

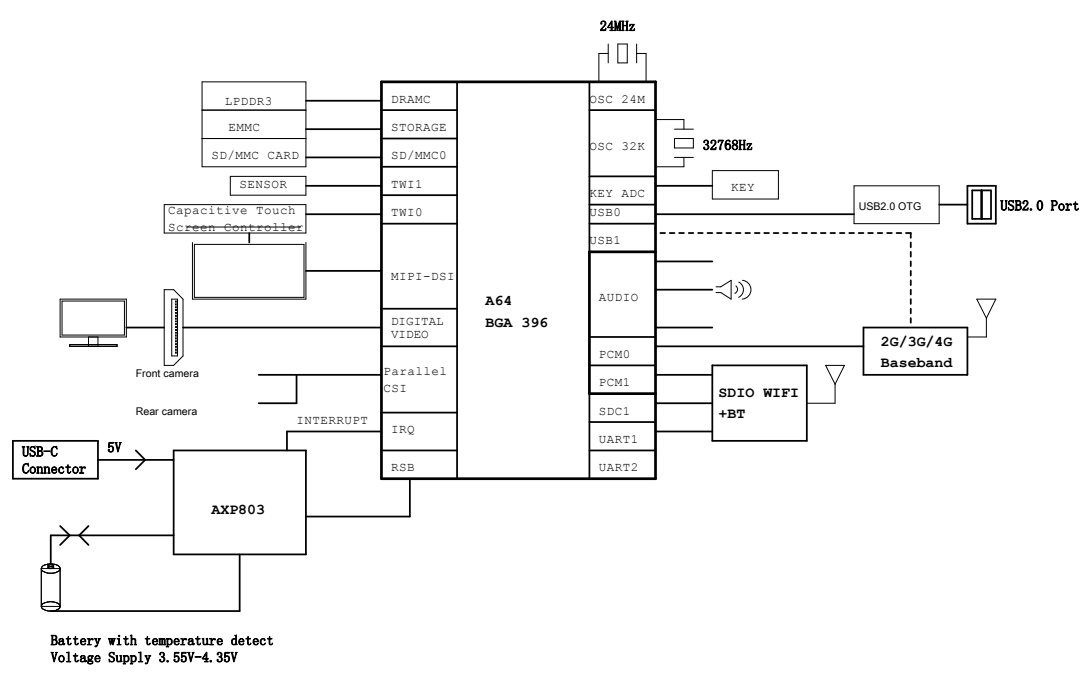
VERSION HISTORY

Index :

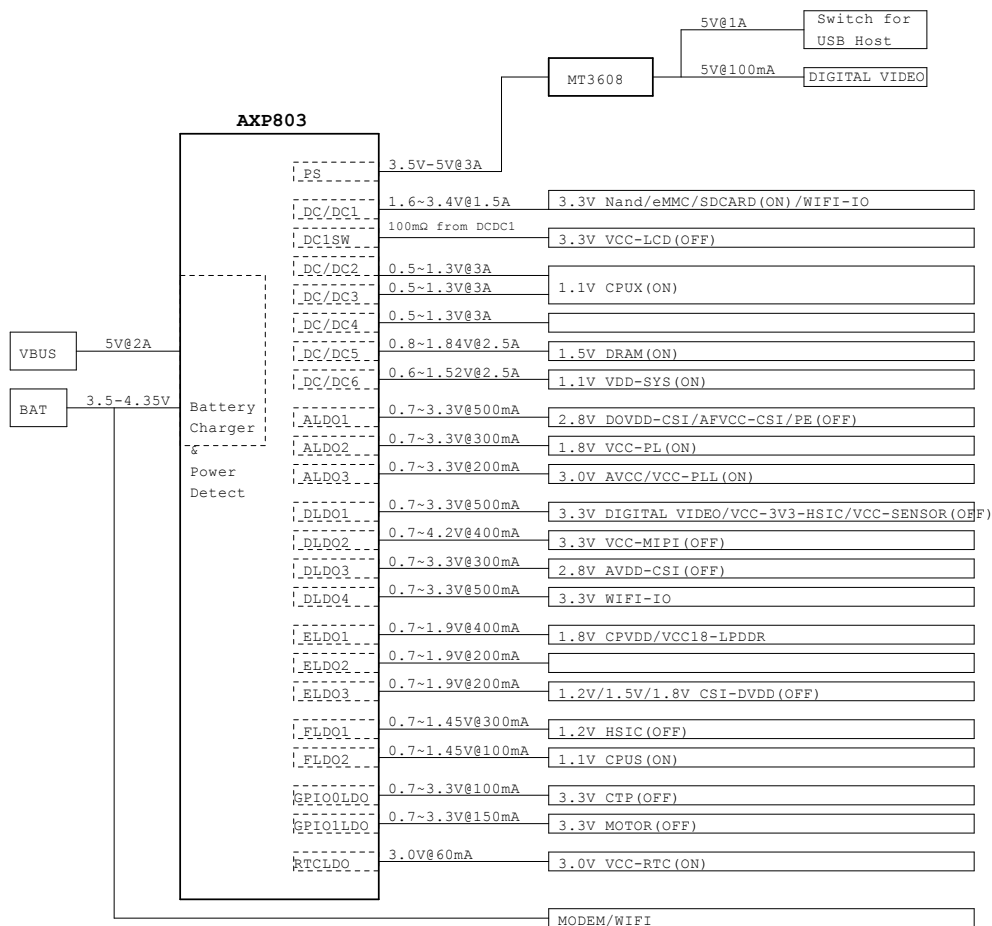
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Revision	Description	Date	Drawn	Checked	Approved
Ver 1.0	Release version	2019-05-28	HE		
Ver 1.1	Solved the TRX of UART3 and RTS CTS of UART4 could not work synchronously Modified PC3 and PD24 network interface problem Modified the problem of WiFi 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

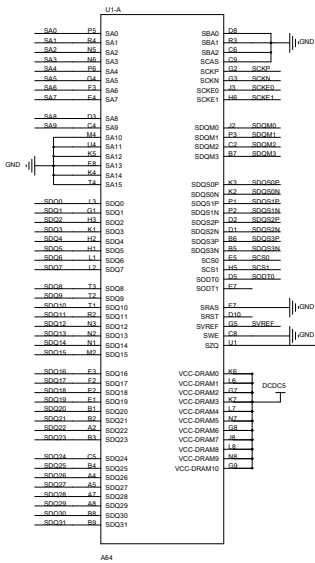


POWER TREE

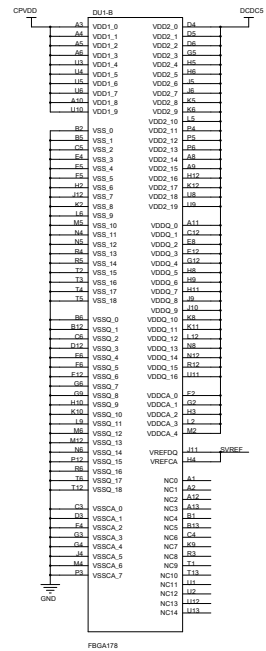
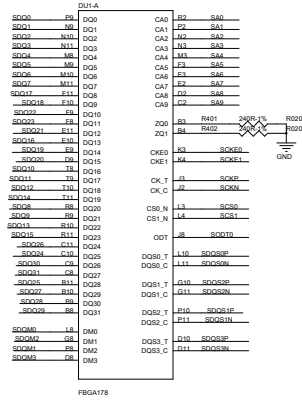


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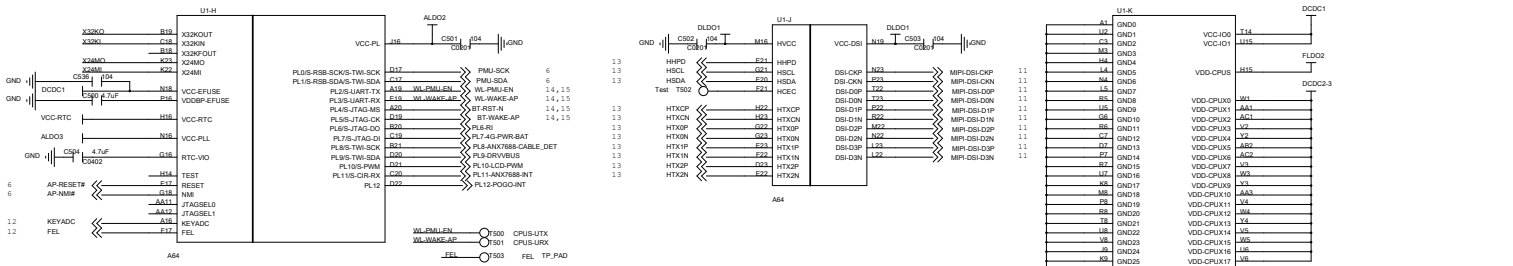
LPDDR3



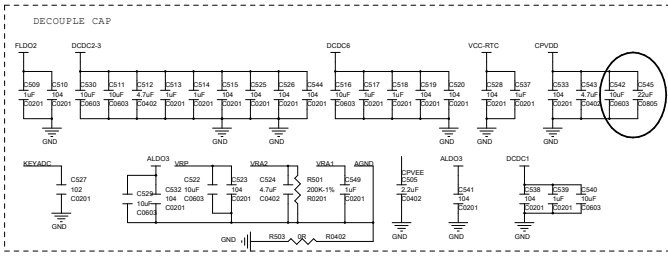
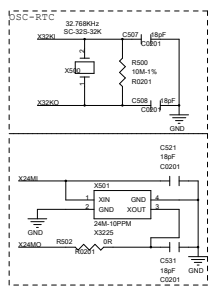
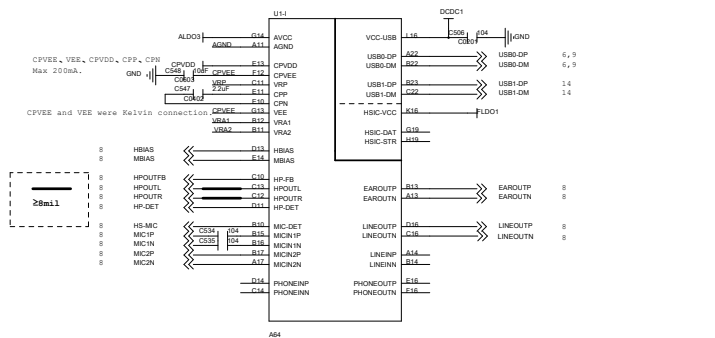
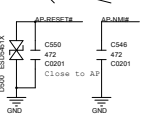
If use LPDDR3,
mount VDD18-LPDDR(ELD01) is 1.8V by Standby.



CPU



Away from the board outline and sensitive signal. Around GND line.

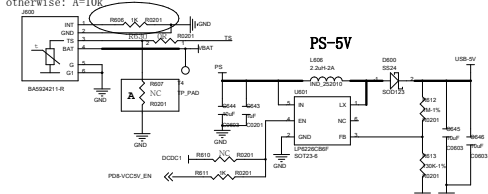


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Power

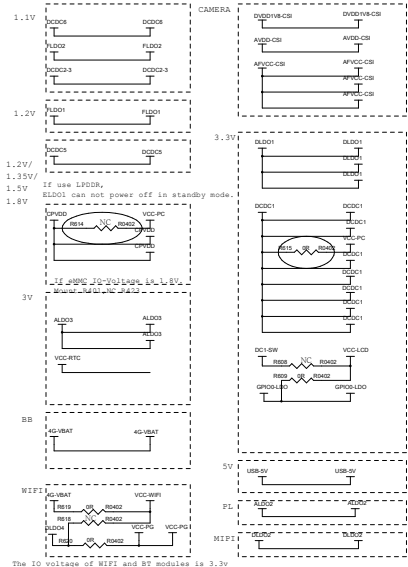
BAT

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



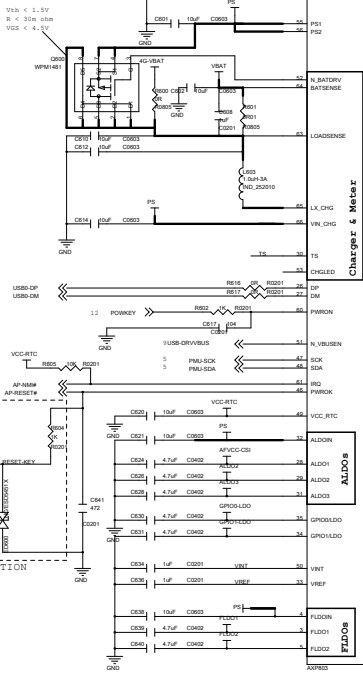
$$V_{out} = 0.6 \times (1 + R_A/R_B)$$

$$I_{max} = 2A$$

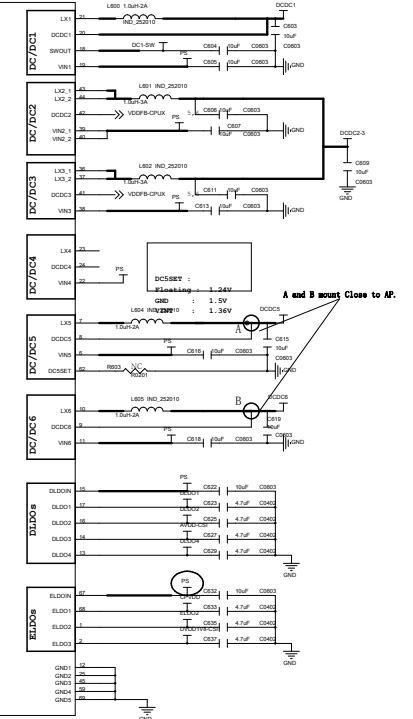


The IO voltage of WIFI and BT module is 3.3v

PMIC

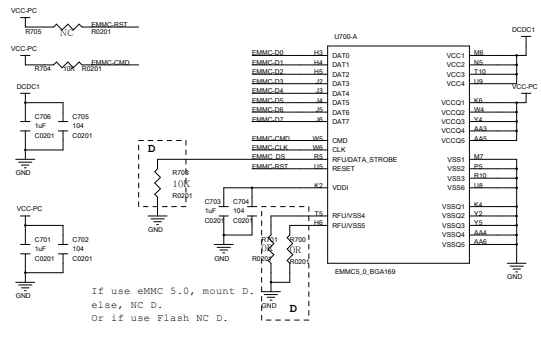
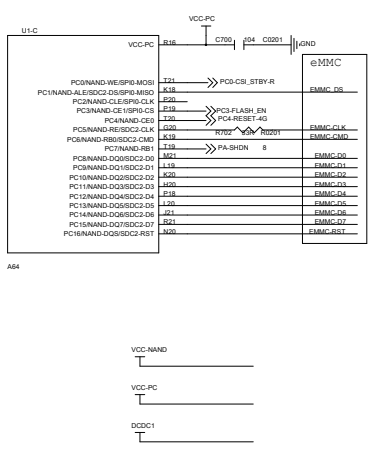


Charger & Meter



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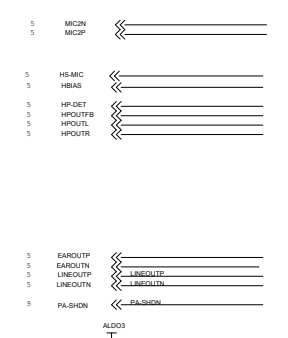
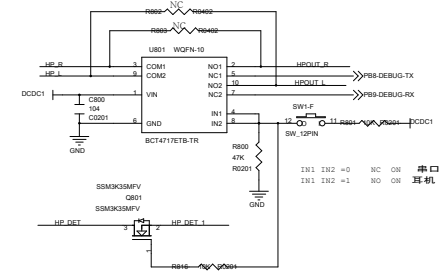
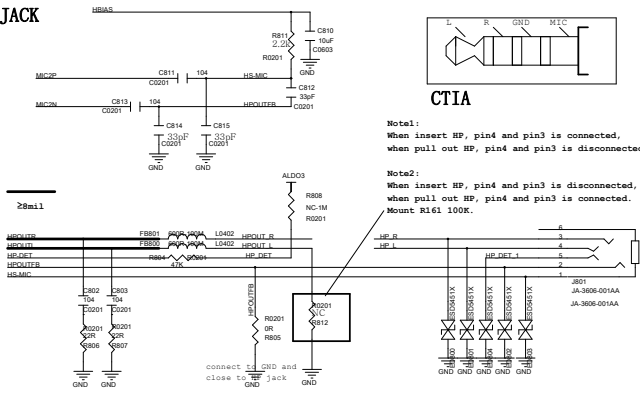
NAND/eMMC



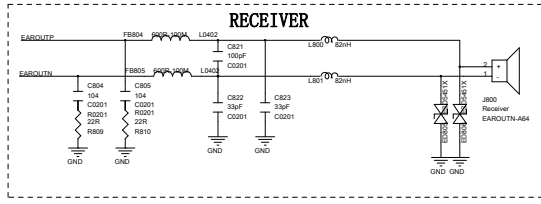
If use eMMC 5.0, mount D.
 else, NC D.
 Or if use Flash NC D.

AUDIO

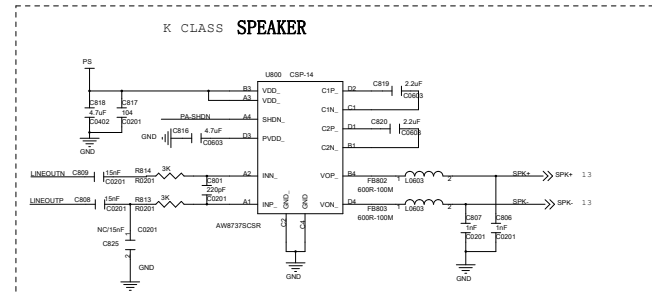
HP JACK



RECEIVER

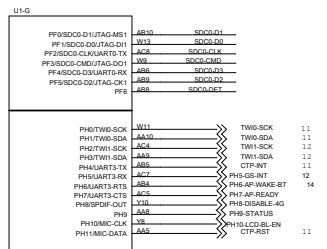


K CLASS SPEAKER

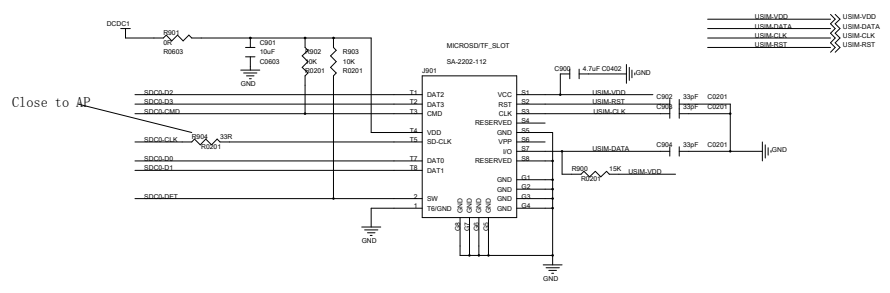


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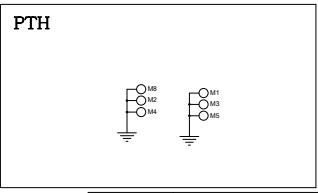
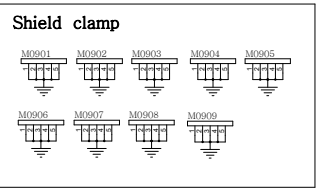
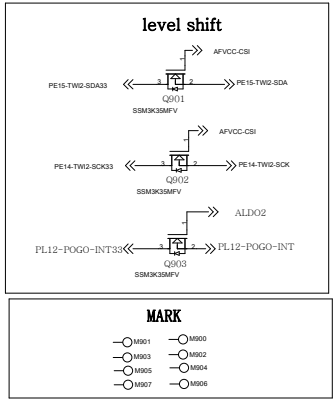
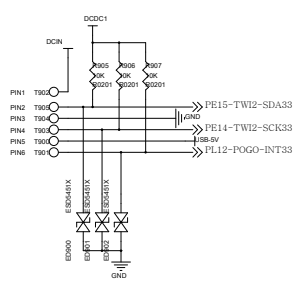
T-CADD/SIM



T-CARD



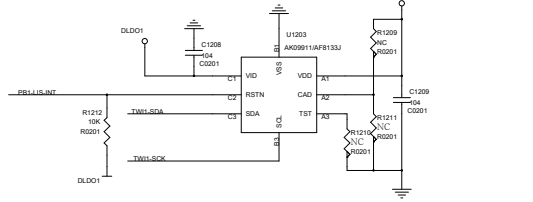
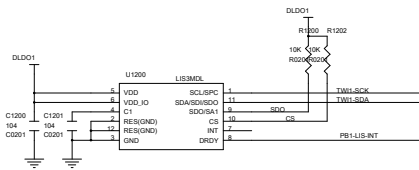
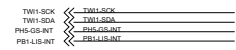
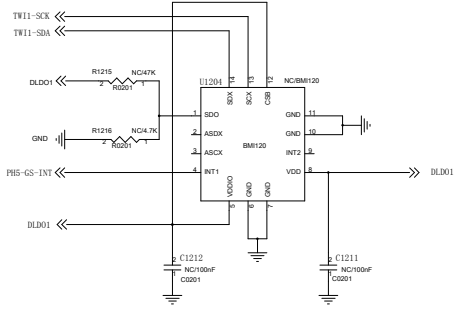
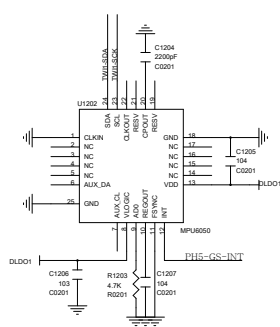
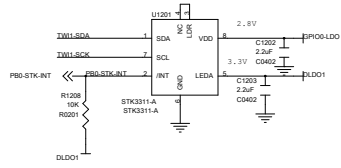
POGO PIN



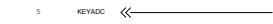
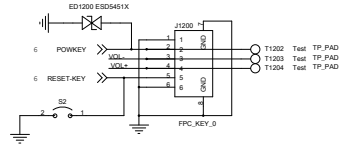
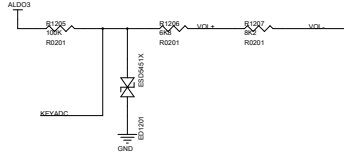
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SENSORs/MT/KEY

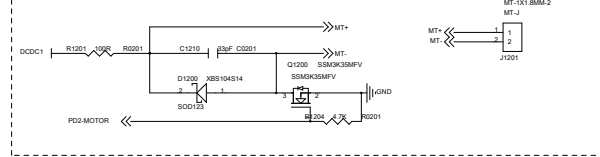
SENSOR



KEY

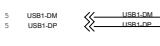
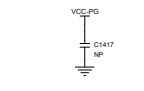
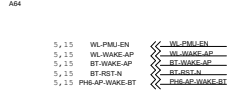
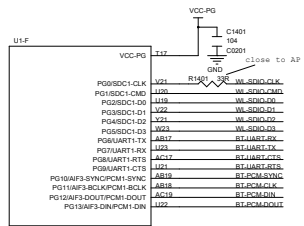


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WIFI+BT



RTL8723CS power supply:
 VCC-WIFI=VBAT-EXT=3.5~4.35V
 VCC-WIFI-IO=DLDO4=3.3V

