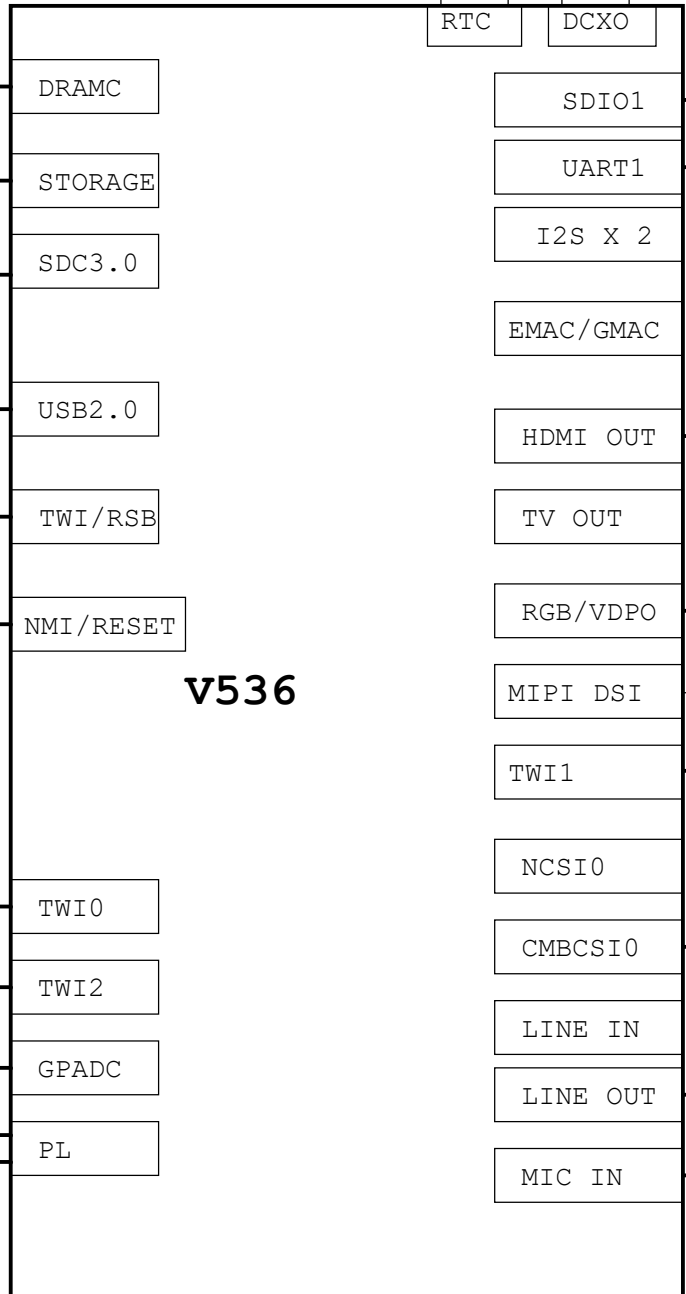


BLOCK

32.768KHz 24MHz



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Design Name		
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Size	Page Name	Rev
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REVISION HISTORY

Revision	Description	Date	Drawn	Checked
Ver 0.1	Initial Version	2018-08-07	WJW	
Ver 0.2	Changelist	2018-09-07	kJW	
Ver 1.0	1、AUDIO 输入C124电容改为100nF 2、CARD增加预留开关 3、运放电源管脚到滤波电容之间增加R408 1R电阻或120R磁珠，提高抗静电能力 4、VDD-CPUS增加预留对地C339 2.2uF 0402 5、HDMI i2c 串接电阻改为33R	2019-01-02	ZQ	

Schematics Index:

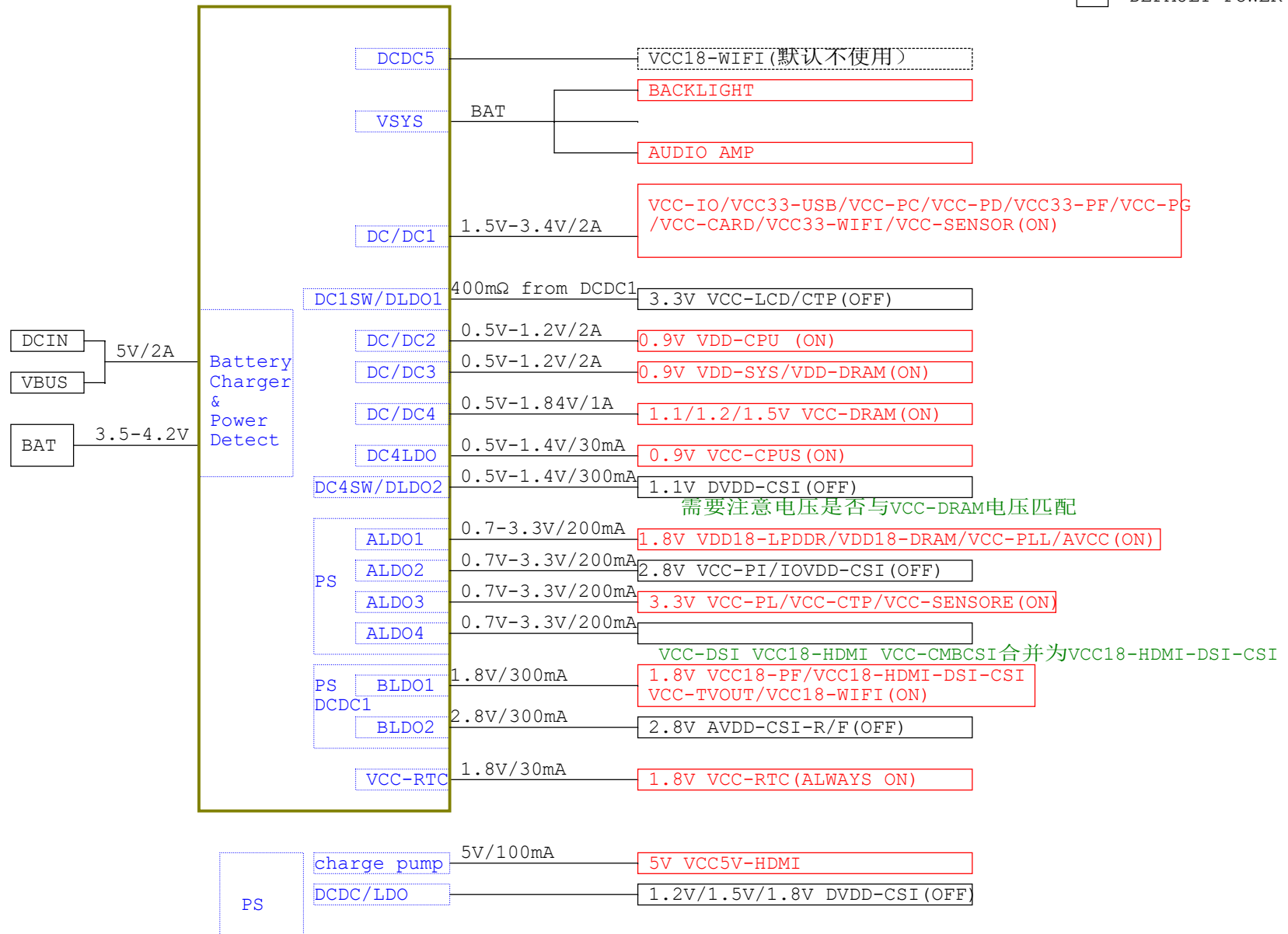
- P01: REVISION HISTORY
- P02: BLOCK
- P03: POWER TREE
- P04: GPIO ASSIGNMENT
- P05: POWER_AXP2101
- P06: CPU
- P07: PE/PF/PG/PH/PL
- P08: DDR3_16X1
- P09: NOR
- P10: CARD
- P11: AUDIO
- P12: LCD/CTP
- P13: HDMI
- P14: COMBO CSI
- P15: KEY/GYRO/SUB
- P16: WIFI

Ver 1.0	1、VCC33-WIFI VCC-PG 由DCDC5改为DCDC1供电 2、VCC18-WIFI 由ALDO4改为BLDO1供电， 3、VCC18-WIFI 预留DCDC5 供电，提高效率	2019-01-17	ZQ	
Ver 1.0	1、删掉ALDO4电容，删掉VBACKUP电容，删掉DCDC4SW电容 2、BLDOIN网络名改为DCDC1 3、删掉FEL 测试点，PCB注意删掉过孔 4、HDMI i2c 串接电阻改为100R 5、BLDOIN 输入电容CP21改为2.2uF 6、PMU页部分2.2UF电容由0603封装改为2.2uF-0402封装 7、PMU 6PIN和7PIN CP12和CP14合并一个4.7uF 0603封装 8、PMU 6PIN和7PIN CP2和CP10合并一个4.7uF 0603封装	2019-01-21	ZQ	
Ver 1.0	1、删掉PC口R76电阻 2、删掉TV-OUT,改为测试点	2019-01-22	ZQ	

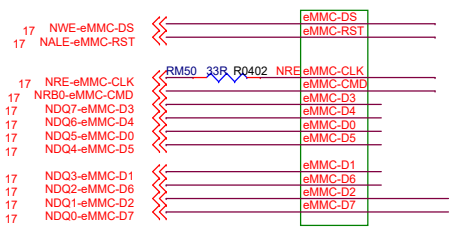
POWER TREE

AXP2101

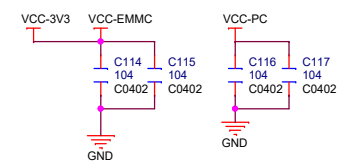
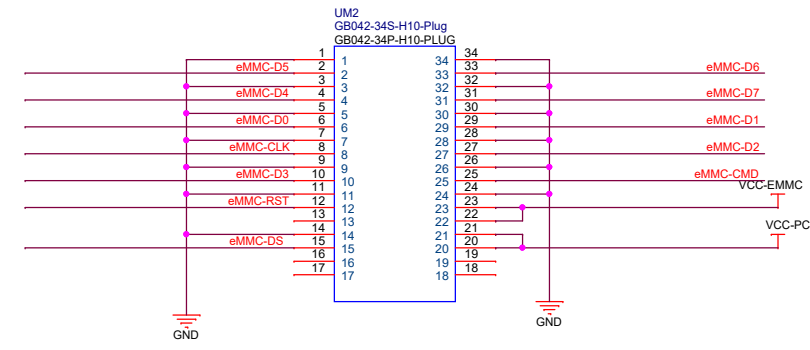
DEFAULT POWER ON
 DEFAULT POWER OFF

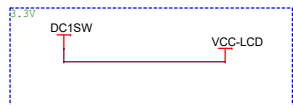
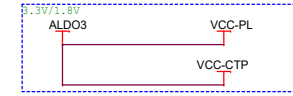
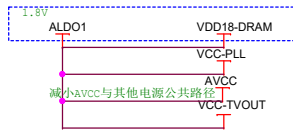
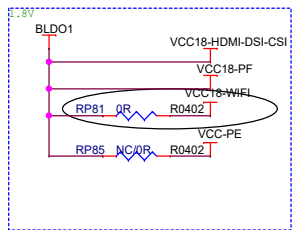
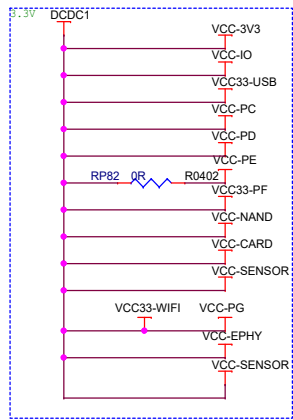


- 1、注意PC口电压
- 2、注意PE口电压
- 3、注意PG口电压
- 4、需要支持USB standby唤醒时，VCC33-USB和VCC-PL合并

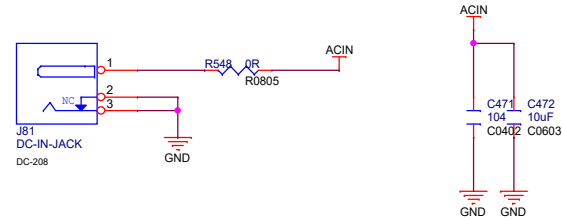


Flash

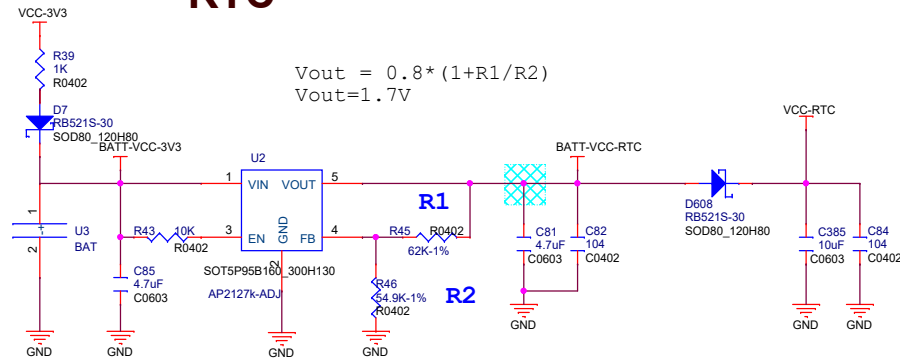




DC-5V



RTC

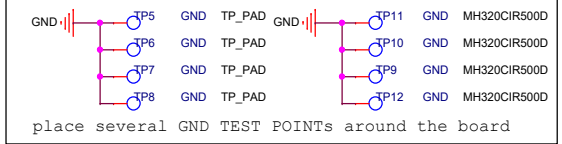
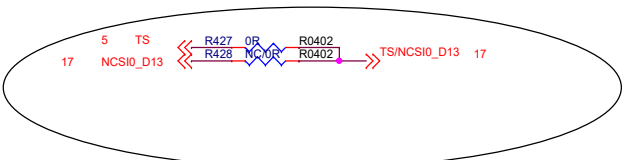
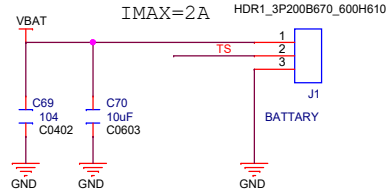


$$V_{out} = 0.8 * (1 + R1/R2)$$

$$V_{out} = 1.7V$$

SINK FROM VINT WHEN PMIC POWER IS PRESENT

BAT



GPIO ASSIGNMENT

注意：修改电路时请注意同步修改GPIO口说明

PIN	Define	CFG	Function
PC0	SPIO-CLK	4	SPI
PC1	SPIO-CS0	4	
PC2	SPIO-MOSI	4	
PC3	SPIO-MISO	4	
PC4	BOOT-SEL-PC4	7	
PC5		7	
PC6		7	
PC7		7	
PC8		7	
PC9		7	
PC10		7	
PC11		7	
PC12		7	
PC13	SPIO-WP	4	
PC14	SPIO-HOLD	4	

PIN	Define 1	CFG	Function
PD0		7	LCD
PD1	LCD-D3	2	
PD2	LCD-D4	2	
PD3	LCD-D5	2	
PD4	LCD-D6	2	
PD5	LCD-D7	2	
PD6	LCD-D10	2	
PD7	LCD-D11	2	
PD8	LCD-D12	2	
PD9	LCD-RST	1	
PD10	LCD-CS	1	
PD11		7	
PD12		7	
PD13		7	
PD14		7	
PD15		7	
PD16		7	
PD17		7	
PD18	LCD-CLK	2	
PD19	LCD-DE	2	
PD20	LCD-HSYNC	2	
PD21	LCD-VSYNC	2	
PD22	LCD-PWM	2	

PIN	Define	CFG	Function
PE0		7	
PE1		7	
PE2		7	
PE3		7	
PE4		7	
PE5		7	
PE6		7	
PE7		7	
PE8		7	
PE9		7	
PE10		7	
PE11		7	
PE12		7	
PE13		7	
PE14		7	
PE15		7	
PE16		7	
PE17		7	
PE18		7	
PE19		7	
PE20		7	
PE21		7	

PIN	Define	CFG	Function
PF0	SDC0-D1	2	CARD0
PF1	SDC0-D0	2	
PF2	SDC0-CLK	2	
PF3	SDC0-CMD	2	
PF4	SDC0-D3	2	
PF5	SDC0-D2	2	
PF6	SDC0-DET	6	


PIN	Define 1	CFG	Function
PG0	WL-SDIO-CLK	2	WIFI
PG1	WL-SDIO-CMD	2	
PG2	WL-SDIO-D0	2	
PG3	WL-SDIO-D1	2	
PG4	WL-SDIO-D2	2	
PG5	WL-SDIO-D3	2	
PG6			
PG7			
PG8			
PG9	I2S2-MCLK	3	AC101S
PG10	I2S2-BCLK	3	
PG11	I2S2-LRCK	3	
PG12	I2S2-DOUT	3	
PG13	I2S2-DIN	3	

PIN	Define	CFG	Function	
PH0	PA-SHDN	1	OLED	
PH1	GY-INT	6		
PH2				
PH3	OLED-RES	1		
PH4	OLED-SA0	1		
PH5	LED-WIFI	1		
PH6	LED-SOS	1		
PH7	UART0-TX	3		UART
PH8	UART0-RX	3		
PH9	TWI2-SCK	5		GYRO
PH10	TWI2-SDA	5		
PH11	TWI1-SCK	5		TP SENSOR
PH12	TWI1-SDA	5		
PH13	TWI0-SCK	5		AC101S/OLED
PH14	TWI0-SDA	5		
PH15	LED-REC	1		

PIN	Define1	CFG	Function
PI0			CSI
PI1			
PI2	CMBCSI0-CSI-MCLK	2	
PI3	CMBCSI0-CSI-RSTN	1	
PI4	CMBCSI0-CSI-PWDN	1	
PI5	CSI-SCK	2	
PI6	CSI-SDA	2	

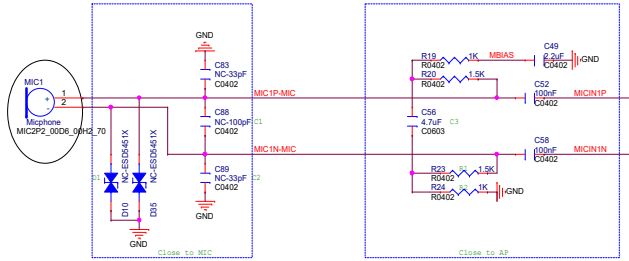
PIN	Define 1	CFG	Function
PL0	RSB-SCK	2	PMIC
PL1	RSB-SDA	2	

PIN	Define 1	CFG	Function	
PL2	CPUS-TX	2	S-UART	
PL3	CPUS-RX	2		
PL4	KEY-OK	7		
PL5	WL-WAKE-AP	6		
PL6	CTP-INT	6		
PL7	CTP-RST	1		
PL8	S-TWI1-SCK	2		
PL9	S-TWI1-SDA	2		
PL10				
PL11	PL11-SYSEN	1		
PL12	WL-PMU-EN	1		
PL13	IRO-RX	2		IRO-RX

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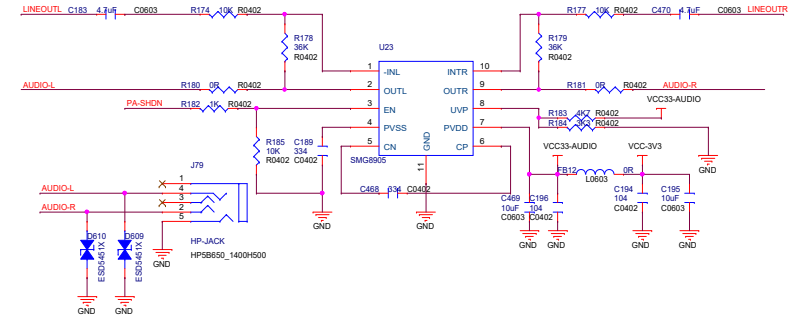
AUDIO

MIC(Electret)

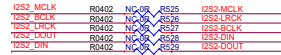
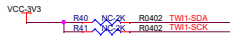
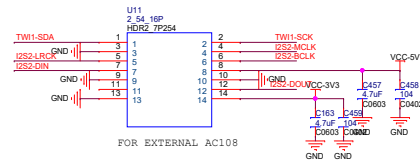


COMPONENT	Differential	Single-ended
R1 R2 C1 C3 D1	USE	NC
2	33pF	0R

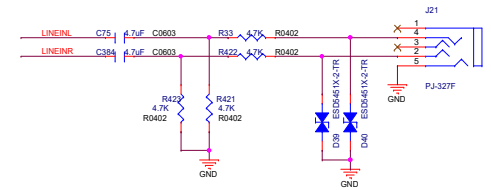
SPEAKER



I2S CONN

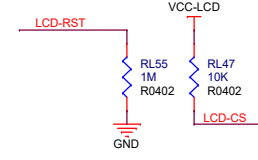
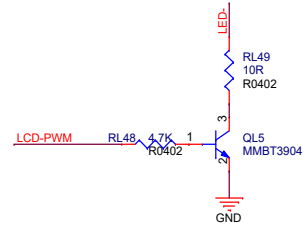
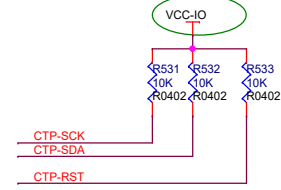
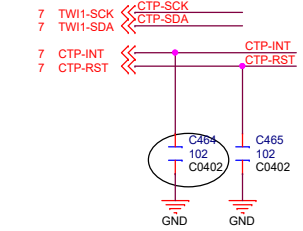
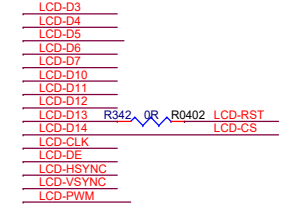
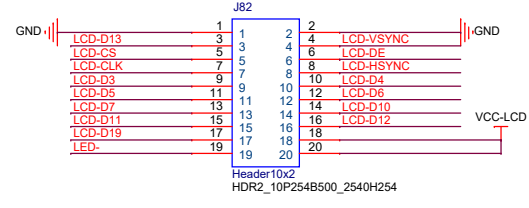
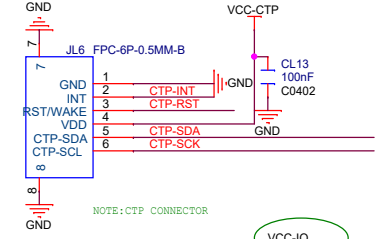
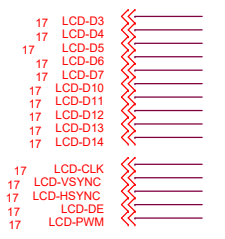


LINE IN

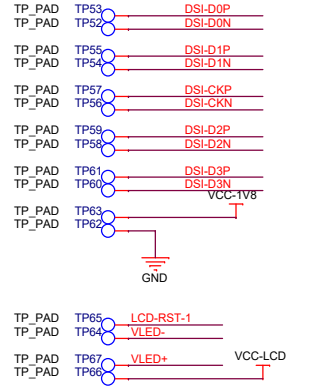
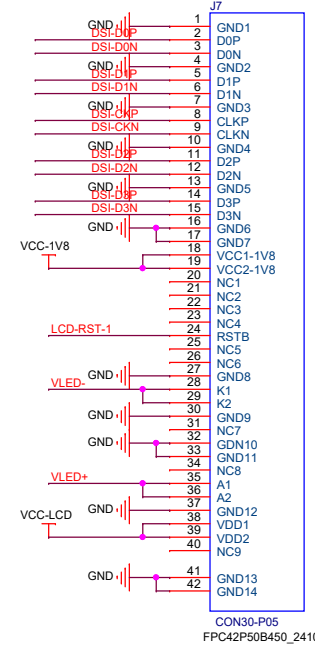
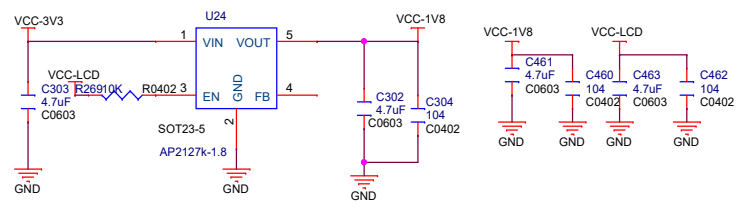
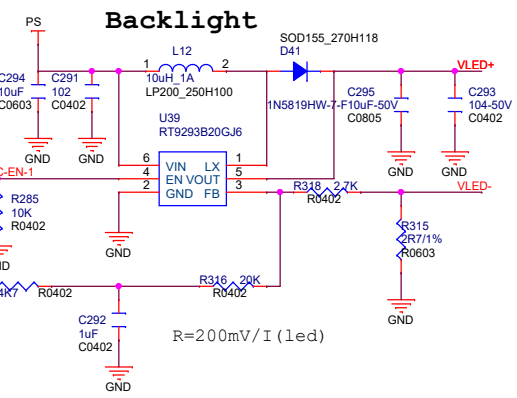
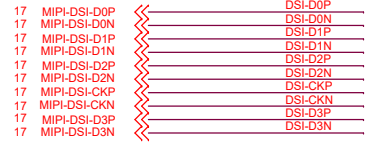


LCD/CTP

CTP CN



MIPI-DSI

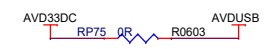
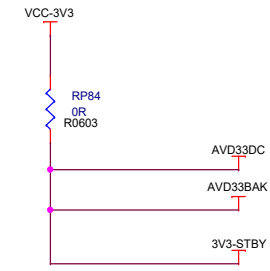


		Linden Tech. Ltd.	
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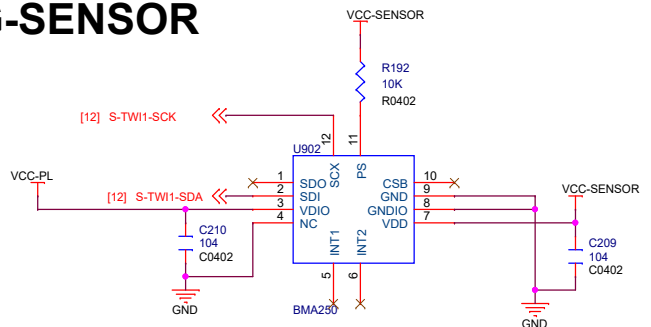
G-SENSOR

12 S-TWI1-SCK <<<
12 S-TWI1-SDA <<<

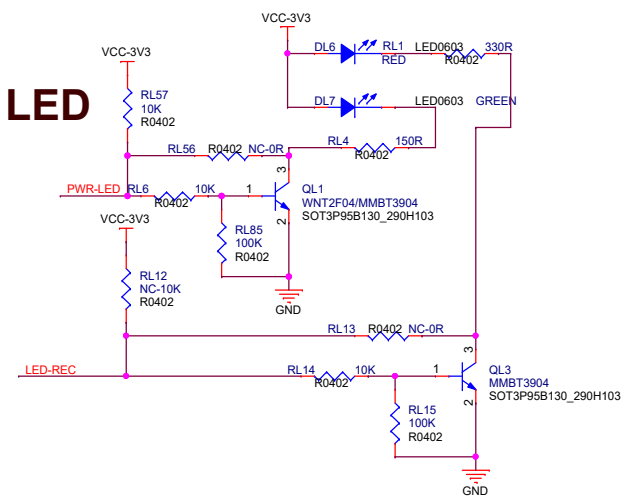
7 PWR-LED <<< PWR-LED
7 LED-REC <<< LED-REC



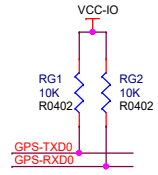
7 GPS-RESETN# >>> GPS-RESETN
7 UART4_TX >>> GPS-RXD0
7 UART4_RX >>> GPS-TXD0



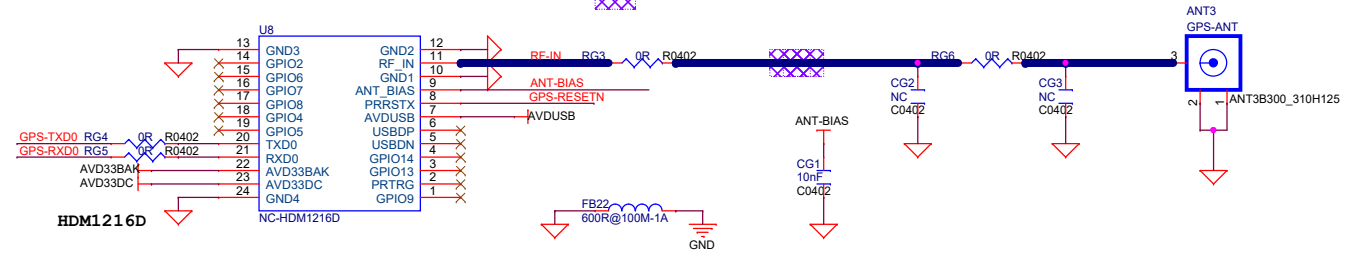
LED



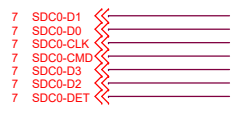
GPS



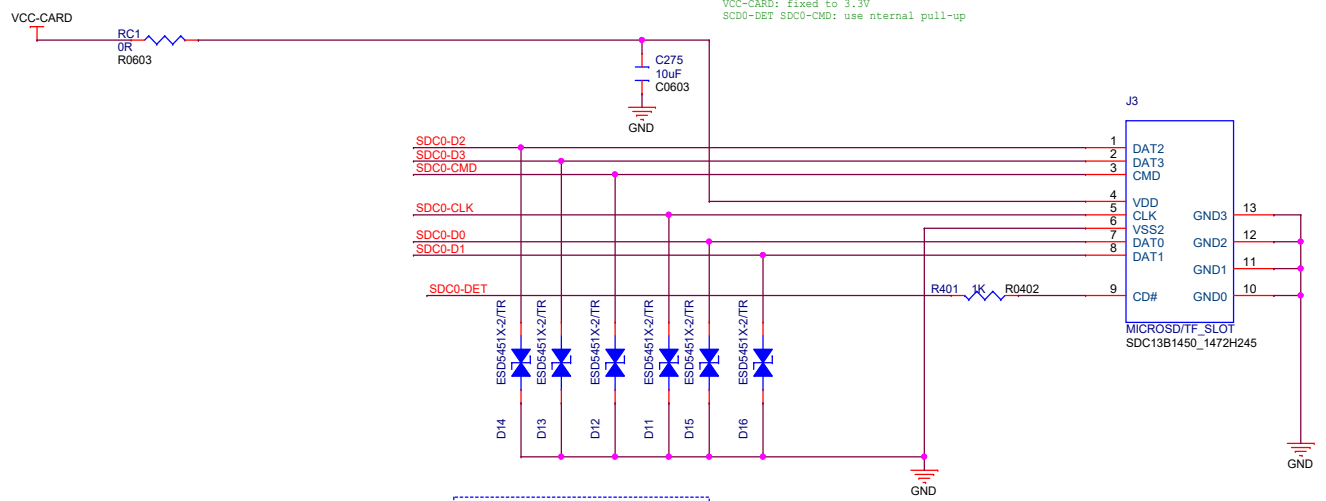
50 Ohm RF trace
50 ohm



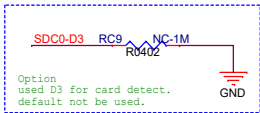
CARD



VCC-CARD

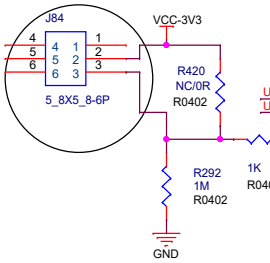
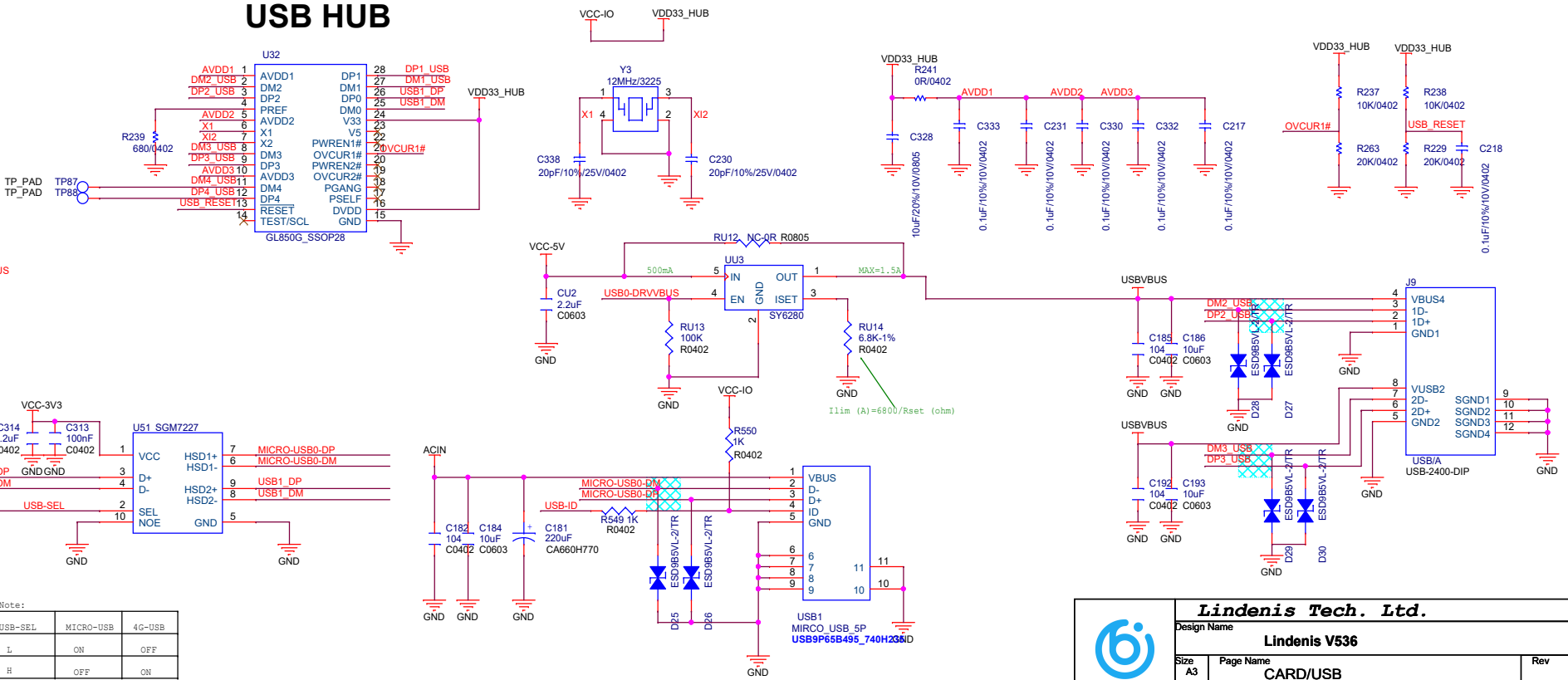
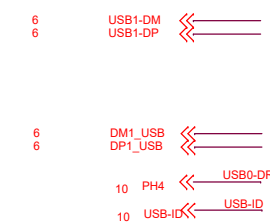


NOTE:
VCC-CARD: fixed to 3.3V
SDC0-DET SDC0-CMD: use internal pull-up



USB

USB HUB



Note:

USB-SEL	MICRO-USB	4G-USB
L	ON	OFF
H	OFF	ON

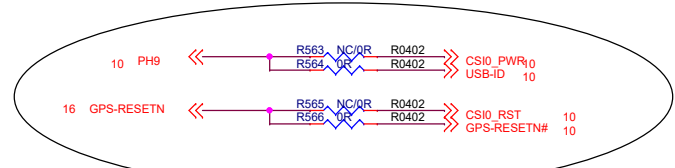
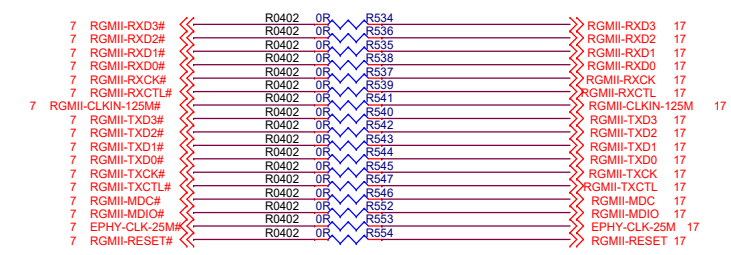
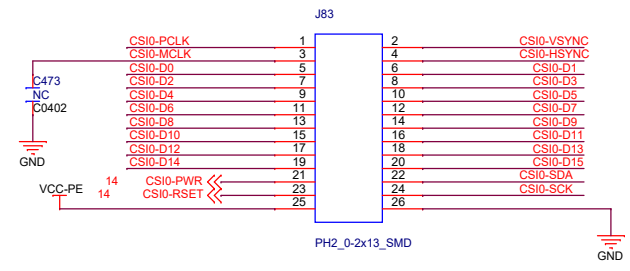
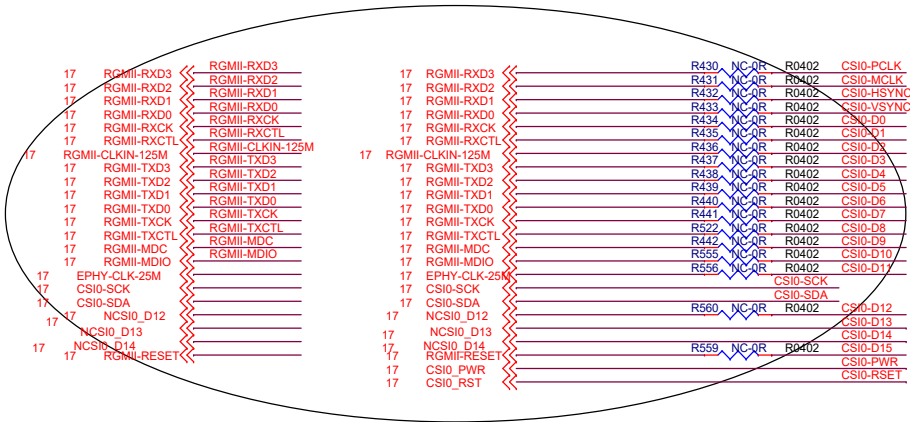
Linden Tech. Ltd.

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Linden V536

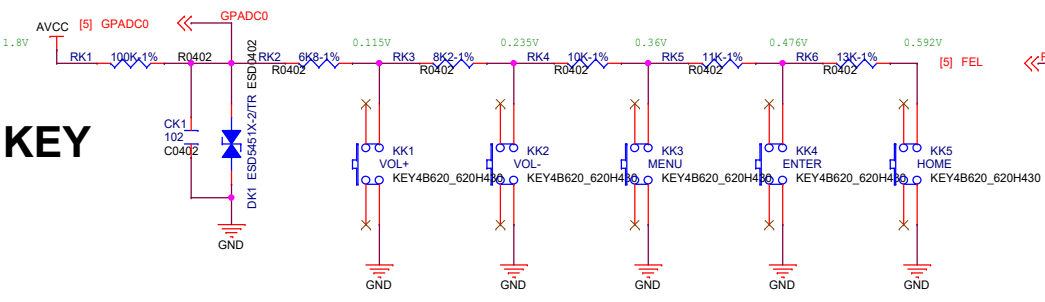
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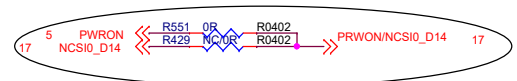
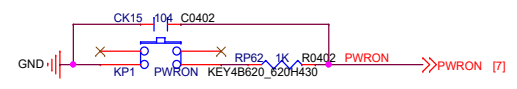
DVP



KEY



Force booting from USB0 by pull FEL LOW.
internally pull high

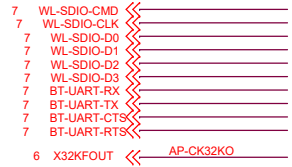


WIFI

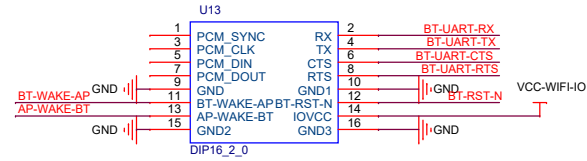
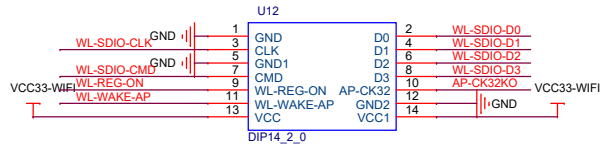
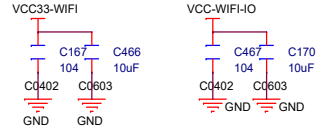
APXXX

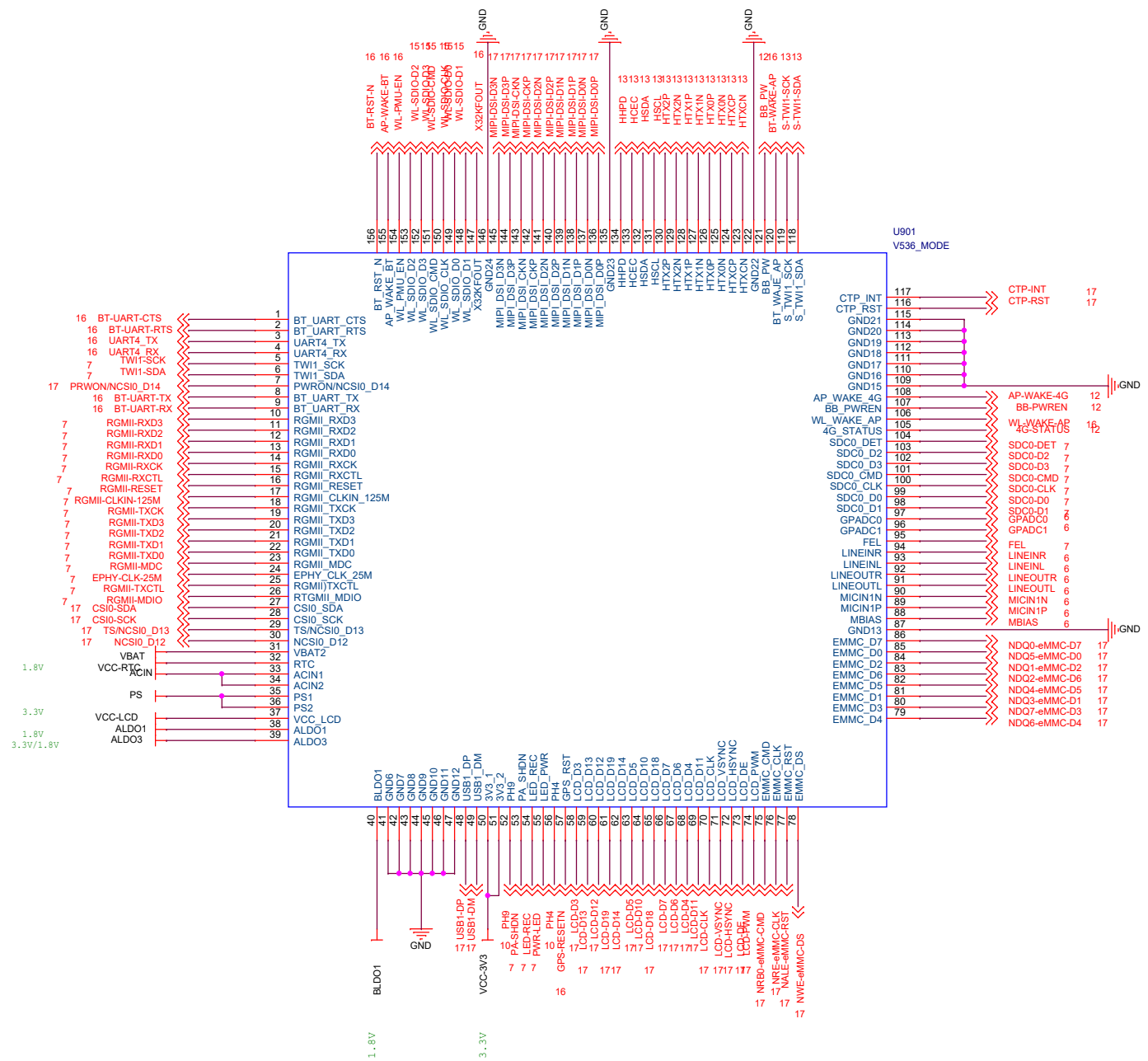
VCC33-WIFI

VCC18-WIFI

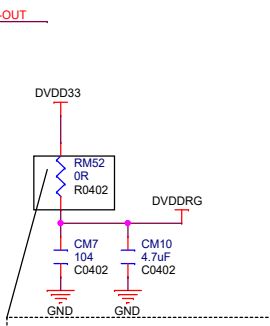
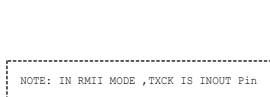
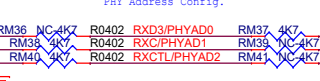
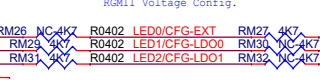
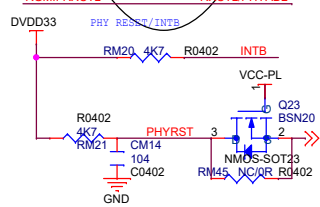
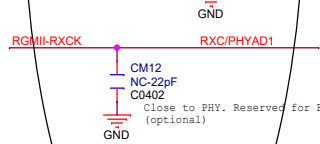
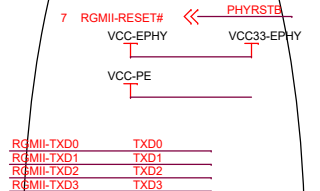
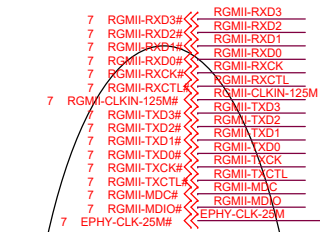


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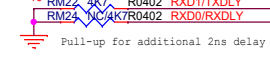
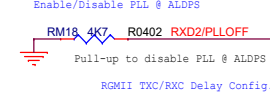
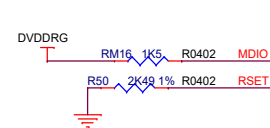
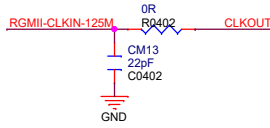




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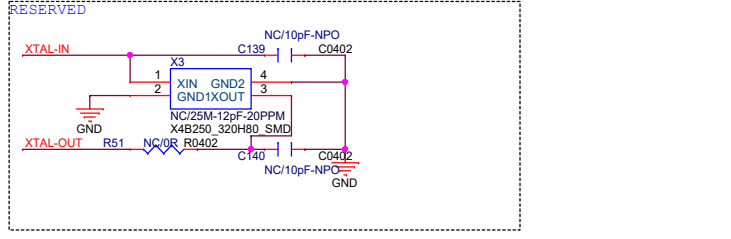
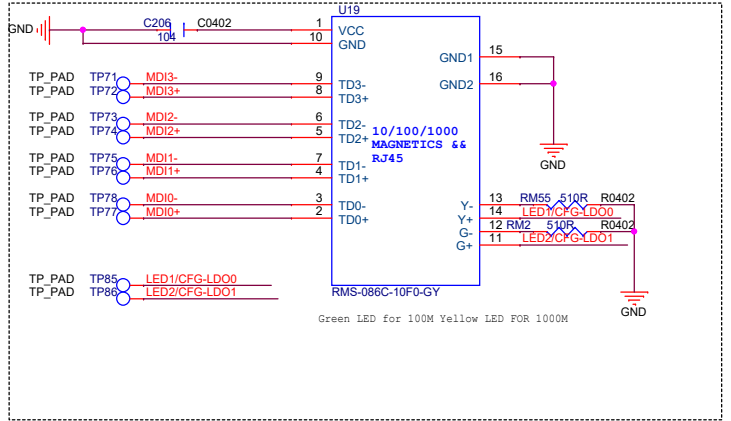
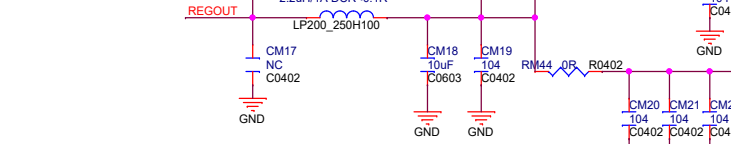
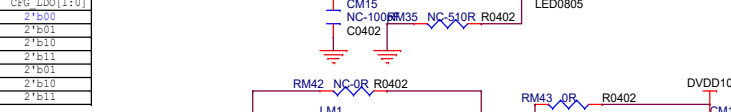
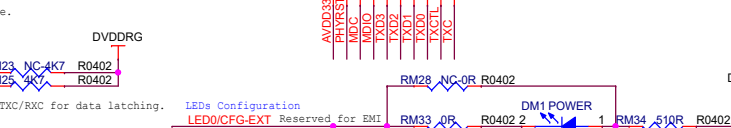
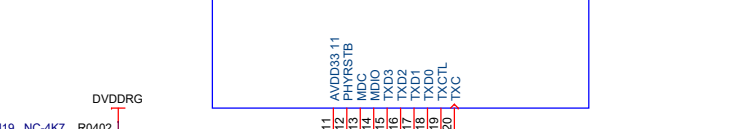
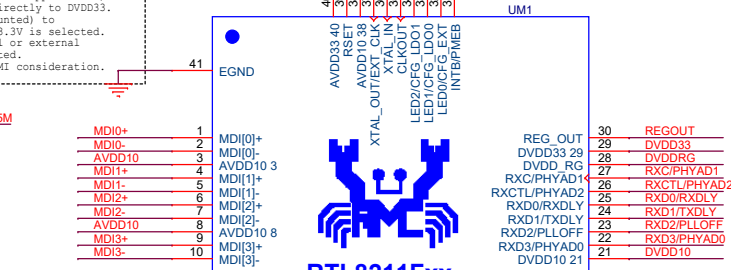
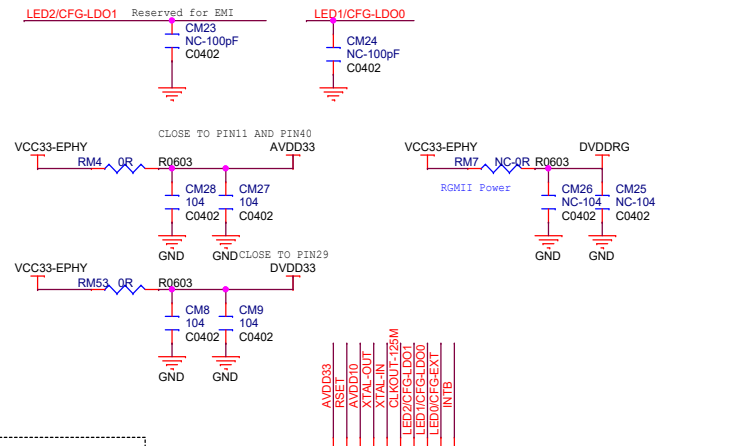


Note 1: RM65 is not needed for ONLY 3.3V RGMII application, and DVDDRG can be connected directly to DVDD33.
 Note 2: DVDDRG must be short (or RM6 be mounted) to DVDD33 if the external RGMII 3.3V is selected.
 Note 3: RM6 must be removed if the internal or external 2.5V/1.8V/1.5V RGMII is selected.
 Note 4: CAPs must be closed to pin28 for EMI consideration.



RGMII Power Source	CFG EXP	CFG LDO[1:0]
External 3.3V (default)	1'b1	2'b00
External 2.5V	1'b1	2'b01
External 1.8V	1'b1	2'b10
External 1.5V	1'b1	2'b11
Internal 3.3V	1'b0	2'b00
Internal 2.5V	1'b0	2'b01
Internal 1.8V	1'b0	2'b10
Internal 1.5V	1'b0	2'b11

PHY Address	PHYAD[2:0]
0	3'b000
1 (default)	3'b001



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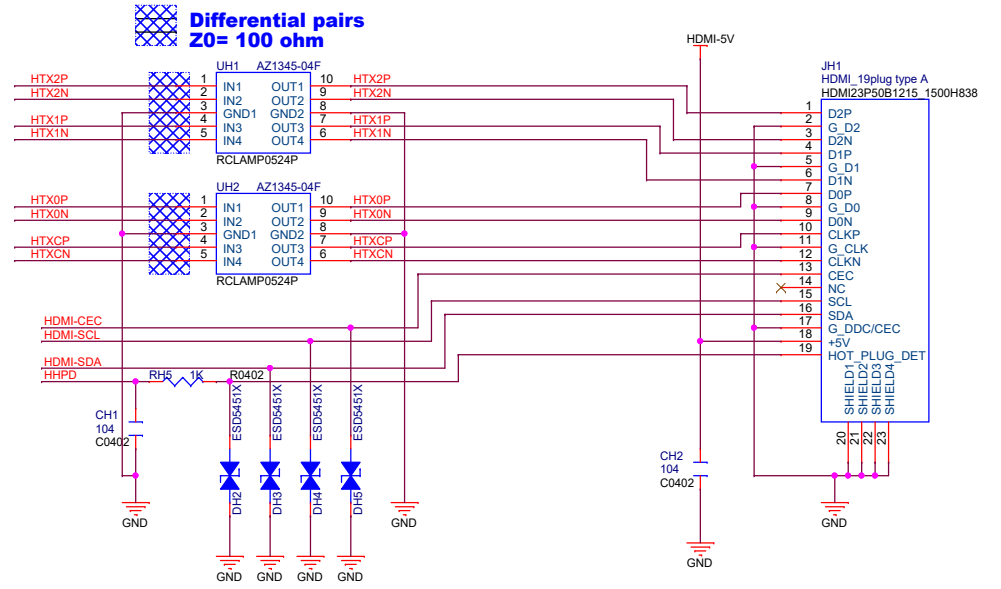
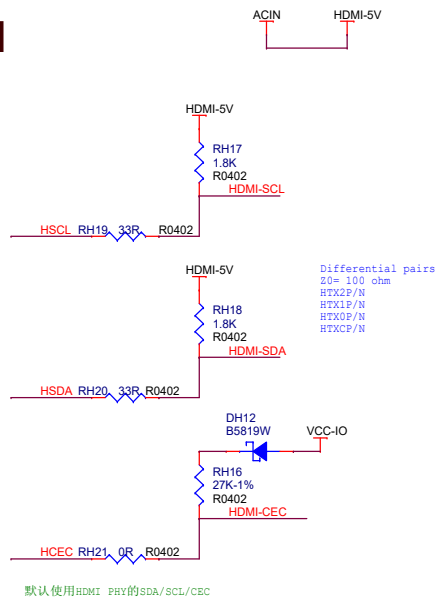
Design Name: **Lindenis V536**

Size: A3 Page Name: **ETHERNET** Rev: _____

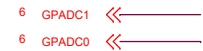
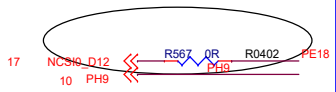
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HDMI

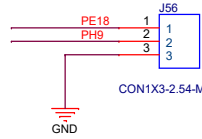
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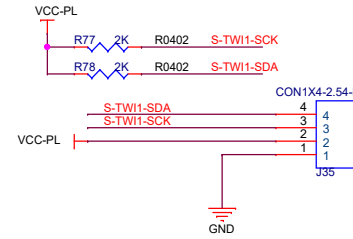
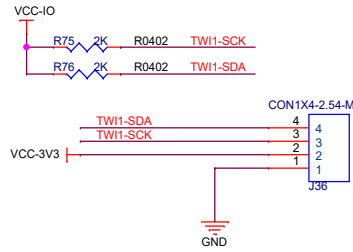
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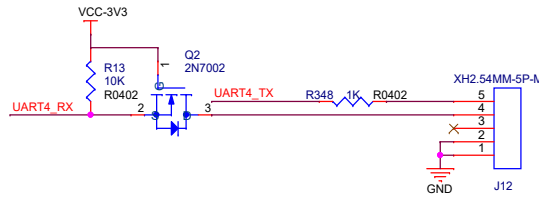
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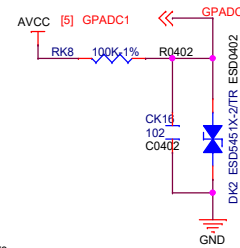
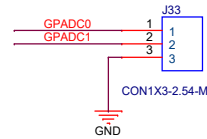
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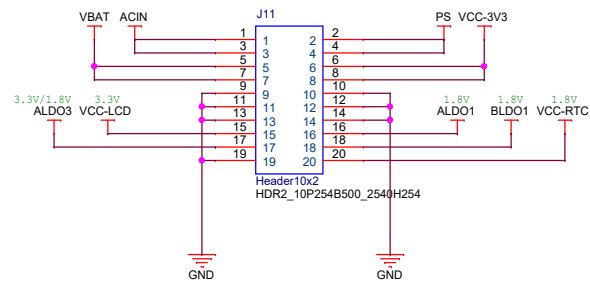
UART



ADC



POWER



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