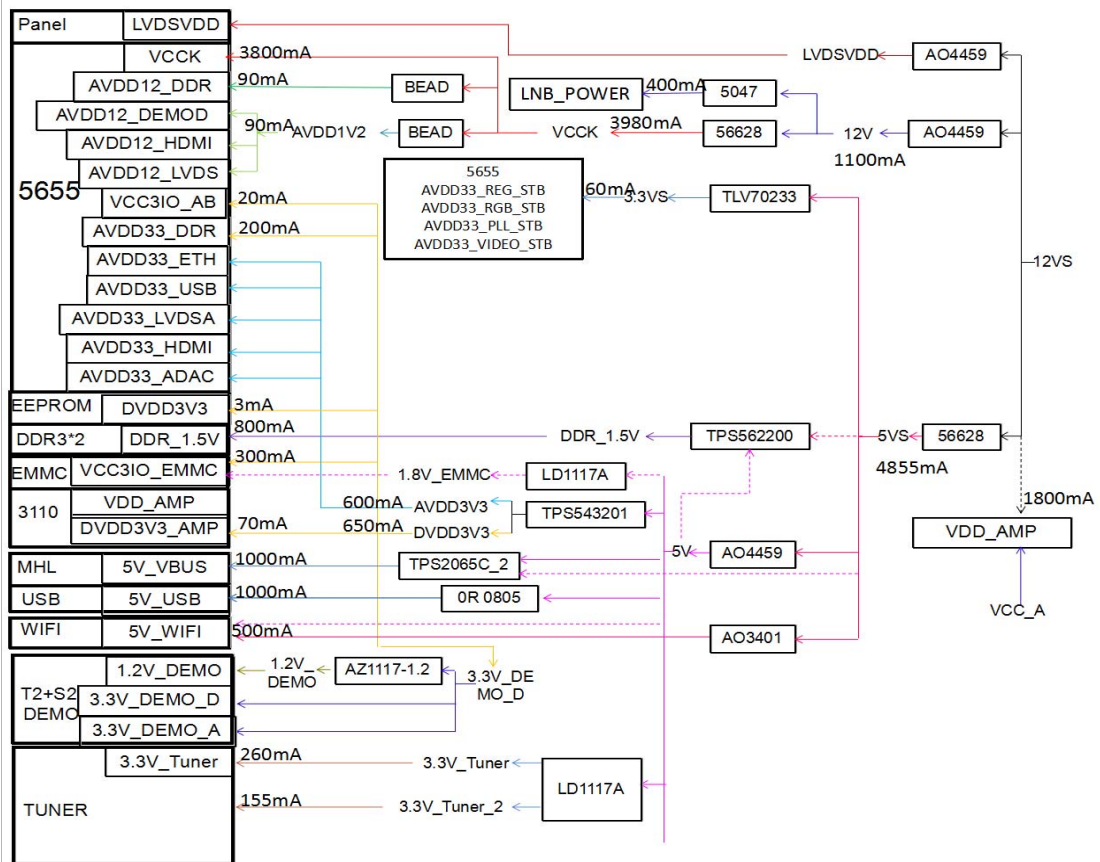


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D				D
C				C
B				B
A				A
5	4	3	2	1

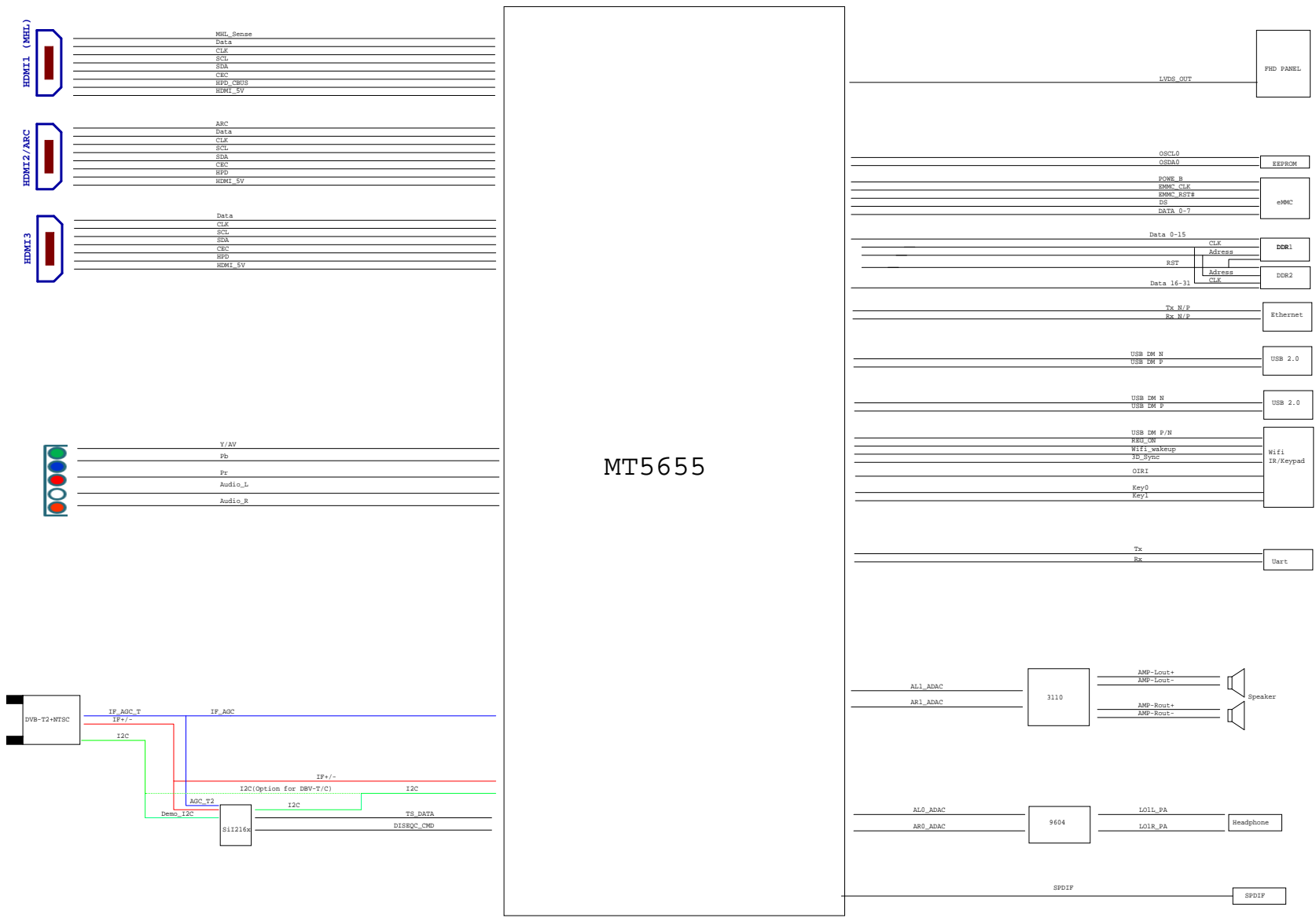
Hisense Electric Co.,LTD		
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POWER TREE



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Block Diagram



GPIO LIST

[illegible]

PIN NAME	Function define	GPIO Function
ADIN0_SRV	SCART_FS	SCART_FS
ADIN1_SRV	KEY_PAD	KEY_PAD0
ADIN2_SRV	Headphone Detect	HP_DET
ADIN3_SRV	MHL Over Current Protect	MHL_OC
ADIN4_SRV	KEY_PAD	KEY_PAD1
ADIN5_SRV	Enable AMP_MUTE	AMP_MUTE
ADIN6_SRV	Enable ANT power	ANTPWR_ON
ADIN7_SRV	Enable panel I2C	PANEL_I2C_WP

PIN NAME	Function define	GPIO Function
OPCTRL0	Wifi Reset	REG_ON
OPCTRL1	Wifi detect	WIFI_DEV_wake
OPCTRL2		
OPCTRL3	Strapping	Strap[3]
OPCTRL4	LED PWM	LED_0
OPCTRL5	HP_SWITCH	HP_SWITCH
OPCTRL6		
OPCTRL7	Wifi Power Enable	WAKEUP_PWR_EN
OPCTRL8	LVDS Power Control	LVDS_PWR_EN
OPCTRL9	Audio Mute	MUTE_CTL
OPCTRL10	Backlight Control	BL_ON/OFF
OPCTRL11	MHL_PWR_EN	MHL_PWR_EN
OPCTRL12	DRAM Standby Power Control	FB_PWR_EN

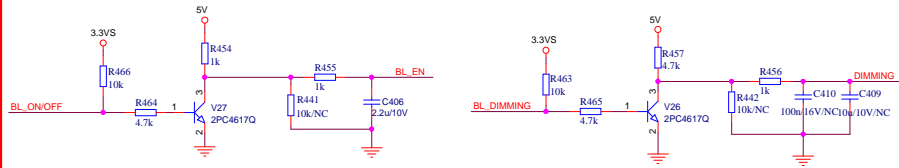
PIN NAME	Function define	GPIO Function
LED_PWM0	Strapping	Strap[1]
LED_PWM1	Strapping	Strap[2]

PIN NAME	Function define	GPIO Function
OPWM0	SYSTEM EEPROM write protect	SYS_EEPROM_WP
OPWM1	Backlight DIMMING	BL_DIMMING
OPWM2	TUNER SWITCH	SW_TUNER

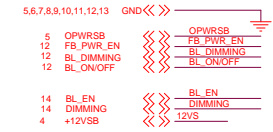
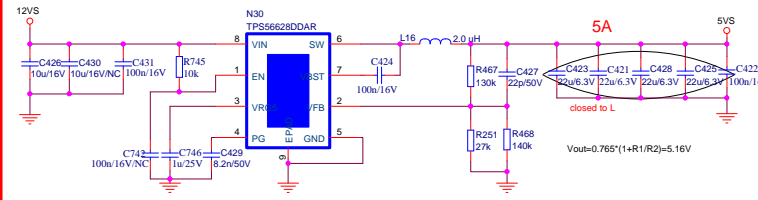
PIN NAME	Function define	GPIO Function
TCON0		POL
TCON1		OE
TCON2		CPV
TCON3		VGH_CTL
TCON4		STV
TCON5		TP
TCON6		PT_EN
TCON7		

TCON10	LNB interrupt	LNB_OC
TCON11	DisEqc status sense	DISEQC_CMD
TCON12	TS error	TS_ERR

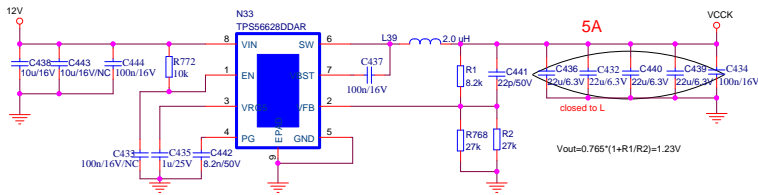
PSU Control



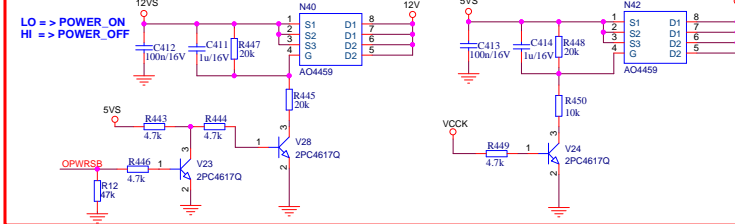
12V-->5VS



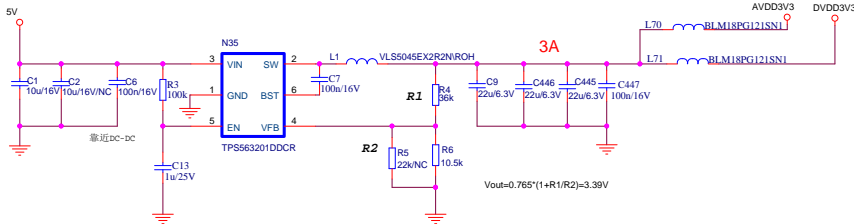
Core Power 1.0V



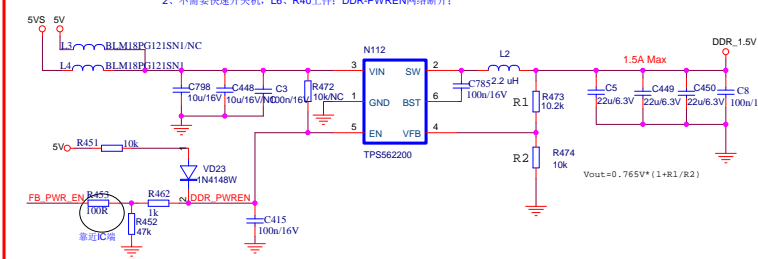
POWER SWITCH



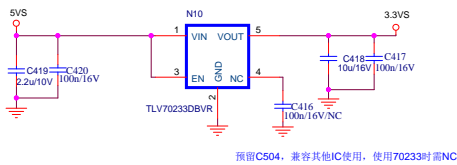
POWER DVDD3V3/AVDD3V3



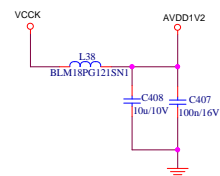
DRAM Power



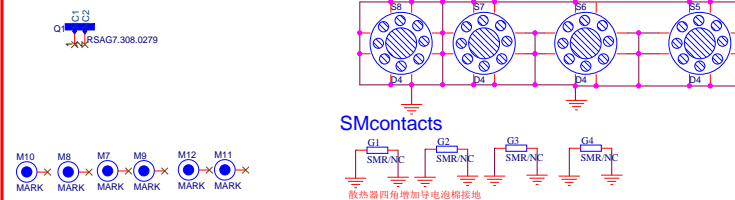
STANDBY POWER 3V3SB

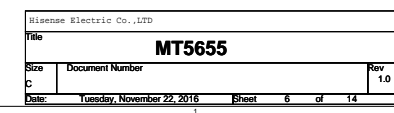
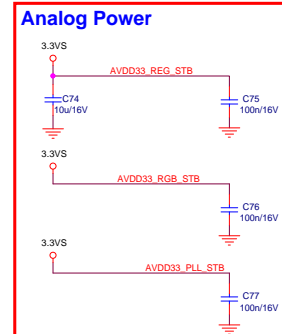
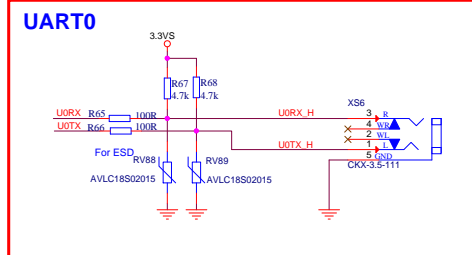
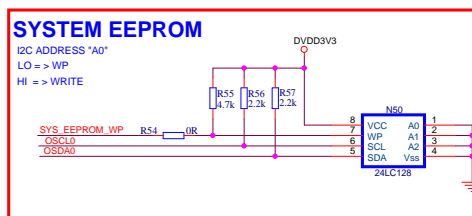


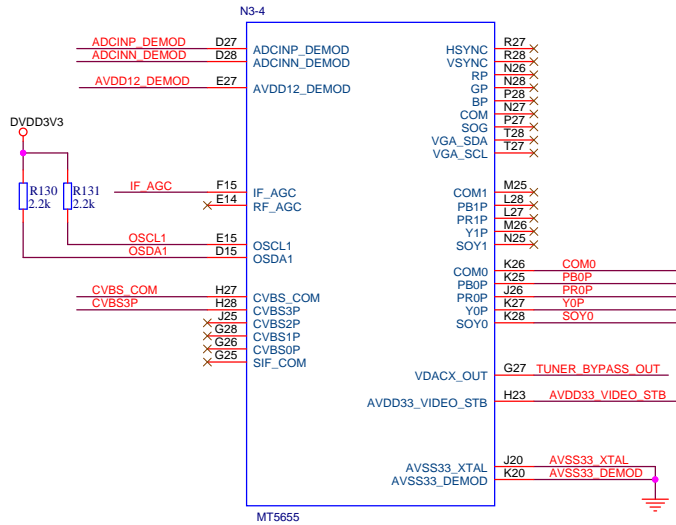
AVDD1V2



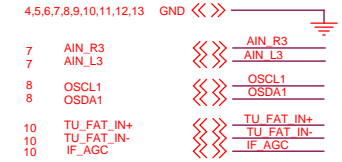
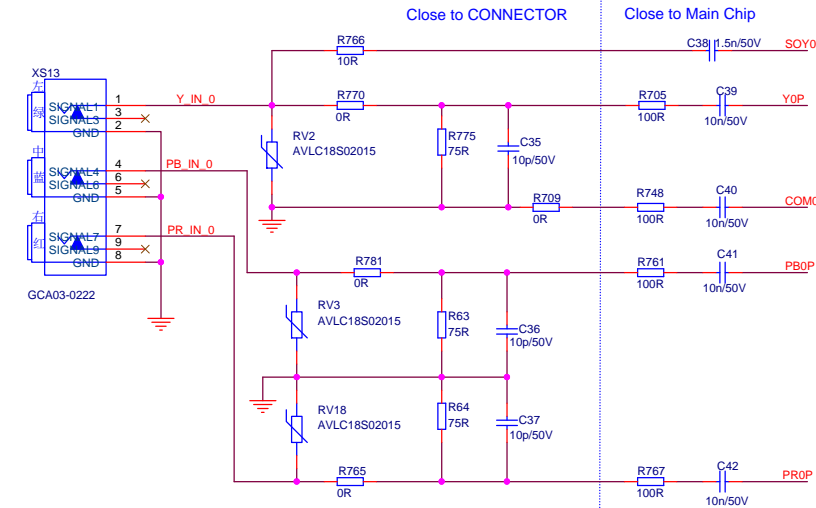
散热器贴N3(主芯片)上



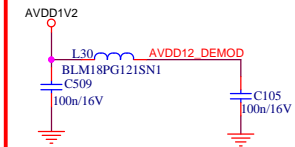




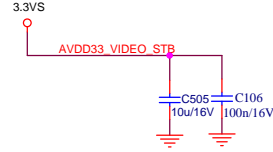
COMP INPUT



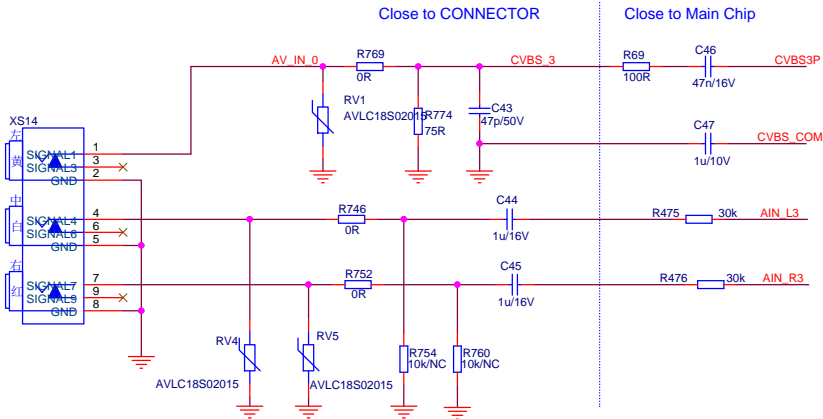
Analog Power 1V2



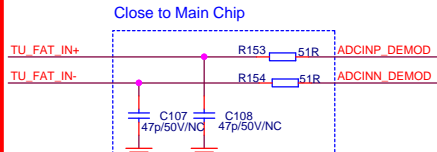
Analog Power 3V3



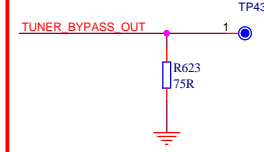
AV & AUDIO INPUT



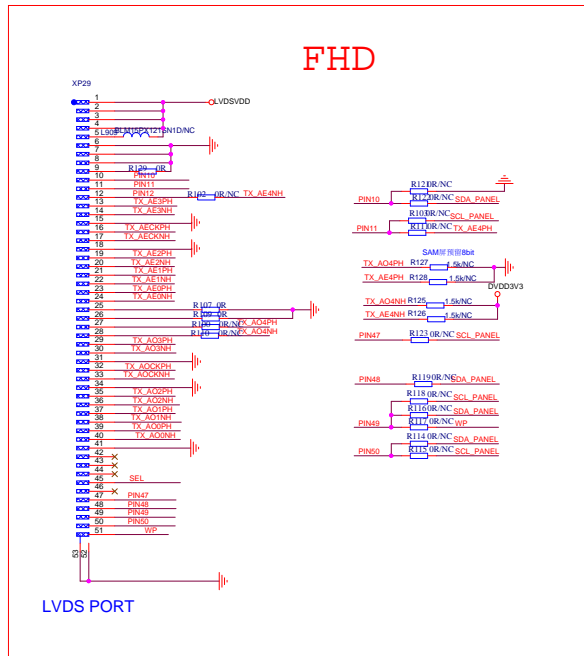
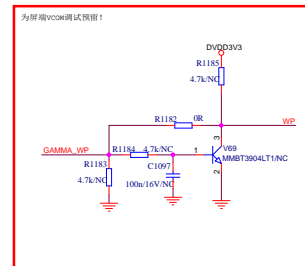
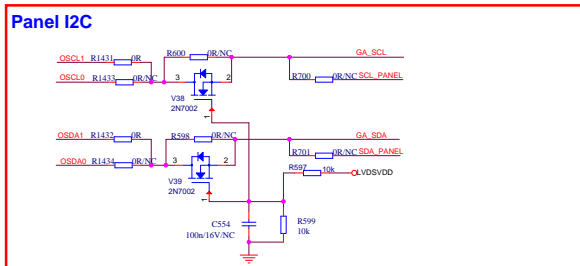
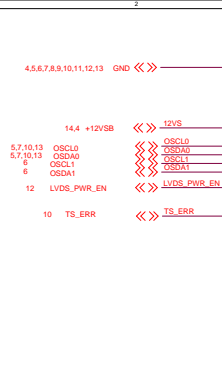
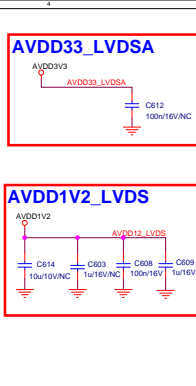
TUNER INPUT

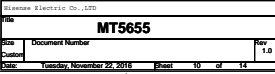


CVBS OUT



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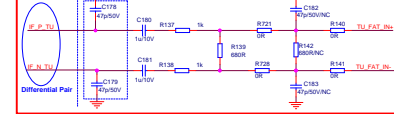
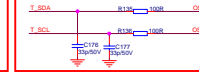
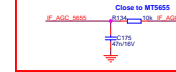
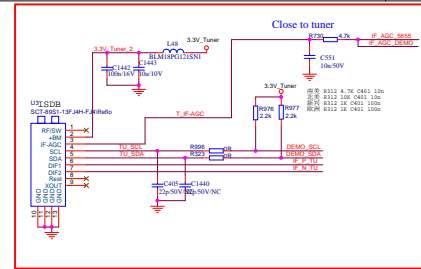




The schematic diagram illustrates the internal circuitry of the STM32F072T8C6 microcontroller. It shows the connection between the chip's pins and external components:

- Power Supply:** The VDD pin is connected to a 3.3V regulator output. The VSS pin is connected to ground.
- I2C Interface:** The SDA and SCL pins are connected to a 10k pull-up resistor to the 3.3V supply.
- UART Interface:** The TXD and RXD pins are connected to a 10k pull-up resistor to the 3.3V supply.
- SPI Interface:** The MOSI, MISO, and SS pins are connected to a 10k pull-up resistor to the 3.3V supply.
- Other Pins:** Various other pins are connected to ground or power as specified in the diagram.

A note at the bottom left specifies the I2C address: "I2C address: 0x00".

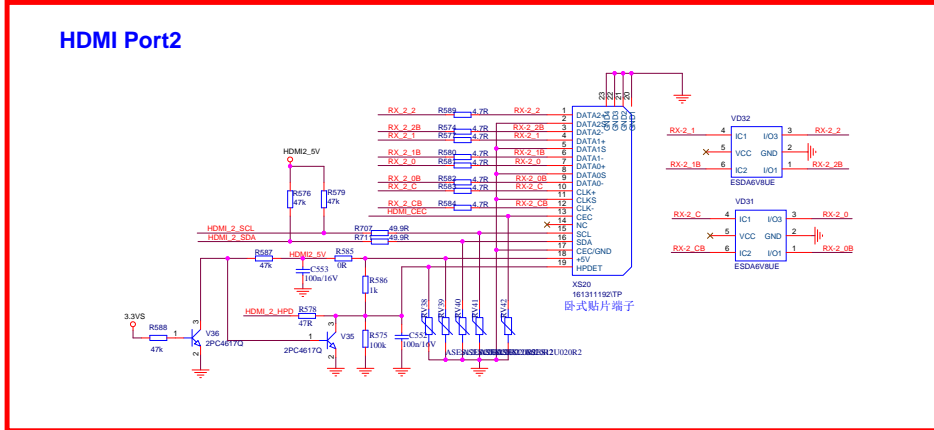
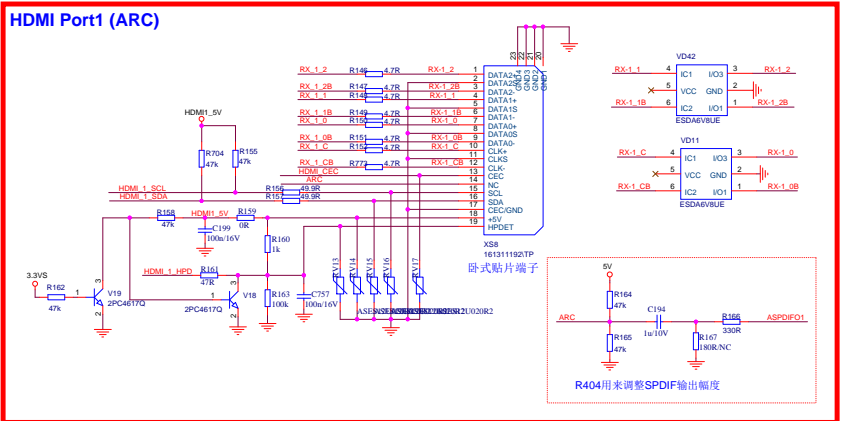
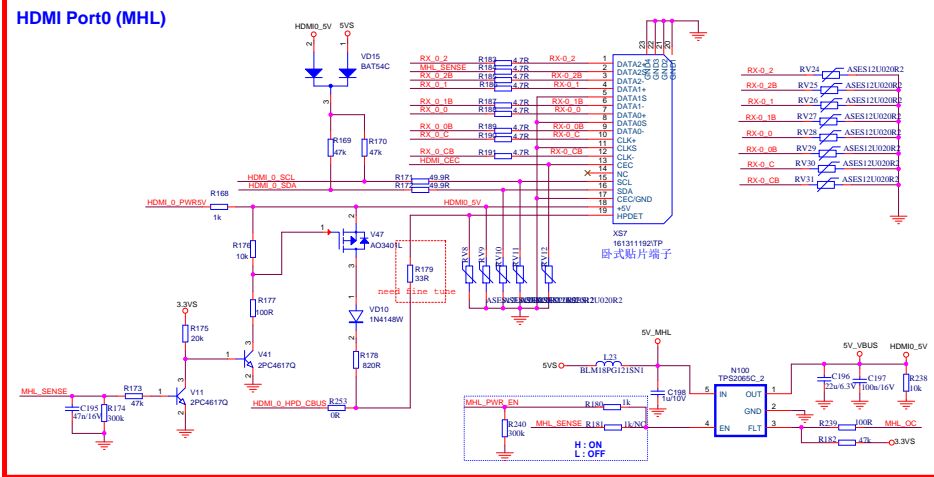
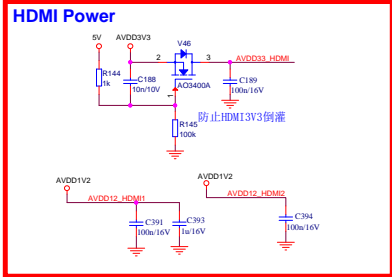
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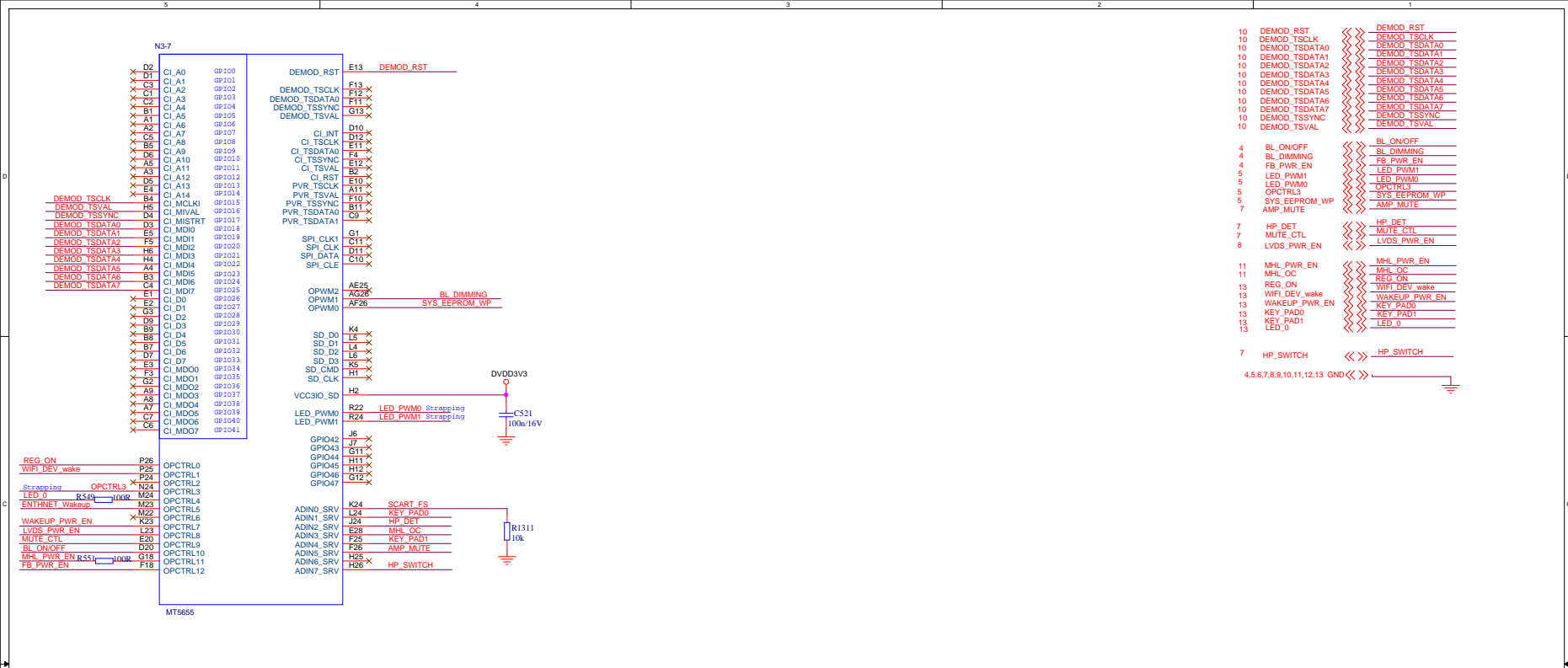
The schematic diagram illustrates the internal circuitry of the EPAD board. Key components include:

- Power Supply Section:** Features two 3.3V DEMO_D regulators providing power to different sections of the board.
- Microcontroller:** An EPAD chip is centrally located, interfaced with various external components.
- Memory and Storage:** Includes a 2724 EEPROM and a 93C46 non-volatile memory device.
- Connectors and I/O:** Shows connections for RS485 communication, RS232 serial interface, and other digital signals.
- Passive Components:** Numerous resistors (e.g., R546, R547, R548) and capacitors (e.g., C700, C701, C500) are used for signal conditioning and decoupling.

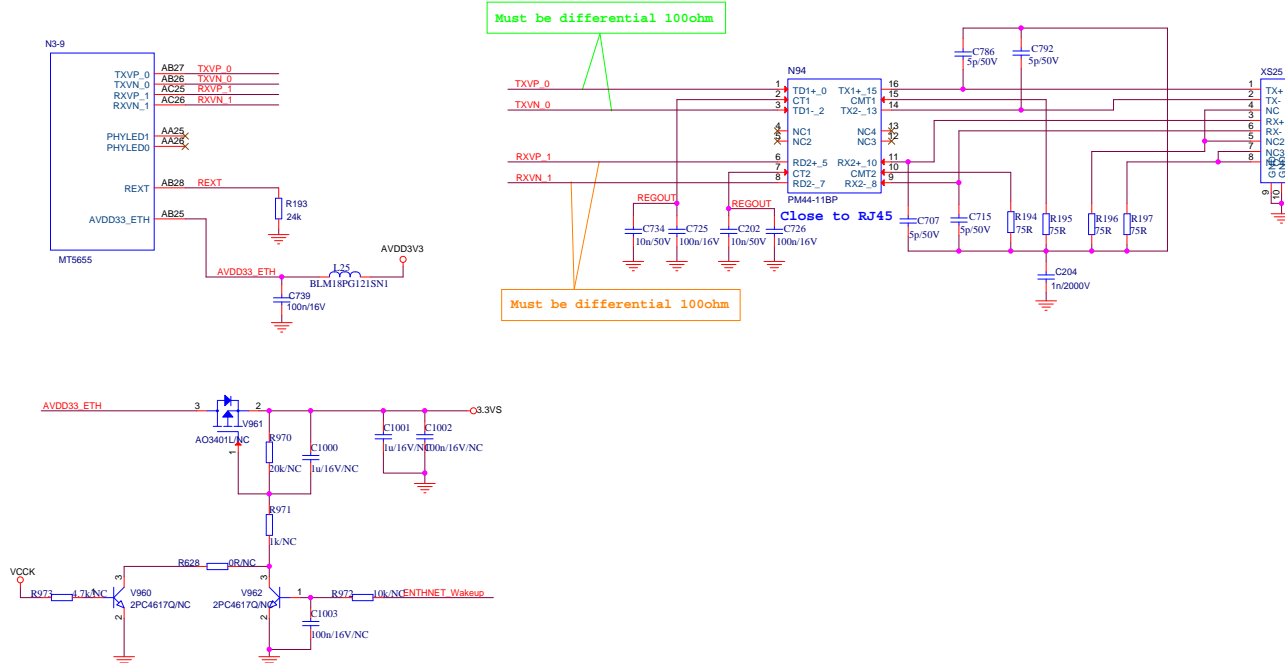
The diagram shows a voltage divider circuit. A 5V input is connected to the VIN pin of an N79 voltage detector. The VOUT pin is connected to a 200k resistor, which is then connected to a 3.3V output. A 100k resistor is connected from the 3.3V output to ground. The N79 is also connected to ground at its other pins. The output is labeled 3.3V_Tester.

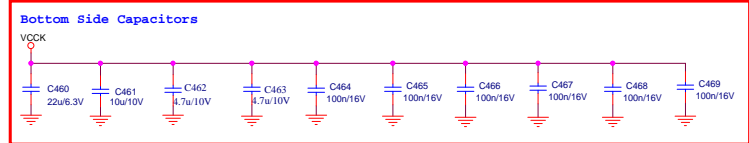
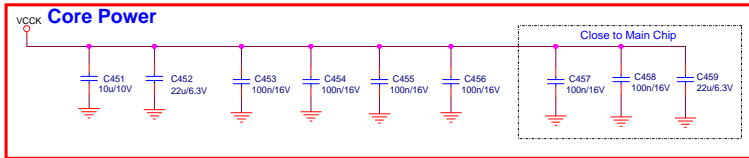
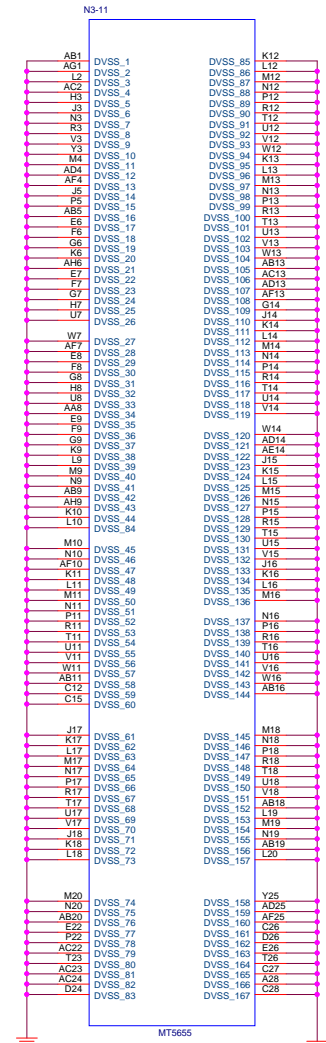
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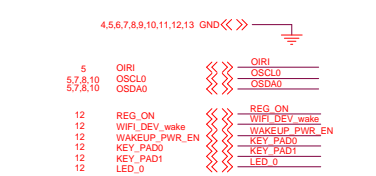
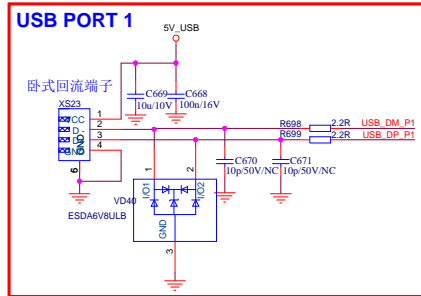
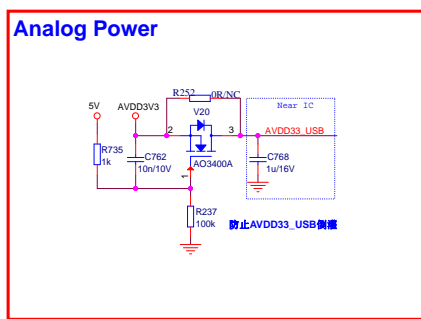
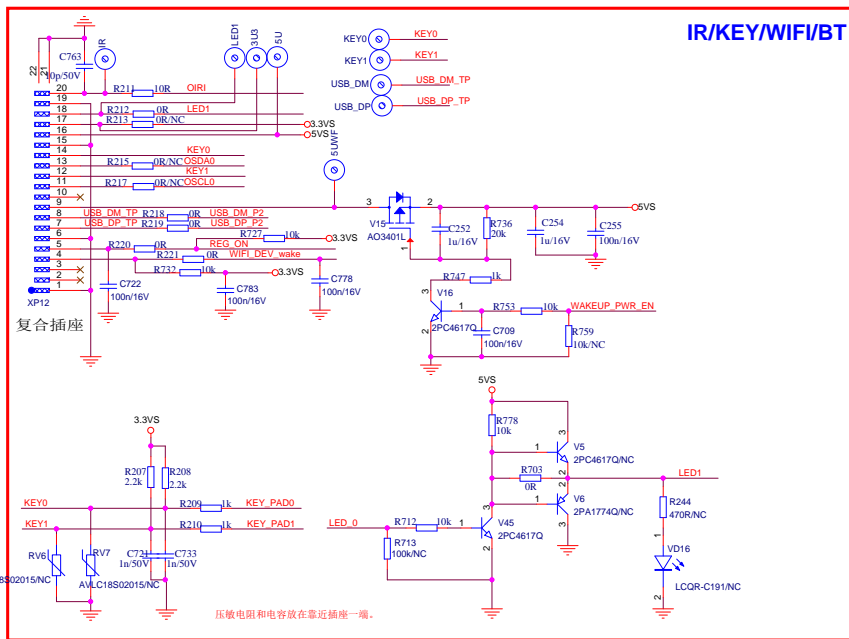
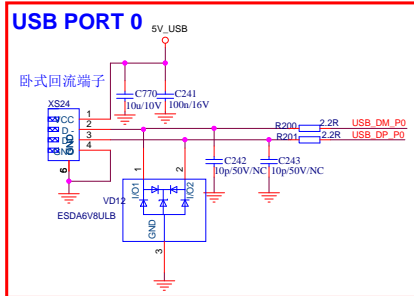
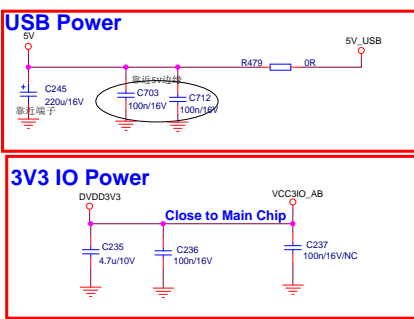


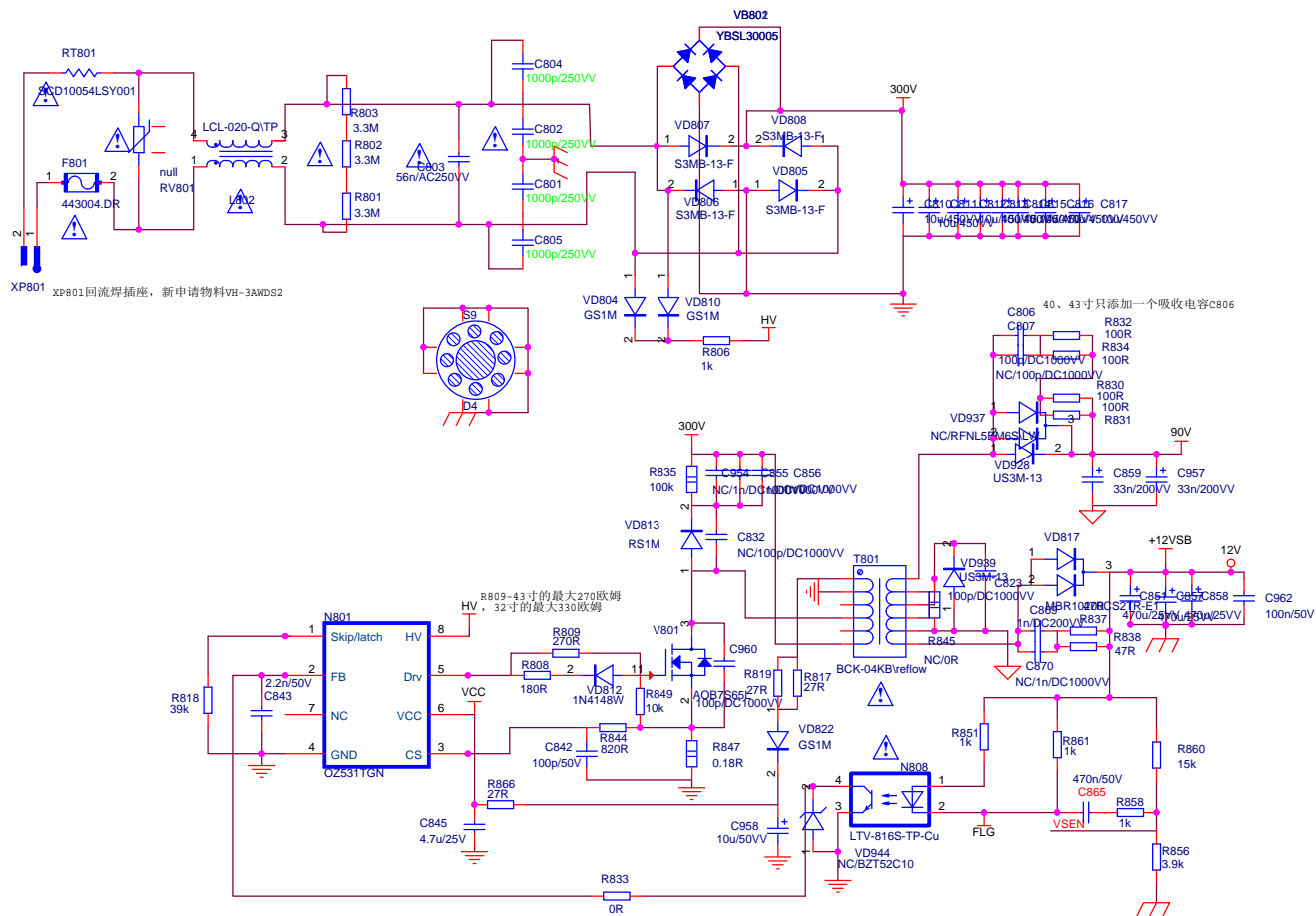
ETHERNET PHY



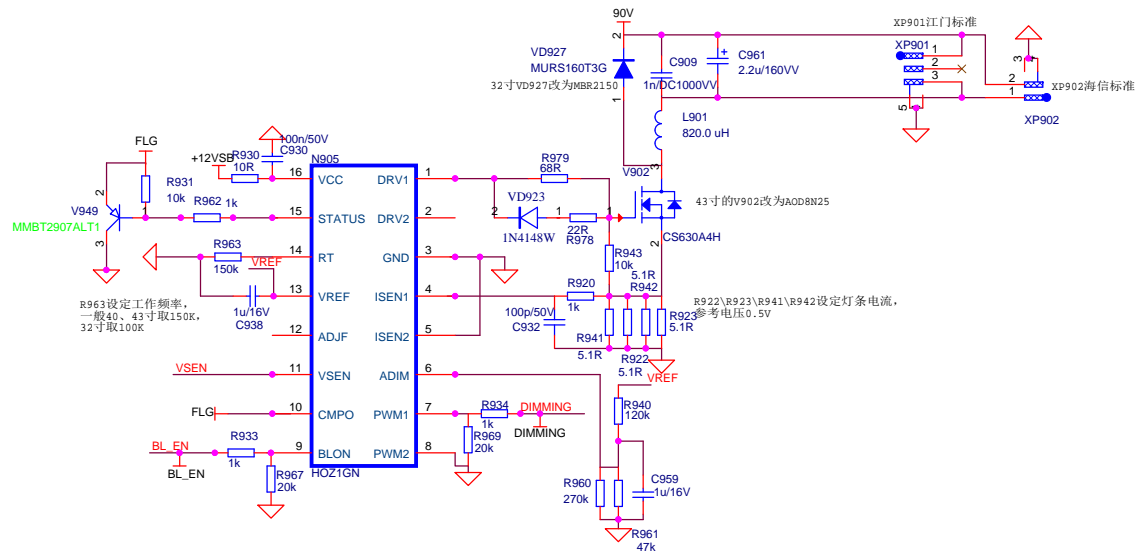
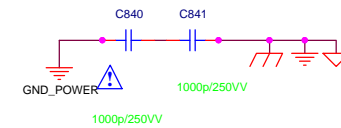
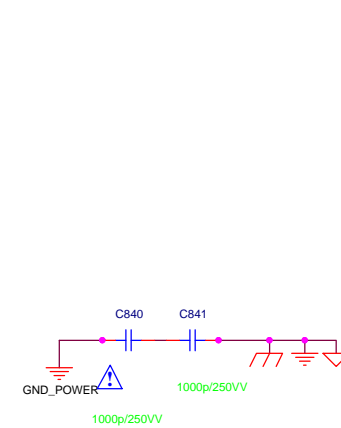


USB_OC_COM Voltage
 = 3.30V : Normal
 = 2.35V : Port 1/3 Over Current (8.2K/(3.3K+8.2K))x3.3
 = 1.94V : Port 2/4 Over Current (4.7K/(3.3K+4.7K))x3.3
 = 1.57V : Port 1/3 and Port 2/4 Over Current ((8.2K/4.7K)/(3.3K+(8.2K/4.7K)))x3.3





1163614 片式瓷介\CC2220-250V-56N-K-X7R\TP\JK\ROH
1162477 片式铝电容\CD125140-450V-10U-M-105\TP\RO
1164371 片式铝电容\CD80105-300V-30J-M-105\TP\ROH
1157653 片式熔断器\443004.DR\4A\250V\TP\JK\ROH
1157646 NTC电阻\SCD10054LSY001\HL\ROH
1165074 直插压敏电阻\TVR10621KSAR263V\TP\ROH
1157903 片式铝电容\CD125140-350V-10U-M-105\TP\RO
1155911 片式铝电容\CD100105-25V-470U-M-105\TP\RO
1159051 续流电感\LGPA-12080P-252M\TP\ROH
1161793 片式铝电容\CD125140-200V-33U-M-105\TP\RO



4,5,6,7,8,9,10,11,12,13 GND <<>>

4 +12VSB
4 BL_EN
4 DIMMING

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