

VERSION HISTORY

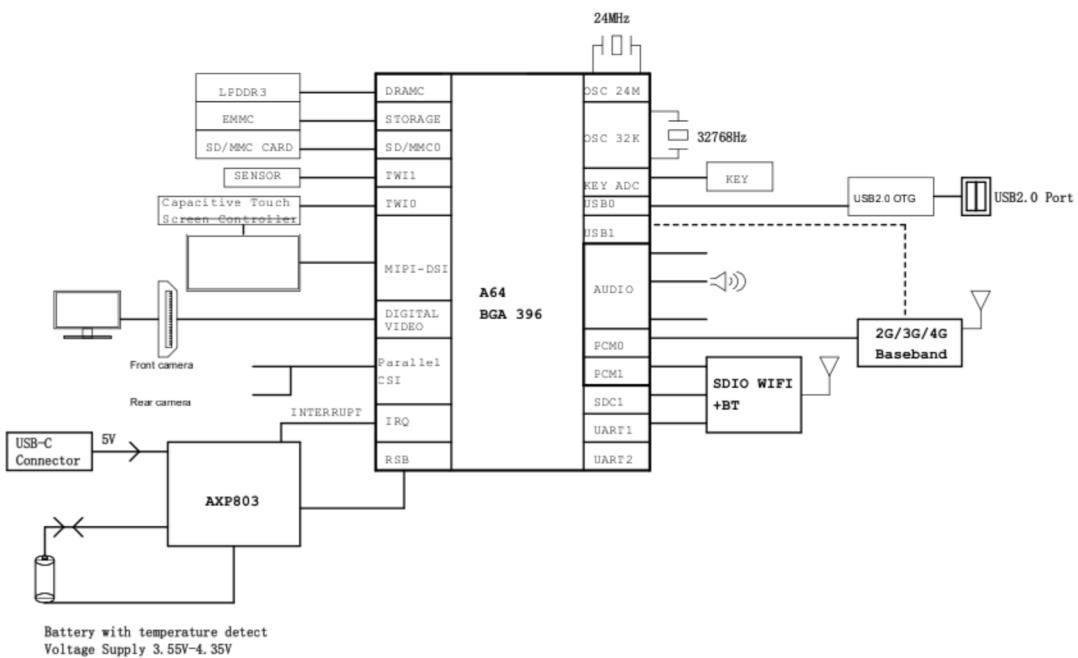
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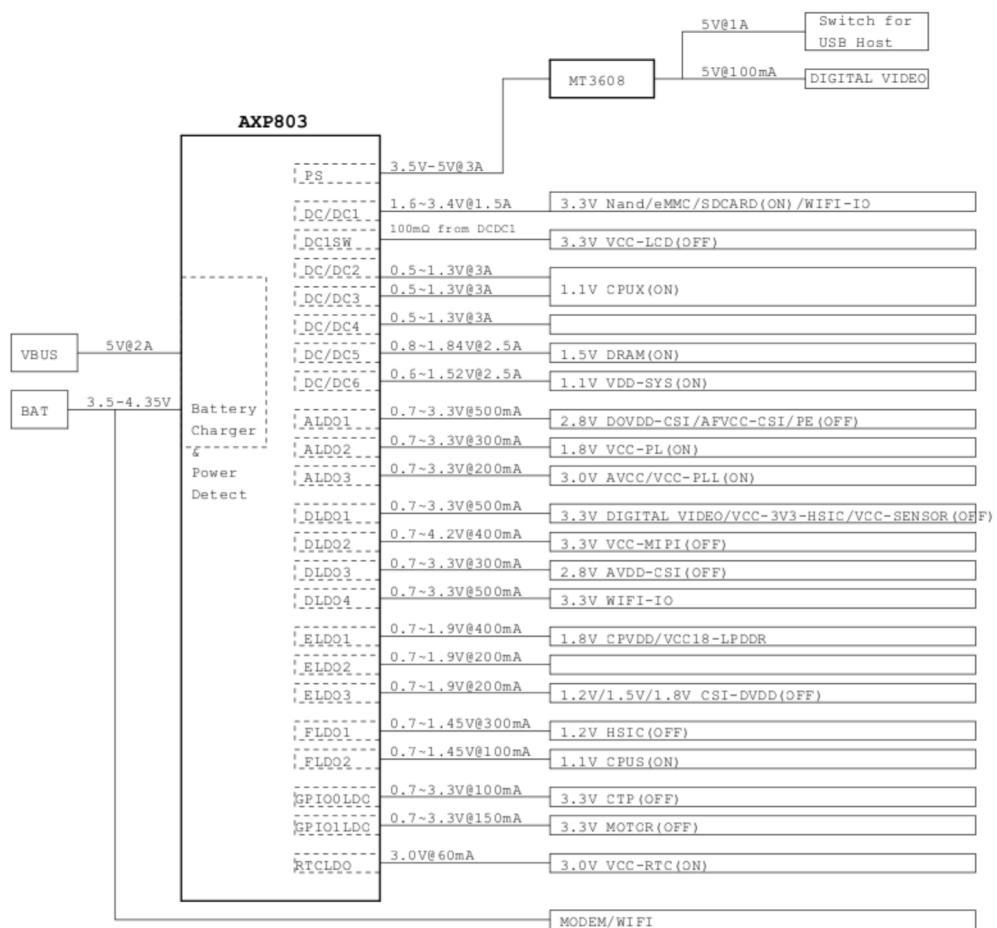
Revision	Description	Date	Drawn	Checked	Approved
Ver 1.0	Release version	2019-05-28	HE		
Ver 1.1	Solved the RX of UART3 and RTS CTS of UART4 could not work synchronously Modified PC3 and PD24 network interface problem Modified the problem of WiFi module in RTL8723CS NTC increases the series resistance	2019-07-06	HE		
Ver 1.2	Refer to below link or v1.2 change https://wiki.pine64.org/index.php?title=PinePhone_v1.2	2020-03-10	HE		
Ver 1.2a	Change USB-C CC switch component part number	2020-06-08	TL		
Ver 1.2b	Change R1318 on page 13 to NC (no connect)	2020-10-11	TL		



BLOCK DIAGRAM

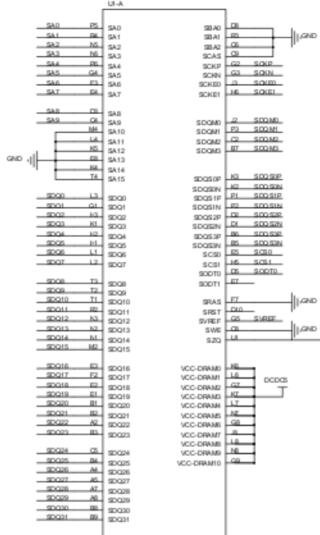


POWER TREE

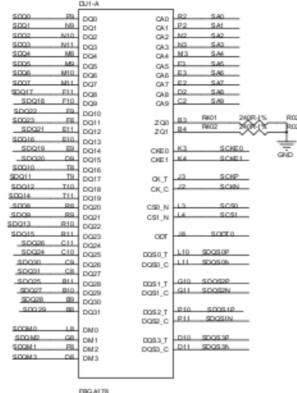


LPDDR3

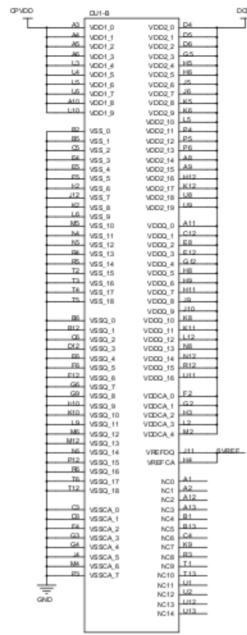
If use LPDDR3,
mount VDD18-LPDDR(ELD01) is 1.8V by Standby.



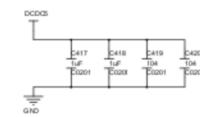
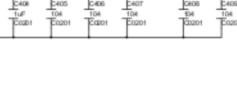
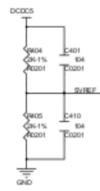
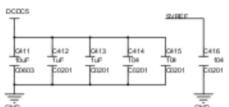
A4



FBGA178

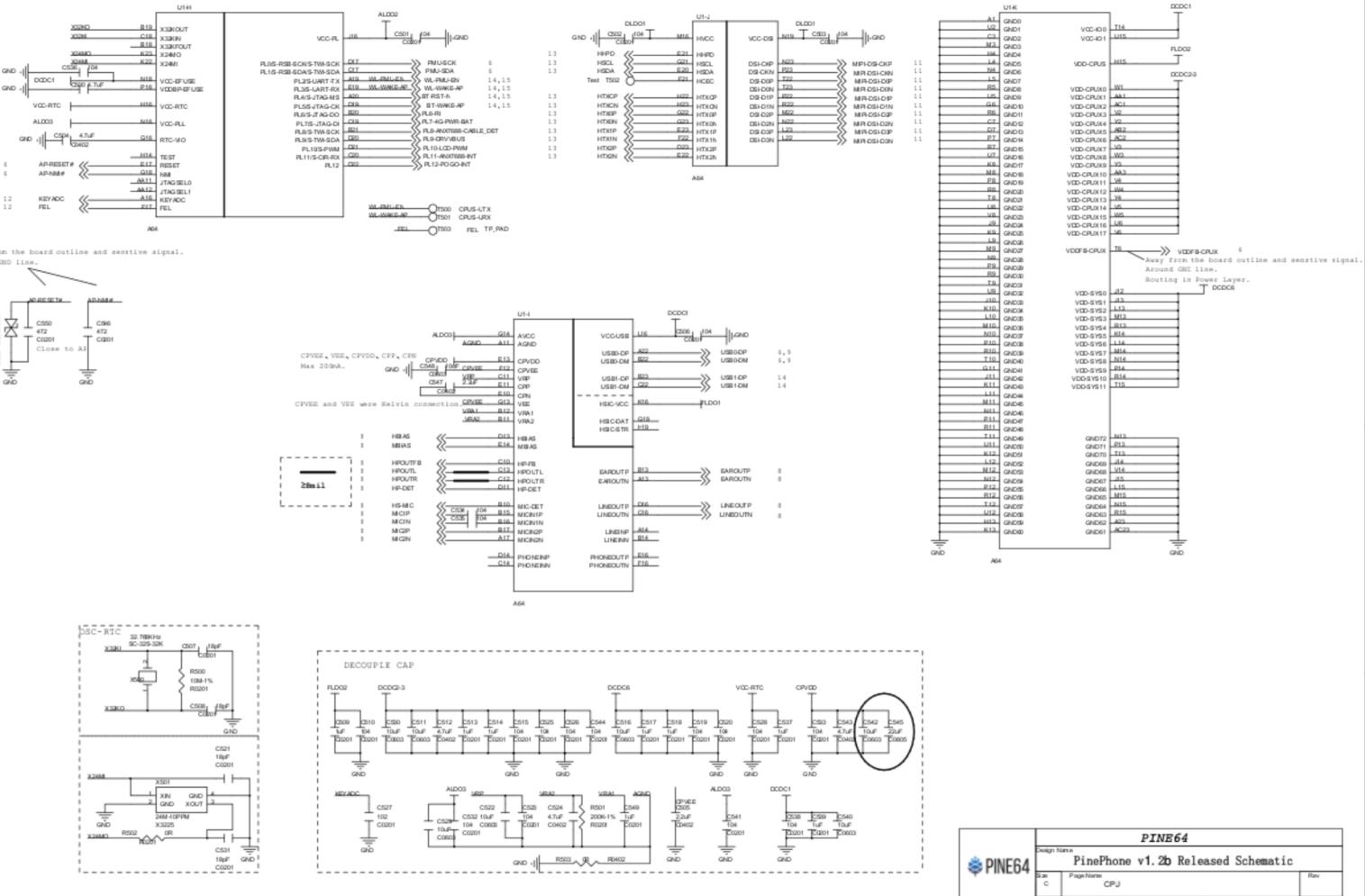


FBGA178



PINE64		PinePhone v1.2b Released Schematic		
Sheet Name	Page Name	Page	Rev	Date
C	LPCDR3-FPGA178	1	1	Tuesday, July 23, 2019

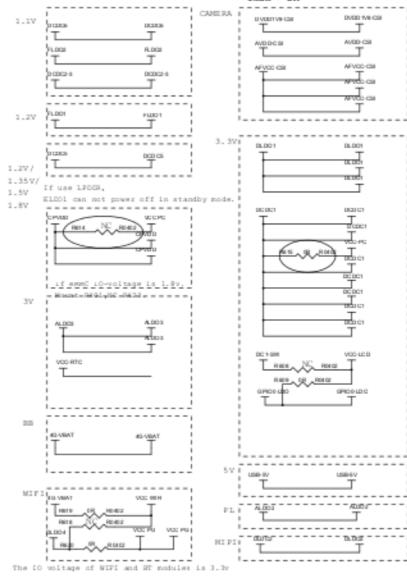
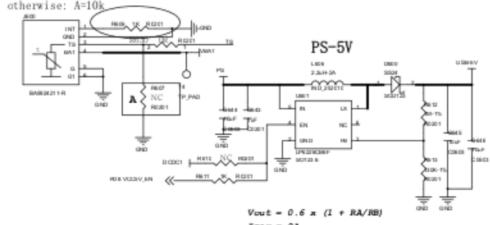
CPU



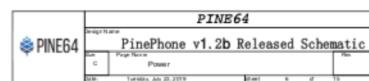
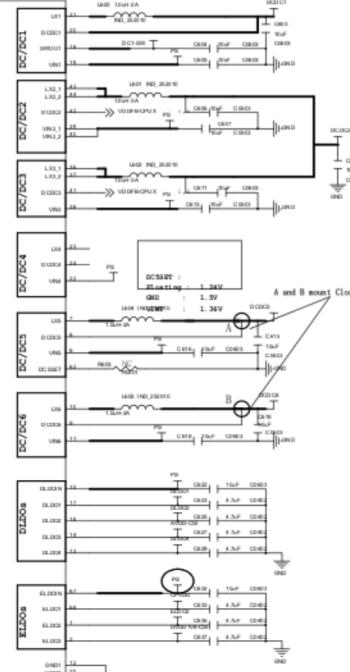
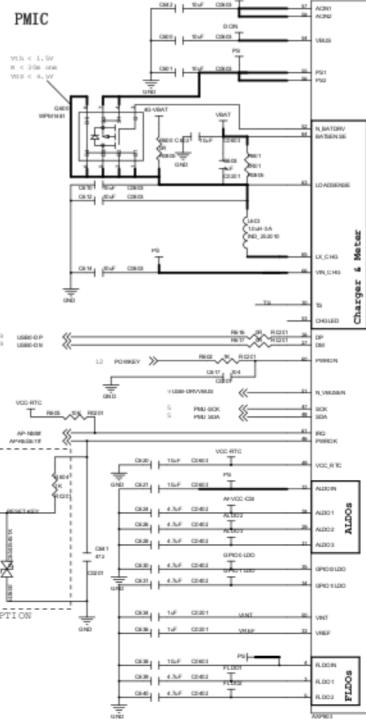
Power

BAT

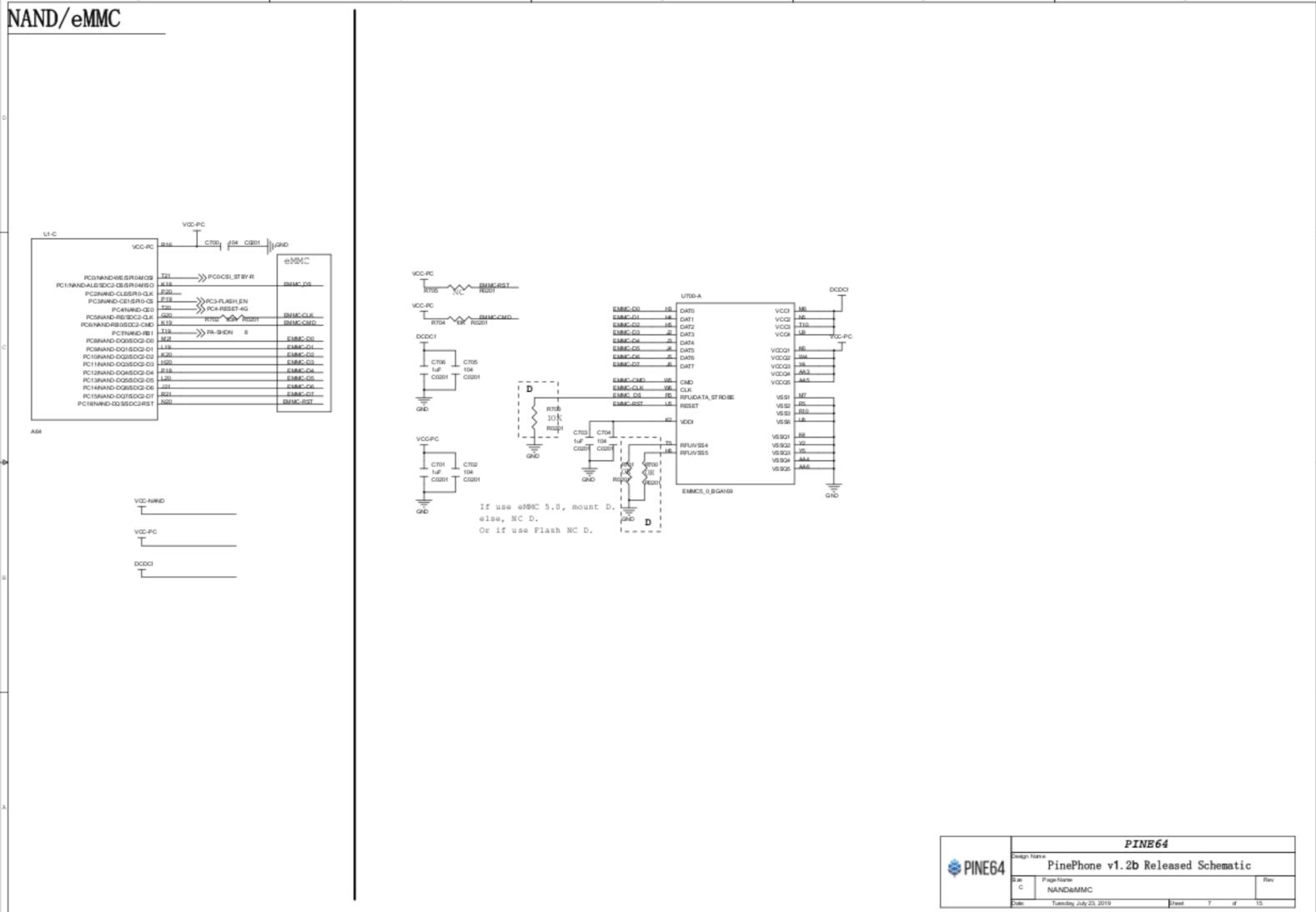
If use the battery temperature sensor: A=NC
otherwise: A=10k



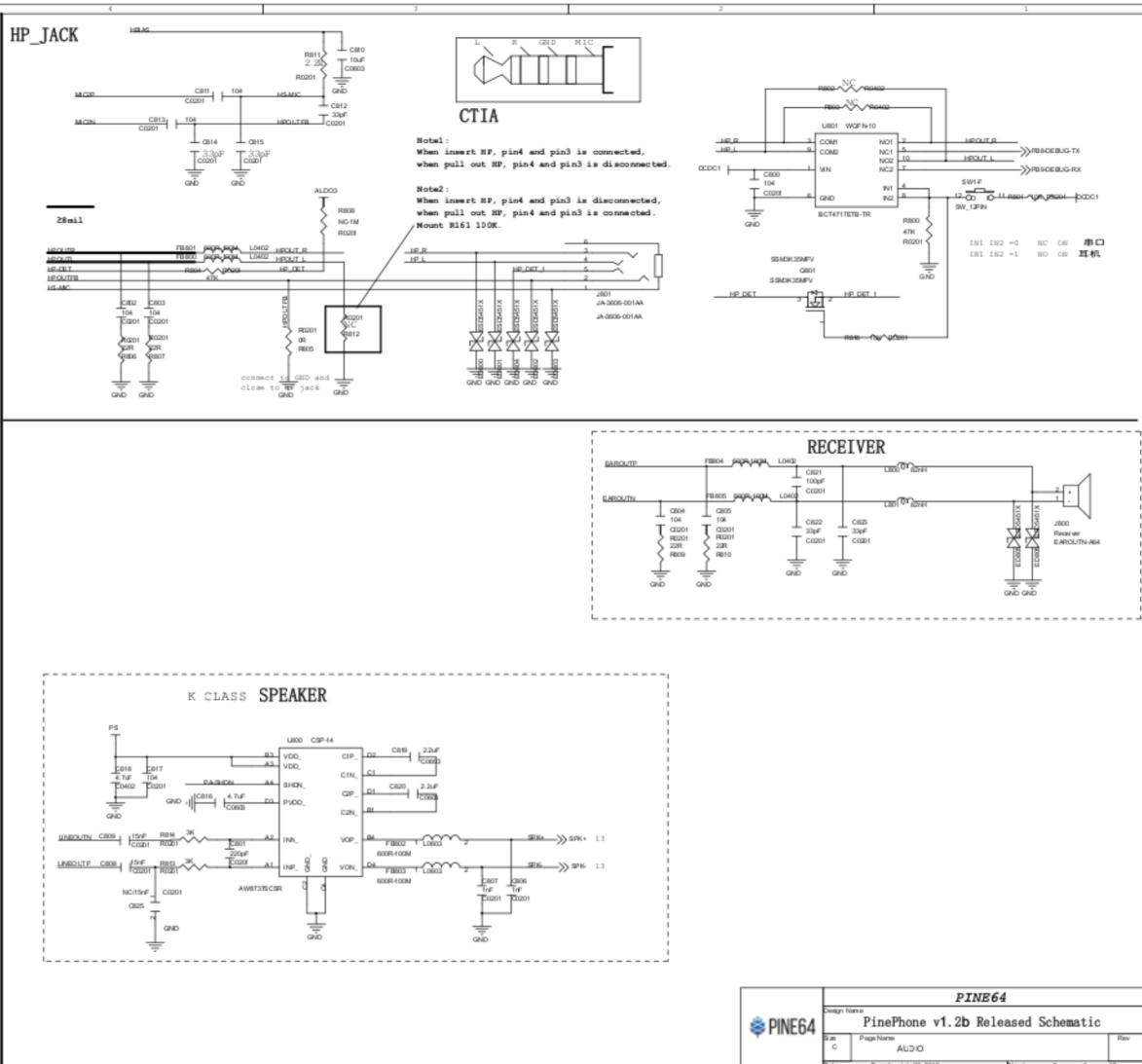
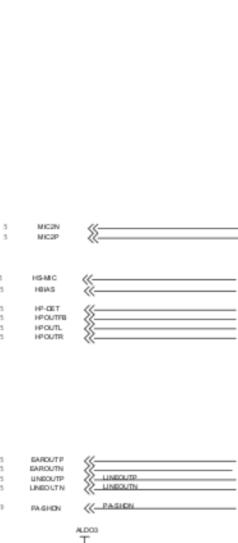
PMIC



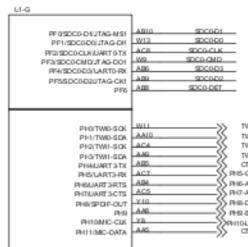
NAND/eMMC



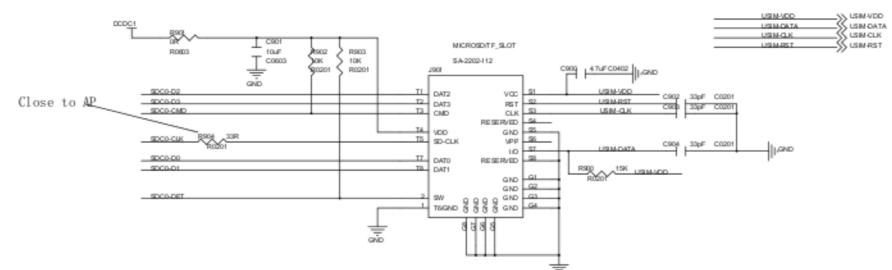
AUDIO



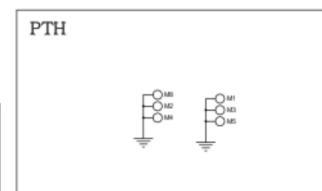
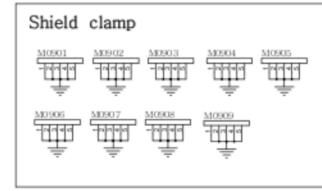
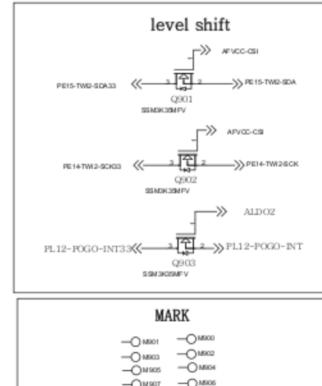
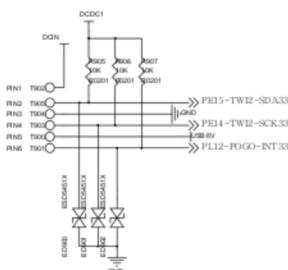
T-CADD/SIM



T-CARD



POGO PIN

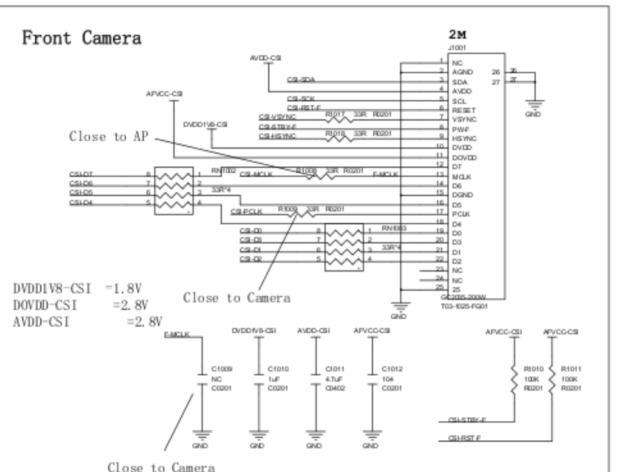
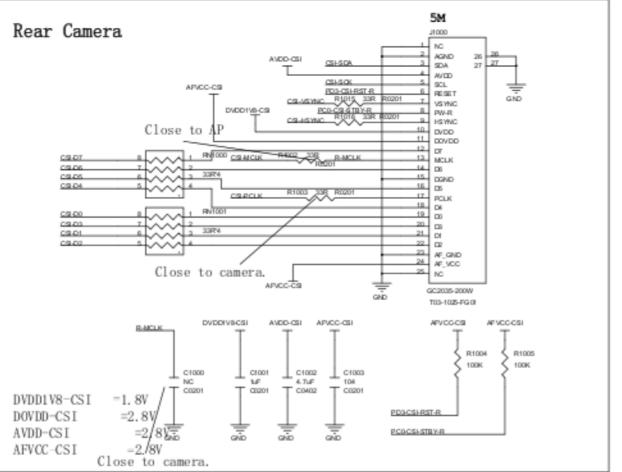
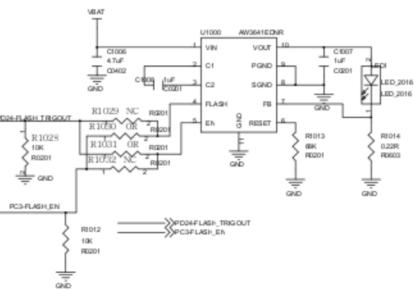


CAMERA

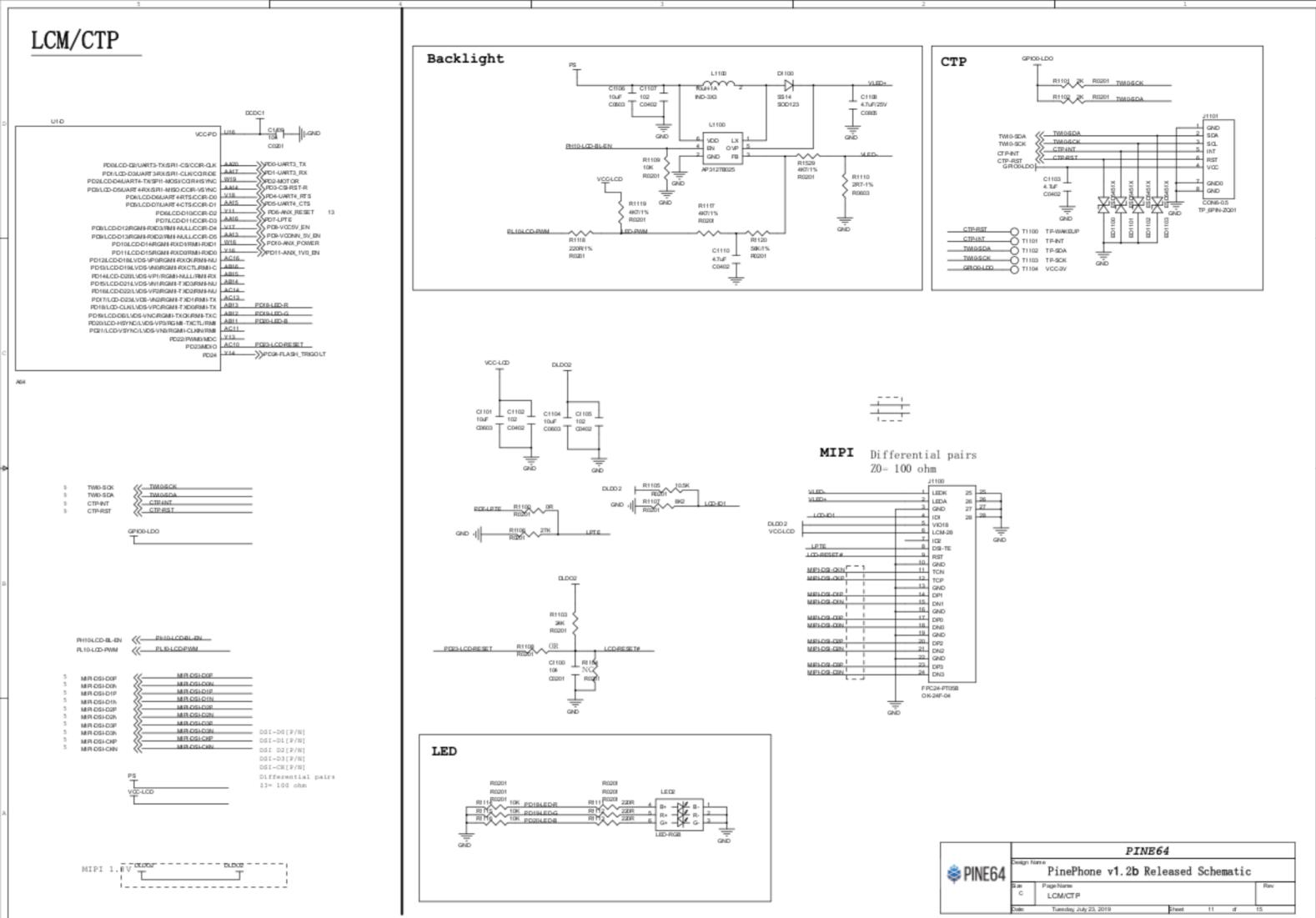


FLASH LED Drive

note: Drive up to 1A



LCM/CTP

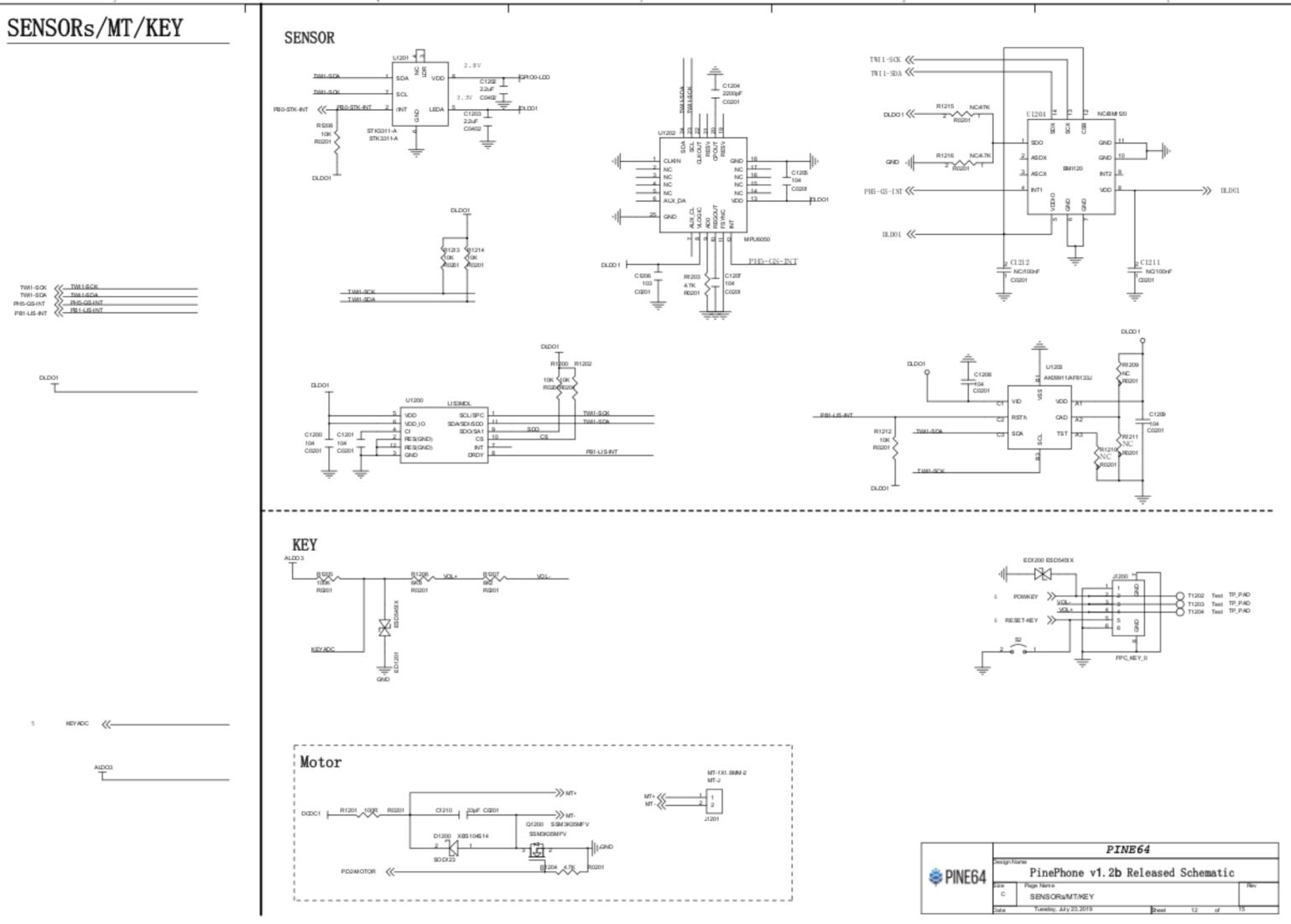


PINE64

PinePhone v1.2b Released Schematic

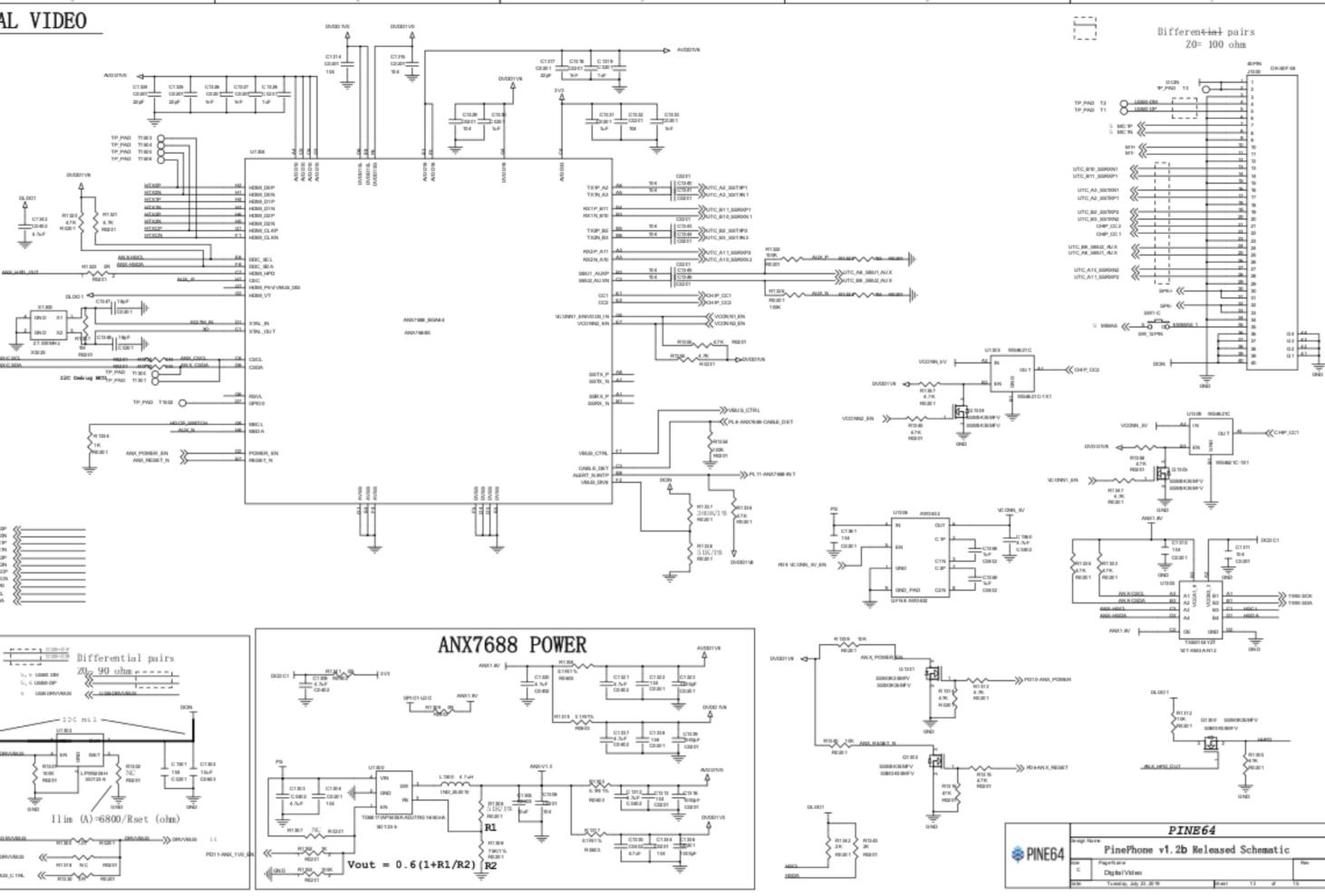
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LCM/CTP	
Tuesday July 23, 2019	2019-07-23

SENSORS/MT/KEY

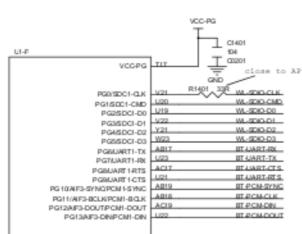


		PINE64			
Design Name:		PinePhone v1.2b Released Schematic			
Date:	Page Name:	Rev:			
C	SENSOR@MTIMEY				
Date:	Tuesday, July 25, 2017	Sheet	12	of	15

DIGITAL VIDEO



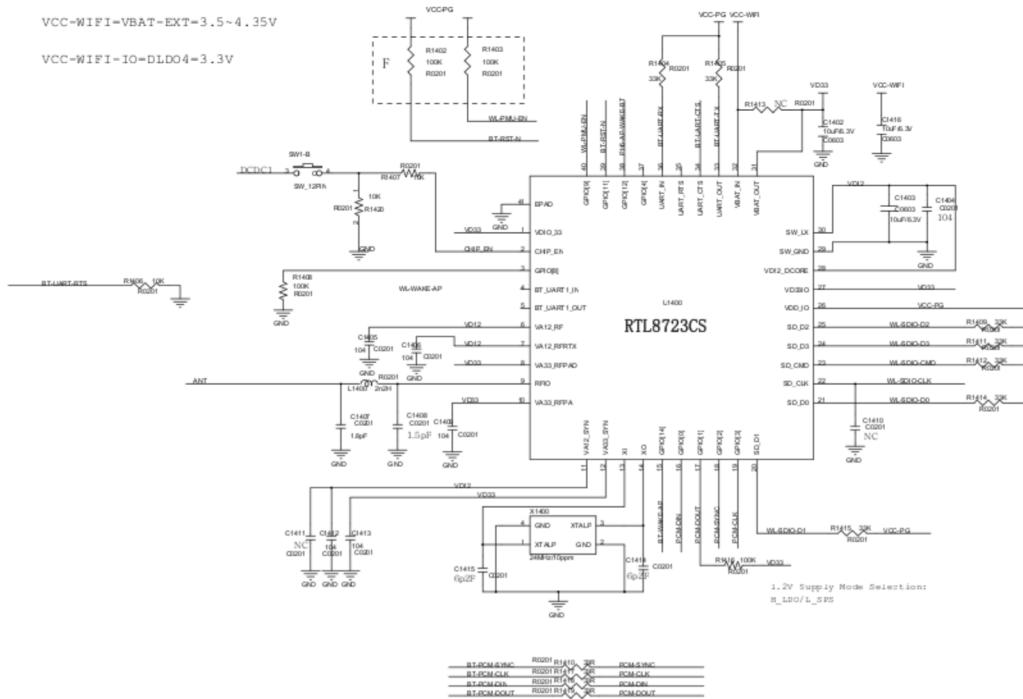
WIFI+BT



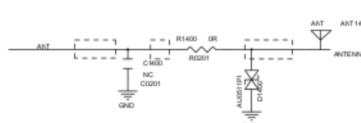
RTL8723CS power supply:

VCC-WIFI=VBAT-EXT=3.5~4.35V

VCC-WIFI-IO-DLD04=3.3V

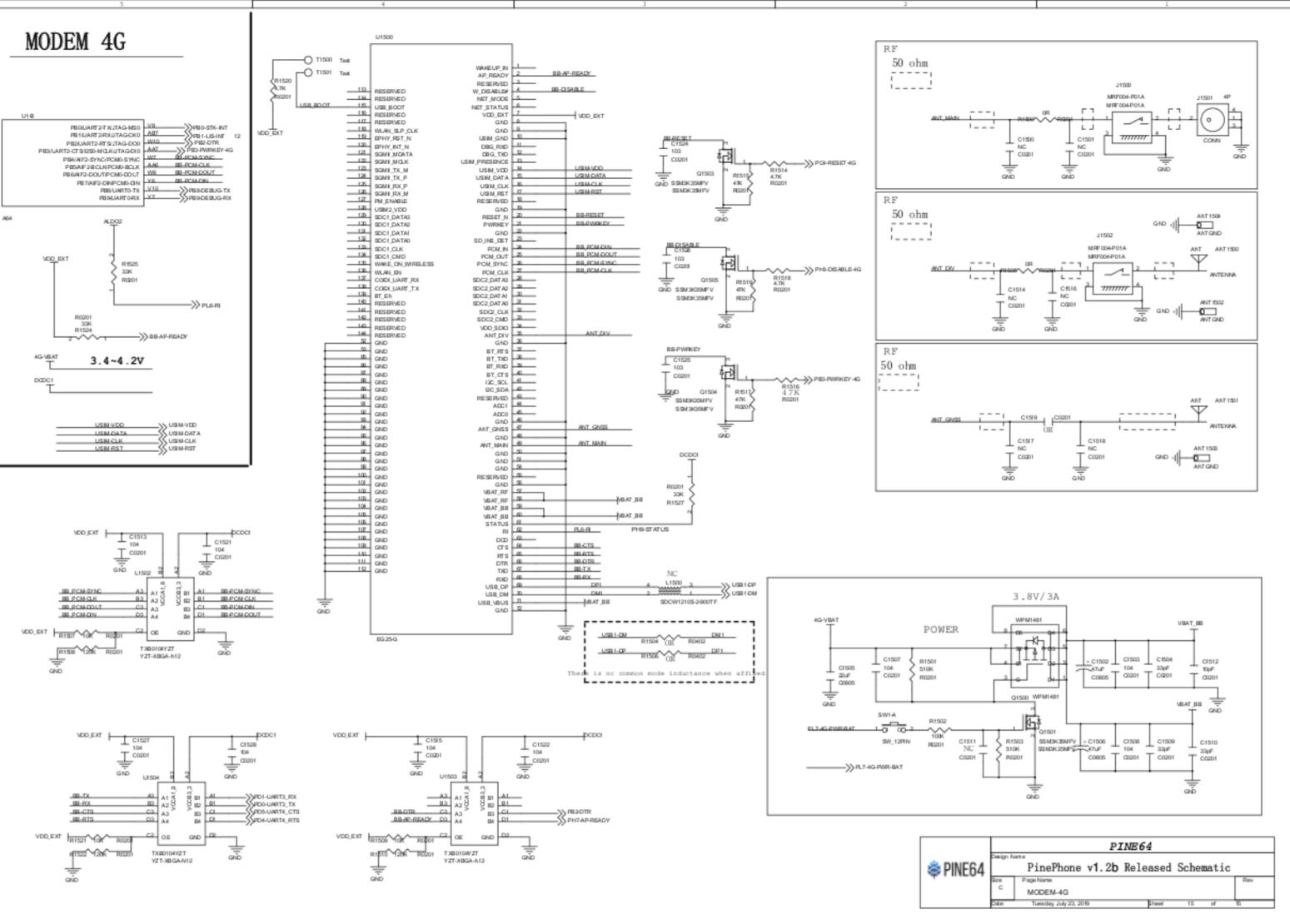


1.2V Supply Node Selection:



BT-PCM-SYNC	R0201	R1610	BR
BT-PCM-CLK	R0201	R1611	BR
BT-PCM-DIN	R0201	R1616	BR
BT-PCM-DOUT	R0201	R1619	BR

MODEM 4G



PINE6