

MangOH Red Platform

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SHEET 10

WIFI and BT

Project Variants

	1600643		
DNI	N		
MIC_OMTP	N		
MIC_CTIA	Y		

Variants description

DNI = Do Not Install
MIC_OMTP = OMTP headphones config (do not define MIC_CTIA)
MIC_CTIA = CTIA/AHJ headphones config (do not define MIC_OMTP)

I2C address list

08h = 3503 USB hub
3Eh = I/O expander
51h = EEPROM with Board ID
64h = Battery gauge
68h = 6 Axis IMU
6Bh = Buck+batt charger
71h = I2C Hub
76h = Pressure Sensor

REFERENCE

1600674 PCA, MANGO H
5302303 PCB, MANGO H

INNER RING

GROUND SLUG

JTAG

Mounting Holes

OUTER RING

No Pull UP on
GPIO_35
GPIO_2
TX_ON
ANT_CNTL1
ANT_CNTL2
GPIO_8
GPIO_33

MAIN CF3 Socket Main Antenna

Diversity

GPS Active Antenna Supply

USB HOST

Real Time IO
3.3V capable, multi function configurable

Low Power I/O
1.8V capable

FTDI to Serial

VBACKUP/DISCHARGE

USB CONN

IoT Connector 1.8V capable IOT#0

26 pin Raspberry Pi Compatible 3.3V capable

FTDI has ESD protection

MTK_TO_WP_UART_EN	CONS_DIR	STATUS
L	L	UART <--> WP CONS
L	H	UART <--> MTK CONS
H	X	WP CONS <--> MTK CONS

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SCHEMATIC: 2500927

SITE: CTO Office
LEAD ENGINEER: Ashish Syal
REV SCH: REV PCB
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Keep TP close to each other

30mS to discharge 47uF@1V8

RTC Backup Battery

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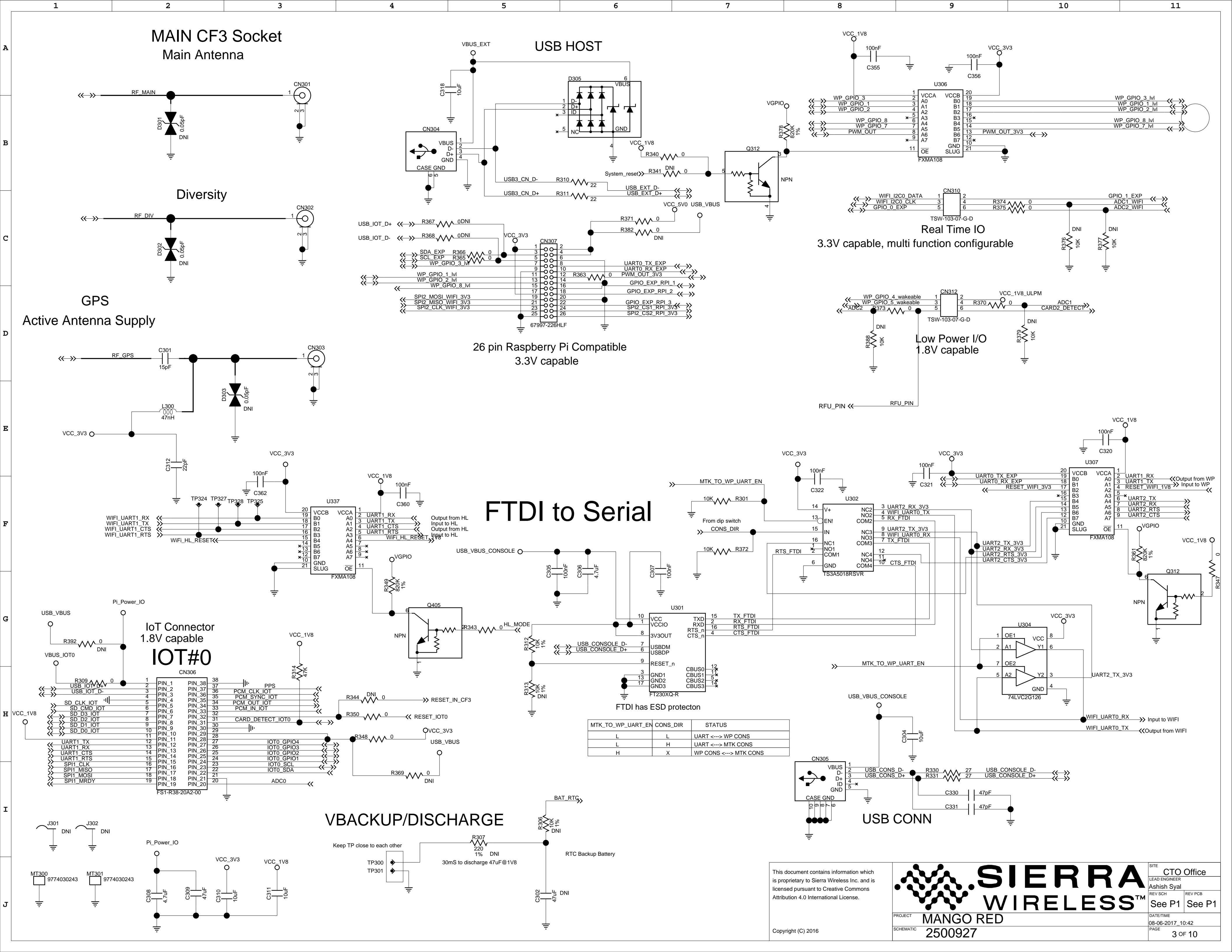
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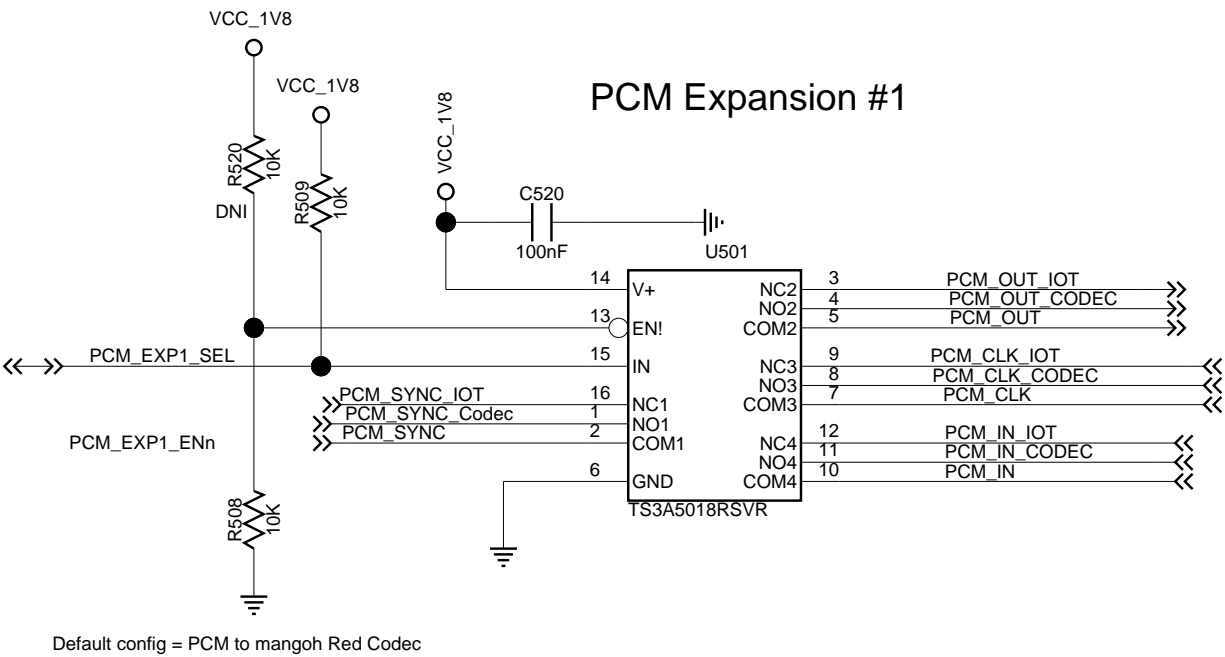
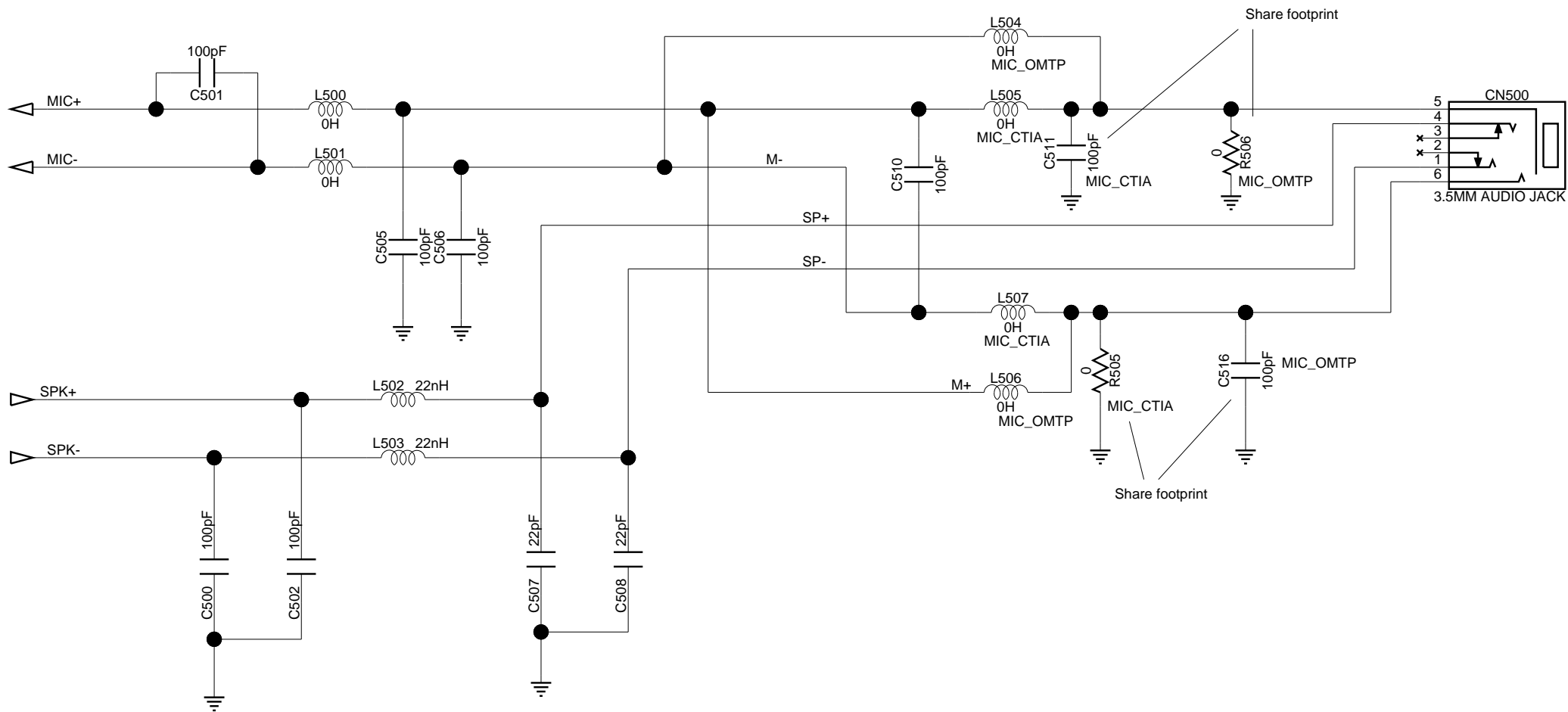
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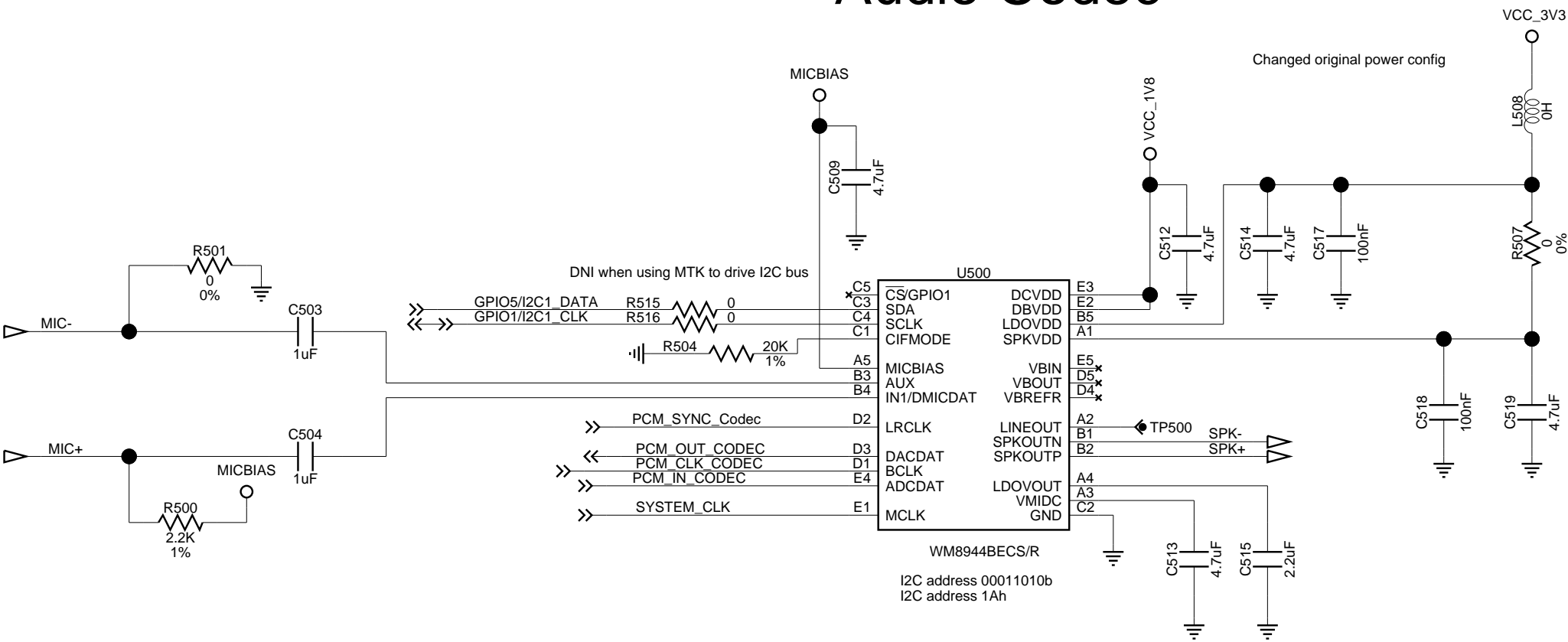
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Audio Source Selection



Audio Codec



A

B

C

D

E

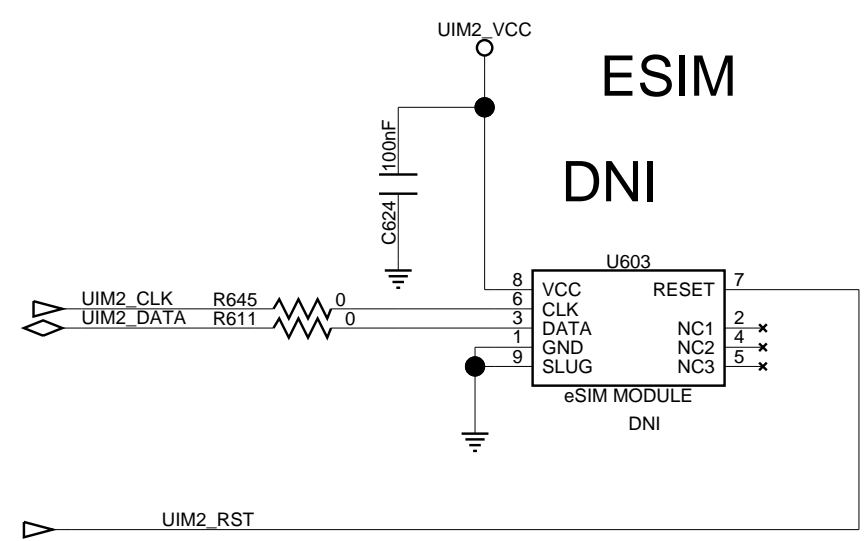
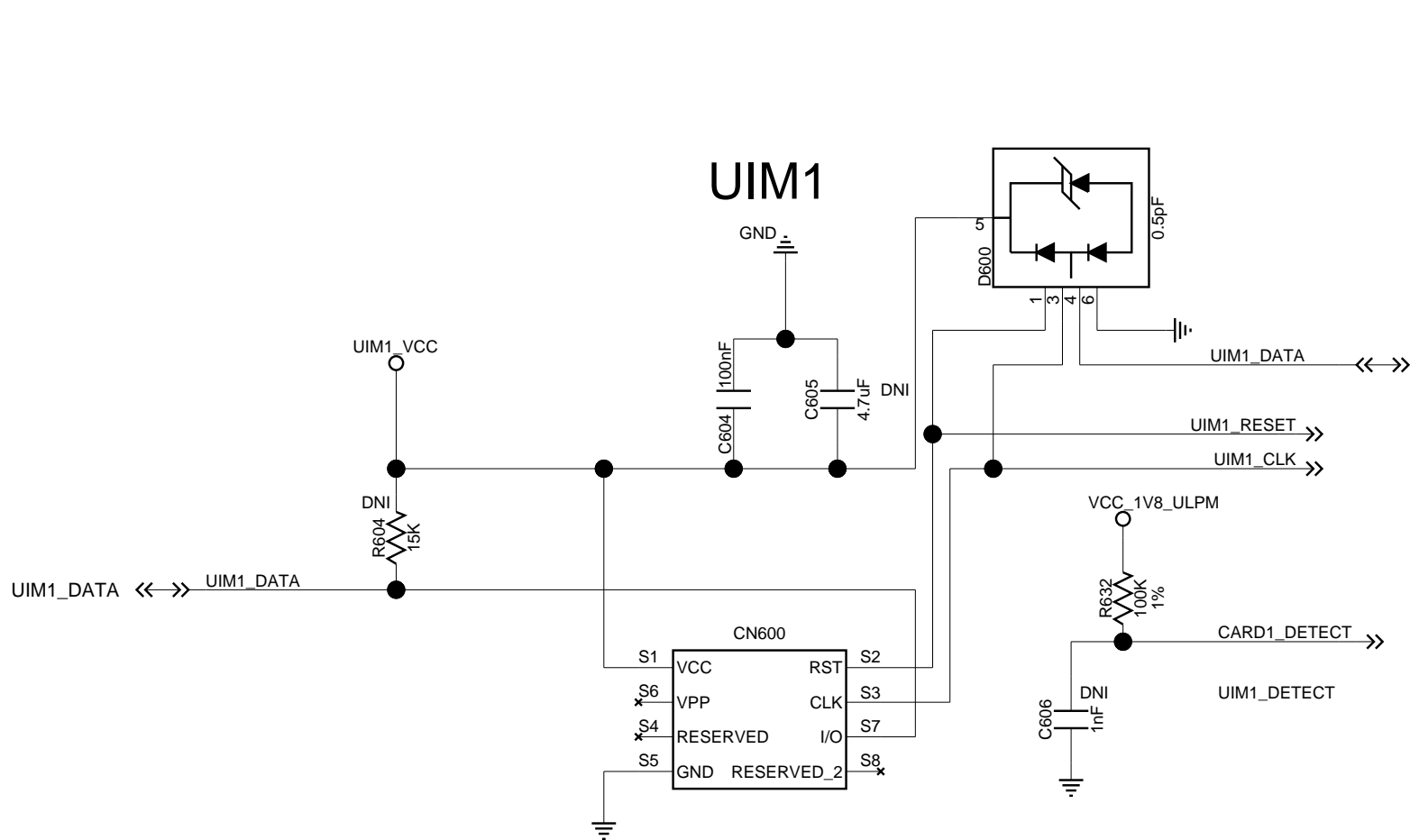
F

G

H

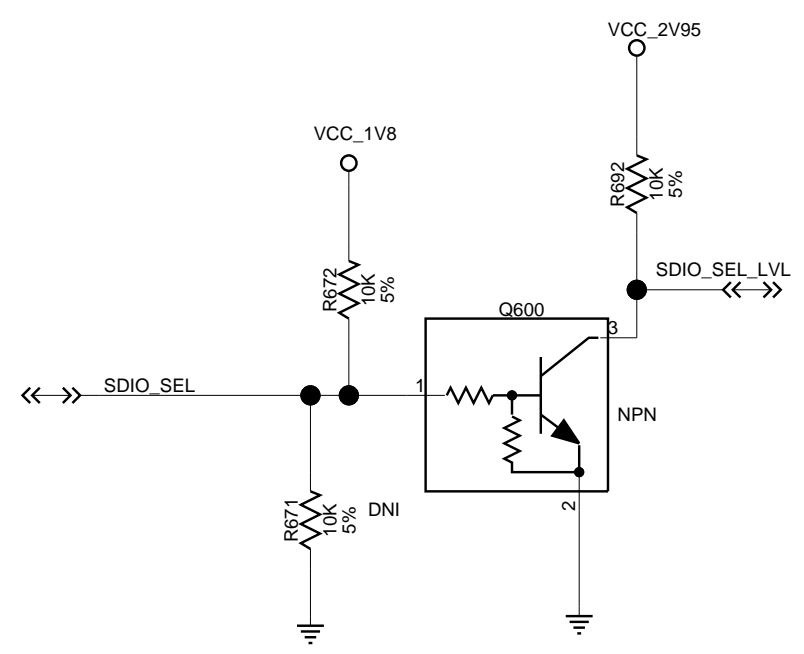
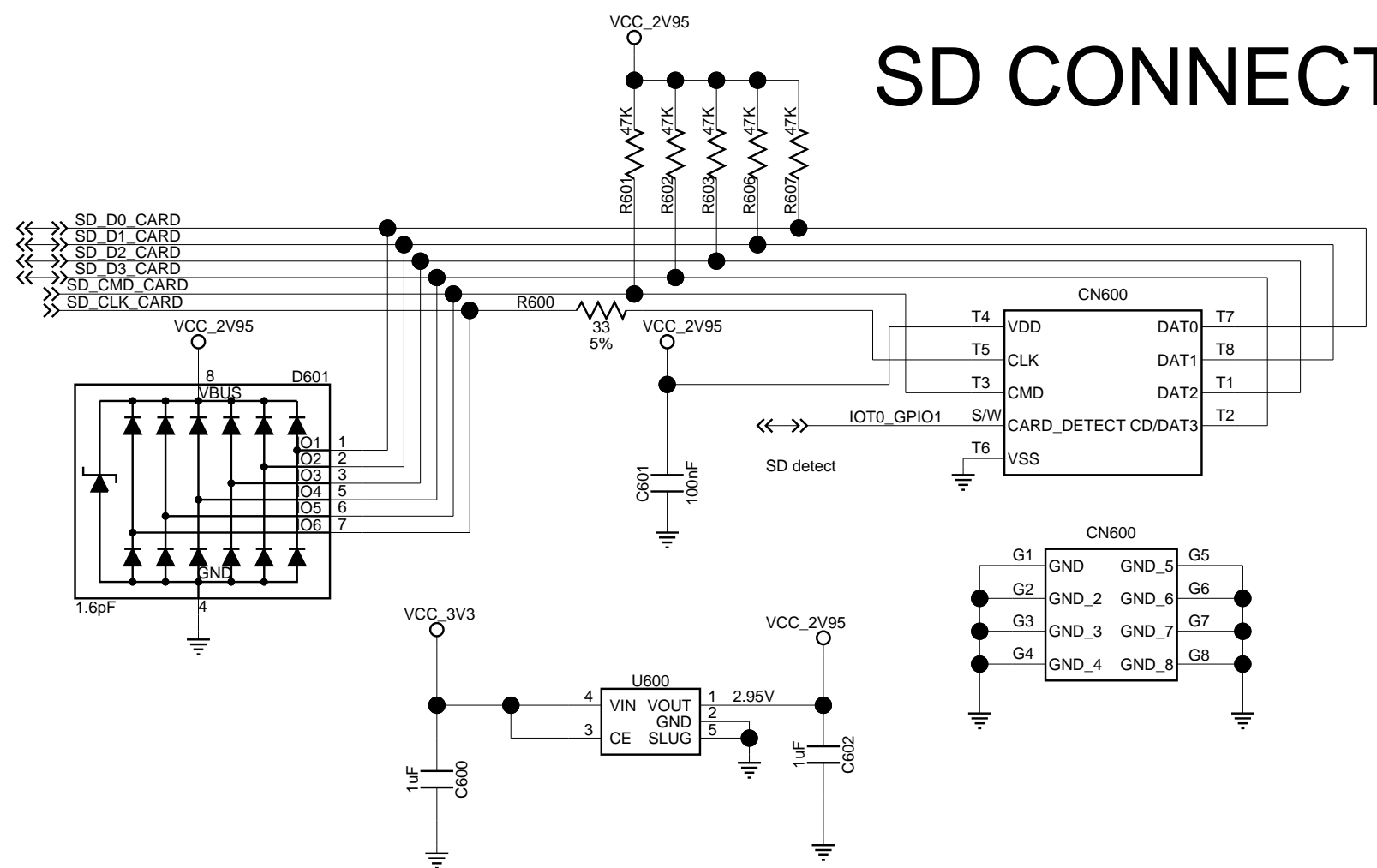
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J

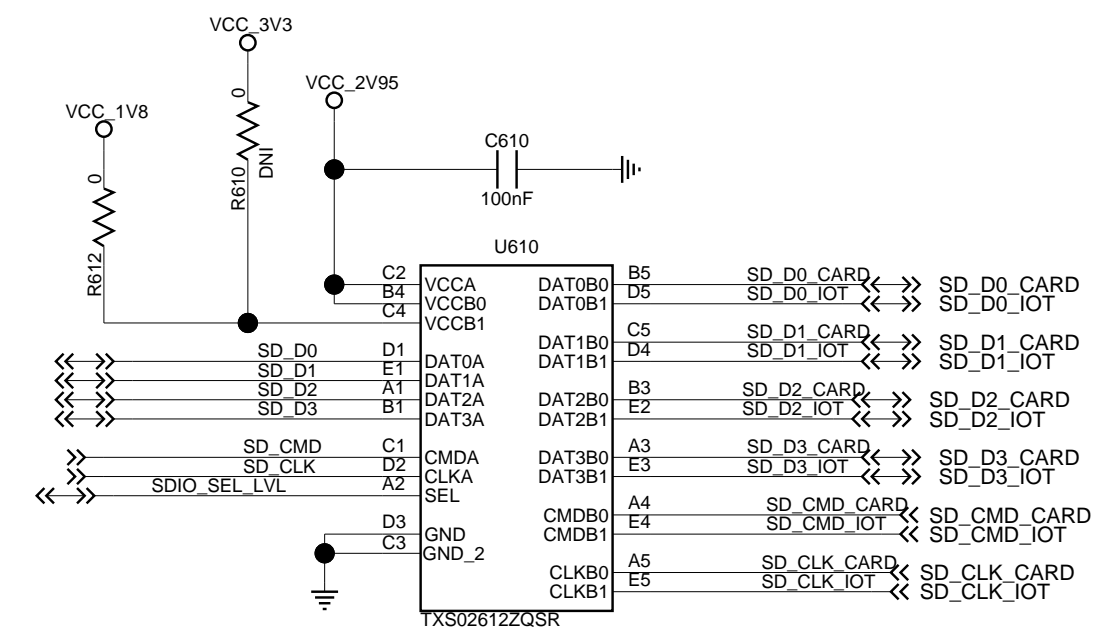


SIM card detected only if present at startup

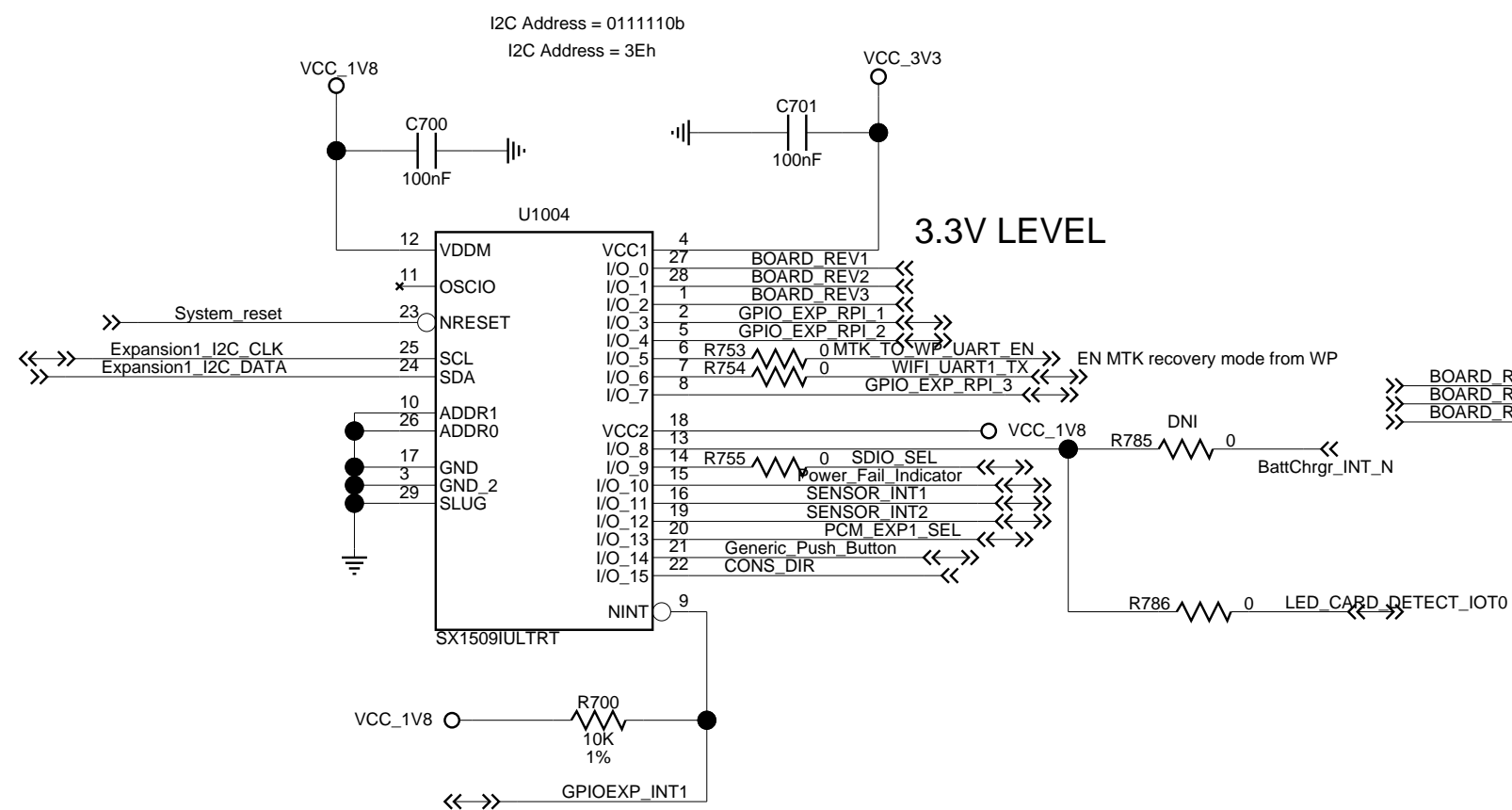
SD CONNECTOR



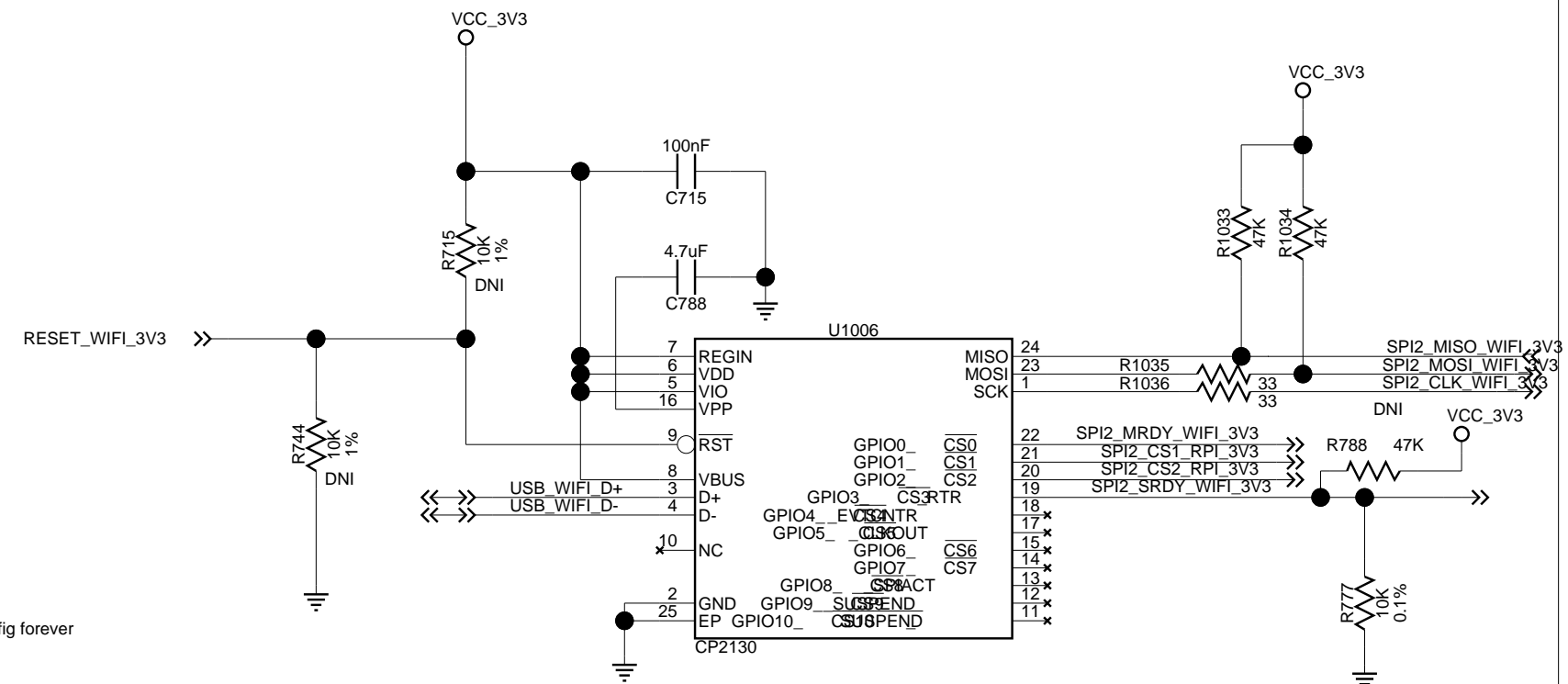
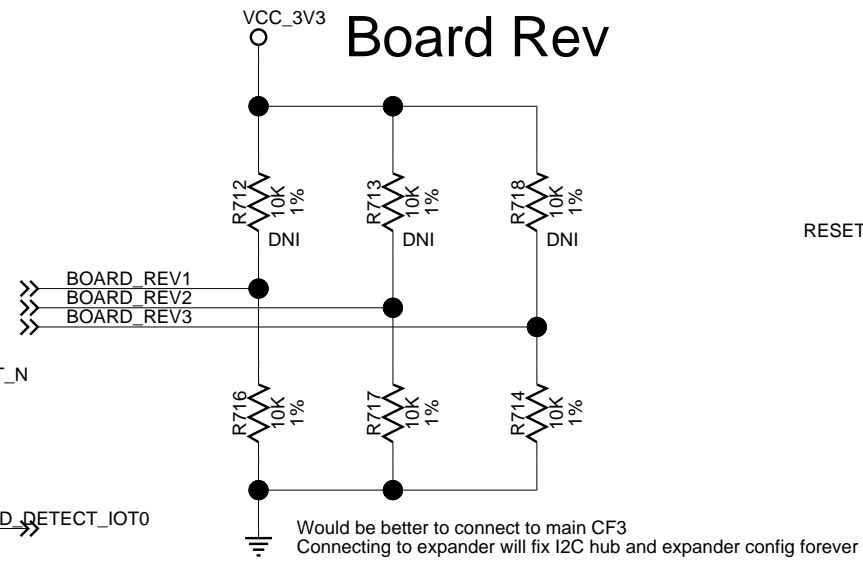
SDIO Expansion



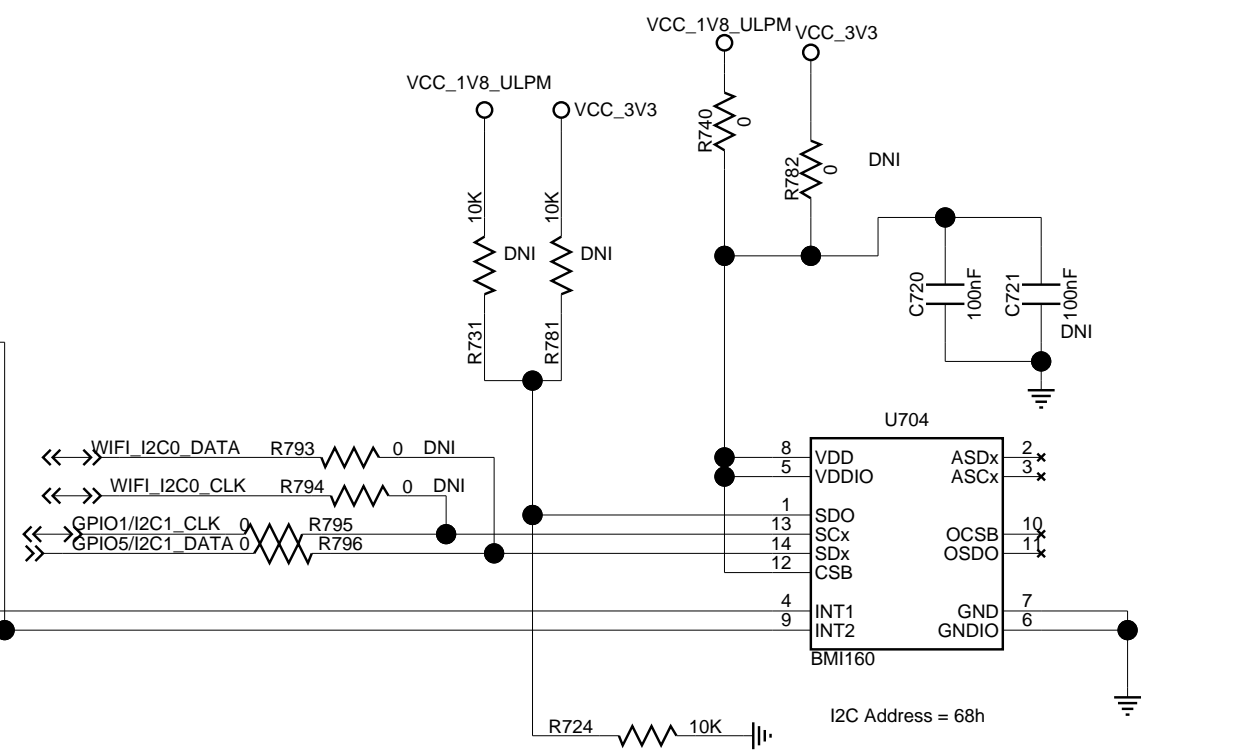
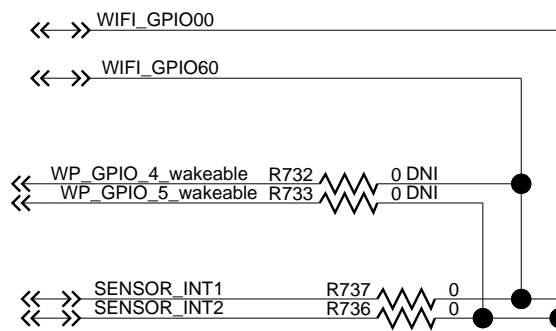
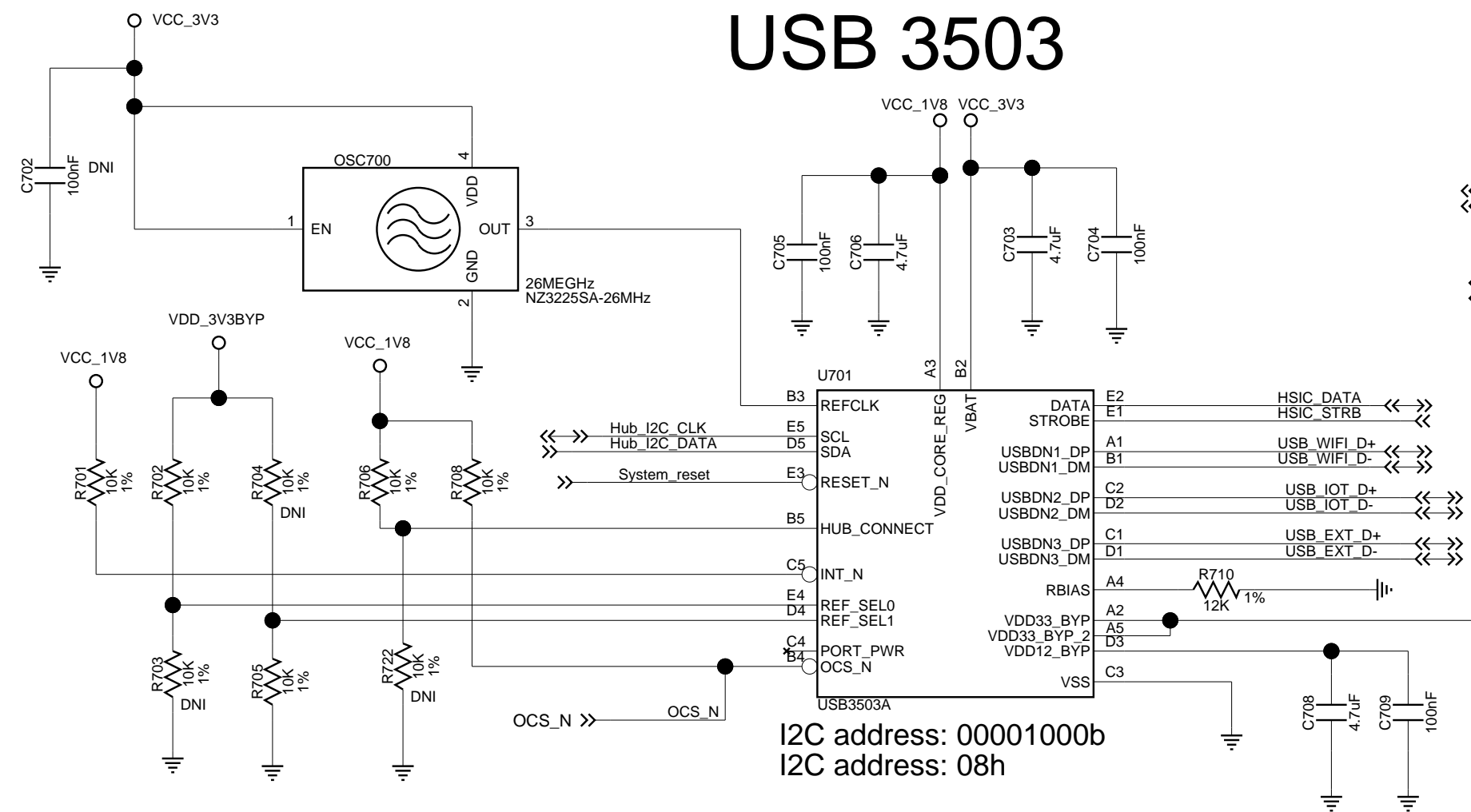
GPIO Expander#1



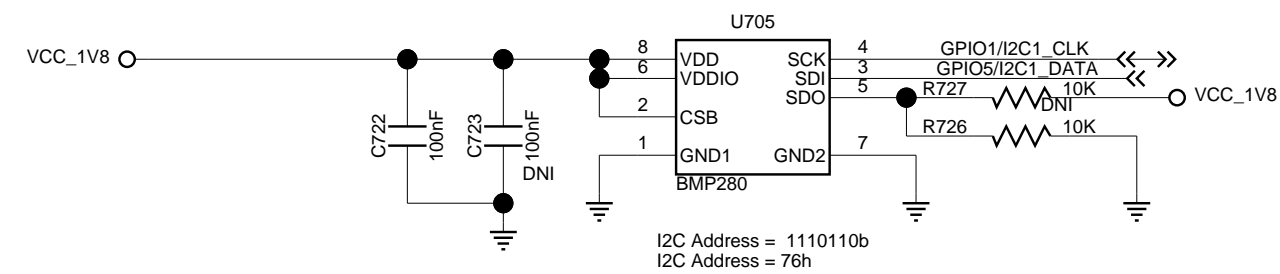
Board Rev



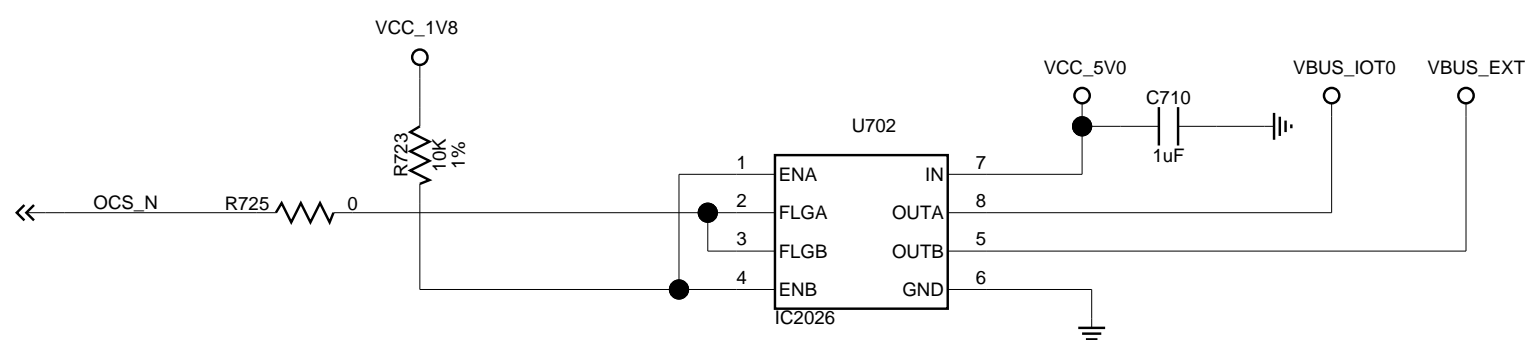
USB 3503



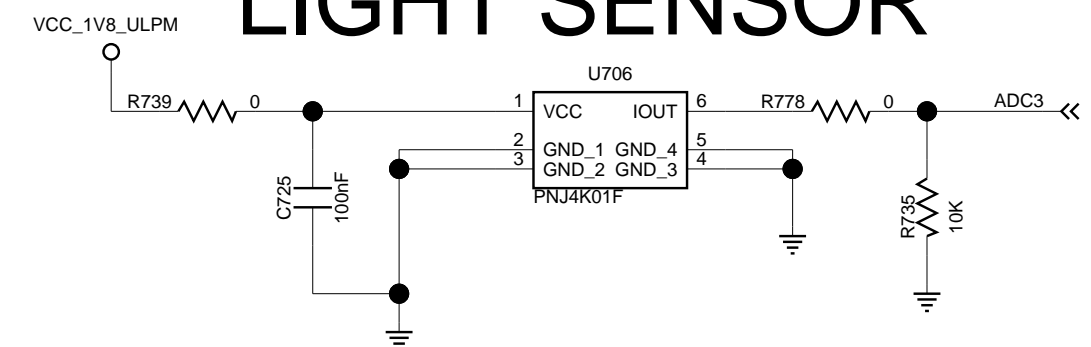
ACCELEROMETER AND GYROSCOPE PRESSURE SENSOR



USB Downstream Power



LIGHT SENSOR



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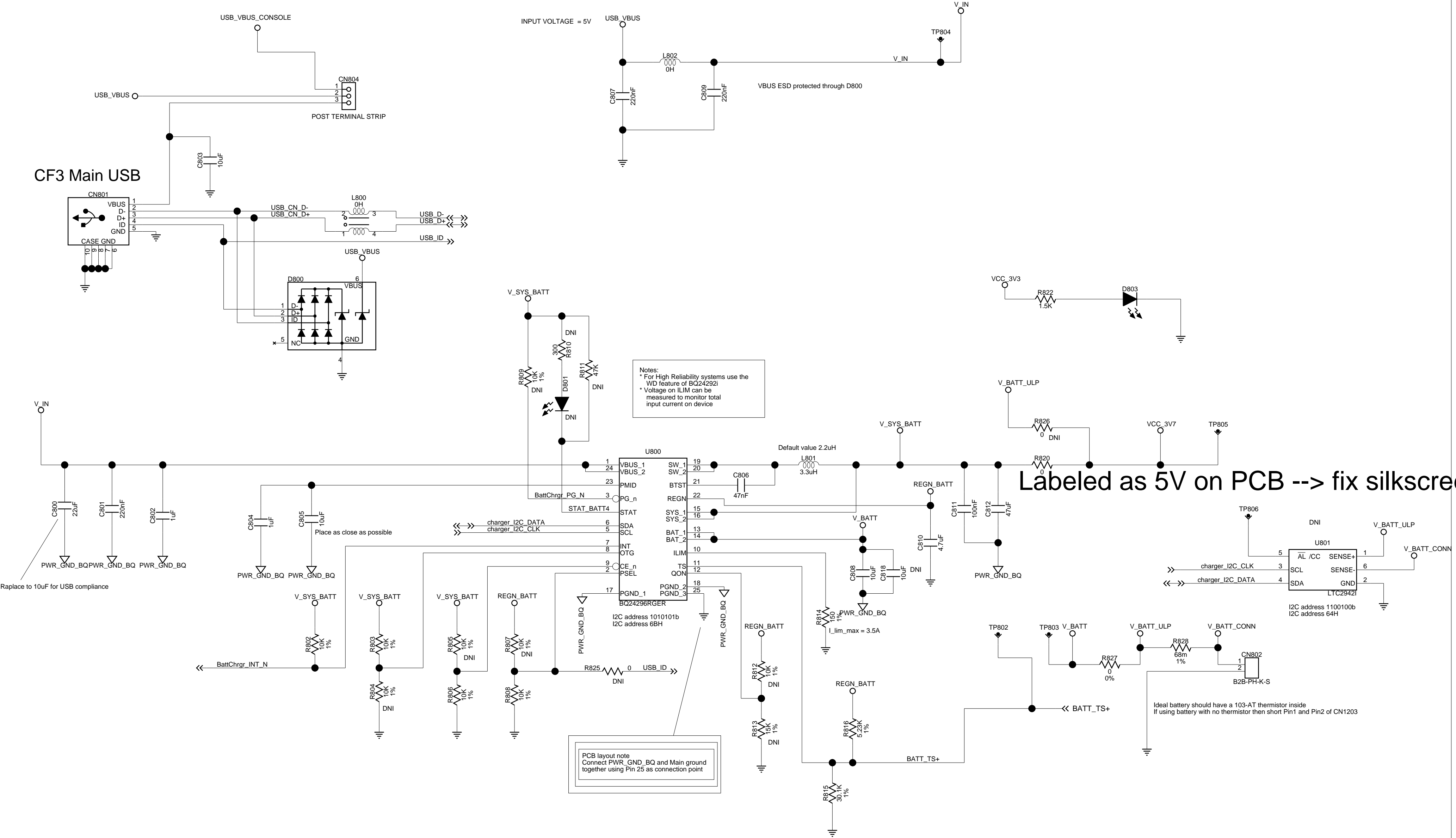
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Power can come from either Main or uUSB-Power connectors

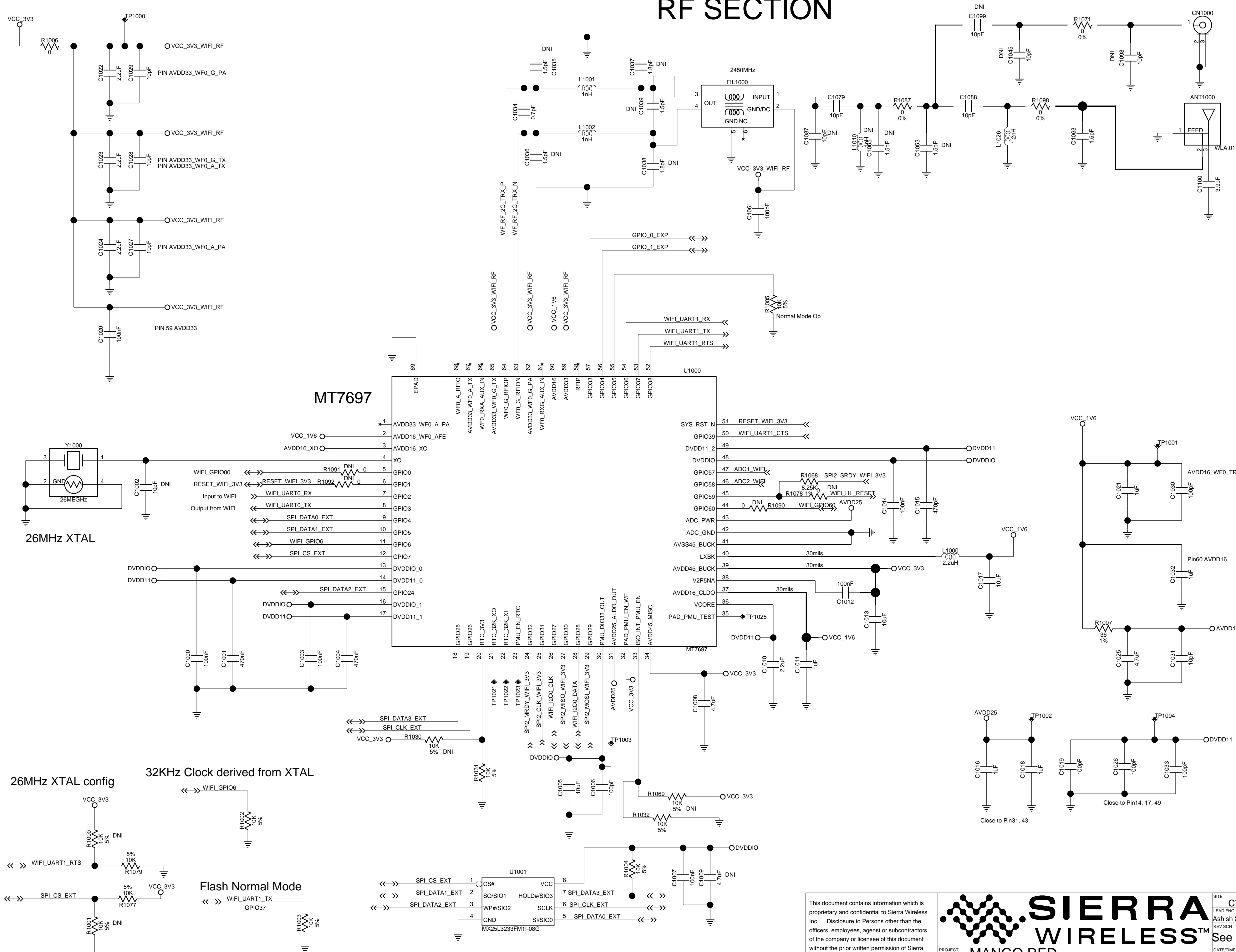
PSU Front End and 3.7V DC/DC converter



CF3 LDO



RF SECTION



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