

5
4
3
2
1

VERSION HISTORY

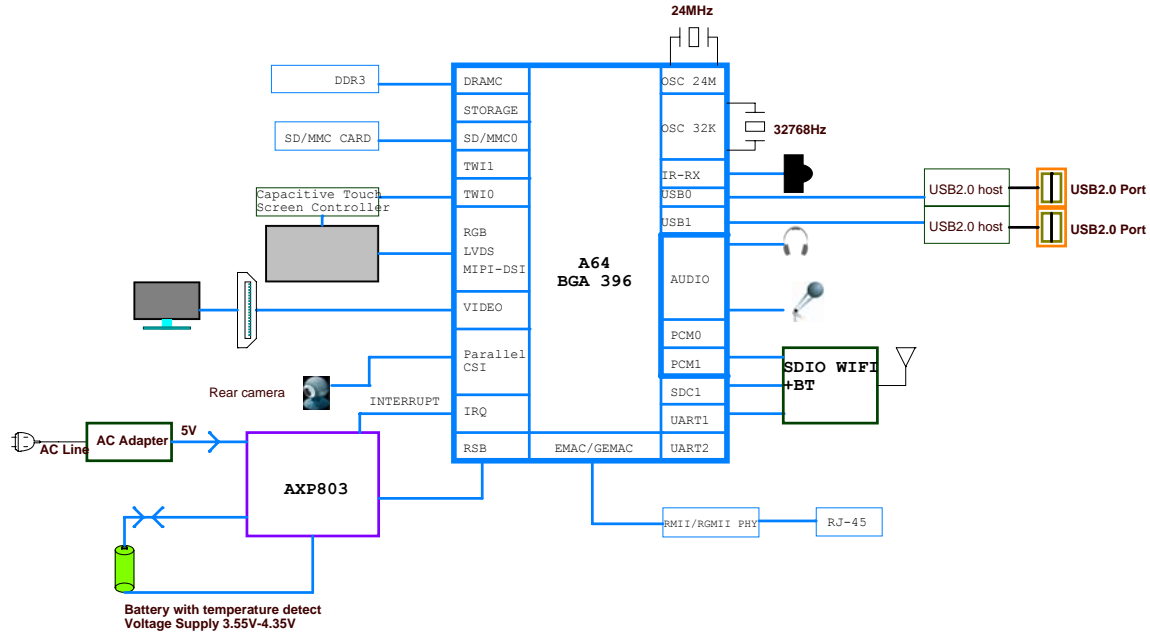
D

Index:

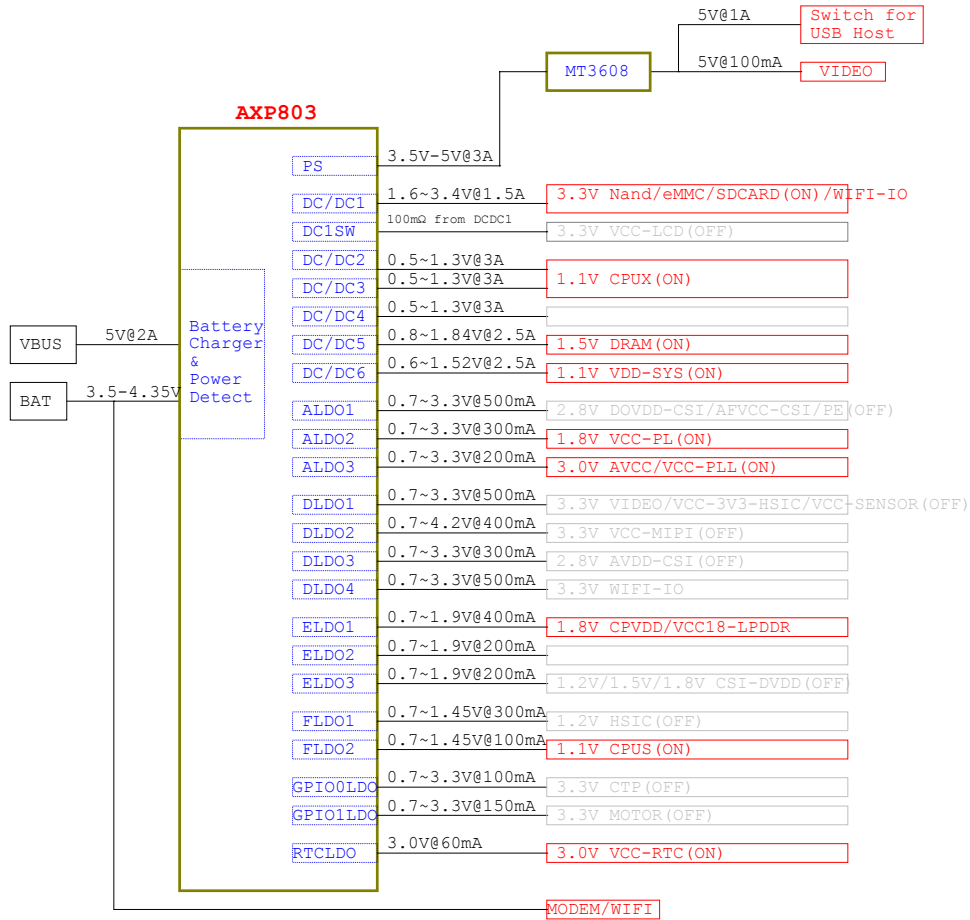
- P01: REVISION HISTORY
P02: BLOCK DIAGRAM
P03: POWER TREE
P04: DDR3 16X2
P05: CPU
P06: PMIC
P07: NAND/eMMC
P08: AUDIO
P09: T-CARD/USB
P10: CAMERA
P11: LCD
P12: Euler Bus
P13: VIDEO
P14: LCD POWER
P15: WIFI+BT
P16: CTP/IR
P17: Pi-2 Bus
P18: EMAC/GMAC
P19: EMAC/GMAC

| Revision | Description | Date | Drawn | Checked | Approved |
|----------|-----------------|------------|-------|---------|----------|
| Ver 1.0 | Release version | 2015-04-22 | | | |
| Ver 1.2 | | 2015-09-28 | | | |
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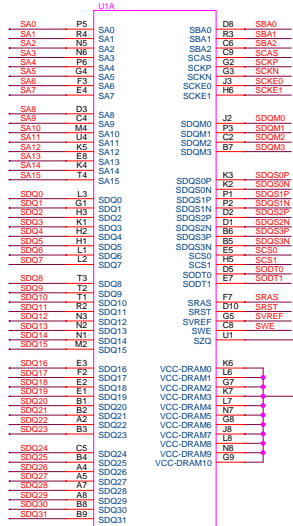
BLOCK DIAGRAM



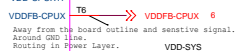
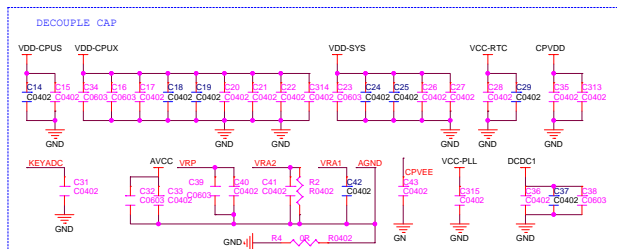
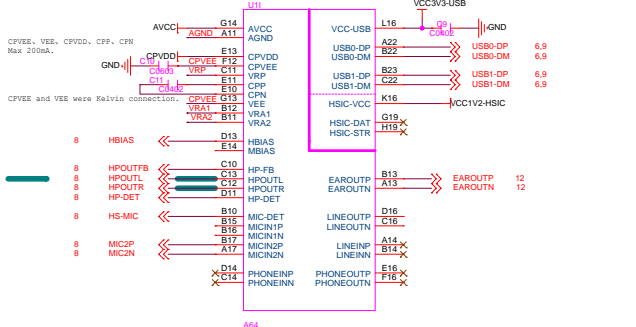
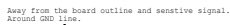
POWER TREE



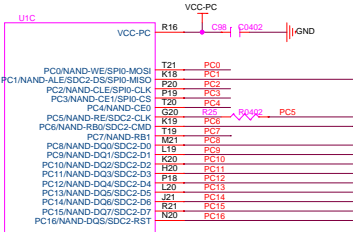
DDR3 16x2



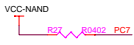
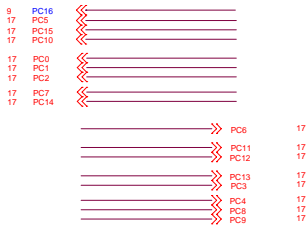
CPU



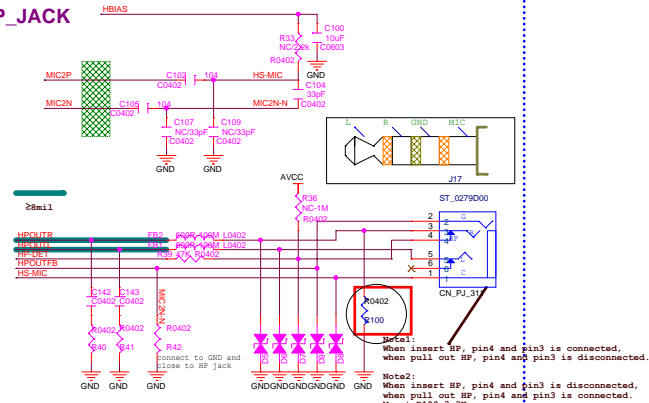
NAND/eMMC



A64



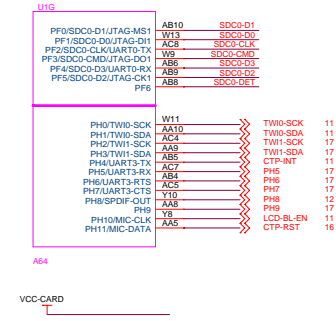
HP_JACK



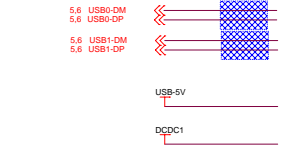
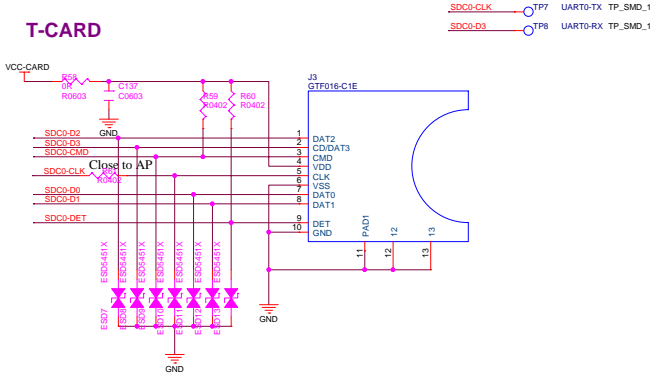
Notel:
When insert HP, pin4 and pin3 is connected,
when pull out HP, pin4 and pin3 is disconnected

Note2:
When insert HP, pin4 and pin3 is disconnected
When pull out HP, pin4 and pin3 is connected.

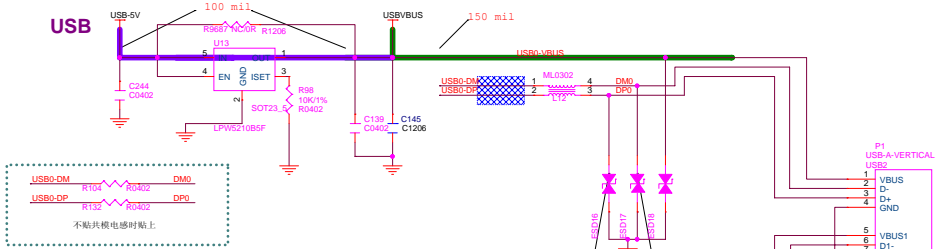
T-CARD/USB



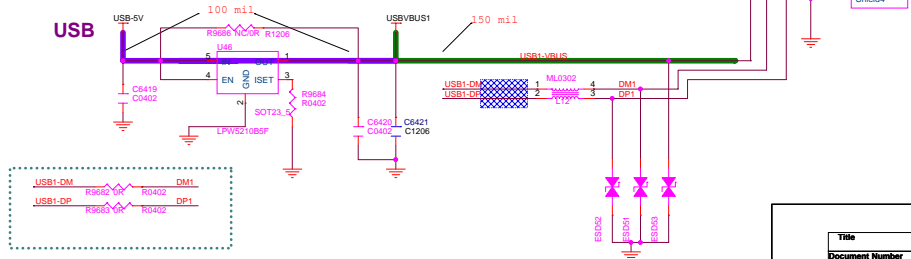
T-CARD



USB



USB



Pine A64

Title A64-DB

Document Number T-CARD/USB

LCD

U10

VCC-PD

U16

GND

Pinout Table:

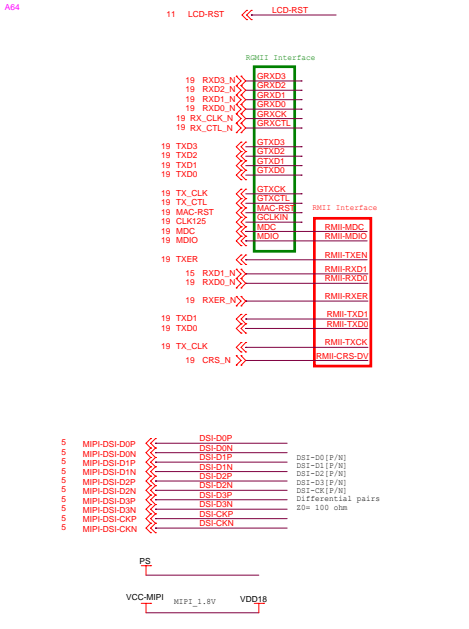
| Pin | Function | Pin | Function |
|------|----------|-----|----------|
| AA20 | GRXD3 | P00 | 12 |
| AA17 | GRXD2 | P01 | 12 |
| V19 | GRXD1 | P02 | 12 |
| AA14 | GRXD0 | P03 | 12 |
| V18 | GRXD0 | P04 | 12 |
| Y11 | GRXD0 | P05 | 12 |
| AA15 | GRXD0 | P06 | 12 |
| AA16 | GRXD0 | P07 | 12 |
| P08 | GRXD0 | | |
| P09 | GRXD0 | | |
| P10 | GRXD0 | | |
| P11 | GRXD0 | | |
| P12 | GRXD0 | | |
| P13 | GRXD0 | | |
| P14 | GRXD0 | | |
| P15 | GRXD0 | | |
| P16 | GRXD0 | | |
| P17 | GRXD0 | | |
| P18 | GRXD0 | | |
| P19 | GRXD0 | | |
| P20 | GRXD0 | | |
| P21 | GRXD0 | | |
| P22 | GRXD0 | | |
| P23 | GRXD0 | | |
| P24 | GRXD0 | | |
| P25 | GRXD0 | | |
| P26 | GRXD0 | | |
| P27 | GRXD0 | | |
| P28 | GRXD0 | | |
| P29 | GRXD0 | | |
| P30 | GRXD0 | | |
| P31 | GRXD0 | | |
| P32 | GRXD0 | | |
| P33 | GRXD0 | | |
| P34 | GRXD0 | | |
| P35 | GRXD0 | | |
| P36 | GRXD0 | | |
| P37 | GRXD0 | | |
| P38 | GRXD0 | | |
| P39 | GRXD0 | | |
| P40 | GRXD0 | | |
| P41 | GRXD0 | | |
| P42 | GRXD0 | | |
| P43 | GRXD0 | | |
| P44 | GRXD0 | | |
| P45 | GRXD0 | | |
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| P47 | GRXD0 | | |
| P48 | GRXD0 | | |
| P49 | GRXD0 | | |
| P50 | GRXD0 | | |
| P51 | GRXD0 | | |
| P52 | GRXD0 | | |
| P53 | GRXD0 | | |
| P54 | GRXD0 | | |
| P55 | GRXD0 | | |
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| P57 | GRXD0 | | |
| P58 | GRXD0 | | |
| P59 | GRXD0 | | |
| P60 | GRXD0 | | |
| P61 | GRXD0 | | |
| P62 | GRXD0 | | |
| P63 | GRXD0 | | |
| P64 | GRXD0 | | |
| P65 | GRXD0 | | |
| P66 | GRXD0 | | |
| P67 | GRXD0 | | |
| P68 | GRXD0 | | |
| P69 | GRXD0 | | |
| P70 | GRXD0 | | |
| P71 | GRXD0 | | |
| P72 | GRXD0 | | |
| P73 | GRXD0 | | |
| P74 | GRXD0 | | |
| P75 | GRXD0 | | |
| P76 | GRXD0 | | |
| P77 | GRXD0 | | |
| P78 | GRXD0 | | |
| P79 | GRXD0 | | |
| P80 | GRXD0 | | |
| P81 | GRXD0 | | |
| P82 | GRXD0 | | |
| P83 | GRXD0 | | |
| P84 | GRXD0 | | |
| P85 | GRXD0 | | |
| P86 | GRXD0 | | |
| P87 | GRXD0 | | |
| P88 | GRXD0 | | |
| P89 | GRXD0 | | |
| P90 | GRXD0 | | |
| P91 | GRXD0 | | |
| P92 | GRXD0 | | |
| P93 | GRXD0 | | |
| P94 | GRXD0 | | |
| P95 | GRXD0 | | |
| P96 | GRXD0 | | |
| P97 | GRXD0 | | |
| P98 | GRXD0 | | |
| P99 | GRXD0 | | |
| P100 | GRXD0 | | |

PS

VCC-MIPI

MIPI_1_RV

VDD18



MIPI-LCD

AVDD-LCD

AVDD-LCD

R164 5K3/1% R0402

5.0V

VCOM

C151 4.7uF/16V C0603

C219 0.1uF/25V C0402

R162 3.3K/1% R0402

C171 10uF C0603

C245 0.1uF C0402

GND

GND

VDD18

R112 R0402

R111 R0402

R113 R0402

R110 R0402

R115 R0402

R203 R0402

L/R

U/D

STBYB

GND

VDD18

R128 R0402

C391

C92 C0402

GND

LCD-RST R115 R0402

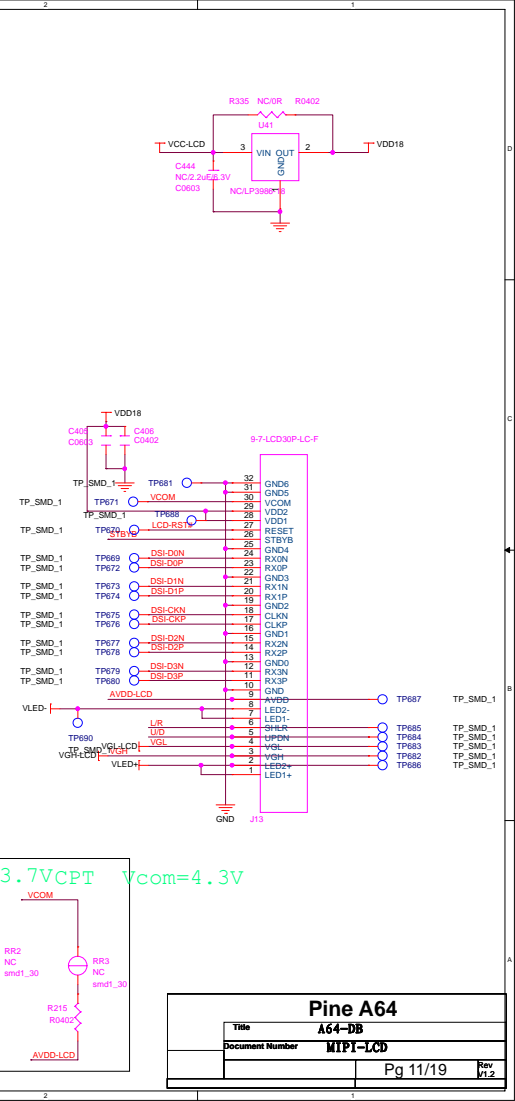
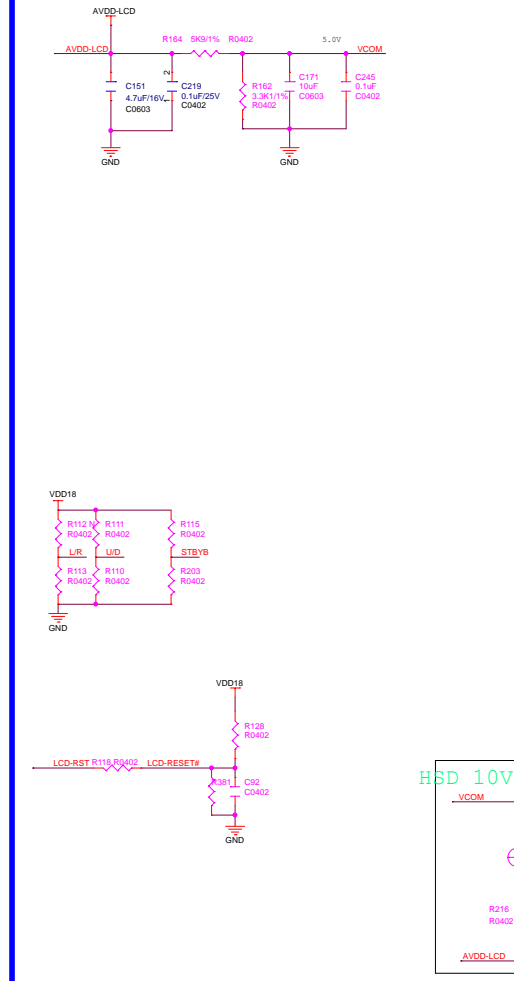
LCD-RESET#

HSD 10V

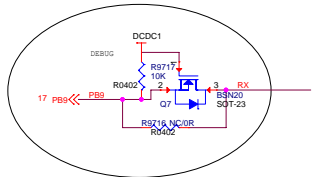
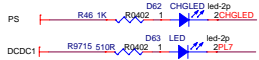
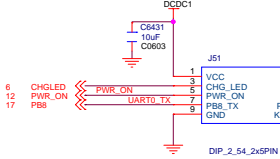
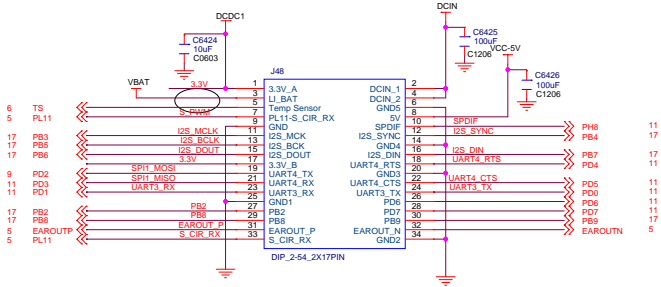
VCOM

R216 R0402

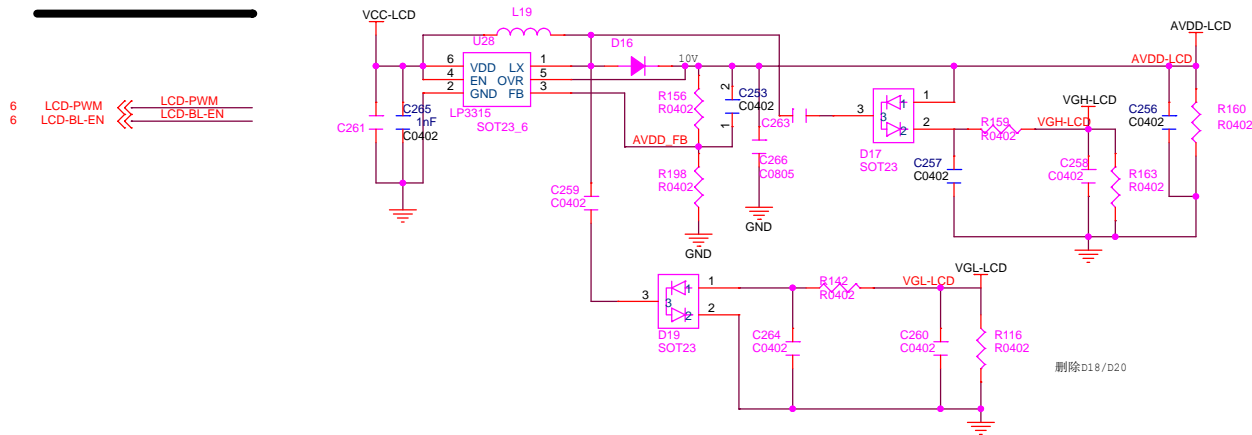
AVDD-LCD



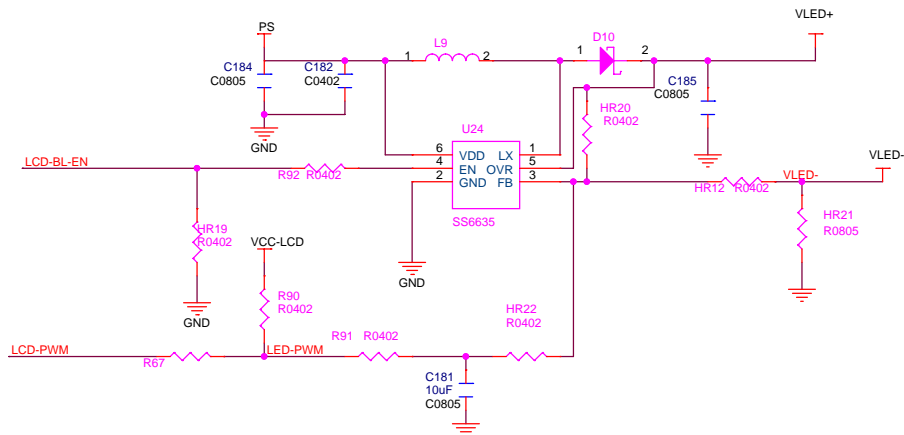
Euler Bus



LCD POWER



Backlight



Pine A64

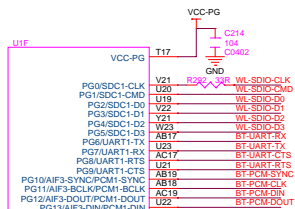
A64-DB

Document Number LCD POWER

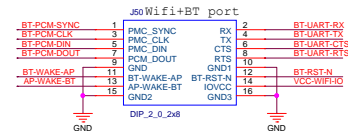
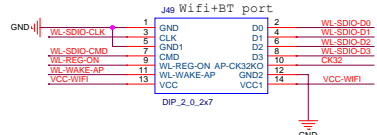
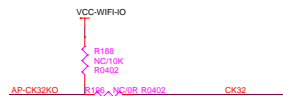
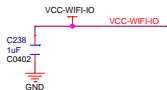
Pg 14/19

Rev

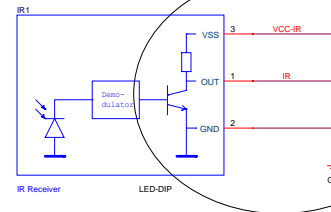
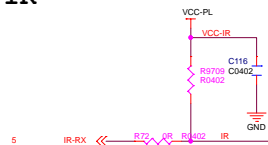
WIFI+BT



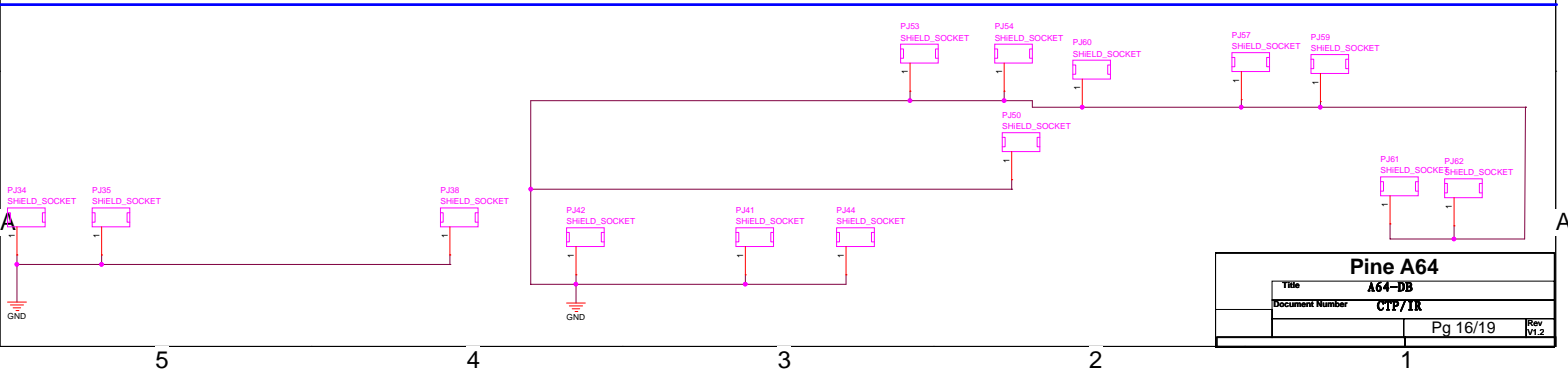
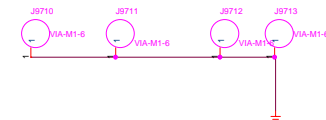
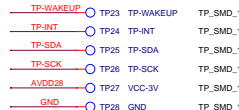
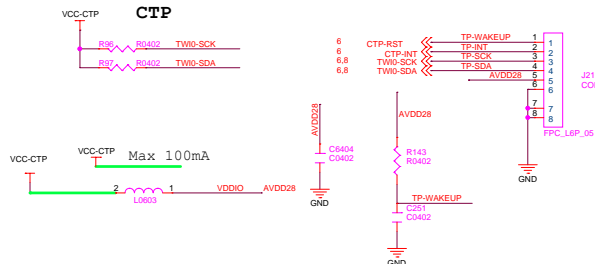
A64



| | |
|-----------------|-------------|
| Pine A64 | |
| Title | A64-DB |
| Document Number | WIFI+BT |
| | Pg 15/19 |
| | Rev V1.2 |



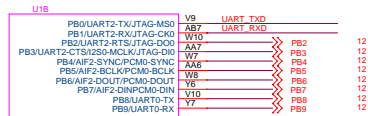
CTP



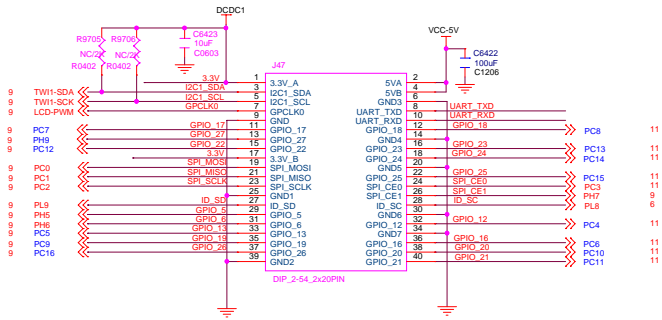
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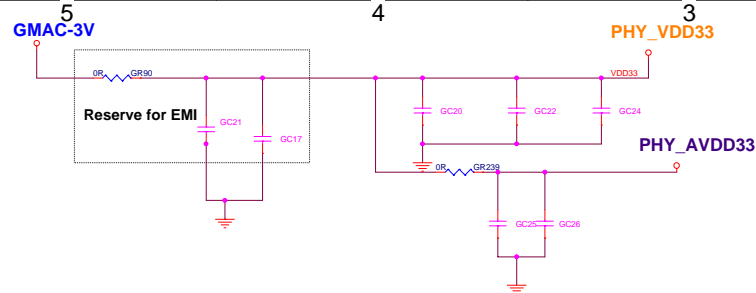
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| Title | A64-DB | |
| Document Number | CTP/IR | |
| | Pg 16/19 | Rev V1.2 |

PI-2 Bus



A64





| RTL8211CN/D/E | GL1 | C56 | U10 | GR65 | GR66 | GR122 | GC41/GC57 |
|-----------------------------|-----|-----|-----|------|------|-------|-----------|
| Enable switching regulator | ○ | ○ | ✗ | ○ | ✗ | ✗ | ○ |
| Disable switching regulator | ✗ | ✗ | ○ | ✗ | ○ | ○ | ✗ |

