

Analog Board Service Manual

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1 Feature

The purpose of this document is to outline the basic requirements

Characteristic	Description
Power Supply	DC 24V,12V,5V
Speakers	10W 8 Ohm x 2
Max Power Output	2x5W @ 1kHz
Frequency Response	15Hz~20kHz
Signal to noise ratio	40 db @ 2w
Distortion	10% @ 2w
Line Input Signal	0.2-2.0 Vrms
Line Input Impedance	10 k Ohm
Headphone	≤300mW

2 IC Description

2.1 TFA9842J

2.1.1 Description

The TFA9842J contains two identical audio power amplifiers. The TFA9842J can be used as two Single-Ended (SE) channels with a fixed gain of 26 dB or one Bridge-Tied Load (BTL) channel with a fixed gain of 32 dB.

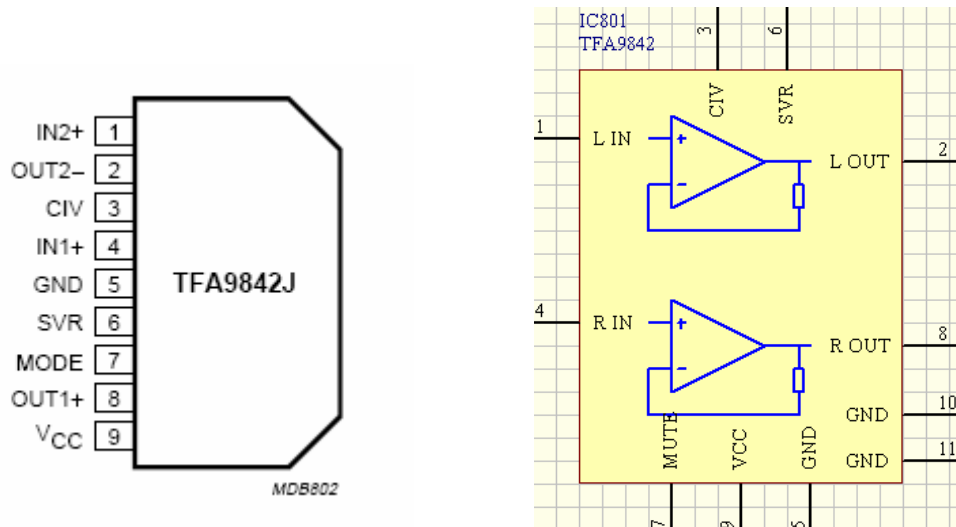
The TFA9842J comes in a 9-pin DIL-bent-SIL (DBS9P) power package. The TFA9842J is pin compatible with the TFA9841J and TFA9843J.

The TFA9842J contains a unique protection circuit that is solely based on multiple temperature measurements inside the chip. This gives maximum output power for all supply voltages and load conditions with no unnecessary audio holes. Almost any supply voltage and load impedance combination can be made as long as thermal boundary conditions (number of channels used, external heatsink and ambient temperature) allow it.

2.1.2 Features

- n SE: 1 W to 7.5 W; BTL: 2 W to 15 W operation possibility
- n Soft clipping
- n Standby and mute mode
- n No on/off switching plops
- n Low standby current

- n High supply voltage ripple rejection
- n Outputs short-circuit protected to ground, supply and across the load
- n Thermally protected
- n Pin compatible with the TFA9841J and TFA9843J.



TFA9842J PIN Configuration

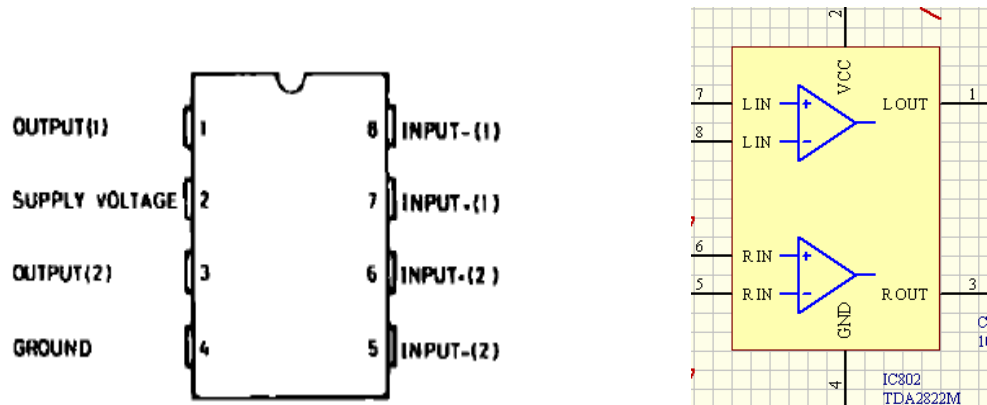
2.2 TDA2822M

2.2.1 Description

The TDA2822M is a monolithic integrated circuit in 8 lead Minidip package. It is intended for use as dual audio power amplifier in portable cassetteplayers and radios.

2.2.2 Features

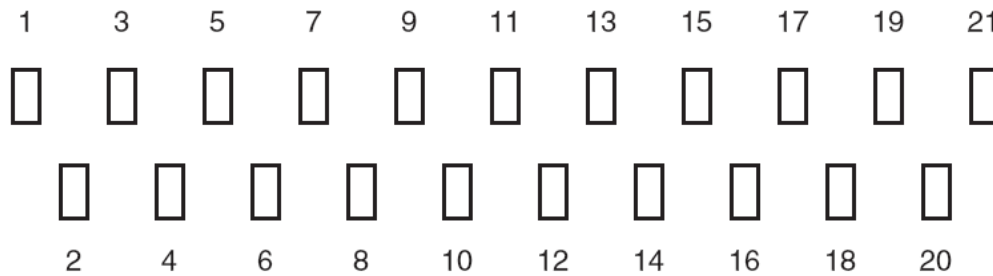
- .Supply voltage down to 1.8V
- .Low cross over distortion
- .Low quiescent current bridge or stereo configuration



TDA2822M PIN Connection

3 Interface

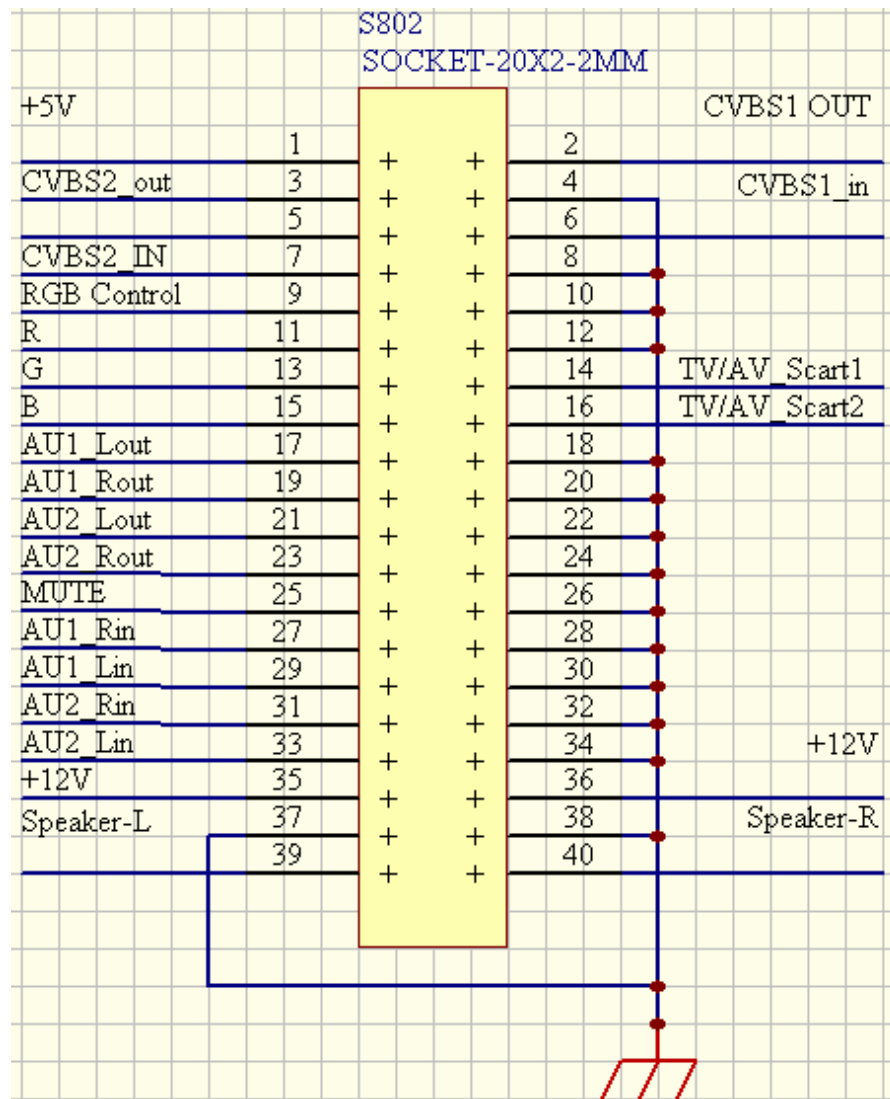
SCART The SCART1 supports composite video and RGB;
The SCART2 supports only composite video.



SCART Connector

Pin	Function	Signal Level	Impedance
1	right audio out	0.5V rms	< 1K ohm
2	right audio in	0.5V rms	> 10 K ohm
3	left / mono audio out	0.5V rms	< 1K ohm
4	ground - for pins 1, 2, 3, 6		
5	ground - for pin 7		
6	left / mono audio in	0.5V rms	> 10K ohm
7	blue (or C) video in / out	0.7V (or 0.3V burst)	75 ohms
8	status and aspect ratio in / out	9.5V-12V = 4:3 source 4.5V-7V = 16:9 source 0V-2V = inactive source	> 10K ohm
9	ground - for pin 11		
10	data 2		
11	green video in / out	0.7V	75 ohms
12	data 1		
13	ground - for pin 15		
14	ground - for pin 16		
15	red (or C) video in / out	0.7V (or 0.3V burst)	75 ohms
16	RGB control in / out	1-3V = RGB, 0-0.4V = composite	75 ohms
17	ground - for pin 19		
18	ground - for pin 20		
19	composite (or Y) video out	1V	75 ohms
20	composite (or Y) video in	1V	75 ohms
21	ground - for pins 8, 10, 12, shield		

SCART Connector Signals



S802 Connector

4 Bug Inspect

(All the following descriptions are defined under situations that the TVset can display blue screen at least)

Part	Bug Description	Check step
Speaker	No sound	1.confirm the speakers are right
		2.make sure speaker connect wires are right
		3.make sure pin 9 of TFA9842J has +24V
		4.make sure pin 39,40 of S802's have input signals
		5.make sure Q802&Q803 are work in normal status
		6.make sure pin 1,4 of TFA9842J have input signals
		7.make sure pin 2,8 of TFA9842J have output signals
		if any step have any problems , please check Related electric circuit.(reference circuit diagram)
Earphone	No sound	1.confirm the earphone are right
		2.make sure the earphone connect wires are right
		3.make sure the pin 2 of TDA2822M have +12V
		4.make sure the S802's pin 39 & 40 have input signals
		5.make sure Q804&Q805 are work in normal status
		6.make sure the pin 6&7 of TDA2822M have input signals
		7.make sure the pin 1&3 of TDA2822M have output signals
		if any step have any problems , please check Related electric circuit.(reference circuit diagram)
Scart 1	No Picture on screen	make sure TP21 and pin 6 of S802 have signals, please check Related electric circuit.(reference circuit diagram)
	Picture can not be output	make sure TP23 have signals, please check Related electric circuit.(reference circuit diagram)
	When R/G/B in But pictures can not be showed	make sure TP34,TP35,TP36 and pin 11,13,15 of S802 are all have signals and check the voltage of the pin 16 of the scart which must be 1~3V, please check Related electric circuit.(reference circuit diagram)
	No sound output	make sure TP29 ,TP30 and pin 17,19 of S802 all have signals output, please check Related electric circuit.(reference circuit diagram)
	No sound input	make sure TP25,TP26 and pin 27,29 of S802 have signals input, please check Related electric circuit.(reference circuit diagram)
	Can't auto exchange status	make sure pin 14 of S802 have a voltage 12V when the input source comes from the scart. When the source stops, the signal returns to 0V and TV viewing is resumed. please check Related electric circuit.(reference circuit diagram)
Scart 2	No Picture on screen	make sure TP22 has signals input, please check Related electric circuit.(reference circuit diagram)
	Picture can not be output	make sure TP24 has signals output, please check Related electric circuit.(reference circuit diagram)
	No sound output	make sure TP31 TP32 and pin 21,23 of S802 all have

		signals, please check Related electric circuit(reference circuit diagram)
	No sound input	make sure TP27,TP28 and pin 31,33 of S802 all have signals input, please check Related electric circuit(reference circuit diagram)
	Can't auto exchange status	make sure S802's pin 16 have a voltage 12V when the input source comes from the scart. When the source stops, the signal returns to 0V and TV viewing is resumed, please check Related electric circuit(reference circuit diagram)

**M-STAR plokštės nustatymai 27" ir 32" LCD televizoriams
(2006-09-08)**

Serviso nustatymai

System	
Option PAL	Yes
Option NTSC	Yes
Option SECAM	Yes
Option BG	Yes
Option DK	Yes
Option I	Yes
Option M/N	Yes
Option L	Yes - su SECAM L/L' No - be SECAM L/L'
Option L'	Yes - su SECAM L/L' No - be SECAM L/L'
Pref. Search Standard	BG, DK, I - visoms šalims, išskyrus Prancūziją; L/L' - Prancūzijos rinkai
Blue Screen	No
Option Naming	Yes
Option APS	Yes - D. Britanijos rinkai; No - visoms šalims, išskyrus D. Britaniją
Option Country	Britain - D. Britanijos rinkai; Others - visoms šalims, išskyrus D. Britaniją

IC Option	
Option Mst5151	Yes
Option HDMI	Yes
Option HDCP	Yes
Option Debug	No

Teletext Option	
Teletext On/Off	Yes
Teletext Country	Pagal kontrakto reikalavimus: West - Vakarų Europos šalims; East - Rytų Europos šalims; Greece - Graikijos rinkai; Cyrillic - Rusijos rinkai; Arabic - Arabų kalbos šalims

AV Option	
Option SCART1	Yes
Option SCART2	Yes
Option AV	Yes
Option SV	Yes
Option DVD	Off
Option SCART Output	TV

Language Option 1	
Option English	Yes
Option Chinese	No
Option Norwegian	Yes
Option DANISH	Yes
Option Swedish	Yes
Option Finnish	Yes
Option Slovakian	Yes
Option Croatian	Yes
Option Bulgarian	Yes
Option Russian	Yes
Option German	Yes
Option Italian	Yes
Option Flemish	Yes
Option Turkish	Yes

Language Option 2	
Option Polish	Yes
Option Spanish	Yes
Option Portuguese	Yes
Option Romanian	Yes
Option Hungarian	Yes
Option Greek	Yes
Option French	Yes
Option Czech	Yes
Option Slovenian	Yes
Option Lithuanian	Yes
Option Estonian	Yes
Option Lettish	Yes

Hotel Option	
Search Menu Display	Yes
Fixed Volume	No
Max Volume	+100
Local Key Operation	Yes
Power On Program	REM
Power On Source	TV
Power On Status	REM
LOGO	Yes

Deviation Settings	
M Japan	+26
BTSC	+26
DK Dual	+26
BG	+26
Nicam L	+15
Nicam I	+26
DK Nicam	+26
FM Radio	+26

DRX	
Standard select	B
Top setting	+8
Video peaking	0
SIF Reference	+2
Subcarrier adjustment	+12

MinMidMax Init	
Volume 0	-95
Volume 1	-65
Volume 10	-46
Volume 25	-36
Volume 50	-30
Volume 75	-25
Volume 100	-10

Scaler	
ADC Rgain	+128
ADC Ggain	+128
ADC Bgain	+128
ADC Roffset	+128
ADC Goffset	+128
ADC Boffset	+128
Rgain	+144
Ggain	+144
Bgain	+144
Roffset	+144
Goffset	+144
Boffset	+144

Vartotojo nustatymai

PICTURE	
Brightness	70
Contrast	70
Colour	55
Sharpness	10
Colour Temp.	Normal
Noise reduction	Middle
Shining	On

SOUND	
Volume	45
Balance	0
Surround	Off
BASS	Off
Equalizer	
120HZ	0
500HZ	0
1.5KHZ	0
5KHZ	0
10KHZ	0

TUNER	
Program	1
Name	
Colour System	AUTO
Sound System	DK
Auto Tune	
Manual Tune	85.25
Fine Tune	
Update Tune	

FUNCTION	
Menu Language	English (arba kita, pagal kontrakto reikalavimus)
Txt Language	Pagal kontrakto reikalavimus: West Euro - Vakarų Europos šalims; East Euro - Rytų Europos šalims; Greece - Graikijos rinkai; Cyrillic - Rusijos rinkai; Arabic - Arabų kalbos šalims
OSD Brightness	High
Child Lock	Off

PIP/ POP	
Mode	Off
PIP H-Pos	0
PIP V-Pos	0
Brightness	68
Contrast	66
Sub Source	VGA

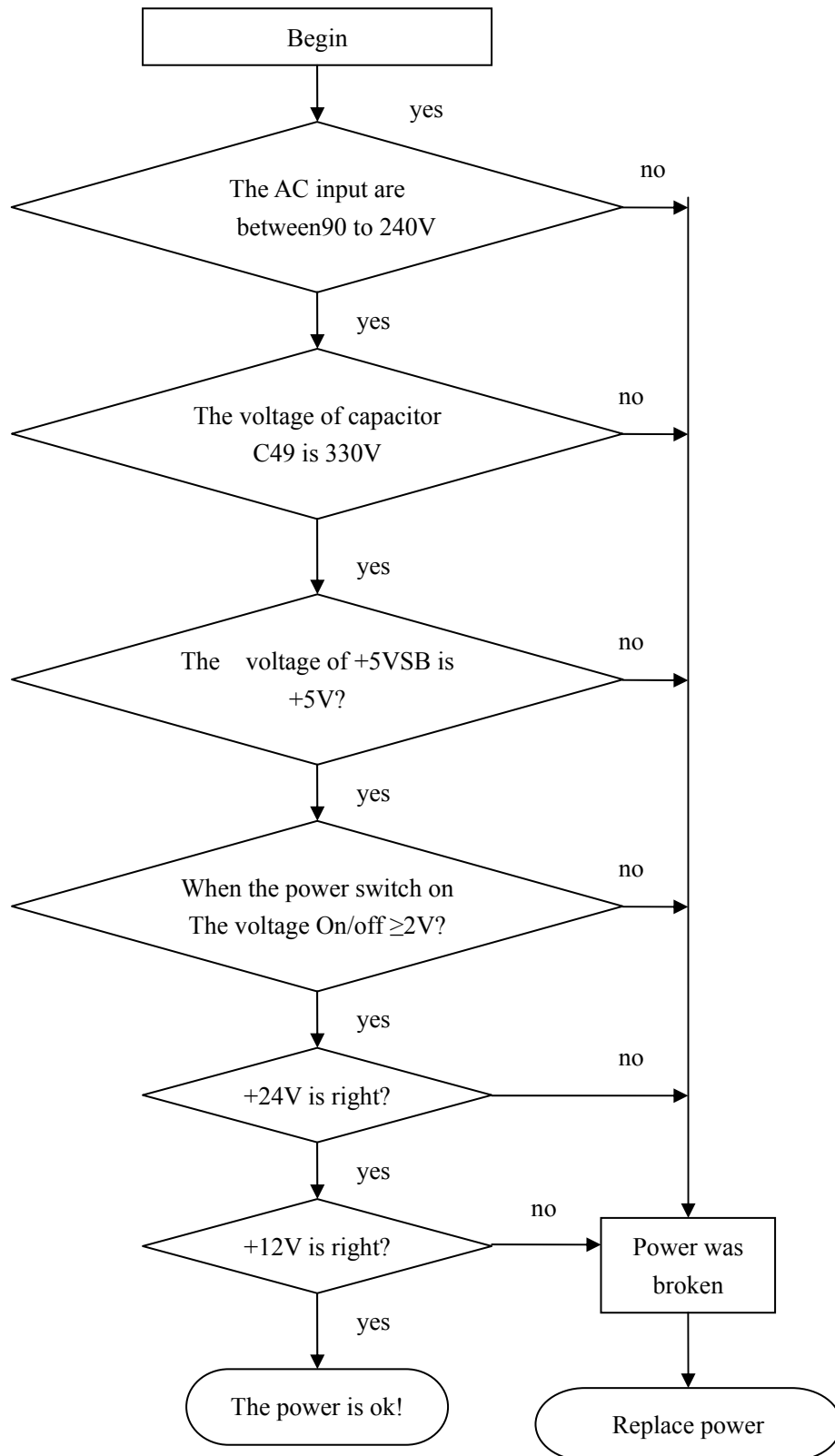
Picture Mode - User

Sound Mode - User

Image Size - Full Screen

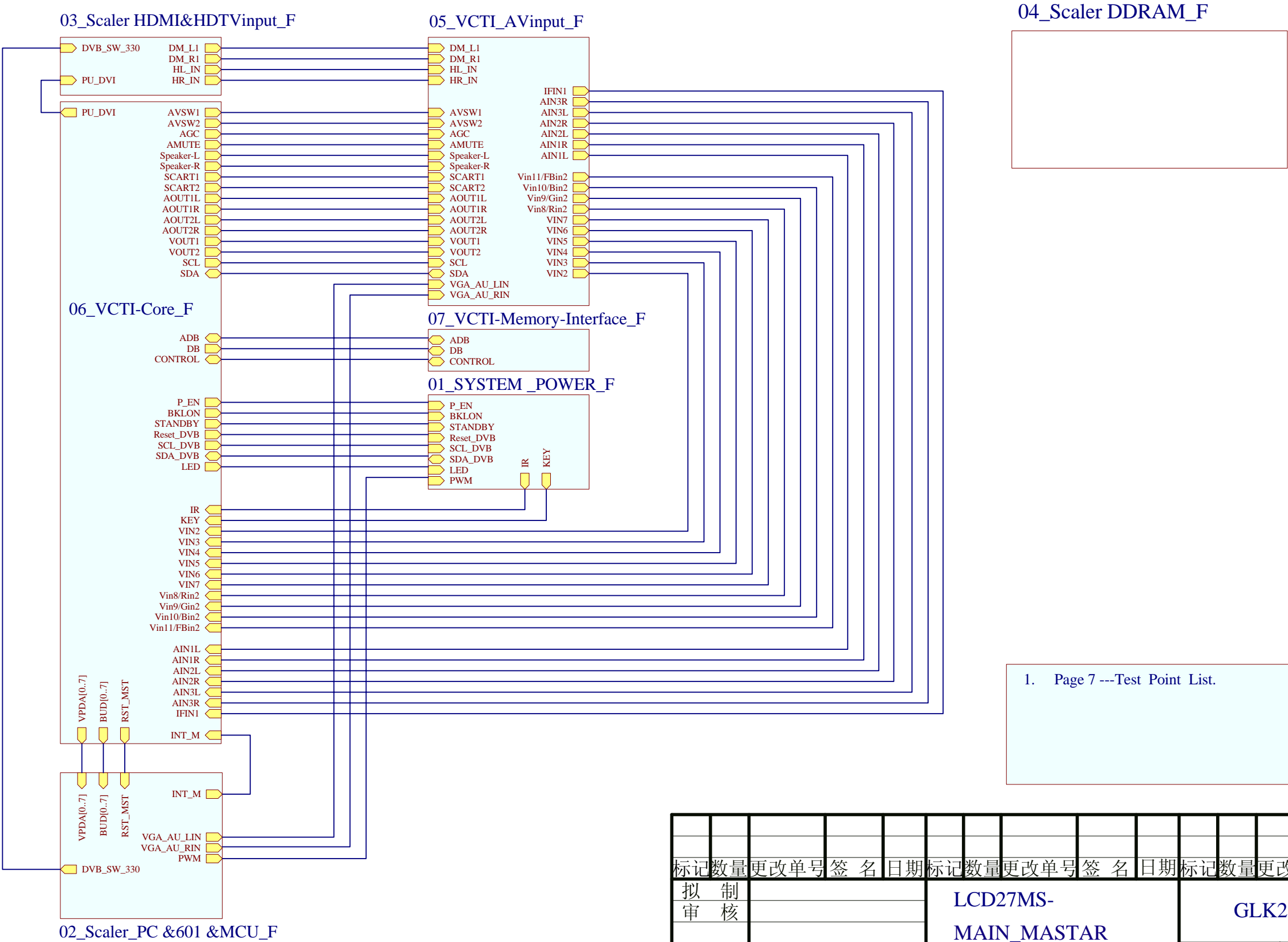
Sleep Timer - Off

Power Service Manual



LCD27/32-MS MAIN BOARD SCH

V02.03



1. Page 7 ---Test Point List.

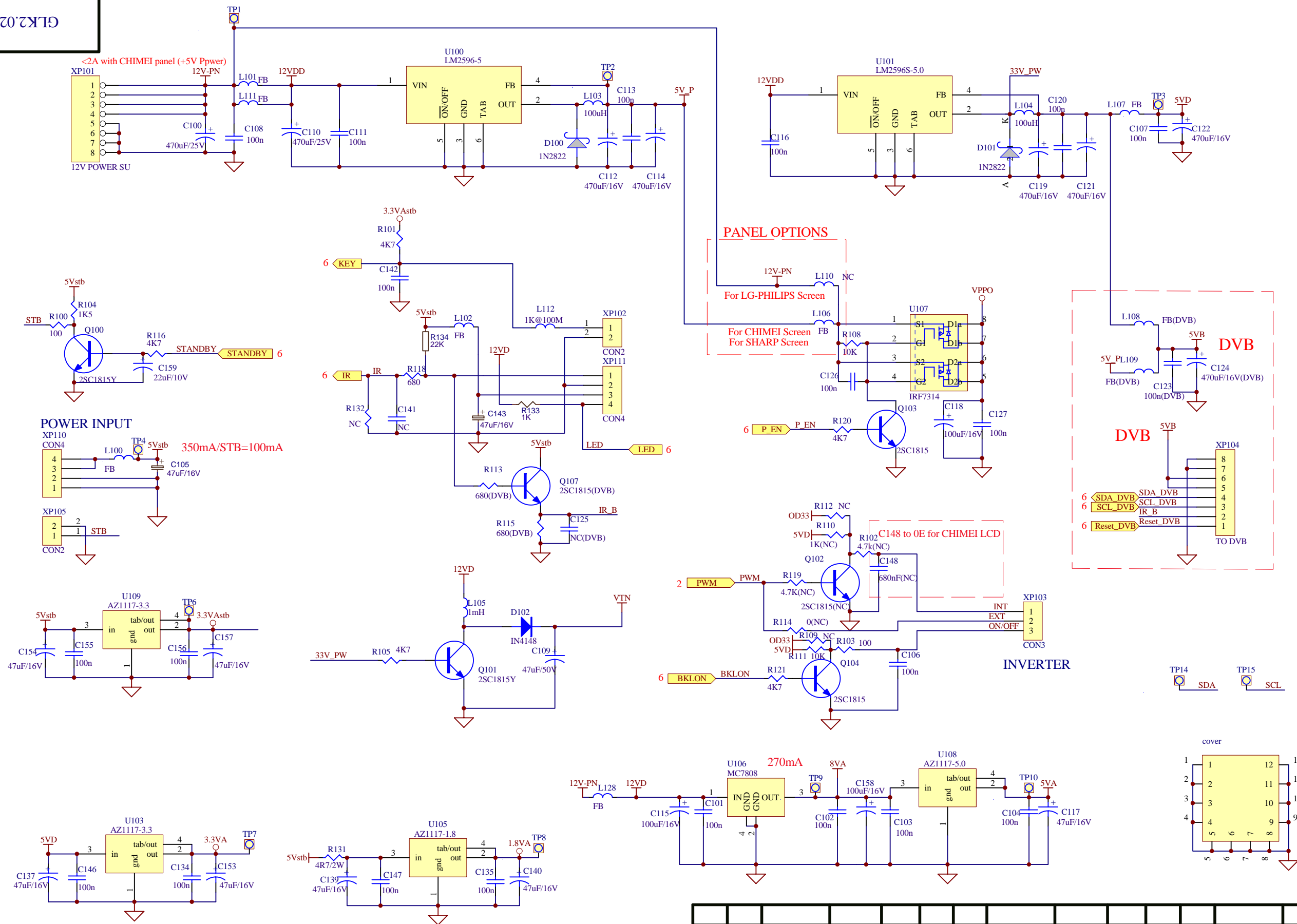
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签 名 日期

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审 核																			
标准化												等级标记				第 0 张		共 8 张	
批 准																			
制图：				描图：								图幅：							



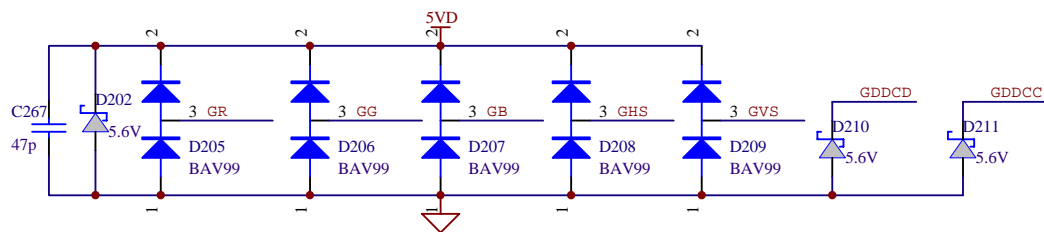
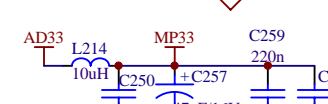
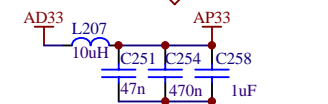
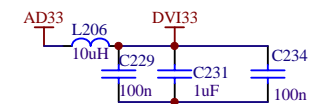
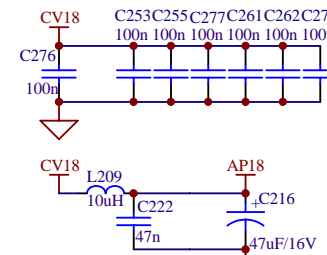
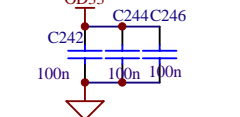
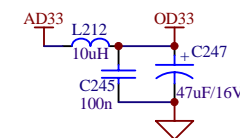
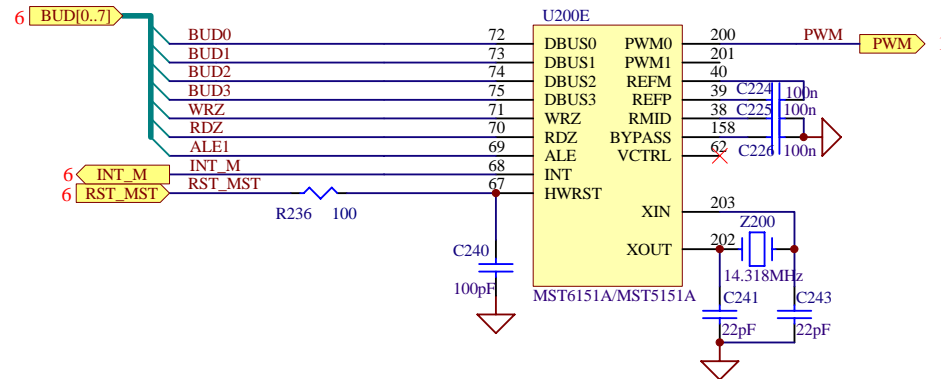
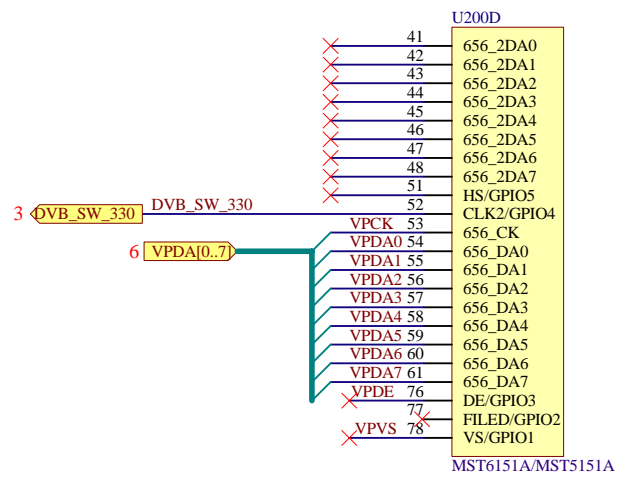
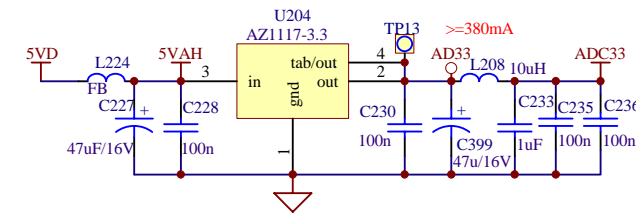
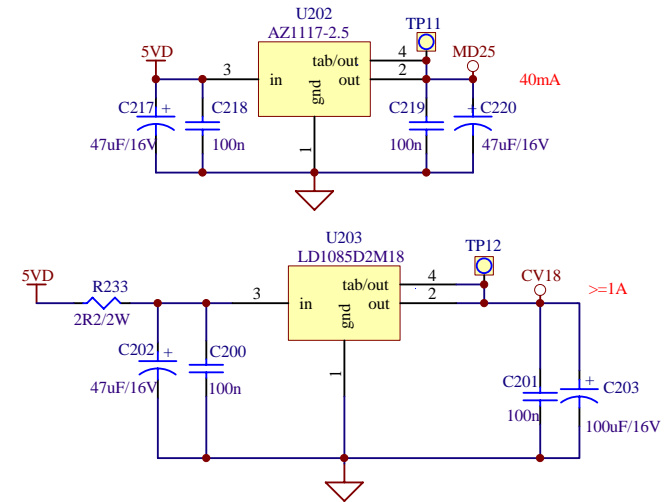
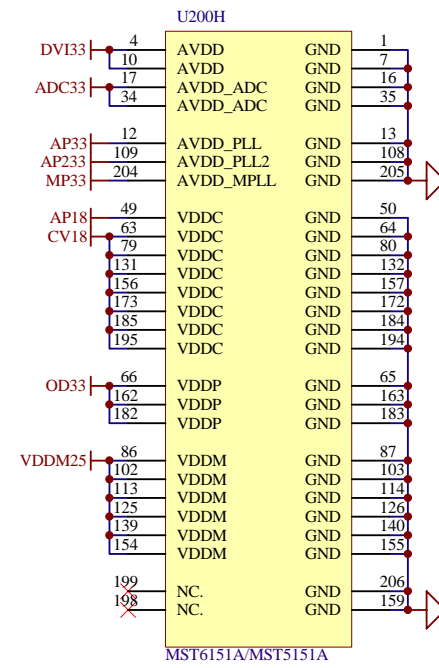
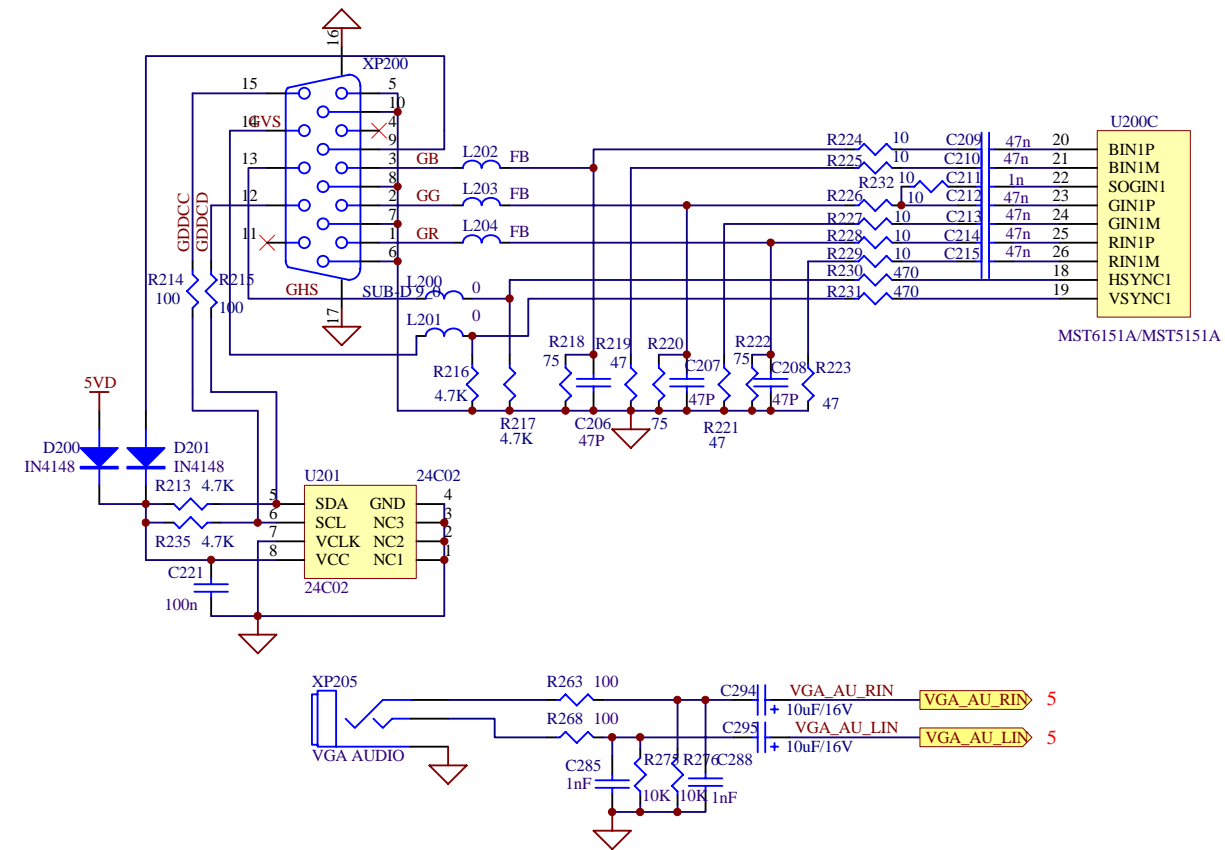
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批 准											
制图:				描图:				图幅:			



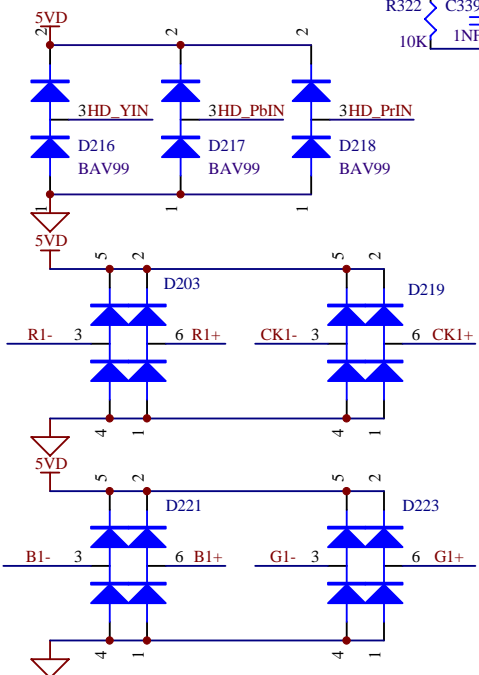
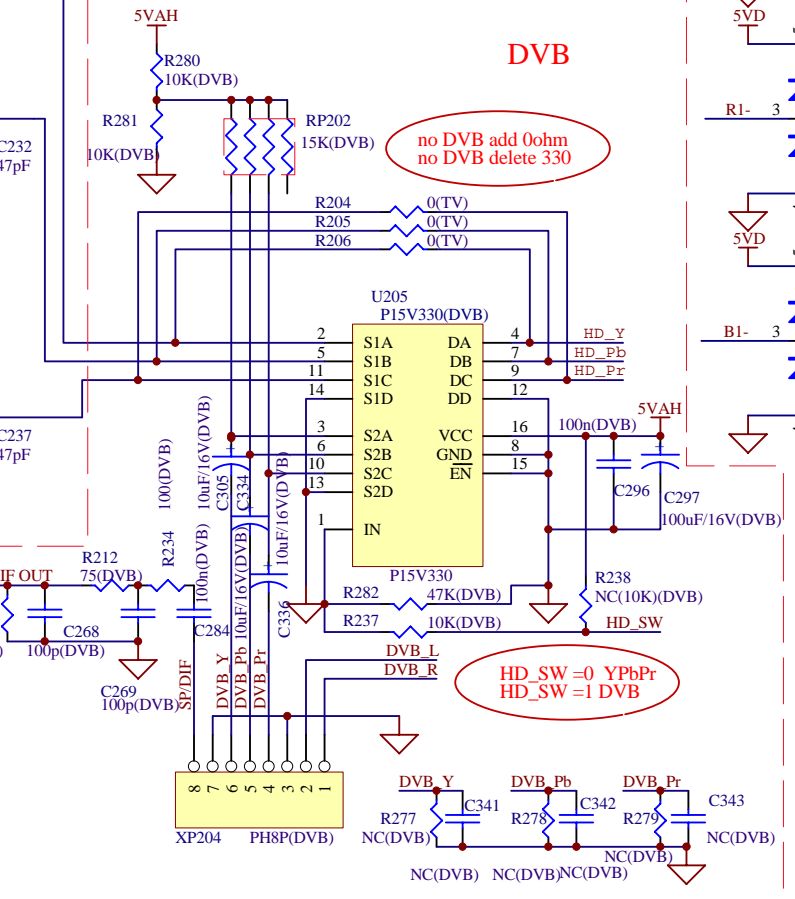
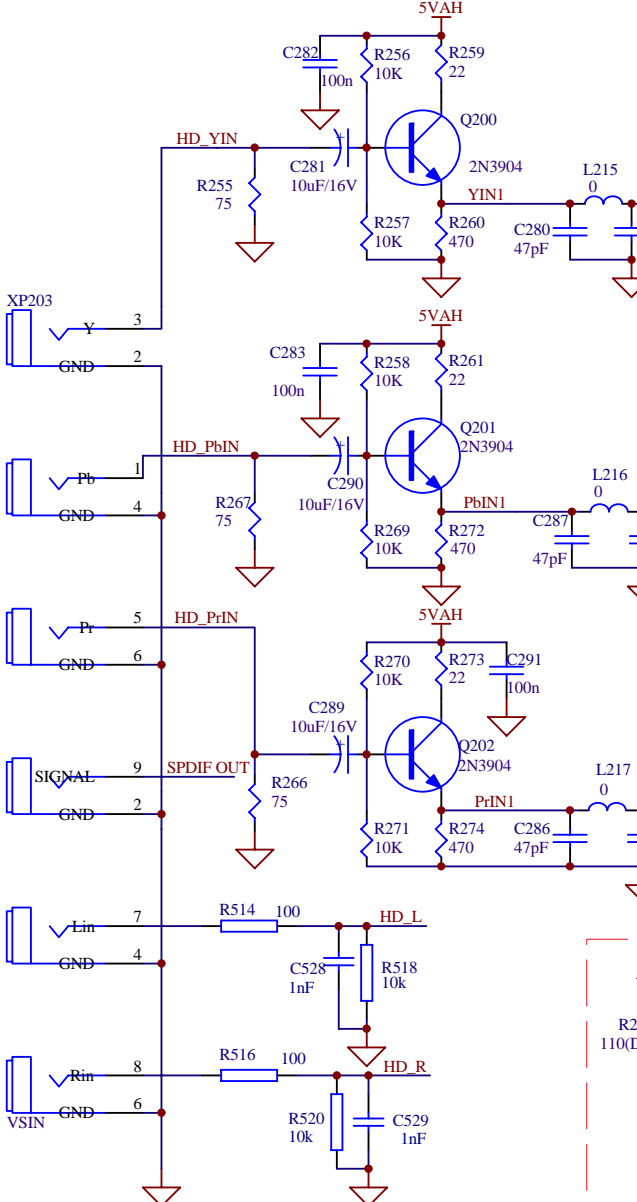
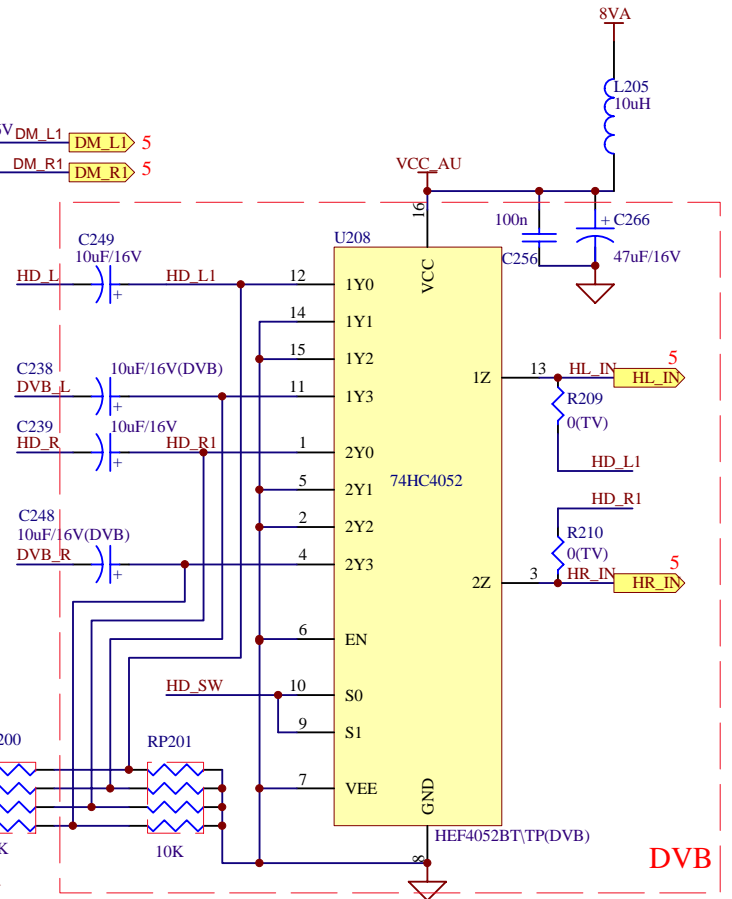
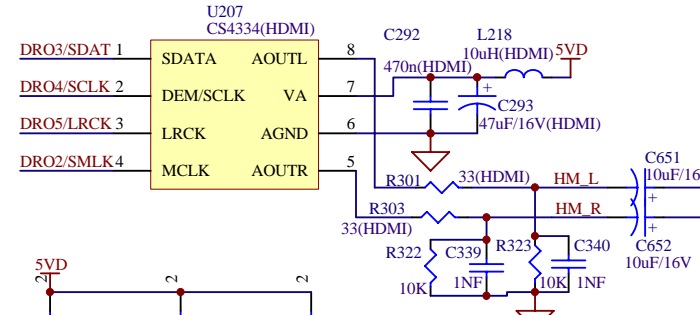
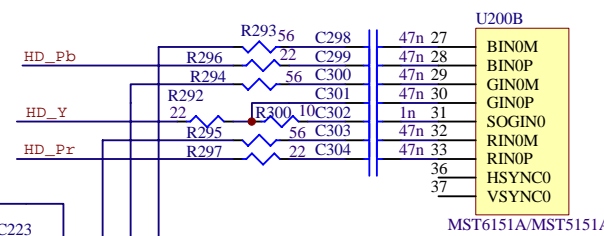
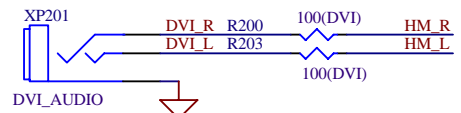
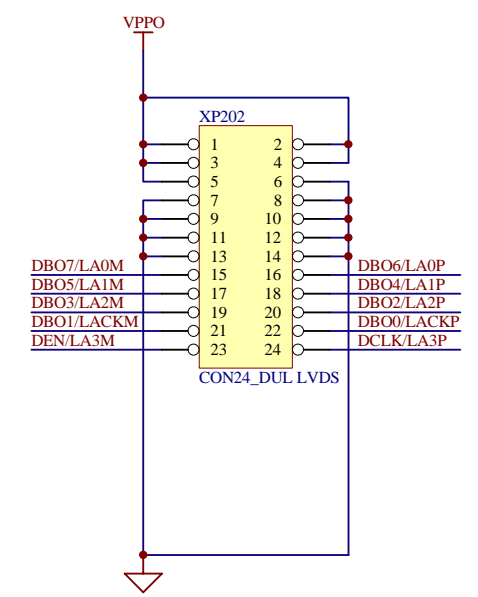
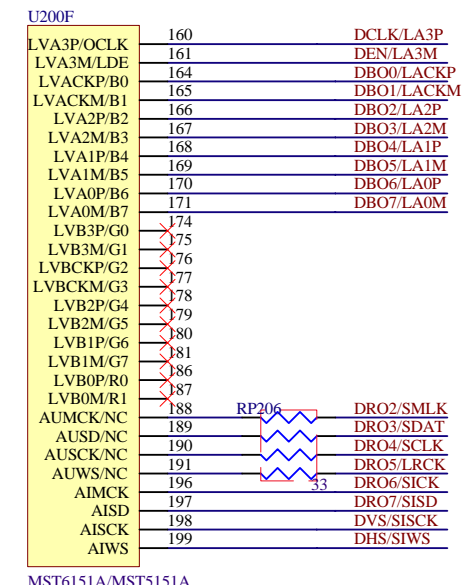
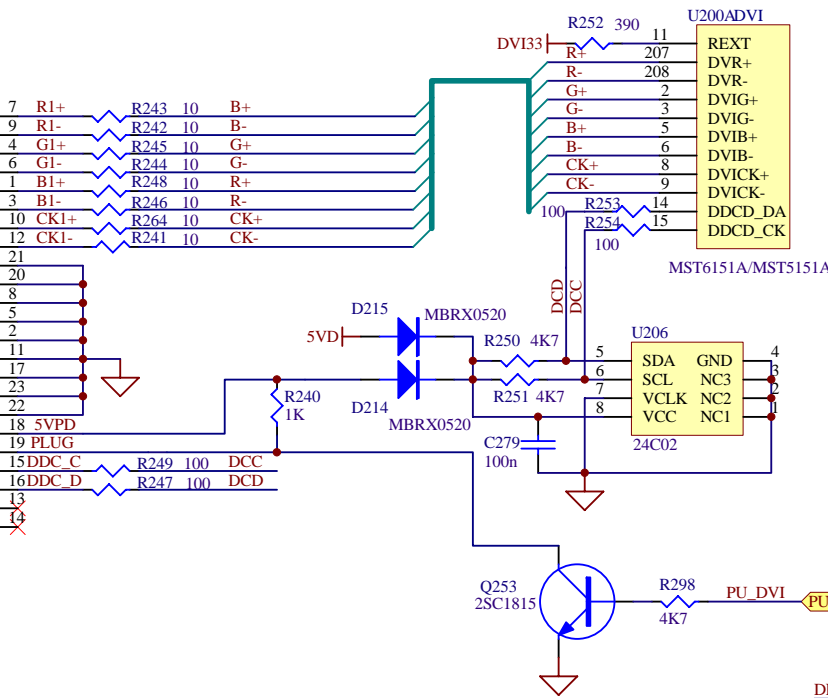
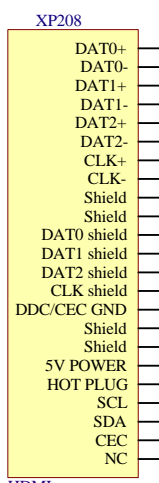
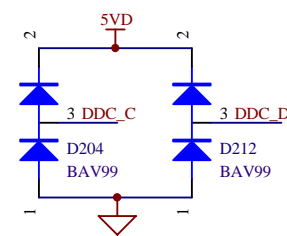
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标准化										等级标记					第 2 张		共 8 张		
批 准																			

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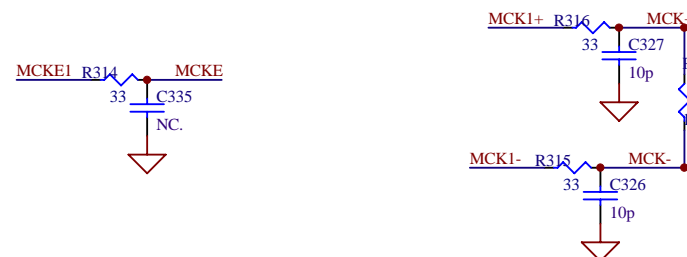
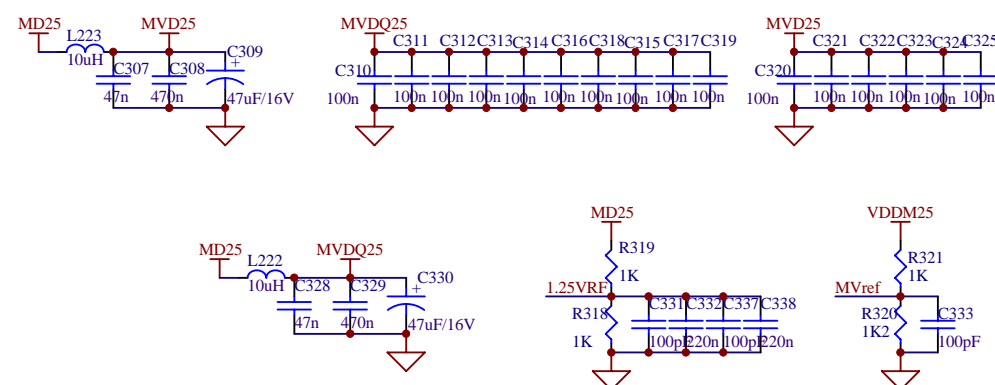
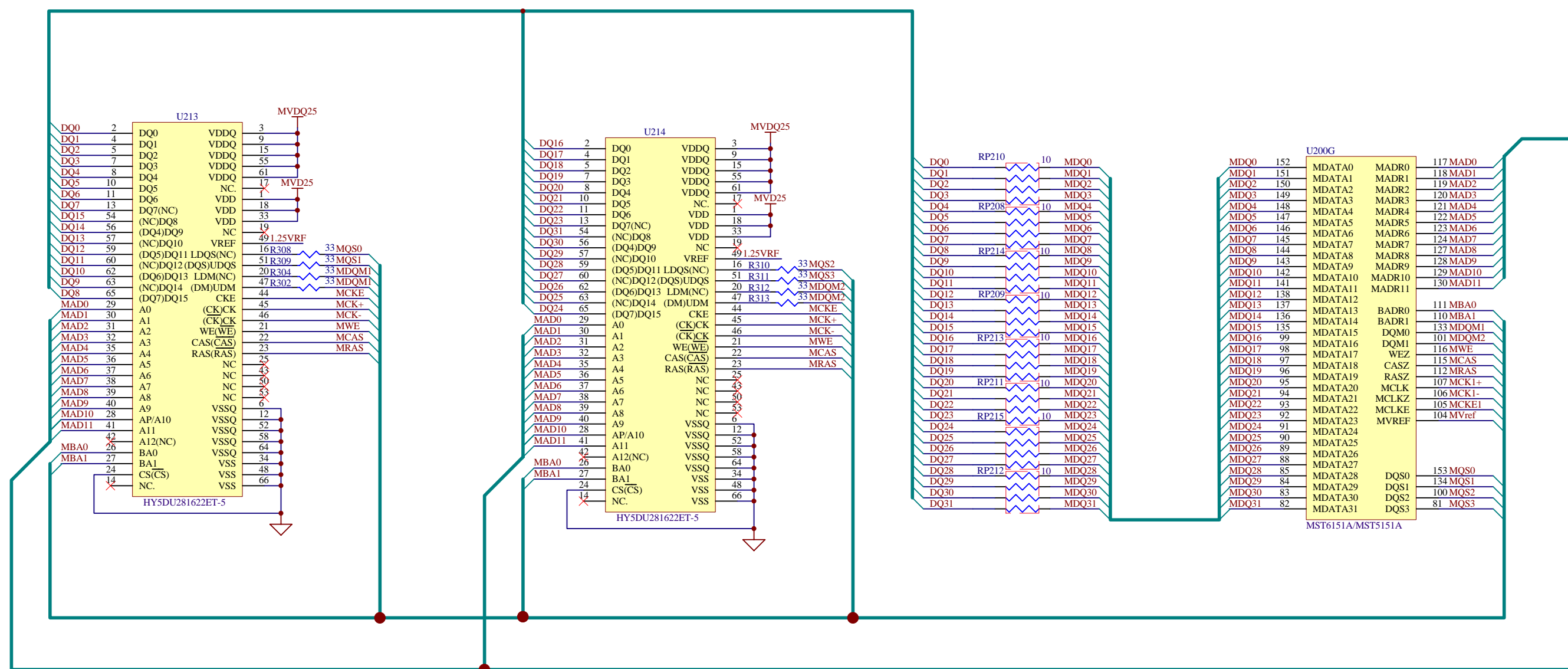
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批 准				V02.03							
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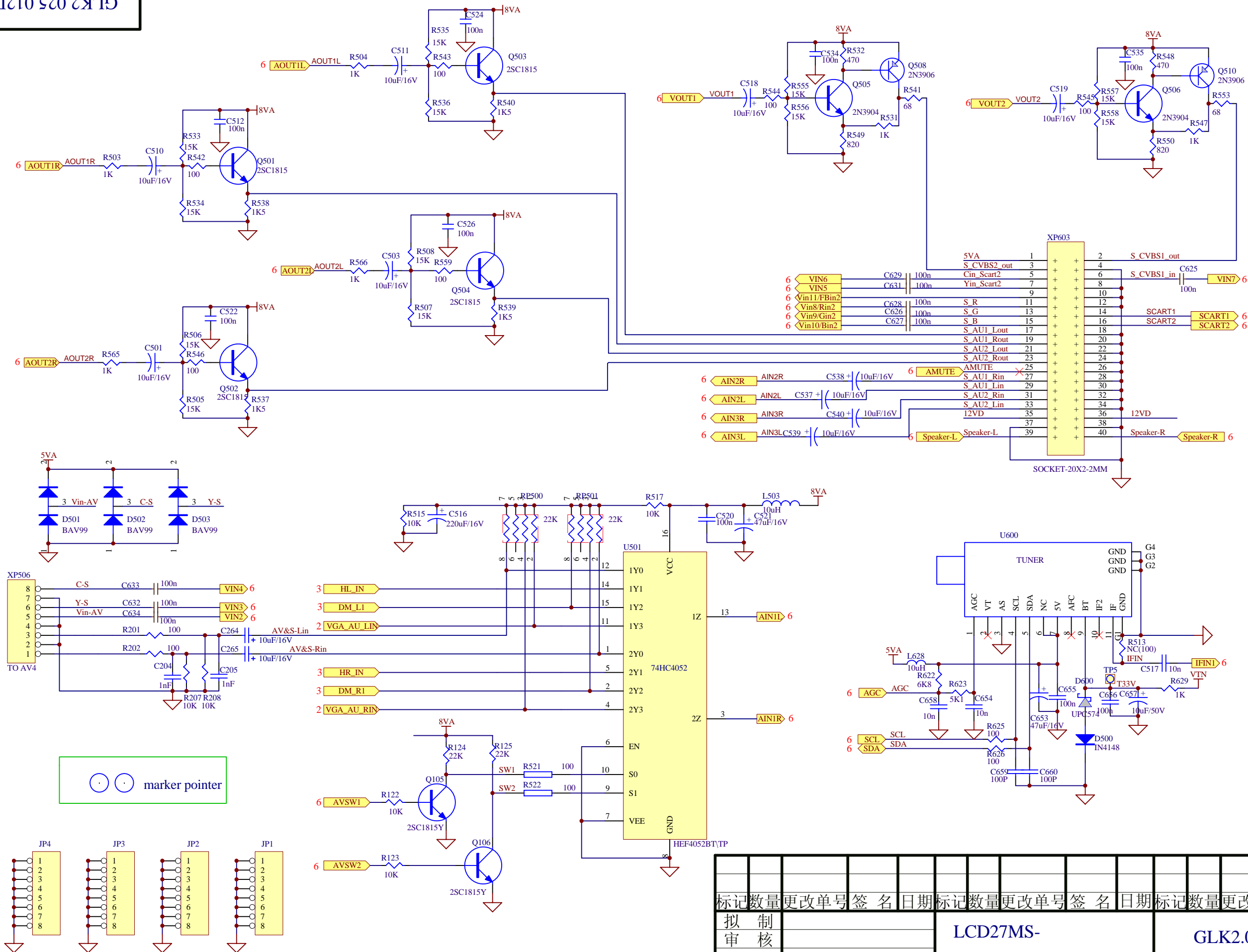


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审	核															
标准	化										等级标记		第 4 张		共 8 张	
批	准															

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描图:

图幅:



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底图总号

签 名 日期

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拟 制
审 核

标准化

批 准

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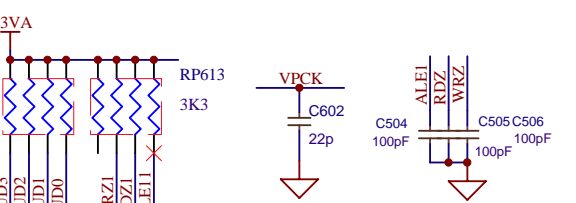
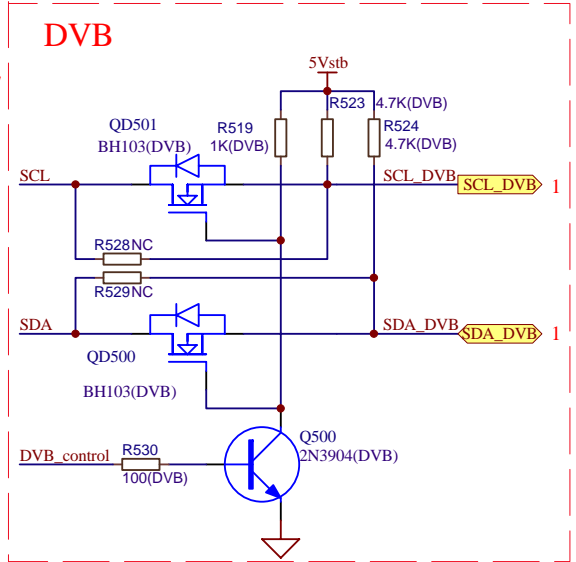
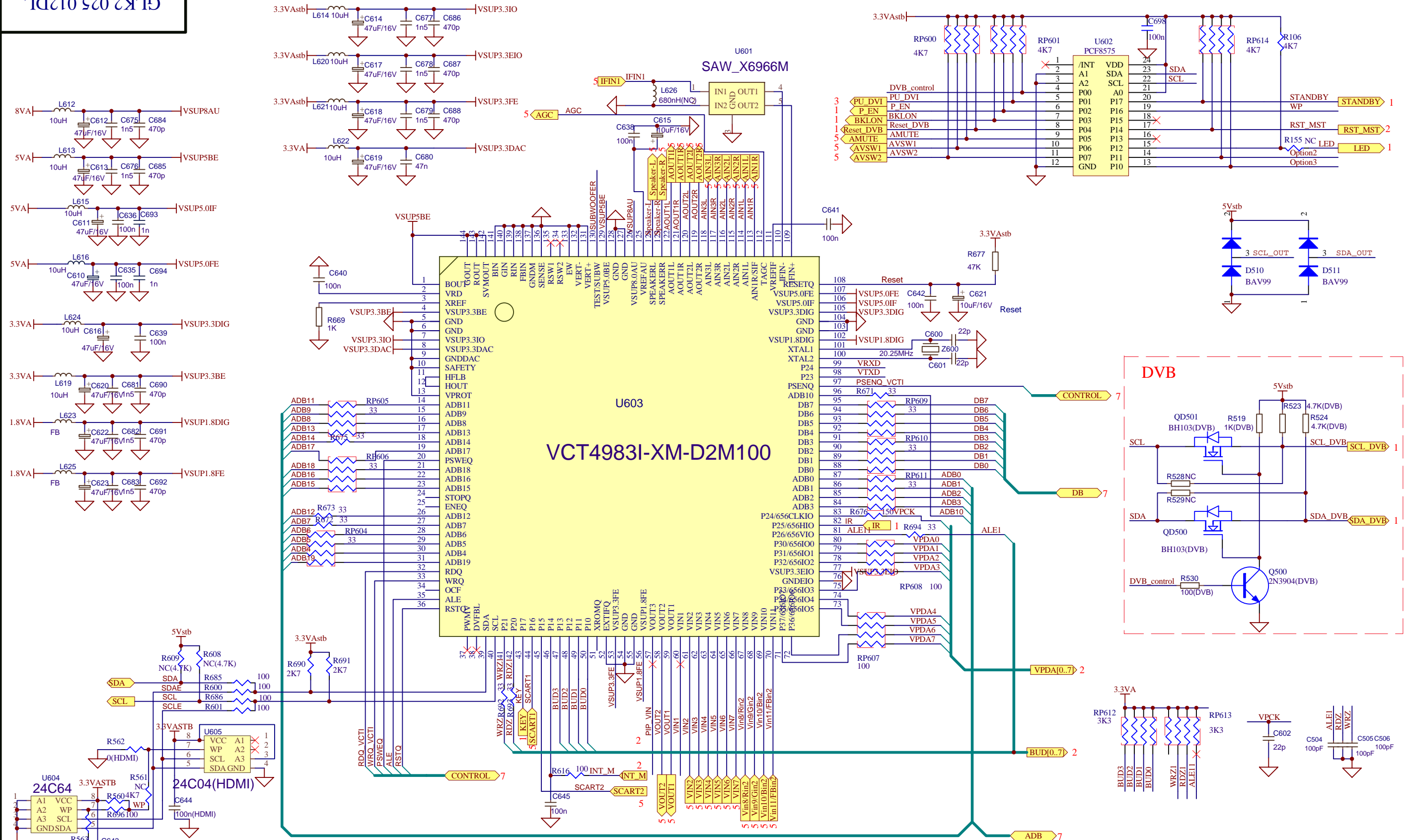
LCD27MS-
MAIN_VCT_AVINPUT
V02.03

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GLK2.025.012DL

等级标记 第 5 张 共 8 张

图幅：



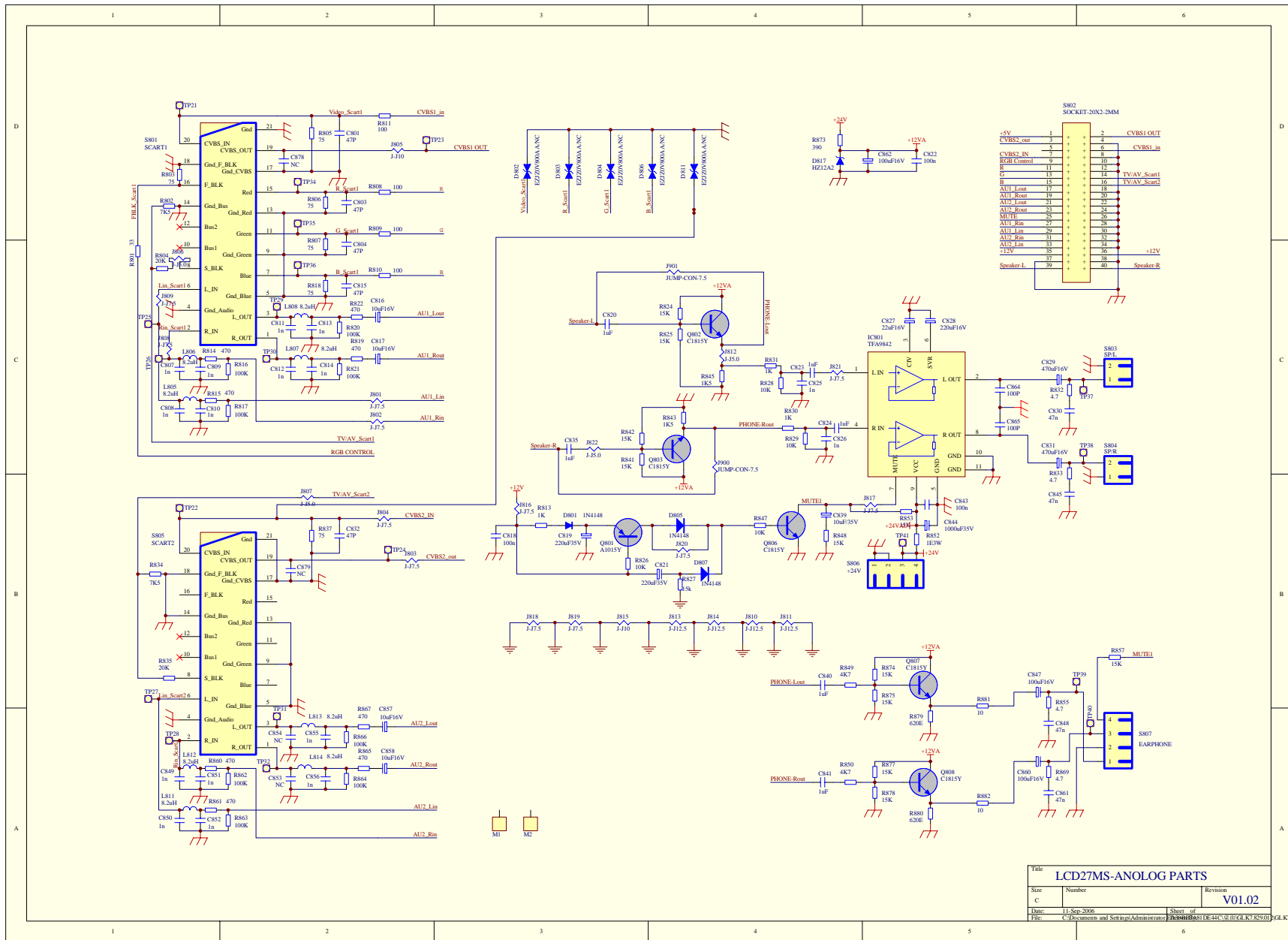
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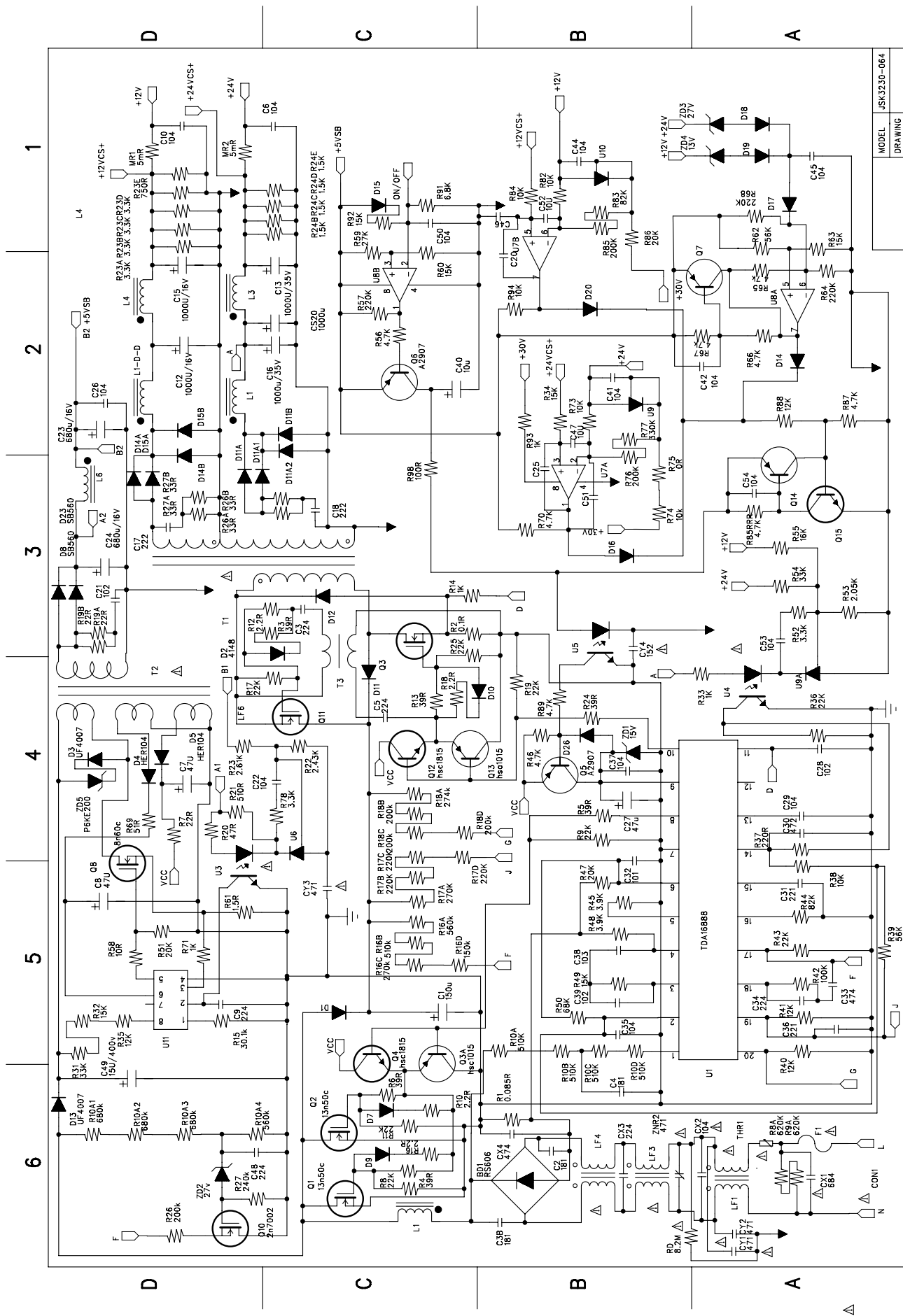
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审 核				MAIN_VCT_CORE				等级标记	第 6 张	共 8 张	
标准化				V02.03							
批 准				制图:				描图:			



Title		
LCD27MS-ANALOG PARTS		
Size	Number	Revision
C		V01.02
Date:	11-Sep-2006	Sheet of
File: C:\Documents and Settings\Administrator\Documents\LCD27MS-ANALOG PARTS\LCD27MS-ANALOG PARTS.PRT		



	MODEL	JSK3230-064
	DRAWING	