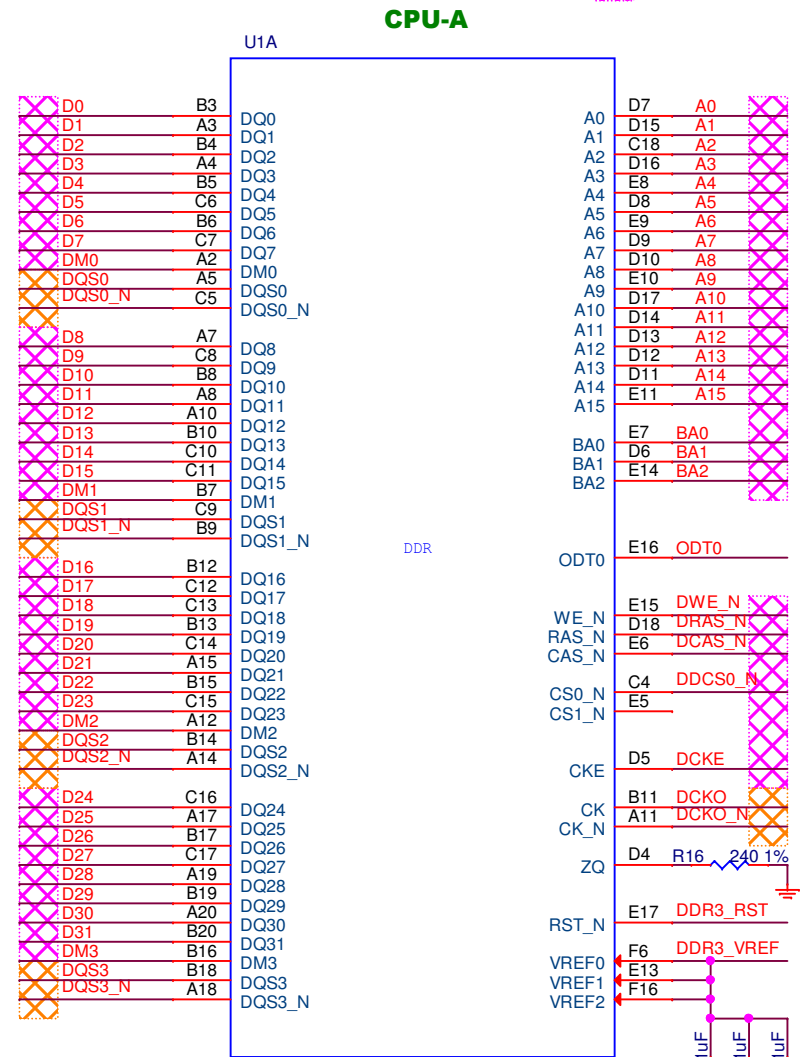
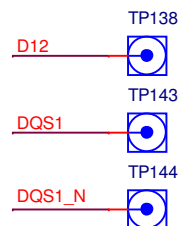


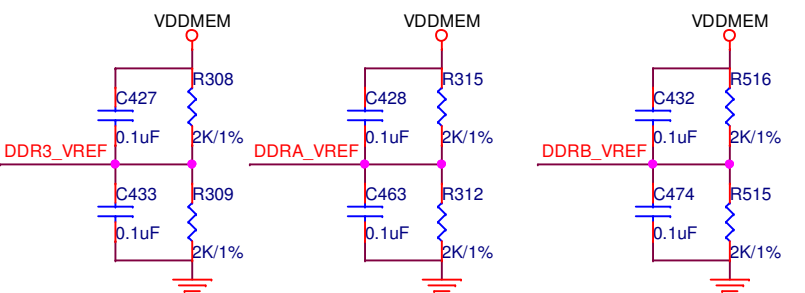
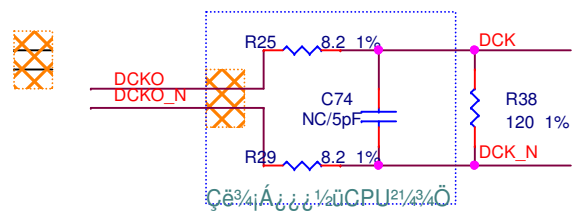
**Equilong BUS
Z0= 50 ohm**



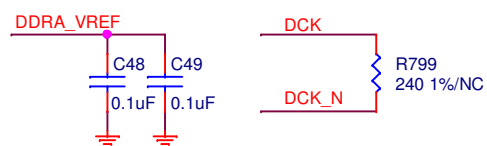
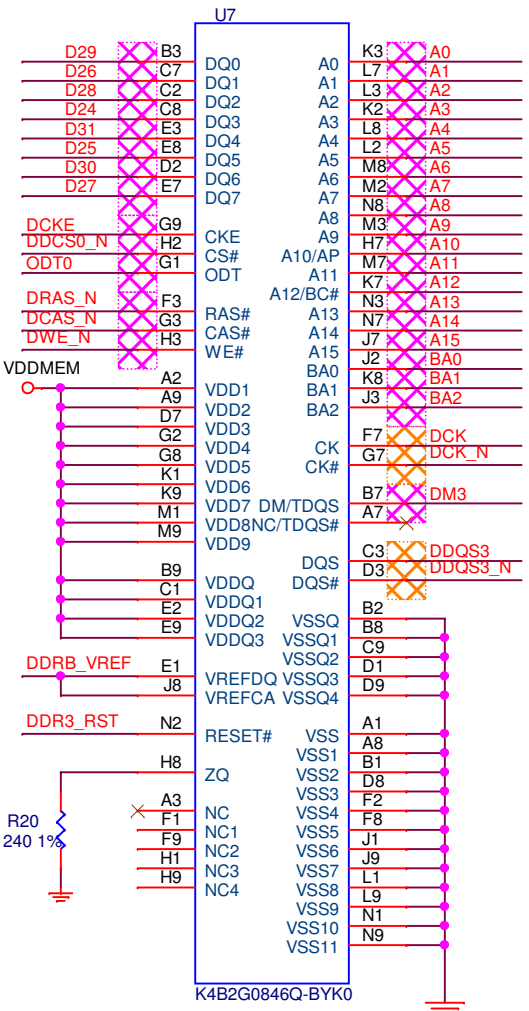
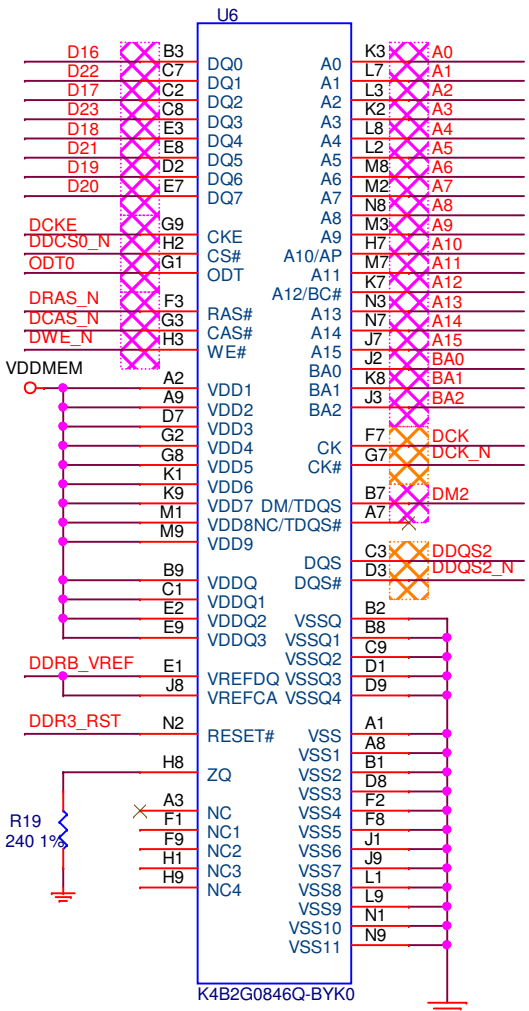
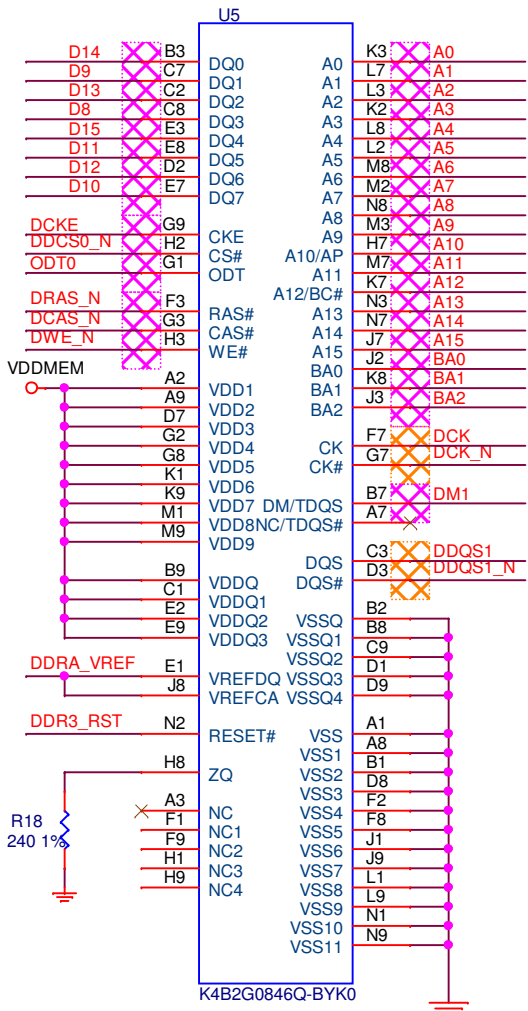
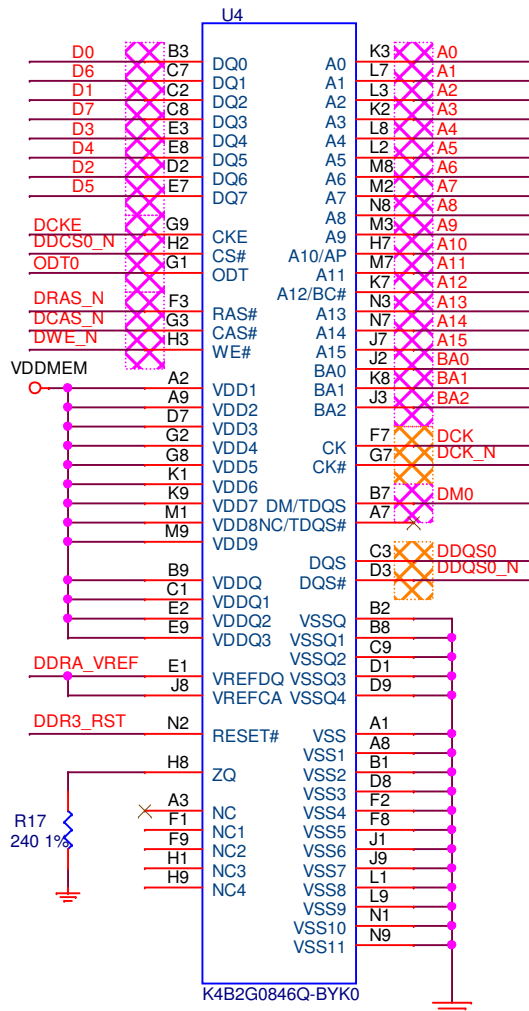
Place TP138, TP143 & TP141 close to U1



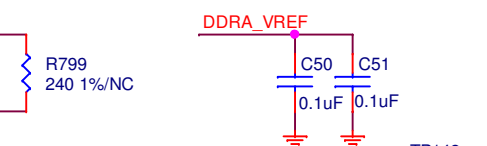
**Differential pairs
Z0= 100 ohm**



The trace DDR_VREF is 20 mils wide at least.

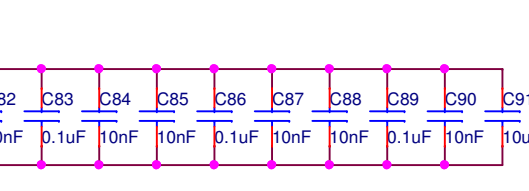
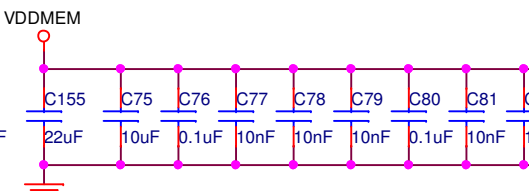
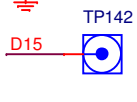


Place TP139 & TP140 close to U4/5

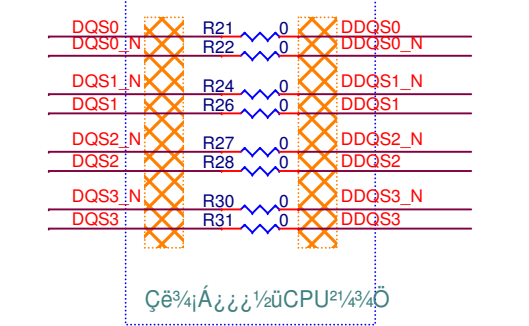
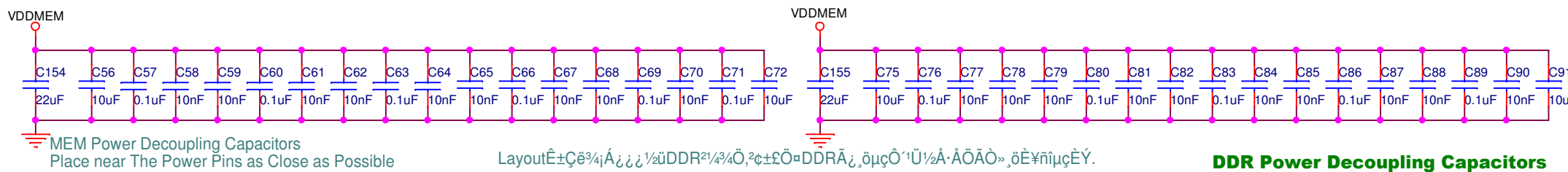


DDR3

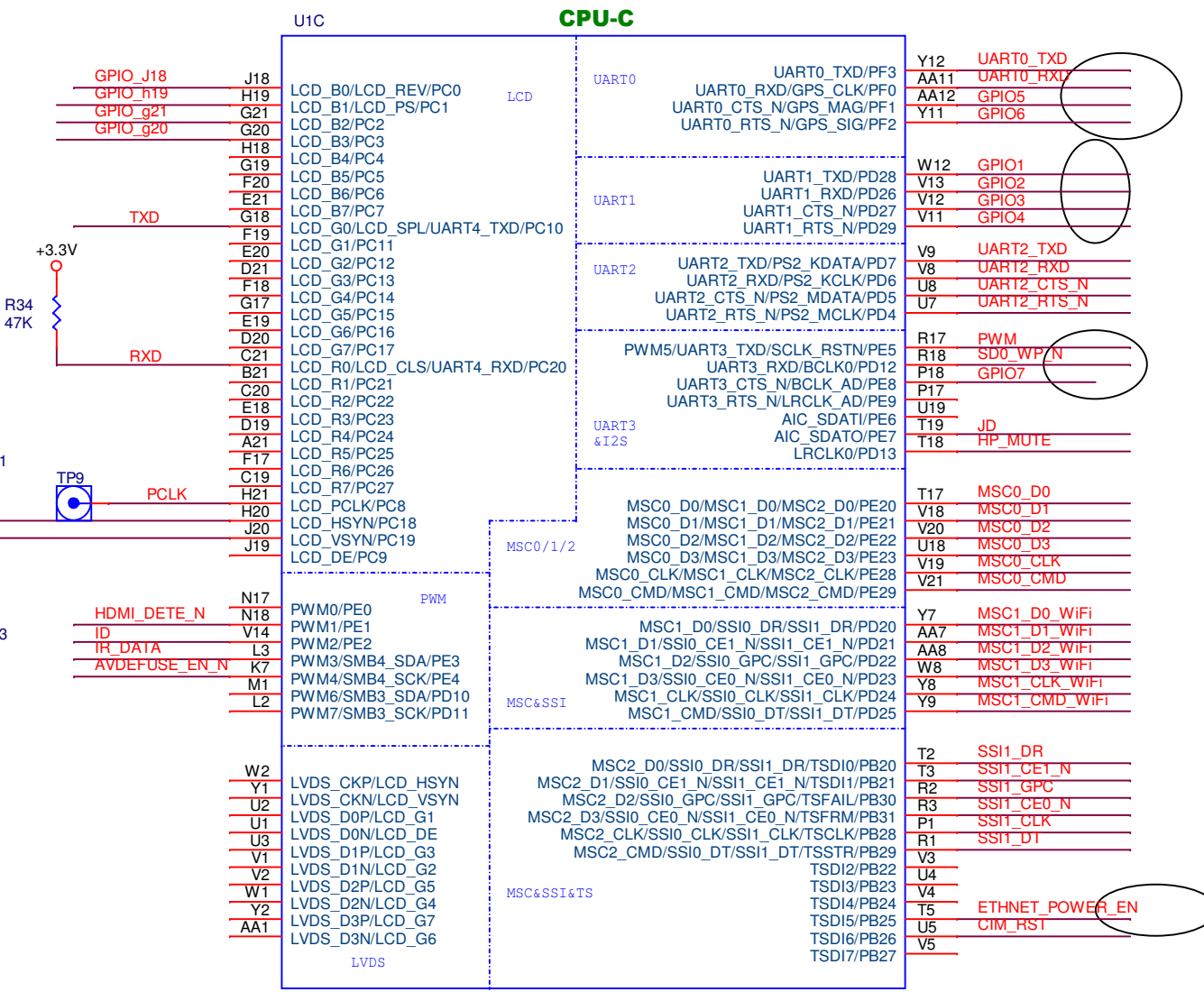
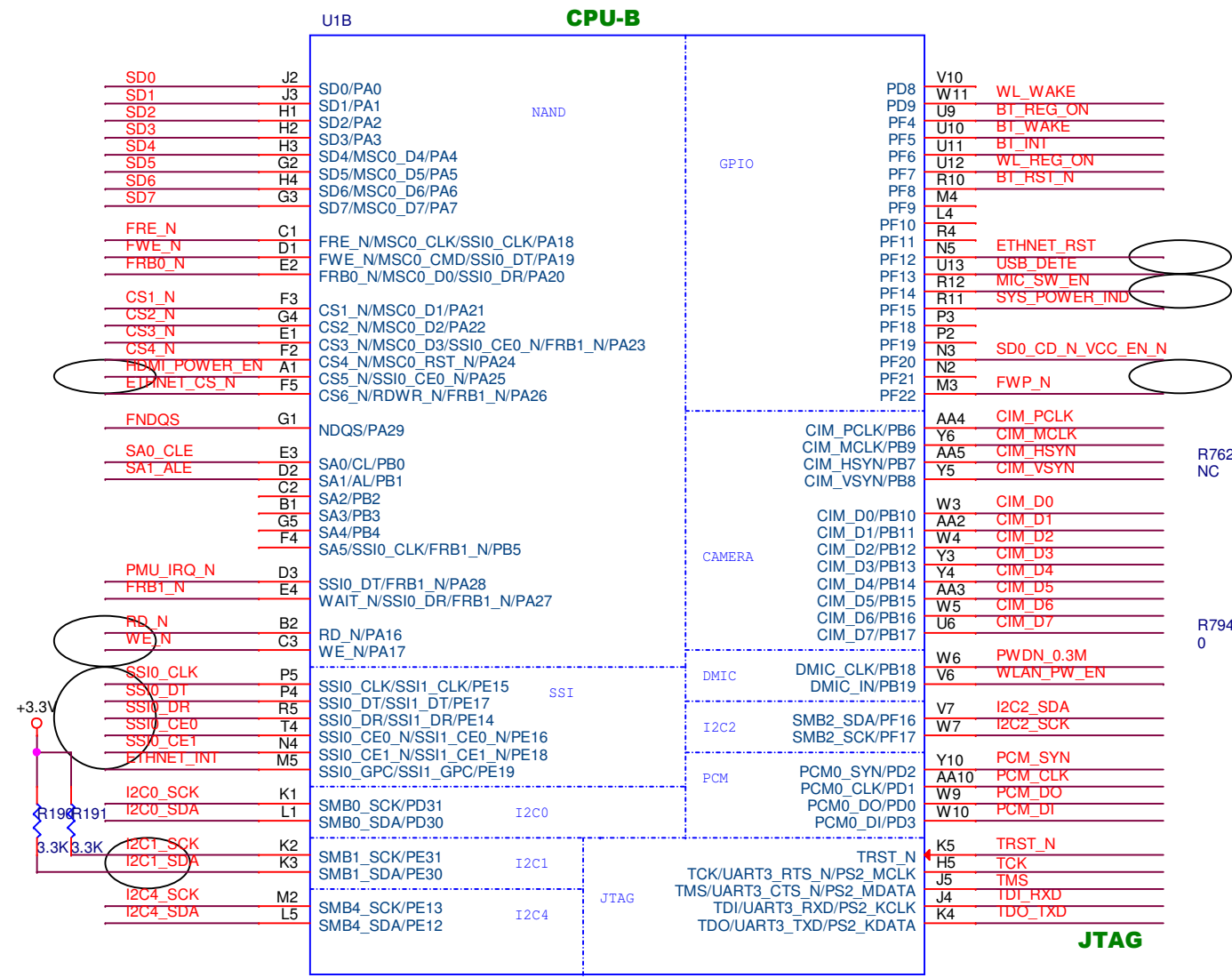
Place TP142 close to U5



DDR Power Decoupling Capacitors

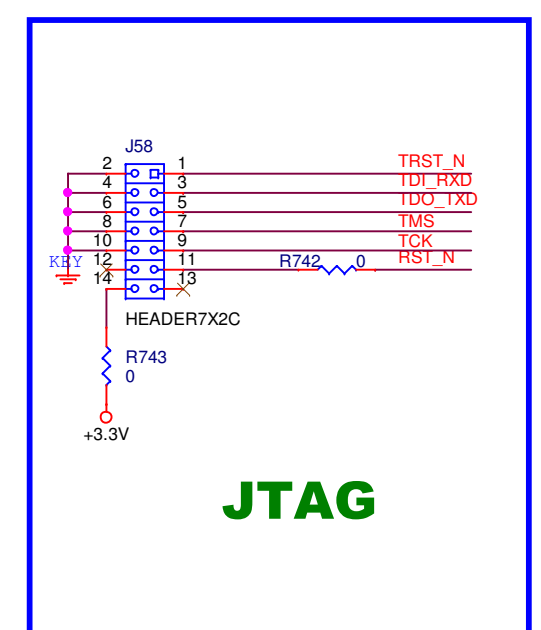
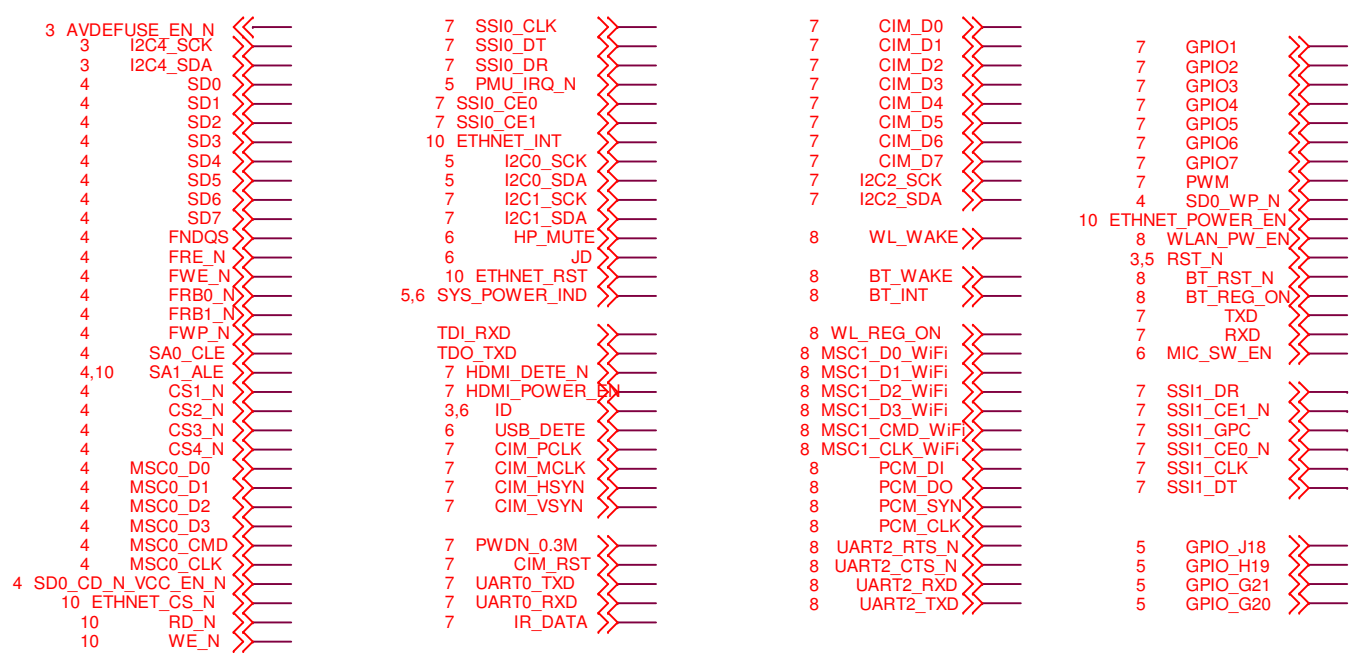


INGENIC SEMICONDUCTOR CO.,LTD		
Title C120_JZ4780		
Size A3	Document Number MEMORY_DDR3x4	Rev V2.0
Date: Thursday, June 04, 2015	Sheet 1	of 10

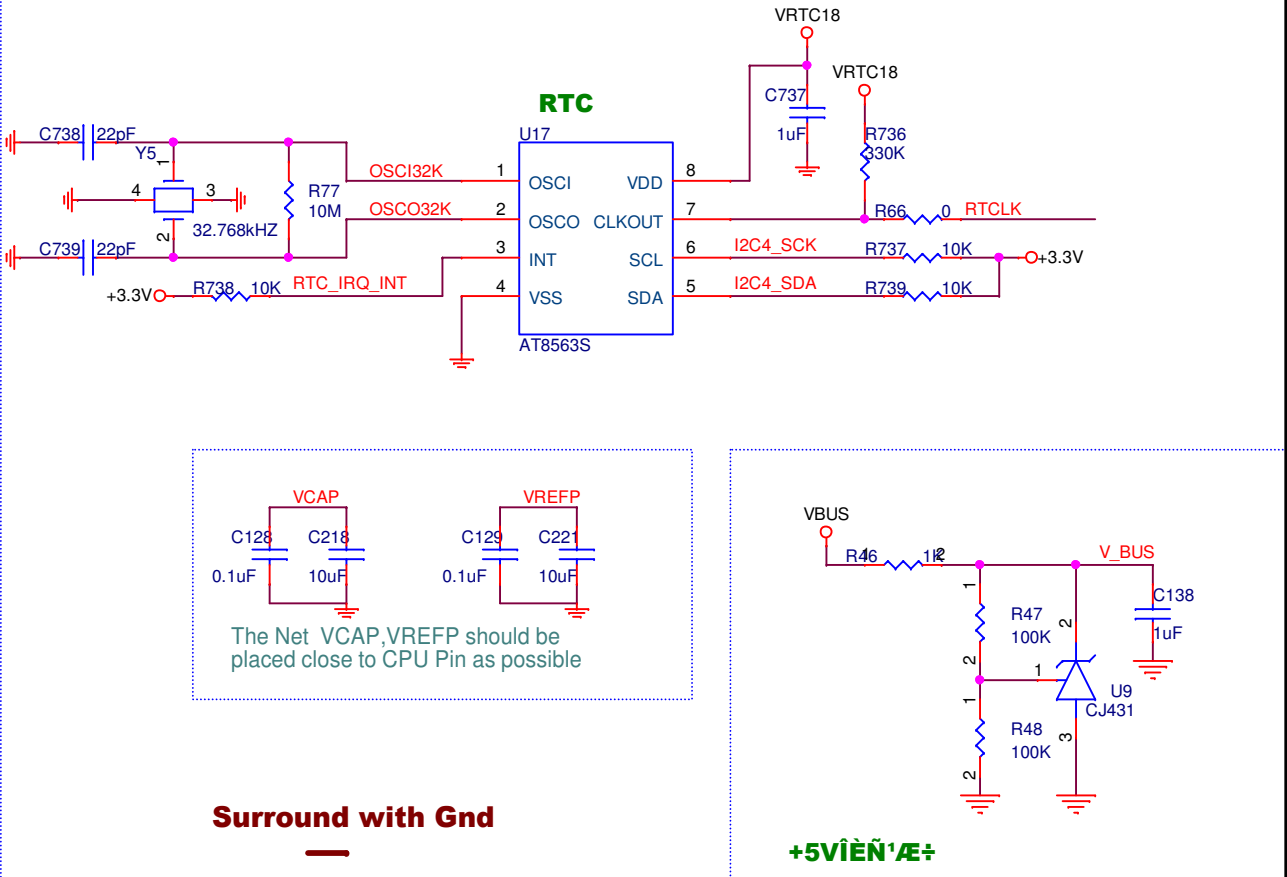
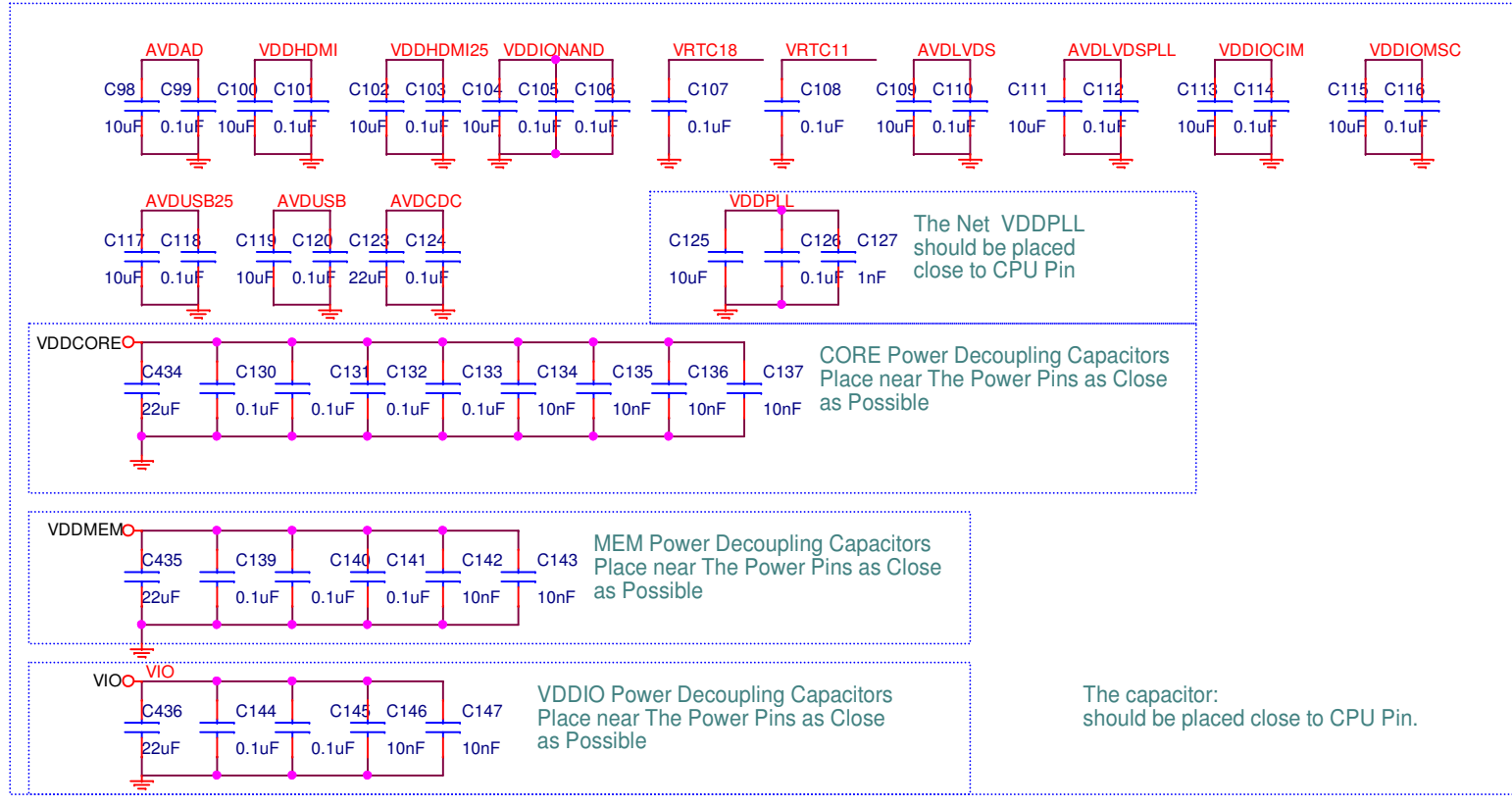
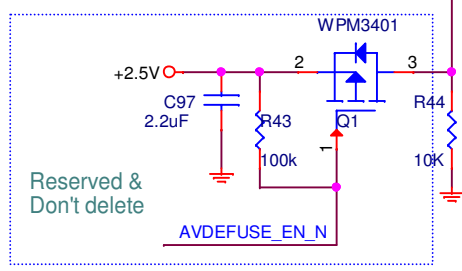
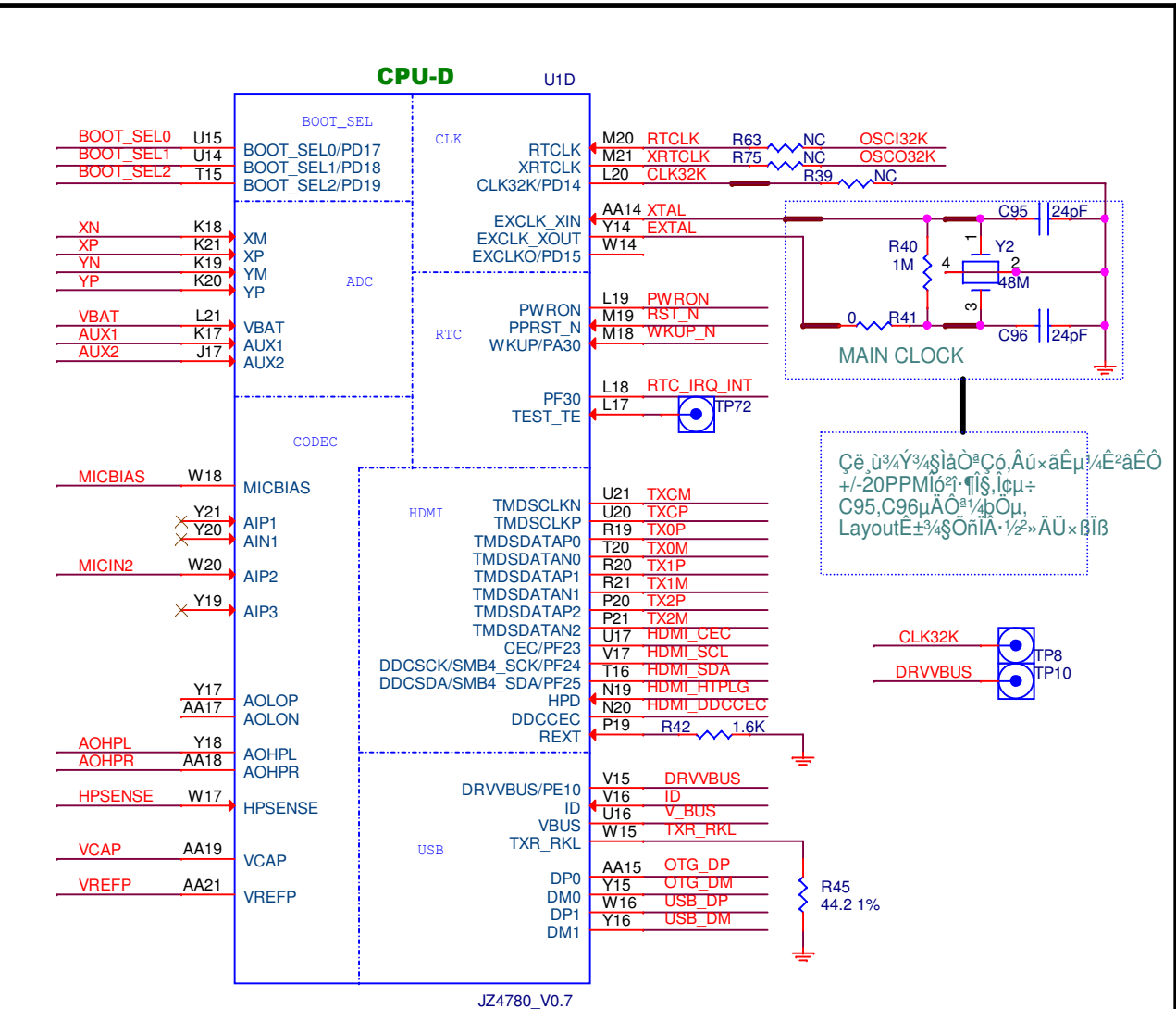
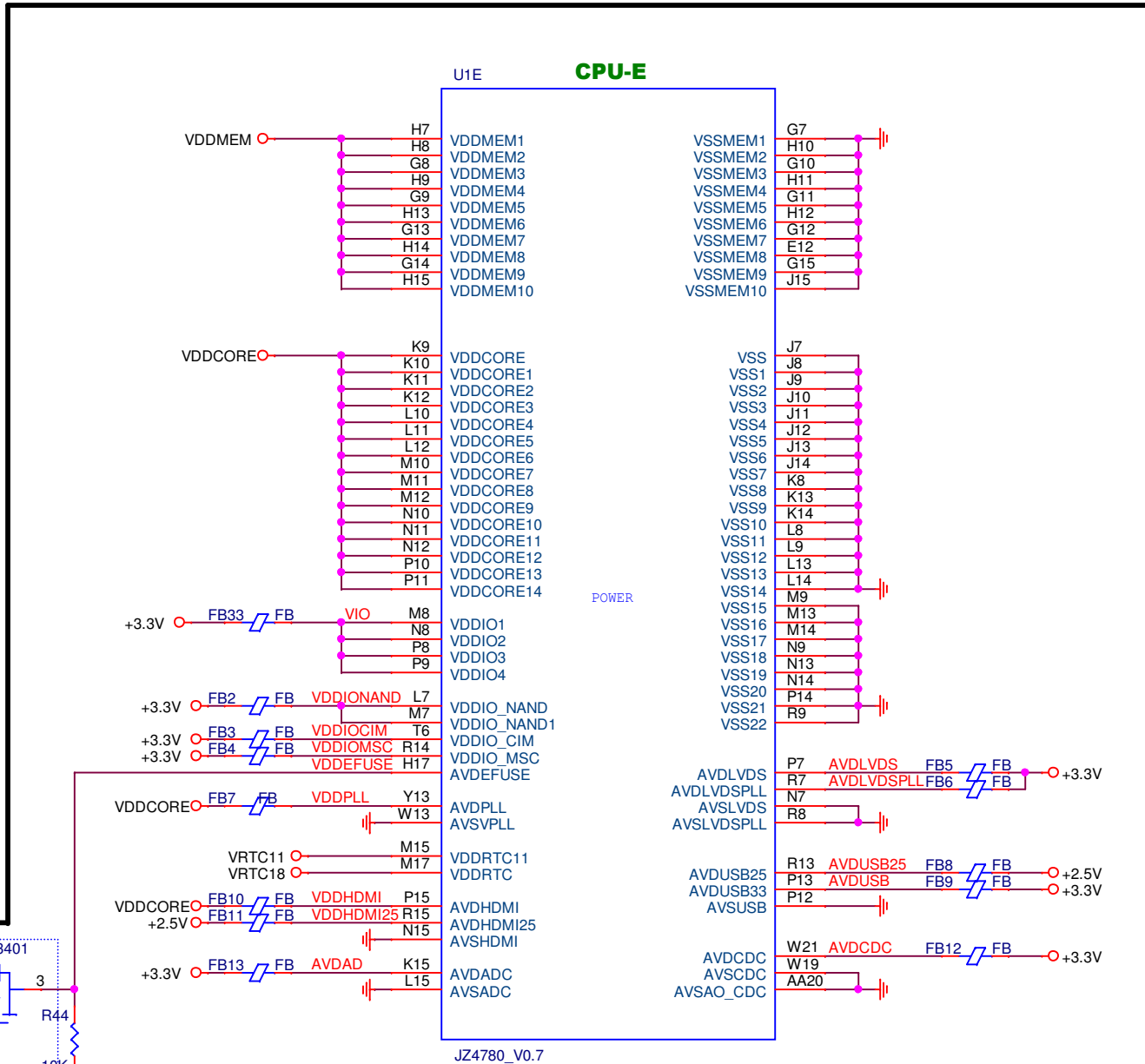


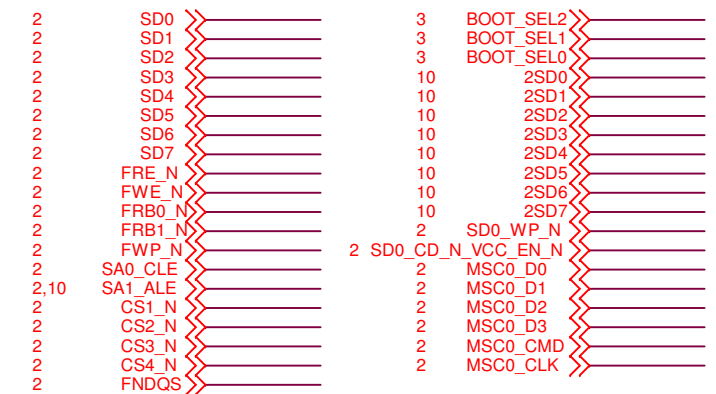
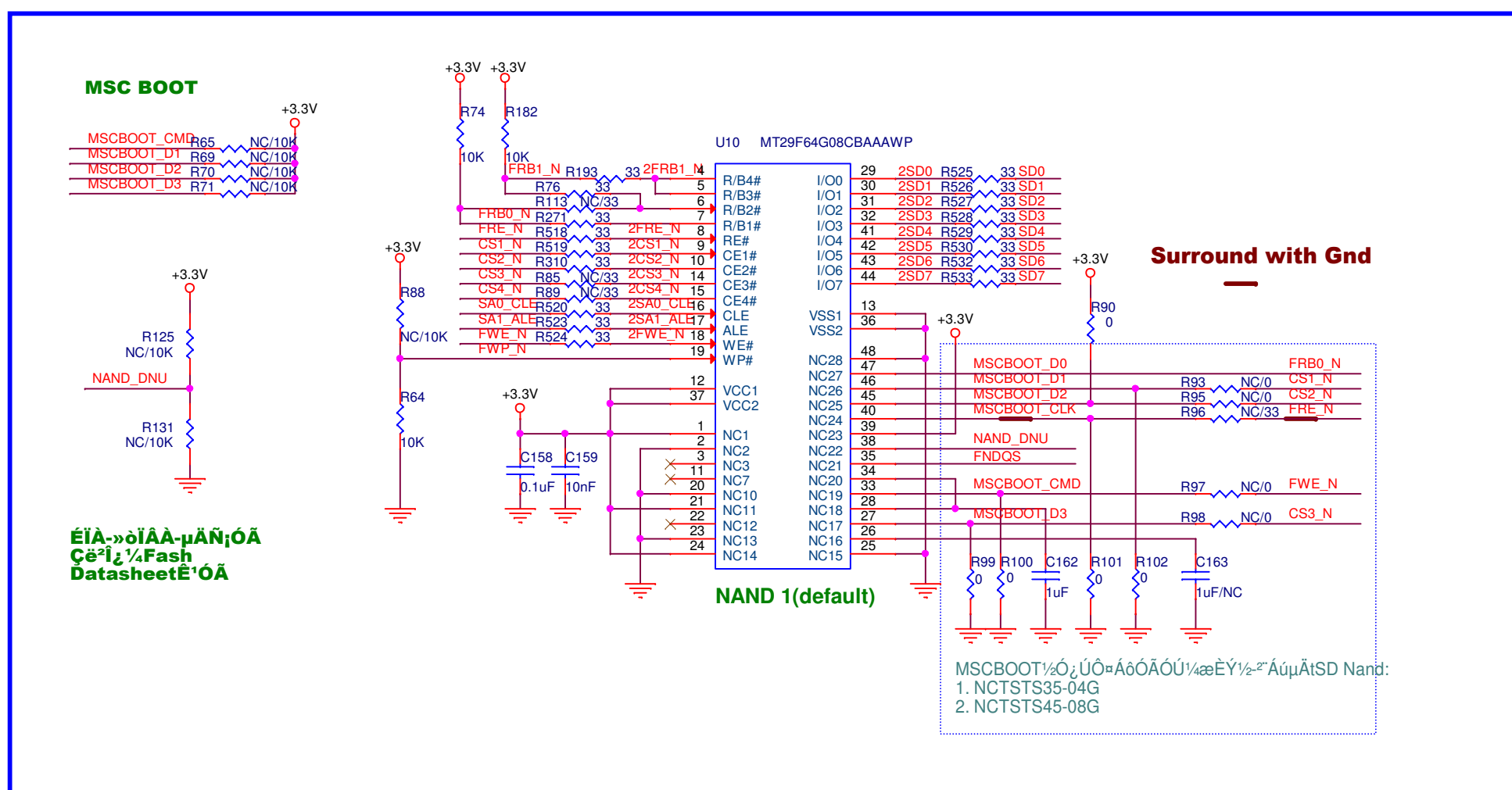
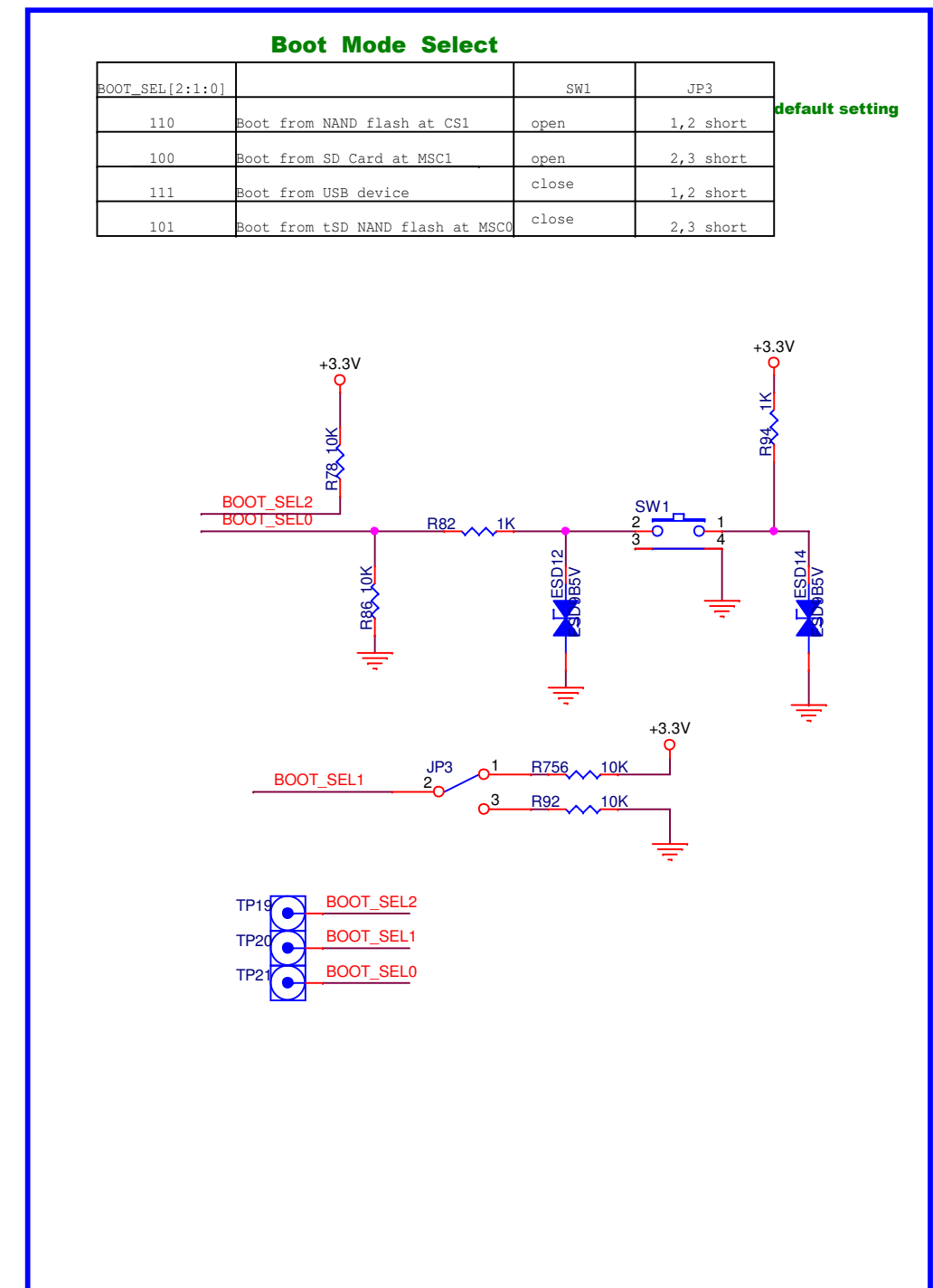
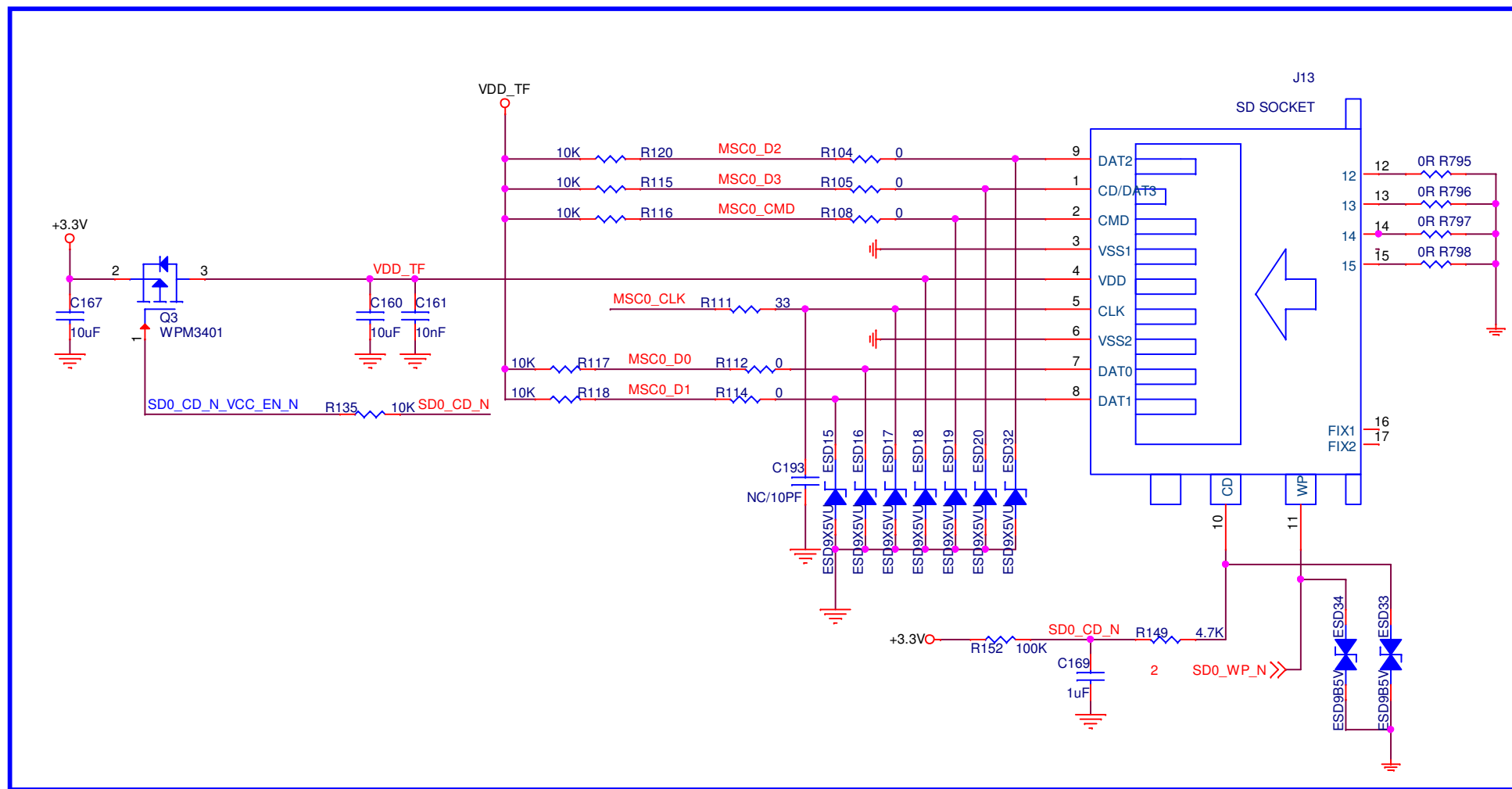
JZ4780_V0.7

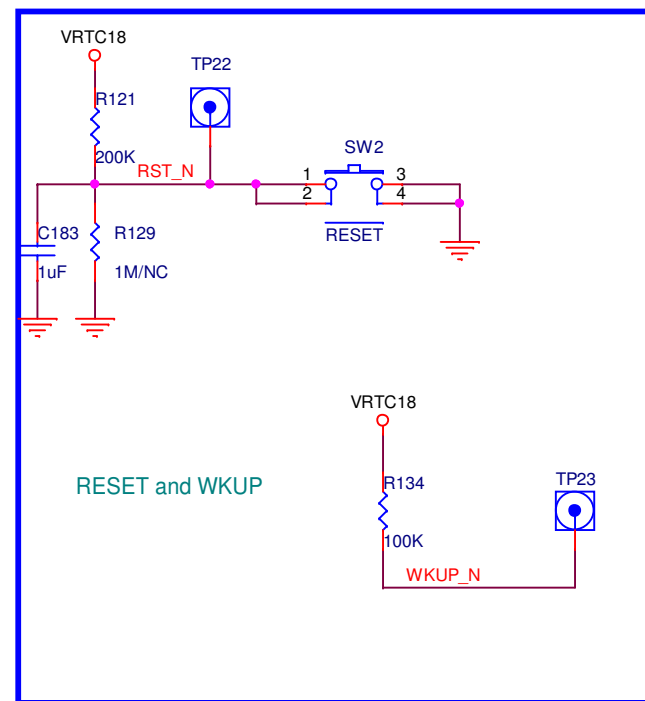
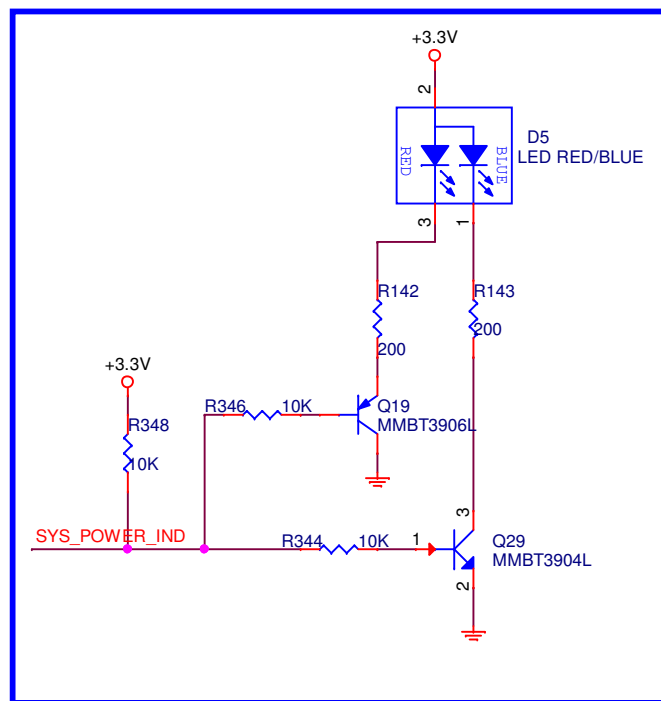
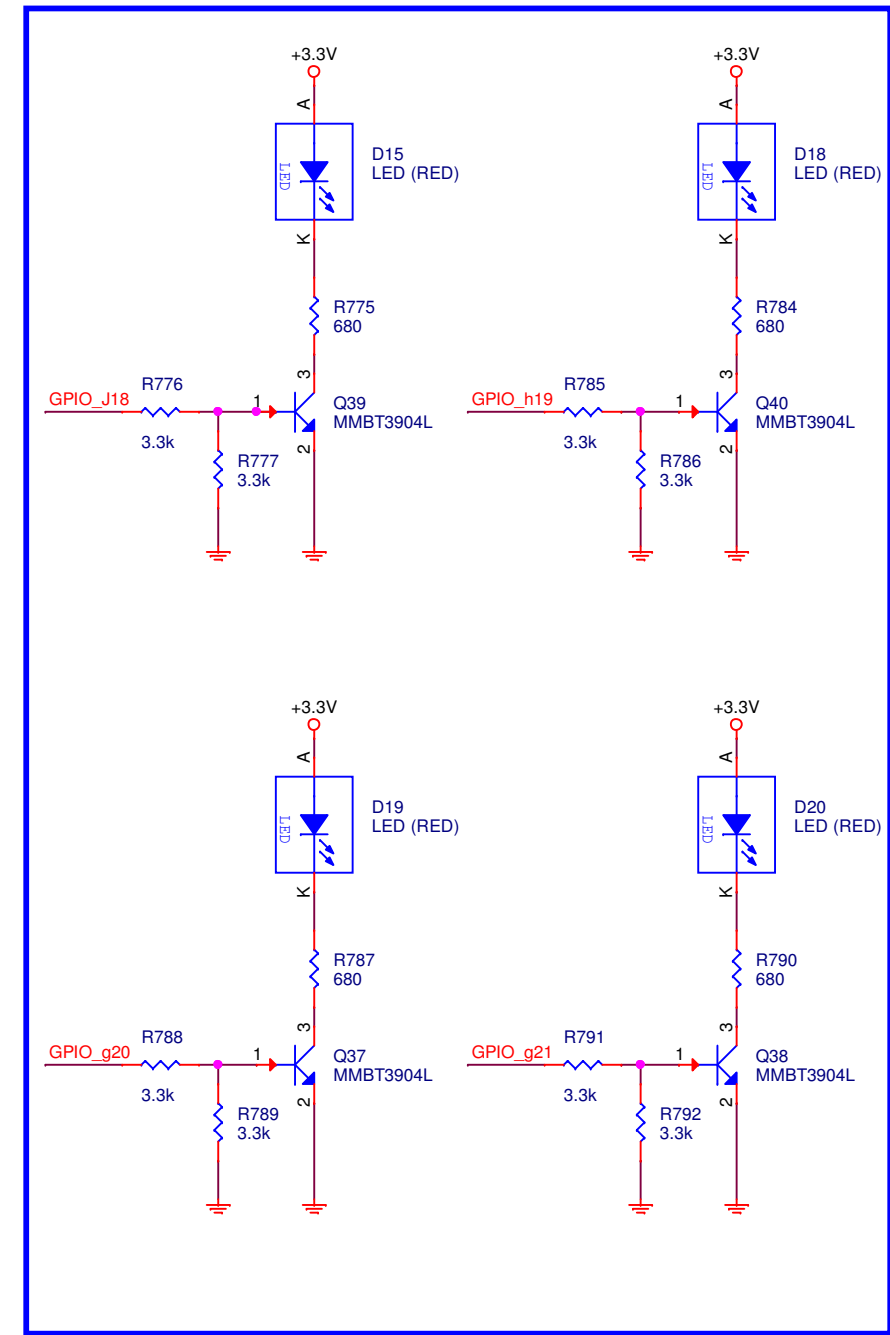
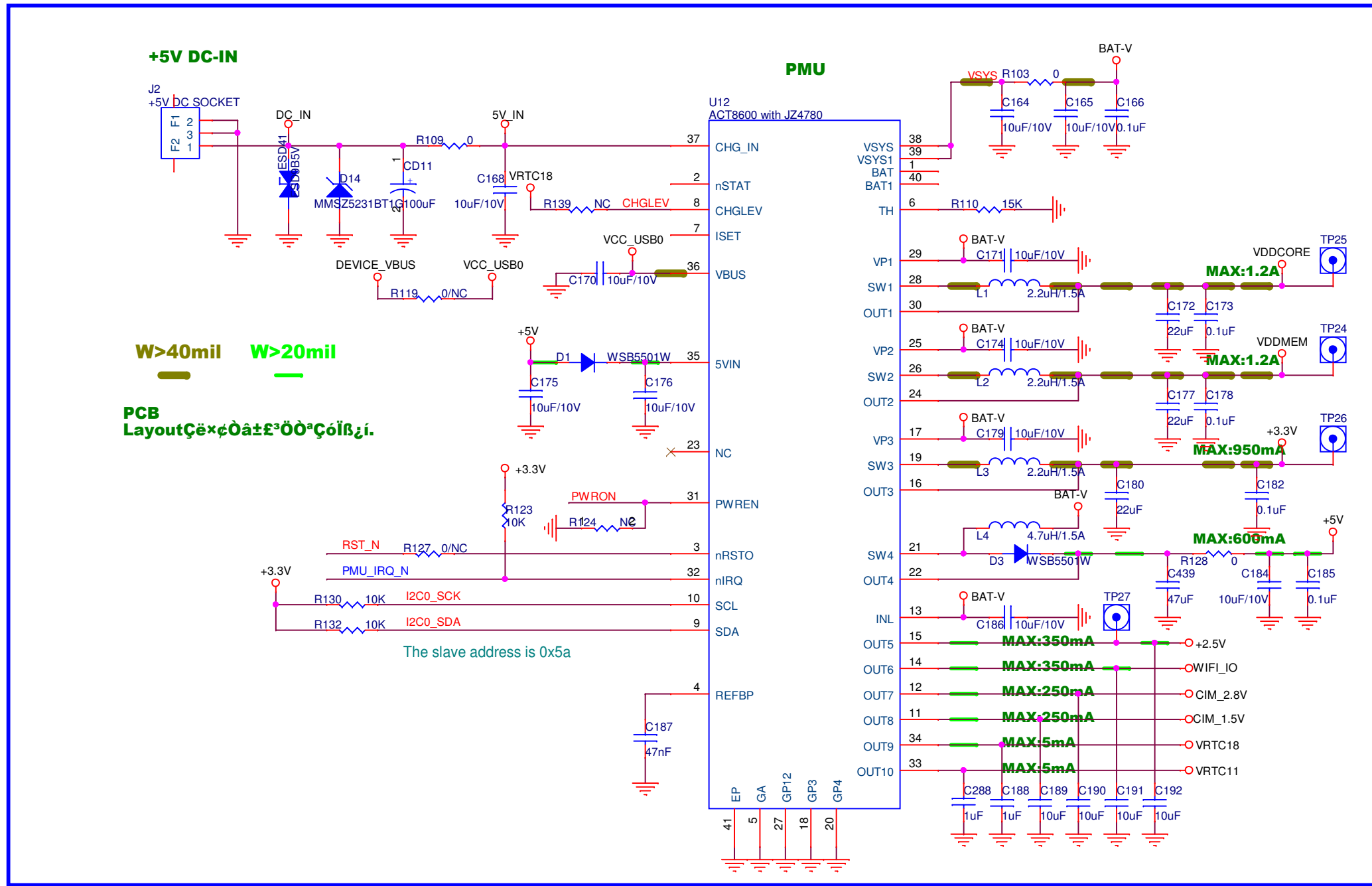
JZ4780_V0.7



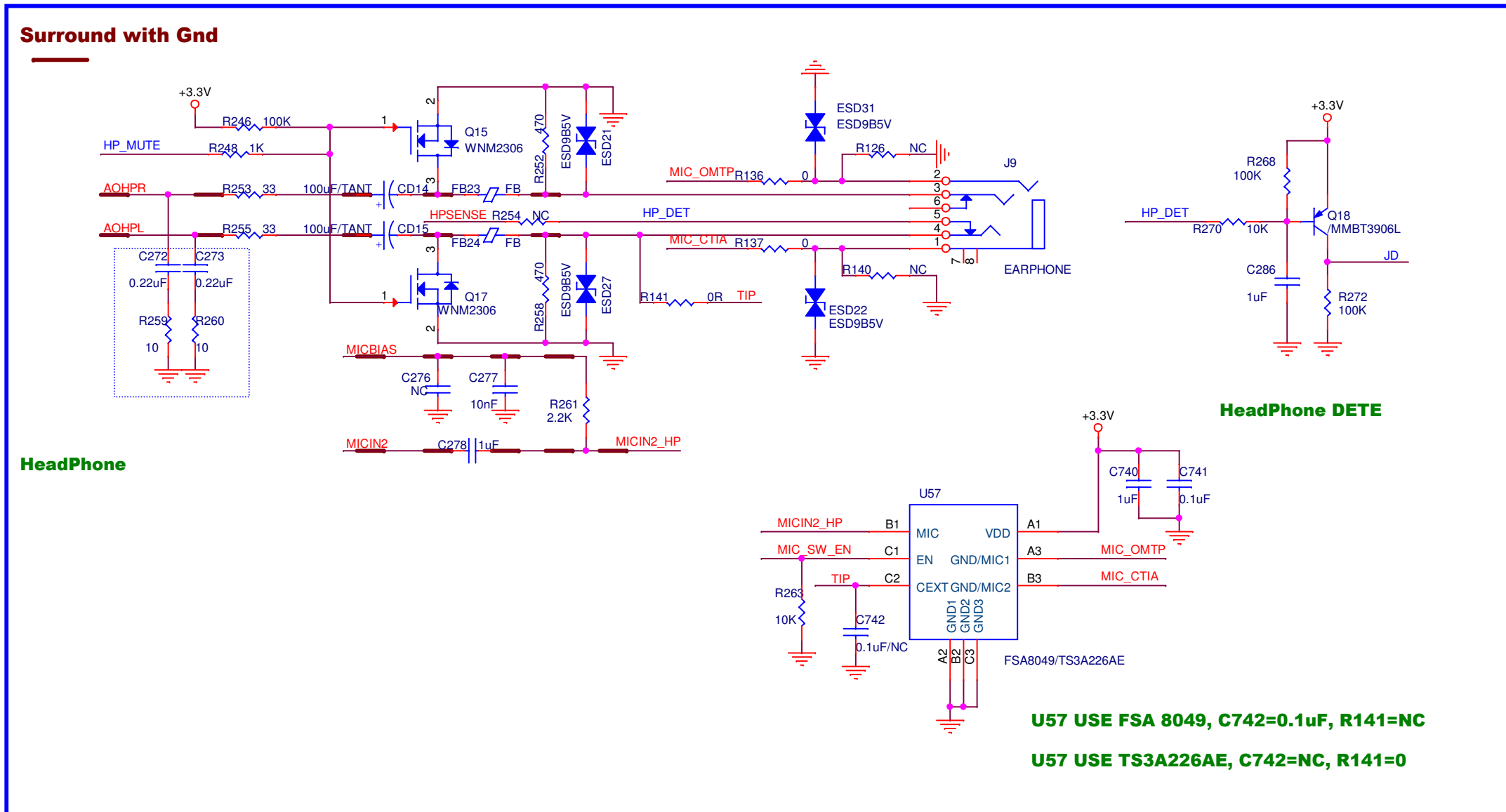
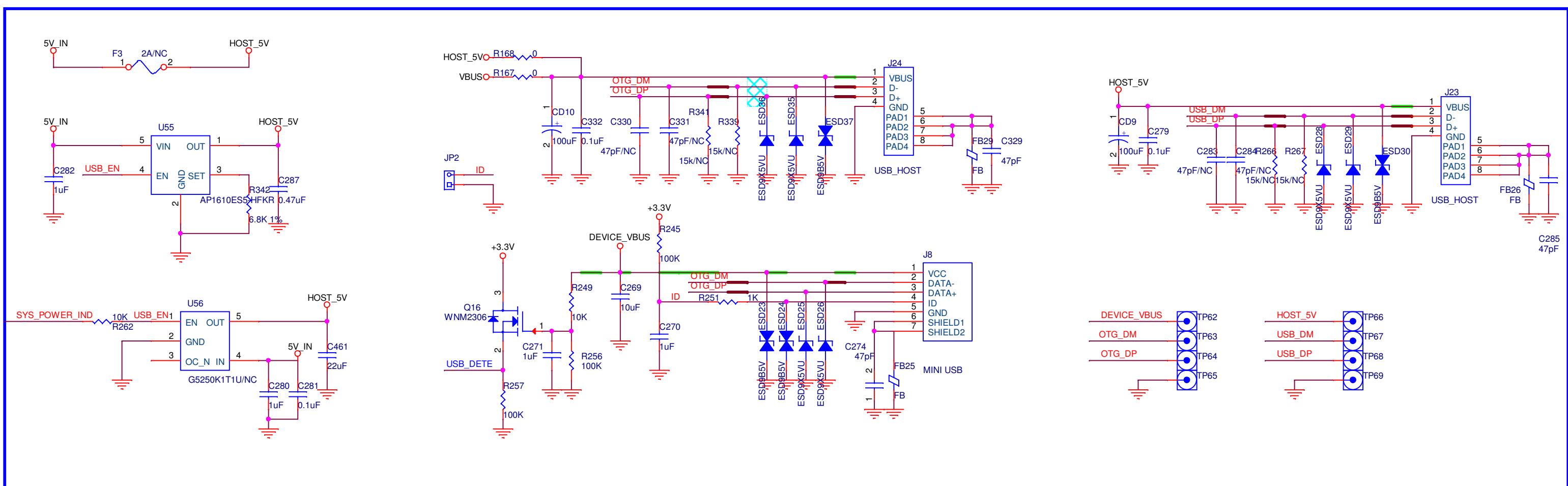
- 5 PWRON WKUP_N
- 5 RST_N
- 2.5 BOOT_SEL2
- 4 BOOT_SEL1
- 4 BOOT_SEL0
- 8 CLK32K
- 2 I2C4_SCK
- 2 I2C4_SDA
- 2 AVDEFUSE_EN_N
- 6 MICIN2
- 6 MICBIAS
- 6 AOHPR
- 6 AOHPL
- 6 HPSENSE
- 2.6 ID
- 6 USB_DM
- 6 USB_DP
- 6 OTG_DM
- 6 OTG_DP
- 7 TXCM
- 7 TXCP
- 7 TX0P
- 7 TX0M
- 7 TX1P
- 7 TX2P
- 7 TX2M
- 7 HDMI_CEC
- 7 HDMI_SCL
- 7 HDMI_SDA
- 7 HDMI_HTPLG
- 7 HDMI_DDCCEC
- 7 XN
- 7 YN
- 7 XP
- 7 YP
- 7 VBAT
- 7 AUX1
- 7 AUX2



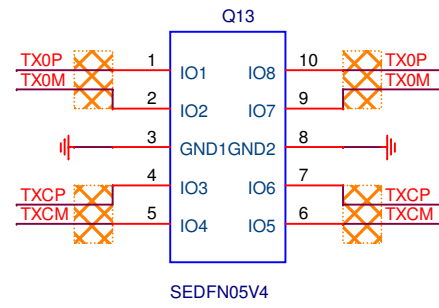
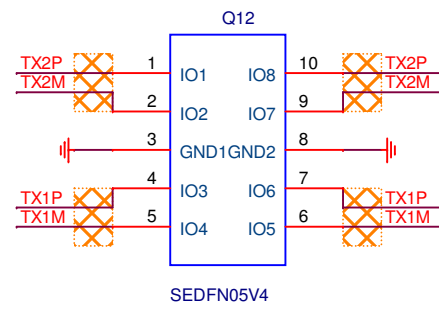




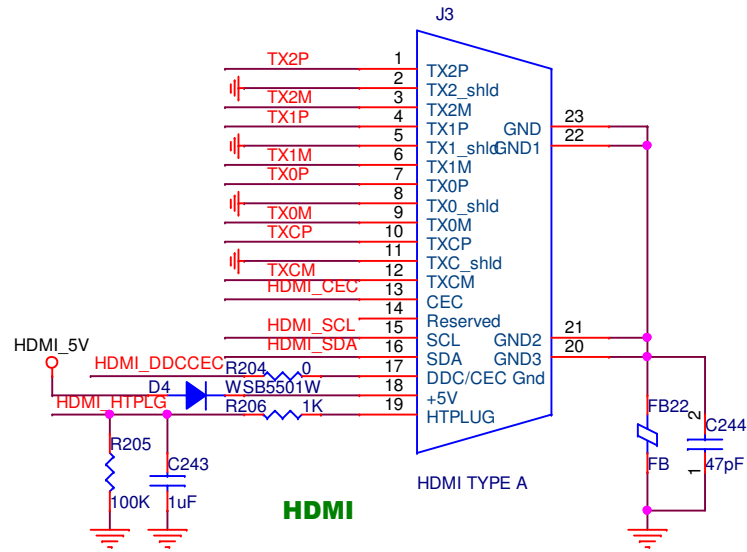
- 3 PWRON
- 3 WKUP_N
- 2,3 RST_N
- 2,6 SYS_POWER_IND
- 2 PMU_IRQ_N
- 2 I2C0_SCK
- 2 I2C0_SDA
- 2 GPIO_J18
- 2 GPIO_H19
- 2 GPIO_G21
- 2 GPIO_G20



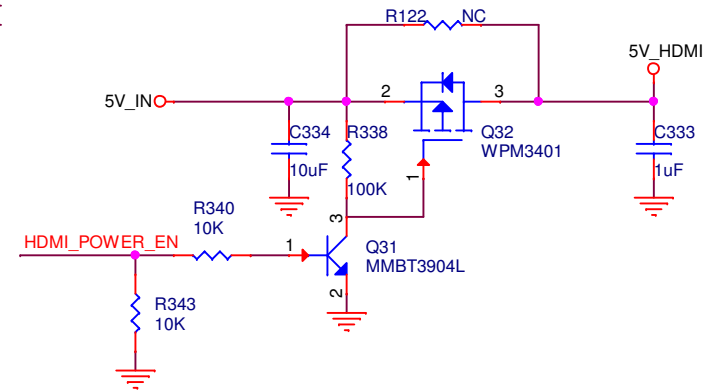
- 3 MICBIAS
- 3 AOHPR
- 3 AOHPL
- 3 HPSENSE
- 3 HP_MUTE
- 2 JD
- 2 USB_DETE
- 3 OTG_DM
- 3 OTG_DP
- 2,3 ID
- 3 SYS_POWER_IND
- 3 USB_DM
- 3 USB_DP
- 3 MICIN2
- 2 MIC_SW_EN



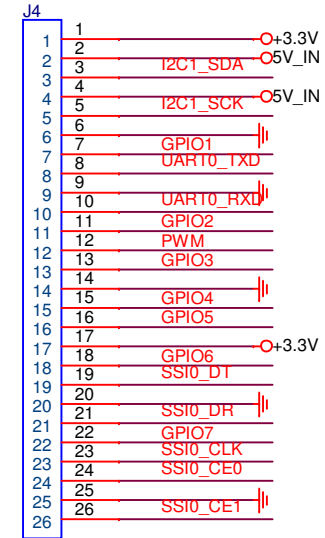
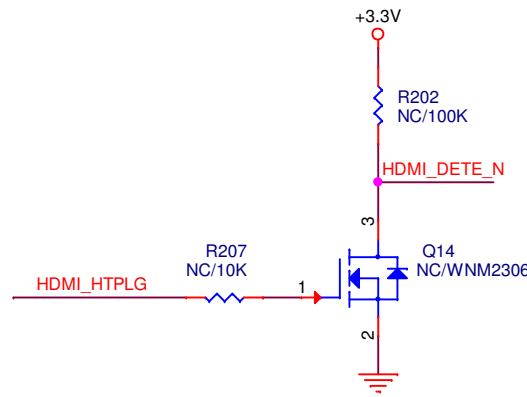
Differential pairs
Z0= 100 ohm



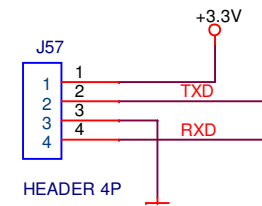
HDMI



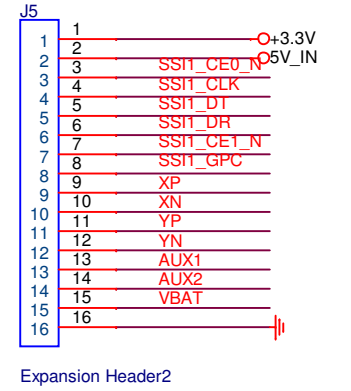
HDMI Power & DETE



Expansion Header

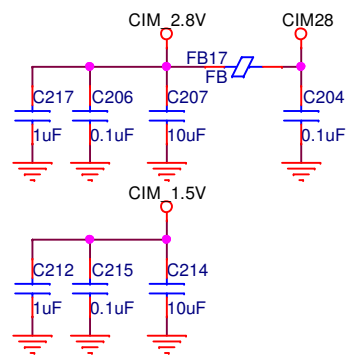


UART

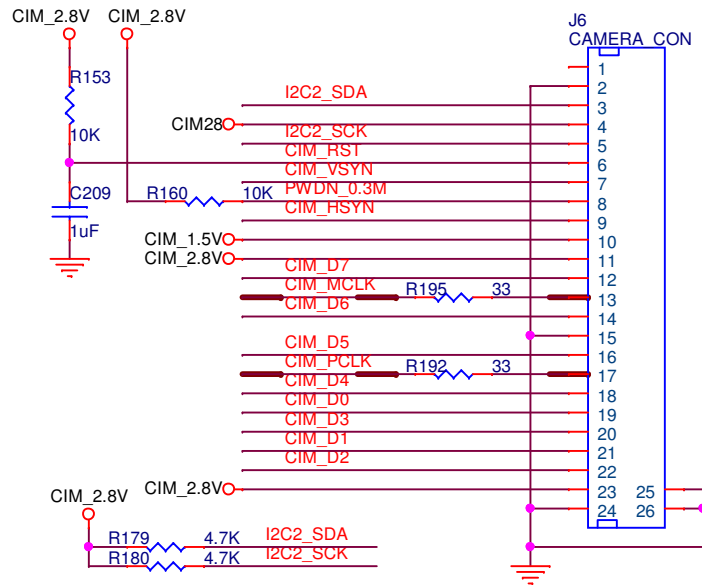


Expansion Header2

Surround with Gnd



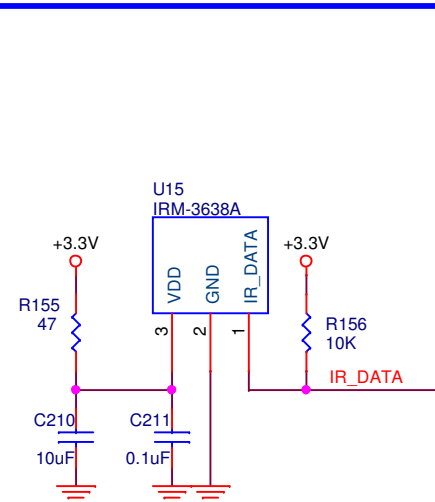
CAMERA POWER



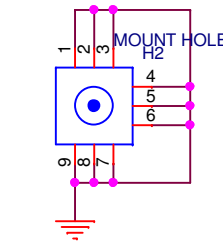
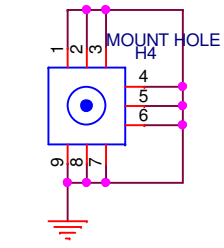
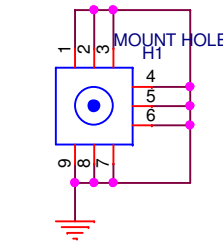
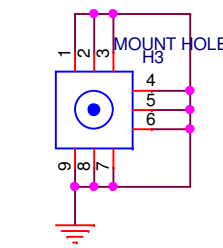
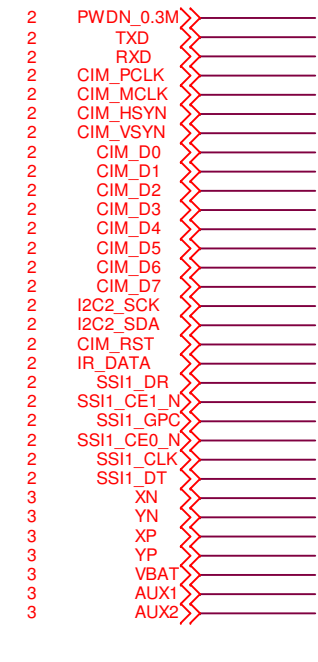
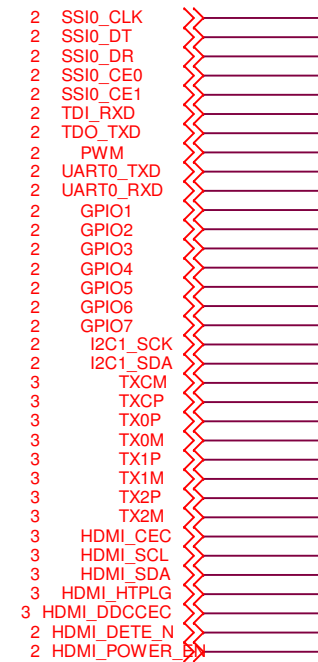
CAMERA (OPTION)

Camear I2C address list

GC0307	0x21
GC0308	0x21
GT2005	0x3c



IR



INGENIC SEMICONDUCTOR CO.,LTD

Title		
C120_JZ4780		
Size	Document Number	Rev
A3	HDMI/CAMERA/IRDA/UART/IO	V2.0
Date:	Thursday, June 04, 2015	Sheet 7 of 10

- 2 MSC1_D0_WiFi
- 2 MSC1_D1_WiFi
- 2 MSC1_D2_WiFi
- 2 MSC1_D3_WiFi
- 2 MSC1_CMD_WiFi
- 2 MSC1_CLK_WiFi
- 3 CLK32K

- 2 WL_REG_ON
- 2 WLAN_PW_EN

- 2 PCM_DI
- 2 PCM_DO
- 2 PCM_SYN
- 2 PCM_CLK
- 2 BT_WAKE
- 2 WL_WAKE
- 2 BT_INT
- 2 UART2_RTS_N
- 2 UART2_CTS_N
- 2 UART2_RXD
- 2 UART2_TXD

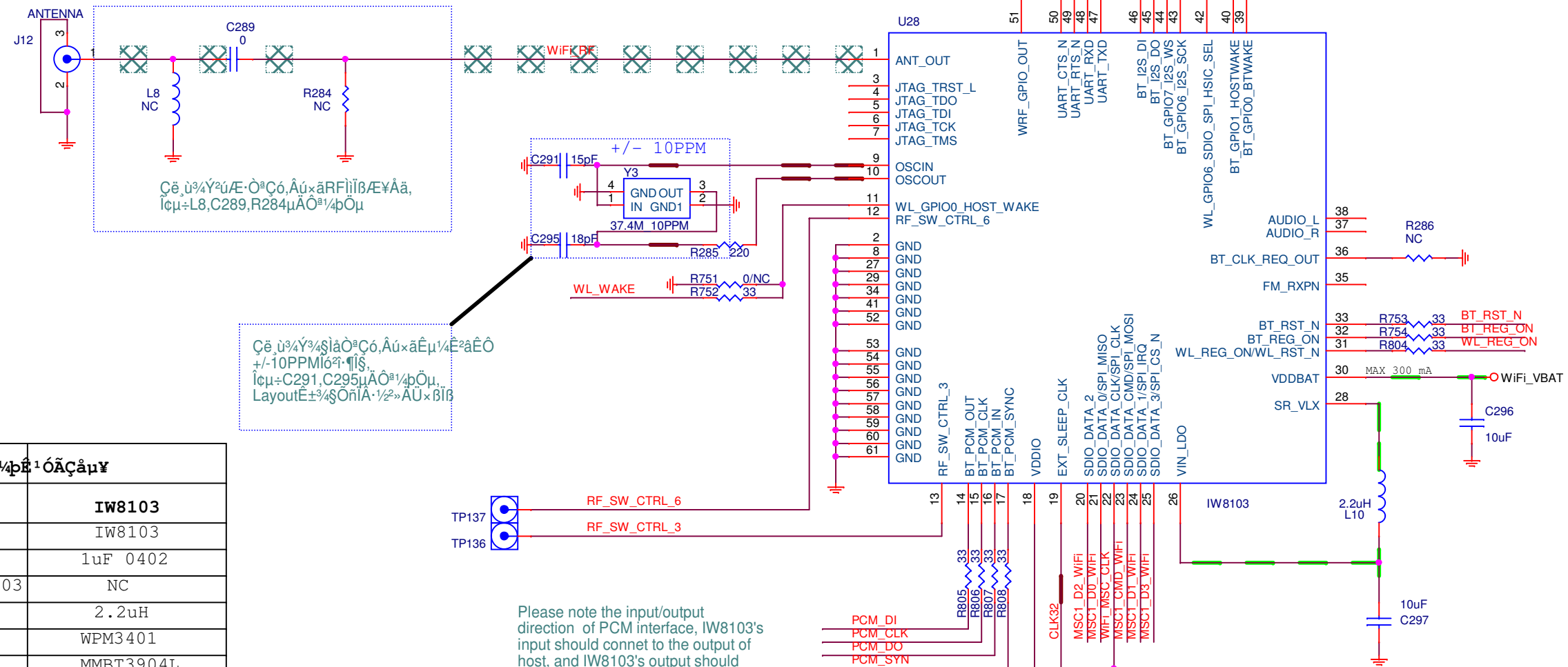
- 2 BT_RST_N
- 2 BT_REG_ON

W>20mil

Surround with Gnd

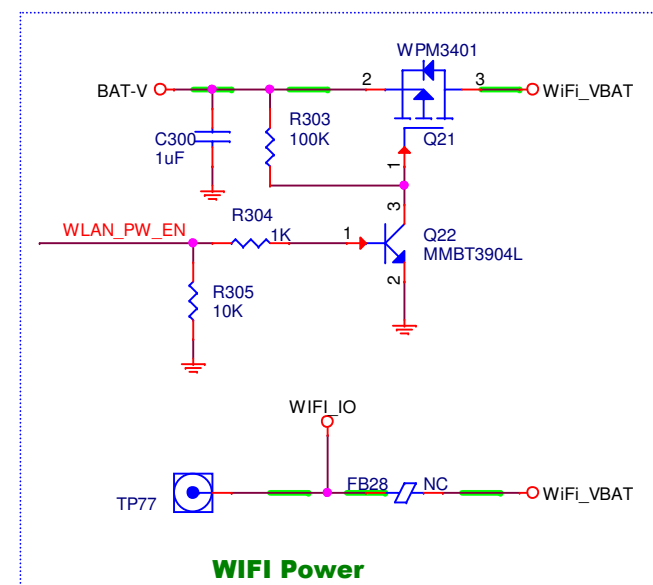
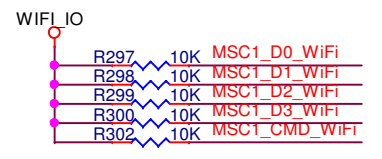
RF Microstrip
Z0= 50 ohm

Please note the input/output direction of UART interface, IW8103's input should connect to the output of host, and IW8103's output should connect to input of host.



Çë, ù%4Y%4sIãÖªCó, Áú×ãÉµ¼EªãÉÖ
+/-10PPMl6ª·¶¶§,
Íçµ=C291,C295µÄÖª¼bÖµ,
LayoutE±%4§ÖñIã·½ª»AU×BÍß

Please note the input/output direction of PCM interface, IW8103's input should connect to the output of host, and IW8103's output should connect to input of host.

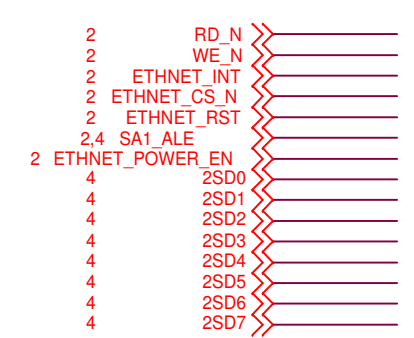
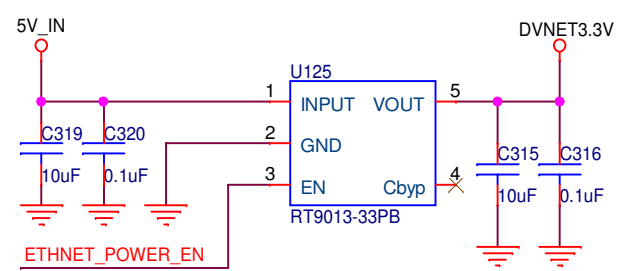
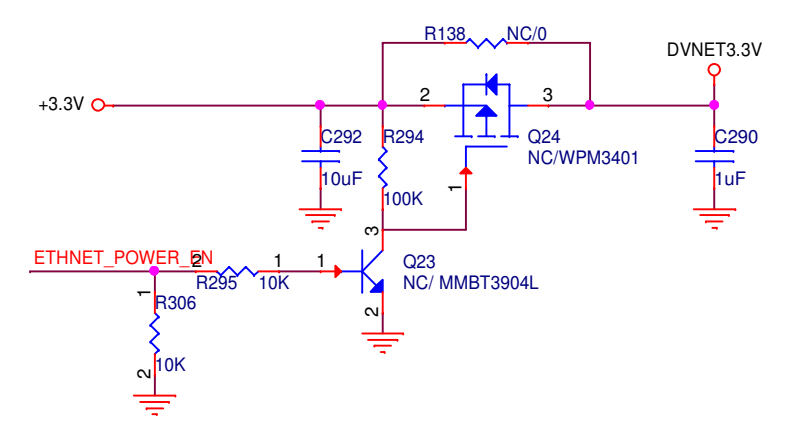
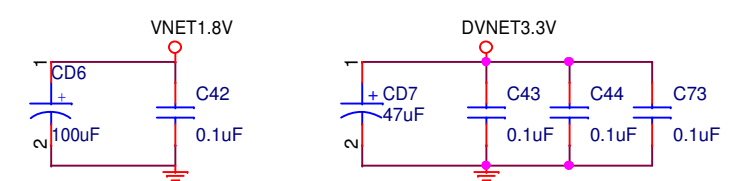
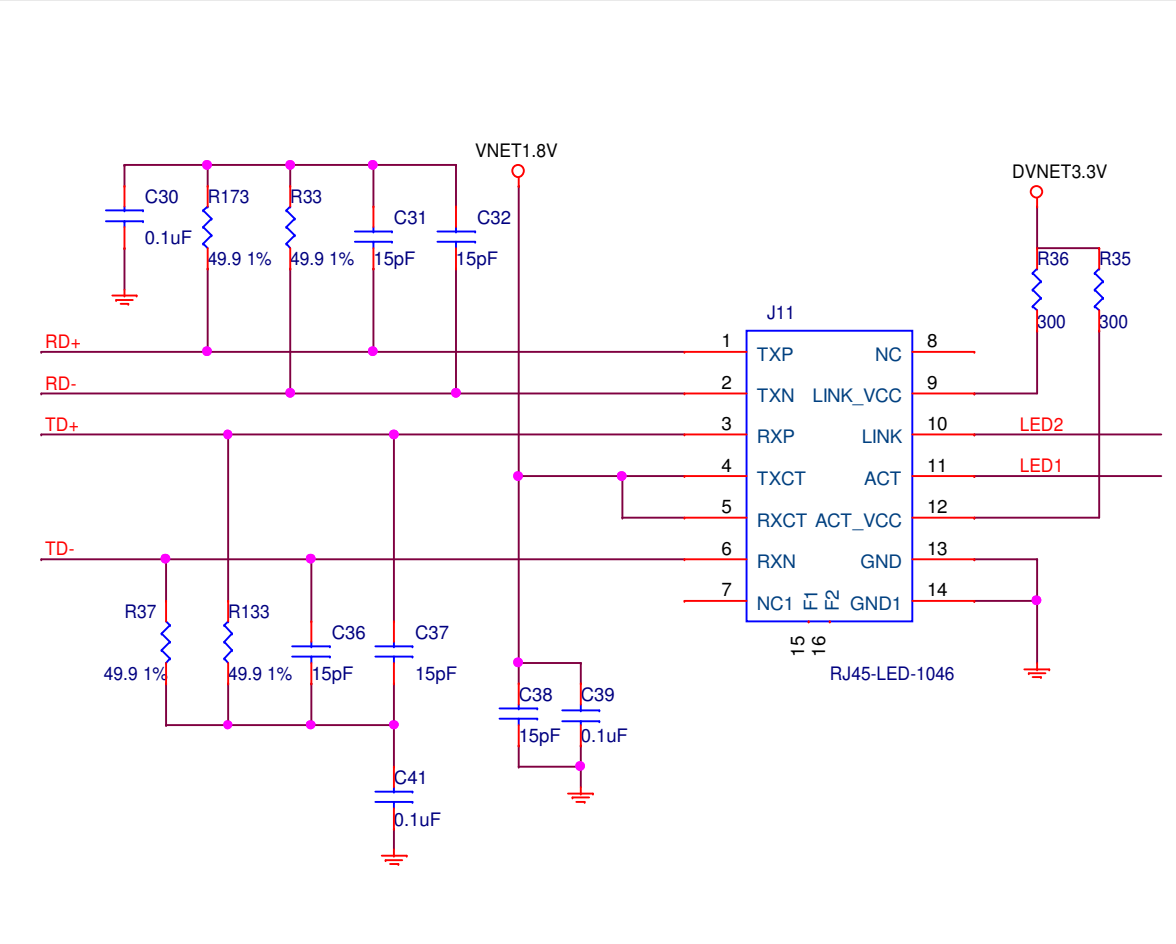
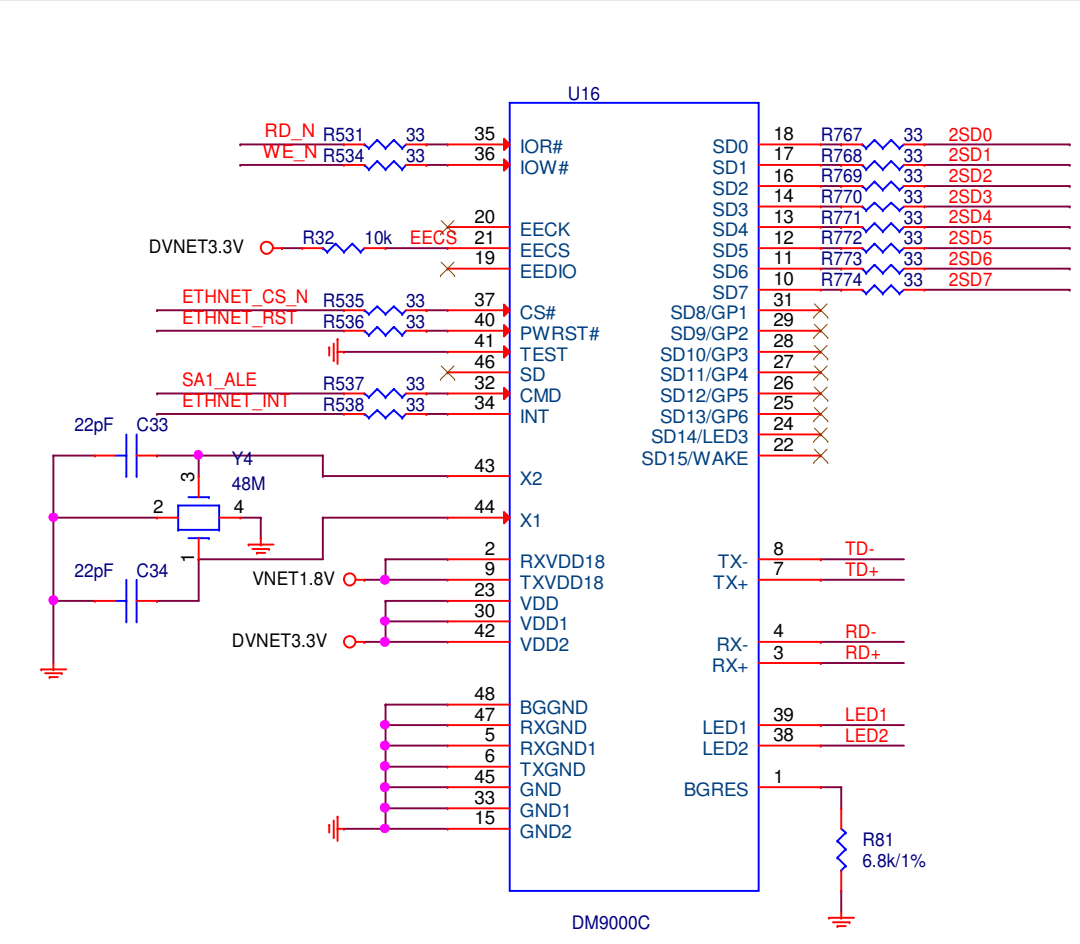


Part	IW8101	IW8103
U28	IW8101	IW8103
C300	NC	1uF 0402
FB28	75@100MHz 0603	NC
L10	1.5uH	2.2uH
Q21	NC	WPM3401
Q22	NC	MMBT3904L
RN1	NC	ÄÄ×è 0R 0402
R279	100K 0402	NC
R746	0R 0402	NC
R751	0R 0402	NC
R757, R748, R759, R752, R753, R754	NC	0R 0402
R303	NC	100K 0402
R305	NC	10K 0402
R304	NC	1K 0402
C289	0R 0402	0R 0402
Y3	26MHz +/-10ppm	37.4MHz +/-10ppm

±, ×ç£°
 1. Ö-Äí¼Ä-Èí²î¼Éè¼Eíª IW8101Éè¼E; £
 2. Çåµ¥ÄÜÍþ±è×ç£±¼pöµòðíªWIFI¹²ÖÄí¼Äí£-çè°´Ö-Äí¼¼±èÉ¼Öµ¼ðÐÑ; Öñ; £
 3. Èç¹ùÈ¹ÖÄIW8103£-òðWIFI_IÖµçÑ¹Ö¼µ÷òüíª2.8V»ð3.0V£-í-È±¼«íµí³µçÑ¹+3.3VÖ²íàÖ¼µ÷òüíª2.8V»ð3.0V

BT & WIFI MODULE

EXT_SLEEP_CLK 200°C1800mV Vp-p to avoid additional current consumption and degradation in FM SNR. 3.3V Vp-p maximum.



INGENIC SEMICONDUCTOR CO.,LTD		
Title		
CI20_JZ4780		
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Data

Revision

Change

June 19 2014	Rev1.0	1. First Revision

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