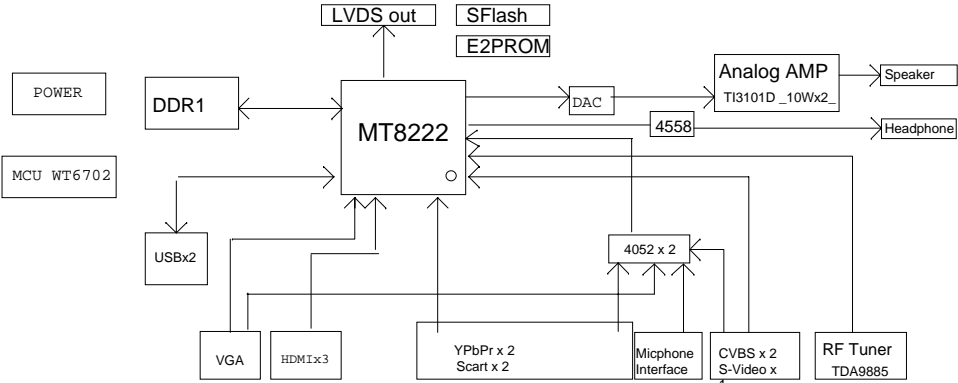


MT8222_P1V1 _DDR1_ VERSION V1.0

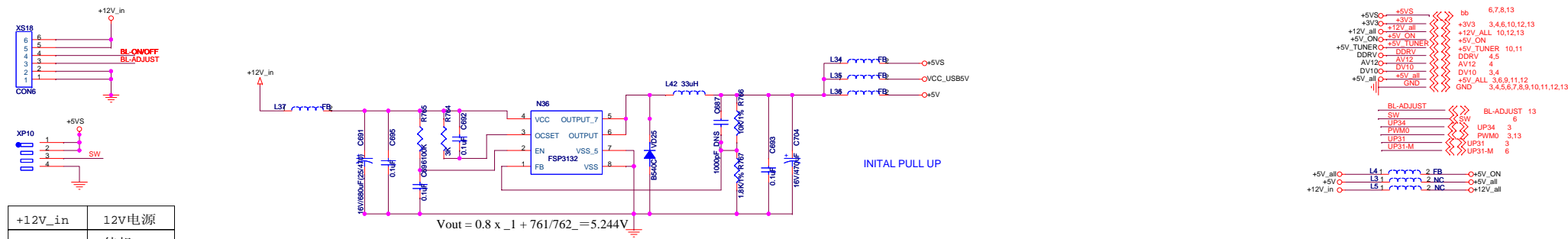
_ DDR1 WITH TERMINATION _

GPIO usage

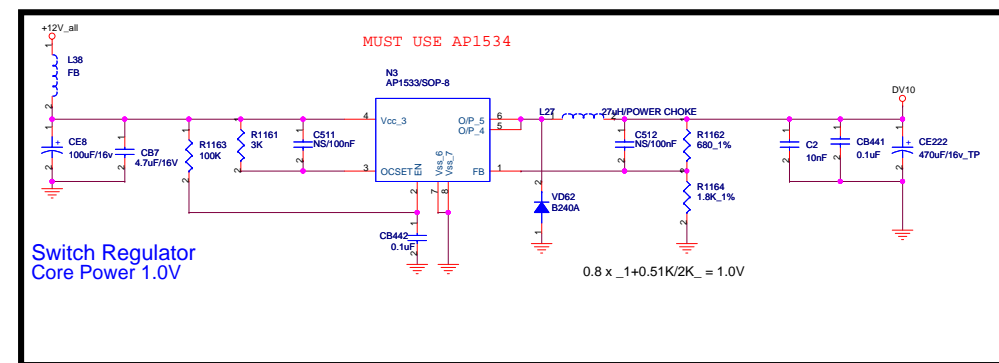
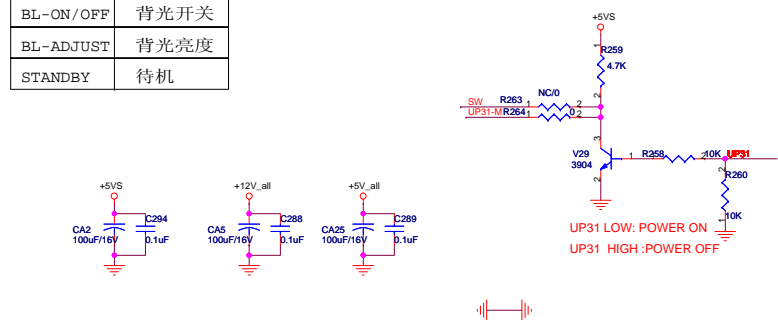
GPIO	Definition	Function define
ADIN0	SCART FS	
ADIN1	SCART FS	
ADIN2	4052 SWITCH	
ADIN3	KEYPAD	
ADIN4	KEYPAD	
ADIN5	HDMI/VGA EDID E2PROM WP	High = WP disable
GPIO_20	Audio MUX	
GPIO_21	AMP_MUTE CONTROL	High = Mute on
GPIO_22	GAME	
GPIO_23	GAME	
GPIO_24	GAME	
GPIO_25	GAME	
PWM0	DIMMING CONTROL	
PWM1	Power conversion to 33V	
PWM2	SYSTEM E2PROM WP	High = WP disable
PWM3	Audio MUX	
UP30	BL ON/OFF CONTROL	Low = Backlight on
UP31	NORMAL POWER ON/OFF	Low = Normal power on
UP33	HMDI 0 HPLUG DETECT	
UP34	HMDI 1 HPLUG DETECT	
UP35	HMDI 2 HPLUG DETECT	
GPIO_0	MICPHOTO_RESERVE	
GPIO_1	LVDS RESERVED	
GPIO_2	FCI	
GPIO_3	FCI	
GPIO_4	LVDS POWER ON/OFF	Hi = LVDS power on
GPIO_5	AMP_SD/FCI	
GPIO_6	SCART1 VIDEO OUTPUT SW/FCI	
GPIO_7	FCI	
GPIO_8	FCI	
GPIO_9	FCI	
GPIO_10	FCI	
GPIO_11	4052 SWITCH	Low = HP insert
INT	Audio MUX select bit 0	
SPDIFIN	LVDS RESERVED	
AOSDATA0	USB0 OC TAG	
AOLRCK	USB0 PWR ENABLE	
AOBCLK	USB1 PWR ENABLE	
AOMCLK	USB1 OC TAG	



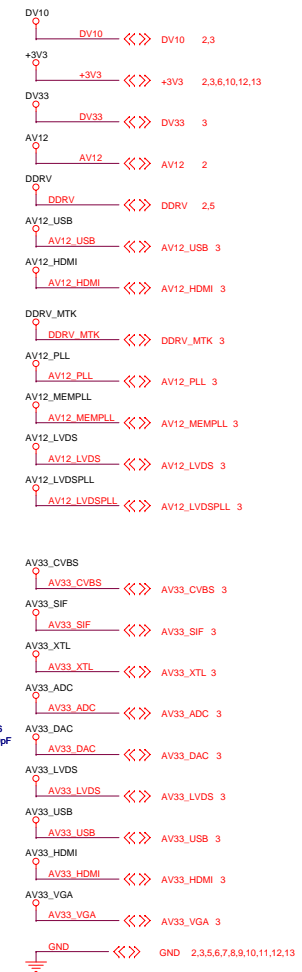
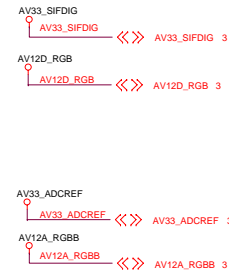
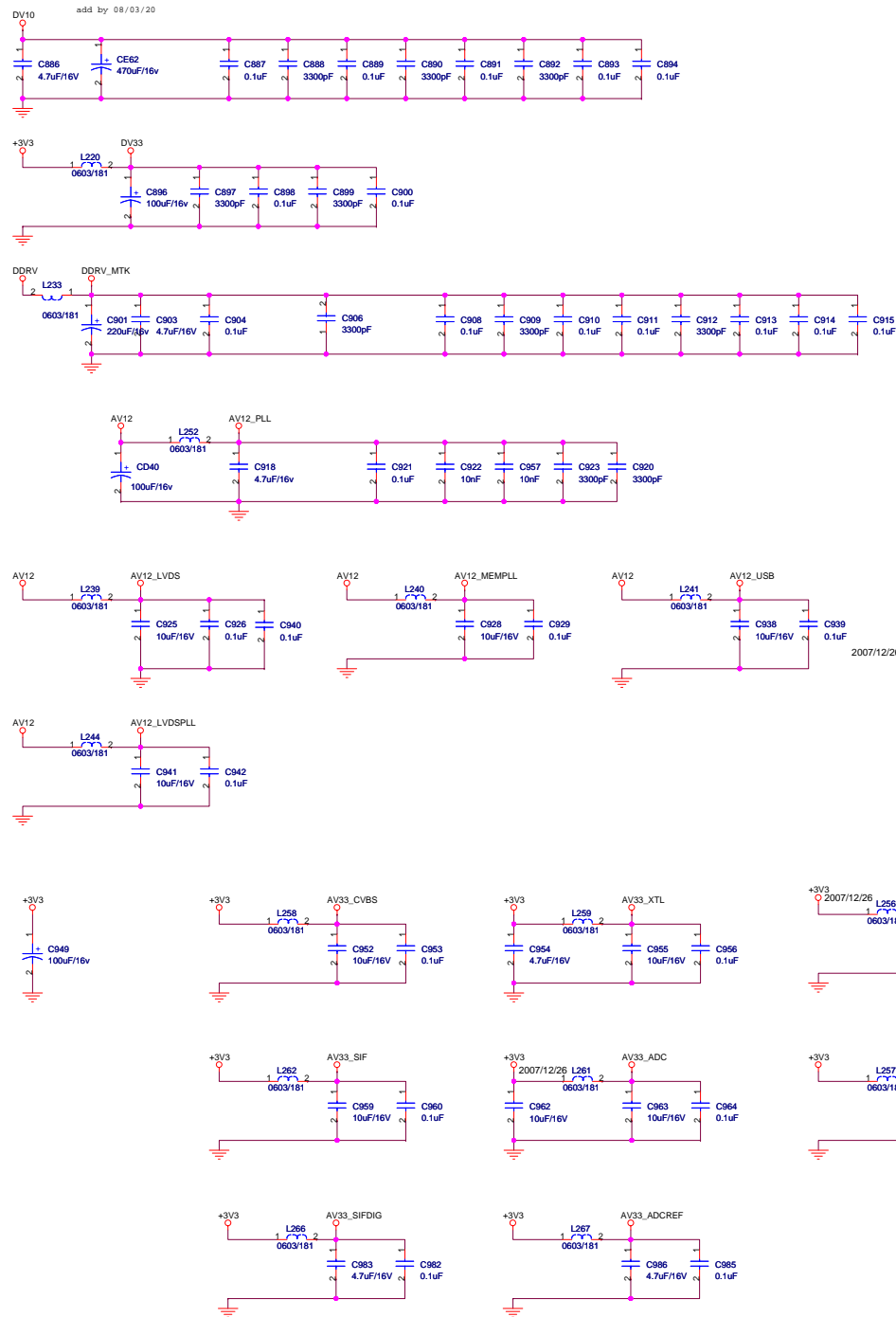
Power Distribution



+12V_in	12V电源
+5V_stb	待机5V
BL-ON/OFF	背光开关
BL-ADJUST	背光亮度
STANDBY	待机

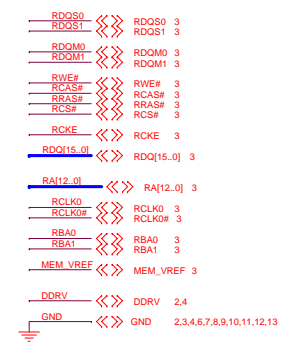
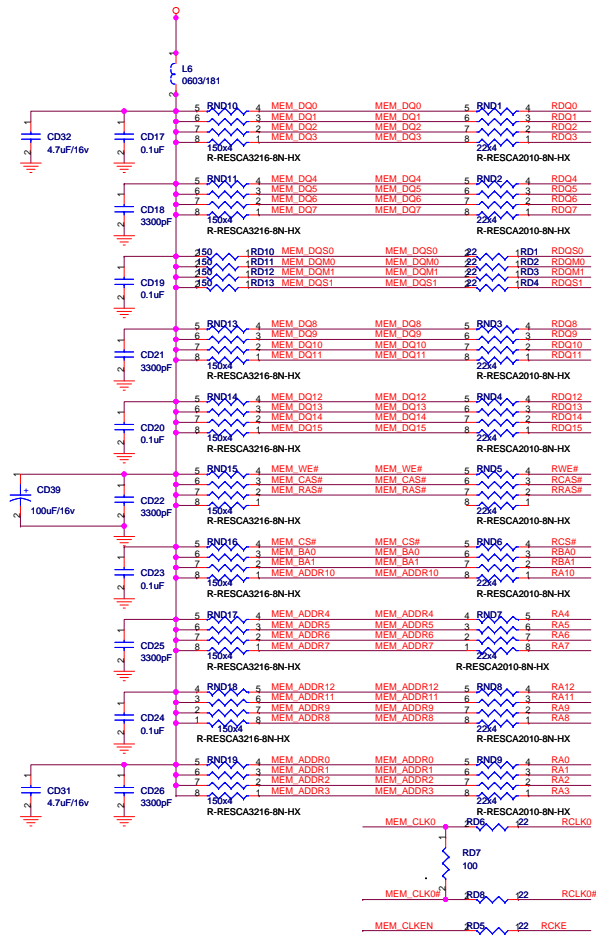
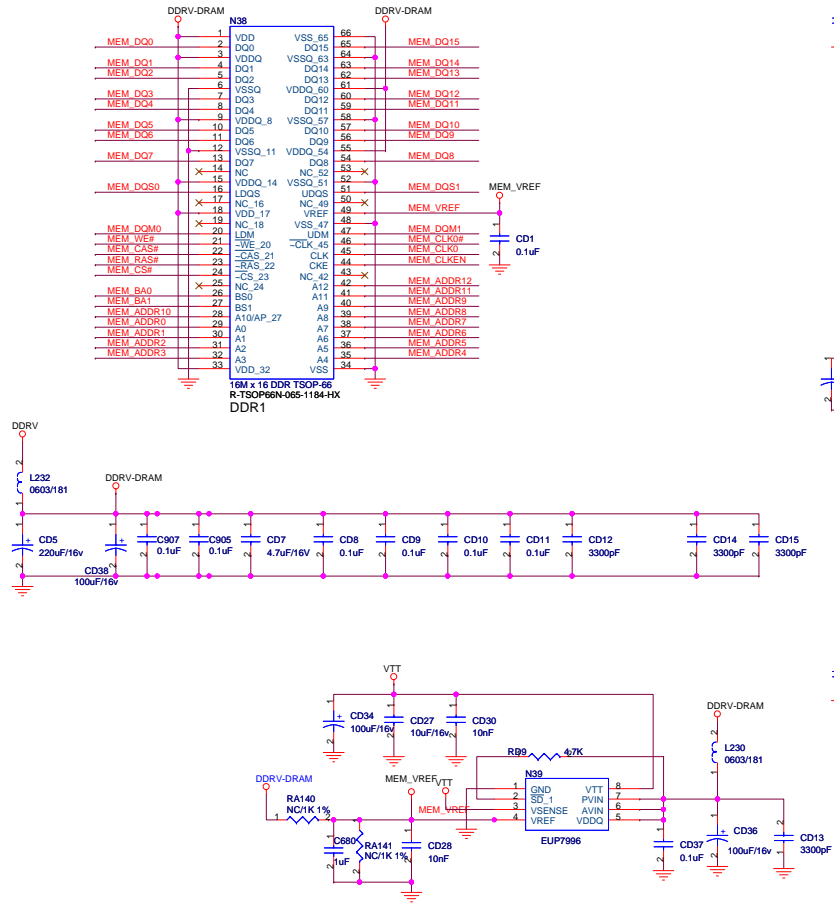


_ Bypass CAPs arround MT8222 _



4、MT8222主芯片旁路电容部分电路

_ DDR1 DRAM With Termination _



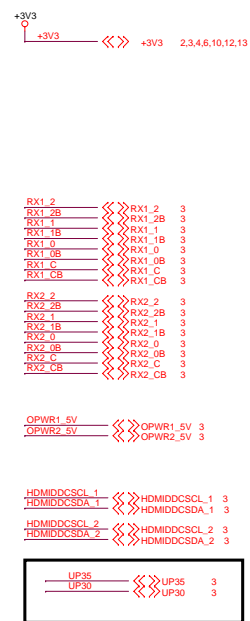
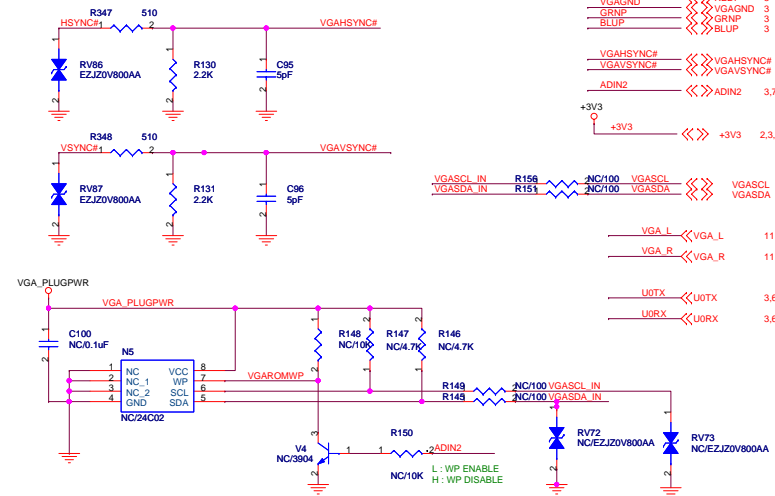
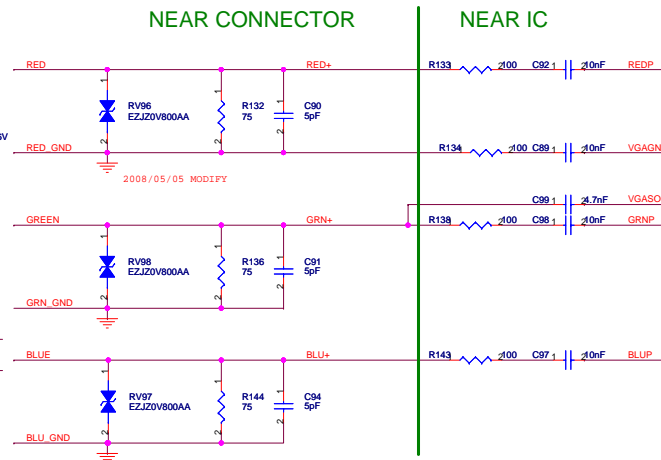
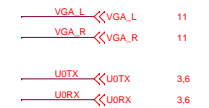
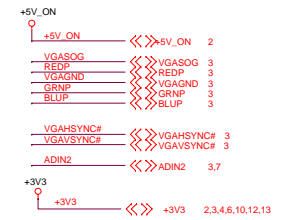


Diagram showing the connection of the three pins of the 7805 voltage regulator to the breadboard power rails:

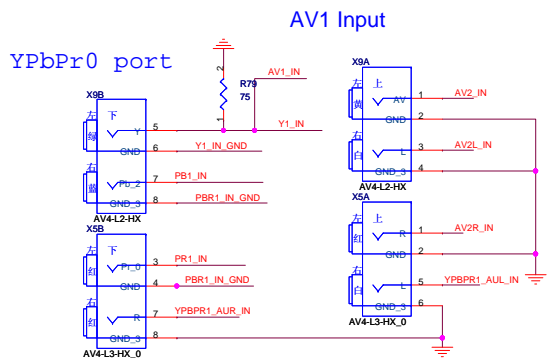
- GND** (Pin 1) is connected to the common ground rail. Pin numbers: 2,3,4,5,6,8,9,10,11,12,13.
- +5V_ON** (Pin 2) is connected to the +5V rail. Pin number: 2.
- +5VS** (Pin 3) is connected to the +5V rail. Pin numbers: 2,6,8,13.

7、HDMI1、HDMI2接口及外围匹配网络部分电路

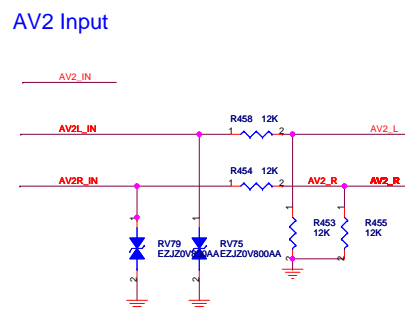


家电维修资料网

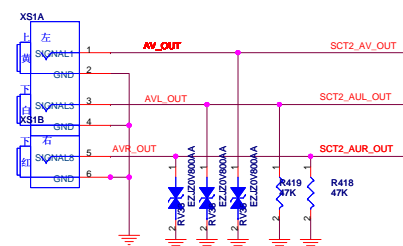
YPbPr0 port



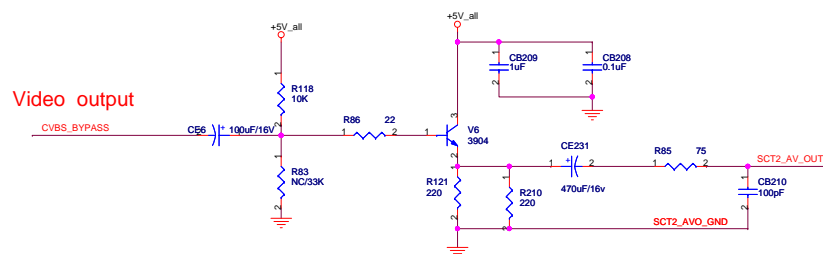
AV1 Input



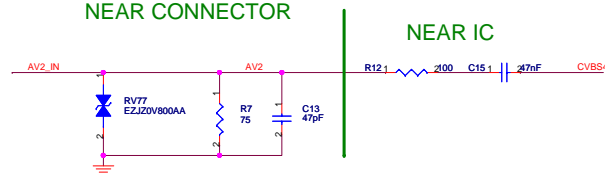
AV2 Input



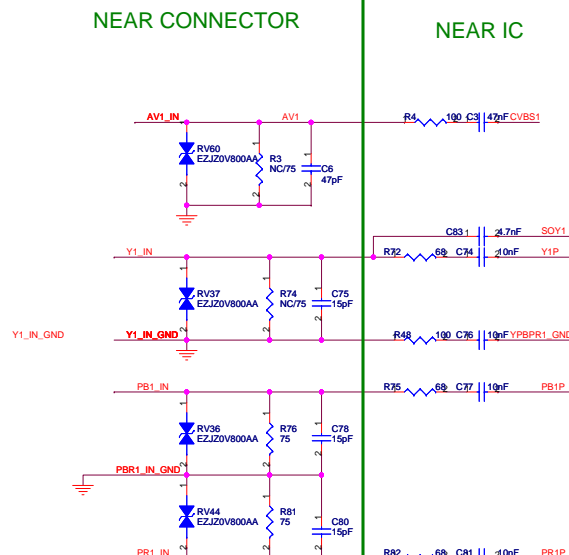
Video output



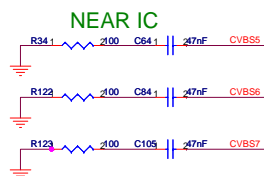
NEAR CONNECTOR



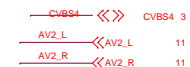
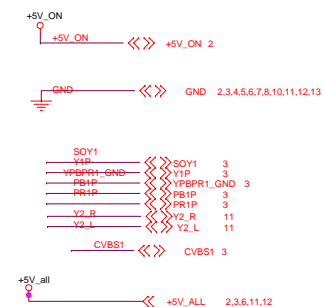
NEAR IC

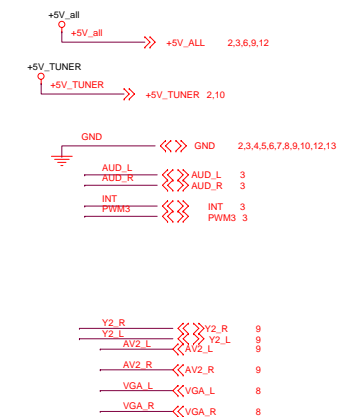


NEAR IC

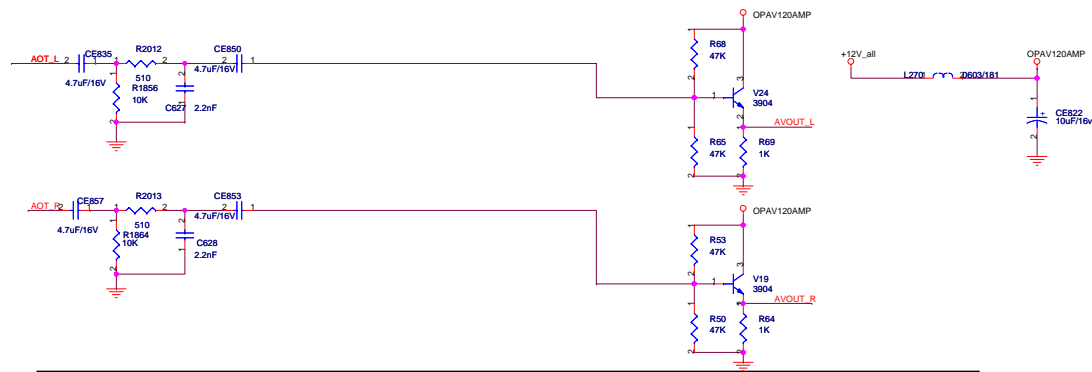


NEAR IC

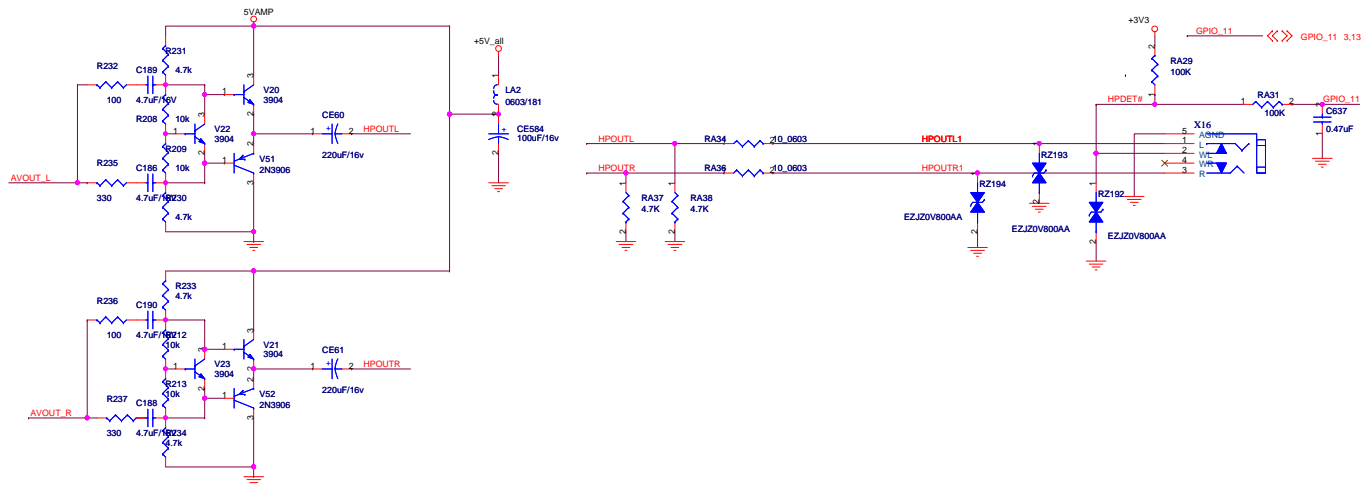
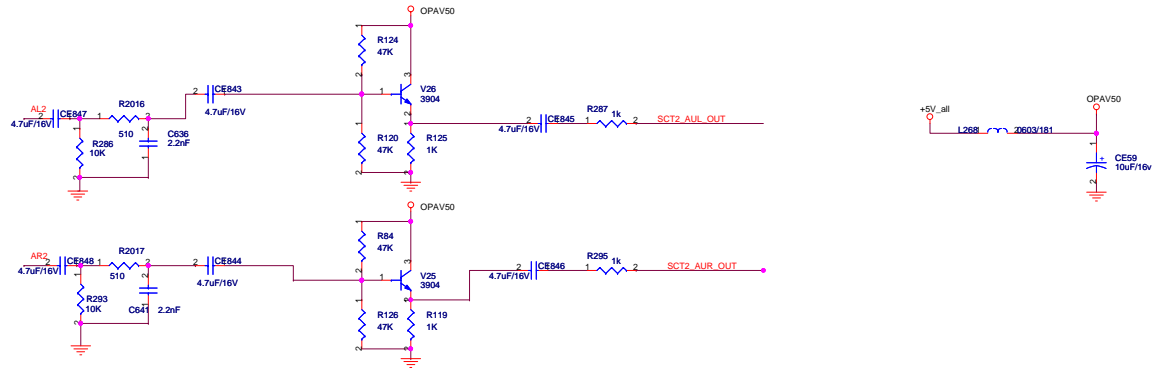
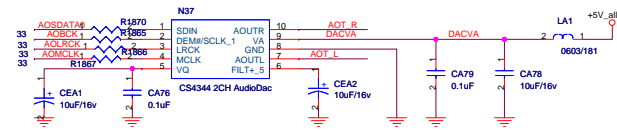




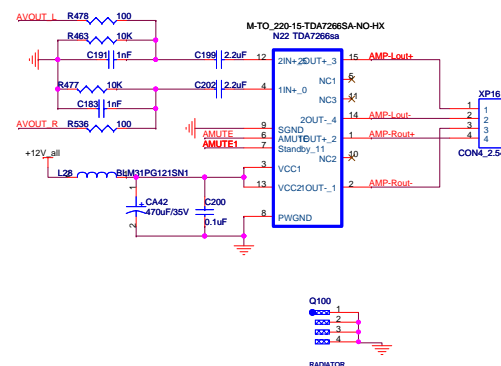
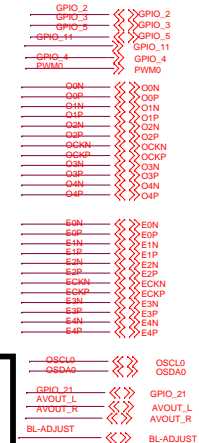
11、音频切换及输出接口部分电路

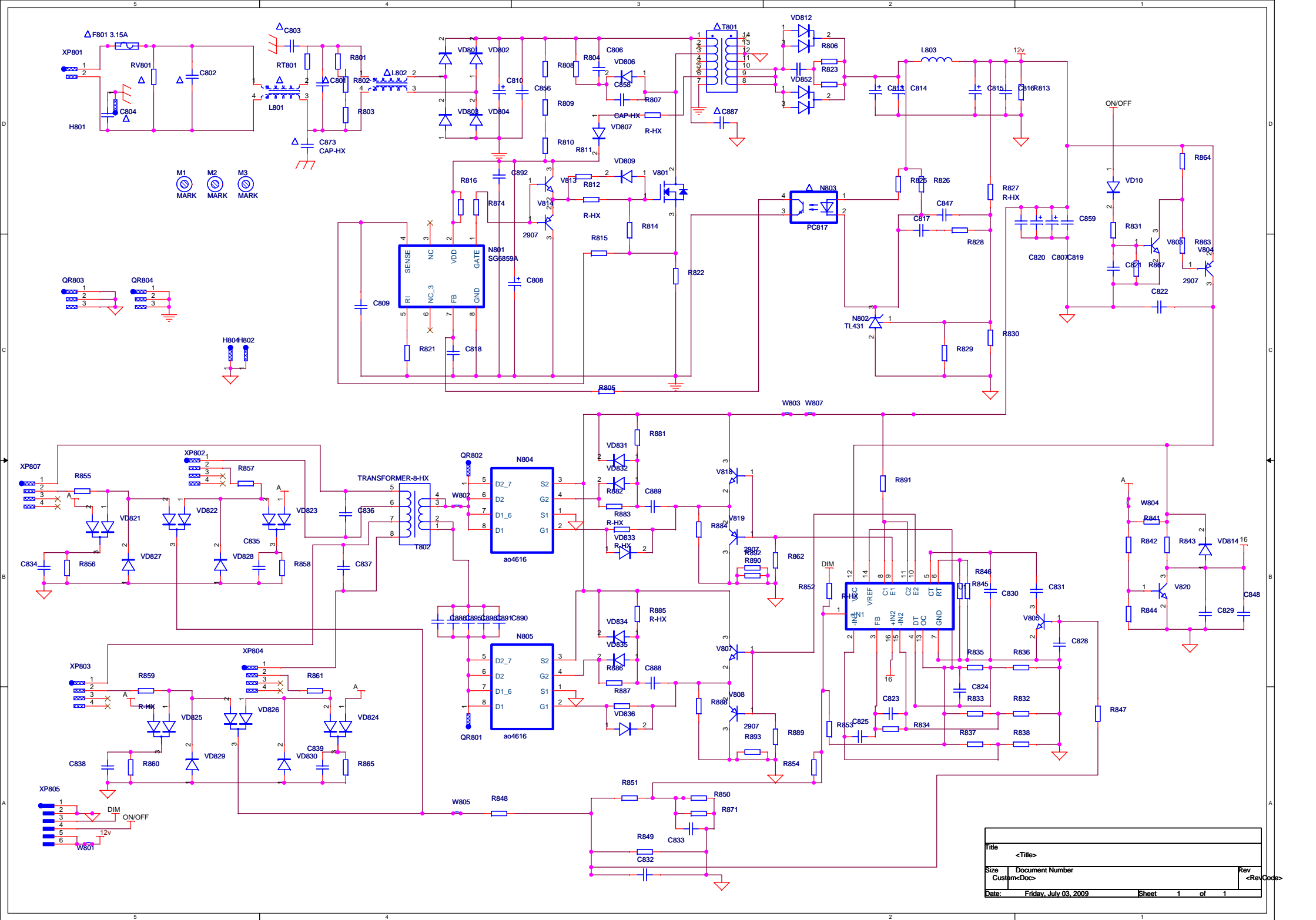


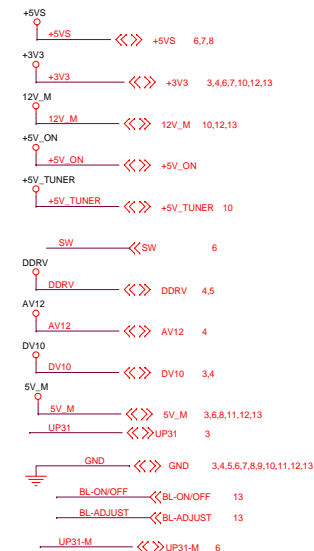
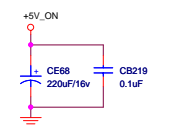
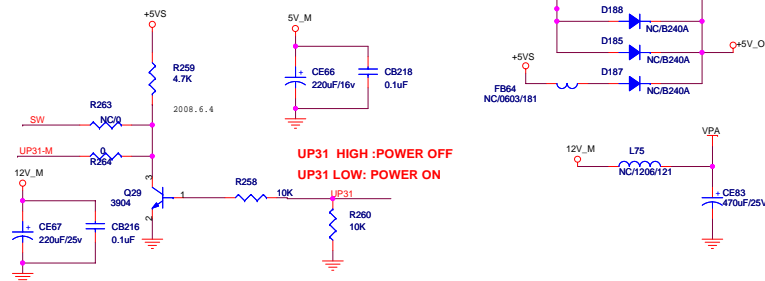
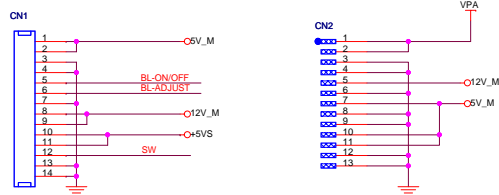
CS4344 DAC FOR I2S



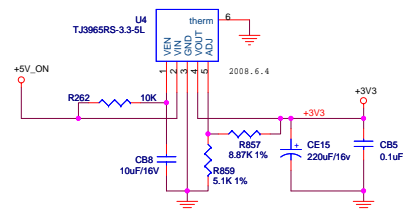
12、HDMI数字音频D/A转换及耳机输出部分电路





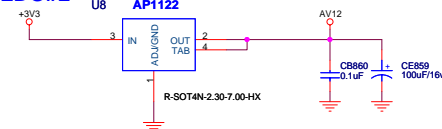


LDO#1

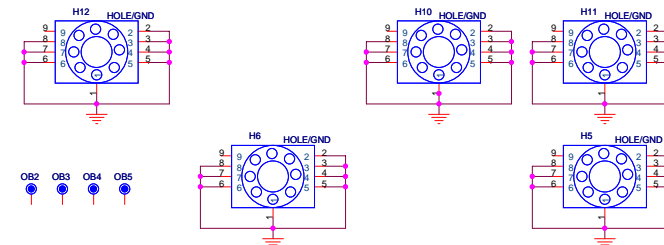


5V to 3.3V
Estimated Power consumed : ??? A

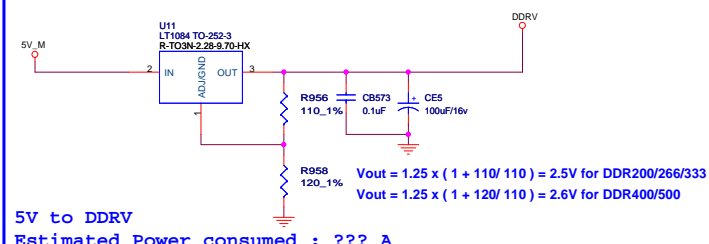
MUST USE AP1122
U8 **AP1122**



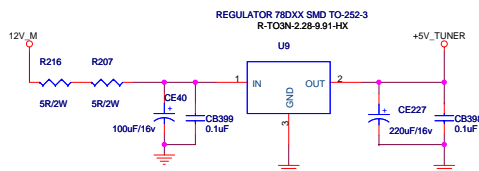
3.3V to 1.2V
Estimated Power consumed : ??? A



LDO#3



If use sdram ,NC FB14
If use ddr ,NC FB14

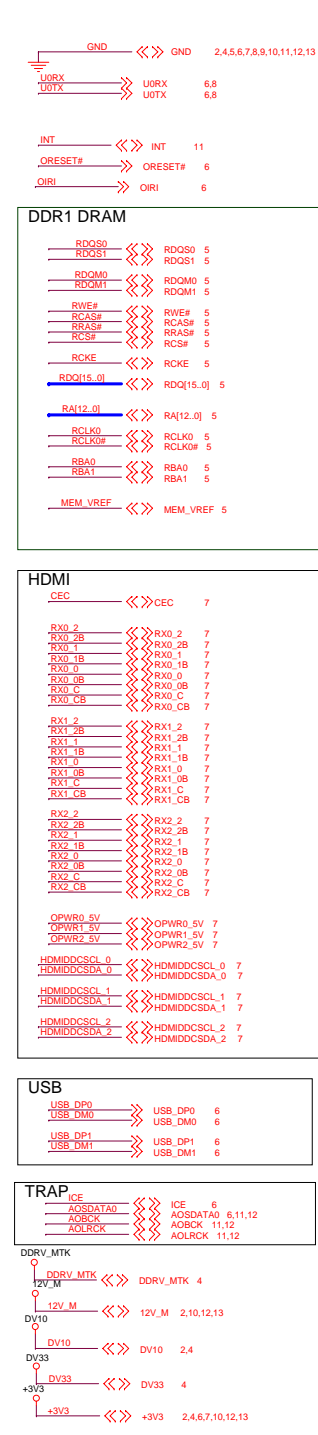
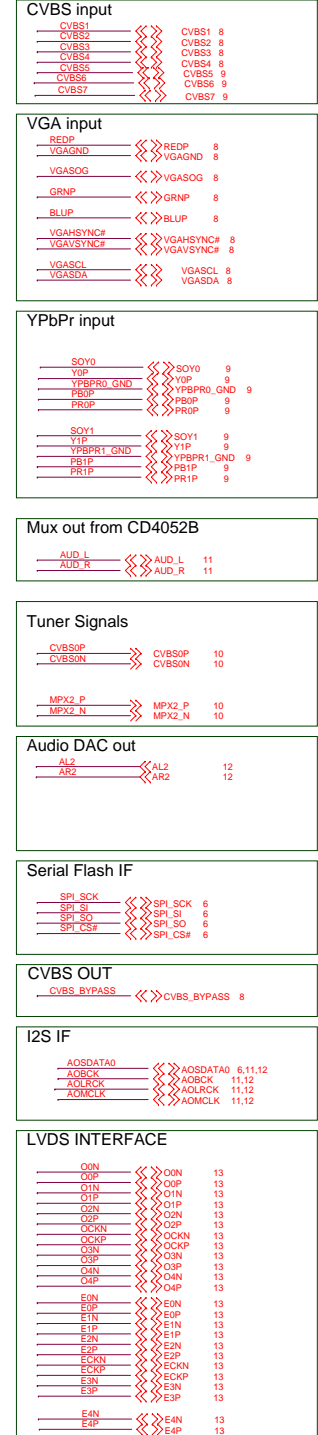


12V to 5V
For Tuner 5V power

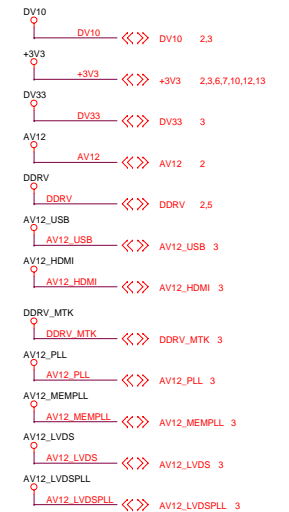
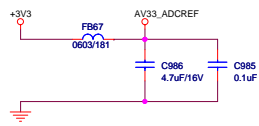
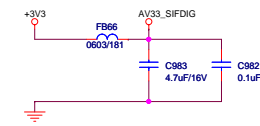
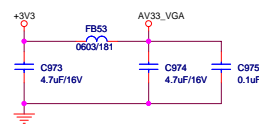
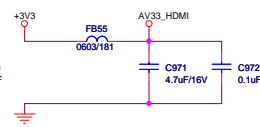
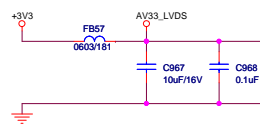
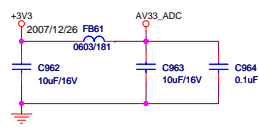
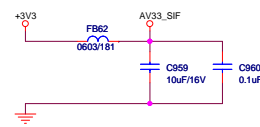
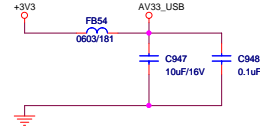
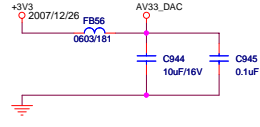
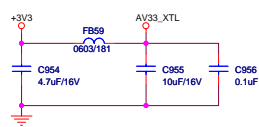
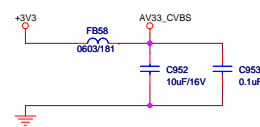
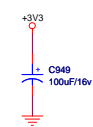
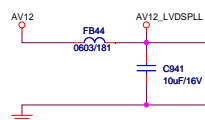
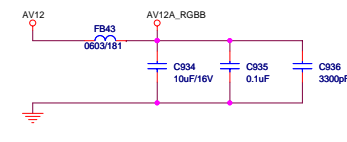
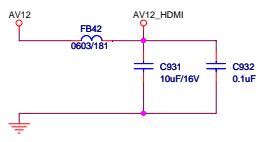
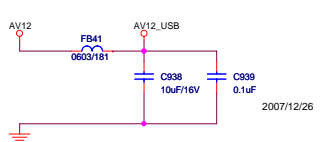
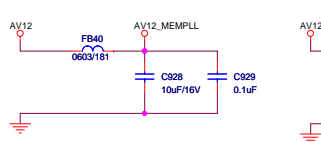
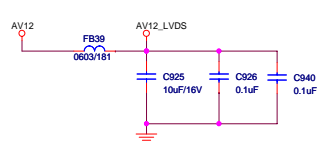
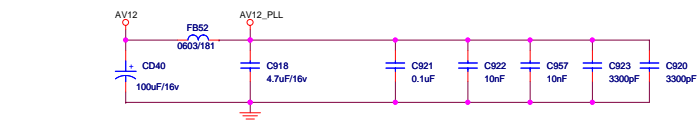
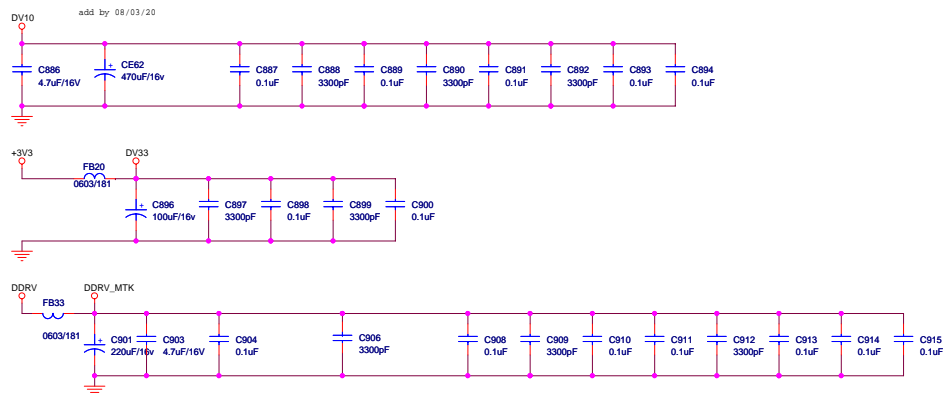
Power LDO

HISENSE_MT8222
2008/1/25

Jiu.Ni



(Bypass CAPs arround MT8222)

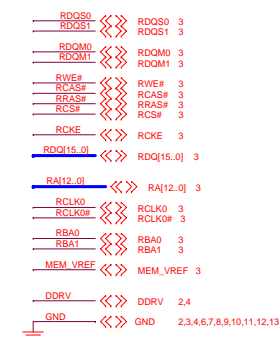
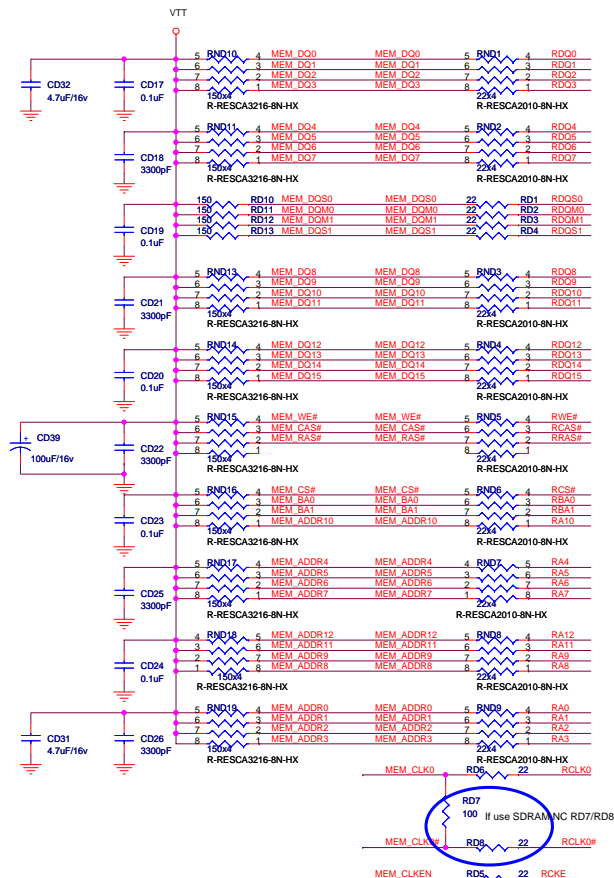
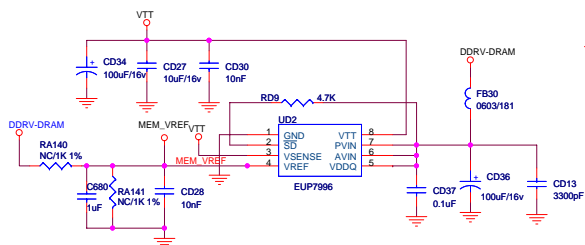
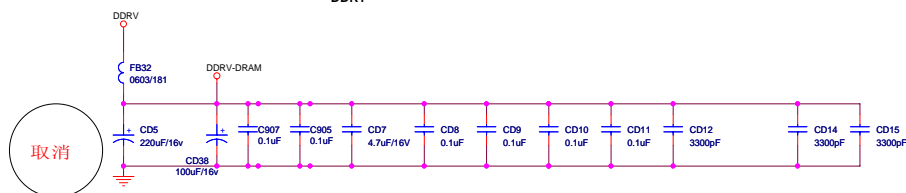


MT8222 Bypass CAPs

HISENSE_MT8222
2008/1/25

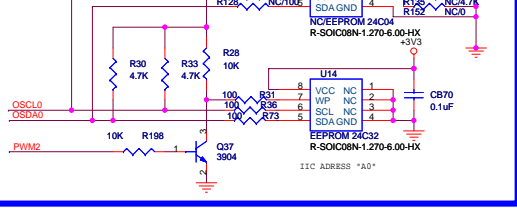
Jiu.Ni

4、MT8222主芯片旁路电容部分电路

[illegible]

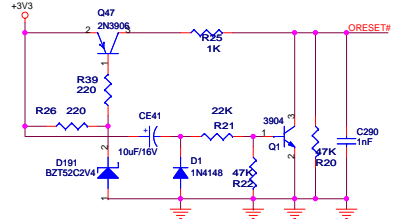
DDR1 DRAM

System E2PROM

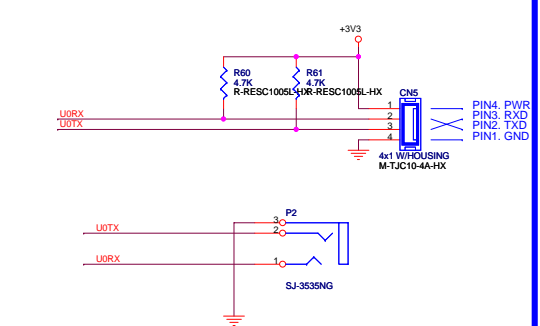


System Reset#

上电和掉电都应该产生低电平复位。

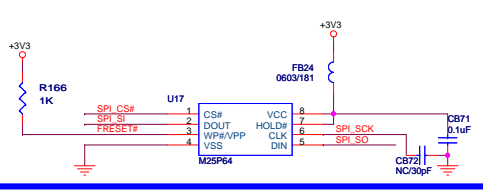


1st UART IF
(For Code download and Debug)



Serial Flash

位置尽量靠近8222，附近若有IO需要串磁珠并且避让，EMC问题



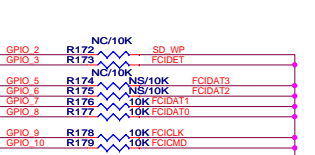
MT8222 Trapping

Status	ICE	AOBCLK	AOLRCK	Description
Normal	0	0	0	Normal operation ST/SST flash
TEST_JCE	1	0	0	ICE mode
TEST_CFUM	1	0	1	Used in simulation and pattern generation
TEST_SCAN	1	1	0	Used to generate ATPG test patterns
OLT_MODE	1	1	1	OLT mode

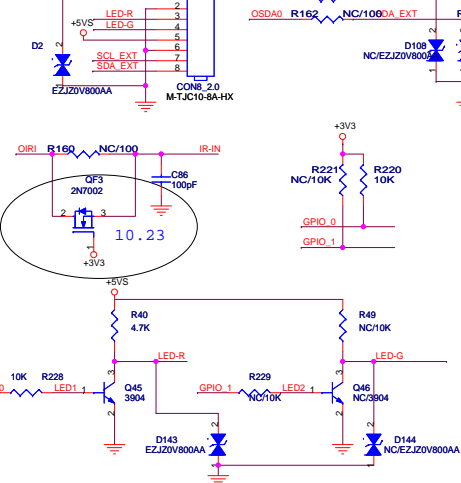
AOSDATA0	Description
0	ST/SST flash
1	ATMEL flash

ADC KEYPAD

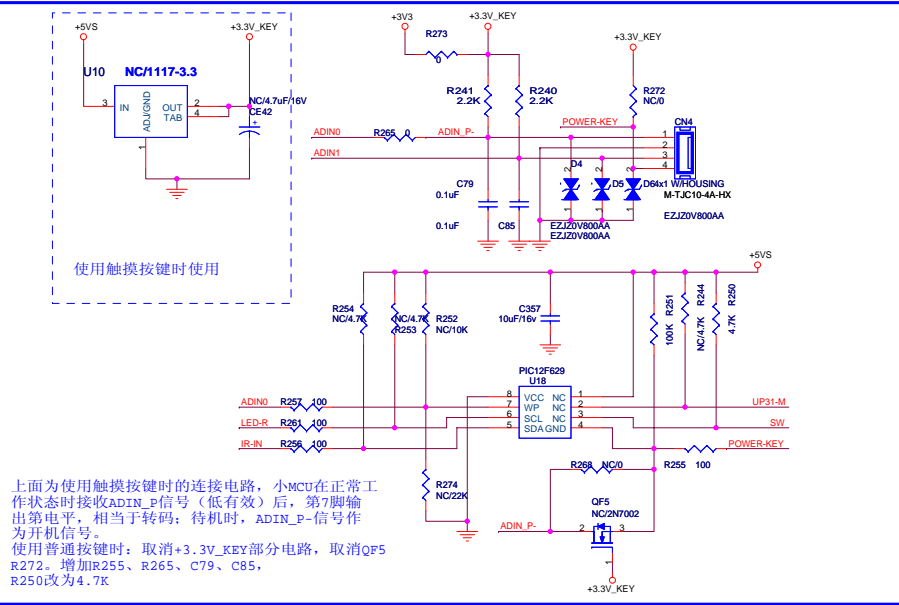
MEMORY CARD I/F GPIO RESERVED



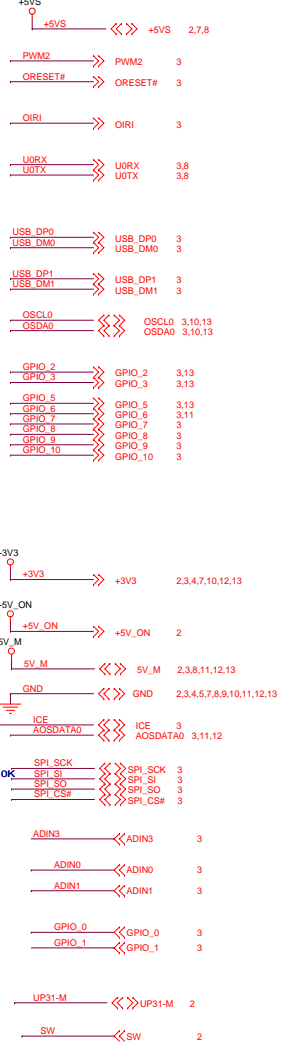
IR



使用触摸按键时使用



上面为使用触摸按键时的连接电路，小MCU在正常工作状态时接收ADIN_P信号（低有效）后，第7脚输出第电平，相当于转码；待机时，ADIN_P-信号作为开机信号。
使用普通按键时：取消+3.3V_KEY部分电路，取消QF5 R272，增加R255、R265、C79、C85，R250改为4.7K



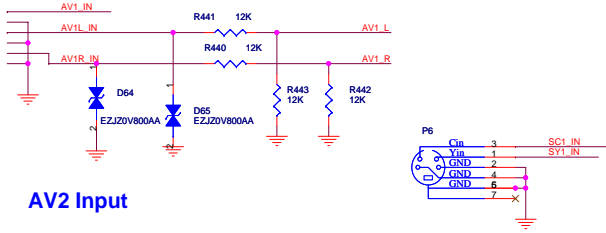
FCI/USB/Flash/Peripheral

HISENSE_MT8222

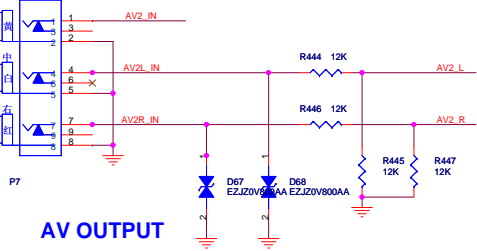
Jiu.Ni

AV1+S-Video1 Input

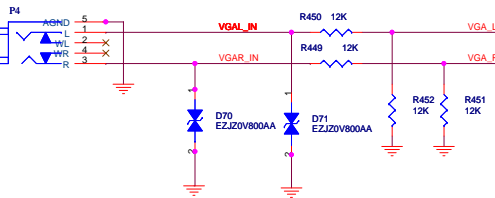
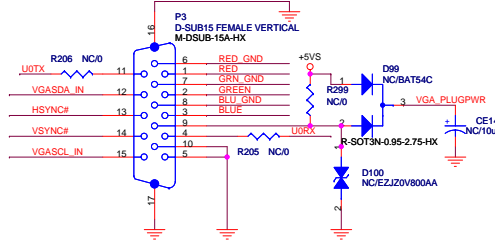
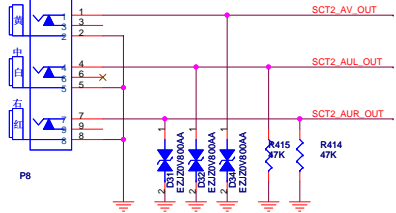
AV1_IN <<> AV1_IN 9
AV1L_IN <<> AV1L_IN 9
AV1R_IN <<> AV1R_IN 9



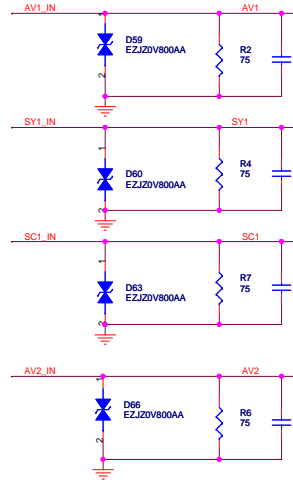
AV2 Input



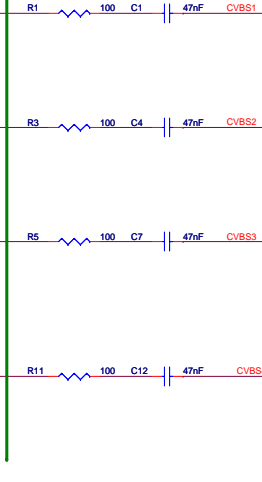
AV OUTPUT



NEAR CONNECTOR



NEAR IC



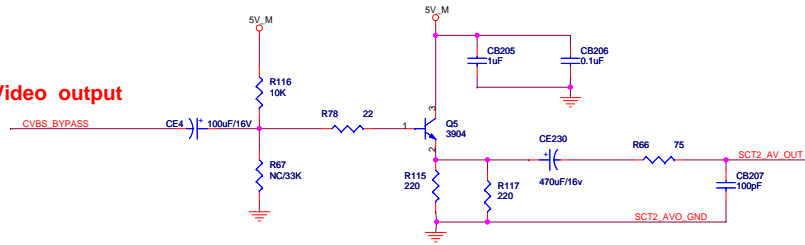
CVBS1 <<> CVBS1 3
CVBS2 <<> CVBS2 3
CVBS3 <<> CVBS3 3
CVBS4 <<> CVBS4 3

GND <<> GND 2,3,4,5,6,7,9,10,11,12,13

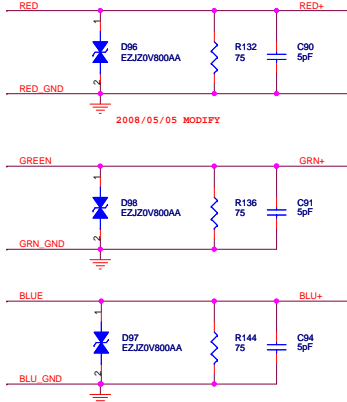
AV1_L <<> AV1_L 11
AV1_R <<> AV1_R 11
AV2_L <<> AV2_L 11
AV2_R <<> AV2_R 11

+5VS <<> +5VS 2,6,7
5V_M <<> 5V_M 2,3,6,11,12,13
SCT2_AUR_OUT <<> SCT2_AUR_OUT 12
SCT2_AUL_OUT <<> SCT2_AUL_OUT 12
CVBS_BYPASS <<> CVBS_BYPASS 3

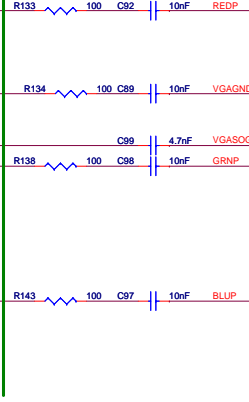
Video output



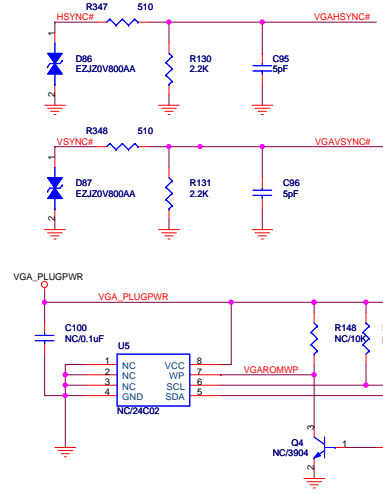
NEAR CONNECTOR



NEAR IC



增加电容



+5V_ON <<> +5V_ON 2
VGASOG <<> VGASOG 3
REDP <<> REDP 3
VGAGND <<> VGAGND 3
GRNP <<> GRNP 3
BLUP <<> BLUP 3
VGAHSYNC# <<> VGAHSYNC# 3
VGA_VSYNC# <<> VGA_VSYNC# 3
ADIN2 <<> ADIN2 3,7
+3V3 <<> +3V3 2,3,4,6,7,10,12,13

VGASCL_IN <<> VGASCL_IN 3
VGASDA_IN <<> VGASDA_IN 3

VGA_L <<> VGA_L 11
VGA_R <<> VGA_R 11
U0TX <<> U0TX 3,6
U0RX <<> U0RX 3,6

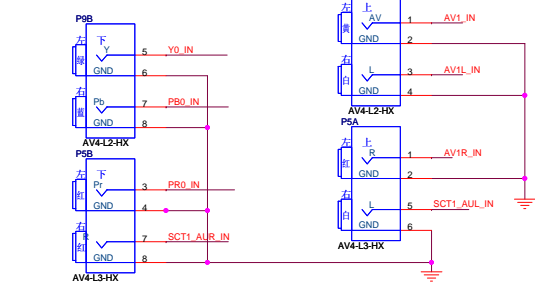
8、AV/S端子/VGA接口及外围匹配网络部分电路

CVBS/ S-Video / VGA

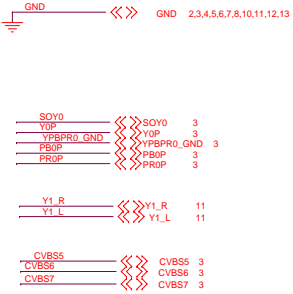
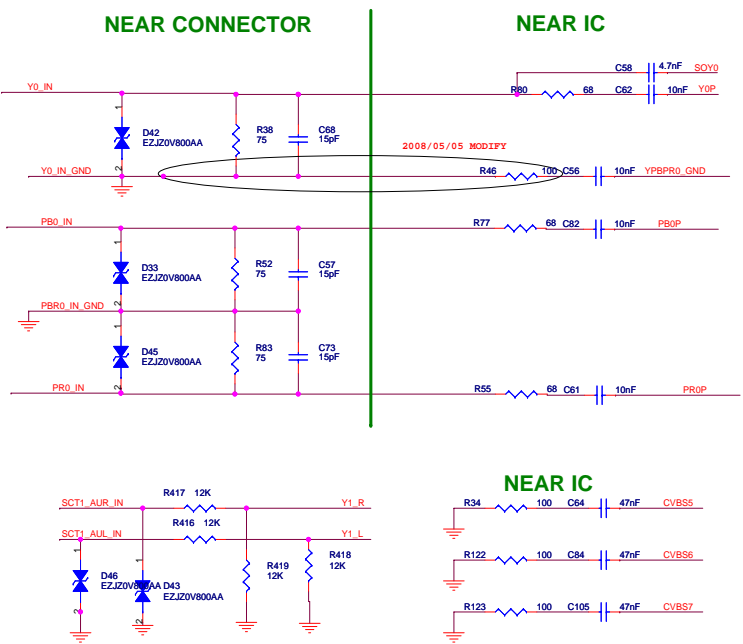
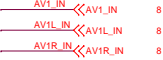
HISENSE_MT8222
2008/11/25

Jiu.Ni

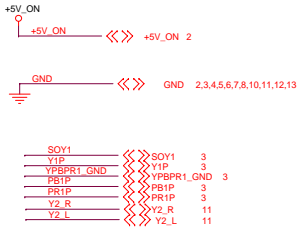
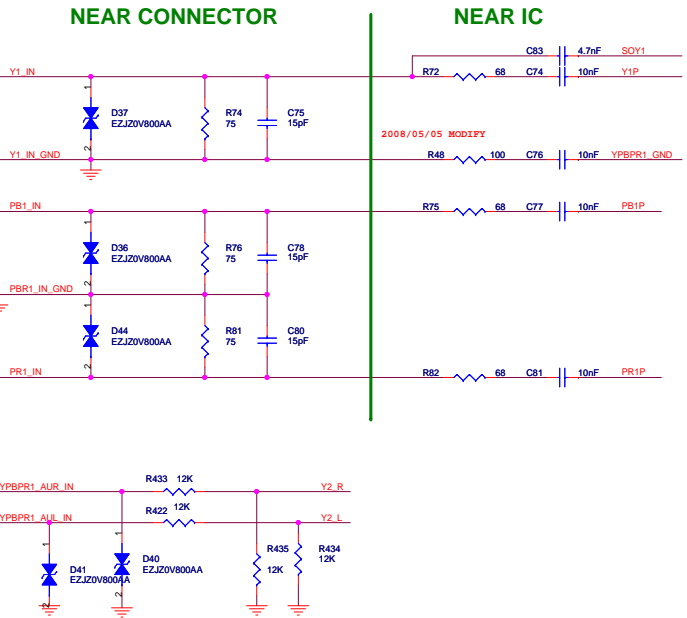
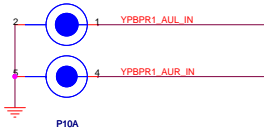
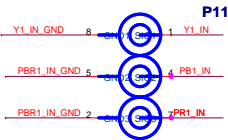
YPbPr0 port



AV1 Input



YPbPr1 port



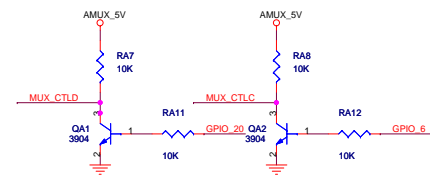
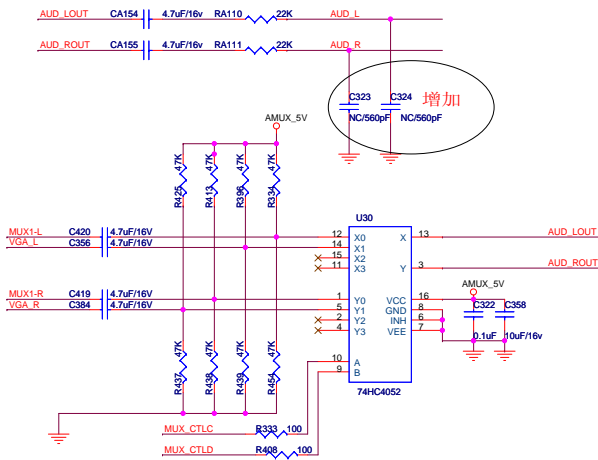
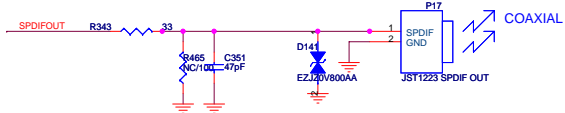
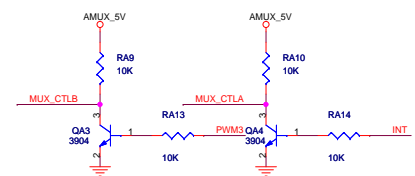
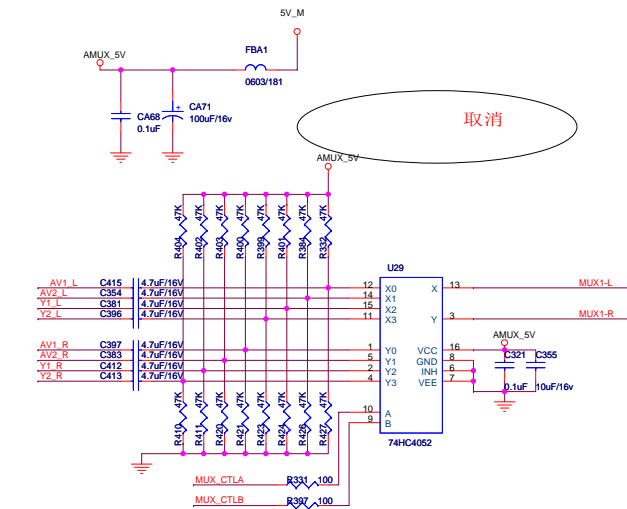
9、AV1/YPbPr接口及外围匹配网络部分电路

YPbPr

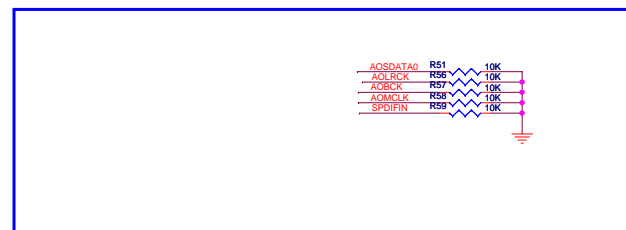
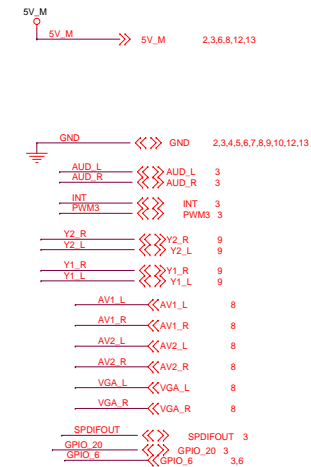
HISENSE_MT8222

2008/1/25

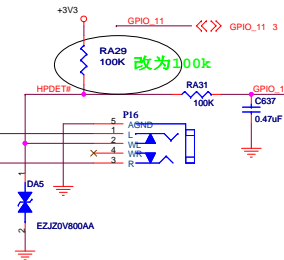
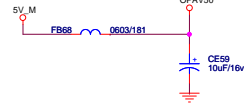
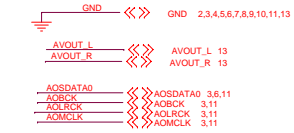
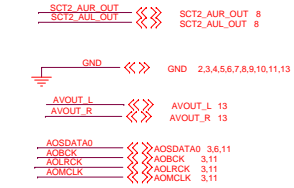
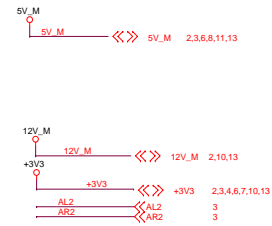
Jiu.Ni

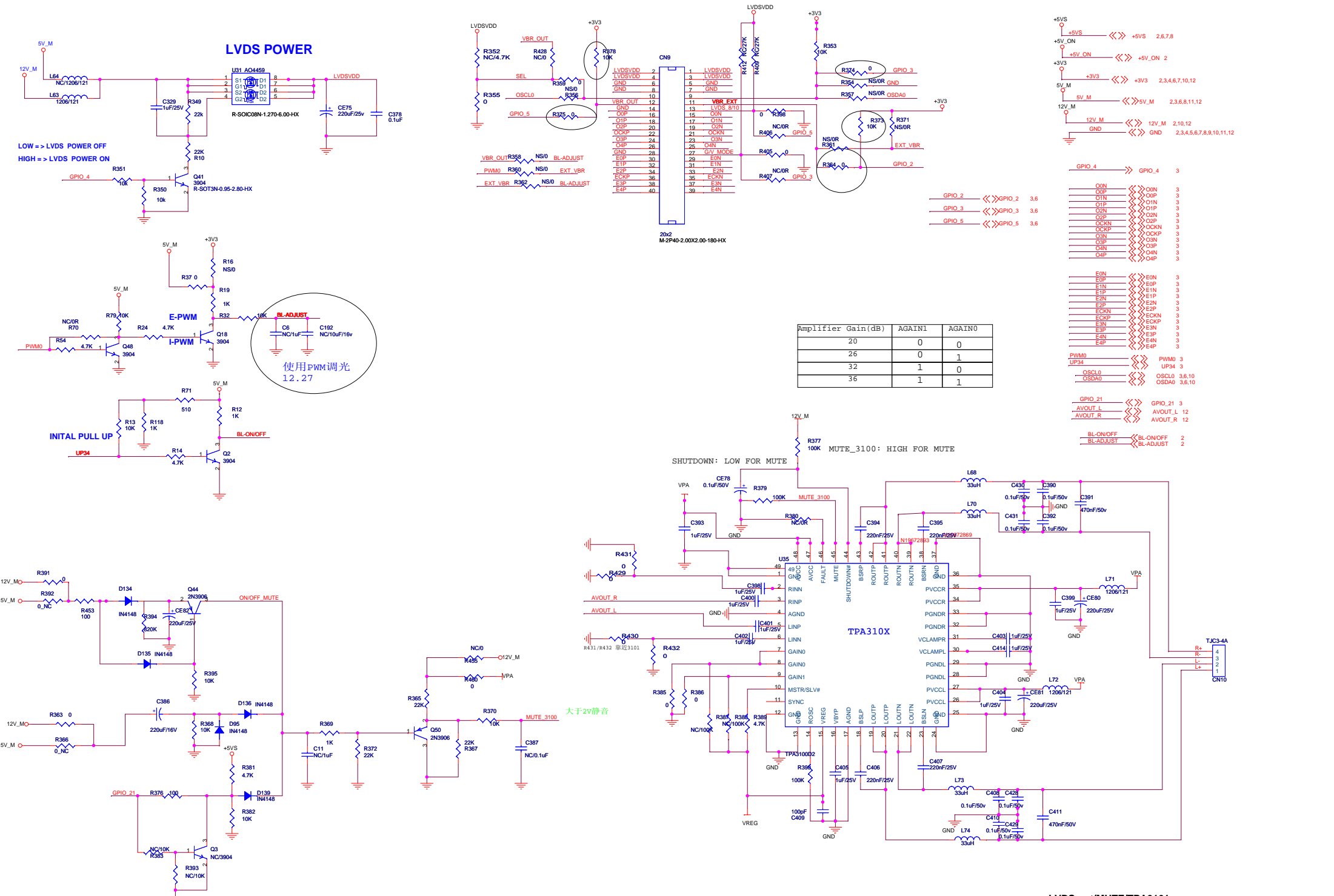


PWM3	INT	GPIO_20	GPIO_6	AUDIO OUTPUT
1	1	1	1	AV1_OUT
1	0	1	1	AV2_OUT
0	1	1	1	YPBR1_OUT
0	0	1	1	YPBR2_OUT
X	X	1	0	VGA_OUT
X	X	0	1	MICPHONE_OUT
X	X	0	0	RESERVE



11、音频切换及光纤输出部分电路





13、液晶屏供电切换、LVDS接口、伴音功放及静音控制部分电路

LVDS out/MUTE/TPA3101

LTA320AP02
1018
P8BF
8CAD210I0K S13

RSAG7.820.1672/ROH VER.F

TLM32V86K/N3Z1
1038000 300
XuGuang Tech Co
8 2 1 0 0 5 1
1DQ-6F1/W116H/R0H
1TD32M5TCN0B0 3P4LTF1006

QC LABEL
1018
P8BF
8CAD210I0K S13

CXA02

LS03881
94U-D ACH-2

