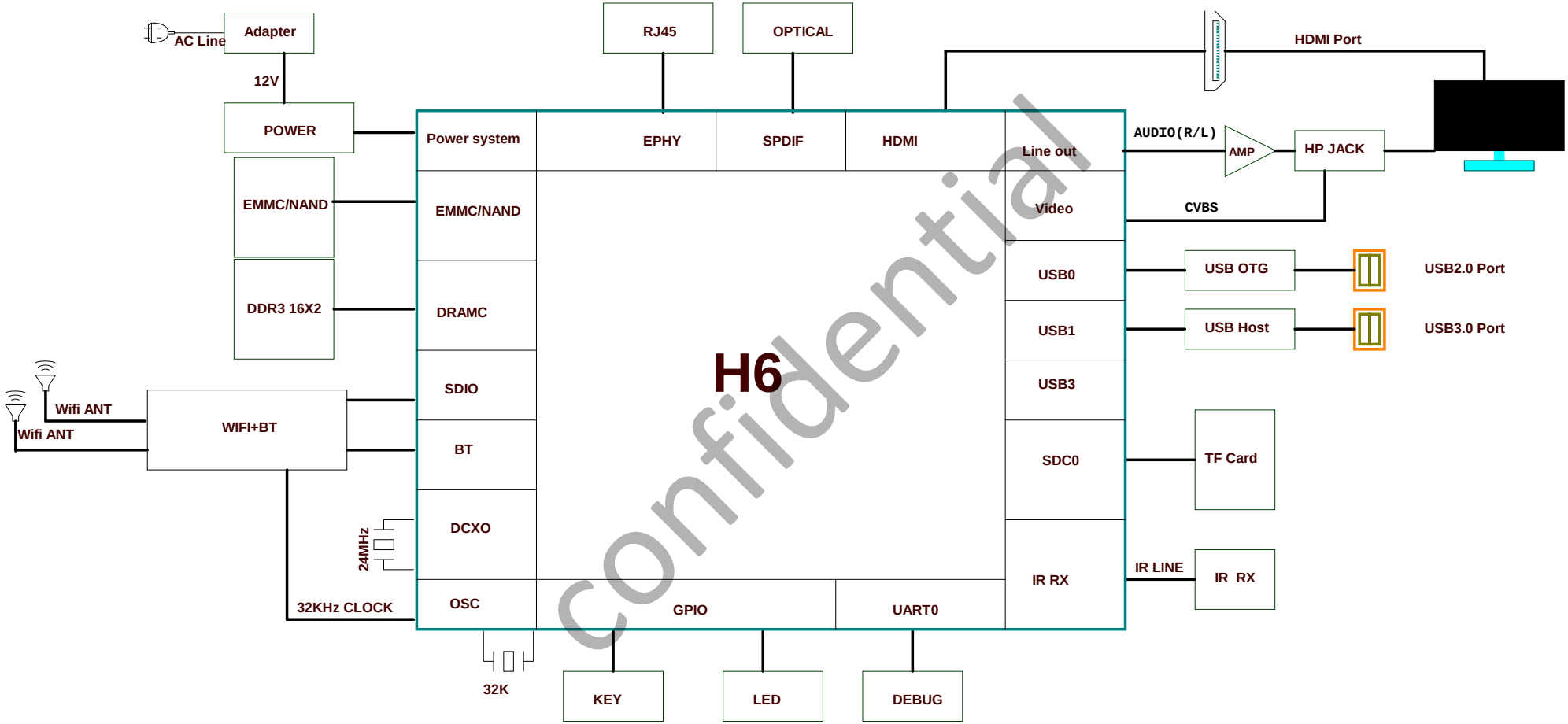
REVISION HISTORY

Revision	Description	Date	Drawn	Checked
Ver 0.5	Initial Version	2016-12-26	HJ	
Ver 0.9		2017-04-10	HJ	
Ver 1.0		2017-07-06	HJ	

Schematics Index:

BLOCK



AllWinner Technology Co.,Ltd		
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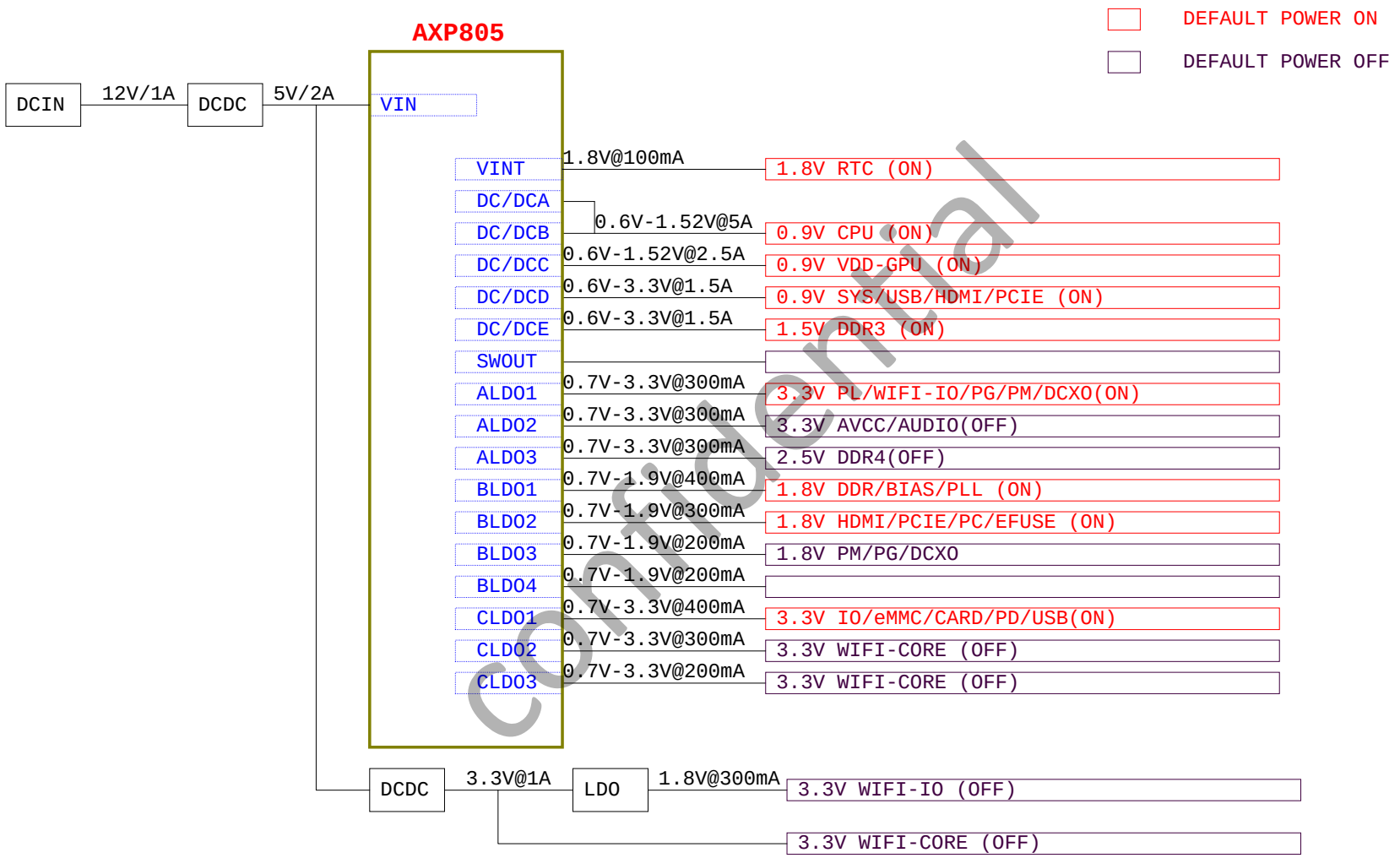
POWER TREE



AllWinner Technology Co.,Ltd		
Design Name: H6-STD-V1.0		
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GPIO ASSIGNMENT

PIN	Define	CFG	Function
PC0	NAND_WE	2	NAND/eMMC
PC1	NAND_ALE/SDC2_DS	2/3	
PC2	NAND_CLE	2	
PC3	NAND_CE0	2	
PC4	NAND_RE/SDC2_CLK	2/3	
PC5	NAND_RB0/SDC2_CMD	2/3	
PC6	NAND_DQ0/SDC2_D0	2/3	
PC7	NAND_DQ1/SDC2_D1	2/3	
PC8	NAND_DQ2/SDC2_D2	2/3	
PC9	NAND_DQ3/SDC2_D3	2/3	
PC10	NAND_DQ4/SDC2_D4	2/3	
PC11	NAND_DQ5/SDC2_D5	2/3	
PC12	NAND_DQ6/SDC2_D6	2/3	
PC13	NAND_DQ7/SDC2_D7	2/3	
PC14	NAND_DQS/SDC2_RST	2/3	
PC15	NAND_CE1	2	
PC16	NAND_RB1	2	

PIN	Define	CFG	Function
PD0	RGMII-RXD3	5	
PD1	RGMII-RXD2	5	
PD2	RGMII-RXD1	5	
PD3	RGMII-RXD0	5	
PD4	RGMII-RXCK	5	
PD5	RGMII-RXCTL	5	
PD6			
PD7	RGMII-TXD3	5	
PD8	RGMII-TXD2	5	
PD9	RGMII-TXD1	5	
PD10	RGMII-TXD0	5	
PD11	RGMII-TXCK	5	
PD12	RGMII-TXCTL	5	
PD13	RGMII-CLKIN	5	
PD14			

PIN	Define	CFG	Function
PD15			
PD16			
PD17			
PD18			
PD19	MDC	5	
PD20	MDIO	5	
PD21	RGMII-RESET	1	
PD22			
PD23			
PD24			
PD25			
PD26			

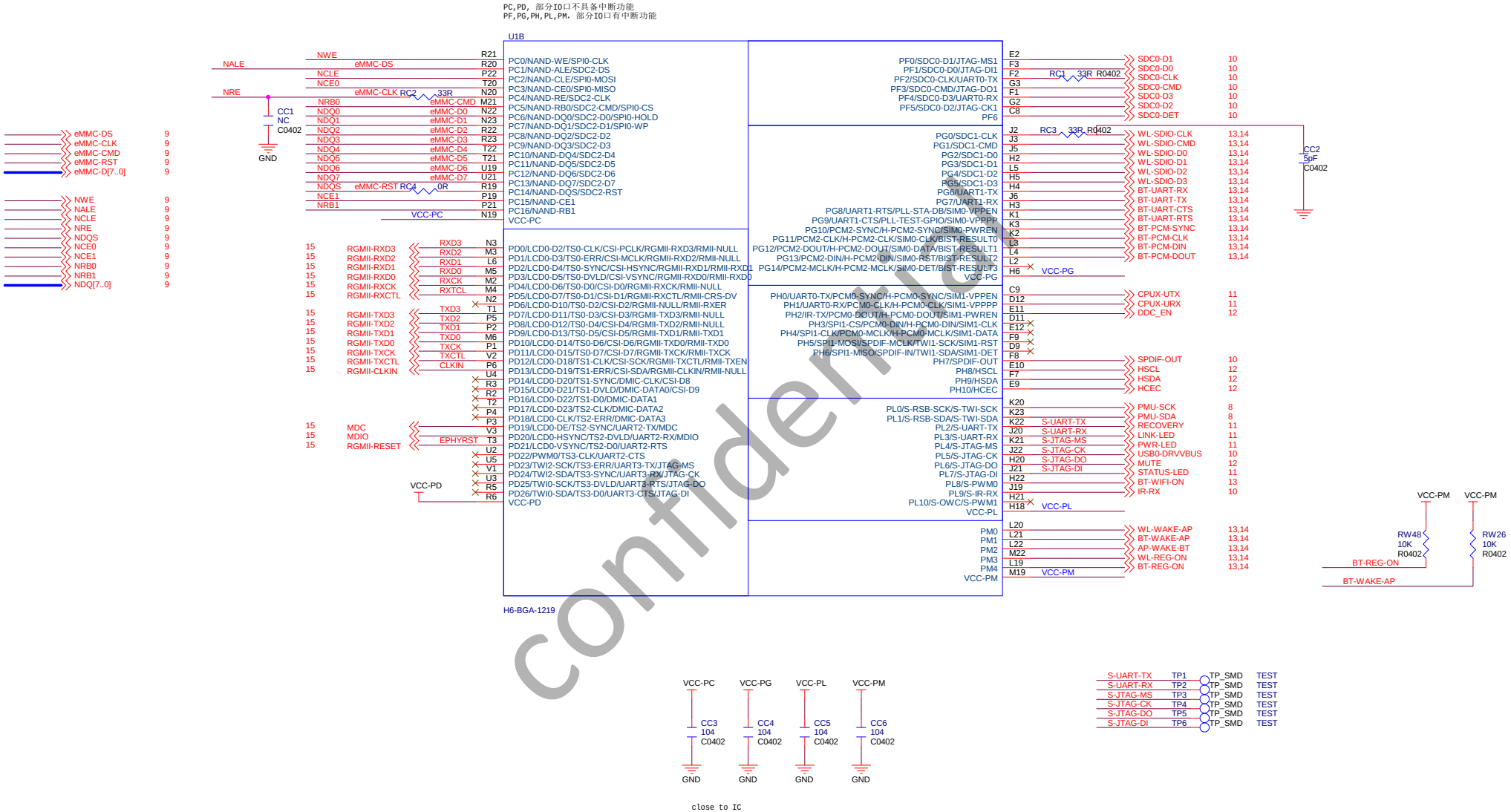
PIN	Define	CFG	Function
PG0	SDC1_CLK	2	WIFI+BT
PG1	SDC1_CMD	2	
PG2	SDC1_D0	2	
PG3	SDC1_D1	2	
PG4	SDC1_D2	2	
PG5	SDC1_D3	2	
PG6	UART1_TX	2	
PG7	UART1_RX	2	
PG8	UART1_RTS	2	
PG9	UART1_CTS	2	
PG10	PCM2_SYNC	2	
PG11	PCM2_CLK	2	
PG12	PCM2_DOUT	2	
PG13	PCM2_DIN	2	
PG14			

PIN	Define	CFG	Function
PF0	SDC0_D1	2	CARD0
PF1	SDC0_D0	2	
PF2	SDC0_CLK/UART0_TX	2/3	
PF3	SDC0_CMD	2	
PF4	SDC0_D3/UART0_RX	2/3	
PF5	SDC0_D2	2	
PF6	SDC0-DET	2	

PIN	Define	CFG	Function
PH0	CPUX-UTX	2	
PH1	CPUX-URX	2	
PH2	DDC_CEC_EN	6	
PH3			
PH4			
PH5			
PH6			
PH7	SPDIF_OUT	3	
PH8	HSCL	2	HDMI
PH9	HSDA	2	
PH10	HCEC	2	

PIN	Define	CFG	Function
PL0	PMU-SCK	3	
PL1	PMU-SDA	3	
PL2	RECOVERY	6	
PL3	LINK-LED	1	
PL4	PWR-LED	1	
PL5	USB0-DRVVBUS	1	
PL6	MUTE	1	
PL7	STATUS-LED	1	
PL8	BT-WIFI-ON	1	
PL9	IR-RX	2	
PL10			
PM0	WL-WAKE-AP	6	WIFI+BT
PM1	BT-WAKE-AP	6	
PM2	AP-WAKE-BT	1	
PM3	WL-REG-ON	1	
PM4	BT-REG-ON	1	

SOC1



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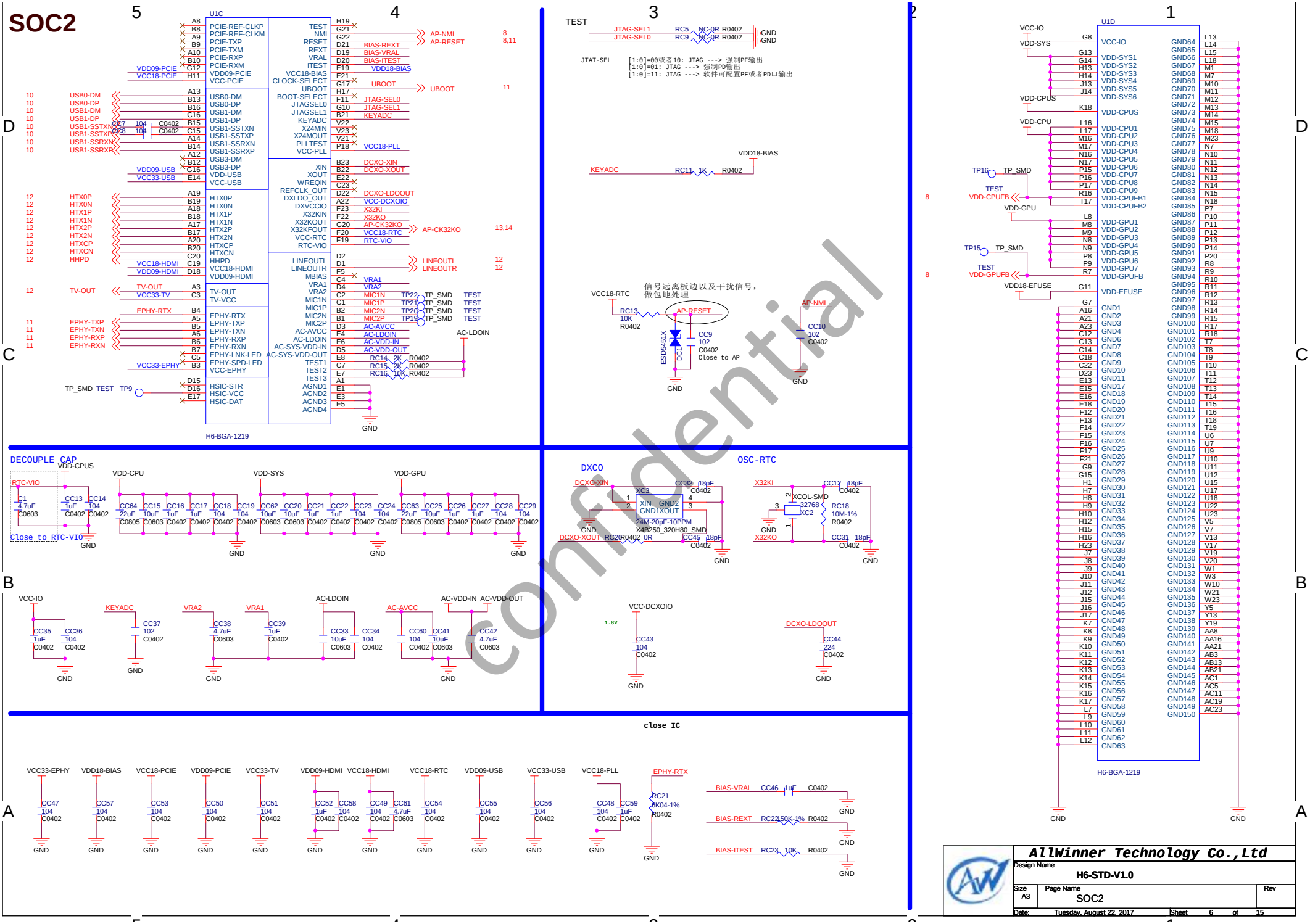
SOC2



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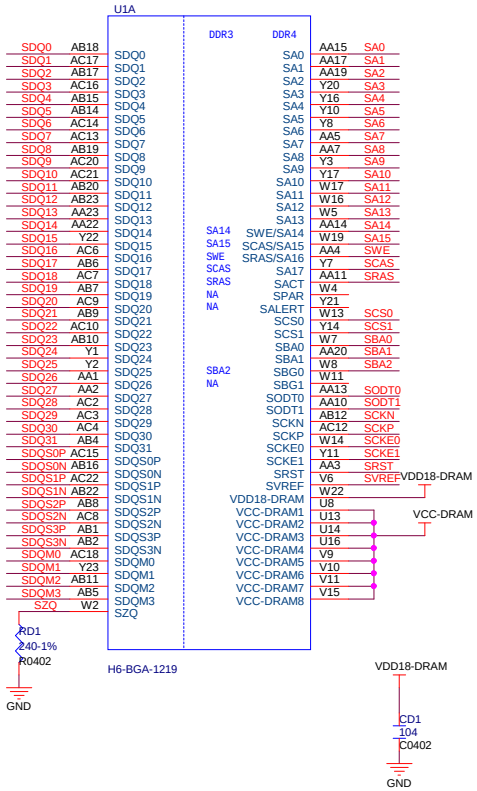
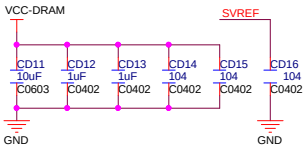
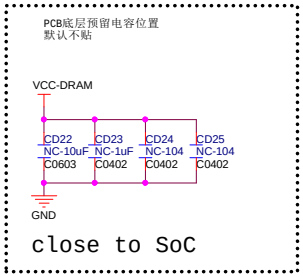
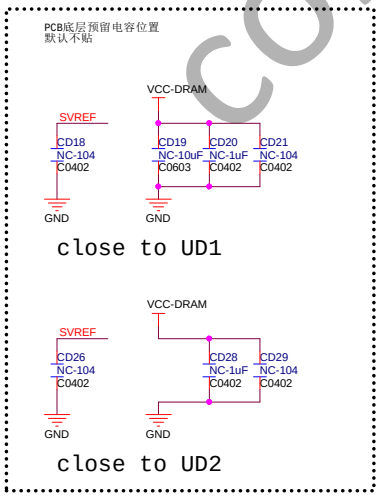
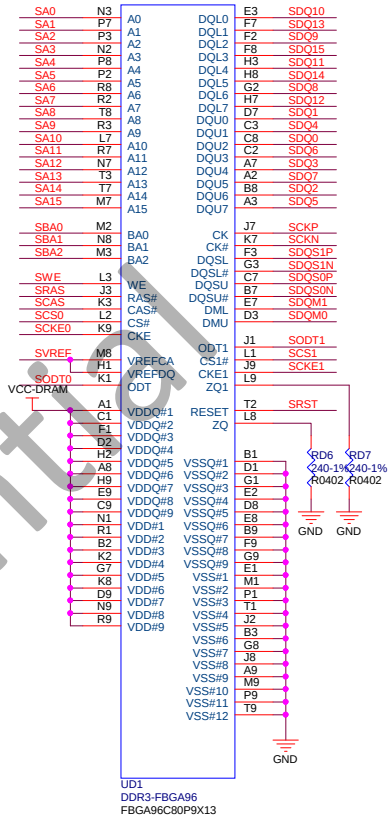
DDR3 16X2

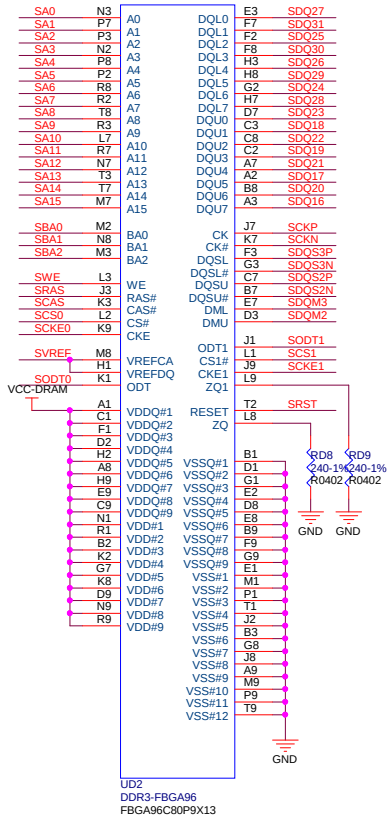


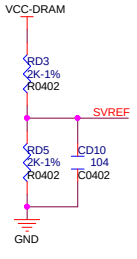


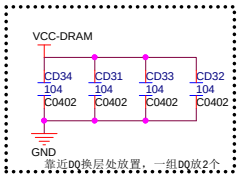


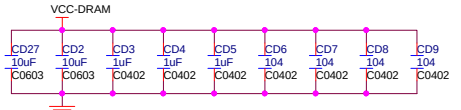


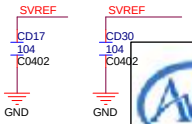












SCKP RD4 100R R0402 SCKN

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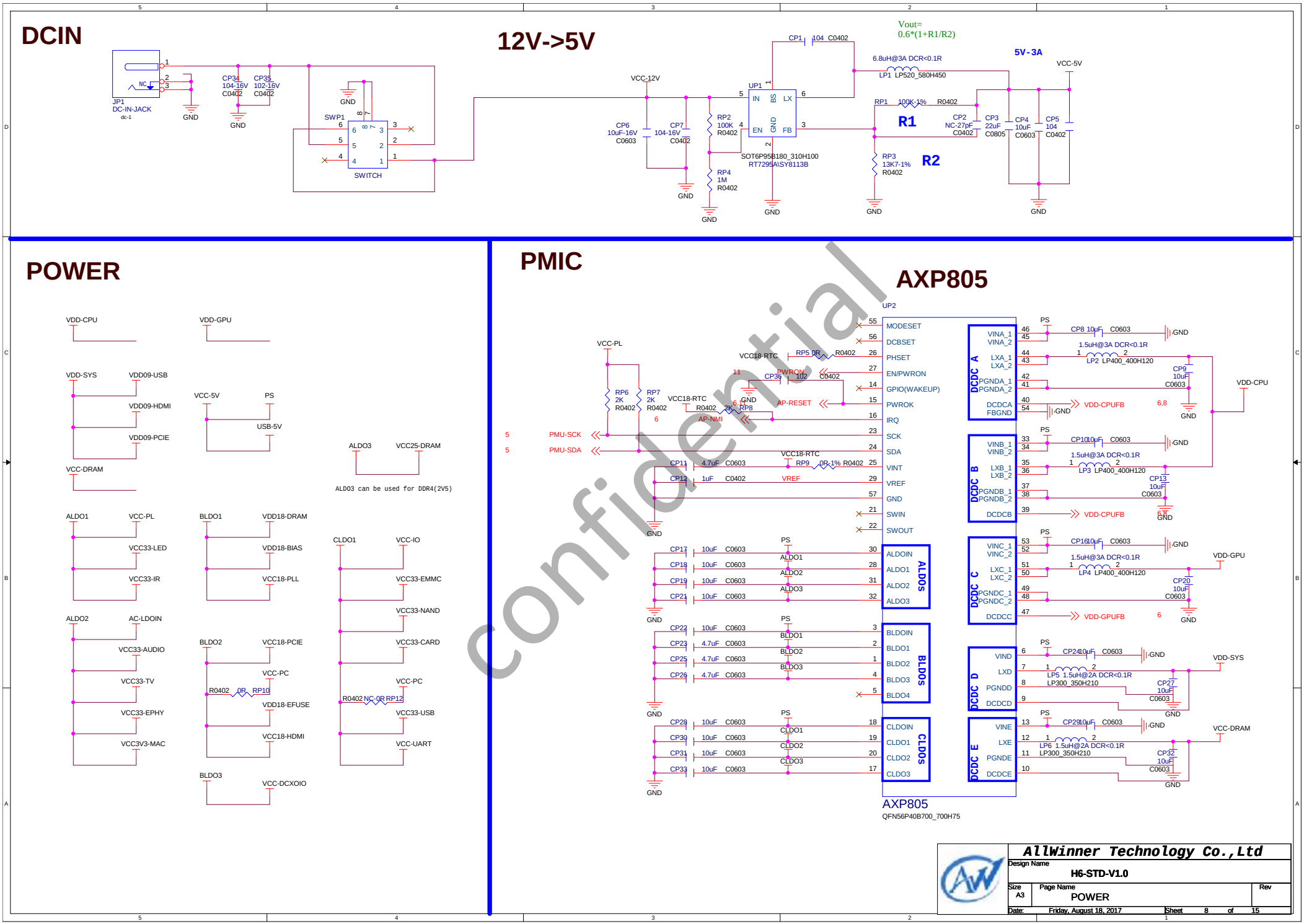
DCIN
12V->5V
Vout=
0.6*(1+R1/R2)
5V-3A
6.8uH@3A DCR<0.1R
LP1 LP520_580H450
VCC-5V
VCC-12V
SOT6P95B180_310H100
RT7295A\SY8113B
R1
R2
POWER
VDD-CPU
VDD-GPU
VDD-SYS
VDD09-USB
VDD09-HDMI
VDD09-PCIE
VCC-DRAM
USB-5V
ALDO3 can be used for DDR4(2V5)
VCC33-LED
VCC33-IR
VCC33-AUDIO
VCC33-TV
VCC33-EPHY
VCC3V3-MAC
VDD18-BIAS
VCC18-PLL
VCC18-PCIE
VCC-PC
VDD18-EFUSE
VCC18-HDMI
VCC-DCXOIO
VCC33-EMMC
VCC33-NAND
VCC33-CARD
VCC33-USB
VCC-UART
PMIC
AXP805
MODESET
DCBSET
PHSET
EN/PWRON
GPIO(WAKEUP)
PWROK
IRQ
SCK
SDA
VINT
VREF
GND
SWIN
SWOUT
ALDOIN
BLDOIN
CLDOIN
DCDC A
DCDC B
DCDC C
DCDC D
DCDC E
VDD-CPUFB
VDD-GPUFB
VDD-SYS
VDD-DRAM
AXP805
QFN56P40B700_700H75
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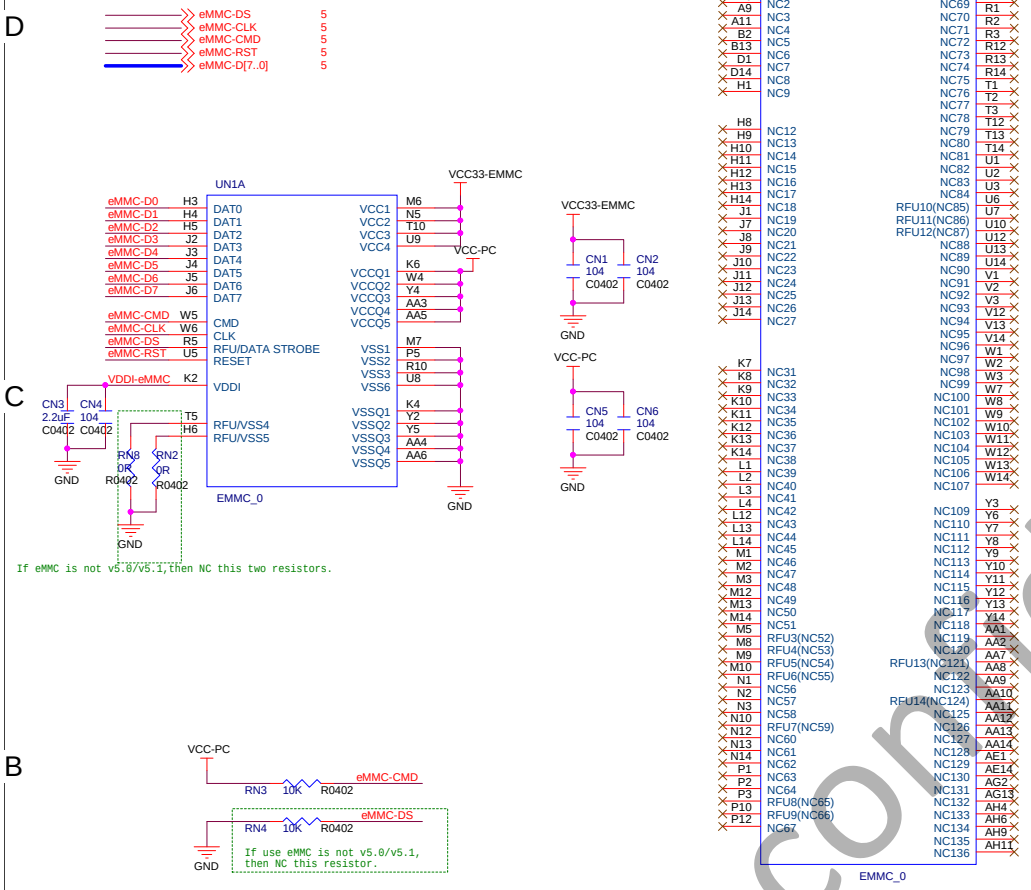
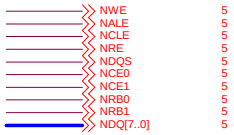
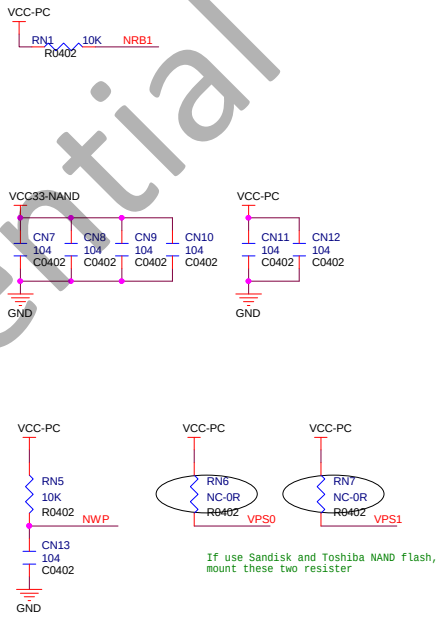
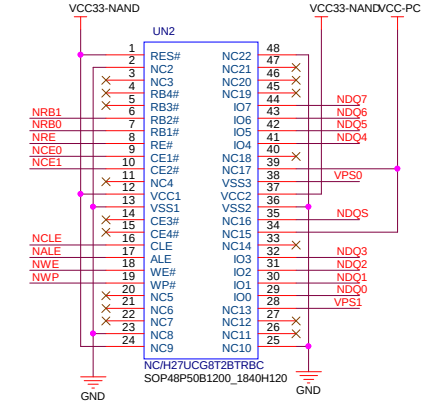
eMMC



NAND







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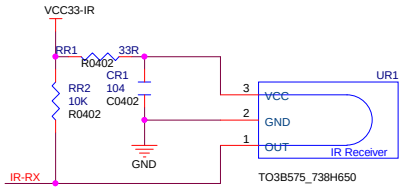
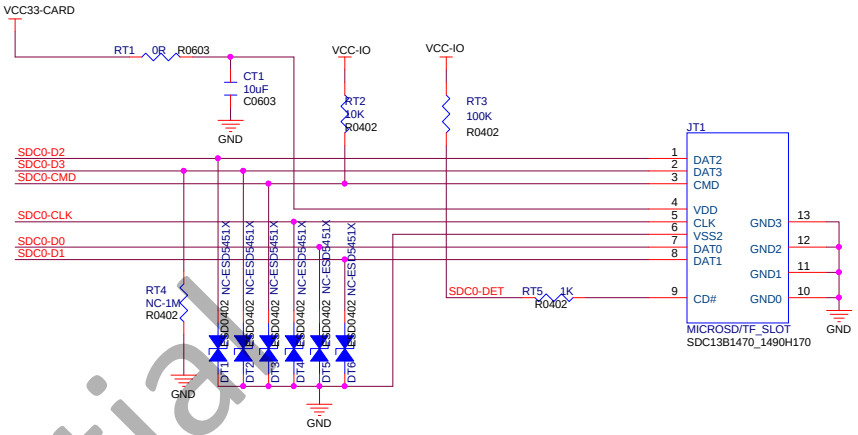
5 SDC0-D1
5 SDC0-D0
5 SDC0-CLK
5 SDC0-CMD
5 SDC0-D3
5 SDC0-D2
5 SDC0-DET
5 IR-RX

6 USB0-DM
6 USB0-DP
6 USB1-DM
6 USB1-DP
6 USB1-SSTXN
6 USB1-SSTXP
6 USB1-SSRXN
6 USB1-SSRXP
5 USB0-DRVVBUS
5 SPDIF-OUT

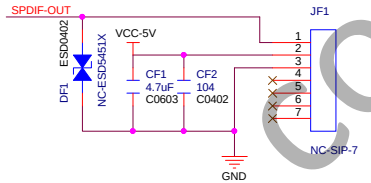
IR



CARD

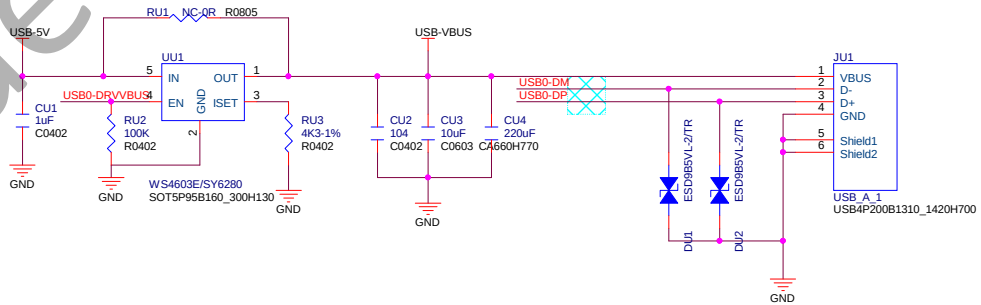


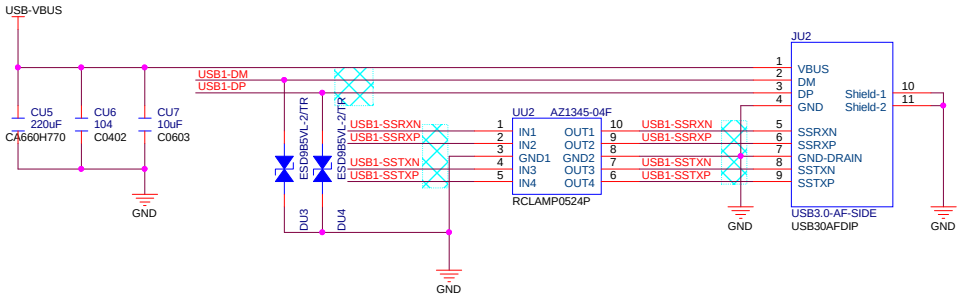
SPDIF



USB

Differential pairs
Z0= 90 ohm





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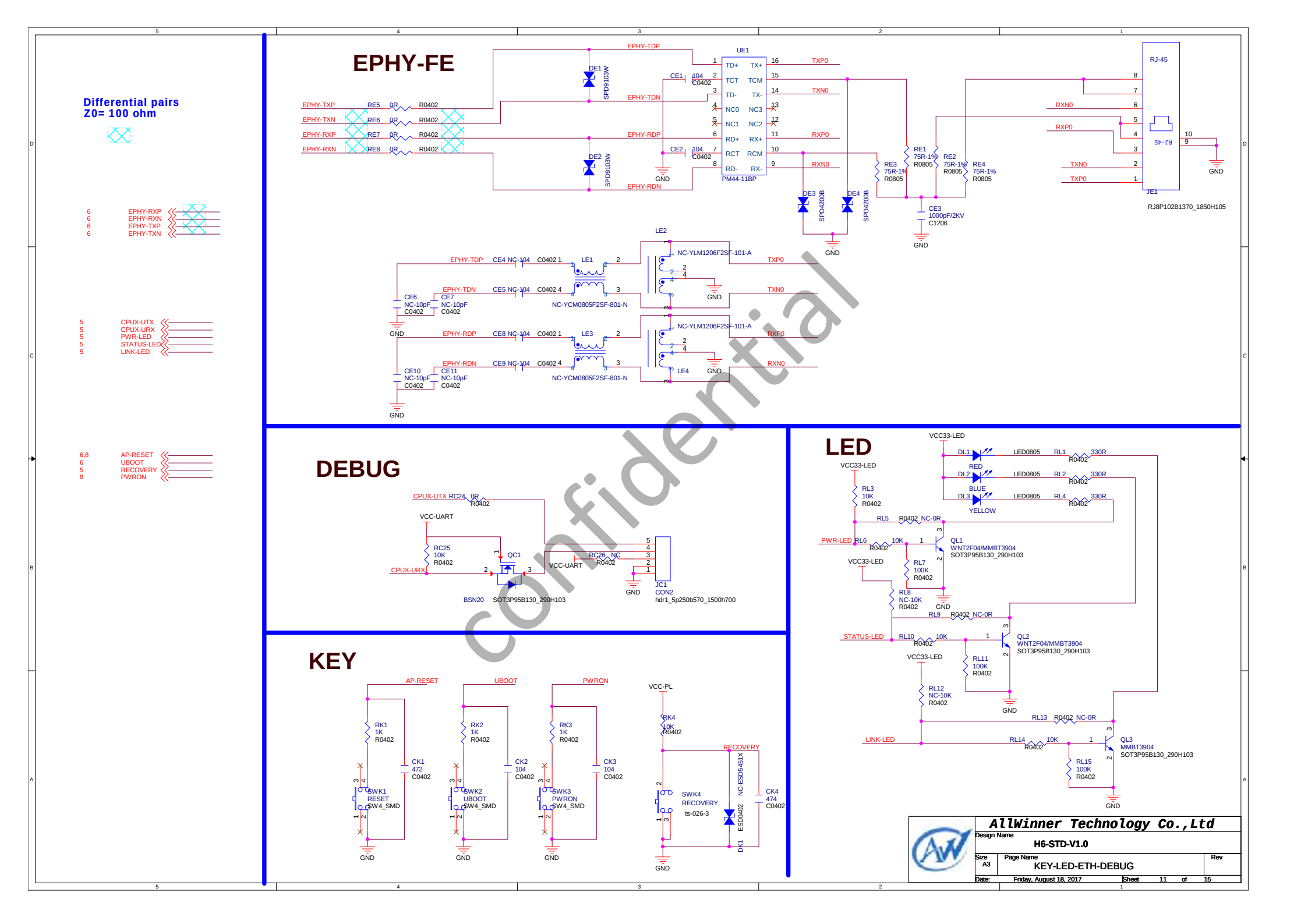
Differential pairs
Z0= 100 ohm
6 EPHY-RXP
6 EPHY-RXN
6 EPHY-TXP
6 EPHY-TXN
5 CPUX-UTX
5 CPUX-URX
5 PWR-LED
5 STATUS-LED
5 LINK-LED
6,8 AP-RESET
6 UBOOT
5 RECOVERY
8 PWRON
EPHY-FE
EPHY-TXP
EPHY-TXN
EPHY-RXP
EPHY-RXN
RE5 0R R0402
RE6 0R R0402
RE7 0R R0402
RE8 0R R0402
DE1 SPD9103W
DE2 SPD9103W
EPHY-TDP
EPHY-TDN
EPHY-RDP
EPHY-RDN
CE1 104 C0402
CE2 104 C0402
UE1
TD+ TX+
TCT TCM
TD- TX-
NC0 NC3
NC1 NC2
RD+ RX+
RCT RCM
RD- RX-
PM44-11BP
TXP0
TXN0
RXP0
RXN0
GND
DE3 SPD4200B
DE4 SPD4200B
RE1 75R-1% R0805
RE2 75R-1% R0805
RE3 75R-1% R0805
RE4 75R-1% R0805
CE3 1000pF/2KV C1206
RJ-45
JE1
RJ8P102B1370_1850H105
LE2
NC-YLM1206F2SF-101-A
LE1
LE3
LE4
NC-YCM0805F2SF-801-N
CE4 NC-104 C0402
CE5 NC-104 C0402
CE8 NC-104 C0402
CE9 NC-104 C0402
CE6 NC-10pF C0402
CE7 NC-10pF C0402
CE10 NC-10pF C0402
CE11 NC-10pF C0402
DEBUG
CPUX-UTX RC24 0R R0402
VCC-UART
RC25 10K R0402
CPUX-URX
QC1
BSN20 SOT3P95B130_290H103
RC26 NC R0402
JC1
CON2
hdr1_5p250b570_1500h700
KEY
AP-RESET
UBOOT
PWRON
RK1 1K R0402
RK2 1K R0402
RK3 1K R0402
CK1 472 C0402
CK2 104 C0402
CK3 104 C0402
SWK1 RESET SW4_SMD
SWK2 UBOOT SW4_SMD
SWK3 PWRON SW4_SMD
VCC-PL
RK4 10K R0402
RECOVERY
SWK4 RECOVERY ts-026-3
NC-ESD5451X
ESD0402
DK1
CK4 474 C0402
LED
VCC33-LED
DL1 RED
DL2 BLUE
DL3 YELLOW
LED0805
RL1 330R R0402
RL2 330R R0402
RL4 330R R0402
RL3 10K R0402
RL5 R0402 NC-0R
PWR-LED
RL6 10K R0402
QL1 WNT2F04/MMBT3904 SOT3P95B130_290H103
RL7 100K R0402
RL8 NC-10K R0402
RL9 R0402 NC-0R
STATUS-LED
RL10 10K R0402
QL2 WNT2F04/MMBT3904 SOT3P95B130_290H103
RL11 100K R0402
RL12 NC-10K R0402
RL13 R0402 NC-0R
LINK-LED
RL14 10K R0402
QL3 MMBT3904 SOT3P95B130_290H103
RL15 100K R0402
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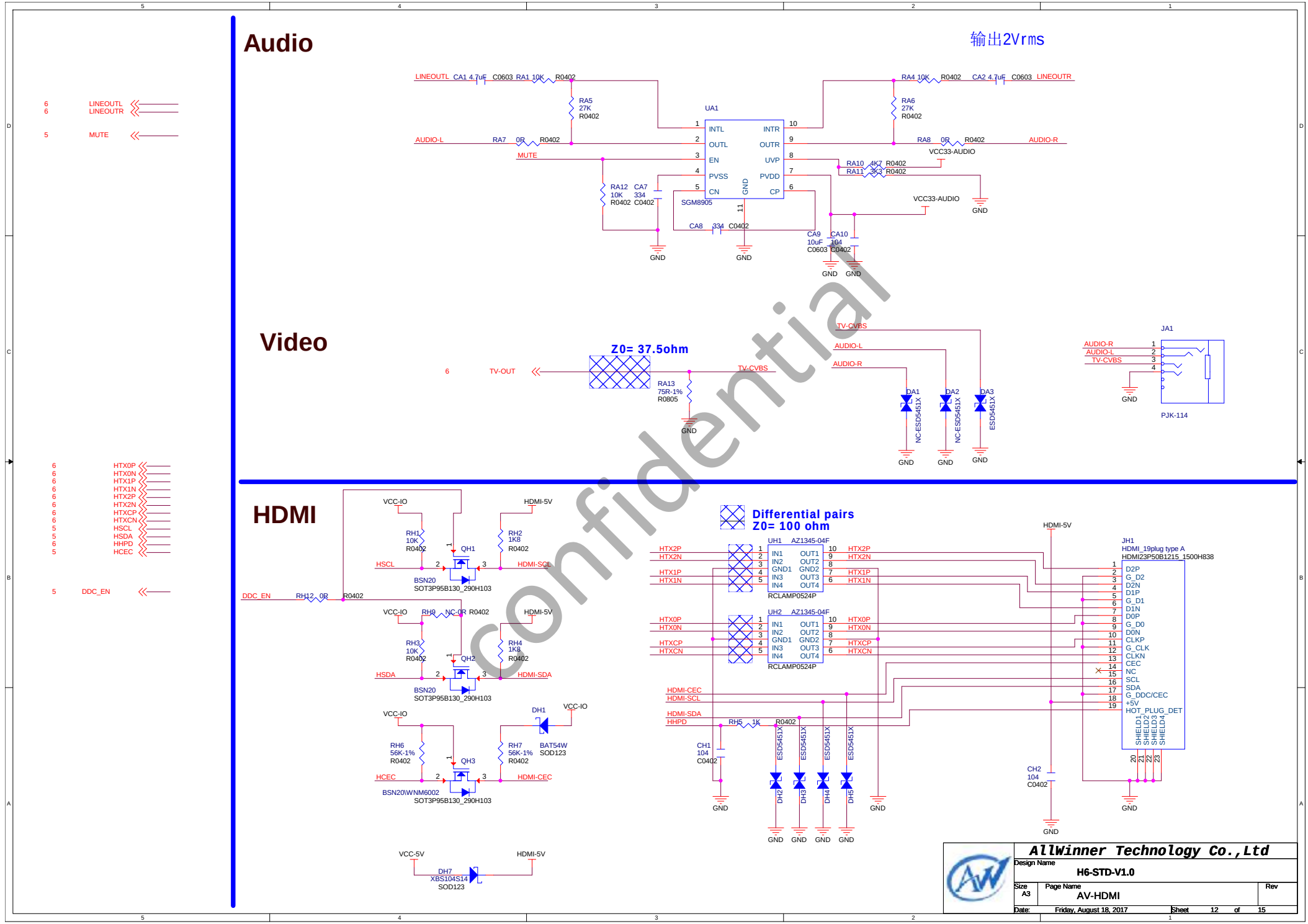
Audio
输出2Vrms
LINEOUTL
LINEOUTR
MUTE
UA1
SGM8905
INTL
OUTL
EN
PVSS
CN
INTR
OUTR
UVP
PVDD
CP
GND
VCC33-AUDIO
AUDIO-L
AUDIO-R
Video
Z0= 37.5ohm
TV-OUT
TV-CVBS
JA1
PJK-114
DA1
DA2
DA3
NC-ESD5451X
ESD5451X
HDMI
Differential pairs
Z0= 100 ohm
VCC-IO
HDMI-5V
HSCL
HSDA
HDMI-SCL
HDMI-SDA
HCEC
HDMI-CEC
DDC_EN
QH1
QH2
QH3
BSN20
SOT3P95B130_290H103
BSN20\WNM6002
BAT54W
SOD123
VCC-5V
DH7
XBS104S14
UH1
UH2
AZ1345-04F
RCLAMP0524P
HTX2P
HTX2N
HTX1P
HTX1N
HTX0P
HTX0N
HTXCP
HTXCN
HDMI-CEC
HDMI-SCL
HDMI-SDA
HHPD
JH1
HDMI_19plug type A
HDMI23P50B1215_1500H838
D2P
G_D2
D2N
D1P
G_D1
D1N
D0P
G_D0
D0N
CLKP
G_CLK
CLKN
CEC
NC
SCL
SDA
G_DDC/CEC
+5V
HOT_PLUG_DET
SHIELD1
SHIELD2
SHIELD3
SHIELD4
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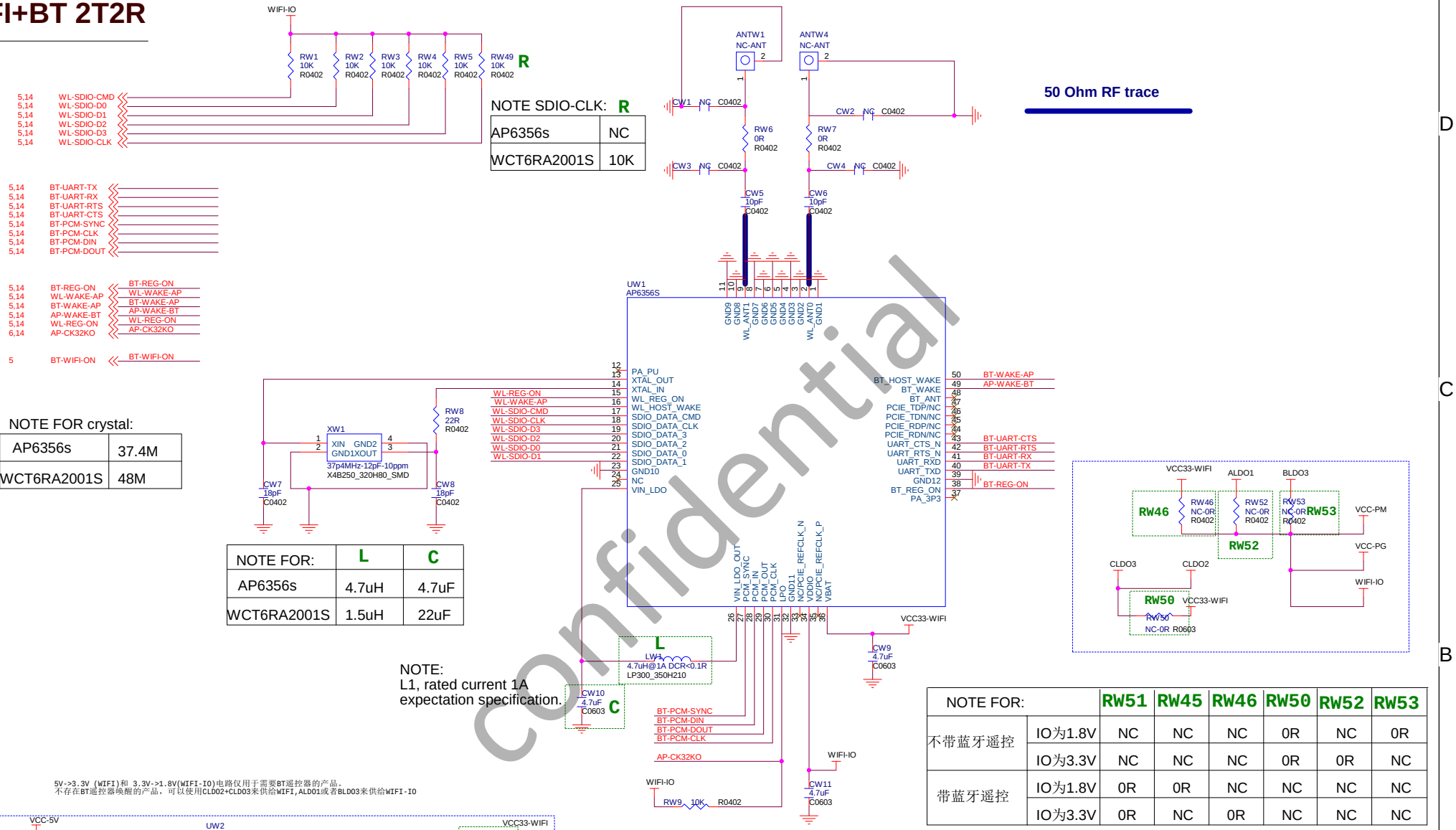
WIFI+BT 2T2R



NOTE FOR:		RW51	RW45	RW46	RW50	RW52	RW53
不带蓝牙遥控	IO为1.8V	NC	NC	NC	0R	NC	0R
	IO为3.3V	NC	NC	NC	0R	0R	NC
带蓝牙遥控	IO为1.8V	0R	0R	NC	NC	NC	NC
	IO为3.3V	0R	NC	0R	NC	NC	NC

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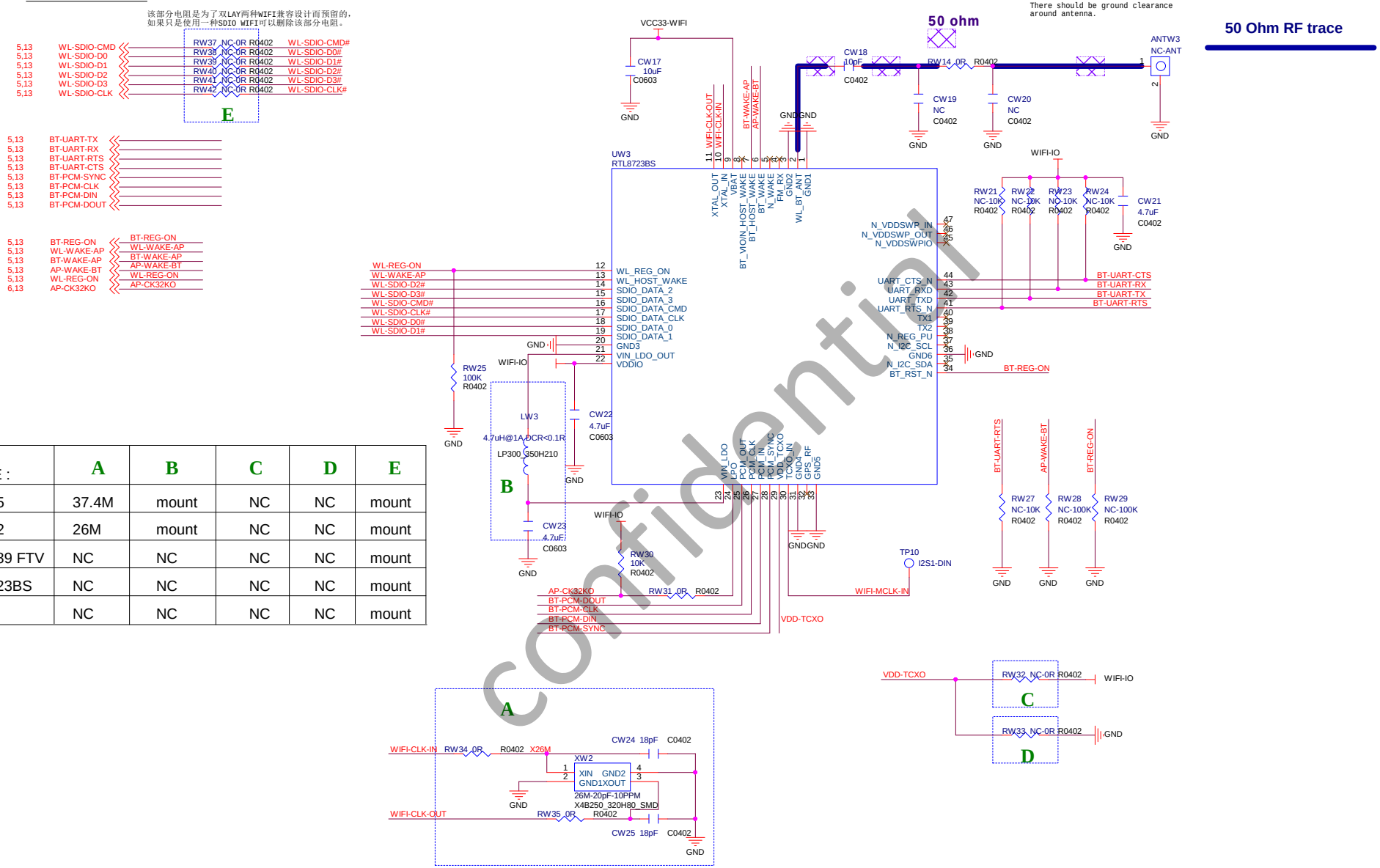
WIFI+BT 1T1R



NOTE :	A	B	C	D	E
AP6255	37.4M	mount	NC	NC	mount
AP6212	26M	mount	NC	NC	mount
RTL8189 FTV	NC	NC	NC	NC	mount
RTL8723BS	NC	NC	NC	NC	mount
XR819	NC	NC	NC	NC	mount

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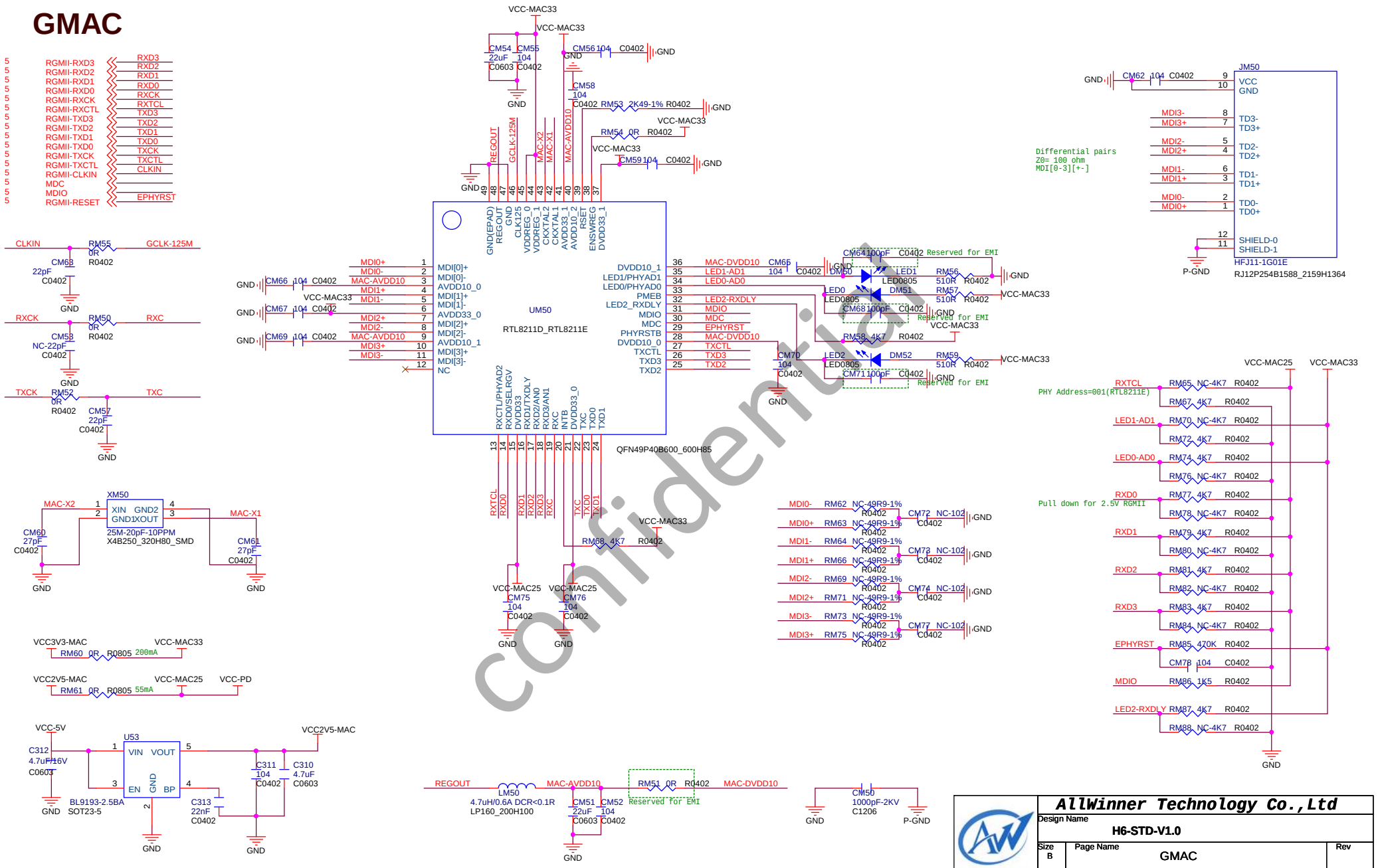
GMAC



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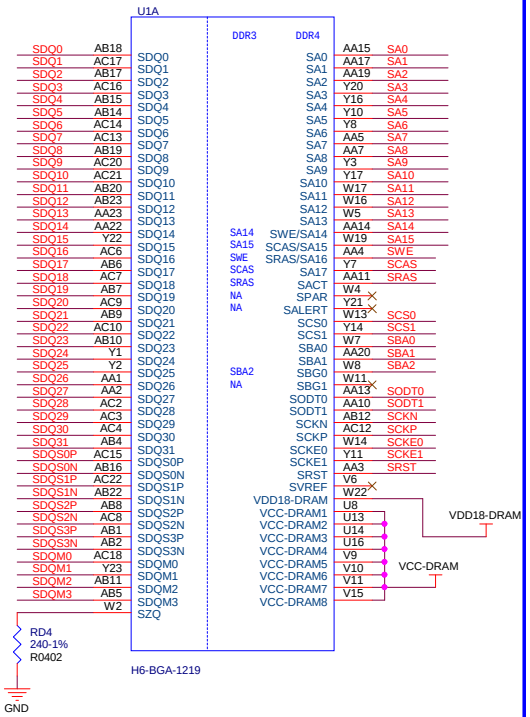

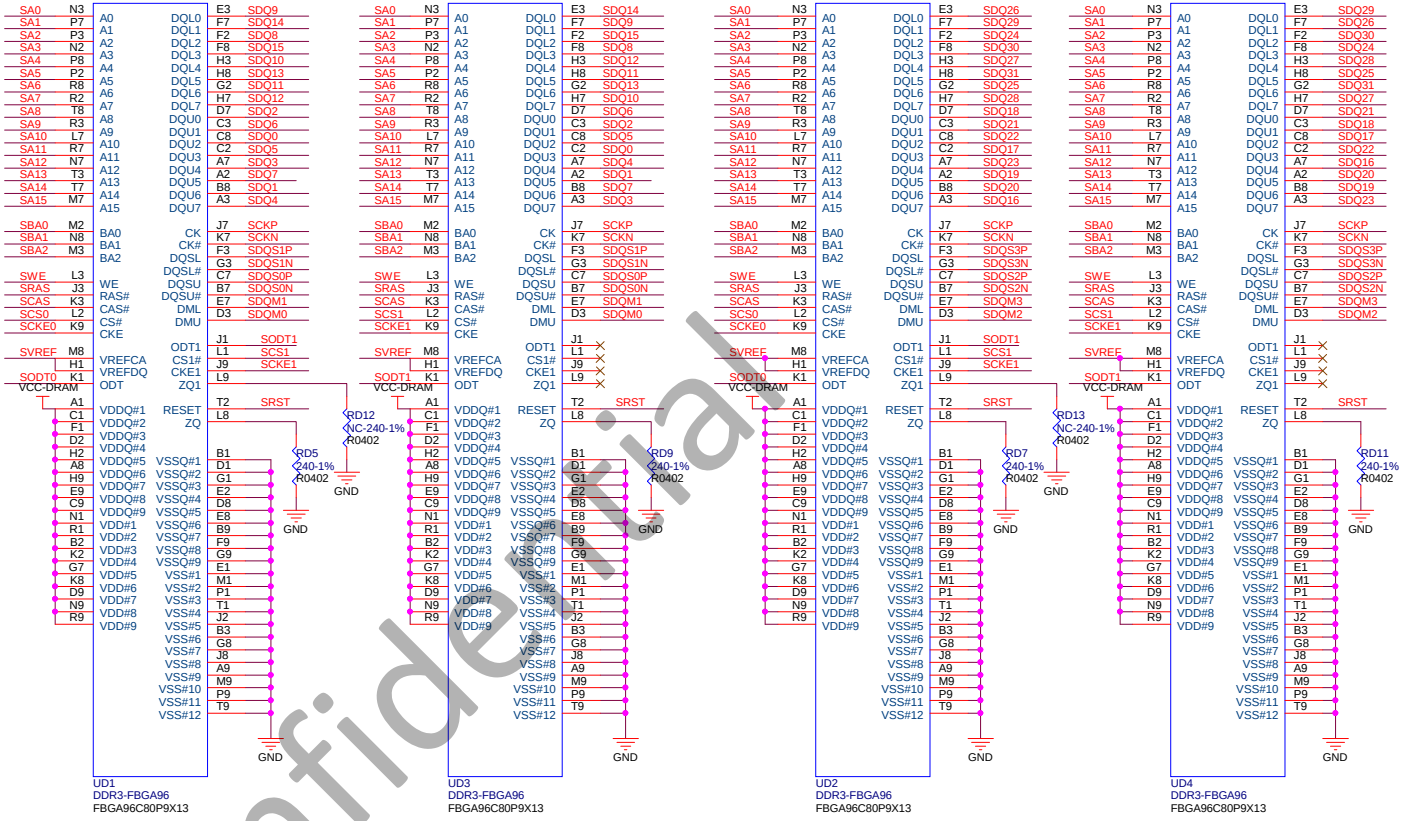

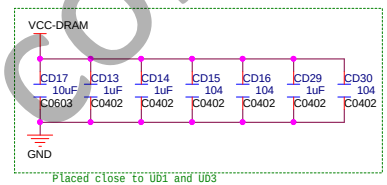

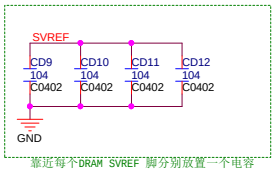

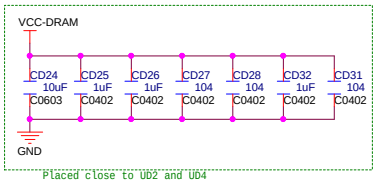

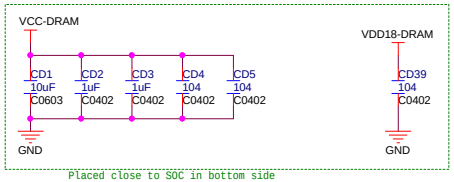

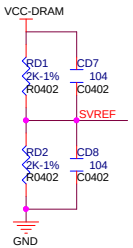

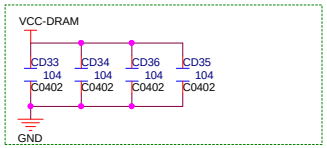

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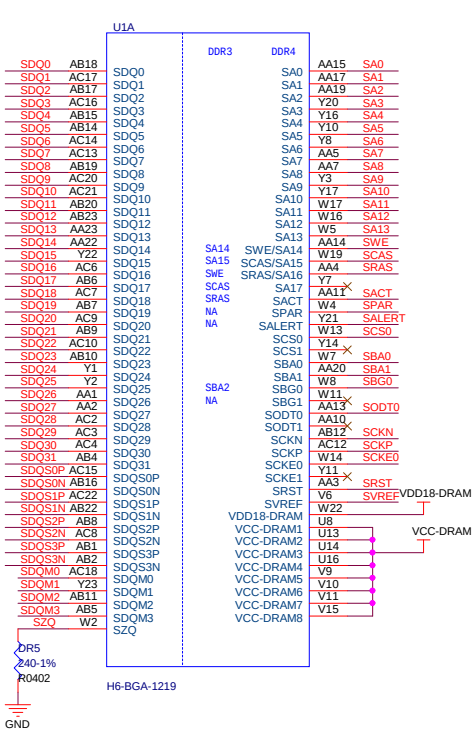
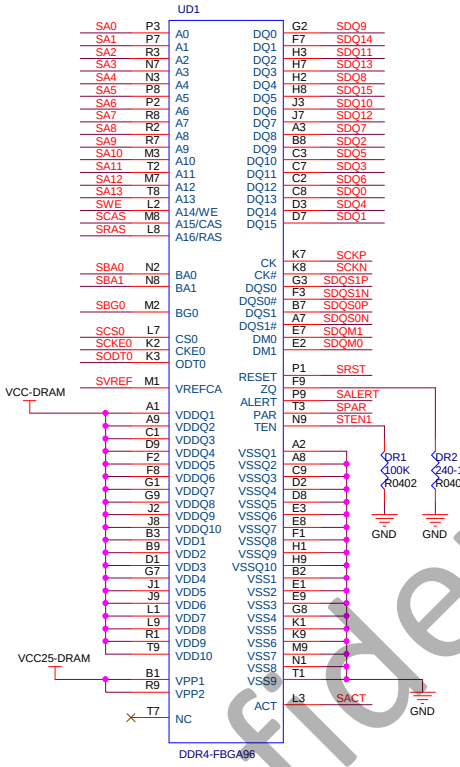
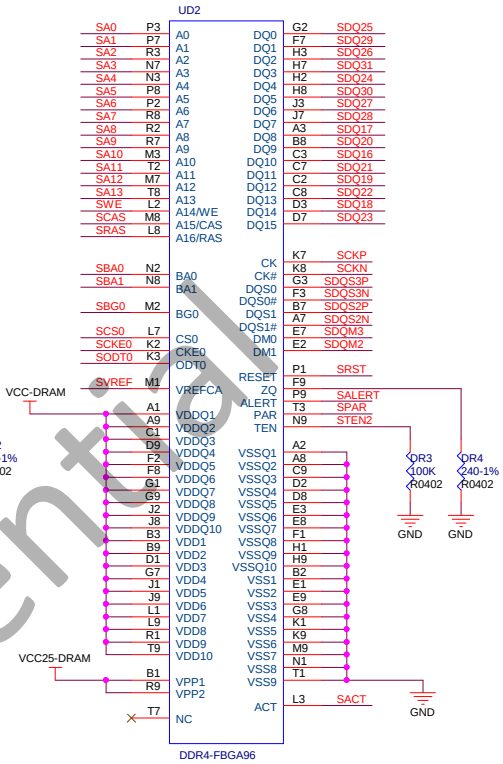
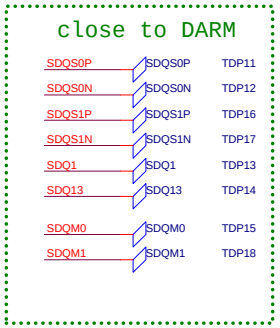
DDR4 16X2

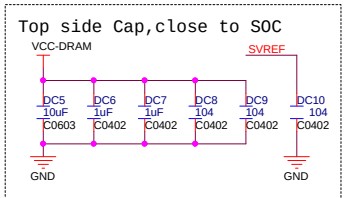


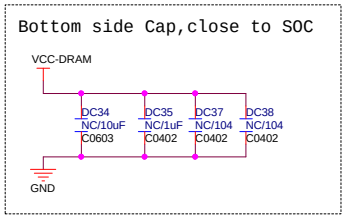


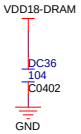


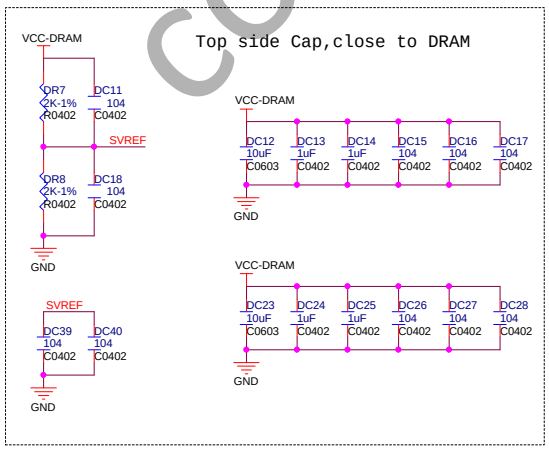


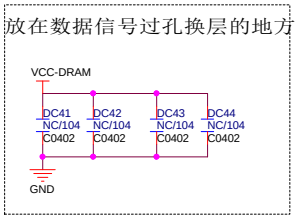
SCKP DR6 100R R0402 SCKN

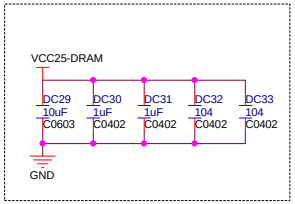


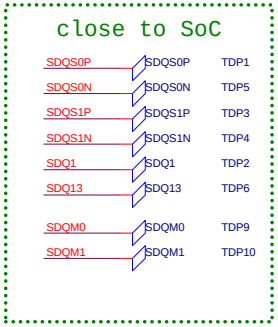


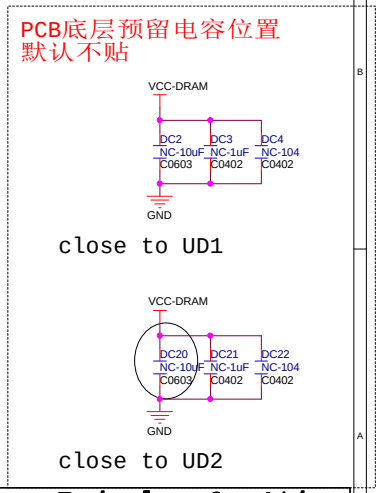












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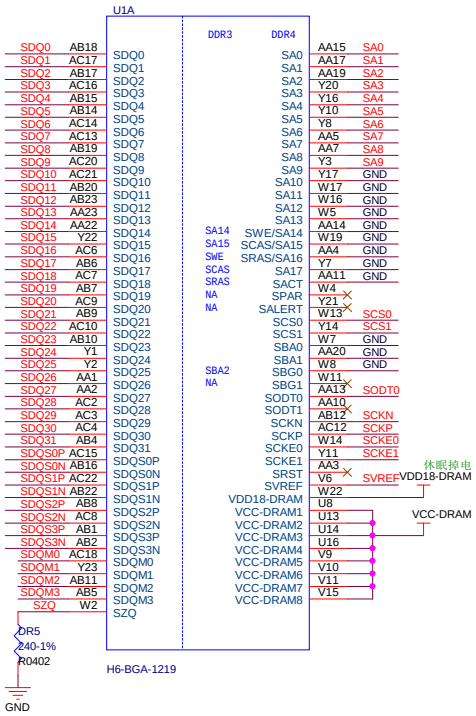

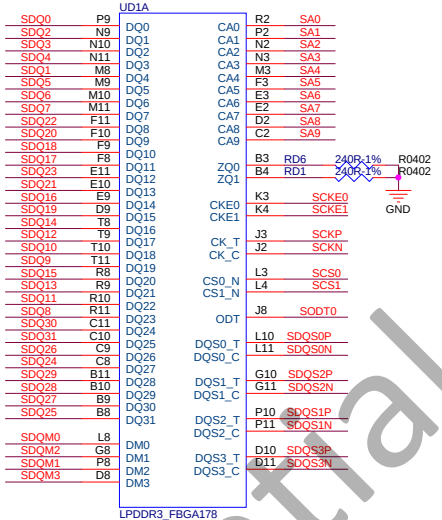

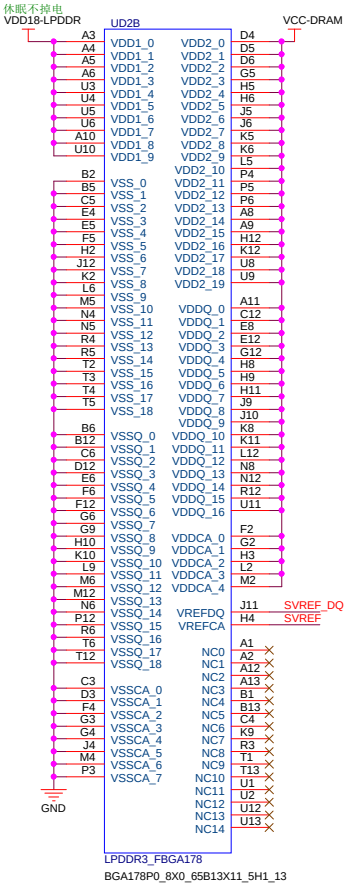

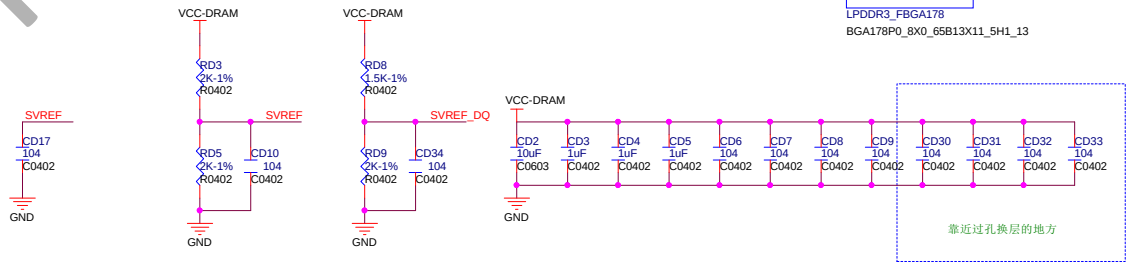

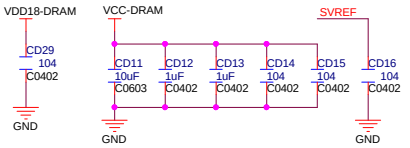

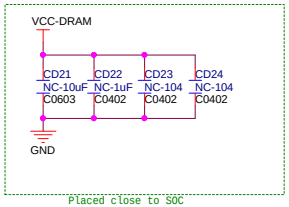

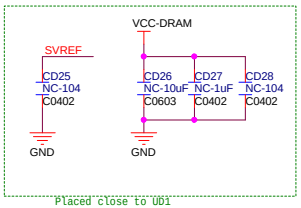

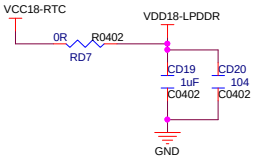

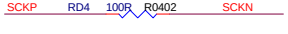

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