/8W	L912	9965 000 43362	Line Filter 8mH 4.0A	D959	9965 000 43434	P6KE120A DO-15
R938	9965 000 43869	18 Ω 5% 1/8W	L913	9965 000 43362	Line Filter 8mH 4.0A	D960	9965 000 36034	SP10150
R938	9965 000 43876	4.7k Ω 5% 1/8W	L914	9965 000 43358	Filter 300 μ H 0R085	D960	9965 000 43855	MBRF10150CT
R939	9965 000 43381	10k Ω 1/10W	L914	9965 100 03226	Choke 380 μ H 130 Ω	D960	9965 000 43856	MBRF10150CT
R939	9965 000 43387	18k Ω 1% 1/6W	L914	9965 100 03227	Choke 380 μ H 130 Ω	D961	9965 000 36034	SP10150
R940	9965 000 43896	1k Ω 5% 1/4W	L915	9965 000 43425	Coil 47uH 10%	D961	9965 000 43855	MBRF10150CT
R940	9965 000 43899	1k Ω 5% 1/6W	L916	9965 000 43425	Coil 47uH 10%	D961	9965 000 43856	MBRF10150CT
R940	9965 000 44641	1.5k Ω 1% 1/8W	L966	9965 000 43361	15 μ H 10%	D970	9965 000 43853	DIODE SB240 DO-41
R941	9965 000 43389	2.2k Ω 1% 1/8W	L966	9965 000 43845	Choke coil 15 μ H 260M Ω	D970	9965 000 43904	SB240
R942	9965 000 43379	100 Ω 5% 1/8W	L966	9965 000 43846	Choke coil 15 μ H 260M Ω	D970	9965 000 43905	SB240-13-F DO-41
R942	9965 000 43391	33 Ω 5% 1/8W	L966	9965 100 02517	Choke coil 15 μ H 260M Ω	D970	9965 100 02828	SB240
R942	9965 000 43869	18 Ω 5% 1/8W	L970	9965 000 42610	Choke Coil			
R943	9965 000 43389	2.2k Ω 1% 1/8W	L970	9965 000 43841	Choke 35 μ H 10% 82M Ω			
R944	9965 000 44642	8.2k Ω 1% 1/10W	L983	9965 000 43360	10 μ H 10%			
R944	9965 000 44643	330 Ω 1% 1/8W	L983	9965 000 43842	Choke coil 10 μ H 17M Ω			
R946	9965 000 43876	4.7k Ω 5% 1/8W	L983	9965 000 43844	Choke coil 10 μ H 14.6M Ω			
R947	9965 000 39756	47k Ω 5% 1/8W	L983	9965 100 02516	Choke coil 10 μ H 14.6M Ω			
R947	9965 000 42735	47k Ω 5% 1/8W	T901	9965 000 43851	XFMR PPH6004AL	IC902	9965 000 44633	SG6961
R948	9965 000 36970	1.5k Ω 5% 0.1W	T901	9965 100 02519	HJC-S6197	IC904	9965 000 36353	TEA1507P
R949	9965 000 43420	0.1 Ω 1% 1W	T904	9965 100 02520	XFMR HJC-S6191	IC904	9965 100 03539	TEA1507P/N1
R949	9965 000 43902	0.15 Ω 1% 1W	T905	9965 000 44651	Power transformer	IC907	9965 000 36353	TEA1507P
R950	9965 000 43399	560k Ω 5%/8W	T905	9965 100 03228	XFMR HJC-S6192	IC907	9965 100 03539	TEA1507P/N1
R950	9965 000 43903	0.33 Ω 5% 1W	TH902	9965 000 43454	NTC 0.75 Ω 15%	IC909	9965 000 40055	PC123 Y82FZOF
R951	9965 000 36963	1k Ω 5% 0.1W				IC909	9965 000 40056	TCET1103G
R952	9965 000 43379	100 Ω 5% 1/8W				IC910	9965 000 40055	PC123 Y82FZOF
R952	9965 000 43896	1k Ω 5% 1/4W				IC910	9965 000 40056	TCET1103G
R952	9965 000 43899	1k Ω 5% 1/6W				IC911	9965 000 40055	PC123 Y82FZOF
R953	9965 000 43396	330k Ω 5% 1/8W				IC911	9965 000 40056	TCET1103G
R953	9965 000 43867	150 Ω 5% 1/8W	D901	9965 000 43371	STTH8L06FP	IC912	9965 000 43441	TL431ACZ
R953	9965 000 44295	150 Ω 5% 1/8W	D901	9965 000 43857	STTH5L06FP	IC913	9965 000 43441	TL431ACZ
R954	9965 000 36987	10 Ω 5% 1/4W	D906	9965 100 03321	LL4148-GSO8	IC920	9965 000 43861	UCC28051D
R954	9965 000 38141	10 Ω 5% 1/6W	D906	9965 100 03327	BAS32L	IC950	9965 000 43860	FA5541N
R955	9965 000 43390	22k Ω 5% 1/8W	D907	9965 000 40067	RGP10-DO-204AL	IC970	9965 000 43859	LA5779L-HK
R956	9965 000 44644	150k Ω 1% 1/8W	D907	9965 000 43435	BYT42D	IC990	9965 000 36055	PC123Y22FZOF
R957	9965 000 39749	100k Ω 0805	D907	9965 000 43436	RGP10D	IC990	9965 000 40055	PC123 Y82FZOF
R957	9965 000 43897	130k Ω 5% 1/4W	D908	9965 000 40067	RGP10-DO-204AL	IC990	9965 000 40056	TCET1103G
R957	9965 000 43900	130k Ω 5% 1/6W	D908	9965 000 43435	BYT42D	IC991	9965 000 36055	PC123Y22FZOF
R958	9965 000 43396	330k Ω 5% 1/8W	D908	9965 000 43436	RGP10D	IC991	9965 000 40055	PC123 Y82FZOF
R958	9965 000 45262	300k Ω 5% 1/8W	D910	9965 100 03321	LL4148-GSO8	IC991	9965 000 40056	TCET1103G
R959	9965 100 02488	220k Ω 5% 0.25W	D910	9965 100 03327	BAS32L	IC995	9965 000 36101	AZ431AZ-AE1
R960	9965 100 02488	220k Ω 5% 0.25W	D911	9965 000 40067	RGP10-DO-204AL	IC995	9965 000 43819	TL431CZ-AP
R961	9965 100 02487	180k Ω 5% 0.25W	D911	9965 000 43435	BYT42D	IC995	9965 100 02780	AZ431AZ-AE1
R962	9965 000 42735	47k Ω 5% 1/8W	D911	9965 000 43436	RGP10D	Q901	9965 000 43368	STW18NK80Z
R963	9965 000 43418	2.2 Ω 5% 1/6W	D912	9965 000 40067	RGP10-DO-204AL	Q901	9965 000 43862	Mosfet 20A/600V
R964	9965 000 43418	2.2 Ω 5% 1/6W	D912	9965 000 43435	BYT42D	Q901	9965 000 43863	Mosfet 20A/600V
R965	9965 000 43379	100 Ω 5% 1/8W	D912	9965 000 43436	RGP10D	Q901	9965 000 43864	Mosfet STP10NK80ZFP
R965	9965 000 44647	2.2 Ω 5% 1/4W	D914	9965 100 02829	BAV103	Q901	9965 000 43865	STP25NM60N 20A/600V
R966	9965 000 43379	100 Ω 5% 1/8W	D914	9965 100 02830	BAV103	Q902	9965 000 43369	Transistor 26A 600V
R967	9965 000 43380	1k Ω 1/10W	D915	9965 100 02829	BAV103	Q902	9965 000 43864	Mosfet STP10NK80ZFP
R968	9965 000 39749	100k Ω 0805	D915	9965 100 02830	BAV103	Q902	9965 000 44610	2SK3681-01
R969	9965 000 44648	470k Ω 1% 0.25W	D918	9965 100 02529	BAV21	Q902	9965 100 03548	FCA20N60
R970	9965 000 43896	1k Ω 5% 1/4W	D919	9965 100 02829	BAV103	Q902	9965 100 03550	STW25NM60N
R970	9965 000 43899	1k Ω 5% 1/6W	D919	9965 100 02830	BAV103	Q908	9965 000 44636	STP7NK80ZFP ST
R970	9965 000 44648	470k Ω 1% 0.25W	D920	9965 100 02529	BAV21	Q908	9965 100 02480	2SK3530-01MRSC
R971	9965 000 43870	19.6k Ω 1% 1/8W	D922	9965 000 43373	STPS40H100CW	Q912	9965 000 37785	BC857CG
R971	9965 000 44648	470k Ω 1% 0.25W	D922	9965 100 03554	SP20100R	Q912	9965 000 40046	BC857 SOT23
R972	9965 000 43389	2.2k Ω 1% 1/8W	D922	9965 100 03555	STPS20H100CFP	Q913	9965 000 37785	BC857CG
R972	9965 000 44296	2.2k Ω 1% 1/8W	D924	9965 000 43437	UF1007 1A 1000V	Q913	9965 000 40046	BC857 SOT23
R972	9965 000 44642	8.2k Ω 1% 1/10W	D924	9965 000 43438	STTH110	Q914	9965 000 37785	BC857CG
R973	9965 000 43400	620 Ω 1% 1/8W	D924	9965 000 43437	UF1007 1A 1000V	Q914	9965 000 40046	BC857 SOT23
R974	9965 000 43381	10k Ω 1/10W	D925	9965 000 43438	STTH110	Q915	9965 000 42648	BC847C
R974	9965 000 44297	10k Ω 5% 1/8W	D925	9965 000 43439	DIODE	Q915	9965 000 42649	BC847C
R974	9965 100 02481	0.3 Ω 1% 0.25W	D926	9965 000 43440	SBYV27-200-E3	Q915	9965 100 02479	BC847C
R975	9965 000 43876	4.7k Ω 5% 1/8W	D926	9965 000 43891	MLL4148 SMD	Q916	9965 000 42648	BC847C
R976	9965 000 43874	47 Ω 5% 1/8W	D926	9965 100 03321	LL4148-GSO8	Q916	9965 000 42649	BC847C
R977	9965 000 43976	10 Ω 5% 1/4W	D926	9965 100 05242	LL4148WP	Q916	9965 100 02479	BC847C
R978	9965 000 43396	330k Ω 5% 1/8W	D927	9965 000 44611	SP1060	Q936	9965 000 35967	KEC 2N3906S-RTK/PS
R979	9965 000 36963	1k Ω 5% 0.1W	D927	9965 100 02528	MBRF1060CT	Q936	9965 100 02478	PMBS3906
R979	9965 000 43875	4.7k Ω 1% 1/8W	D929	9965 100 02829	BAV103	Q988	9965 000 36033	RK7002
R980	9965 000 43394	3.3k Ω 5% 1/8W	D929	9965 100 02830	BAV103	Q988	9965 000 42650	2N7002
R981	9965 000 42735	47k Ω 5% 1/8W	D934	9965 000 40				

Q993	9965 000 35966	PMBS3904
Q993	9965 000 36961	KEC 2N3904S-RTK/PS
Q993	9965 000 40045	MMBT3904
BD901	9965 000 43370	GBU8J
BD901	9965 000 43854	DIODE GBU605
BD901	9965 000 43858	Bridge 6A/600V
BD901	9965 000 44288	GBU606
BD901	9965 000 44609	GBU805
BD901	9965 100 03552	GBU605
BD901	9965 100 04061	GBU806
NR901	9965 000 43820	NTC SCK101R55LSY

Scaler Board [S]

Various

0295	9965 100 10001	EEPROM Label-CPT-P
1257	9965 100 02817	Tuner assy
1257	9965 100 02820	Tuner assy
1257	9965 100 03392	Tuner + Eeprom
1257	9965 100 03395	Tuner + Eeprom
1258	9965 000 44580	NOR Flash assy
1258	9965 000 45022	NOR Flash assy
1258	9965 100 02858	NOR Flash assy
1258	9965 100 03398	NOR Flash assy
1258	9965 100 05892	NOR Flash assy
1258	9965 100 05894	NOR Flash assy
1258	9965 100 05895	NOR Flash assy
1258	9965 100 05996	NOR Flash assy
1258	9965 100 06907	NOR Flash assy
1258	9965 100 08018	NOR Flash assy
1258	9965 100 08200	NOR Flash assy
1258	9965 100 08858	NOR Flash assy
1258	9965 100 08985	NOR Flash assy
1258	9965 100 09226	NOR Flash assy
1258	9965 100 09281	NOR Flash assy
1258	9965 100 09636	NOR Flash assy
1258	9965 100 10030	NOR Flash assy
1258	9965 100 10035	NOR Flash assy
1258	9965 100 10239	NOR Flash assy
1301	9965 000 44325	EEPROM Assy
1301	9965 000 44603	EEPROM Assy
1301	9965 000 44787	EEPROM Assy
1301	9965 000 45023	EEPROM Assy
1301	9965 100 05848	EEPROM Assy
1301	9965 100 05849	EEPROM Assy
1301	9965 100 05864	EEPROM Assy
1301	9965 100 05997	EEPROM Assy
1301	9965 100 06908	EEPROM Assy
1301	9965 100 08019	EEPROM Assy
1301	9965 100 08201	EEPROM Assy
1301	9965 100 08859	EEPROM Assy
1301	9965 100 08986	EEPROM Assy
1301	9965 100 09224	EEPROM Assy
1301	9965 100 09637	EEPROM Assy
1301	9965 100 10031	EEPROM Assy
1301	9965 100 10036	EEPROM Assy
1302	9965 000 44327	EEPROM Assy
1302	9965 000 44605	EEPROM Assy
1302	9965 000 44789	EEPROM Assy
1302	9965 000 45025	EEPROM Assy
1302	9965 100 05845	EEPROM Assy
1302	9965 100 05846	EEPROM Assy
1302	9965 100 05847	EEPROM Assy
1302	9965 100 05998	EEPROM Assy
1302	9965 100 06909	EEPROM Assy
1302	9965 100 08020	EEPROM Assy
1302	9965 100 08202	EEPROM Assy
1302	9965 100 08860	EEPROM Assy
1302	9965 100 08987	EEPROM Assy
1302	9965 100 09225	EEPROM Assy
1302	9965 100 09638	EEPROM Assy
1302	9965 100 10032	EEPROM Assy
1302	9965 100 10037	EEPROM Assy
FB150	9965 000 42268	220Ω at 100MHz 0805
FB201	9965 000 42268	220Ω at 100MHz 0805
FB202	9965 000 43996	Bead 120Ω/500mA
FB202	9965 100 02775	Bead 120Ω/500mA
FB202	9965 100 03317	Bead 120Ω/500mA
FB203	9965 000 42268	220Ω at 100MHz 0805
FB250	9965 000 43995	Bead 600Ω/200mA
FB250	9965 000 43997	Bead 600Ω/200mA
FB251	9965 000 43995	Bead 600Ω/200mA
FB251	9965 000 43997	Bead 600Ω/500mA
FB252	9965 000 43995	Bead 600Ω/200mA
FB252	9965 000 43997	Bead 600Ω/500mA
FB253	9965 000 43995	Bead 600Ω/200mA
FB253	9965 000 43997	Bead 600Ω/500mA
FB254	9965 000 42268	220Ω at 100MHz 0805
FB255	9965 000 43995	Bead 600Ω/200mA
FB255	9965 000 43997	Bead 600Ω/500mA
FB256	9965 000 43995	Bead 600Ω/200mA

FB256	9965 000 43997	Bead 600Ω/500mA
FB257	9965 000 43995	Bead 600Ω/200mA
FB257	9965 000 43997	Bead 600Ω/500mA
FB350	9965 000 43995	Bead 600Ω/200mA
FB350	9965 000 43997	Bead 600Ω/500mA
FB351	9965 000 43995	Bead 600Ω/200mA
FB351	9965 000 43997	Bead 600Ω/500mA
FB352	9965 000 43995	Bead 600Ω/200mA
FB352	9965 000 43997	Bead 600Ω/500mA
FB401	9965 000 43995	Bead 600Ω/200mA
FB401	9965 000 43997	Bead 600Ω/500mA
FB402	9965 000 43995	Bead 600Ω/200mA
FB402	9965 000 43997	Bead 600Ω/500mA
FB403	9965 000 43995	Bead 600Ω/200mA
FB403	9965 000 43997	Bead 600Ω/500mA
FB404	9965 000 43995	Bead 600Ω/200mA
FB404	9965 000 43997	Bead 600Ω/500mA
FB405	9965 000 43995	Bead 600Ω/200mA
FB405	9965 000 43997	Bead 600Ω/500mA
FB406	9965 000 43995	Bead 600Ω/200mA
FB406	9965 000 43997	Bead 600Ω/500mA
FB407	9965 000 43995	Bead 600Ω/200mA
FB407	9965 000 43997	Bead 600Ω/500mA
FB408	9965 000 43995	Bead 600Ω/200mA
FB408	9965 000 43997	Bead 600Ω/500mA
FB409	9965 000 43995	Bead 600Ω/200mA
FB409	9965 000 43997	Bead 600Ω/500mA
FB410	9965 000 43995	Bead 600Ω/200mA
FB410	9965 000 43997	Bead 600Ω/500mA
FB411	9965 000 43995	Bead 600Ω/200mA
FB411	9965 000 43997	Bead 600Ω/500mA
FB660	9965 000 43995	Bead 600Ω/200mA
FB660	9965 000 43997	Bead 600Ω/500mA
FB661	9965 000 43995	Bead 600Ω/200mA
FB661	9965 000 43997	Bead 600Ω/500mA
FB662	9965 000 43995	Bead 600Ω/200mA
FB662	9965 000 43997	Bead 600Ω/500mA
FB663	9965 000 43995	Bead 600Ω/200mA
FB663	9965 000 43997	Bead 600Ω/500mA
FB700	9965 000 43995	Bead 600Ω/200mA
FB700	9965 000 43997	Bead 600Ω/500mA
FB701	9965 000 43995	Bead 600Ω/200mA
FB701	9965 000 43997	Bead 600Ω/500mA
FB703	9965 000 42268	220Ω at 100MHz 0805
FB725	9965 000 43995	Bead 600Ω/200mA
FB725	9965 000 43997	Bead 600Ω/500mA
FB726	9965 000 43995	Bead 600Ω/200mA
FB726	9965 000 43997	Bead 600Ω/500mA
FB760	9965 000 43995	Bead 600Ω/200mA
FB760	9965 000 43997	Bead 600Ω/500mA
FB761	9965 000 43995	Bead 600Ω/200mA
FB761	9965 000 43997	Bead 600Ω/500mA
FB801	9965 000 43918	75Ω W6 RH 3.5X10X
FB801	9965 000 43919	80Ω BF30TA 3.5X9X
FB851	9965 000 42268	220Ω at 100MHz 0805
FB852	9965 000 42268	220Ω at 100MHz 0805
FB853	9965 000 42268	220Ω at 100MHz 0805
FB900	9965 000 43995	Bead 600Ω/200mA
FB900	9965 000 43997	Bead 600Ω/500mA
TU201	9965 000 44034	Tuner FQD1236/F
TU202	9965 100 02821	TDQU4-507A
X250	9965 000 44013	Xtal 25MHz 20p HC49/S
X250	9965 000 44014	Xtal 25MHz 20p HC49/S
X250	9965 100 02868	Crystal 25Mhz 20pF
X250	9965 100 02869	Crystal 25Mhz 20pF
X250	9965 100 03276	Xtal 25MHz 20p HC49/S
X250	9965 100 03534	Xtal 25MHz 20p HC49/S
X350	9965 000 44012	Xtal 27MHz 15p
X350	9965 000 44601	Xls/Osc. 27Mhz
X350	9965 000 44602	Crystal 27Mhz
X350	9965 100 02870	Xtal 27Mhz 15pF
X350	9965 100 02871	Xtal 27Mhz 15pF
X350	9965 100 03224	Crystal 27Mhz
X350	9965 100 03536	Crystal 27Mhz
X350	9965 100 05116	Crystal / Osc 27MHz
X350	9965 100 05117	Crystal / Osc 27MHz
ZD100	9965 000 37806	SMD
ZD150	9965 000 37806	SMD
ZD151	9965 000 44008	BZX284-C12
ZD151	9965 100 02872	BZX284-C12
ZD151	9965 100 03537	BZX284-C12
ZD151	9965 100 05862	BZX284-C5V1SOD-110
ZD152	9965 000 37806	SMD
ZD701	9965 000 44006	PDZ24B SOD-323
ZD701	9965 100 02873	PDZ24B
ZD701	9965 100 03538	PDZ24B SOD-323
ZD706	9965 000 44006	PDZ24B SOD-323
ZD706	9965 100 03538	PDZ24B SOD-323

—||—

C100	9965 000 43488	100nF 25V 0603
C101	9965 000 43981	3.9nF 1% 50V 0603

C102	9965 000 43979	1nF 5% 50V 0603
C103	9965 000 43979	1nF 5% 50V 0603
C104	9965 000 42259	100pF 50V 0603
C105	9965 000 43980	100nF 20% 25V 0603
C106	9965 000 42259	100pF 50V 0603
C107	9965 000 43488	100nF 25V 0603
C108	9965 000 35998	220uF 16V
C108	9965 000 43916	470μF 20% 25V
C109	9965 000 43488	100nF 25V 0603
C110	9965 000 42402	1mF 20% 25V 0805
C111	9965 000 43488	100nF 25V 0603
C112	9965 000 43985	1μF 20% 16V
C113	9965 100 03699	220uF 25V
C113	9965 100 05107	2200uF 25V
C114	9965 000 43981	3.9nF 1% 50V 0603
C116	9965 000 43488	100nF 25V 0603
C117	9965 000 43980	100nF 20% 25V 0603
C118	9965 000 43979	1nF 5% 50V 0603
C119	9965 000 43979	1nF 5% 50V 0603
C120	9965 000 42260	10nF 50V X7R 0603
C121	9965 000 43488	100nF 25V 0603
C122	9965 000 43488	100nF 25V 0603
C123	9965 000 43979	1nF 5% 50V 0603
C124	9965 000 37776	100μF 25V
C124	9965 000 43645	100μF 25V
C124	9965 100 08191	100uF 16V
C124	9965 100 08192	100uF 16V
C125	9965 000 35998	220uF 16V
C125	9965 000 43916	470μF 20% 25V
C126	9965 000 43981	3.9nF 1% 50V 0603
C127	9965 000 43916	470μF 20% 25V
C127	9965 000 44823	470uF 16V
C128	9965 000 43981	3.9nF 1% 50V 0603
C129	9965 000 42262	100nF 50V Y5V 0603
C130	9965 000 42235	47μF 25V 6.3X5.3mm
C130	9965 100 03679	47uF 16V
C130	9965 100 03680	47uF 16V
C130	9965 100 03697	47uF 25V
C130	9965 100 05108	47uF 25V
C130	9965 100 08199	47uF 16V
C131	9965 000 43913	470μF 35V
C131	9965 000 43914	470μF 35V
C132	9965 000 43980	100nF 20% 25V 0603
C133	9965 000 43980	100nF 20% 25V 0603
C133	9965 100 06906	4.7F 20% 10V
C134	9965 000 42231	330pF 50V NPO 0603
C150	9965 000 42235	47μF 25V 6.3X5.3mm
C150	9965 100 03679	47uF 16V
C150	9965 100 03680	47uF 16V
C150	9965 100 03697	47uF 25V
C150	9965 100 05108	47uF 25V
C150	9965 100 08199	47uF 16V
C151	9965 000 43980	100nF 20% 25V 0603
C152	9965 000 35998	220uF 16V
C152	9965 000 43917	1000μF 25V
C153	9965 000 43913	470μF 35V
C154	9965 100 03677	470uF 25V
C155	9965 000 42235	47μF 25V 6.3X5.3mm
C155	9965 100 03679	47uF 16V
C155	9965 100 03680	47uF 16V
C155	9965 100 03697	47uF 25V
C155	9965 100 05108	47uF 25V
C155	9965 100 08199	47uF 16V
C156	9965 000 43980	100nF 20% 25V 0603
C157	9965 000 42698	10μF 16V 20% 1206
C158	9965 000 43980	100nF 20% 25V 0603
C159	9965 000 42235	47μF 25V 6.3X5.3mm
C159	9965 100 03679	47uF 16V
C159	9965 100 03680	47uF 16V
C159	9965 100 03697	47uF 25V
C159	9965 100 05108	47uF 25V
C159	9965 100 08199	47uF 16V
C160	9965 000 43980	1

C170	9965 000 42262	100nF 50V Y5V 0603	C351	9965 100 09686	10F 16V 1206	C446	9965 000 42228	100nF 16V X7R 0603
C171	9965 000 42260	10nF 50V X7R 0603	C353	9965 000 42228	100nF 16V X7R 0603	C447	9965 000 42228	100nF 16V X7R 0603
C172	9965 000 43991	47F 35V	C354	9965 000 42228	100nF 16V X7R 0603	C448	9965 000 42228	100nF 16V X7R 0603
C173	9965 000 35998	220uF 16V	C355	9965 000 42260	10nF 50V X7R 0603	C449	9965 000 42228	100nF 16V X7R 0603
C173	9965 000 37774	470uF 16V	C356	9965 000 43977	1nF 5% 25V 0603	C450	9965 000 44016	10uF 10% 16V
C174	9965 000 42231	330pF 50V NPO 0603	C357	9965 000 42690	47pF 50V NPO 5% 0603	C450	9965 000 44017	10uF 20% 16V
C175	9965 000 42262	100nF 50V Y5V 0603	C358	9965 000 42229	22pF 50V NPO 0603	C450	9965 000 44018	10uF 10% 16V
C176	9965 000 42260	10nF 50V X7R 0603	C359	9965 000 42403	10uF 25V 20% 1210	C450	9965 000 44019	CER 10U 10V X7R 10%
C201	9965 000 42228	100nF 16V X7R 0603	C359	9965 100 08198	10uF 10V 0805	C450	9965 000 44020	10uF 10% 10V
C202	9965 000 37776	100uF 25V	C359	9965 100 09685	10F 10V	C450	9965 000 45057	10uF 10% 16V
C202	9965 000 43645	100uF 25V	C360	9965 000 42403	10uF 25V 20% 1210	C451	9965 000 42228	100nF 16V X7R 0603
C202	9965 100 08191	100uF 16V	C360	9965 100 08198	10uF 10V 0805	C452	9965 000 42228	100nF 16V X7R 0603
C202	9965 100 08192	100uF 16V	C360	9965 100 09685	10F 10V	C453	9965 000 42228	100nF 16V X7R 0603
C203	9965 000 37776	100uF 25V	C361	9965 000 42228	100nF 16V X7R 0603	C454	9965 000 42228	100nF 16V X7R 0603
C203	9965 000 43645	100uF 25V	C362	9965 000 43978	10pF 5% 50V 0603	C455	9965 000 42228	100nF 16V X7R 0603
C204	9965 000 42260	10nF 50V X7R 0603	C363	9965 000 42260	10nF 50V X7R 0603	C456	9965 000 42228	100nF 16V X7R 0603
C205	9965 000 42403	10uF 25V 20% 1210	C364	9965 000 42260	10nF 50V X7R 0603	C457	9965 000 42228	100nF 16V X7R 0603
C205	9965 100 08198	10uF 10V 0805	C365	9965 000 42260	10nF 50V X7R 0603	C458	9965 000 42228	100nF 16V X7R 0603
C205	9965 100 09685	10F 10V	C366	9965 000 42260	10nF 50V X7R 0603	C459	9965 000 42228	100nF 16V X7R 0603
C206	9965 000 42228	100nF 16V X7R 0603	C367	9965 000 42260	10nF 50V X7R 0603	C460	9965 000 42228	100nF 16V X7R 0603
C207	9965 000 42232	47nF 16V X7R 0603	C368	9965 000 42260	10nF 50V X7R 0603	C461	9965 000 44016	10uF 10% 16V
C208	9965 000 42678	15pF -5% 50V 0603	C371	9965 000 42260	10nF 50V X7R 0603	C461	9965 000 44017	10uF 20% 16V
C209	9965 000 42678	15pF -5% 50V 0603	C372	9965 000 42260	10nF 50V X7R 0603	C461	9965 000 44018	10uF 10% 16V
C210	9965 000 42690	47pF 50V NPO 5% 0603	C401	9965 000 42228	100nF 16V X7R 0603	C461	9965 000 44019	CER 10U 10V X7R 10%
C211	9965 000 42235	47uF 25V 6.3X5.3mm	C402	9965 000 42228	100nF 16V X7R 0603	C461	9965 000 44020	10uF 10% 10V
C211	9965 100 03679	47uF 16V	C403	9965 000 42228	100nF 16V X7R 0603	C461	9965 000 45057	10uF 10% 16V
C211	9965 100 03680	47uF 16V	C404	9965 000 42228	100nF 16V X7R 0603	C462	9965 000 42228	100nF 16V X7R 0603
C211	9965 100 03697	47uF 25V	C405	9965 000 43988	4.7uF 10% 10V	C463	9965 000 42228	100nF 16V X7R 0603
C211	9965 100 05108	47uF 25V	C405	9965 100 03698	4.7uF +/-10% 10V	C464	9965 000 42228	100nF 16V X7R 0603
C211	9965 100 08199	47uF 16V	C406	9965 000 42228	100nF 16V X7R 0603	C465	9965 000 42228	100nF 16V X7R 0603
C212	9965 000 43984	5.6pF 50V 0603	C407	9965 000 43988	4.7uF 10% 10V	C466	9965 000 42228	100nF 16V X7R 0603
C213	9965 000 42678	15pF -5% 50V 0603	C407	9965 100 03698	4.7uF +/-10% 10V	C467	9965 000 42228	100nF 16V X7R 0603
C214	9965 000 42235	47uF 25V 6.3X5.3mm	C408	9965 000 42228	100nF 16V X7R 0603	C468	9965 000 43988	4.7uF 10% 10V
C214	9965 100 03679	47uF 16V	C409	9965 000 42228	100nF 16V X7R 0603	C468	9965 100 03698	4.7uF +/-10% 10V
C214	9965 100 03680	47uF 16V	C410	9965 000 42228	100nF 16V X7R 0603	C469	9965 000 42228	100nF 16V X7R 0603
C214	9965 100 03697	47uF 25V	C411	9965 000 42228	100nF 16V X7R 0603	C470	9965 000 42228	100nF 16V X7R 0603
C214	9965 100 05108	47uF 25V	C412	9965 000 42228	100nF 16V X7R 0603	C472	9965 000 42228	100nF 16V X7R 0603
C214	9965 100 08199	47uF 16V	C413	9965 000 43916	470uF 20% 25V	C473	9965 000 42228	100nF 16V X7R 0603
C215	9965 000 42228	100nF 16V X7R 0603	C413	9965 100 08191	100uF 16V	C474	9965 000 44022	10uF 10% 16V
C216	9965 000 42260	10nF 50V X7R 0603	C413	9965 100 08192	100uF 16V	C474	9965 000 44023	10uF 10% 10V
C218	9965 000 42228	100nF 16V X7R 0603	C414	9965 000 43988	4.7uF 10% 10V	C474	9965 000 44024	10uF 10% 10V
C250	9965 000 42228	100nF 16V X7R 0603	C414	9965 100 03698	4.7uF +/-10% 10V	C474	9965 100 05856	10uF 16V 10% 1206
C251	9965 000 42232	47nF 16V X7R 0603	C415	9965 000 42228	100nF 16V X7R 0603	C475	9965 100 09686	10F 16V 1206
C252	9965 000 42260	10nF 50V X7R 0603	C416	9965 000 42228	100nF 16V X7R 0603	C475	9965 000 44022	10uF 10% 16V
C254	9965 000 42260	10nF 50V X7R 0603	C417	9965 000 43988	4.7uF 10% 10V	C475	9965 000 44023	10uF 10% 10V
C255	9965 000 42228	100nF 16V X7R 0603	C417	9965 100 03698	4.7uF +/-10% 10V	C475	9965 000 44024	10uF 10% 10V
C256	9965 000 42228	100nF 16V X7R 0603	C418	9965 000 42228	100nF 16V X7R 0603	C475	9965 100 05856	10uF 16V 10% 1206
C257	9965 000 42403	10uF 25V 20% 1210	C419	9965 000 42228	100nF 16V X7R 0603	C475	9965 100 09686	10F 16V 1206
C257	9965 100 08198	10uF 10V 0805	C420	9965 000 42228	100nF 16V X7R 0603	C476	9965 000 44022	10uF 10% 16V
C257	9965 100 09685	10F 10V	C421	9965 000 42228	100nF 16V X7R 0603	C476	9965 000 44023	10uF 10% 10V
C258	9965 000 42228	100nF 16V X7R 0603	C422	9965 000 42403	10uF 25V 20% 1210	C476	9965 000 44024	10uF 10% 10V
C259	9965 000 42228	100nF 16V X7R 0603	C422	9965 100 08198	10uF 10V 0805	C476	9965 100 05856	10uF 16V 10% 1206
C260	9965 000 42680	18pF 50V NPO 5% 0603	C422	9965 100 09685	10F 10V	C476	9965 100 09686	10F 16V 1206
C261	9965 000 42680	18pF 50V NPO 5% 0603	C423	9965 000 42228	100nF 16V X7R 0603	C477	9965 000 44022	10uF 10% 16V
C262	9965 000 42228	100nF 16V X7R 0603	C424	9965 000 42228	100nF 16V X7R 0603	C477	9965 000 44023	10uF 10% 10V
C263	9965 000 42228	100nF 16V X7R 0603	C425	9965 000 42228	100nF 16V X7R 0603	C477	9965 000 44024	10uF 10% 10V
C264	9965 000 42403	10uF 25V 20% 1210	C426	9965 000 42228	100nF 16V X7R 0603	C477	9965 100 05856	10uF 16V 10% 1206
C264	9965 100 08198	10uF 10V 0805	C427	9965 000 44016	10uF 10% 16V	C477	9965 100 09686	10F 16V 1206
C264	9965 100 09685	10F 10V	C427	9965 000 44017	10uF 20% 16V	C501	9965 000 42228	100nF 16V X7R 0603
C265	9965 000 42228	100nF 16V X7R 0603	C427	9965 000 44018	10uF 10% 16V	C502	9965 000 37776	100uF 25V
C266	9965 000 42228	100nF 16V X7R 0603	C427	9965 000 44019	CER 10U 10V X7R 10%	C502	9965 000 43645	100uF 25V
C267	9965 000 42228	100nF 16V X7R 0603	C427	9965 000 44020	10uF 10% 10V	C502	9965 100 08191	100uF 16V
C268	9965 000 42228	100nF 16V X7R 0603	C427	9965 000 45057	10uF 10% 16V	C502	9965 100 08192	100uF 16V
C269	9965 000 42228	100nF 16V X7R 0603	C428	9965 000 43988	4.7uF 10% 10V	C503	9965 100 03699	220uF 25V
C270	9965 000 42228	100nF 16V X7R 0603	C428	9965 100 03698	4.7uF +/-10% 10V	C503	9965 100 05107	220uF 25V
C271	9965 000 42228	100nF 16V X7R 0603	C429	9965 000 42228	100nF 16V X7R 0603	C503	9965 100 08193	150F 25V
C272	9965 000 42228	100nF 16V X7R 0603	C430	9965 000 42235	47uF 25V 6.3X5.3mm	C503	9965 100 08194	150F 25V
C273	9965 000 42228	100nF 16V X7R 0603	C430	9965 100 03679	47uF 16V	C504	9965 000 42228	100nF 16V X7R 0603
C274	9965 000 42403	10uF 25V 20% 1210	C430	9965 100 03680	47uF 16V	C505	9965 000 42228	100nF 16V X7R 0603
C274	9965 100 08198	10uF 10V 0805	C430	9965 100 03697	47uF 25V	C506	9965 000 42403	10uF 16V 20% 1210
C274	9965 100 09685	10F 10V	C430	9965 100 05108	47uF 25V	C506	9965 100 08198	10uF 10V 0805
C275	9965 000 42228	100nF 16V X7R 0603	C430	9965 100 08199	47uF 16V	C506	9965 100 09685	10F 10V
C276	9965 000 42228	100nF 16V X7R 0603	C431	9965 000 42228	100nF 16V X7R 0603	C507	9965 000 42235	47uF 25V 6.3X5.3mm
C277	9965 000 42228	100nF 16V X7R 0603	C432	9965 000 42228	100nF 16V X7R 0603	C507	9965 100 03679	47uF 16V
C278	9965 000 42228	100nF 16V X7R 0603	C433	9965 000 42228	100nF 16V X7R 0603	C507	9965 100 03680	47uF 16V
C279	9965 000 42228	100nF 16V X7R 0603	C434	9965 000 42403	10uF 25V 20% 1210	C507	9965 100 03697	47uF 25V
C280	9965 000 42228	100nF 16V X7R 0603	C434	9965 100 08198	10uF 10V 0805	C507	9965 100 05108	47uF 25V
C281	9965 000 42403	10uF 25V 20% 1210	C434	9965 100 09685	10F 10V	C507	9965 100 08199	47uF 16V
C281	9965 100 08198	10uF 10V 0805	C435	9965 000 42228	100nF 16V X7R 0603	C508	9965 000 42228	100nF 16V X7R 0603
C281	9965 100 09685	10F 10V	C436	9965 000 42228	100nF 16V X7R 0603	C509	9965 000 42228	100nF 16V X7R 0603
C282	9965 000 42228	100nF 16V X7R 0603	C437	9965 000 42228	100nF 16V X7R 0603	C510	9965 000 42228	100nF 16V X7R 0603
C283	9965 000 42228	100nF 16V X7R 0603	C438	9965 000 42228	100nF 16V X7R 0603	C511	9965 000 42228	100nF 16V X7R 0603
C284	9965 000 42228	100nF 16V X7R 0603	C439	9965 000 42228	100nF 16V X7R 0603	C512	9965 000 42228	100nF 16V X7R 0603
C285	9965 000 42228	100nF 16V X7R 0603	C440	9965 000 42228	100nF 16V X7R 0603	C513	9965 000 42228	100nF 16V X7R 0603
C286	9965 000 42228	100nF 16V X7R 0603	C441	9965 000 42228	100nF 16V X7R 0603	C514	9965 000 42228	100nF 16V X7R 0603
C350	9965 000							

C524	9965 000 42228	100nF 16V X7R 0603	C664	9965 000 43983	47nF 20 50V	C774	9965 100 09685	10F 10V
C525	9965 000 42228	100nF 16V X7R 0603	C665	9965 000 42229	22pF 50V NPO 0603	C775	9965 000 42403	10µF 25V 20% 1210
C526	9965 000 42228	100nF 16V X7R 0603	C666	9965 000 42231	330pF 50V NPO 0603	C775	9965 100 08198	10µF 10V 0805
C527	9965 000 43988	4.7µF 10% 10V	C667	9965 000 42231	330pF 50V NPO 0603	C775	9965 100 09685	10F 10V
C527	9965 100 03698	4.7µF +/-10% 10V	C668	9965 000 43983	47nF 20 50V	C776	9965 000 42403	10µF 25V 20% 1210
C528	9965 000 42228	100nF 16V X7R 0603	C669	9965 000 42690	47pF 50V NPO 5% 0603	C776	9965 100 08198	10µF 10V 0805
C529	9965 000 42228	100nF 16V X7R 0603	C670	9965 000 42231	330pF 50V NPO 0603	C776	9965 100 09685	10F 10V
C530	9965 000 42228	100nF 16V X7R 0603	C671	9965 000 42231	330pF 50V NPO 0603	C777	9965 000 42403	10µF 25V 20% 1210
C531	9965 000 42228	100nF 16V X7R 0603	C672	9965 000 43983	47nF 20 50V	C777	9965 100 08198	10µF 10V 0805
C532	9965 000 42228	100nF 16V X7R 0603	C673	9965 000 43983	47nF 20 50V	C777	9965 100 09685	10F 10V
C533	9965 000 42228	100nF 16V X7R 0603	C674	9965 000 43983	47nF 20 50V	C778	9965 000 42228	100nF 16V X7R 0603
C534	9965 000 42228	100nF 16V X7R 0603	C675	9965 000 42673	10nF 50V Y5V 20% 0603	C779	9965 000 42403	10µF 25V 20% 1210
C535	9965 000 42228	100nF 16V X7R 0603	C676	9965 000 42673	10nF 50V Y5V 20% 0603	C779	9965 100 08198	10µF 10V 0805
C536	9965 000 42228	100nF 16V X7R 0603	C700	9965 000 42228	100nF 16V X7R 0603	C779	9965 100 09685	10F 10V
C537	9965 000 42228	100nF 16V X7R 0603	C701	9965 000 42228	100nF 16V X7R 0603	C780	9965 000 42403	10µF 25V 20% 1210
C538	9965 000 37776	100µF 25V	C702	9965 000 42228	100nF 16V X7R 0603	C780	9965 100 08198	10µF 10V 0805
C538	9965 000 43645	100µF 25V	C703	9965 000 42228	100nF 16V X7R 0603	C780	9965 100 09685	10F 10V
C538	9965 100 08191	100uF 16V	C704	9965 000 42228	100nF 16V X7R 0603	C781	9965 000 42403	10µF 25V 20% 1210
C538	9965 100 08192	100uF 16V	C705	9965 000 42228	100nF 16V X7R 0603	C781	9965 100 08198	10µF 10V 0805
C539	9965 000 42228	100nF 16V X7R 0603	C706	9965 000 42228	100nF 16V X7R 0603	C781	9965 100 09685	10F 10V
C540	9965 000 42228	100nF 16V X7R 0603	C707	9965 000 42228	100nF 16V X7R 0603	C782	9965 000 42228	100nF 16V X7R 0603
C541	9965 000 42228	100nF 16V X7R 0603	C708	9965 000 42260	10nF 50V X7R 0603	C783	9965 000 42401	220pF NPO 50V 5% 0603
C542	9965 000 42228	100nF 16V X7R 0603	C709	9965 000 42260	10nF 50V X7R 0603	C784	9965 000 42403	10µF 25V 20% 1210
C543	9965 000 42228	100nF 16V X7R 0603	C710	9965 000 42228	100nF 16V X7R 0603	C784	9965 100 08198	10µF 10V 0805
C544	9965 000 42228	100nF 16V X7R 0603	C711	9965 000 42228	100nF 16V X7R 0603	C784	9965 100 09685	10F 10V
C545	9965 000 42228	100nF 16V X7R 0603	C712	9965 000 42228	100nF 16V X7R 0603	C789	9965 000 43992	220µF
C546	9965 000 42228	100nF 16V X7R 0603	C713	9965 000 42228	100nF 16V X7R 0603	C789	9965 000 43993	220µF 10V
C547	9965 000 42228	100nF 16V X7R 0603	C714	9965 000 42228	100nF 16V X7R 0603	C790	9965 000 43992	220µF
C548	9965 000 42228	100nF 16V X7R 0603	C715	9965 000 42228	100nF 16V X7R 0603	C790	9965 000 43993	220µF 10V
C549	9965 000 42228	100nF 16V X7R 0603	C716	9965 000 42228	100nF 16V X7R 0603	C800	9965 000 43913	470µF 35V
C550	9965 000 42228	100nF 16V X7R 0603	C717	9965 000 42228	100nF 16V X7R 0603	C800	9965 000 43914	470µF 35V
C551	9965 000 42228	100nF 16V X7R 0603	C718	9965 000 42228	100nF 16V X7R 0603	C800	9965 100 08195	100uF 35V
C552	9965 000 42228	100nF 16V X7R 0603	C719	9965 000 42228	100nF 16V X7R 0603	C800	9965 100 08196	100µF 35V
C553	9965 000 42228	100nF 16V X7R 0603	C720	9965 000 42235	47µF 25V 6.3X5.3mm	C800	9965 100 08197	100µF 35V
C554	9965 000 42228	100nF 16V X7R 0603	C720	9965 100 03679	47uF 16V	C801	9965 000 43913	470µF 35V
C555	9965 100 03699	220uF 25V	C720	9965 100 03680	47uF 16V	C801	9965 000 43914	470µF 35V
C555	9965 100 05107	2200uF 25V	C720	9965 100 03697	47uF 25V	C802	9965 000 43989	470nF 20% 50V
C555	9965 100 08193	150F 25V	C720	9965 100 05108	47uF 25V	C803	9965 000 42262	100nF 50V Y5V 0603
C555	9965 100 08194	150F 25V	C720	9965 100 08199	47uF 16V	C804	9965 000 42262	100nF 50V Y5V 0603
C556	9965 000 42233	10µF 20% 10V 1206	C721	9965 000 43488	100nF 25V 0603	C805	9965 000 43986	15nF 1% 50V
C557	9965 000 43988	4.7µF 10% 10V	C725	9965 000 42228	100nF 16V X7R 0603	C806	9965 000 42262	100nF 50V Y5V 0603
C557	9965 100 03698	4.7µF +/-10% 10V	C726	9965 000 43977	1nF 5% 25V 0603	C807	9965 000 42604	470µF 25V
C558	9965 000 42228	100nF 16V X7R 0603	C727	9965 000 42260	10nF 50V X7R 0603	C807	9965 000 42605	470nF 25V EB 10X13mm
C559	9965 000 42233	10µF 20% 10V 1206	C728	9965 000 43980	100nF 20% 25V 0603	C807	9965 000 43917	1000µF 25V
C560	9965 000 43988	4.7µF 10% 10V	C729	9965 000 42693	5pF 50V NPO 0603	C808	9965 000 42262	100nF 50V Y5V 0603
C560	9965 100 03698	4.7µF +/-10% 10V	C730	9965 000 42260	10nF 50V X7R 0603	C809	9965 000 43982	470pF
C561	9965 000 42228	100nF 16V X7R 0603	C731	9965 000 42260	10nF 50V X7R 0603	C810	9965 000 43989	470nF 20% 50V
C562	9965 000 42228	100nF 16V X7R 0603	C732	9965 000 42693	5pF 50V NPO 0603	C811	9965 000 43989	470nF 20% 50V
C563	9965 000 42403	10µF 25V 20% 1210	C733	9965 000 42260	10nF 50V X7R 0603	C812	9965 000 42604	470µF 25V
C563	9965 100 08198	10uF 10V 0805	C734	9965 000 42260	10nF 50V X7R 0603	C812	9965 000 42605	470µF 25V EB 10X13mm
C563	9965 100 09685	10F 10V	C735	9965 000 42231	330pF 50V NPO 0603	C812	9965 000 43917	1000µF 25V
C564	9965 000 42228	100nF 16V X7R 0603	C736	9965 000 42231	330pF 50V NPO 0603	C813	9965 000 42262	100nF 50V Y5V 0603
C565	9965 000 42228	100nF 16V X7R 0603	C737	9965 000 42693	5pF 50V NPO 0603	C814	9965 000 42262	100nF 50V Y5V 0603
C566	9965 000 42228	100nF 16V X7R 0603	C738	9965 000 42260	10nF 50V X7R 0603	C815	9965 000 43986	15nF 1% 50V
C567	9965 000 42228	100nF 16V X7R 0603	C739	9965 000 42231	330pF 50V NPO 0603	C816	9965 000 43985	1µF 20% 16V
C568	9965 000 42228	100nF 16V X7R 0603	C740	9965 000 42231	330pF 50V NPO 0603	C817	9965 000 43985	1µF 20% 16V
C569	9965 000 42228	100nF 16V X7R 0603	C741	9965 000 42229	22pF 50V NPO 0603	C818	9965 000 43987	470nF 20% 16V
C570	9965 000 42228	100nF 16V X7R 0603	C742	9965 000 42693	5pF 50V NPO 0603	C819	9965 000 42262	100nF 50V Y5V 0603
C571	9965 000 42228	100nF 16V X7R 0603	C760	9965 000 42228	100nF 16V X7R 0603	C820	9965 000 42262	100nF 50V Y5V 0603
C572	9965 000 42228	100nF 16V X7R 0603	C761	9965 000 42403	10µF 25V 20% 1210	C821	9965 000 42235	47µF 25V 6.3X5.3mm
C573	9965 000 42228	100nF 16V X7R 0603	C761	9965 100 08198	10µF 10V 0805	C821	9965 100 03697	47uF 25V
C574	9965 000 42228	100nF 16V X7R 0603	C761	9965 100 09685	10F 10V	C821	9965 100 05108	47uF 25V
C575	9965 000 42228	100nF 16V X7R 0603	C762	9965 000 42403	10µF 25V 20% 1210	C822	9965 000 42262	100nF 50V Y5V 0603
C576	9965 000 42228	100nF 16V X7R 0603	C762	9965 100 08198	10uF 10V 0805	C823	9965 000 43985	1µF 20% 16V
C577	9965 000 42228	100nF 16V X7R 0603	C762	9965 100 09685	10F 10V	C824	9965 000 43985	1µF 20% 16V
C578	9965 000 42228	100nF 16V X7R 0603	C763	9965 000 42228	100nF 16V X7R 0603	C825	9965 000 42231	330pF 50V NPO 0603
C579	9965 000 42228	100nF 16V X7R 0603	C764	9965 000 42228	100nF 16V X7R 0603	C826	9965 000 42231	330pF 50V NPO 0603
C580	9965 000 42228	100nF 16V X7R 0603	C765	9965 000 42228	100nF 16V X7R 0603	C827	9965 000 42262	100nF 50V Y5V 0603
C581	9965 000 42228	100nF 16V X7R 0603	C766	9965 000 42403	10µF 25V 20% 1210	C828	9965 000 43982	470pF
C601	9965 000 43977	1nF 5% 25V 0603	C766	9965 100 08198	10µF 10V 0805	C829	9965 000 42262	100nF 50V Y5V 0603
C602	9965 000 42678	15pF -5% 50V 0603	C766	9965 100 09685	10F 10V	C830	9965 100 03699	220uF 25V
C603	9965 000 42678	15pF -5% 50V 0603	C767	9965 000 42403	10µF 25V 20% 1210	C830	9965 100 05107	2200uF 25V
C604	9965 000 42678	15pF -5% 50V 0603	C767	9965 100 08198	10uF 10V 0805	C850	9965 000 42228	100nF 16V X7R 0603
C605	9965 000 42678	15pF -5% 50V 0603	C767	9965 100 09685	10F 10V	C851	9965 000 42698	10µF 16V 20% 1206
C606	9965 000 42260	10nF 50V X7R 0603	C768	9965 000 42403	10µF 25V 20% 1210	C900	9965 000 42260	10nF 50V X7R 0603
C607	9965 000 42678	15pF -5% 50V 0603	C768	9965 100 08198	10µF 10V 0805	C901	9965 000 43980	100nF 20% 25V 0603
C608	9965 000 42678	15pF -5% 50V 0603	C768	9965 100 09685	10F 10V	C902	9965 100 05995	47F 25V
C609	9965 000 42260	10nF 50V X7R 0603	C769	9965 000 42403	10µF 25V 20% 1210	C903	9965 000 42678	15pF -5% 50V 0603
C610	9965 000 42260	10nF 50V X7R 0603	C769	9965 100 08198	10uF 10V 0805	C904	9965 000 43980	100nF 20% 25V 0603
C611	9965 000 42260	10nF 50V X7R 0603	C769	9965 100 09685	10F 10V	C905	9965 000 42678	15pF -5% 50V 0603
C612	9965 000 42260	10nF 50V X7R 0603	C770	9965 000 42403	10µF 25V 20% 1210	C906	9965 000 43994	10µF 16V
C613	9965 000 42260	10nF 50V X7R 0603	C770	9965 100 08198	10uF 10V 0805	C907	9965 000 43977	1nF 5% 25V 0603
C641	9965 000 42231	330pF 50V NPO 0603	C770	9965 100 09685	10F 10V	C908	9965 000 42678	15pF -5% 50V 0603
C642	9965 000 42231	330pF 50V NPO 0603	C771	9965 000 42403	10µF 25V 20% 1210	C909	9965 000 42260	10nF 50V X7R 0603
C644	9965 000 42231	330pF 50V NPO 0603	C771	9965 100 08198	10µF 10V 0805	C910	9965 000 42231	330pF 50V NPO 0603

C921	9965 000 42400	1μF 10V Y5V 20% 0603
C922	9965 000 42400	1μF 10V Y5V 20% 0603
C923	9965 000 42400	1μF 10V Y5V 20% 0603
C924	9965 000 42400	1μF 10V Y5V 20% 0603
C925	9965 000 42403	10μF 16V
C925	9965 000 43994	10μF 16V
C926	9965 000 43980	100nF 20% 25V 0603
C927	9965 000 42260	10nF 50V X7R 0603
C928	9965 000 43980	100nF 20% 25V 0603
C929	9965 000 43980	100nF 20% 25V 0603
C930	9965 000 43980	100nF 20% 25V 0603
C931	9965 000 43980	100nF 20% 25V 0603
C932	9965 000 42260	10nF 50V X7R 0603
C933	9965 000 42260	10nF 50V X7R 0603
C934	9965 000 42264	1μF 16V 0805
C935	9965 000 42264	1μF 16V 0805
C936	9965 000 42264	1μF 16V 0805
C937	9965 000 42264	1μF 16V 0805
C938	9965 000 42264	1μF 16V 0805
C939	9965 000 42260	10nF 50V X7R 0603
C940	9965 000 42264	1μF 16V 0805
CN100	9965 100 03429	Connector
CN351	9965 000 44317	Connector 2.0mm 3p
CN601	9965 000 43922	RCA Jack g/b/r g/b/r
CN601	9965 000 43925	RCA Jack g/b/r g/b/r
CN601	9965 100 03446	RCA Jack g/b/r+g/b/r
CN640	9965 000 42612	RCA Jack
CN640	9965 000 43921	RCA Jack w/r w/r 2pj
CN660	9965 000 43920	RCA Jack 1p Bk
CN660	9965 000 44598	RCA JACK 1p BL
CN661	9965 000 43923	RCA Jack Wh/Ye/Rd
CN661	9965 000 43924	RCA Jack Wh/Ye/Rd
CN662	9965 000 44320	Connector 2*7p
CN700	9965 100 05953	HDMI Header 19p
CN701	9965 100 05953	HDMI Header 19p
CN726	9965 000 43927	DB15 Right Angle f
CN726	9965 000 43928	D-SUB Conn 15p f
CN727	9965 000 43926	Phone Jack 3.5MM 3p
CN850	9965 000 44323	Conn. 2*20p m
CN900	9965 000 45310	Connector FF 0.5mm
CN900	9965 100 06905	Connector 16p
CON700	9965 000 44002	HDMI Header 19p
CON701	9965 000 44002	HDMI Header 19p

-W-

R100	9965 000 42212	0Ω 5% 1/10W
R101	9965 000 42395	10kΩ 1% 1/10W
R102	9965 000 42661	2.7kΩ 1% 1/10W
R103	9965 000 42220	22kΩ 5% 1/10W
R104	9965 000 42213	100Ω 5% 1/10W
R105	9965 000 42220	22kΩ 5% 1/10W
R106	9965 000 42214	10kΩ 5% 1/10W
R107	9965 000 42226	68Ω 5% 1/10W
R108	9965 000 42218	220Ω 5% 1/10W
R109	9965 000 42226	68Ω 5% 1/10W
R110	9965 000 43966	4.7Ω 5% 1/10W
R111	9965 000 42656	10kΩ 5% 1/10W
R112	9965 000 43957	2.2Ω 5% 1/10W
R113	9965 000 43962	39kΩ 5% 1/10W
R114	9965 000 43487	3.3kΩ 5% 1/10W
R115	9965 000 43487	3.3kΩ 5% 1/10W
R116	9965 000 40053	1KΩ 1/10W 5%
R117	9965 000 42220	22kΩ 5% 1/10W
R118	9965 000 42656	10Ω 5% 1/10W
R119	9965 000 42669	6.8kΩ 5% 1/10W
R120	9965 000 43955	1kΩ 1% 1/10W
R121	9965 000 43961	3.9kΩ 5% 1/10W
R122	9965 000 43955	1kΩ 1% 1/10W
R123	9965 000 43959	240Ω 1% 1/10W
R124	9965 000 43975	560Ω 1% 1/8W
R125	9965 000 42221	27kΩ 5% 1/10W
R126	9965 000 43965	470Ω 1% 1/10W
R127	9965 000 42214	10kΩ 5% 1/10W
R128	9965 000 42220	22kΩ 5% 1/10W
R129	9965 000 42218	220Ω 5% 1/10W
R130	9965 000 42220	22kΩ 5% 1/10W
R131	9965 000 42214	10kΩ 5% 1/10W
R132	9965 000 42218	220Ω 5% 1/10W
R133	9965 000 42669	6.8kΩ 5% 1/10W
R134	9965 000 43969	750Ω 1% 1/10W
R135	9965 000 42669	6.8kΩ 5% 1/10W
R136	9965 000 43487	3.3kΩ 5% 1/10W
R137	9965 000 42220	22kΩ 5% 1/10W
R138	9965 000 43966	4.7Ω 5% 1/10W
R139	9965 000 42656	10Ω 5% 1/10W
R140	9965 000 43957	2.2Ω 5% 1/10W
R141	9965 000 42656	10Ω 5% 1/10W
R142	9965 000 43955	1kΩ 1% 1/10W
R143	9965 000 43958	1.5kΩ 5% 1/10W
R144	9965 000 42219	2.2kΩ 5% 1/10W
R145	9965 000 43968	560Ω 1% 1/10W
R146	9965 000 44051	220Ω 1% 1/10W

R147	9965 000 42669	6.8kΩ 5% 1/10W
R148	9965 000 44051	220Ω 1% 1/10W
R149	9965 000 43975	560Ω 1% 1/8W
R150	9965 000 43912	1.2Ω 5% 2W
R151	9965 000 42213	100Ω 5% 1/10W
R152	9965 000 42220	22kΩ 5% 1/10W
R153	9965 000 42284	0Ω 1/10W
R154	9965 000 42213	100Ω 5% 1/10W
R155	9965 000 42284	0Ω 1/10W
R156	9965 000 42277	47kΩ 5% 1/10W
R157	9965 000 42220	22kΩ 5% 1/10W
R158	9965 000 42220	22kΩ 5% 1/10W
R159	9965 000 42214	10kΩ 5% 1/10W
R160	9965 000 43954	120Ω 1% 1/10W
R161	9965 000 43960	24Ω 1% 1/10W
R162	9965 000 43954	120Ω 1% 1/10W
R163	9965 000 43974	1Ω 5% 1/8W
R164	9965 000 42214	10kΩ 5% 1/10W
R165	9965 000 42225	4.7kΩ 5% 1/10W
R166	9965 100 02778	15kΩ 1% 0.1W
R167	9965 000 42214	10kΩ 5% 1/10W
R169	9965 000 42225	4.7kΩ 5% 1/10W
R170	9965 000 42213	100Ω 5% 1/10W
R171	9965 000 42214	10kΩ 5% 1/10W
R172	9965 000 40053	1KΩ 1/10W 5%
R173	9965 000 42225	4.7kΩ 5% 1/10W
R174	9965 000 39751	0Ω 1/8W
R175	9965 000 39751	0Ω 1/8W
R176	9965 000 39751	0Ω 1/8W
R178	9965 000 42213	100Ω 5% 1/10W
R179	9965 000 42395	10kΩ 1% 1/10W
R180	9965 000 43975	560Ω 1% 1/8W
R181	9965 000 42661	2.7kΩ 1% 1/10W
R182	9965 000 42212	0Ω 5% 1/10W
R183	9965 000 43975	560Ω 1% 1/8W
R184	9965 000 44051	220Ω 1% 1/10W
R185	9965 000 39751	0Ω 1/8W
R186	9965 000 39751	0Ω 1/8W
R187	9965 000 40053	1KΩ 1/10W 5%
R188	9965 000 42212	0Ω 5% 1/10W
R189	9965 000 43975	560Ω 1% 1/8W
R190	9965 000 43975	560Ω 1% 1/8W
R191	9965 100 02779	4.7kΩ 1% 0.1W
R201	9965 000 42213	100Ω 5% 1/10W
R202	9965 000 42225	4.7kΩ 5% 1/10W
R205	9965 000 42212	0Ω 5% 1/10W
R206	9965 000 42212	0Ω 5% 1/10W
R207	9965 000 43336	75Ω 5% 1/10W
R208	9965 000 42214	10kΩ 5% 1/10W
R209	9965 000 42214	10kΩ 5% 1/10W
R210	9965 000 42225	4.7kΩ 5% 1/10W
R211	9965 000 42225	4.7kΩ 5% 1/10W
R212	9965 000 42212	0Ω 5% 1/10W
R213	9965 000 42225	4.7kΩ 5% 1/10W
R214	9965 000 43962	39kΩ 5% 1/10W
R215	9965 000 43962	39kΩ 5% 1/10W
R217	9965 000 42219	2.2kΩ 5% 1/10W
R218	9965 000 42284	0Ω 1/10W
R219	9965 000 44038	220kΩ 5% 1/10W
R220	9965 000 42215	100kΩ 5% 1/10W
R250	9965 000 44050	1.1kΩ 5% 1/10W
R251	9965 000 42225	4.7kΩ 5% 1/10W
R252	9965 000 42225	4.7kΩ 5% 1/10W
R253	9965 000 42225	4.7kΩ 5% 1/10W
R254	9965 000 42222	33Ω 5% 1/10W
R255	9965 000 42222	33Ω 5% 1/10W
R256	9965 000 42222	33Ω 5% 1/10W
R257	9965 000 42222	33Ω 5% 1/10W
R258	9965 000 42222	33Ω 5% 1/10W
R259	9965 000 42222	33Ω 5% 1/10W
R260	9965 000 42222	33Ω 5% 1/10W
R261	9965 000 42222	33Ω 5% 1/10W
R262	9965 000 42216	1MΩ 5% 1/10W
R263	9965 000 42222	33Ω 5% 1/10W
R264	9965 000 42222	33Ω 5% 1/10W
R265	9965 000 42222	33Ω 5% 1/10W
R266	9965 000 42222	33Ω 5% 1/10W
R301	9965 000 42212	0Ω 5% 1/10W
R302	9965 000 42212	0Ω 5% 1/10W
R303	9965 000 43336	75Ω 5% 1/10W
R304	9965 000 43336	75Ω 5% 1/10W
R305	9965 000 43336	75Ω 5% 1/10W
R346	9965 000 43965	470Ω 1% 1/10W
R347	9965 000 44324	22kΩ 1% 0.1W
R348	9965 000 42225	4.7kΩ 5% 1/10W
R349	9965 000 42217	22Ω 5% 1/10W
R351	9965 000 42214	10kΩ 5% 1/10W
R352	9965 000 42214	10kΩ 5% 1/10W
R353	9965 000 42214	10kΩ 5% 1/10W
R354	9965 000 42214	10kΩ 5% 1/10W
R355	9965 000 42214	10kΩ 5% 1/10W
R356	9965 000 42214	10kΩ 5% 1/10W
R357	9965 000 42214	10kΩ 5% 1/10W
R358	9965 000 42214	10kΩ 5% 1/10W

R359	9965 000 42212	0Ω 5% 1/10W
R362	9965 000 42217	22Ω 5% 1/10W
R363	9965 000 42222	33Ω 5% 1/10W
R364	9965 000 42218	220Ω 5% 1/10W
R365	9965 000 42222	33Ω 5% 1/10W
R366	9965 000 42277	47kΩ 5% 1/10W
R367	9965 000 42214	10kΩ 5% 1/10W
R368	9965 000 42214	10kΩ 5% 1/10W
R369	9965 000 43972	8.2kΩ 5% 1/10W
R370	9965 000 42213	100Ω 5% 1/10W
R371	9965 000 42214	10kΩ 5% 1/10W
R372	9965 000 42213	100Ω 5% 1/10W
R373	9965 000 42666	51Ω 5% 1/10W
R374	9965 000 42225	4.7kΩ 5% 1/10W
R375	9965 000 42225	4.7kΩ 5% 1/10W
R377	9965 000 42214	10kΩ 5% 1/10W
R378	9965 000 42218	220Ω 5% 1/10W
R379	9965 000 42225	4.7kΩ 5% 1/10W
R380	9965 000 42213	100Ω 5% 1/10W
R381	9965 000 42213	100Ω 5% 1/10W
R382	9965 000 42213	100Ω 5% 1/10W
R383	9965 000 42225	4.7kΩ 5% 1/10W
R384	9965 000 42225	4.7kΩ 5% 1/10W
R385	9965 000 42213	100Ω 5% 1/10W
R386	9965 000 42213	100Ω 5% 1/10W
R387	9965 000 42213	100Ω 5% 1/10W
R388	9965 000 42219	2.2kΩ 5% 1/10W
R390	9965 000 42225	4.7kΩ 5% 1/10W
R391	9965 000 42225	4.7kΩ 5% 1/10W
R392	9965 000 42225	4.7kΩ 5% 1/10W
R394	9965 000 42225	4.7kΩ 5% 1/10W
R395	9965 000 43961	3.9kΩ 5% 1/10W
R396	9965 000 42225	4.7kΩ 5% 1/10W
R397	9965 000 42225	4.7kΩ 5% 1/10W
R398	9965 000 42225	4.7kΩ 5% 1/10W
R399	9965 000 42213	100Ω 5% 1/10W
R400	9965 000 42213	100Ω 5% 1/10W
R401	9965 000 43971	820Ω 1% 1/10W
R501	9965 000 42213	100Ω 5% 1/10W
R502	9965 000 42217	22Ω 5% 1/10W
R504	9965 000 42217	22Ω 5% 1/10W
R505	9965 000 42217	22Ω 5% 1/10W
R506	9965 000 42217	22Ω 5% 1/10W
R507	9965 000 42217	22Ω 5% 1/10W
R508	9965 000 42213	100Ω 5% 1/10W
R509	9965 000 42225	4.7kΩ 5% 1/10W
R510	9965 000 42664	47Ω 5% 1/10W
R511	9965 000 42664	47Ω 5% 1/10W
R512	9965 000 42664	47Ω 5% 1/10W
R513	9965 000 42664	47Ω 5% 1/10W
R514	9965 000 42664	47Ω 5% 1/10W
R515	9965 000 42664	47Ω 5% 1/10W
R516	9965 000 42664	47Ω 5% 1/10W
R517	9965 000 42664	47Ω 5% 1/10W
R518	9965 000 43336	75Ω 5% 1/10W
R519	9965 000 43336	75Ω 5% 1/10W
R520	9965 000 43336	75Ω 5% 1/10W
R521	9965 000 43336	75Ω 5% 1/10W
R522	9965 000 43336	75Ω 5% 1/10W
R523	9965 000 43336	75Ω 5% 1/10W
R524	9965 000 43336	75Ω 5% 1/1

R671	9965 000 40053	1KΩ 1/10W 5%	R780	9965 000 43963	3.9kΩ 1% 1/10W	R938	9965 100 05994	47kΩ 1% 1/10W
R672	9965 000 42221	27kΩ 5% 1/10W	R780	9965 000 44599	5kΩ 1% 0.1W	R939	9965 100 05994	47kΩ 1% 1/10W
R673	9965 000 42225	4.7kΩ 5% 1/10W	R781	9965 000 42222	33Ω 5% 1/10W	R940	9965 000 42226	68Ω 5% 1/10W
R674	9965 000 42213	100Ω 5% 1/10W	R782	9965 000 43963	3.9kΩ 1% 1/10W	R941	9965 000 42226	68Ω 5% 1/10W
R675	9965 000 42213	100Ω 5% 1/10W	R782	9965 000 44599	5kΩ 1% 0.1W	R942	9965 000 42213	100Ω 5% 1/10W
R676	9965 000 42213	100Ω 5% 1/10W	R785	9965 000 42225	4.7kΩ 5% 1/10W	R943	9965 000 42226	68Ω 5% 1/10W
R677	9965 000 42225	4.7kΩ 5% 1/10W	R786	9965 000 42277	47kΩ 5% 1/10W	R944	9965 000 42213	100Ω 5% 1/10W
R678	9965 000 42212	0Ω 5% 1/10W	R787	9965 000 42277	47kΩ 5% 1/10W	R945	9965 000 42226	68Ω 5% 1/10W
R686	9965 000 40053	1KΩ 1/10W 5%	R788	9965 000 42212	0Ω 5% 1/10W	R946	9965 000 42213	100Ω 5% 1/10W
R687	9965 000 42662	330Ω 5% 1/10W	R789	9965 000 42212	0Ω 5% 1/10W	R947	9965 000 42213	100Ω 5% 1/10W
R688	9965 000 42662	330Ω 5% 1/10W	R790	9965 000 43970	7.5kΩ 5% 1/10W	R948	9965 000 40053	1KΩ 1/10W 5%
R689	9965 000 42213	100Ω 5% 1/10W	R791	9965 000 43970	7.5kΩ 5% 1/10W	R949	9965 000 42213	100Ω 5% 1/10W
R690	9965 000 42213	100Ω 5% 1/10W	R792	9965 000 40053	1KΩ 1/10W 5%	R950	9965 000 42213	100Ω 5% 1/10W
R691	9965 000 42225	4.7kΩ 5% 1/10W	R793	9965 000 40053	1KΩ 1/10W 5%	R951	9965 000 42213	100Ω 5% 1/10W
R692	9965 000 42212	0Ω 5% 1/10W	R794	9965 000 42212	0Ω 5% 1/10W	R952	9965 000 42284	0Ω 1/10W
R693	9965 000 42212	0Ω 5% 1/10W	R794	9965 000 44051	220Ω 5% 1/10W	R953	9965 000 42284	0Ω 1/10W
R694	9965 000 42214	10kΩ 5% 1/10W	R795	9965 000 42212	0Ω 5% 1/10W	R954	9965 000 42284	0Ω 1/10W
R695	9965 000 42214	10kΩ 5% 1/10W	R795	9965 000 44051	220Ω 5% 1/10W	R955	9965 000 42212	0Ω 5% 1/10W
R696	9965 000 42214	10kΩ 5% 1/10W	R801	9965 000 42225	4.7kΩ 5% 1/10W	RP501	9965 000 43951	22Ω 5%
R697	9965 000 42214	10kΩ 5% 1/10W	R802	9965 000 42225	4.7kΩ 5% 1/10W	RP502	9965 000 43951	22Ω 5%
R698	9965 000 42225	4.7kΩ 5% 1/10W	R803	9965 000 42225	4.7kΩ 5% 1/10W	RP503	9965 000 43952	47Ω 5% 1/16W
R699	9965 000 42225	4.7kΩ 5% 1/10W	R804	9965 000 43962	39kΩ 5% 1/10W	RP504	9965 000 43952	47Ω 5% 1/16W
R700	9965 000 40053	1KΩ 1/10W 5%	R805	9965 000 42216	1MΩ 5% 1/10W	RP505	9965 000 43951	22Ω 5%
R701	9965 000 42213	100Ω 5% 1/10W	R806	9965 000 42220	22kΩ 5% 1/10W	RP506	9965 000 43953	75Ω 5% 1/16W
R702	9965 000 42213	100Ω 5% 1/10W	R807	9965 000 42225	4.7kΩ 5% 1/10W	RP507	9965 000 43952	47Ω 5% 1/16W
R703	9965 000 42213	100Ω 5% 1/10W	R808	9965 000 42216	1MΩ 5% 1/10W	RP508	9965 000 43951	22Ω 5%
R704	9965 000 42215	100kΩ 5% 1/10W	R809	9965 000 43973	10Ω 1/10W	RP509	9965 000 43952	47Ω 5% 1/16W
R705	9965 000 40053	1KΩ 1/10W 5%	R810	9965 000 42220	22kΩ 5% 1/10W	RP510	9965 000 43951	22Ω 5%
R706	9965 000 42212	0Ω 5% 1/10W	R811	9965 000 43976	10Ω 5% 1/4W	RP511	9965 000 43952	47Ω 5% 1/16W
R707	9965 000 42213	100Ω 5% 1/10W	R812	9965 000 43976	10Ω 5% 1/4W	RP512	9965 000 43952	47Ω 5% 1/16W
R708	9965 000 42213	100Ω 5% 1/10W	R813	9965 000 42671	22Ω 5% 1/4W	RP513	9965 000 43953	75Ω 5% 1/16W
R710	9965 000 42214	10kΩ 5% 1/10W	R814	9965 000 42671	22Ω 5% 1/4W	RP514	9965 000 43952	47Ω 5% 1/16W
R711	9965 000 42214	10kΩ 5% 1/10W	R815	9965 000 42220	22kΩ 5% 1/10W	RP515	9965 000 43952	47Ω 5% 1/16W
R712	9965 000 42213	100Ω 5% 1/10W	R816	9965 000 42214	10kΩ 5% 1/10W	RP516	9965 000 43953	75Ω 5% 1/16W
R713	9965 000 40053	1KΩ 1/10W 5%	R817	9965 000 42213	100Ω 5% 1/10W	RP517	9965 000 43953	75Ω 5% 1/16W
R714	9965 000 43964	4.64kΩ 1% 1/10W	R818	9965 000 42214	10kΩ 5% 1/10W	RP518	9965 000 43953	75Ω 5% 1/16W
R715	9965 000 42225	4.7kΩ 5% 1/10W	R819	9965 000 42214	10kΩ 5% 1/10W	RP519	9965 000 43953	75Ω 5% 1/16W
R716	9965 000 42222	33Ω 5% 1/10W	R820	9965 000 42220	22kΩ 5% 1/10W	RP520	9965 000 43953	75Ω 5% 1/16W
R717	9965 000 42222	33Ω 5% 1/10W	R821	9965 000 42284	0Ω 1/10W	RP521	9965 000 43953	75Ω 5% 1/16W
R718	9965 000 42215	100kΩ 5% 1/10W	R822	9965 000 42284	0Ω 1/10W	RP522	9965 000 43953	75Ω 5% 1/16W
R719	9965 000 42214	10kΩ 5% 1/10W	R824	9965 000 40053	1KΩ 1/10W 5%	RP523	9965 000 43953	75Ω 5% 1/16W
R720	9965 000 42214	10kΩ 5% 1/10W	R825	9965 000 40053	1KΩ 1/10W 5%	RP524	9965 000 43953	75Ω 5% 1/16W
R721	9965 000 42217	22Ω 5% 1/10W	R826	9965 000 42214	10kΩ 5% 1/10W	RP525	9965 000 43953	75Ω 5% 1/16W
R722	9965 000 42217	22Ω 5% 1/10W	R827	9965 000 42214	10kΩ 5% 1/10W	RP526	9965 000 43953	75Ω 5% 1/16W
R723	9965 000 42212	0Ω 5% 1/10W	R850	9965 000 42213	100Ω 5% 1/10W			
R724	9965 000 42212	0Ω 5% 1/10W	R850	9965 000 43490	5.6kΩ 5% 0.1W			
R725	9965 000 42212	0Ω 5% 1/10W	R852	9965 000 40053	1KΩ 1/10W 5%			
R726	9965 000 42226	68Ω 5% 1/10W	R852	9965 000 42225	4.7kΩ 5% 1/10W	L100	9965 000 44001	22μH 20%
R727	9965 000 42213	100Ω 5% 1/10W	R853	9965 000 42225	4.7kΩ 5% 1/10W	L100	9965 100 02833	Inductor 22uH 20%
R728	9965 000 42212	0Ω 5% 1/10W	R855	9965 000 43956	2kΩ 5% 1/10W	L100	9965 100 03275	22μH 20%
R729	9965 000 42226	68Ω 5% 1/10W	R856	9965 000 42214	10kΩ 5% 1/10W	L101	9965 000 43998	10μH SLF12575T-1
R730	9965 000 43336	75Ω 5% 1/10W	R857	9965 000 42225	4.7kΩ 5% 1/10W	L101	9965 100 02834	SLF12575T
R731	9965 000 42213	100Ω 5% 1/10W	R858	9965 000 42212	0Ω 5% 1/10W	L102	9965 000 43998	10μH SLF12575T-1
R732	9965 000 42226	68Ω 5% 1/10W	R860	9965 000 42212	0Ω 5% 1/10W	L150	9965 000 44001	22μH 20%
R733	9965 000 43336	75Ω 5% 1/10W	R860	9965 000 42218	220Ω 5% 1/10W	L151	9965 000 44001	22μH 20%
R734	9965 000 42213	100Ω 5% 1/10W	R866	9965 000 42225	4.7kΩ 5% 1/10W	L151	9965 100 02833	Inductor 22uH 20%
R735	9965 000 42212	0Ω 5% 1/10W	R900	9965 000 42213	100Ω 5% 1/10W	L151	9965 100 03275	22μH 20%
R736	9965 000 42226	68Ω 5% 1/10W	R901	9965 000 42220	22kΩ 5% 1/10W	L201	9965 000 42718	2.2μH 10% FCI160
R737	9965 000 40053	1KΩ 1/10W 5%	R902	9965 000 42214	10kΩ 5% 1/10W	L201	9965 100 02835	2.2uH 10%
R738	9965 000 42221	27kΩ 5% 1/10W	R903	9965 000 43336	75Ω 5% 1/10W	L201	9965 100 03278	2.2μH 10%
R739	9965 000 43336	75Ω 5% 1/10W	R904	9965 000 42214	10kΩ 5% 1/10W	L202	9965 000 42718	2.2μH 10% FCI160
R740	9965 000 42213	100Ω 5% 1/10W	R905	9965 000 42214	10kΩ 5% 1/10W	L202	9965 100 03278	2.2μH 10%
R741	9965 000 40053	1KΩ 1/10W 5%	R906	9965 000 43336	75Ω 5% 1/10W	L601	9965 000 43818	0.10μH 10%
R742	9965 000 42221	27kΩ 5% 1/10W	R907	9965 000 43955	1kΩ 1% 1/10W	L601	9965 100 02836	0.1 uH 10%
R743	9965 000 43967	510Ω 5% 1/10W	R908	9965 000 42212	0Ω 5% 1/10W	L601	9965 100 02837	0.1 uH 10%
R744	9965 000 43956	2kΩ 5% 1/10W	R909	9965 000 43955	1kΩ 1% 1/10W	L601	9965 100 02875	Ind. 0.1 uH 10%
R745	9965 000 43967	510Ω 5% 1/10W	R910	9965 000 43336	75Ω 5% 1/10W	L601	9965 100 03279	0.10μH 10%
R746	9965 000 42214	10kΩ 5% 1/10W	R911	9965 000 43955	1kΩ 1% 1/10W	L601	9965 100 03280	0.10H 10% FCI1608F
R748	9965 000 43956	2kΩ 5% 1/10W	R912	9965 000 42221	27kΩ 5% 1/10W	L602	9965 000 43818	0.10μH 10%
R749	9965 000 42213	100Ω 5% 1/10W	R913	9965 000 40053	1KΩ 1/10W 5%	L602	9965 100 02875	Ind. 0.1 uH 10%
R750	9965 000 42225	4.7kΩ 5% 1/10W	R914	9965 000 40053	1KΩ 1/10W 5%	L602	9965 100 03279	0.10μH 10%
R751	9965 000 42214	10kΩ 5% 1/10W	R915	9965 000 42221	27kΩ 5% 1/10W	L602	9965 100 03280	0.10H 10% FCI1608F
R753	9965 000 42222	33Ω 5% 1/10W	R916	9965 000 42212	0Ω 5% 1/10W	L603	9965 000 43818	0.10μH 10%
R754	9965 000 42213	100Ω 5% 1/10W	R917	9965 100 02779	4.7kΩ 1% 0.1W	L603	9965 100 02875	Ind. 0.1 uH 10%
R760	9965 000 42214	10kΩ 5% 1/10W	R918	9965 100 02779	4.7kΩ 1% 0.1W	L603	9965 100 03279	0.10μH 10%
R761	9965 000 42213	100Ω 5% 1/10W	R919	9965 000 43955	1kΩ 1% 1/10W	L603	9965 100 03280	0.10H 10% FCI1608F
R762	9965 000 42214	10kΩ 5% 1/10W	R920	9965 000 43955	1kΩ 1% 1/10W	L603	9965 100 03280	0.10H 10% FCI1608F
R763	9965 000 42214	10kΩ 5% 1/10W	R921	9965 000 43955	1kΩ 1% 1/10W	L604	9965 000 43818	0.10μH 10%
R764	9965 000 42214	10kΩ 5% 1/10W	R922	9965 000 43955	1kΩ 1% 1/10W	L604	9965 100 02875	Ind. 0.1 uH 10%
R765	9965 000 42225	4.7kΩ 5% 1/10W	R923	9965 100 05994	47kΩ 1% 1/10W	L604	9965 100 03279	0.10μH 10%
R766	9965 000 42225	4.7kΩ 5% 1/10W	R924	9965 100 05994	47kΩ 1% 1/10W	L604	9965 100 03280	0.10H 10% FCI1608F
R767	9965 000 42214	10kΩ 5% 1/10W	R925	9965 100 05994	47kΩ 1% 1/10W	L605	9965 000 43818	0.10μH 10%
R768	9965 000 42214	10kΩ 5% 1/10W	R926	9965 100 05994	47kΩ 1% 1/10W	L605	9965 100 02875	Ind. 0.1 uH 10%
R769	9965 000 42214	10kΩ 5% 1/10W	R927	9965 000 42212	0Ω 5% 1/10W	L605	9965 100 03279	0.10μH 10%
R770	9965 000 42214	10kΩ 5% 1/10W	R928	9965 000 42212	0Ω 5% 1/10W	L605	9965 100 03280	0.10H 10% FCI1608F
R771	9965 000 42214	10kΩ 5% 1/10W	R929	9965 000 42212	0Ω 5% 1/10W	L606	9965 000 43818	0.10μH 10%
R772	9965 000 42214	10kΩ 5% 1/10W	R930	9965 000 42212	0Ω 5% 1/10W	L606	9965 100 02875	Ind. 0.1 uH 10%
R773	9965 000 42222	33Ω 5% 1/10W	R931	9965 000 42212	0Ω 5% 1/10W	L606	9965 100 03279	0.10μH 10%
R774	9965 000 42222	33Ω 5% 1/10W	R932	9965 000 44785	3kΩ 1% 0.1W	L606	9965 100 03280	0.10H 10% FCI1608F
R775	9965 000 42222	33Ω 5% 1/10W	R933	9965 000 40053	1KΩ 1/10W 5%	L660	9965 000 43818	0.1

L661	9965 100 02875	Ind. 0.1 uH 10%
L661	9965 100 03279	0.10µH 10%
L661	9965 100 03280	0.10H 10% FCI1608F
L662	9965 000 43818	0.10µH 10%
L662	9965 100 02875	Ind. 0.1 uH 10%
L662	9965 100 03279	0.10µH 10%
L662	9965 100 03280	0.10H 10% FCI1608F
L725	9965 000 43818	0.10µH 10%
L725	9965 100 02875	Ind. 0.1 uH 10%
L725	9965 100 03279	0.10µH 10%
L725	9965 100 03280	0.10H 10% FCI1608F
L726	9965 000 43818	0.10µH 10%
L726	9965 100 02875	Ind. 0.1 uH 10%
L726	9965 100 03279	0.10µH 10%
L726	9965 100 03280	0.10H 10% FCI1608F
L801	9965 000 42392	33µH 10% TSL0808
L802	9965 000 42392	33µH 10% TSL0808
L855	9965 000 43999	67Ω/400mADLW21SN67
L855	9965 000 44000	90Ω/400mA ACM2012
L855	9965 100 02838	Choke 670m/400mA
L855	9965 100 02839	Choke 900m/400mA
L855	9965 100 03283	ACM2012 90Ω/400mA
L856	9965 000 43999	67Ω/400mADLW21SN67
L856	9965 000 44000	90Ω/400mA ACM2012
L856	9965 100 03283	ACM2012 90Ω/400mA
L857	9965 000 43999	67Ω/400mADLW21SN67
L857	9965 000 44000	90Ω/400mA ACM2012
L857	9965 100 03283	ACM2012 90Ω/400mA
L858	9965 000 43999	67Ω/400mADLW21SN67
L858	9965 000 44000	90Ω/400mA ACM2012
L858	9965 100 03283	ACM2012 90Ω/400mA
L859	9965 000 43999	67Ω/400mADLW21SN67
L859	9965 000 44000	90Ω/400mA ACM2012
L859	9965 100 03283	ACM2012 90Ω/400mA
L900	9965 000 43818	0.10µH 10%
L900	9965 100 02875	Ind. 0.1 uH 10%
L901	9965 000 43818	0.10µH 10%
L901	9965 100 02875	Ind. 0.1 uH 10%
L902	9965 000 43818	0.10µH 10%
L902	9965 100 02875	Ind. 0.1 uH 10%



D101	9965 000 44010	BAS316
D101	9965 100 02823	BAS316
D101	9965 100 03400	BAS316
D102	9965 000 44010	BAS316
D102	9965 100 03400	BAS316
D103	9965 000 44005	PDZ18B
D103	9965 000 44009	BZX384-C18
D103	9965 100 02824	BZX384-C18
D103	9965 100 02825	PDZ18B
D103	9965 100 03268	BZX384-C18
D104	9965 000 44004	BZX384-C5V6
D104	9965 100 02826	BZX384-C5V6 SOD-323
D104	9965 100 02827	PDZ5.6B
D104	9965 100 03271	PDZ5.6B
D150	9965 100 02828	SB240
D151	9965 000 44003	BAV103
D151	9965 100 02829	BAV103
D151	9965 100 02830	BAV103
D151	9965 100 03272	BAV103
D151	9965 100 03273	BAV103
D350	9965 000 37405	BAS32L
D350	9965 100 02831	LL4148 GS08
D350	9965 100 03321	LL4148-GSO8
D350	9965 100 03327	BAS32L
D351	9965 100 02831	LL4148 GS08
D351	9965 100 03321	LL4148-GSO8
D351	9965 100 03327	BAS32L
D352	9965 100 02831	LL4148 GS08
D352	9965 100 03321	LL4148-GSO8
D352	9965 100 03327	BAS32L
D401	9965 100 02831	LL4148 GS08
D401	9965 100 03321	LL4148-GSO8
D401	9965 100 03327	BAS32L
D700	9965 000 44010	BAS316
D700	9965 100 03400	BAS316
D701	9965 000 44010	BAS316
D701	9965 100 03400	BAS316
D702	9965 100 02831	LL4148 GS08
D702	9965 100 03321	LL4148-GSO8
D702	9965 100 03327	BAS32L
D703	9965 100 02831	LL4148 GS08
D703	9965 100 03321	LL4148-GSO8
D703	9965 100 03327	BAS32L
D704	9965 100 02831	LL4148 GS08
D704	9965 100 03321	LL4148-GSO8
D704	9965 100 03327	BAS32L
D705	9965 100 02831	LL4148 GS08
D705	9965 100 03321	LL4148-GSO8
D705	9965 100 03327	BAS32L
D725	9965 100 02831	LL4148 GS08

D725	9965 100 03321	LL4148-GSO8
D725	9965 100 03327	BAS32L
D726	9965 100 02831	LL4148 GS08
D726	9965 100 03321	LL4148-GSO8
D726	9965 100 03327	BAS32L
D760	9965 000 44015	SM240A DO-214AC
D760	9965 100 02832	SM240A DO-214AC
D800	9965 100 02831	LL4148 GS08
D800	9965 100 03321	LL4148-GSO8
D800	9965 100 03327	BAS32L
D801	9965 100 02831	LL4148 GS08
D801	9965 100 03321	LL4148-GSO8
D801	9965 100 03327	BAS32L



Q10	9965 000 45107	2N7002E-T1-E3 (60V)
Q100	9965 000 37398	SI5441DC
Q101	9965 100 02840	SI4936ADY SO-8
Q102	9965 100 02840	SI4936ADY SO-8
Q103	9965 000 42648	BC847C
Q103	9965 000 42649	BC847C
Q103	9965 100 02430	BC847C SOT-323
Q103	9965 100 02841	BC847C
Q103	9965 100 03458	BC847C
Q104	9965 100 02842	BC817-25
Q104	9965 100 03287	BC817-25 500mA/45V
Q105	9965 000 42648	BC847C
Q105	9965 000 42649	BC847C
Q105	9965 100 03458	BC847C
Q106	9965 000 42648	BC847C
Q106	9965 000 42649	BC847C
Q106	9965 100 03458	BC847C
Q107	9965 100 02843	PHD38N02LT
Q107	9965 100 02844	PHD36N03LT
Q108	9965 000 37397	MUN2211J
Q108	9965 000 42211	PDTCT114EK SC-59
Q109	9965 100 02845	SI3441BDV
Q11	9965 000 45107	2N7002E-T1-E3 (60V)
Q110	9965 000 42648	BC847C
Q110	9965 000 42649	BC847C
Q110	9965 100 03458	BC847C
Q111	9965 000 42211	PDTCT114EK SC-59
Q111	9965 100 02846	MUN2211TIG
Q12	9965 000 44111	PMBS3904
Q13	9965 000 44111	PMBS3904
Q14	9965 000 45107	2N7002E-T1-E3 (60V)
Q15	9965 000 45107	2N7002E-T1-E3 (60V)
Q150	9965 000 37398	SI5441DC
Q151	9965 000 42648	BC847C
Q151	9965 000 42649	BC847C
Q151	9965 100 03458	BC847C
Q152	9965 000 37397	MUN2211J
Q153	9965 000 37397	MUN2211J
Q153	9965 000 42211	PDTCT114EK SC-59
Q154	9965 000 37397	MUN2211J
Q154	9965 000 42211	PDTCT114EK SC-59
Q16	9965 000 45107	2N7002E-T1-E3 (60V)
Q17	9965 000 45107	2N7002E-T1-E3 (60V)
Q2	9965 000 44111	PMBS3904
Q20	9965 000 45107	2N7002E-T1-E3 (60V)
Q201	9965 000 36033	RK7002
Q201	9965 000 42651	2N7002
Q201	9965 100 02428	RK7002
Q201	9965 100 03293	RK7002
Q202	9965 000 36033	RK7002
Q202	9965 000 42651	2N7002
Q202	9965 100 03293	RK7002
Q21	9965 000 45105	AF9435PSLA (30V/5.7A)
Q21	9965 000 45106	SI9435BDY-T1-E3(30V)
Q22	9965 000 44111	PMBS3904
Q24	9965 000 45105	AF9435PSLA (30V/5.7A)
Q24	9965 000 45106	SI9435BDY-T1-E3(30V)
Q25	9965 000 44111	PMBS3904
Q26	9965 000 44111	PMBS3904
Q28	9965 000 44111	PMBS3904
Q3	9965 000 44111	PMBS3904
Q30	9965 000 44111	PMBS3904
Q351	9965 000 40045	MMBT3904
Q351	9965 100 02847	MMBT3904 200mA/40V
Q351	9965 100 03497	MMBT3904
Q353	9965 000 40045	MMBT3904
Q353	9965 100 03497	MMBT3904
Q601	9965 000 45107	2N7002E-T1-E3 (60V)
Q602	9965 000 45107	2N7002E-T1-E3 (60V)
Q603	9965 000 45107	2N7002E-T1-E3 (60V)
Q604	9965 000 45107	2N7002E-T1-E3 (60V)
Q605	9965 000 45107	2N7002E-T1-E3 (60V)
Q612	9965 000 44111	PMBS3904
Q613	9965 000 45107	2N7002E-T1-E3 (60V)
Q7	9965 000 44111	PMBS3904
Q700	9965 000 42648	BC847C
Q700	9965 000 42649	BC847C

Q700	9965 100 03458	BC847C
Q701	9965 000 42648	BC847C
Q701	9965 000 42649	BC847C
Q701	9965 100 03458	BC847C
Q704	9965 100 02845	SI3441BDV
Q761	9965 000 43944	BC847BW 100mA/45V
Q761	9965 100 02848	BC847BW 100mA/45V
Q761	9965 100 03294	BC847BW 100mA/45V
Q762	9965 000 43944	BC847BW 100mA/45V
Q762	9965 100 03294	BC847BW 100mA/45V
Q8	9965 000 44111	PMBS3904
Q801	9965 100 02849	BC857BW
Q801	9965 100 03295	BC857BW 100mA/50V
Q802	9965 000 43944	BC847BW 100mA/45V
Q802	9965 100 03294	BC847BW 100mA/45V
Q850	9965 000 40045	MMBT3904
Q850	9965 100 03497	MMBT3904
Q851	9965 000 40045	MMBT3904
Q851	9965 100 03497	MMBT3904
Q9	9965 000 44111	PMBS3904
Q900	9965 000 42648	BC847C
Q900	9965 000 42649	BC847C
Q901	9965 100 02845	SI3441BDV
U1	9965 000 45083	CAS-220/C
U10	9965 000 45101	NC7WZ14P6X
U100	9965 000 43937	TPS5430DDAR
U100	9965 000 44828	TPS5420DRG4
U100	9965 100 02850	TPS5430DDAR
U100	9965 100 03298	
U101	9965 000 43942	NCP5422AD
U101	9965 100 02851	NCP5422AD
U102	9965 000 43929	TS431AIL
U102	9965 100 02852	TS431AIL
U11	9965 000 44123	24LC02BT
U12	9965 000 45089	ZR39661BGCG
U13	9965 000 45097	SN74CBT3257CPWR
U15	9965 000 45096	NC7SB3157P6X
U150	9965 000 42209	AME1117CCGTZ
U150	9965 000 42624	LD1117S33 SOT-223
U150	9965 000 42747	LD1117S33 SOT-223
U151	9965 000 42209	AME1117CCGTZ
U151	9965 000 43930	LD1117DT33TR
U151	9965 100 02853	LD1117DT33TR
U152	9965 000 42209	AME1117CCGTZ
U152	9965 000 42624	LD1117S33 SOT-223
U152	9965 000 42747	LD1117S33 SOT-223
U153	9965 000 43935	AP1117ELA-ADJ
U153	9965 100 02854	LD1117S-TR
U153	9965 100 02855	AP1117ELA-ADJ
U154	9965 000 43935	AP1117ELA-ADJ
U154	9965 100 02854	LD1117S-TR
U154	9965 100 02855	AP1117ELA-ADJ
U155	9965 000 43937	TPS5430DDAR
U156	9965 000 43935	AP1117ELA-ADJ
U156	9965 000 43937	TPS5430DDAR
U156	9965 000 44828	TPS5420DRG4
U156	9965 100 02850	TPS5430DDAR
U156	9965 100 02855	AP1117ELA-ADJ
U156	9965 100 03298	AP1117E
U16	9965 000 45093	AP1117E33LA
U16	9965 000 45103	AT1117
U17	9965 000 45097	SN74CBT3257CPWR
U18	9965 000 45088	MST9883C-LF-140
U19	9965 000 45097	SN74CBT3257CPWR
U2	9965 000 45091	AIC1084PE
U2	9965 000 45092	AP1084DLA
U2	9965 000 45102	AT1084
U20	9965 000 45108	S29AL032D90TF1030
U20	9965 100 05643	MX29LV320CTTC
U21	9965 000 45100	74LVC1G126GW
U23	9965 000 45087	V58C2256164SCI6
U23	9965 100 05642	M13S2561616A
U24	9965 000 45087	V58C2256164SCI6
U24	9965 100 05642	M13S2561616A
U25	9965 000 45094	DS1233AZ-10
U250	9965 000 43932	MT5112BD
U250	9965 100 02856	MT5112BD
U26	9965 000 45093	AP1117E33LA
U26	9965 000 45103	AT1117
U27	9965 000 44123	24LC02BT
U28	9965 000 45099	WT6701F_S20
U29	9965 000 45097	SN74CBT3257CPWR
U3	9965 000 45091	AIC1084PE
U3	9965 000 45092	AP1084DLA
U3	9965 000 45102	AT1084
U30	9965 000 45086	MSP4440K
U301	9965 000 43933	MT5371AJ
U301	9965 100 02857	MT5371AJ PBGA-588
U32	9965 000 45091	AIC1084PE
U32	9965 000 45092	AP1084DLA
U32	9965 000 45102	AT1084
U33	9965 000 45098	TPA6110A2DGNRG4
U34	9965 000 45085	TPA3101D2RGZR
U353	9965 000 44035	AT24C32AN-10SU-2.7

U353	9965 000 44284	M24C32-WMN6TP
U37	9965 000 45091	AIC1084PE
U37	9965 000 45092	AP1084DLA
U37	9965 000 45102	AT1084
U38	9965 000 45091	AIC1084PE
U38	9965 000 45092	AP1084DLA
U38	9965 000 45102	AT1084
U4	9965 000 45091	AIC1084PE
U4	9965 000 45092	AP1084DLA
U4	9965 000 45102	AT1084
U41	9965 000 45101	NC7WZ14P6X
U42	9965 000 45100	74LVC1G126GW
U501	9965 000 43940	HY5DU561622ETP-5
U501	9965 100 02859	HY5DU561622ETP-5
U501	9965 100 03307	HY5DU561622ETP-5
U502	9965 000 43940	HY5DU561622ETP-5
U502	9965 100 02859	HY5DU561622ETP-5
U502	9965 100 03307	HY5DU561622ETP-5
U503	9965 000 43934	LP2996MRX
U503	9965 100 02860	LP2996MRX
U6	9965 100 05641	CAT6341
U601	9965 000 45095	MP1410ES-C019-LF-Z
U603	9965 000 45091	AIC1084PE
U603	9965 000 45092	AP1084DLA
U603	9965 000 45102	AT1084
U604	9965 000 44123	24LC02BT
U7	9965 000 45091	AIC1084PE
U7	9965 000 45092	AP1084DLA
U7	9965 000 45102	AT1084
U700	9965 000 44049	TMD5 341APFCRG4
U700	9965 100 02861	TMD5341APFCRG4
U701	9965 000 35965	M24C02-WMN6TP
U701	9965 000 42647	AT24C02BN-10SU-1.8
U701	9965 000 43941	M24C02-WMN6TP
U701	9965 100 08599	AT24C02BN
U702	9965 000 35965	M24C02-WMN6TP
U702	9965 000 42647	AT24C02BN-10SU-1.8
U702	9965 000 43941	M24C02-WMN6TP
U702	9965 100 08599	AT24C02BN
U703	9965 000 43938	TS5A3157DCKRE4
U703	9965 100 02862	TS5A3157DCKRE4
U703	9965 100 02863	NLASB3157DFT2G
U725	9965 000 35965	M24C02-WMN6TP
U725	9965 000 42647	AT24C02BN-10SU-1.8
U725	9965 000 43941	M24C02-WMN6TP
U725	9965 100 08599	AT24C02BN
U760	9965 000 43936	WM8776SEFT/R
U760	9965 100 02864	WM8776SEFT/R
U801	9965 000 44600	TDA8932T
U801	9965 100 02865	TDA8933T
U801	9965 100 03313	TDA8932T
U9	9965 000 45101	NC7WZ14P6X
U900	9965 000 43938	TS5A3157DCKRE4
U900	9965 100 02862	TS5A3157DCKRE4
U900	9965 100 02863	NLASB3157DFT2G
U901	9965 000 42637	74HC4052D PHILIPS
U901	9965 100 02866	74HC4052D
U902	9965 000 44786	AD8188ARU
U902	9965 100 02867	AD8188ARU
U903	9965 000 43935	AP1117ELA-ADJ
U903	9965 100 02854	LD1117S-TR
U903	9965 100 02855	AP1117ELA-ADJ

Side AV Panel [SA]

Various

SW0201 9965 100 02882 Tact Switch

—||—

C0201	9965 000 43985	1μF 20% 16V
C040	9965 000 42690	47pF 50V NPO 5% 0603
C041	9965 000 42231	330pF 50V NPO 0603
C042	9965 000 42231	330pF 50V NPO 0603
C043	9965 000 42231	330pF 50V NPO 0603
C044	9965 000 42231	330pF 50V NPO 0603
C045	9965 000 42690	47pF 50V NPO 5% 0603
C046	9965 000 42690	47pF 50V NPO 5% 0603
C049	9965 000 42722	6n8 50V X7R 0603
C050	9965 000 42722	6n8 50V X7R 0603
CN041	9965 000 43811	RCA Jack 1*3 Y/W/R
CN041	9965 000 43812	RCA Jack 1*3 Y/Wh/Rd
CN042	9965 000 43813	Mini Jack 4p Bk
CN042	9965 000 43814	Mini Jack 4p
CN043	9965 000 43816	Phone Jack 3.5mm 7p Bk
CN043	9965 100 03712	Phone JACK 3.5mm bl

—W—

R0201 9965 000 42662 330Ω 5% 1/10W

R0202	9965 000 42218	220Ω 5% 1/10W
R0203	9965 000 42225	4.7kΩ 5% 1/10W
R0204	9965 000 42214	10kΩ 5% 1/10W
R0205	9965 000 42225	4.7kΩ 5% 1/10W
R0206	9965 000 42225	4.7kΩ 5% 1/10W
R040	9965 000 43336	75Ω 5% 1/10W
R041	9965 000 40053	1KΩ 1/10W 5%
R042	9965 000 42221	27kΩ 5% 1/10W
R043	9965 000 40053	1KΩ 1/10W 5%
R044	9965 000 42221	27kΩ 5% 1/10W
R045	9965 000 43336	75Ω 5% 1/10W
R046	9965 000 43336	75Ω 5% 1/10W
R047	9965 000 42212	0Ω 5% 1/10W
R048	9965 000 42212	0Ω 5% 1/10W

—W—

L040	9965 000 43818	0.10μH 10%
L040	9965 100 02875	Ind. 0.1 uH 10%
L040	9965 100 02876	0.1 uF 10%
L041	9965 000 43818	0.10μH 10%
L041	9965 100 02875	Ind. 0.1 uH 10%
L042	9965 000 43818	0.10μH 10%
L042	9965 100 02875	Ind. 0.1 uH 10%
LED0201	9965 000 42729	L-3WSYKPBW

—E—

Q0201	9965 000 42649	BC847C
Q0201	9965 100 02479	BC847C
Q0202	9965 000 42649	BC847C
Q0202	9965 100 02479	BC847C
Q0203	9965 000 37785	BC857CG
Q0203	9965 000 40046	BC857 SOT23
Q0203	9965 000 43378	BC858CLG
U0201	9965 000 42727	TSOP34136SB1

11. Revision List

Manual xxxx xxx xxxx.0

- First release.

Manual xxxx xxx xxxx.4

- 26MD357B/37 added.
- 26MF337B/27 added.
- 32MD357B/37 added.
- 32MF337B/27 added.
- 37MF337B/37 added.
- 37PFL5332D/37 added.
- 42MF337B/37 added.

Manual xxxx xxx xxxx.5

- **Chapter 10:** Spare parts list added.