

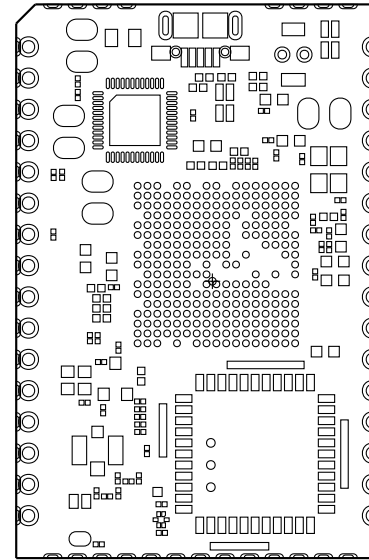
REVISION HISTORY

Schematics Index:

P01: REVISION HISTORY
 P02: BLOCK
 P03: CPU
 P04: POWER
 P05: MISC
 P06:SDIO WIFI
 P07: USB
 P08: BESIDE CPU
 P09: NAND

PB2 SPDIF-D0
 PG13 EINT13
 PB15 GPIO
 PB16 GPIO
 PD2 LCD-D2
 PD3 LCD-D3
 PD4 LCD-D4
 PD5 LCD-D5

GND
 VCC-3V3
 IPSOUT
 CHG-IN
 PWRON
 GND
 TS
 BAT
 PWM0
 PWM1
 TWI1-SCK
 TWI1-SDA
 UART2-TX
 UART2-RX
 UART2-CTS
 UART2-RTS



GND
 HPL
 HPCOM
 HPR
 I2S-MCLK
 I2S-BCLK
 I2S-LCLK
 I2S-D0
 I2S-D1
 AGND
 MICIN1
 MICIN2
 VMIC
 PB5
 PB6
 PB7
 PB8
 PB9

GND
 UART1-TX EINT3 PG3
 UART1-RX EINT4 PG4
 LRADC0
 CSIPCK SPI2-CS0 PE0
 CSIMCLK SPI2-CLK PE1
 CSIHSYNC SPI2-MOSI PE2
 CSIVSYNC SPI2-MISO PE3
 CSID0 SDC2-D0 PE4
 CSID1 SDC2-D1 PE5
 CSID2 SDC2-D2 PE6
 CSID3 SDC2-D3 PE7
 CSID4 SDC2-CMD PE8
 CSID5 SDC2-CLK PE9
 CSID6 UART1-TX PE10
 CSID7 UART1-RX PE11

SOFTWARE-DEFINED
 ALT. MUX FUNCTION
 GR8 PIN PORT NO.

Revision History	Description	Date	Drawn	Checked	Approved
CRUMB	version 0.1	2016-08-05			
C.H.I.P. Pro	version 0.9	2016-11-11			
C.H.I.P. Pro	version 0.9a - fix sheet 1 pinout dwg	2017-03-01			

NEXT/THING

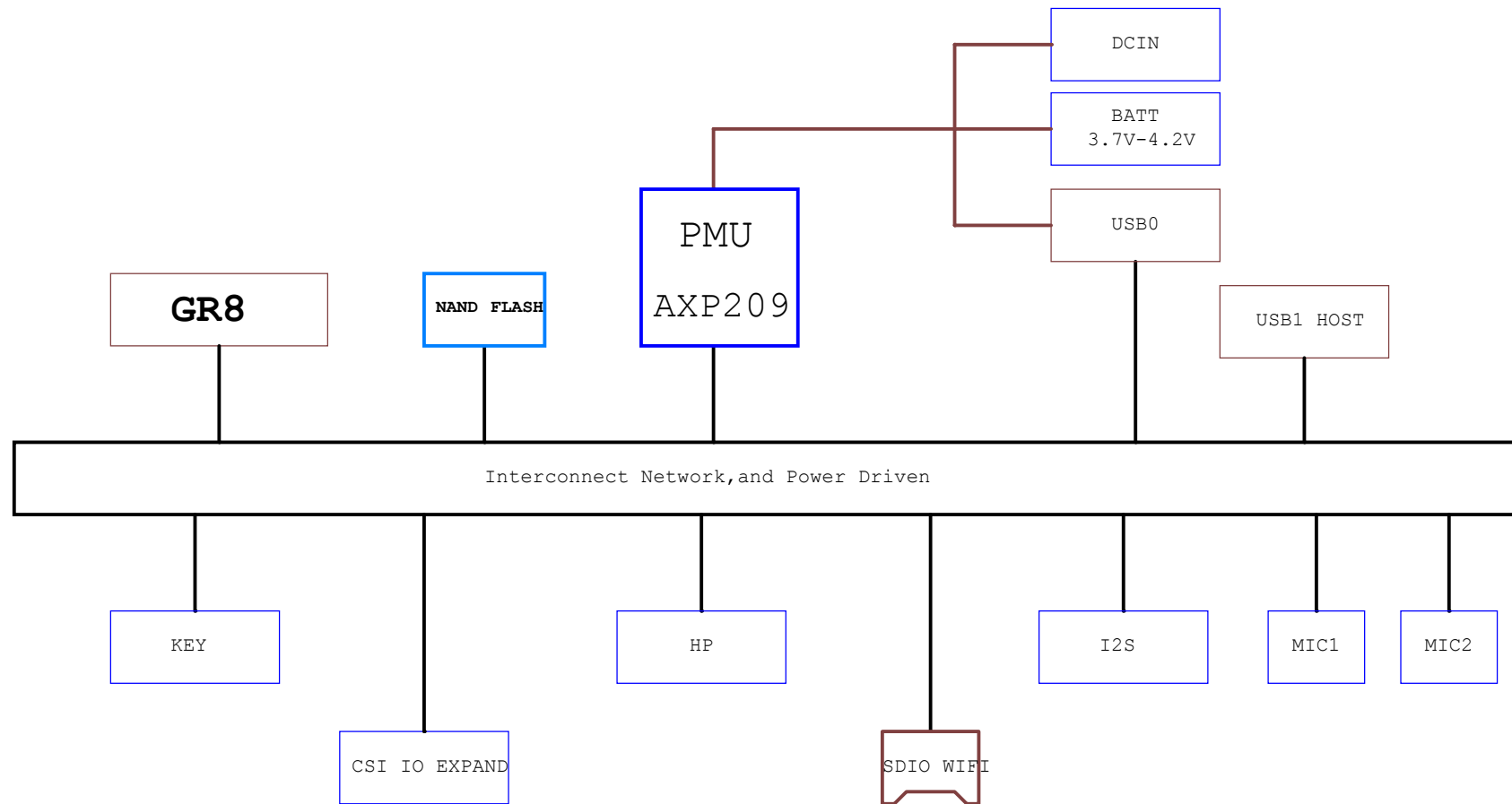
COMPANY

Oakland, California
docs.nextthing.co

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

Size A3	Page Name REVISION HISTORY	Rev v0.9a
Date: Wednesday, March 1, 2017:		Sheet 1 of 9

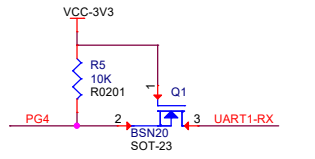
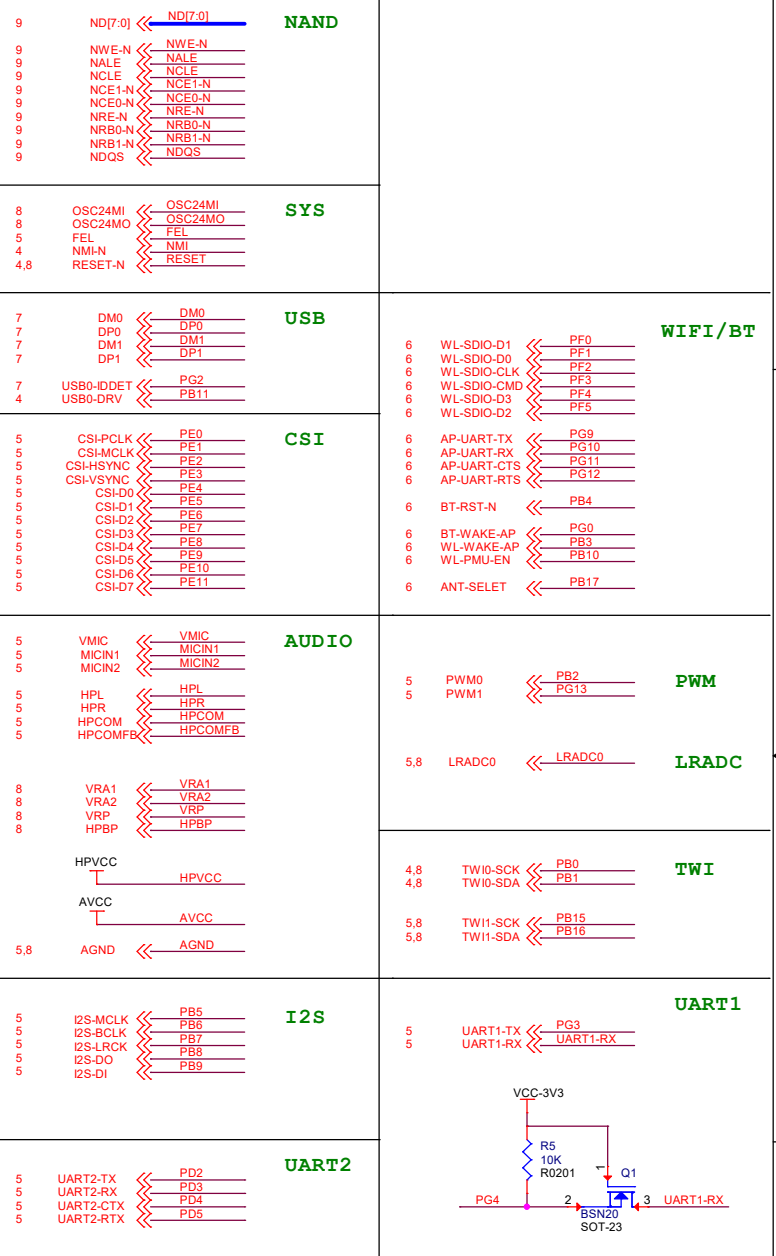
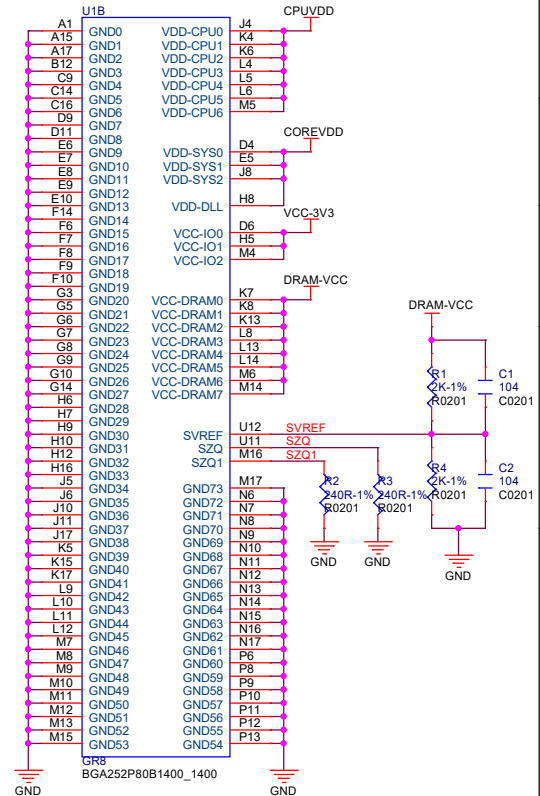
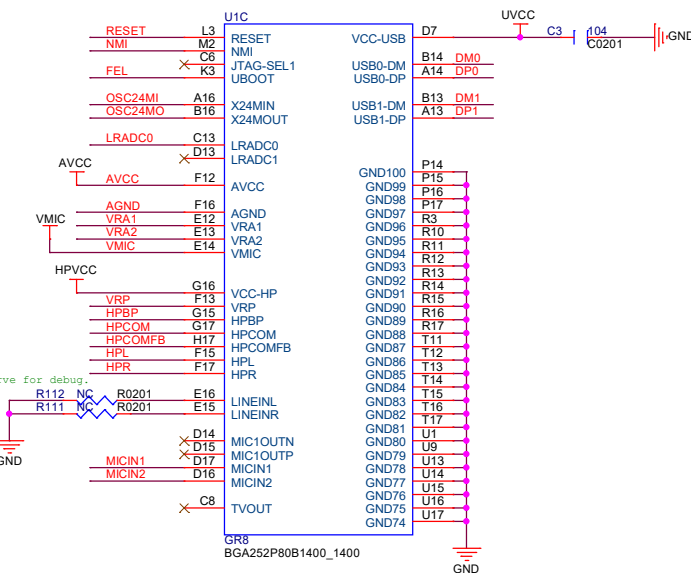
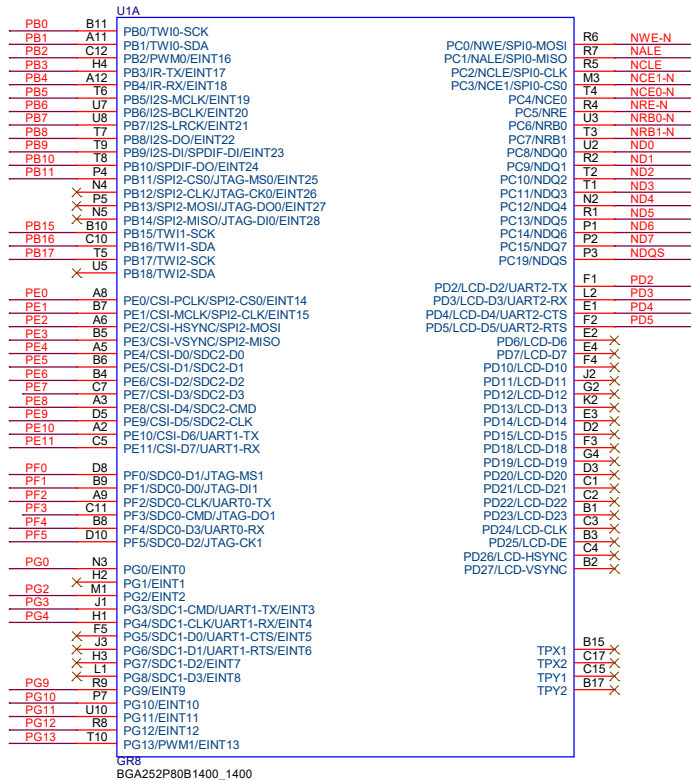
BLOCK



TP list	Function
TP 0	FEL
TP 1	USB0-ID
TP 2	USB0-D+
TP 3	USB0-D-
TP 4	TWI0-SDA
TP 5	TWI0-SCK
TP 6	DC3-SET

NEXT/THING COMPANY		
<i>Oakland, California</i> docs.nextthing.co		
Design Name		
C.H.I.P. Pro		
Size A3	Page Name BLOCK	Rev v0.9
Date: Wednesday, November 30, 2016 Sheet 2 of 9		

CPU

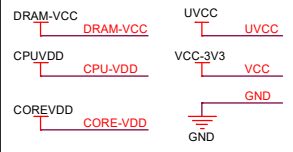


NEXT/THING COMPANY

Oakland, California
docs.nextthing.co

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

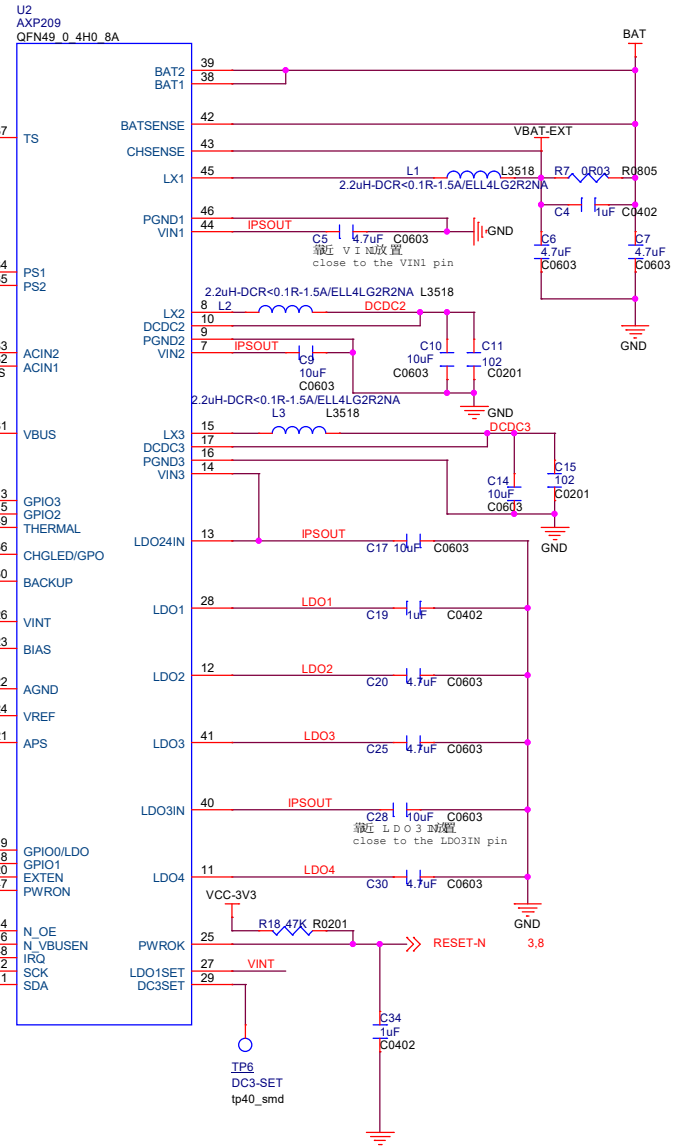
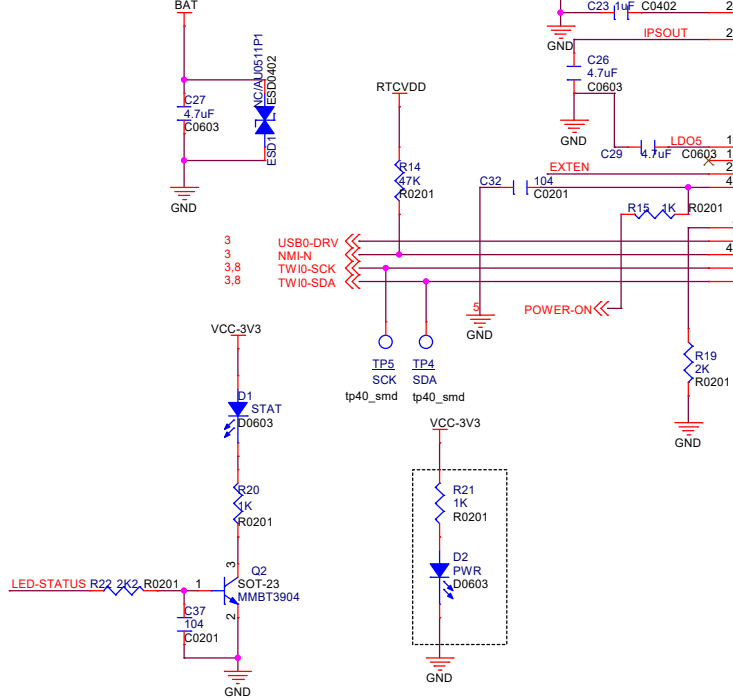
Size: A3	Page Name: CPU	Rev: v0.9
Date: Wednesday, November 30, 2016	Sheet: 3 of 9	



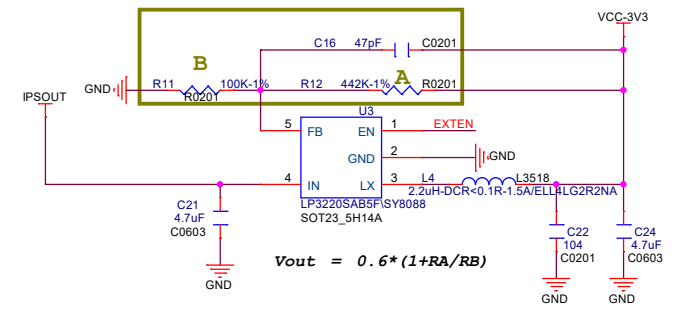
POWER/PMU

CPUVDD	DCDC2	MAX 1200MA
COREVDD	DCDC3	MAX 1600MA
RTCVDD	LDO1	MAX 200MA
AVCC	LDO2	MAX 200MA
LDO3	LDO3	MAX 200MA
LDO4	LDO4	MAX 200MA
VCC-1V8	LDO5	MAX NC/50MA
VCC-3V3	VCC-3V3	MAX 1000MA
DRAM-VCC	DRAM-VCC	MAX 1000MA

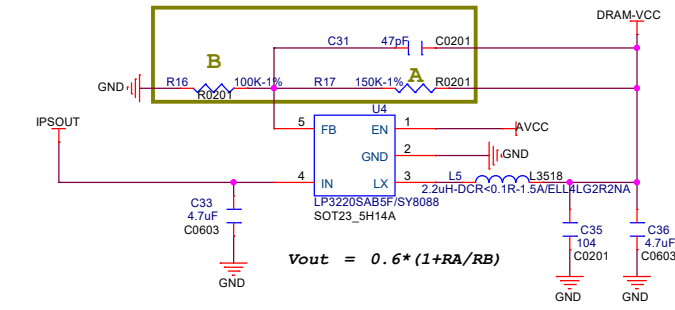
BATTERY IN



IPSOUT TO 3V3



IPSOUT TO 1V6



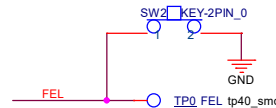
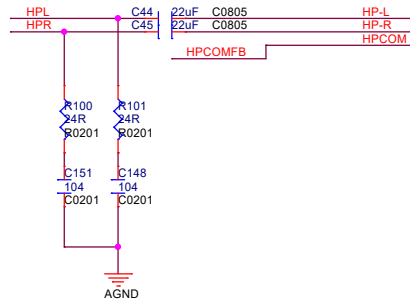
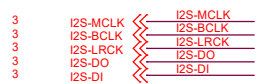
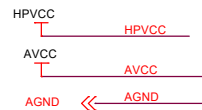
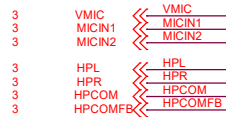
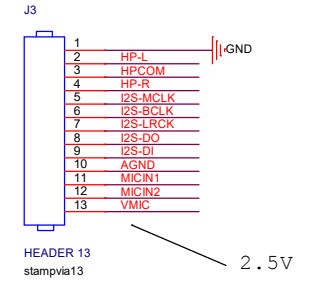
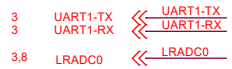
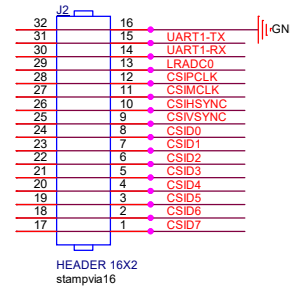
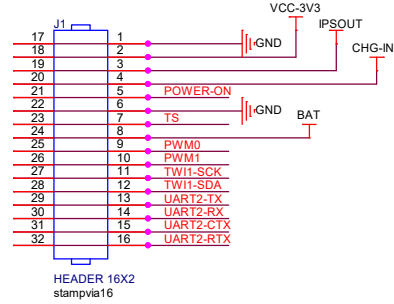
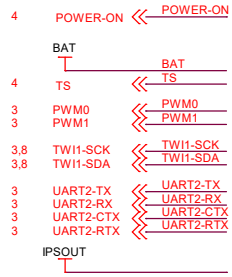
NEXT/THING COMPANY

Oakland, California
docs.nextthing.co

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

Size: A3	Page Name: POWER	Rev: v0.9
Date: Wednesday, November 30, 2016	Sheet: 4	of 9

MISC



NEXT/THING

COMPANY

Oakland, California

docs.nextthing.co

Design Name **C.H.I.P. Pro**

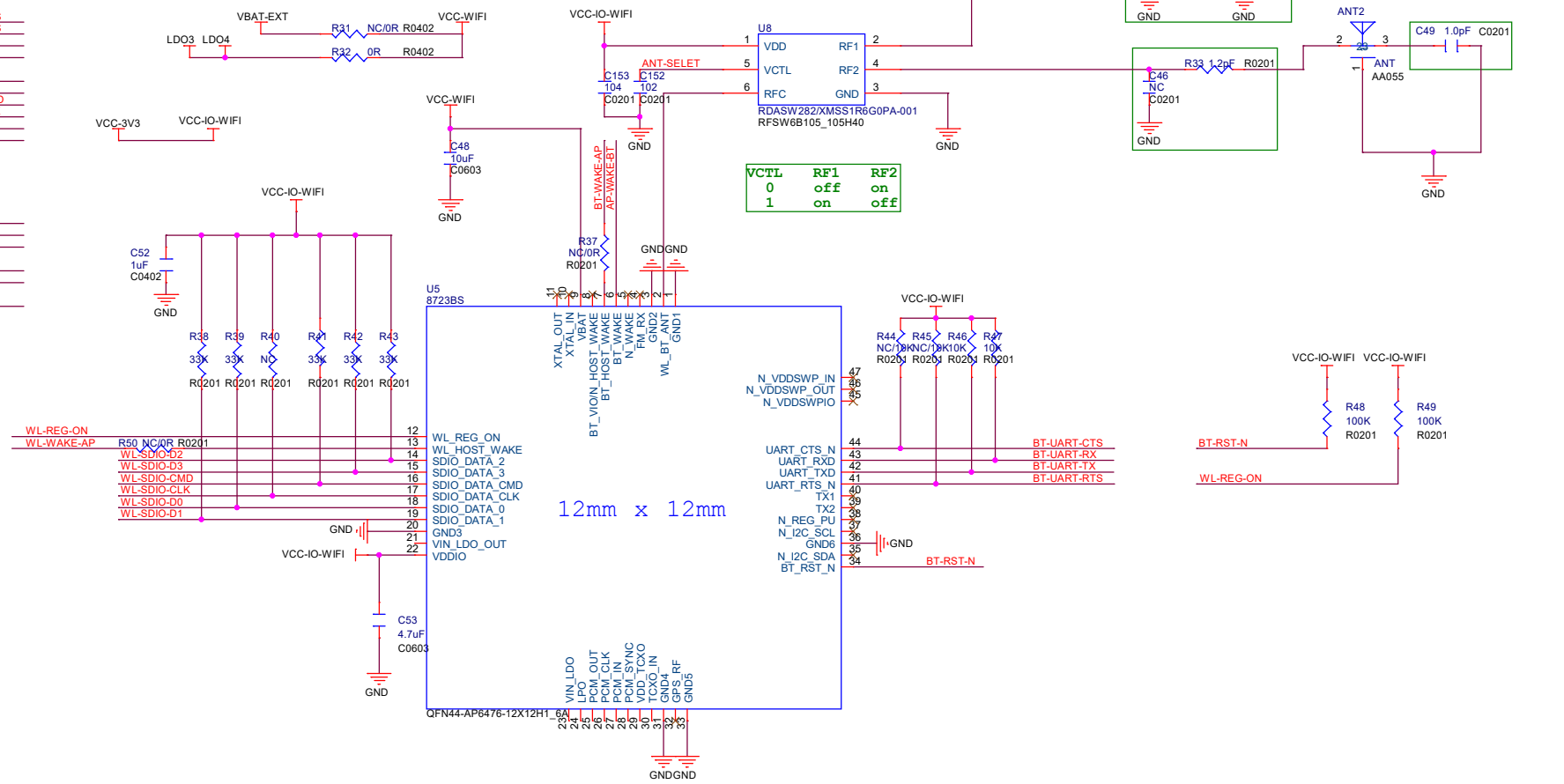
Size A3	Page Name MISC	Rev v0.9
------------	--------------------------	-------------

Date: Wednesday, November 30, 2016 Sheet 5 of 9

SDIO WIFI&BT

- 3 AP-UART-CTS << BT-UART-RTS
- 3 AP-UART-RTS << BT-UART-CTS
- 3 AP-UART-RX << BT-UART-TX
- 3 AP-UART-TX << BT-UART-RX

- 3 WL-PMU-EN << WL-REG-ON
- 3 BT-RST-N << BT-RST-N
- 4 AP-WAKE-BT << AP-WAKE-BT
- 3 BT-WAKE-AP << BT-WAKE-AP
- 3 WL-WAKE-AP << WL-WAKE-AP
- 3 ANT-SELET << ANT-SELET



12mm x 12mm

NEXT/THING COMPANY

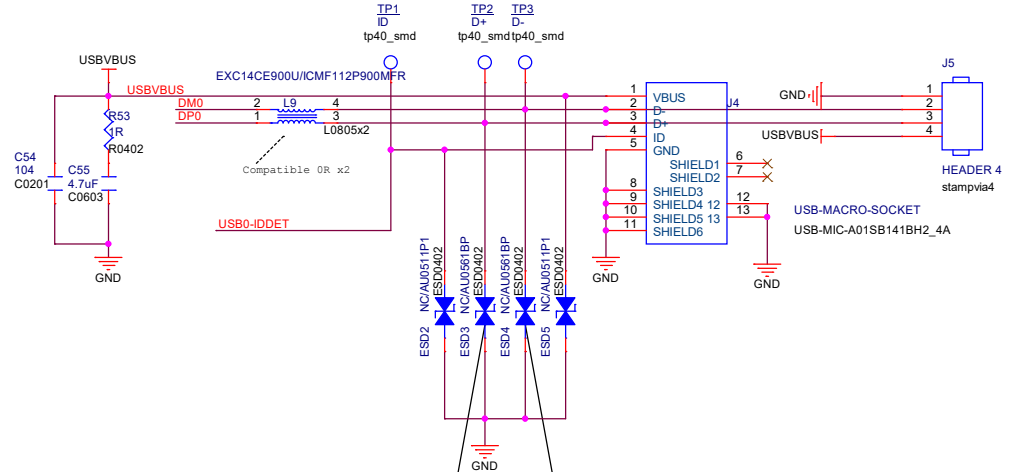
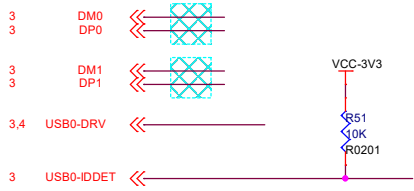
Oakland, California
docs.nextthing.co

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

Size: A3 Page Name: **SDIO WIFI&BT** Rev: v0.9

Date: Wednesday, November 30, 2016 Sheet: 6 of 9

USB



D+ / D- 上的 ESD 电容 小于等于 4pF (考虑误差)。
 The parasitic capacitance of esd on D+/D- < 4pF



NEXT/THING COMPANY

Oakland, California
docs.nextthing.co

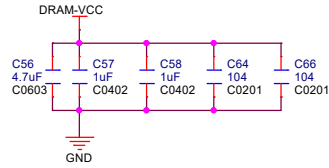
Design Name: **C.H.I.P. Pro**

Size A3	Page Name USB	Rev v0.9
------------	-------------------------	-------------

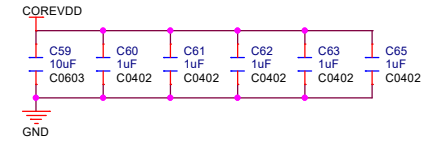
Date: Wednesday, November 30, 2016 Sheet 7 of 9

BESIDE CPU

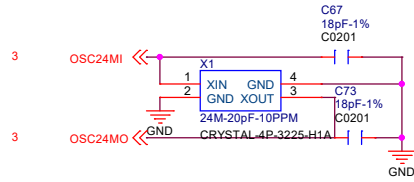
DRAM



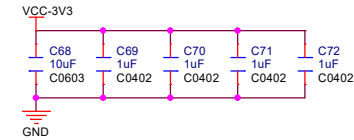
CORE



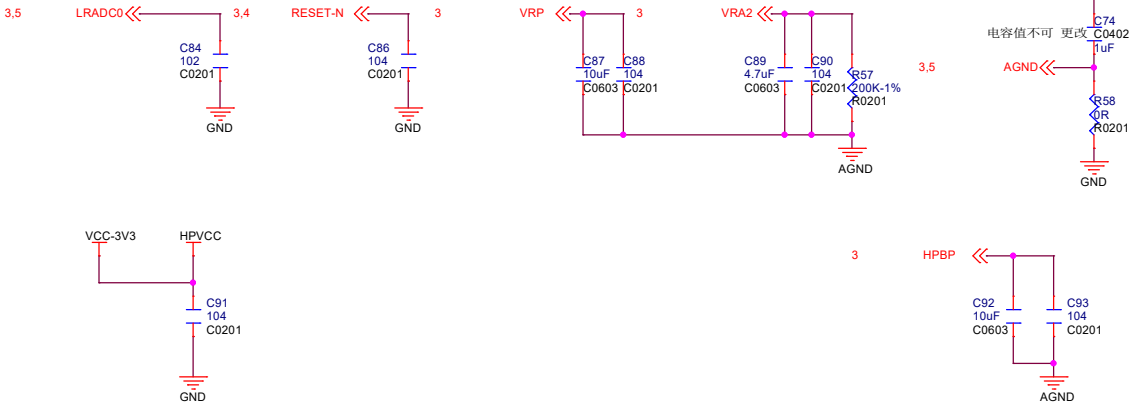
CRYSTAL



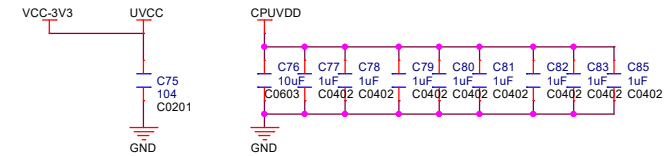
PIO-INTERFACE



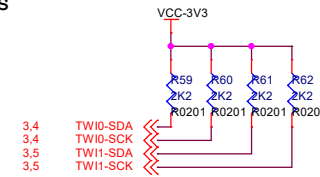
AUDIO-TP



USB-CPU



OTHERS



NEXT/THING
COMPANY

Oakland, California
docs.nextthing.co

Design Name		C.H.I.P. Pro	
Size	Page Name	Rev	
A3	BESIDE CPU	v0.9	
Date:	Wednesday, November 30, 2016	Sheet	8 of 9

