

VERSION HISTORY

4

3

2

1

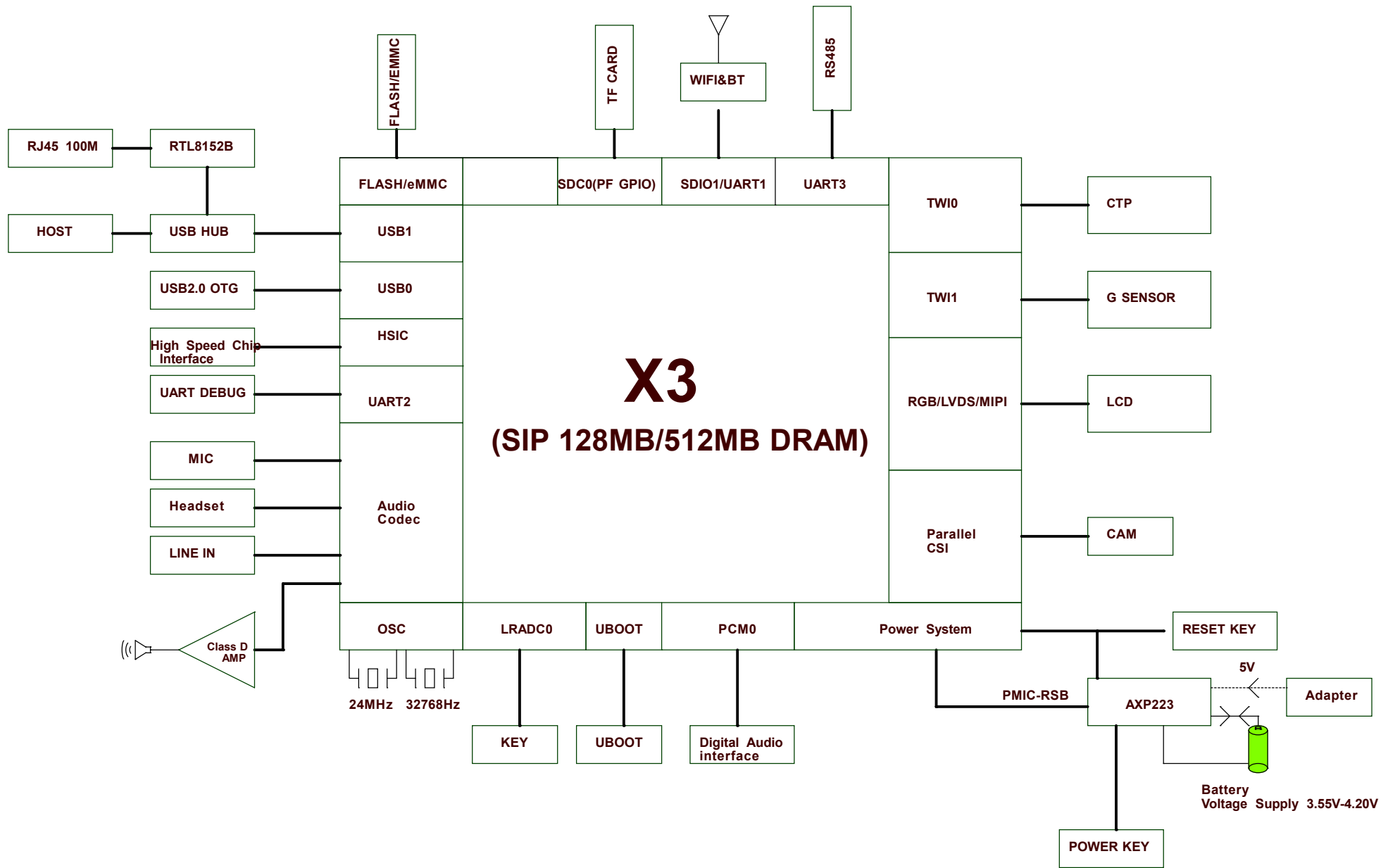
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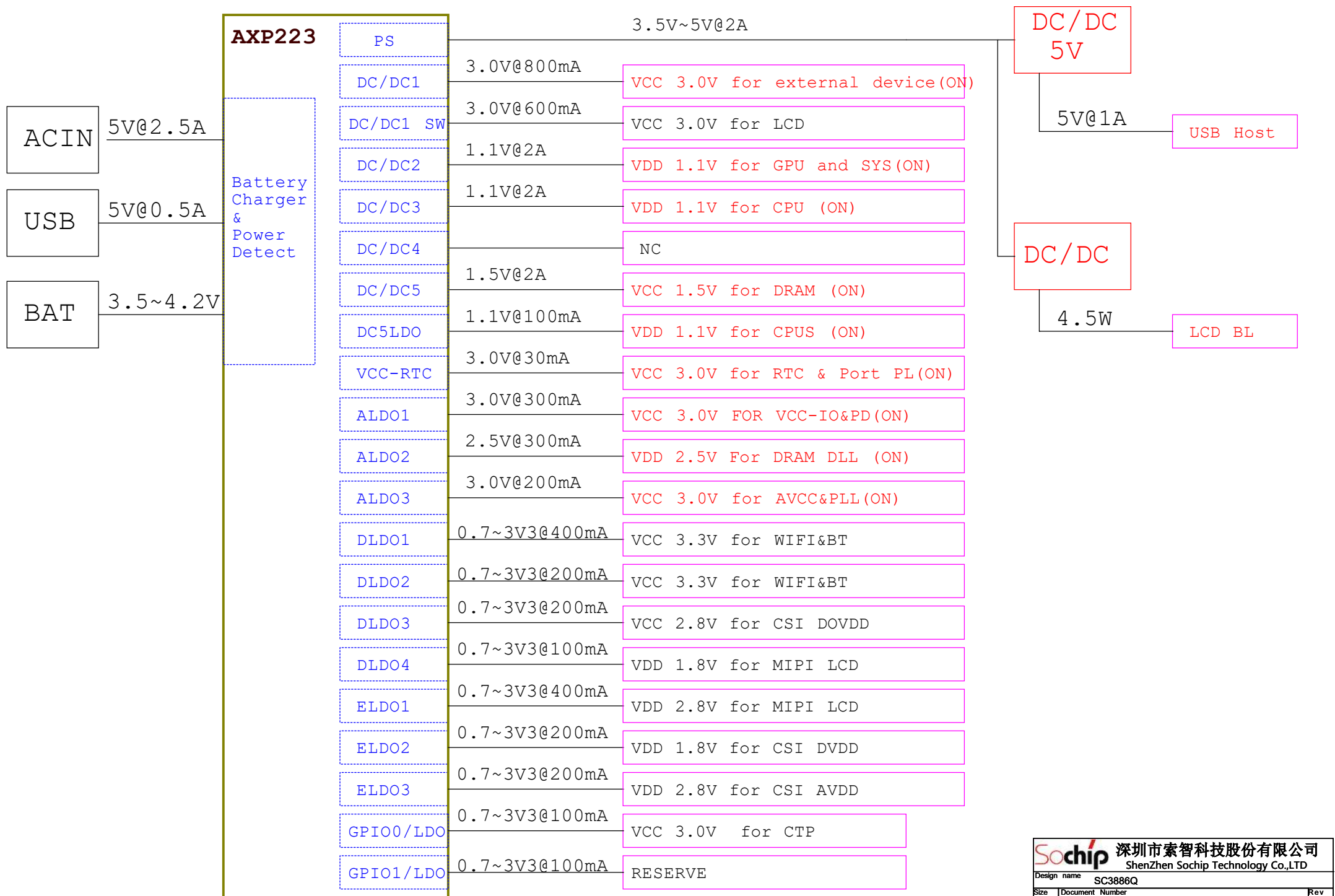
Revision	Description	Date	Drawn	Checked	Approved
Ver 00	First release	2019-8-26	zsc		

 深圳市索智科技股份有限公司 ShenZhen Sochip Technology Co.,LTD		
Design name	SC3886Q	
Size	Document Number	Rev
A3	VERSION HISTORY	V00
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BLOCK DIAGRAM



POWER TREE



GPIO ASSIGNMENT

PIN	Name	Function
PB0	UART2-TX	DEBUG
PB1	UART2-RX	
PB2	PB2	Digital Audio
PB3	GS-INT	G-Sensor
PB4	PCM0-SYNC	Digital Audio
PB5	PCM0-CLK	
PB6	PCM0-DOUT	
PB7	PCM0-DIN	

PIN	Name	Function
PG0	WL-SDIO-CLK	WLAN&BT
PG1	WL-SDIO-CMD	
PG2	WL-SDIO-D0	
PG3	WL-SDIO-D1	
PG4	WL-SDIO-D2	
PG5	WL-SDIO-D3	
PG6	AP-UART1-TX	
PG7	AP-UART1-RX	
PG8	AP-UART1-RTS	
PG9	AP-UART1-CTS	
PG10	WL-WAKE-AP	
PG11	BT-WAKE-AP	
PG12	AP-WAKE-BT	
PG13	BT-RST-N	

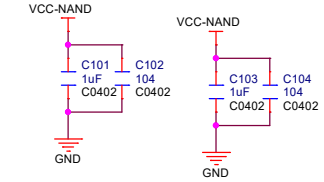
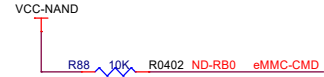
PIN	Name	Function
PH0	LCD-PWM0	LCM
PH1	PWM1	Digital Audio
PH2	TWI0-SCK	TP
PH3	TWI0-SDA	
PH4	TWI1-SCK	SENSOR
PH5	TWI1-SDA	
PH6	UART3_TX	RS485
PH7	UART3-RX	
PH8	REVERSE	Digital Audio
PH9	PA-SHDN	WIFI&BT

PIN	Name	Function
PL0	PMIC-SCK	PMIC
PL1	PMIC-SDA	
PL2	RJ45-EN	RJ45
PL3	HUB-RST	HUB
PL4	CTP-RST	CTP
PL5	CTP-INT	
PL6	USB-ID	USB
PL7	LCD-RESET	LCD
PL8	USB-HOST-EN	HOST
PL9	T-CARD-DET	TF CARD
PL10	LCD-BL-EN	LCD
PL11	PA-SHDN-N	SPK

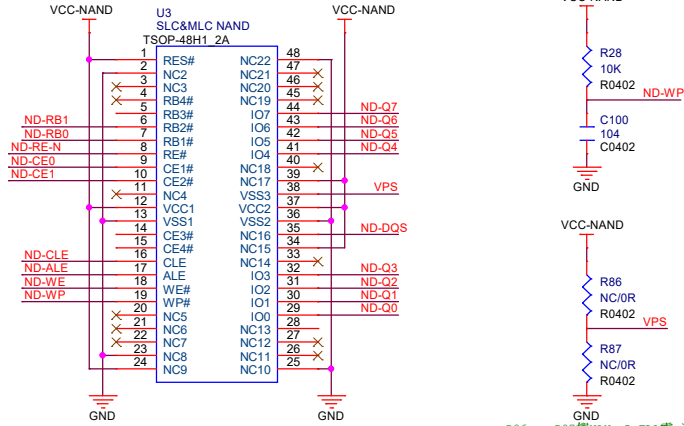
SPI FLASH

(5) ND-DQS	ND-Q5	eMMC-RST
(5) ND-DQ7	ND-Q7	eMMC-D7
(5) ND-DQ6	ND-Q6	eMMC-D6
(5) ND-DQ5	ND-Q5	eMMC-D5
(5) ND-DQ4	ND-Q4	eMMC-D4
(5) ND-DQ3	ND-Q3	eMMC-D3
(5) ND-DQ2	ND-Q2	eMMC-D2
(5) ND-DQ1	ND-Q1	eMMC-D1
(5) ND-DQ0	ND-Q0	eMMC-D0

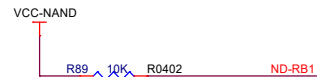
(5) ND-RB0	ND-RB0	eMMC-CMD
(5) ND-RB1	ND-RB1	NC
(5) ND-RE	R75	R0402
(5) ND-CE0	ND-CE0	D-RE-N eMMC-CLK
(5) ND-CE1	ND-CE1	SPI0-CS
(5) ND-CLE	ND-CLE	SPI0-CLK
(5) ND-ALE	ND-ALE	SPI0-MISO
(5) ND-WE	ND-WE	SPI0-MOSI



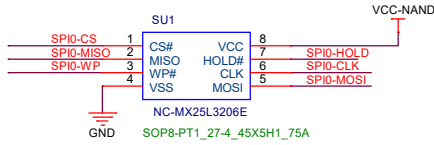
NAND FLASH



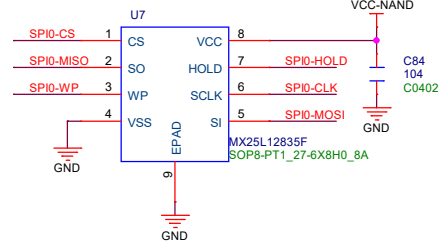
U3 / U5 LAYOUT 时靠在一起



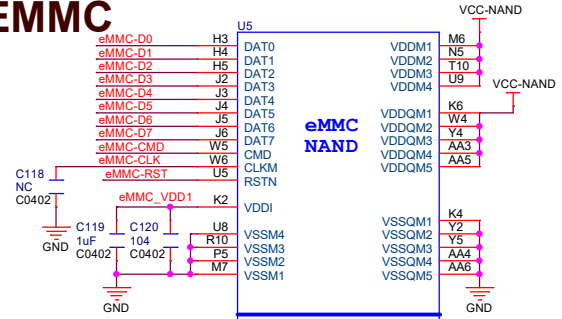
U7 / SU1 LAYOUT 时靠在一起



SPI FLASH



EMMC



K7	DO31	TQ	L4
K8	DO30	V2	V2
K9	DO29	V3	V3
J7	DO28	A1	W3
J8	DO27	A2	Y3
J9	DO26	A3	K3
K10	DO25	A4	
J10	DO24	L2	
J11	DO23	A6	L3
K12	DO22	A7	M3
K13	DO21	A8	N3
L13	DO20	A9	U3
L12	DO19	A10	U3
M12	DO18	A11	M2
M13	DO17	A12	M1
M14	DO16	A13	N2
U14	DO15	V1	
U13	DO14	BA0	U1
U12	DO13	BA1	
V13	DO12	CE0#	P2
V12	DO11	CE1#	T3
W13	DO10	CAS#	T2
W12	DO9	RAS#	R2
Y12	DO8	WE#	R3
W10	DO7	CKE0	P1
Y10	DO6	CKE1	T1
W9	DO5	CLK	P12
W8	DO4	CLK#	R12
W7	DO3		
Y7	DO2		
Y7	DO1		
J11	DQS3	VDDO1	H8
N12	DQS2	VDDO2	J13
T12	DQS1	VDDO3	K14
Y11	DQS0	VDDO4	P13
K11	DM3	VDDO5	R1
N13	DM2	VDDO6	R13
T13	DM1	VDDO7	W14
W11	DM0	VDDO8	Y13
N1	VDD1	VDDO9	AA8
AA11	VDD2		
W2	VDD3	VSSO1	H9
P14	VDD4	VSSO2	H12
H11	VDD5	VSSO3	L14
W1	VSS1	VSSO4	T14
U2	VSS2	VSSO5	V14
R14	VSS3	VSSO6	Y6
K1	VSS4	VSSO7	AA9
H10	VSS5	VSSO8	AA12
		VSSO9	N14

A4	DNU-A4	NC-AA13	AA13
A6	DNU-A6	NC-AA10	AA10
A9	DNU-A9	NC-AA7	AA7
A11	DNU-A11	NC-AA2	AA2
B2	DNU-B2	NC-Y14	Y14
B13	DNU-B13		
D1	DNU-D1	NC-U10	U10
D14	DNU-D14	NC-U7	U7
H1	DNU-H1	NC-U6	U6
H14	DNU-H14	NC-T5	T5
AA1	DNU-AA1	NC-R5	R5
AA14	DNU-AA14	NC-P10	P10
AE1	DNU-AE1	NC-P3	P3
AE14	DNU-AE14	NC-N10	N10
AG2	DNU-AG2	NC-M10	M10
AG13	DNU-AG13	NC-M9	M9
AH4	DNU-AH4	NC-M8	M8
AH6	DNU-AH6	NC-M5	M5
AH9	DNU-AH9		
AH11	DNU-AH11	NC-J14	J14
		NC-H13	H13
		NC-H6	H6

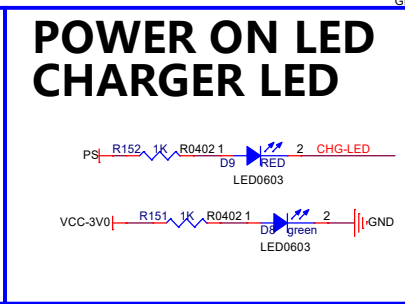
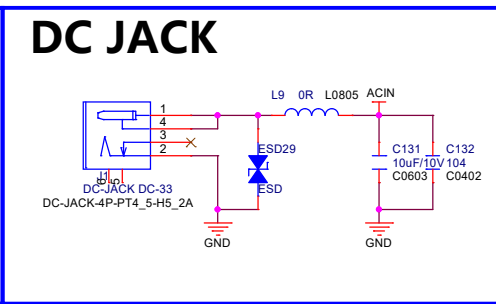
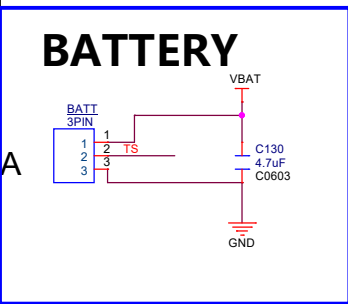
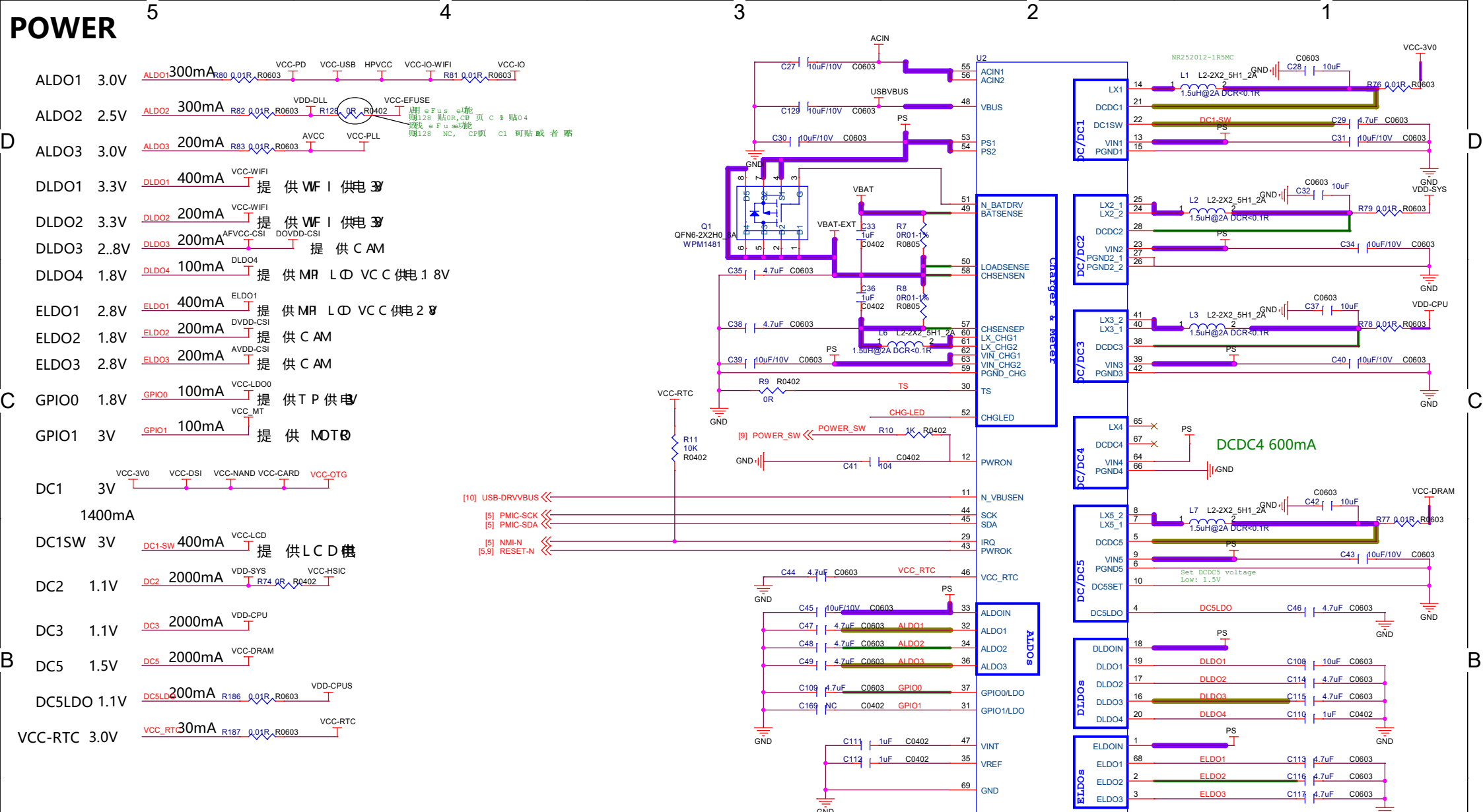
KLM8G1GETF-B041
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Design name: SC3886Q

Size: A3 Document Number: NOR FLASH/EMMC Rev: V00

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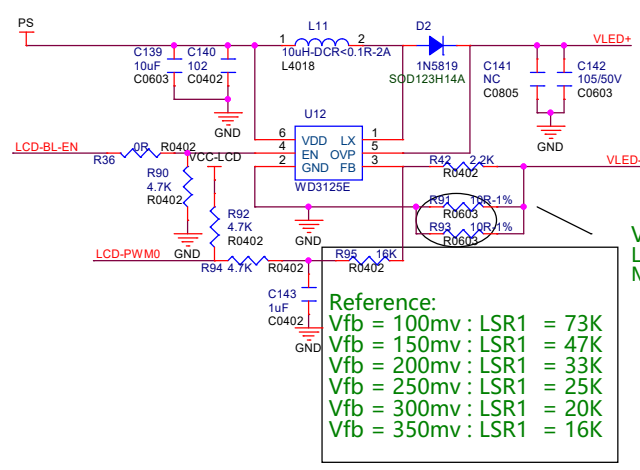
- [5] DSI-D0P <-> DSI-D0P
- [5] DSI-D0N <-> DSI-D0N
- [5] DSI-D1P <-> DSI-D1P
- [5] DSI-D1N <-> DSI-D1N
- [5] DSI-D2P <-> DSI-D2P
- [5] DSI-D2N <-> DSI-D2N
- [5] DSI-D3P <-> DSI-D3P
- [5] DSI-D3N <-> DSI-D3N

- [5] LCD-D2 <-> LCD-B2
- [5] LCD-D3 <-> LCD-B3
- [5] LCD-D4 <-> LCD-B4
- [5] LCD-D5 <-> LCD-B5
- [5] LCD-D6 <-> LCD-B6
- [5] LCD-D7 <-> LCD-B7

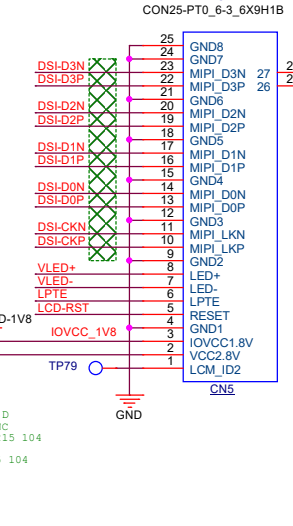
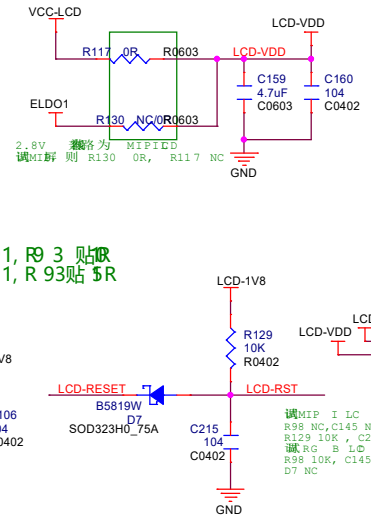
- [5] LCD-D10 <-> LCD-G2
- [5] LCD-D11 <-> LCD-G3
- [5] LCD-D12 <-> LCD-G4
- [5] LCD-D13 <-> LCD-G5
- [5] LCD-D14 <-> LCD-G6
- [5] LCD-D15 <-> LCD-G7

- [5] LCD-D18 <-> LCD-R2 LVDS-VP0
- [5] LCD-D19 <-> LCD-R3 LVDS-VN0
- [5] LCD-D20 <-> LCD-R4 LVDS-VP1
- [5] LCD-D21 <-> LCD-R5 LVDS-VN1
- [5] LCD-D22 <-> LCD-R6 LVDS-VP2
- [5] LCD-D23 <-> LCD-R7 LVDS-VN2
- [5] LCD-CLK <-> LCD-CLK LVDS-VPC
- [5] LCD-DE <-> LCD-DE LVDS-VNC
- [5] LCD-HSYNC <-> LCD-HSYNC LVDS-VP3
- [5] LCD-VSYNC <-> LCD-VSYNC LVDS-VN3

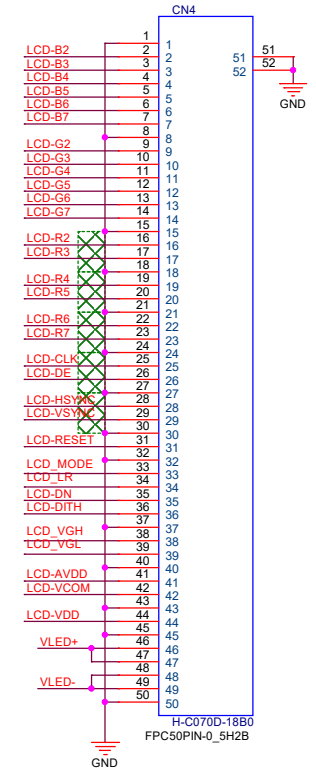
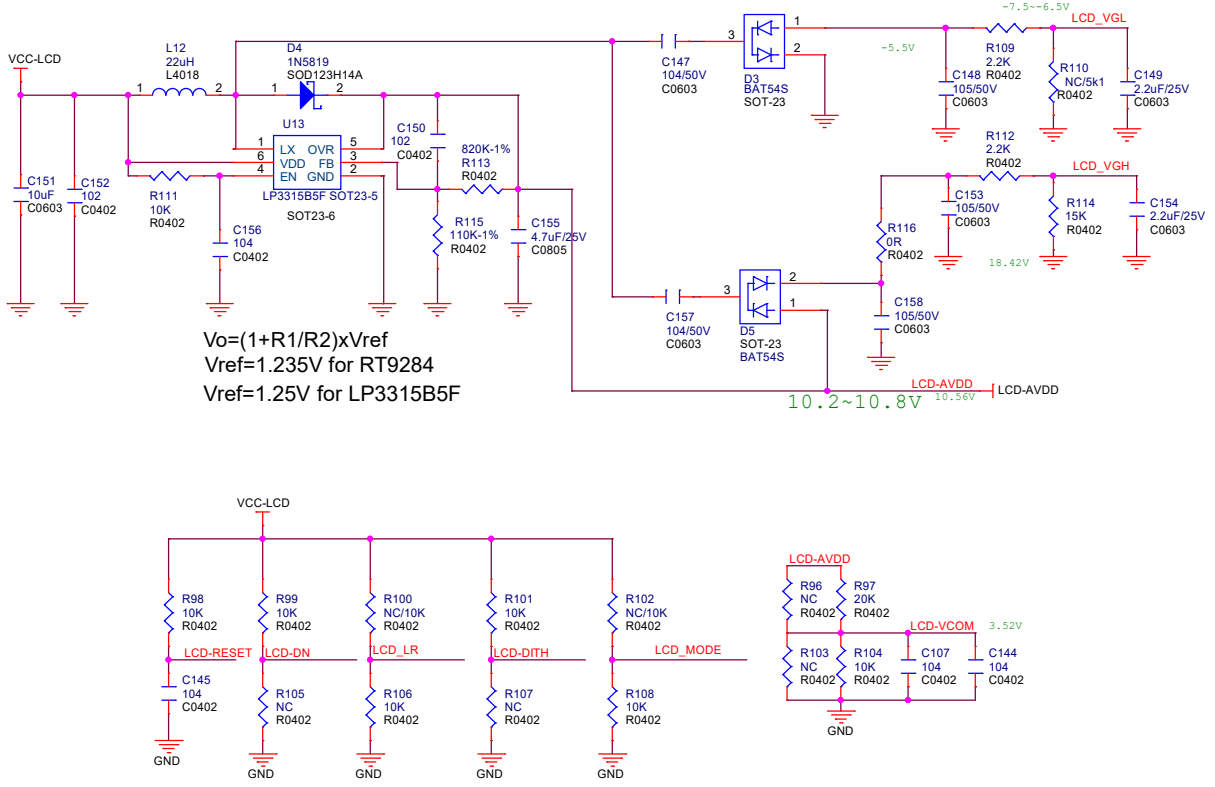
- [5] LCD-PWM0 <-> LCD-PWM0
- [5] LCD-RESET <-> LCD-RESET
- [5] LCD-BL-EN <-> LCD-BL-EN



Vfb=300mV/(led)
 LVDS 7串 3并: R91, R93 贴片
 MIPI 6串 2并: R91, R93 贴片

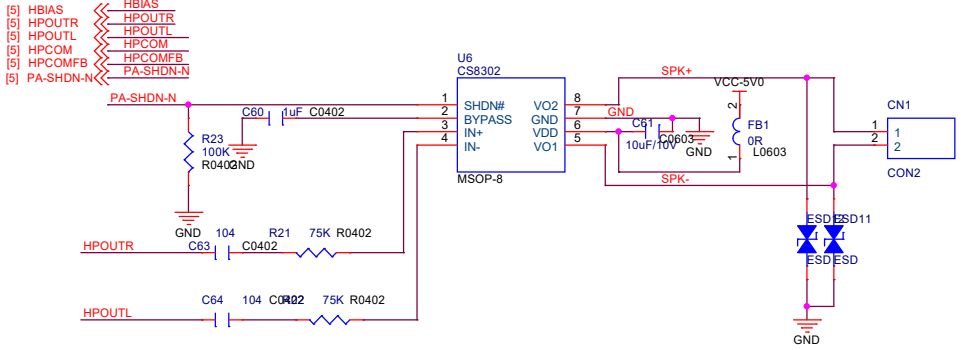


- VLED- TP2
- VLED+ TP4
- IOVCC_1V8 TP5
- LCD-RST TP7
- DSI-D2P TP8
- DSI-D2N TP9
- DSI-D1P TP10
- DSI-D1N TP11
- DSI-CKP TP12
- DSI-CKN TP13
- DSI-D0P TP14
- DSI-D0N TP15
- DSI-D3P TP16
- DSI-D3N TP17
- LPTE TP78

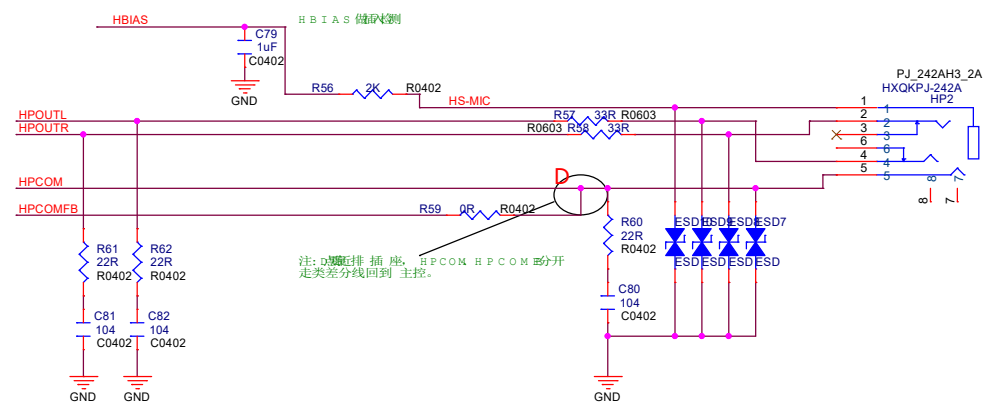


- LCD_LR TP46
- LCD_VGH TP47
- LCD_VGN TP48
- LCD_VGL TP49
- LCD-AVDD TP50
- LCD-RESET TP51
- LCD-DITH TP52
- LCD-VDD TP18
- GND TP19
- LCD-B7 TP22
- LCD-B6 TP23
- LCD-B5 TP24
- LCD-B4 TP25
- LCD-B3 TP26
- LCD-B2 TP27
- LCD-G7 TP28
- LCD-G6 TP29
- LCD-G5 TP30
- LCD-G4 TP31
- LCD-G3 TP32
- LCD-G2 TP33
- LCD-R7 TP34
- LCD-R6 TP35
- LCD-R5 TP36
- LCD-R4 TP37
- LCD-R3 TP38
- LCD-R2 TP39
- LCD-CLK TP40
- LCD-VCOM TP41
- LCD_MODE TP42
- LCD-DE TP43
- LCD-VSYNC TP44
- LCD-HSYNC TP45

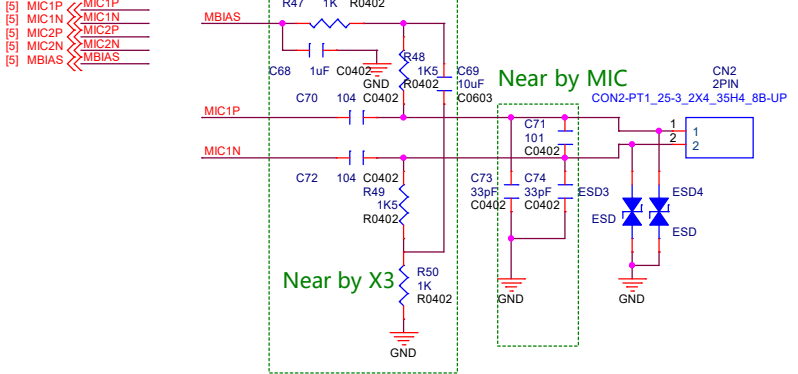
SPK



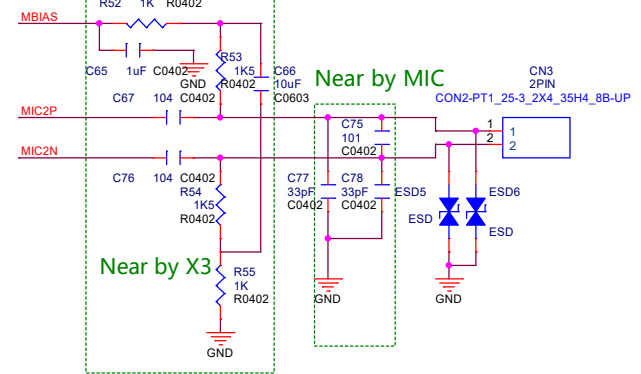
EARPHONE



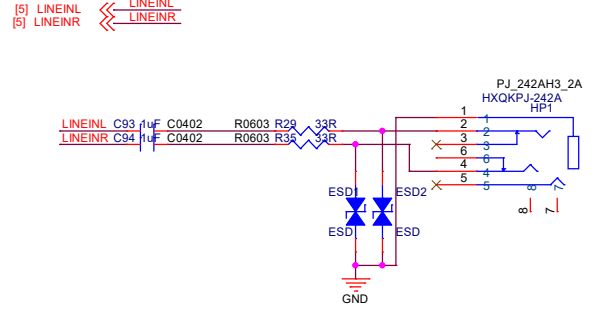
MIC1



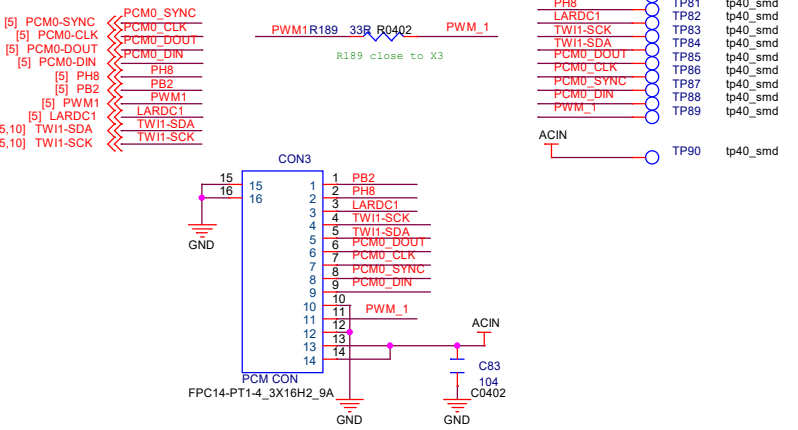
MIC2



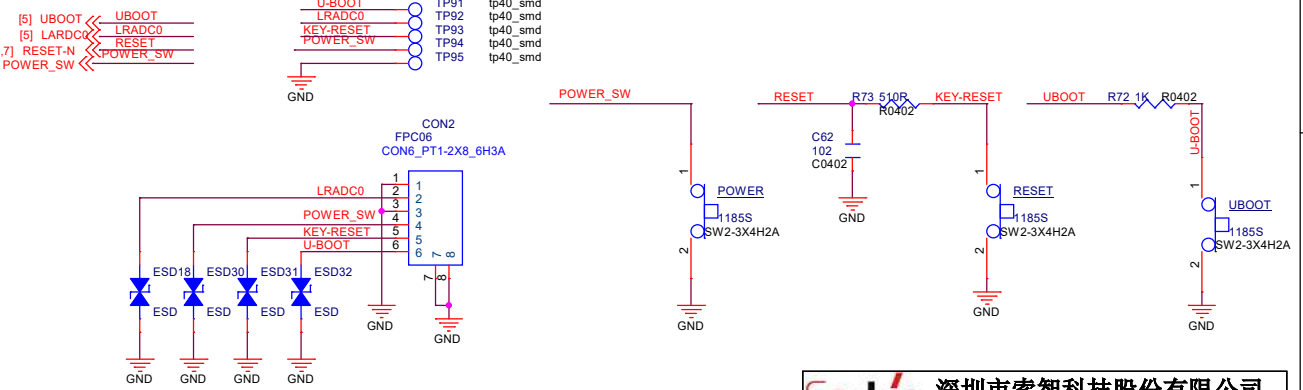
LINEIN



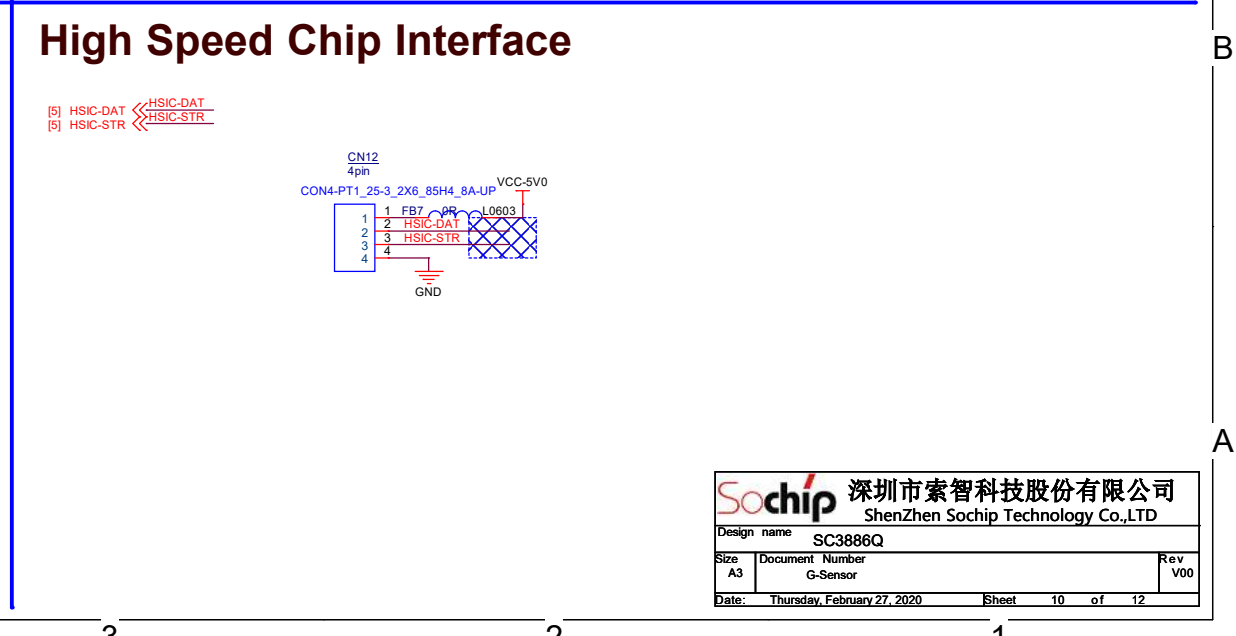
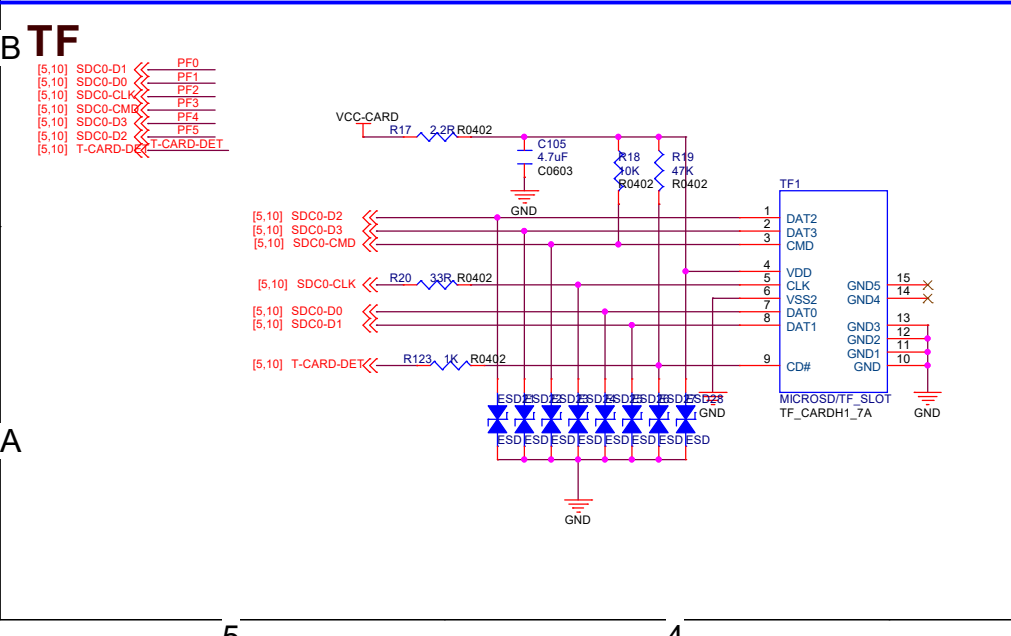
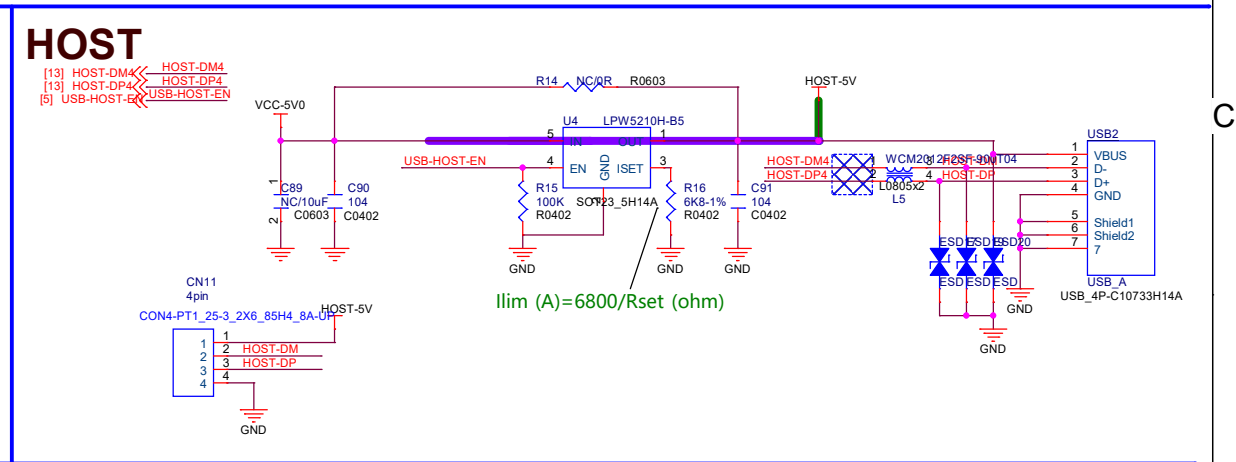
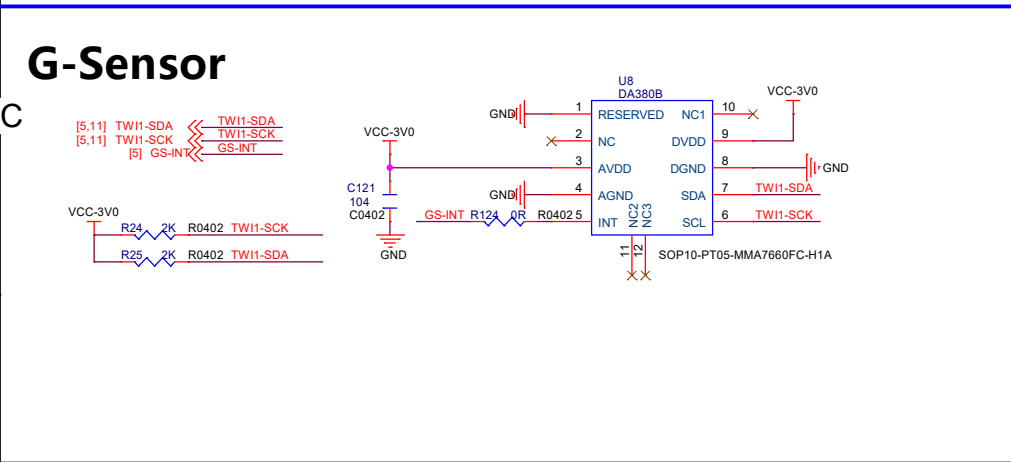
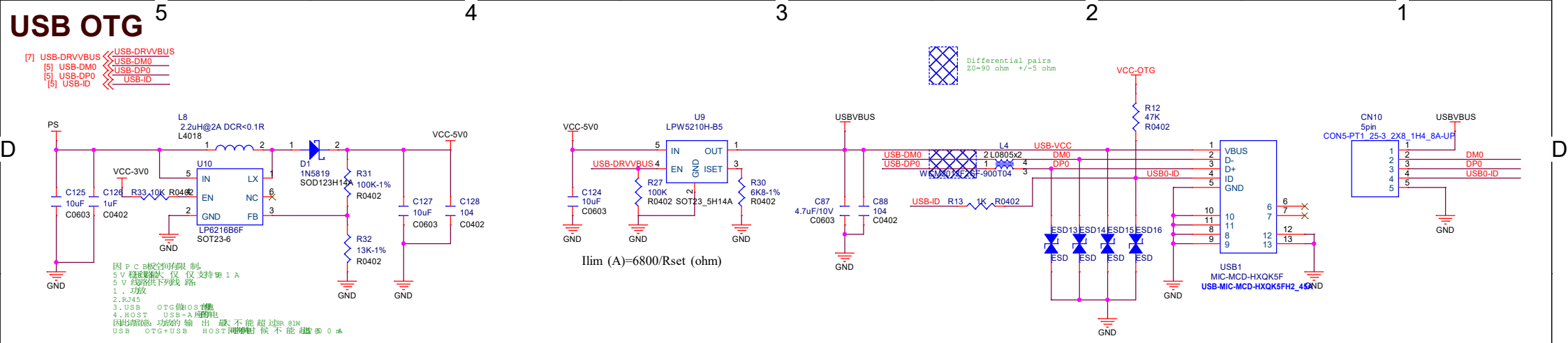
PCM AUDIO INTERFACE



KEY

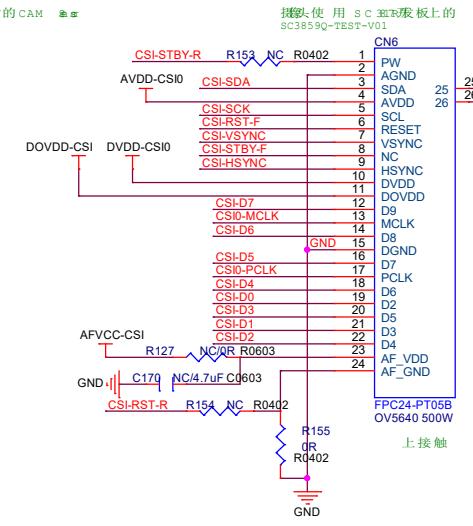
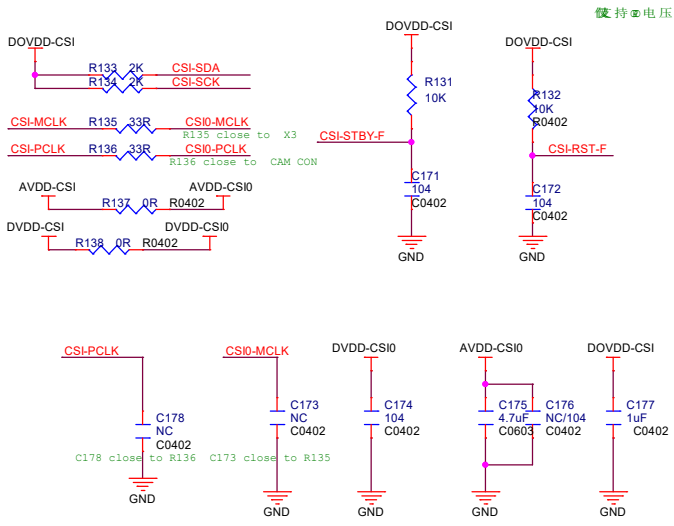


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DVP CAM⁵

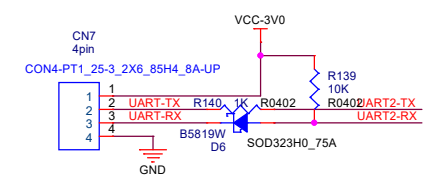
- [5] CSI-STBY-F << PE17
- [5] CSI-RST-F << PE16
- [5] CSI-STBY-R << PE14
- [5] CSI-RST-R << PE13
- [5] CSI-SDA << PE12
- [5] CSI-SCK << PE11
- [5] CSI-D7 << PE10
- [5] CSI-D6 << PE9
- [5] CSI-D5 << PE8
- [5] CSI-D4 << PE7
- [5] CSI-D3 << PE6
- [5] CSI-D2 << PE5
- [5] CSI-D1 << PE4
- [5] CSI-VSYNC << PE3
- [5] CSI-HSYNC << PE2
- [5] CSI-MCLK << PE1
- [5] CSI-PCLK << PE0



- CSI-D7 << TP57 tp40_smd
- CSI-D6 << TP60 tp40_smd
- CSI-D5 << TP61 tp40_smd
- CSI-D4 << TP62 tp40_smd
- CSI-STBY-R << TP6 tp40_smd
- CSI-RST-R << TP53 tp40_smd
- CSI-D0 << TP63 tp40_smd
- CSI-D3 << TP64 tp40_smd
- CSI-D1 << TP65 tp40_smd
- CSI-D2 << TP66 tp40_smd
- CSI-VSYNC << TP67 tp40_smd
- CSI-HSYNC << TP68 tp40_smd
- CSI-MCLK << TP69 tp40_smd
- CSI-PCLK << TP70 tp40_smd
- CSI-D6 << TP7 tp40_smd
- CSI-D0 << TP6 tp40_smd
- CSI-D3 << TP72 tp40_smd
- CSI-SDA << TP73 tp40_smd
- CSI-SCK << TP73 tp40_smd
- CSI-RST-F << TP74 tp40_smd
- AVDD-CSIO << TP75 tp40_smd
- DVDD-CSIO << TP76 tp40_smd
- DOVDD-CSIO << TP77 tp40_smd

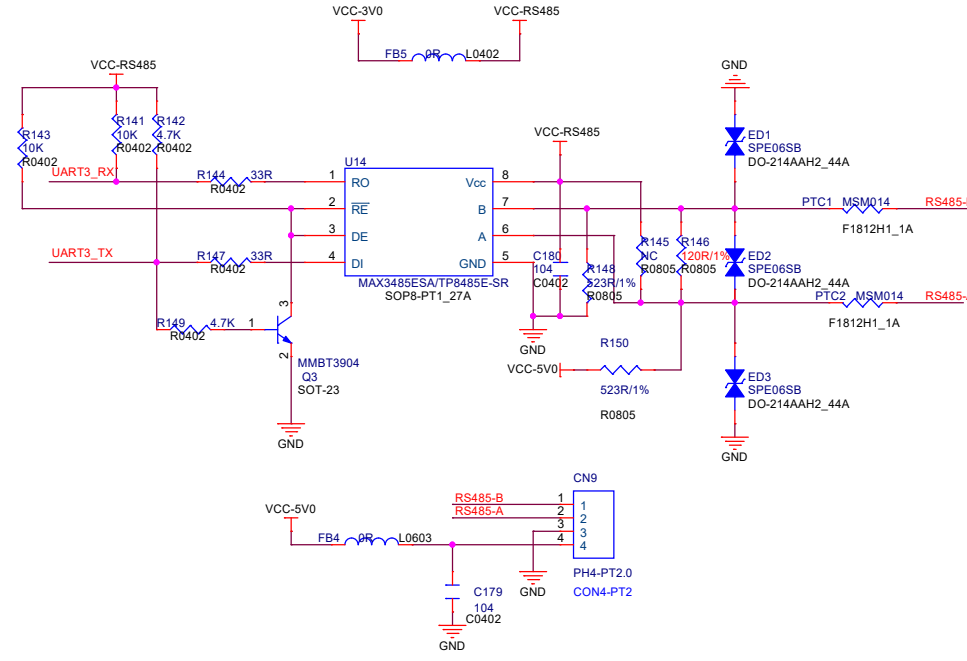
UART DEBUG

- [5] UART2-TX << UART2-TX
- [5] UART2-RX << UART2-RX



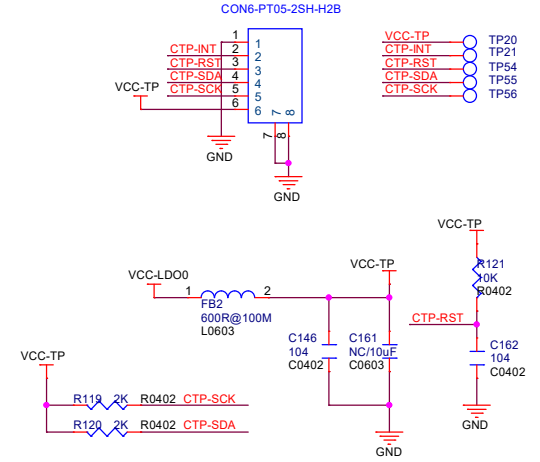
RS485

- [5] UART3-TX << UART3_TX
- [5] UART3-RX << UART3_RX

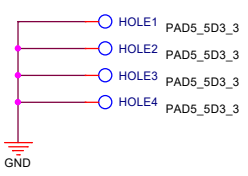


CTP

- [5] TWI0-SCK << CTP-SCK
- [5] TWI0-SDA << CTP-SDA
- [5] CTP-RST << CTP-RST
- [5] CTP-INT << CTP-INT



SCREW HOLD



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Shenzhen Sochip Technology Co.,LTD

Design name: SC3886Q

Size A3 Document Number DVP CAM Rev V00

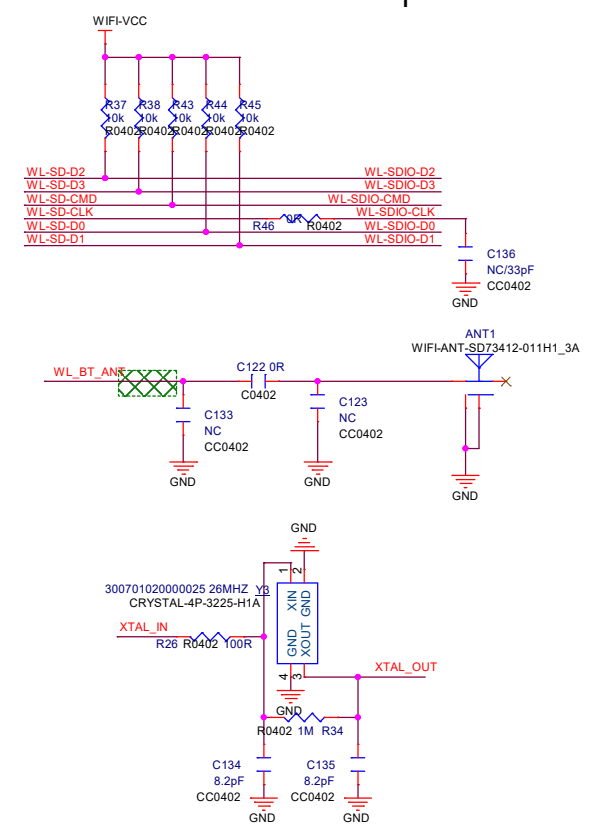
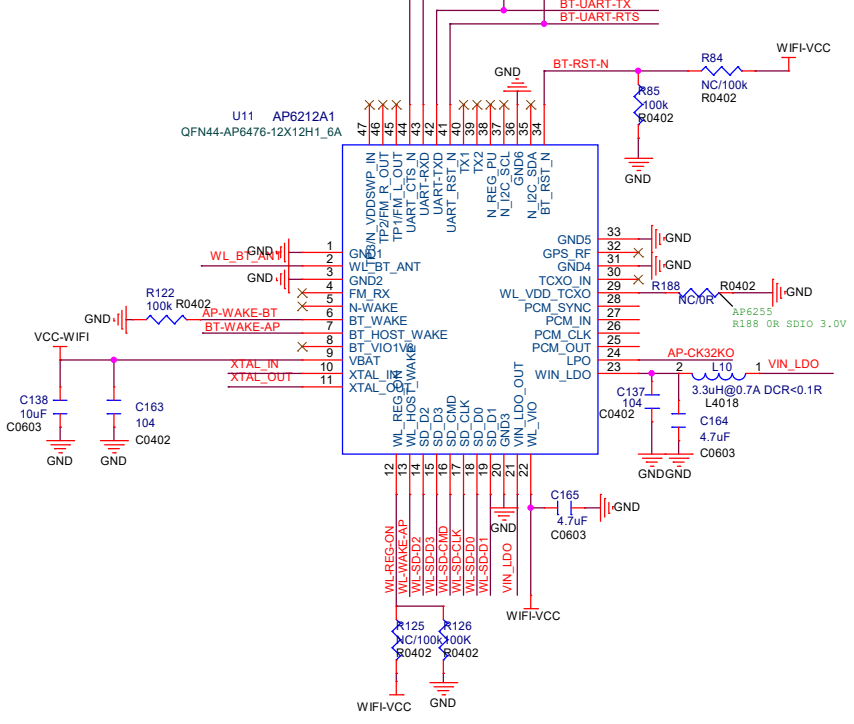
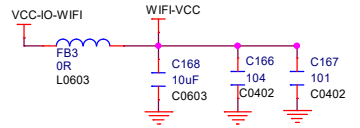
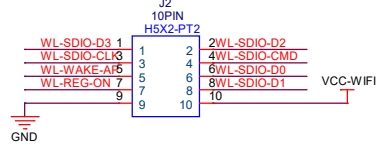
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WIFI AP6212

- [5] WL-SDIO-D2 <-> WL-SDIO-D2
 - [5] WL-SDIO-D3 <-> WL-SDIO-D3
 - [5] WL-SDIO-CMD <-> WL-SDIO-CMD
 - [5] WL-SDIO-CLK <-> WL-SDIO-CLK
 - [5] WL-SDIO-D0 <-> WL-SDIO-D0
 - [5] WL-SDIO-D1 <-> WL-SDIO-D1
 - [5] AP-UART1-TX <-> BT-UART-RX
 - [5] AP-UART1-RX <-> BT-UART-TX
 - [5] AP-UART1-RTS <-> BT-UART-CTS
 - [5] AP-UART1-CTS <-> BT-UART-RTS
-
- [5] WL-WAKE-AP <-> WL-WAKE-AP
 - [5] BT-WAKE-AP <-> BT-WAKE-AP
 - [5] AP-WAKE-BT <-> AP-WAKE-BT
 - [5] BT-RST-N <-> BT-RST-N
 - [5] WL-REG-ON <-> WL-REG-ON

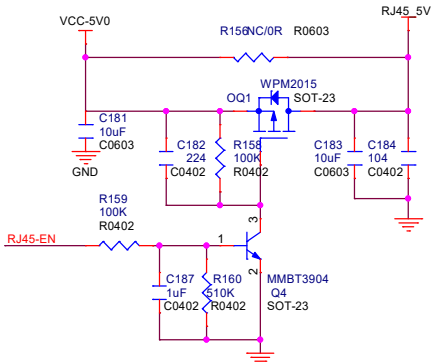
[5] X32KFOUT <-> R51 22R R0402 AP-CK32KO

EXT WIFI JACK

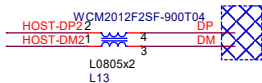
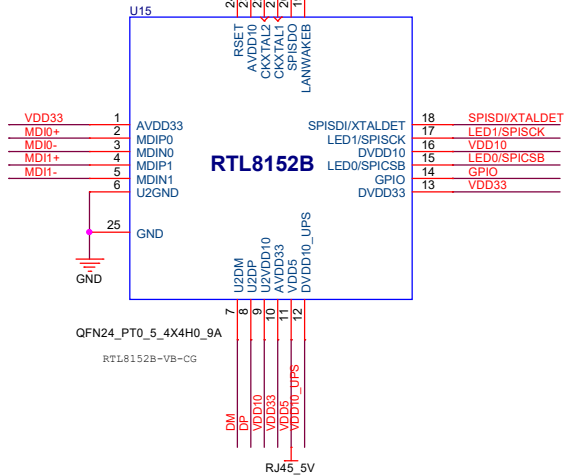


ETHERNET 100M

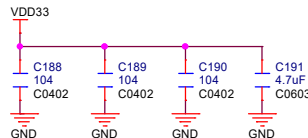
[5] RJ45-EN ← RJ45-EN
 [13] HOST-DM2 ← HOST-DM2
 [13] HOST-DP2 ← HOST-DP2



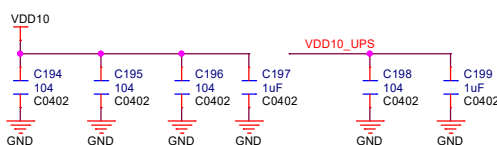
R2 value should be 2.49K (1%) for all application



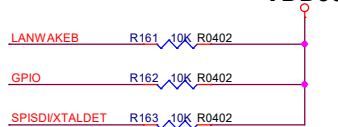
3.3V



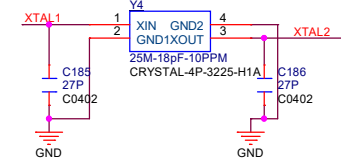
1.05V



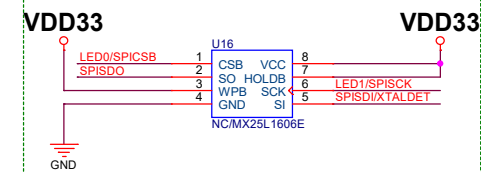
External Resistors



XTAL



SPI Flash

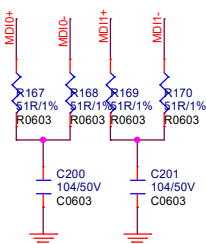
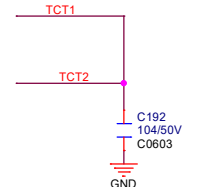
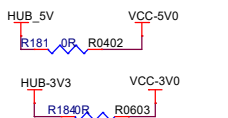
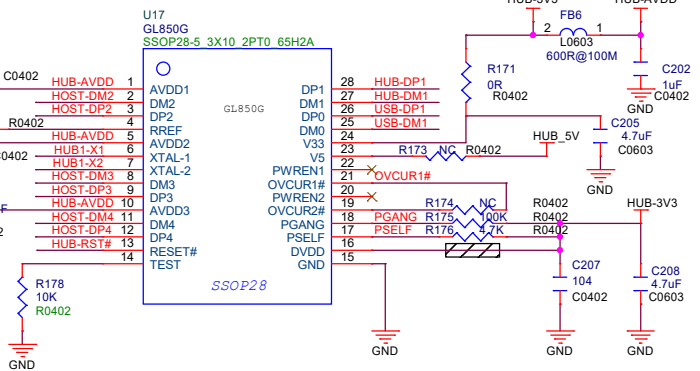
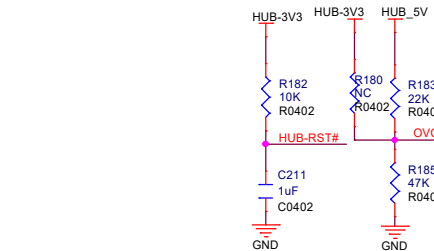


HUB

[13] HOST-DM2 ← HOST-DM2
 [13] HOST-DP2 ← HOST-DP2
 [10] HOST-DM4 ← HOST-DM4
 [10] HOST-DP4 ← HOST-DP4
 [5] USB-DM1 ← USB-DM1
 [5] USB-DP1 ← USB-DP1
 [5] HUB-RST ← HUB-RST

Differential pairs
 Z0=90 ohm +/-5 ohm

HUB-RST R177 0R R0402 HUB-RST#



RJ-45 Connector + Transformer

Differential pairs
 Z0=100 ohm +/-5 ohm

