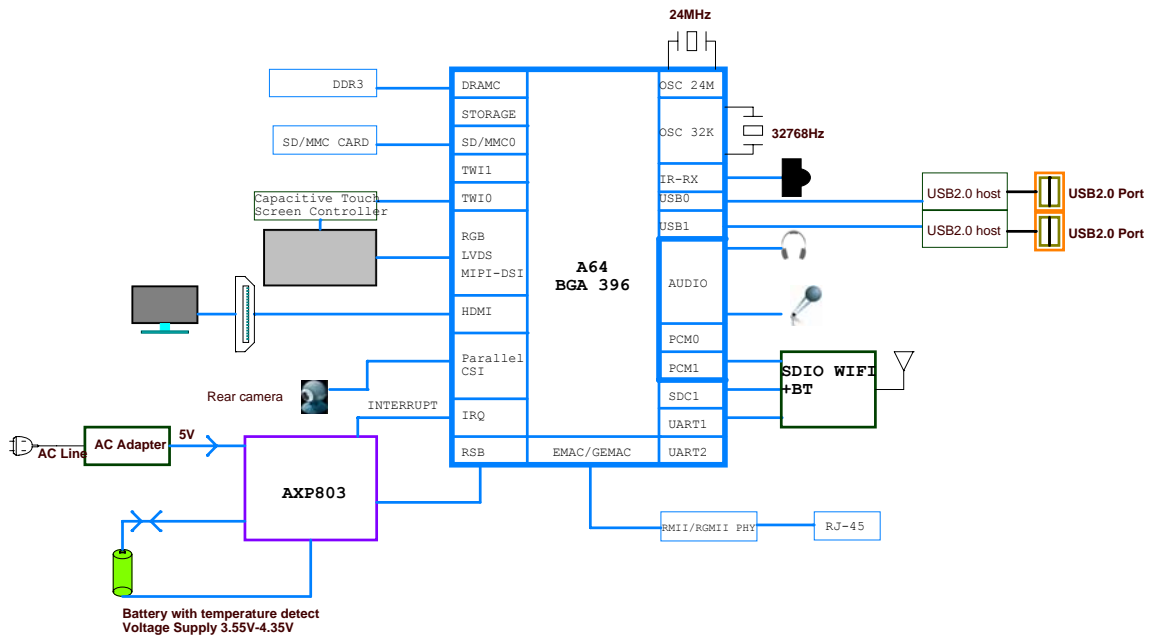


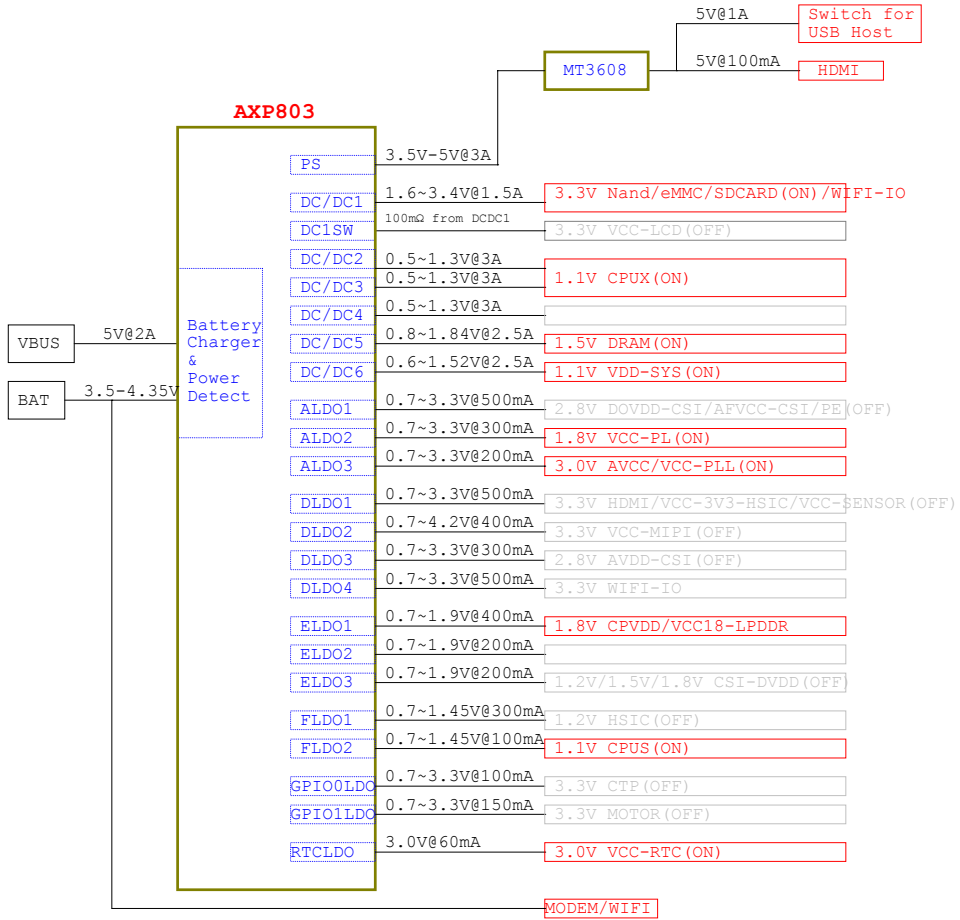


# BLOCK DIAGRAM



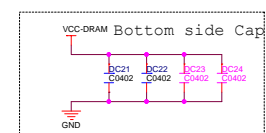
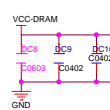
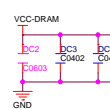
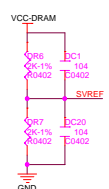
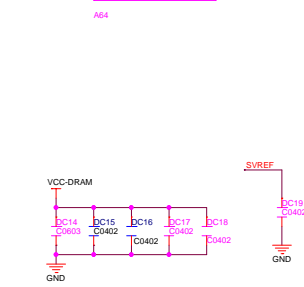
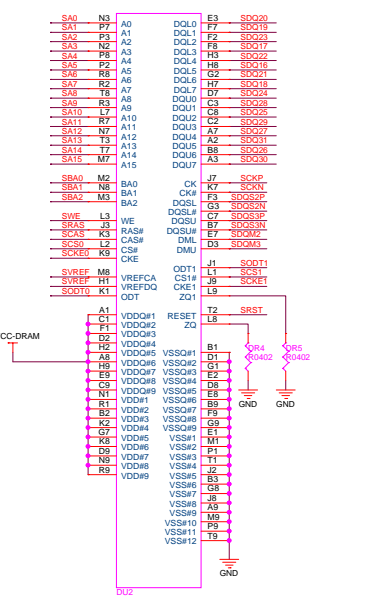
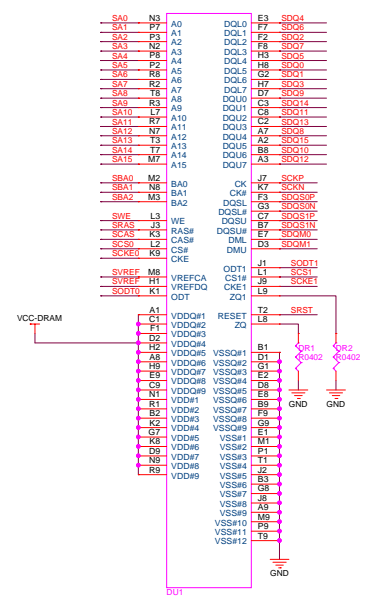
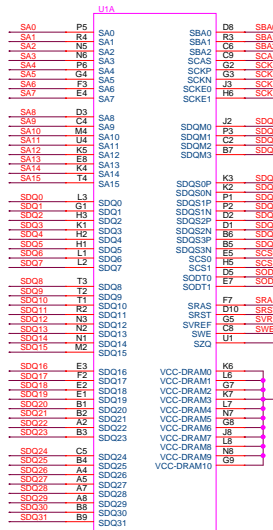
<b>Pine A64</b>	
Title	A64-DB
Document Number	<b>BLOCK DIAGRAM</b>
Pg 2/19	Rev 1/12

# POWER TREE



<b>Pine A64</b>	
Title	A64-DB
Document Number	<b>POWER TREE</b>
Pg 3/19	Rev V1.2

# DDR3 16x2



D11-FBG496  
BG496P0\_80B11\_00X14\_00

D12-FBG496  
BG496P0\_80B11\_00X14\_00

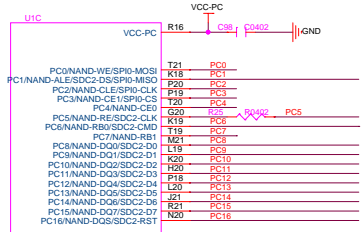
## Pine A64

Title	A64-DB
Document Number	DDR3
Pg 4/19	Rev 1/2

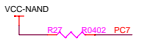
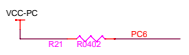
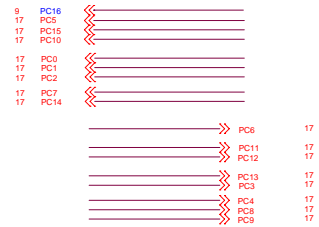




# NAND/eMMC

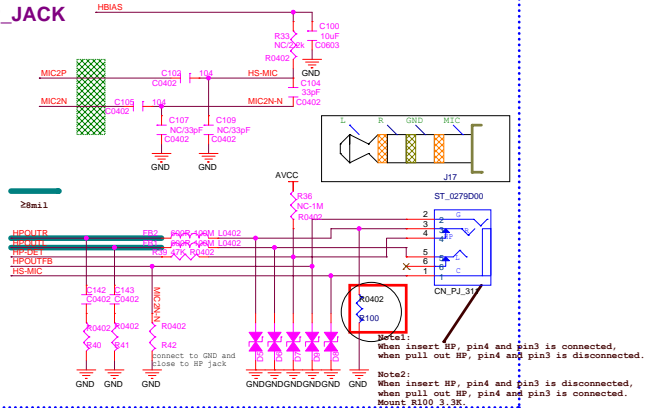


A64



# AUDIO

## HP JACK



- 5 HBIAS <<< \_\_\_\_\_
- 5 HP-DET <<< \_\_\_\_\_
- 5 HP-OUTFB <<< \_\_\_\_\_
- 5 HP-OUTL <<< \_\_\_\_\_
- 5 HP-OUTR <<< \_\_\_\_\_
- 5 MIC2N <<< \_\_\_\_\_
- 5 MIC2P <<< \_\_\_\_\_
- 5 HS-MIC <<< \_\_\_\_\_

- 5 EAROUTP <<< \_\_\_\_\_
- 5 EAROUTN <<< \_\_\_\_\_

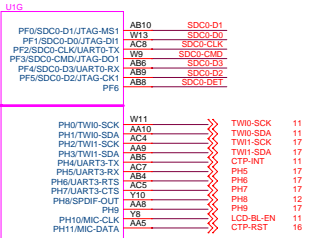
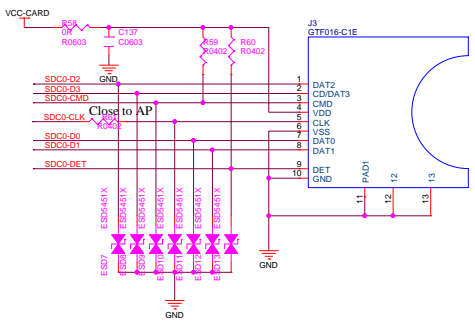
- AVCC \_\_\_\_\_
- VCC-5V \_\_\_\_\_



# T-CARD/USB

## T-CARD

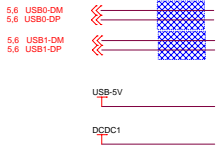
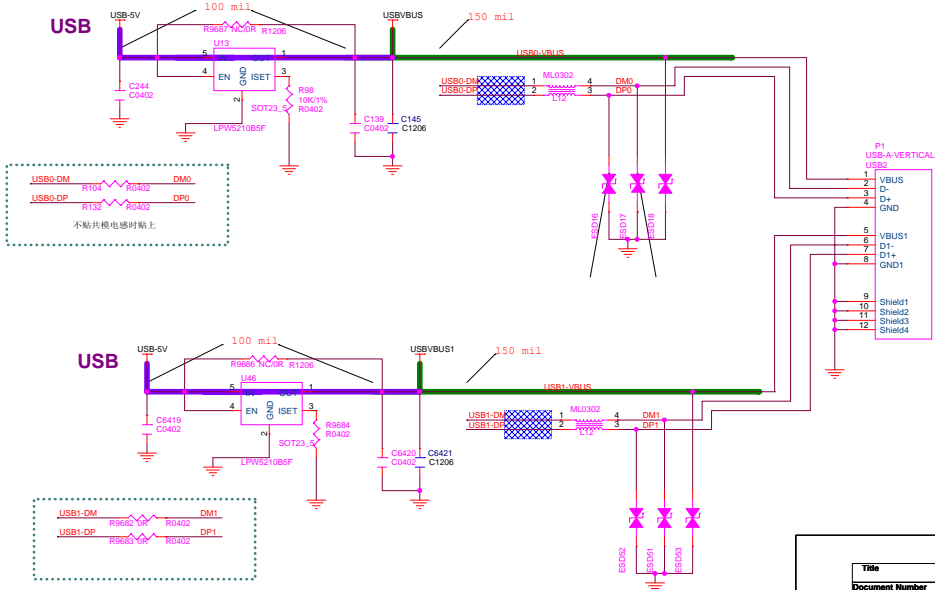
SDC0-CLK TP7 UART0-TX TP\_SMD\_1  
 SDC0-D3 TP8 UART0-RX TP\_SMD\_1



A64

VCC-CARD

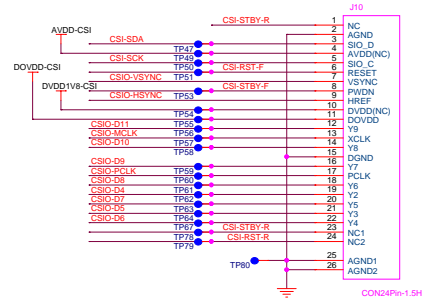
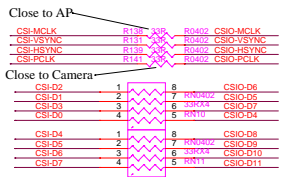
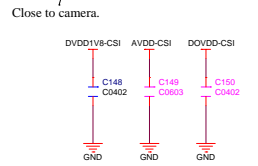
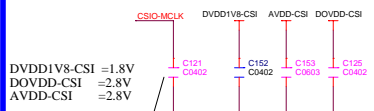
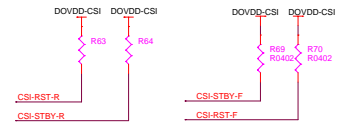
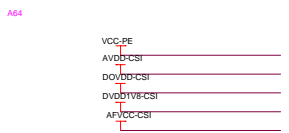
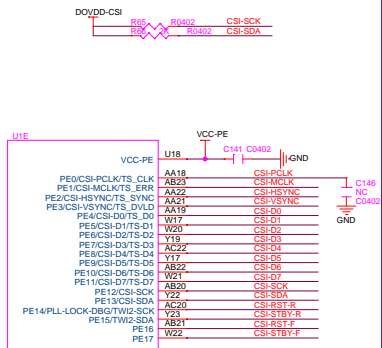
## USB



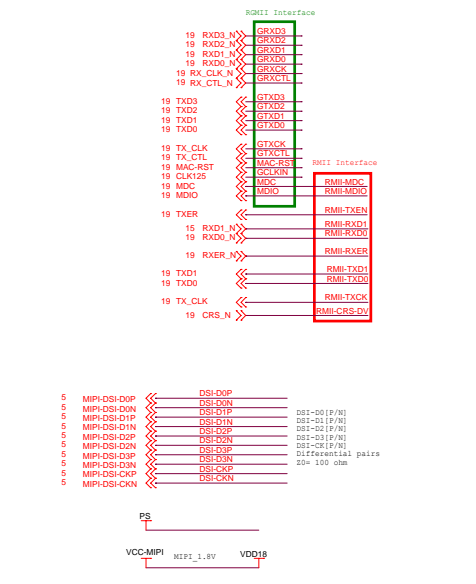
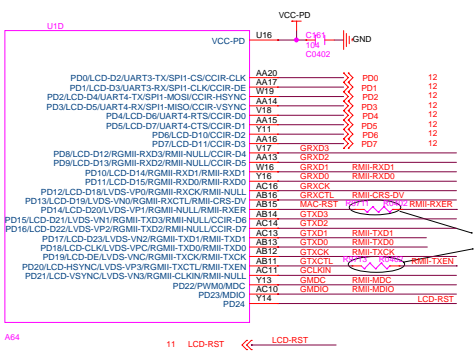
### Pine A64

Title	A64-DB
Document Number	T-CARD/USB
Rev	v
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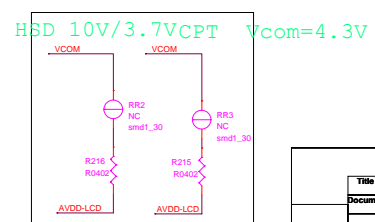
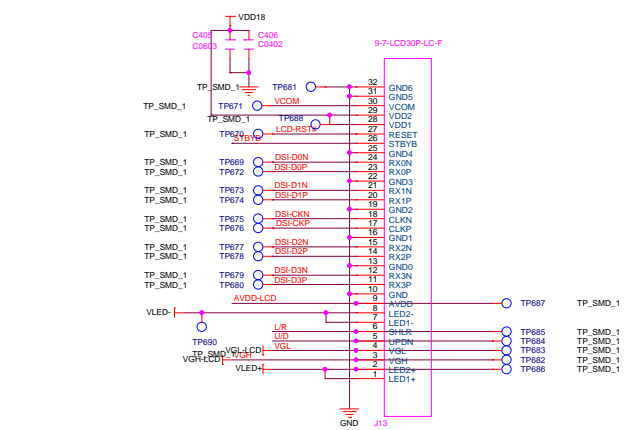
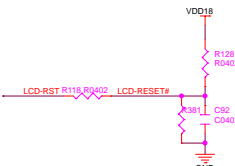
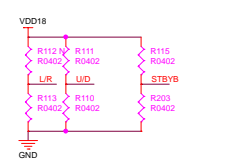
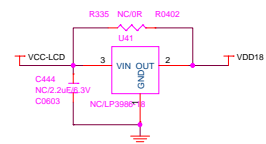
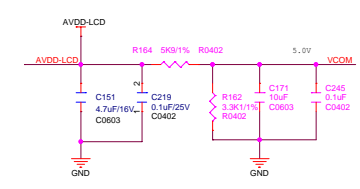
# CAMERA



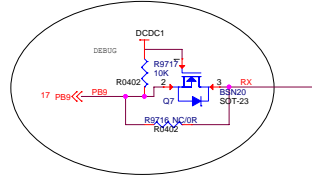
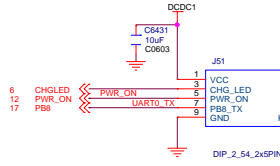
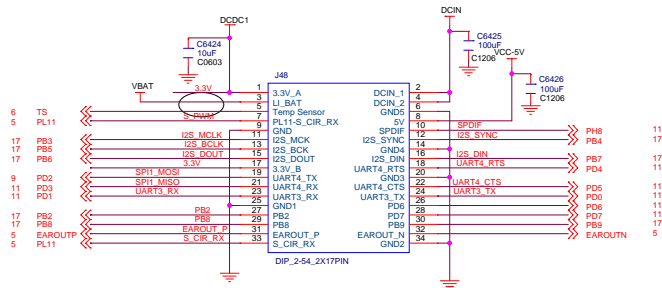
# LCD



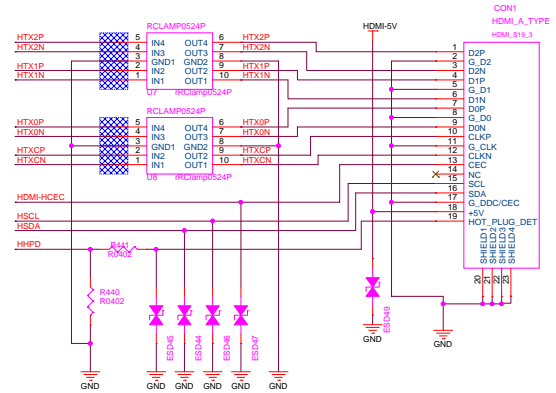
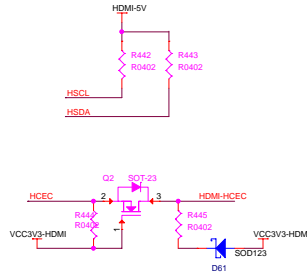
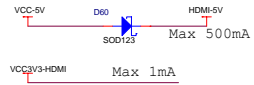
# MIPI-LCD



# Euler Bus



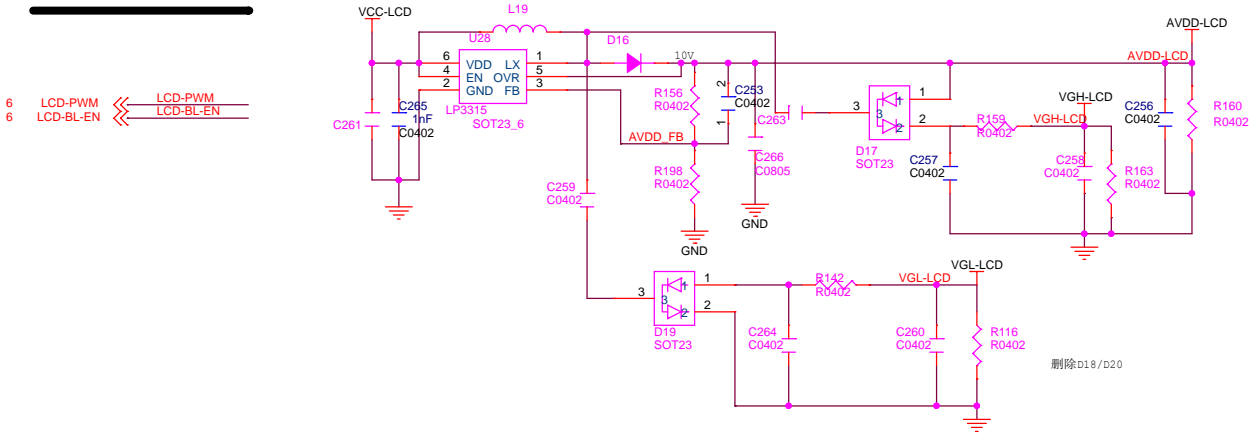
# HDMI



## Pine A64

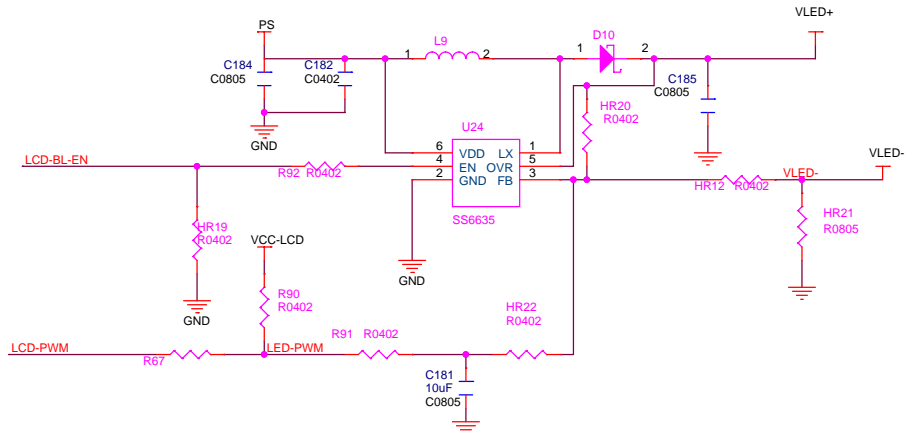
Title	A64-DB
Document Number	HDMI
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# LCD POWER



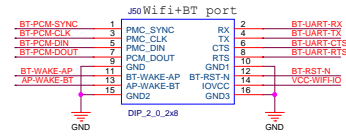
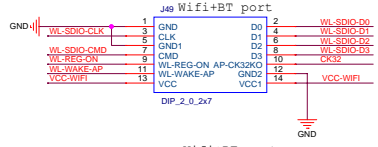
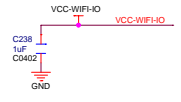
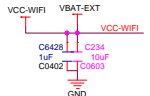
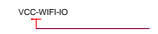
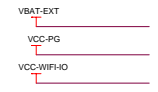
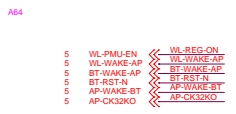
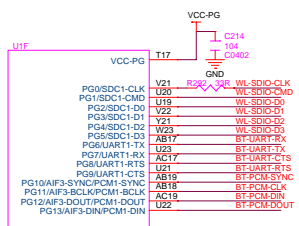
删除D18/D20

# Backlight



<b>Pine A64</b>	
<b>A64-DB</b>	
<b>Document Number LCD POWER</b>	
Pg 14/19	Rev V

# WIFI+BT

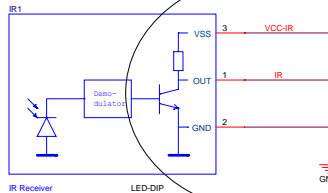
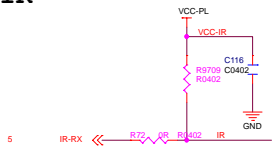


## Pine A64

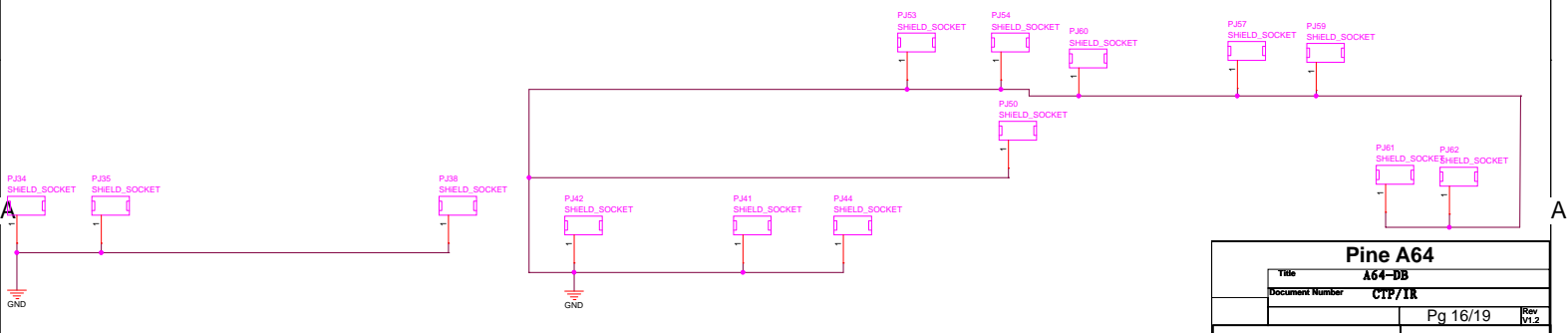
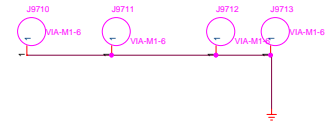
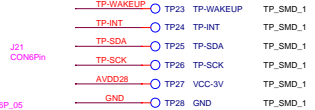
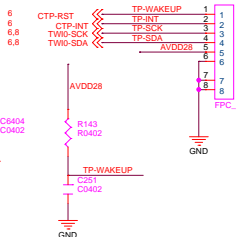
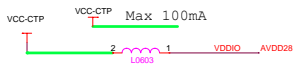
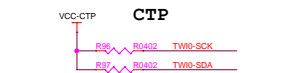
Title		A64-DB	
Document Number		WIFI+BT	
Pg 15/19			Rev 1.2

# CTP/IR

## IR

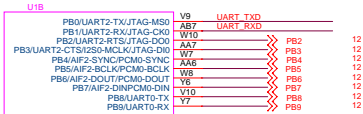


## CTP

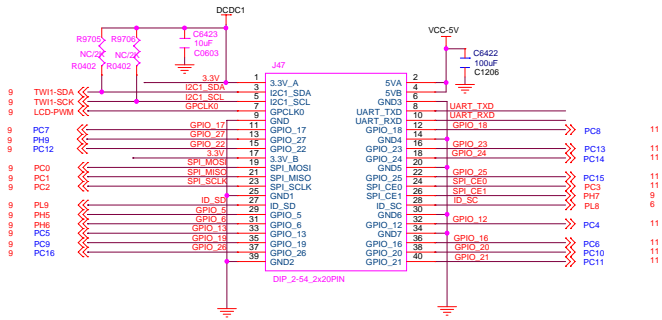




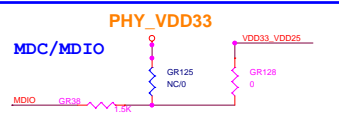
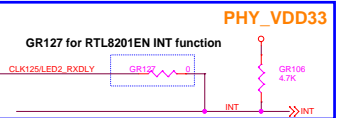
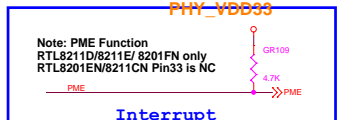
# PI-2 Bus



A64



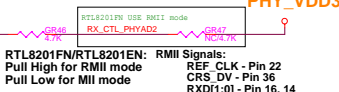
<b>Pine A64</b>	
Title	A64-DB
Document Number	PI-2
	Pg 17/19
	Rev M1.2



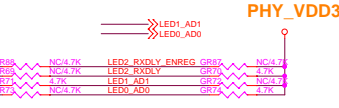
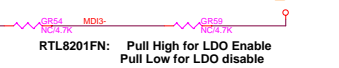
MDIO >>> MDIO RTL8201FN/EN/8211CN/8211D: GR128(NC)  
MDC >>> MDC RTL8211E: GR125(NC)

## Configuration Setting

RMII/RMII Setting only for RTL8201FN & RTL8201EN PHYAD2  
Setting only for RTL8211E



RTL8201FN/RTL8201EN: RMII Signals:  
REF\_CLK - Pin 22  
CRS\_DV - Pin 36  
RXD[1:0] - Pin 16, 14  
TX\_EN - Pin 27  
TXD[1:0] - Pin 24, 23  
RX\_ER - Pin 38



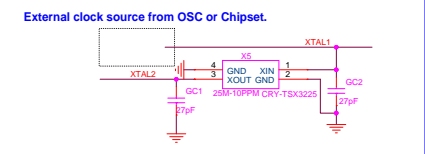
RTL8211D/E: If use 2.5V RGMII please pull down (GR123)RXD0/SERLGV  
RTL8211CN/8201EN: GR123, GR124 NC



RTL8211CN/8211D/8211E: GR78, GR79: Config for all capability. GR71: SMI Interface. GR46, GR71, R74: PHY Address=001 (8211E). GR69, GR85: Without TX/RX Delay.

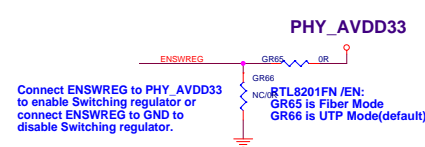
RTL8201EN: GR88: SMI Interface. GR71, GR74: PHY Address=01. Other resistors are NC.

RTL8201FN: R78: REF CLK Input. R77: REF CLK Output. R69, R71, R74: PHY Address=001. Other resistors are NC.

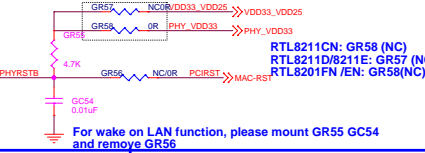


Use external clock:  
RTL8201FN/RTL8201EN/8211CN/8211D/8211E: GR105(0 ohm)

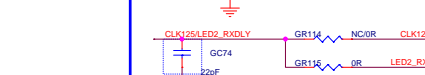
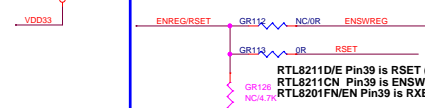
### Enable/Disable SWREG



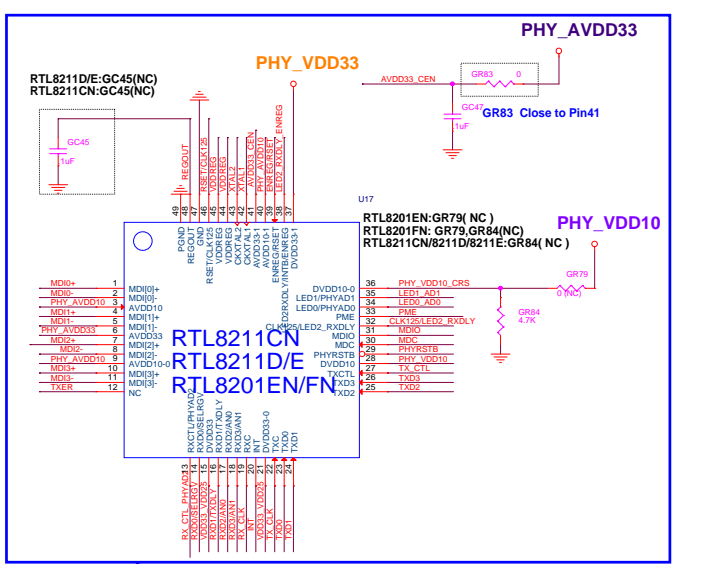
## PHY Reset

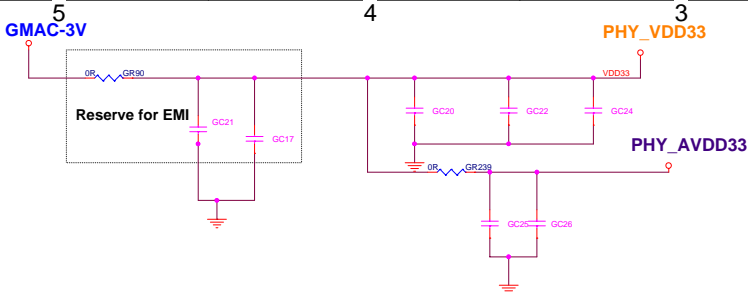


## RSET/ENSWREG/CLK125 Co-layout



Reserve for EMI.





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

