REVISION HISTORY

Schematics Index:

P01: REVISION HISTORY
P02: BLOCK
P03: CPU
P04: POWER
P05: MISC
P06: SDIO WIFI
P07: USB

Revision History	Description	Date	Drawn	Checked	Approved
C.H.I.P. ALPHA	version 0.1	2015-03-30			
C.H.I.P. ALPHA	version 0.2	2015-07-10			

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Design Name: C.H.I.P. ALPHA

Size: A3 | Page Name: REVISION HISTORY | Rev: v0.2

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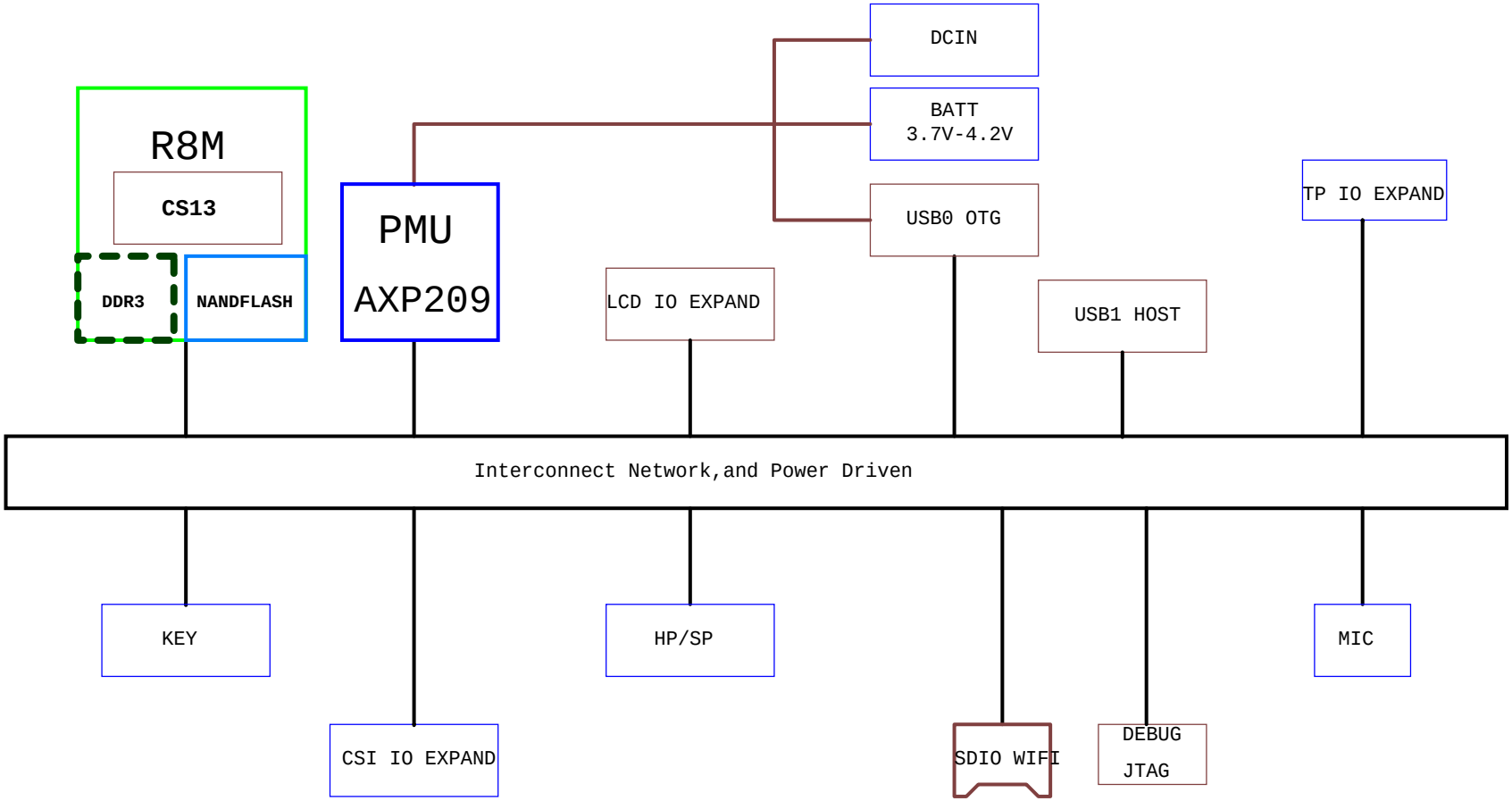
BLOCK



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Design Name: **C.H.I.P. ALPHA**

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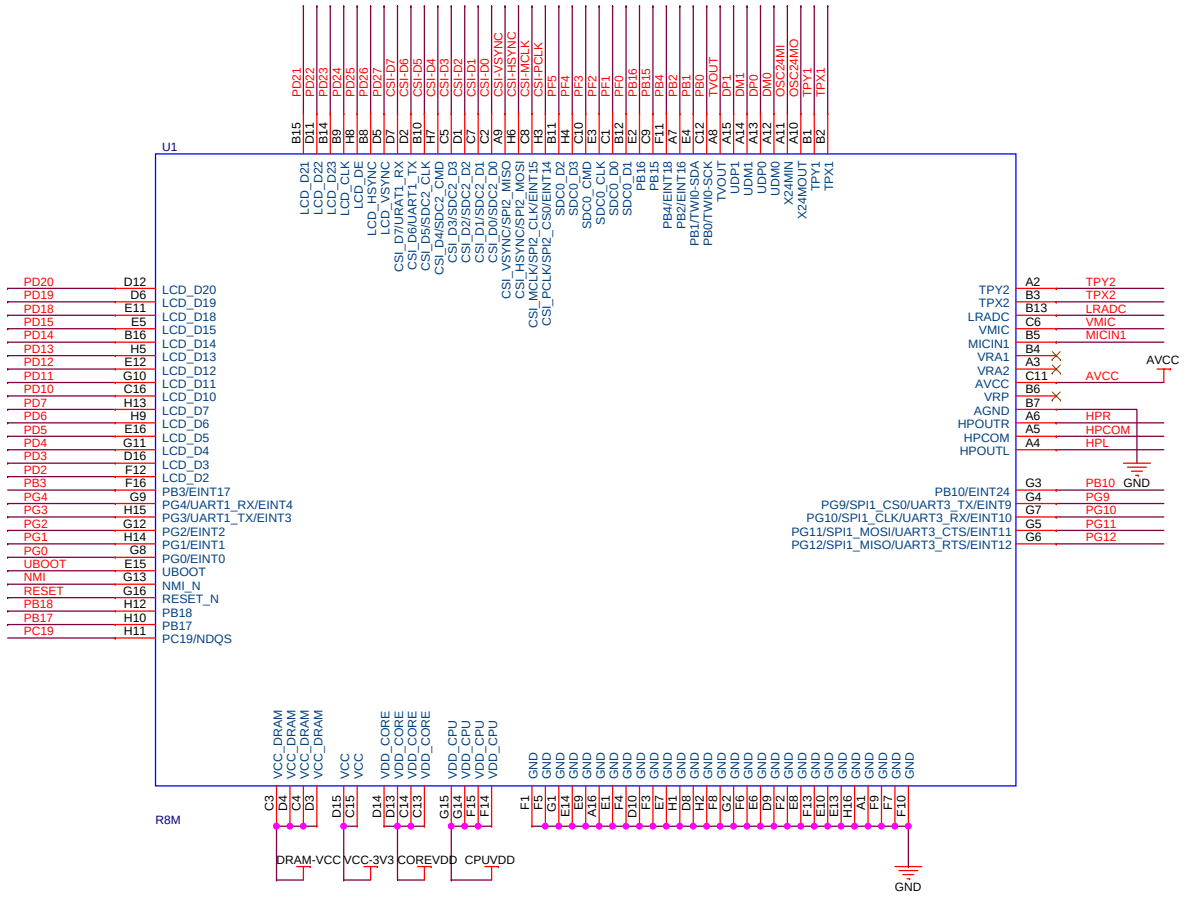
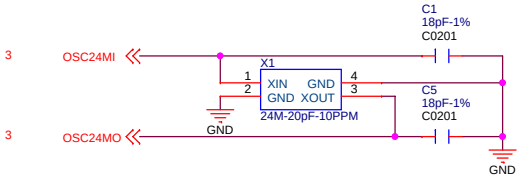
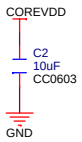
CPU



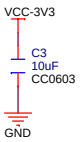
CRYSTAL



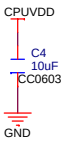
CORE



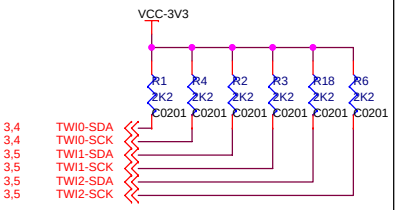
PIO-INTFACE



CPU



OTHERS



5 LRADC — LRADC

3 OSC24MI — OSC24MI
3 OSC24MO — OSC24MO

5 UBOOT — UBOOT
3,4 NMI-N — NMI
4 RESET-N — RESET

7 DM0 — DM0
7 DP0 — DP0
7 DM1 — DM1
7 DP1 — DP1

5 CSI-PCLK — CSI-PCLK
5 CSI-MCLK — CSI-MCLK
5 CSI-HSYNC — CSI-HSYNC
5 CSI-VSYNC — CSI-VSYNC
5 CSI-D0 — CSI-D0
5 CSI-D1 — CSI-D1
5 CSI-D2 — CSI-D2
5 CSI-D3 — CSI-D3
5 CSI-D4 — CSI-D4
5 CSI-D5 — CSI-D5
5 CSI-D6 — CSI-D6
5 CSI-D7 — CSI-D7

5 VMIC — VMIC
5 MICIN1 — MICIN1
5 HPR — HPR
5 HPCOM — HPCOM
5 HPL — HPL
5 TVOUT — TVOUT

5 LCD-D2 — PD2
5 LCD-D3 — PD3
5 LCD-D4 — PD4
5 LCD-D5 — PD5
5 LCD-D6 — PD6
5 LCD-D7 — PD7
5 LCD-D10 — PD10
5 LCD-D11 — PD11
5 LCD-D12 — PD12
5 LCD-D13 — PD13
5 LCD-D14 — PD14
5 LCD-D15 — PD15
5 LCD-D18 — PD18
5 LCD-D19 — PD19
5 LCD-D20 — PD20
5 LCD-D21 — PD21
5 LCD-D22 — PD22
5 LCD-D23 — PD23
5 LCD-CLK — PD24
5 LCD-DE — PD25
5 LCD-HSYNC — PD26
5 LCD-VSYNC — PD27

5 TPX1 — TPX1
5 TPX2 — TPX2
5 TPY1 — TPY1
5 TPY2 — TPY2

5 MICM — R19 0R R0402 — GND

6 WL-SDIO-D1 — PF0
6 WL-SDIO-D0 — PF1
6 WL-SDIO-CLK — PF2
6 WL-SDIO-CMD — PF3
6 WL-SDIO-D3 — PF4
6 WL-SDIO-D2 — PF5
6 AP-UART1-TX — PG9
6 AP-UART1-RX — PG10
6 AP-UART1-CTS — PG11
6 AP-UART1-RTS — PG12

6 WL-PMU-EN — PC19
6 BT-RST-N — PB4
4,6 AP-WAKE-BT — PMU-GPIO3

5 PWM0 — PB2
7 USB0-IDDET — PG2
4,7 USB0-DRV — PB10
5 AP-EINT1 — PG1
5 AP-EINT2 — PG0
5 AP-EINT3 — PB3

3,4 TWI0-SCK — PB0
3,4 TWI0-SDA — PB1
3,5 TWI1-SCK — PB15
3,5 TWI1-SDA — PB16
3,5 TWI2-SCK — PB17
3,5 TWI2-SDA — PB18
5 UART1-TX — PG3
5 UART1-RX — PG4

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Design Name: **C.H.I.P. ALPHA**

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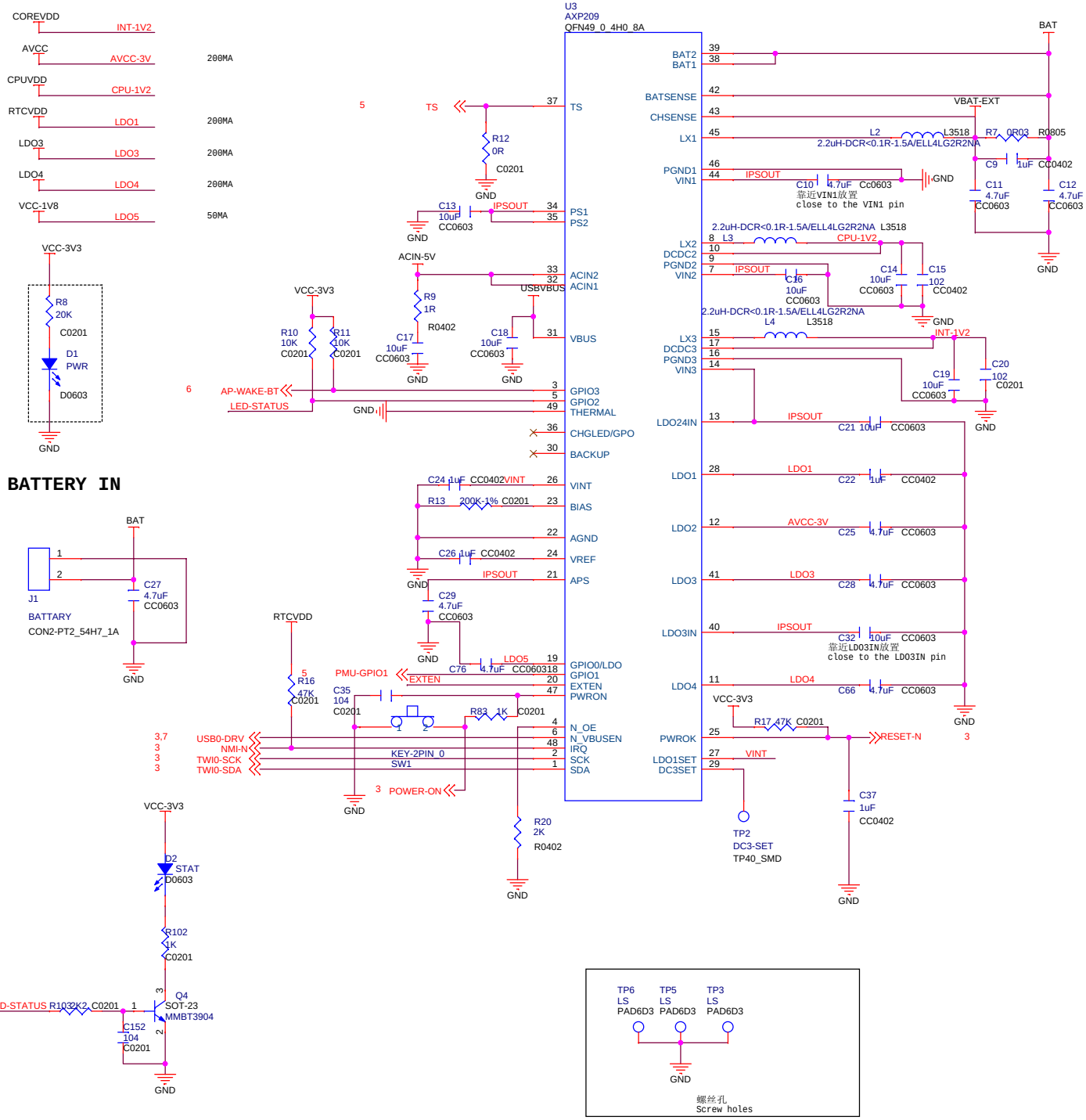
POWER/PMU



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Design Name	C.H.I.P. ALPHA	
Size A3	Page Name POWER	Rev v0.2
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MISC

POWER-ON

LCD-CLK
LCD-DE
LCD-VSYNC
LCD-HSYNC
LCD-D7
LCD-D6
LCD-D5
LCD-D4
LCD-D3
LCD-D2

LCD-D15
LCD-D14
LCD-D13
LCD-D12
LCD-D11
LCD-D10

LCD-D23
LCD-D22
LCD-D21
LCD-D20
LCD-D19
LCD-D18

UBOOT
LRADC

TWI2-SCK
TWI2-SDA
TPX1 — X1
TPX2 — X2
TPY1 — Y1
TPY2 — Y2
TWI1-SCK
TWI1-SDA
TS
HPCOM
PMU-GPIO1

PWM0
UART1-TX
UART1-RX
AP-EINT1
AP-EINT2 — BT_WAKE_AP
AP-EINT3 — WL_WAKE_AP

GND

add bt wakup and wifi wake up 150623 v0.2

RN1 0R*4 RN0201
CSI-D2 — CSID2
CSI-D3 — CSID3
CSI-D0 — CSID0
CSI-D1 — CSID1

RN2 0R*4 RN0201
CSI-D6 — CSID6
CSI-D7 — CSID7
CSI-D4 — CSID4
CSI-D5 — CSID5

CSI-VSYNC — R39 0R C0201 — CSIVSYNC
CSI-HSYNC — R40 0R C0201 — CSIHSYNC
CSI-PCLK — R41 0R C0201 — CSIPCK
CSI-MCLK — R43 0R C0201 — CSICK

U13

GND, VCC-5V, VCC-3V3, VCC-1V8
TWI1-SDA, TWI1-SCK, X1, Y1
LCD-D2, LCD-D4, LCD-D6, LCD-D10, LCD-D12, LCD-D14, LCD-D18, LCD-D20, LCD-D22, LCD-CLK, LCD-VSYNC
GND

ACIN-5V, GND, TS, VBAT-EXT, POWER-ON, GND, X2, Y2
PWM0, LCD-D3, LCD-D5, LCD-D7, LCD-D11, LCD-D13, LCD-D15, LCD-D17, LCD-D19, LCD-D21, LCD-D23, LCD-HSYNC, LCD-DE

150709 v0.2

LCD_CN
CON2X20-PT2_54-5_2X31_2H2A

U14

GND
EINT UART1-TX
EINT UART1-RX
UBOOT
LRADC
GND
XIO-P0
XIO-P2
XIO-P4
XIO-P6
GND
AP-EINT1
TWI2-SDA
SPI2_CS0 CSIPCK
SPI2_MOSI CSIHSYNC
CSID0
CSID2
CSID4
CSID6
GND

HPL, HPCOM, HPR, MICM
MICIN1, VCC-5V, AP-EINT3, TWI2-SCK, CSICK, SPI2_CLK, CSIVSYNC, SPI2_MISO, CSID1, CSID3, CSID5, CSID7
GND

LCD_CN
CON2X20-PT2_54-5_2X31_2H2A

Note:
TWI2 pin reused
SPI2 pin reused

L+R+G+M/T

VCC-3V3
R88 1M C0201
EARCON
J11 HXQKPJ-342H
PJ-033SMTH4A
R414 0R C0201
PMU-GPOI1
TP7 PMU-GPOI1 TP40_SMD
150709 v0.2

MICM
HPL
HPR
MICIN1
C294 100pF
C79 22uFCC0805
C78 22uFCC0805
EARMIC
C54 C0201 104
R192 1.5K
R100 24R C0201
R101 24R C0201
R105 100K C0201
VMIC
R113 C0201 1K
C188 4.7u/6.3V
TP4 VMIC TP40_SMD
150709 v0.2
C151 104 C0201
C148 104 C0201
GND

VCC-3V3
R87 10k C0201
AP-EINT2
XIO-P7
U27 PCF8574ARGYR QFN20-PT0_5-3_65X4_65H1A
TWI2-SCK
TWI2-SDA
SCL INT SDA VCC A0 A1 NC2 A2 GND
P7 NC4 P5 P4 P6 NC3 P2 P3 P0 P1
XIO-P6 XIO-P5 XIO-P4 XIO-P3 XIO-P2
XIO-P0 XIO-P1
C145 1uF CC0402
GND
EARMIC
EARCON
TV-OUT
J2 TVOUT&MIC CON3-PT2_54-2_5X7_57H16_3A

C53 C0201 22pF
Pb Y/CVBS
TV-OUT
TVOUT
L9 L0603 1.8uH
R60 C0201 75R
C55 C0201 271
C56 C0201 331
D18 SOT-23 BAT54S
VCC-3V3
GND

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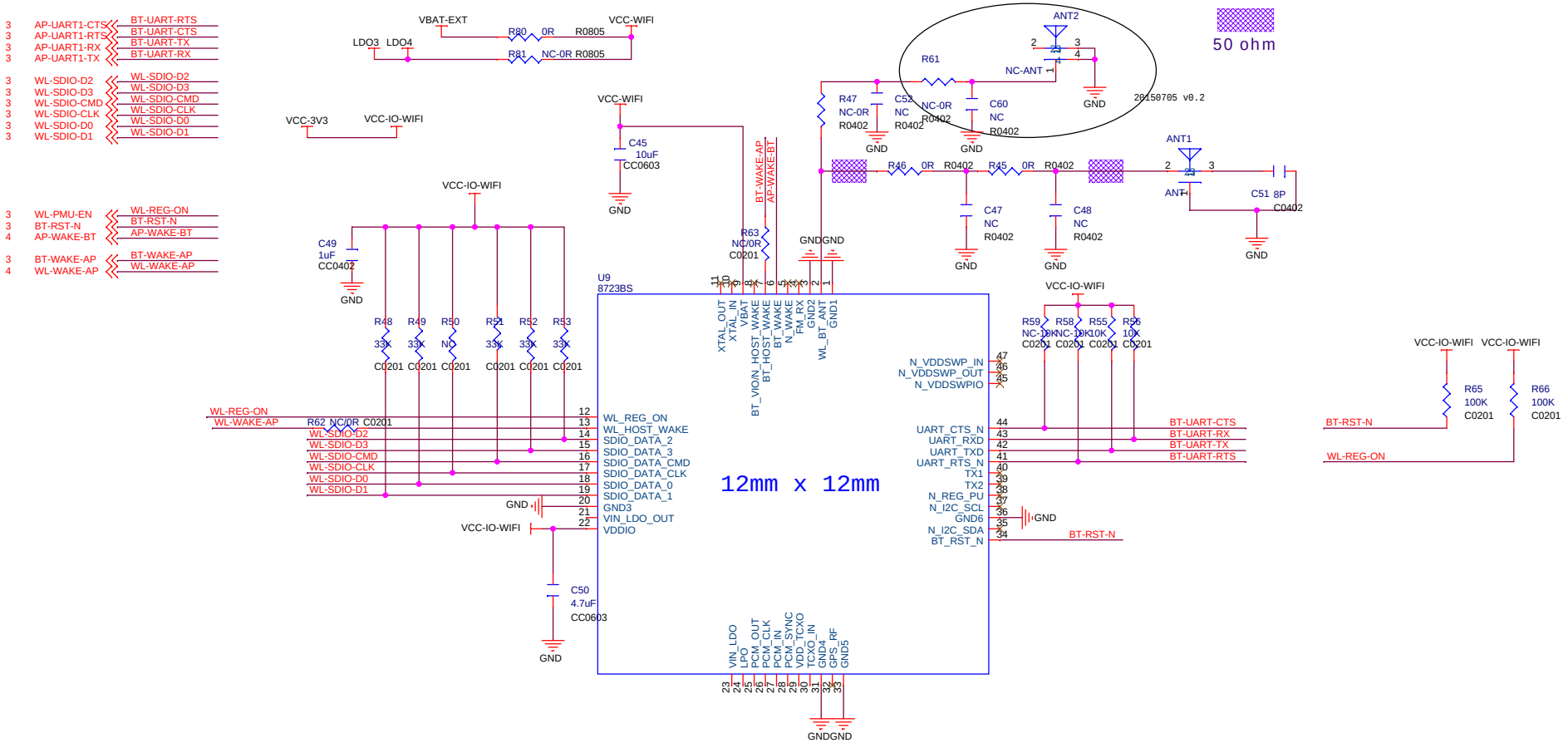
SDIO WIFI&BT



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Design Name	C.H.I.P. ALPHA	
Size A3	Page Name SDIO WIFI&BT	Rev v0.2
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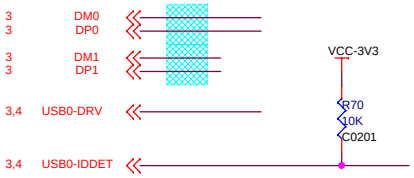
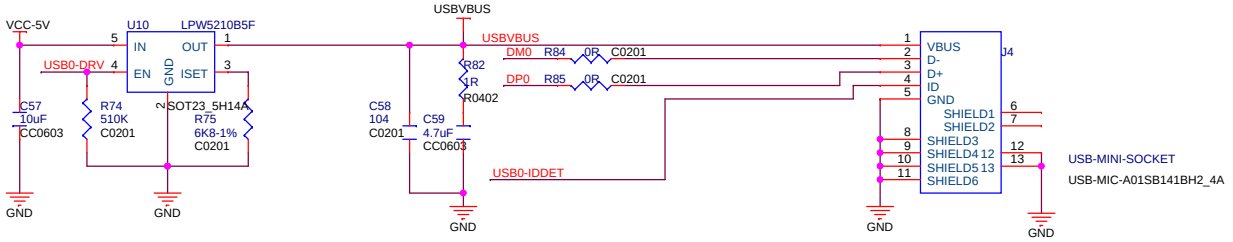
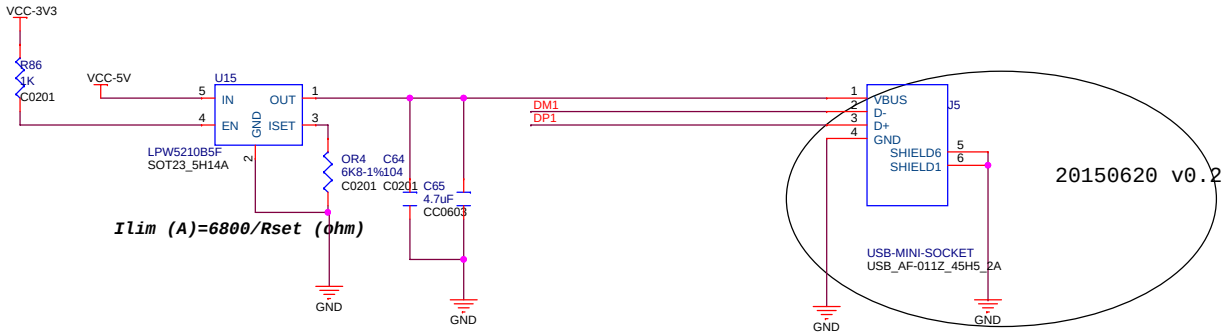
USB

USB





D+/D-上的ESD器件寄生电容小于等于4pF(4pF包括了误差)。
The parasitic capacitance of esd on D+/D- < 4pf



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