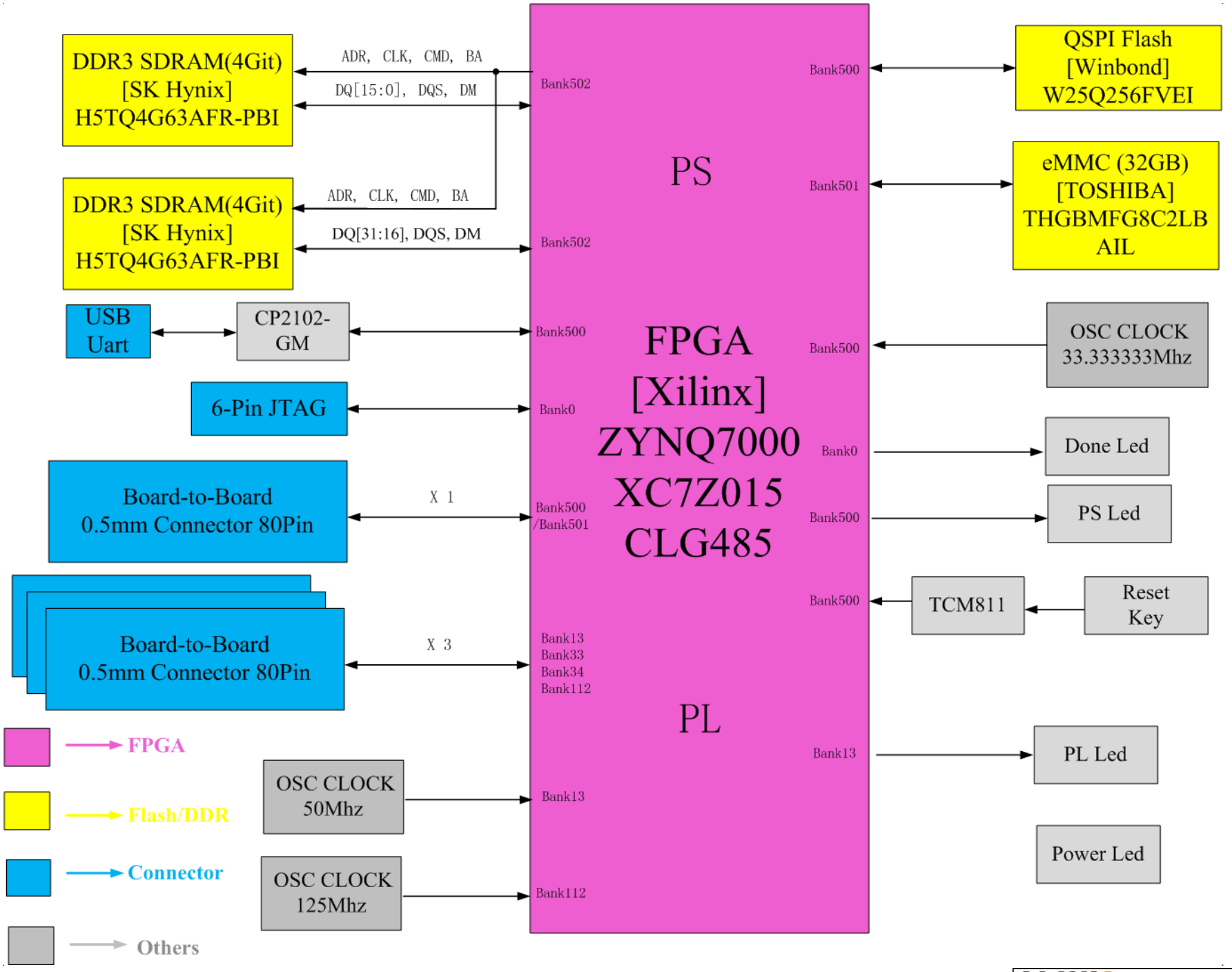

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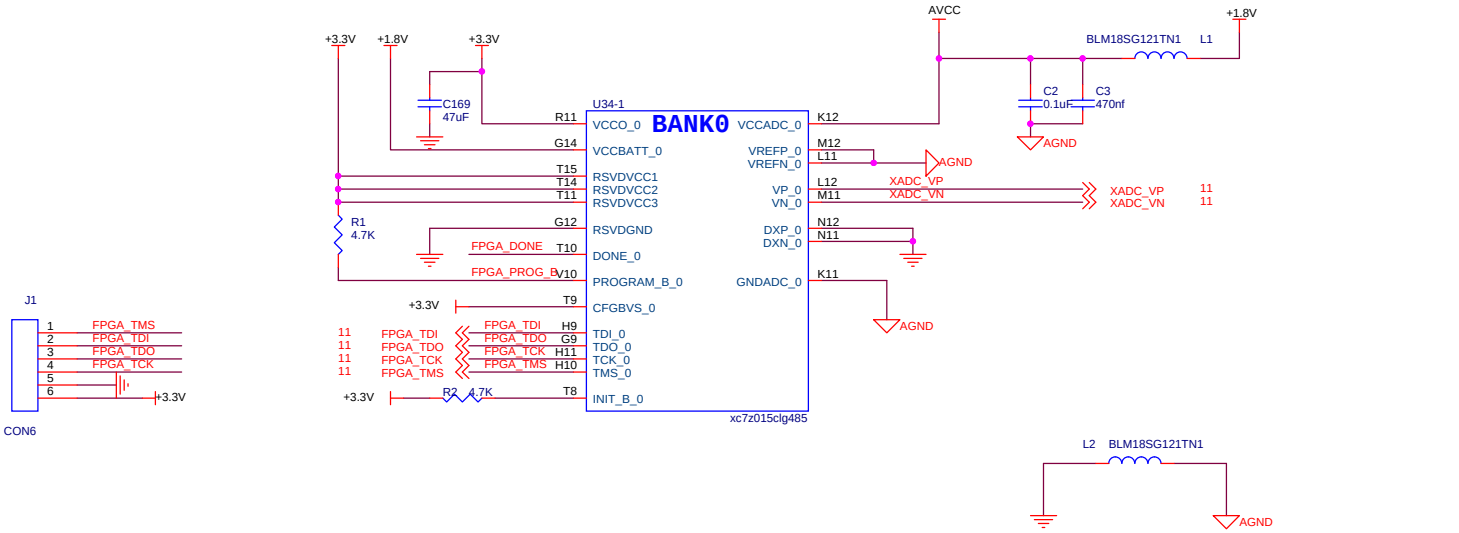
Title	AC7015 BLOCK DIGRAM	
Size	Document Number: AC7015核心板 Schematics	Rev 1.0
Date: Wednesday, June 24, 2020	Sheet 1 of 12	



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Title	AC7015 Bank0	
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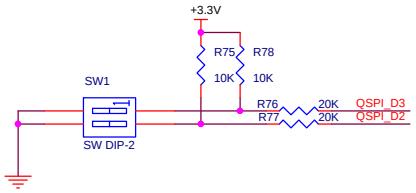
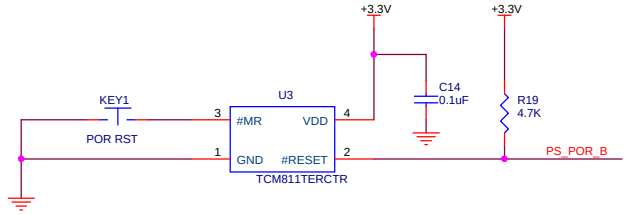
BOOT OPTION

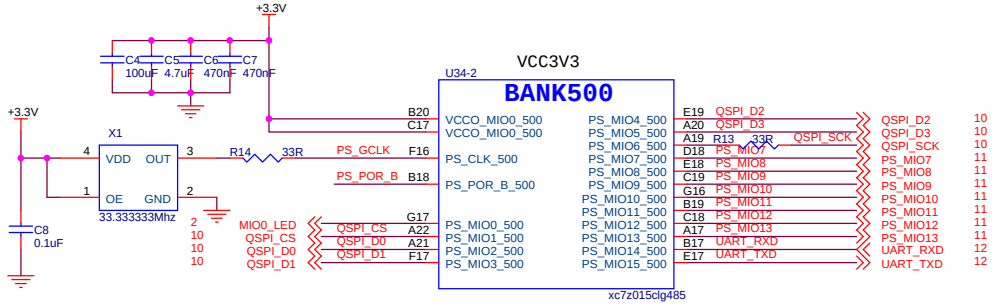
MIO[8] =1 ----MIO bank1 voltage=1.8V
MIO[2] =0 ----cascaded JTAG
MIO[3] =0 ----JTAG/NAND/Quad-SPI/SD
MIO[6] =0 ----PLL used
MIO[7] =0 ----MIO bank0 voltage=3.3V

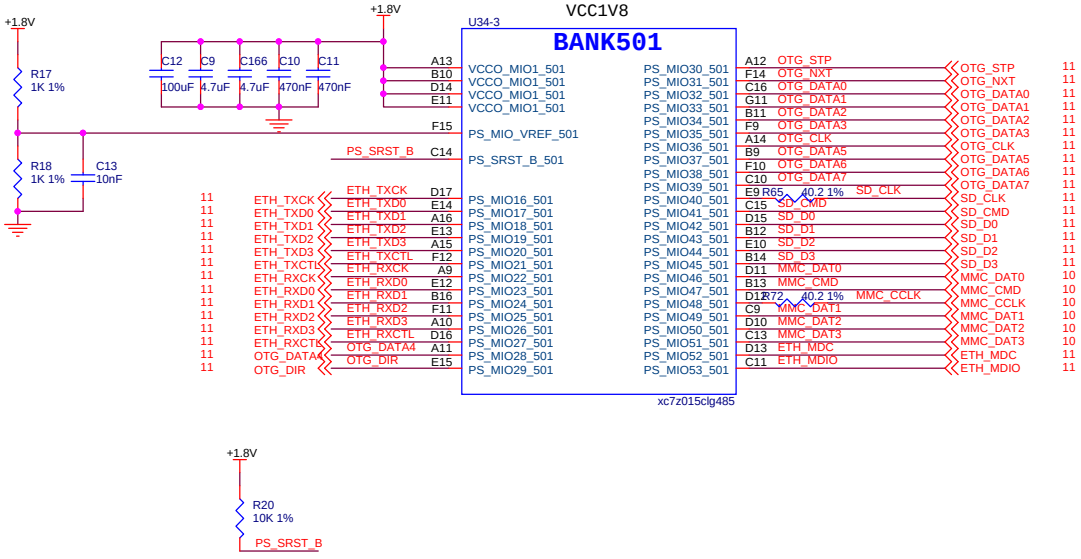


Boot Mode	MIO[5] (QSPI_D3)	MIO[4] (QSPI_D2)
JTAG	0	0
NAND	0	1
QSPI-FLASH	1	0
SD Card	1	1

POWER ON RESET







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Title: AC7015 Bank500 & 501

Size | Document Number: AC7015核心板 Schematics | Rev: 1.0

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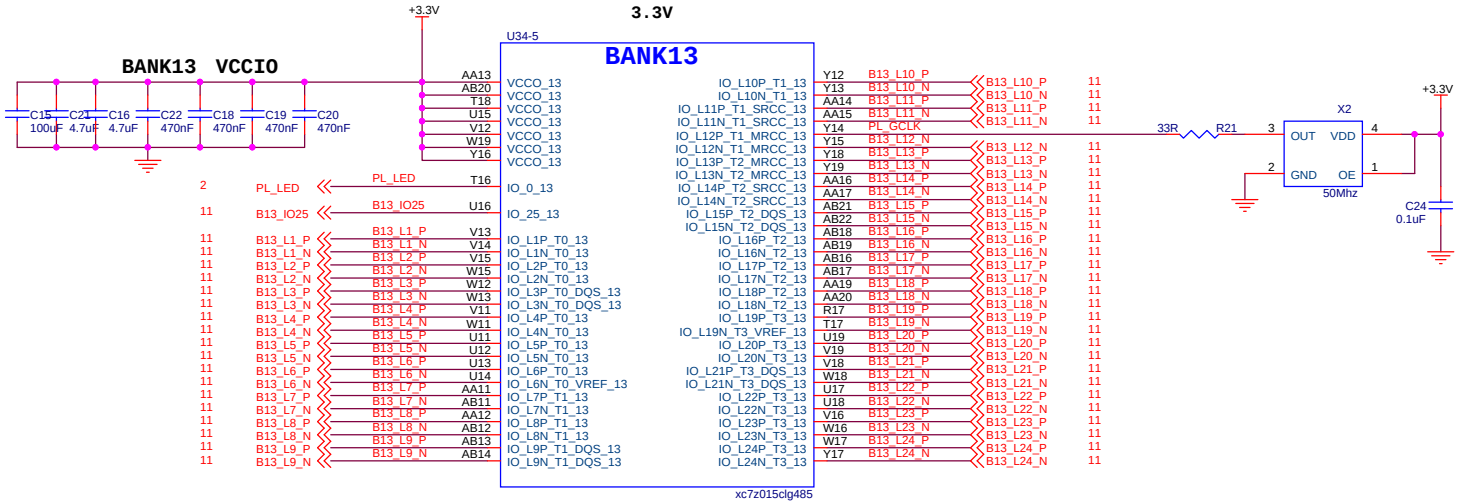

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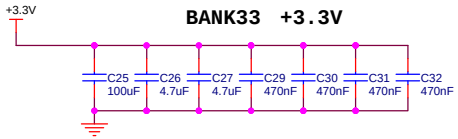
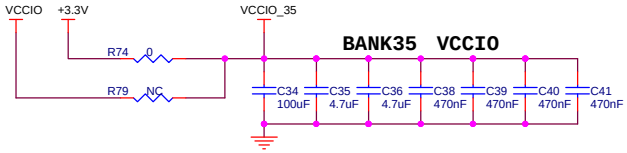
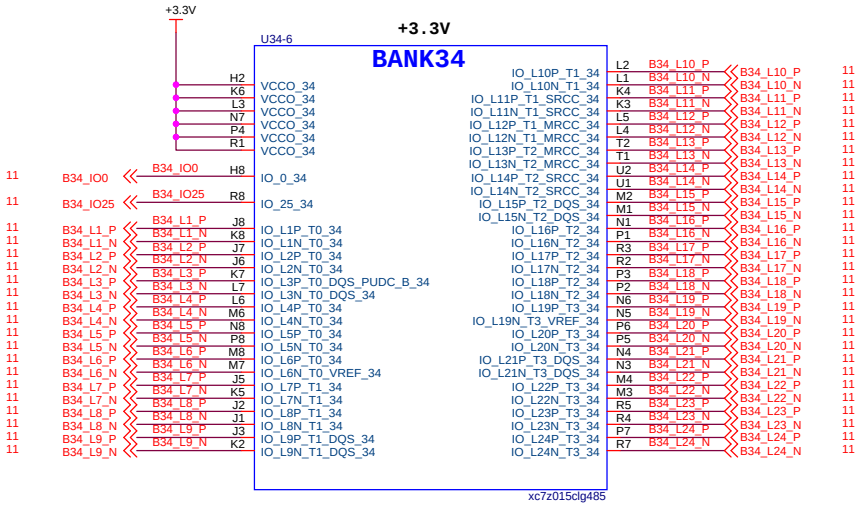
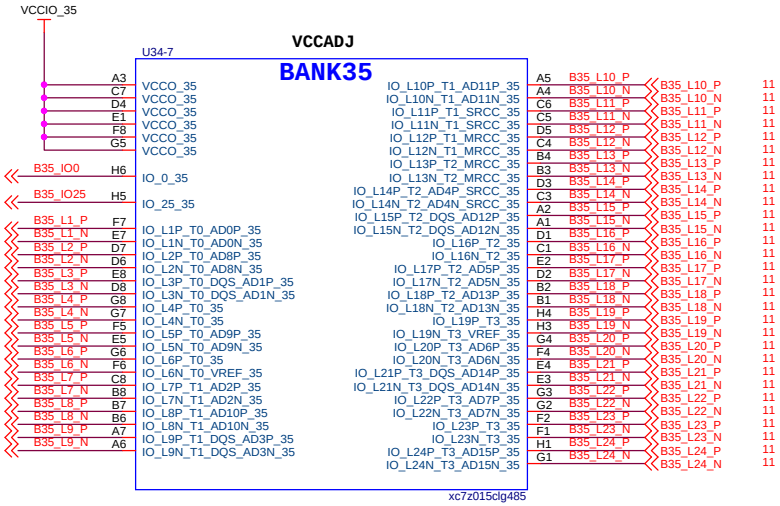
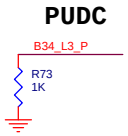
Title	AC7015 Bank13
Size	Document Number: AC7015核心板 Schematics — Rev: 1.0
Date:	Wednesday, June 24, 2020 — Sheet 4 of 12











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Title: AC7015 Bank34 & 35		
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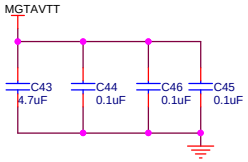
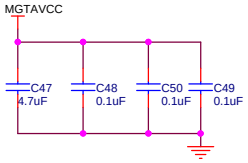
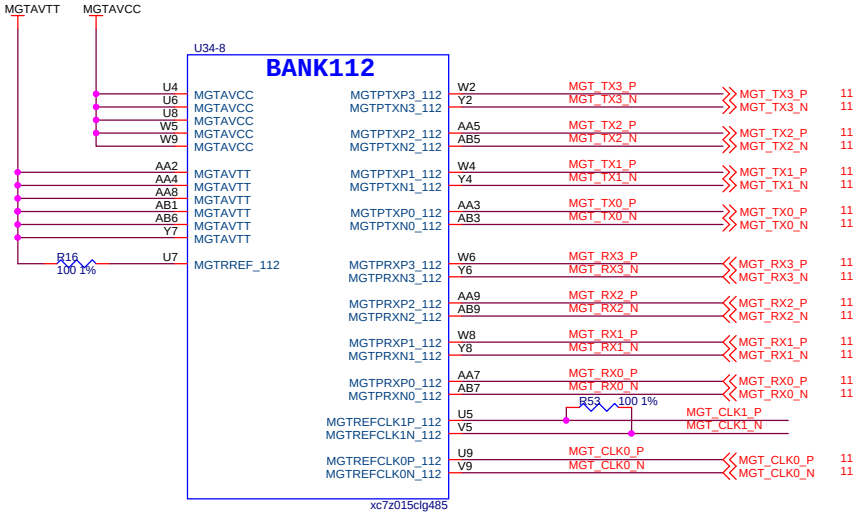
MGTAVTT 4.7uF(1) 0.1uF(2)



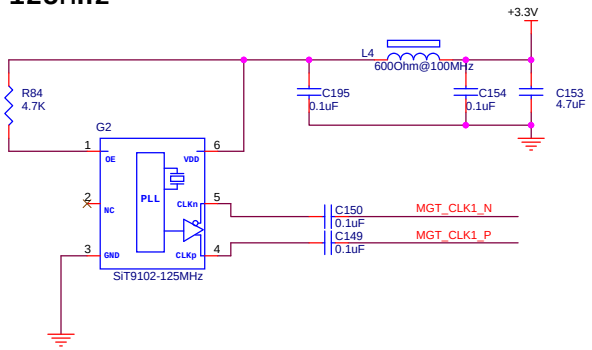
MGTAVCC 4.7uF(1) 0.1uF(2)



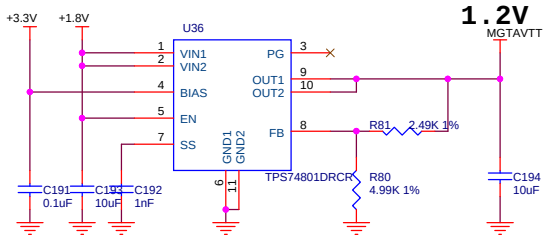


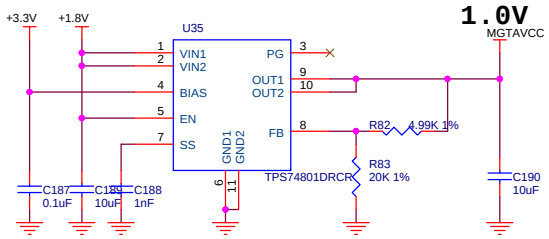
GTP CLOCK

125MHz



POWER ON: VCCINT(1.0V)->VMGTAVCC(1.0V)->VMGTAVTT(1.2V)





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Title	AC7015 Bank35	
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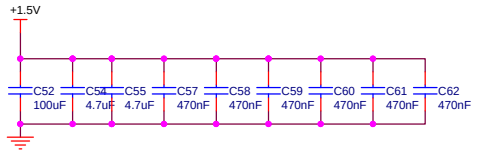

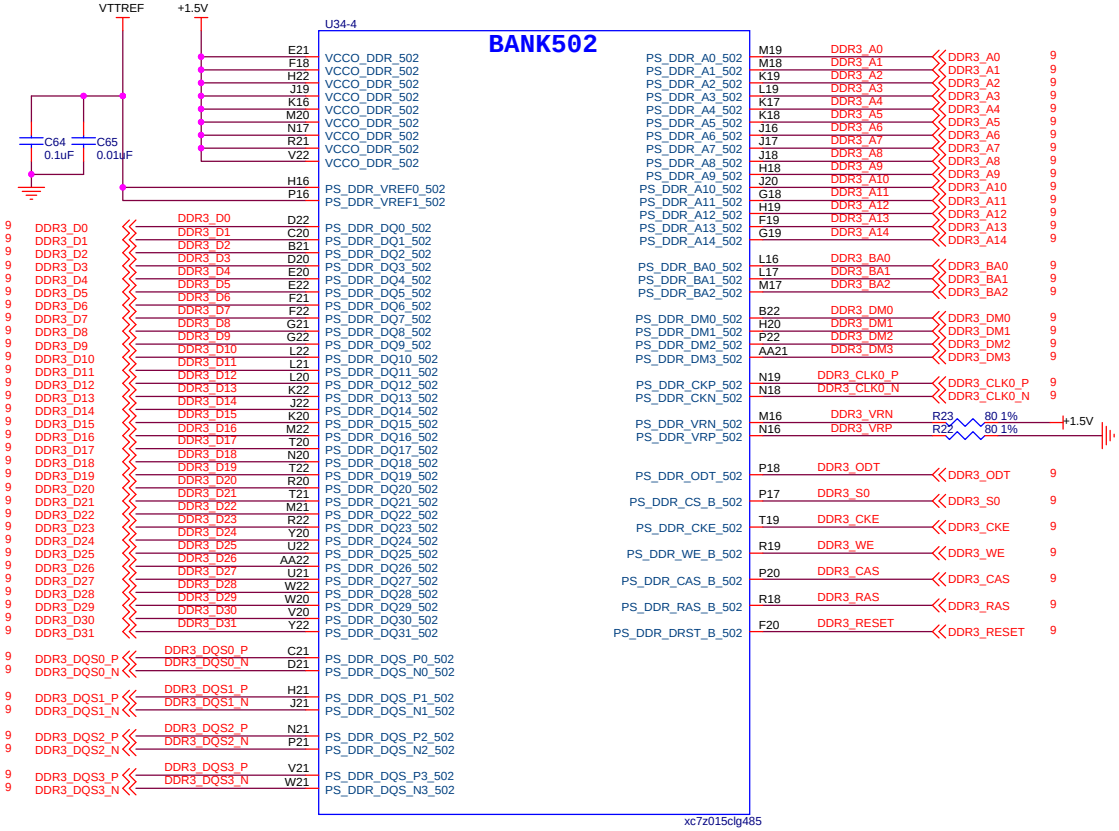

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Title	AC7015 Bank502
Size	Document Number: AC7015核心板 Schematics
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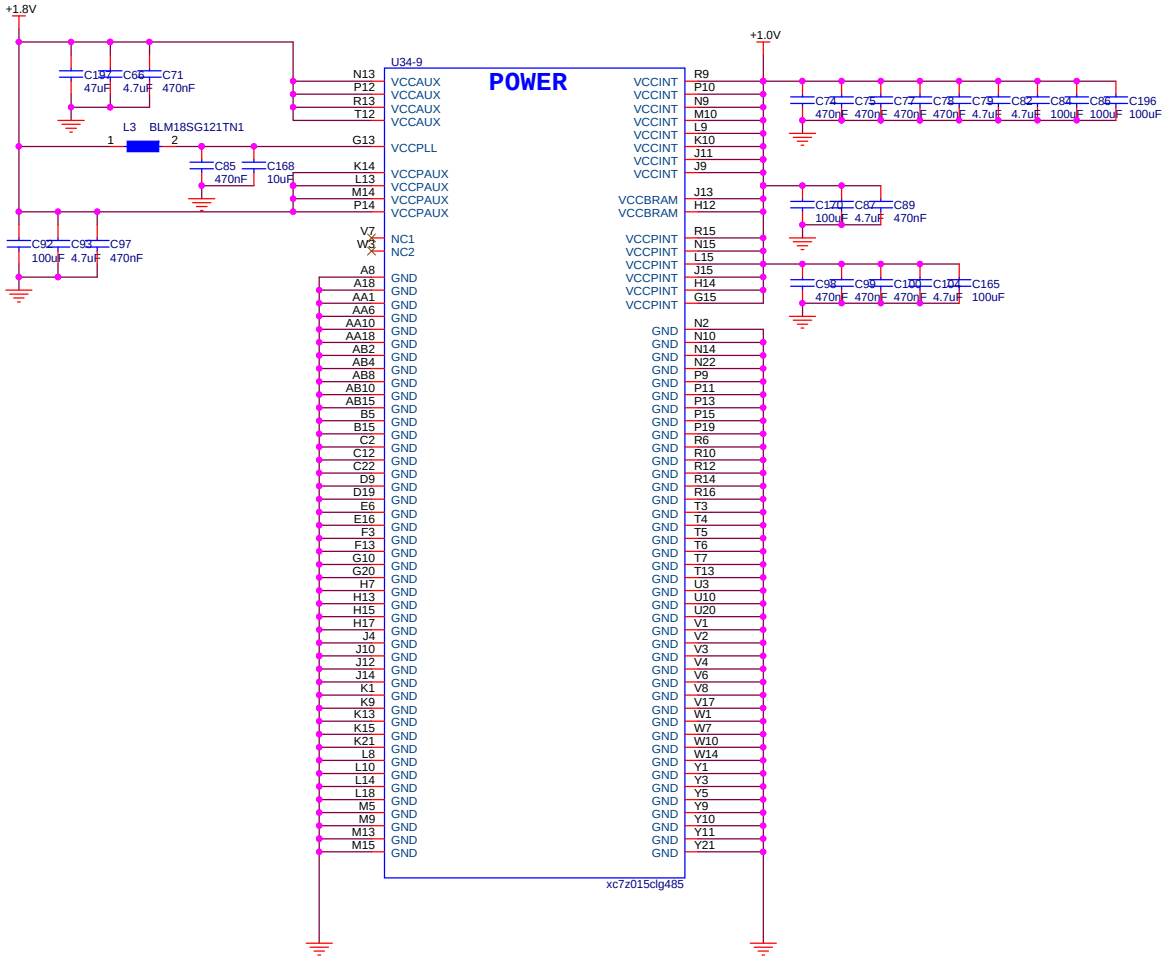

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Title	AC7015 POWER	
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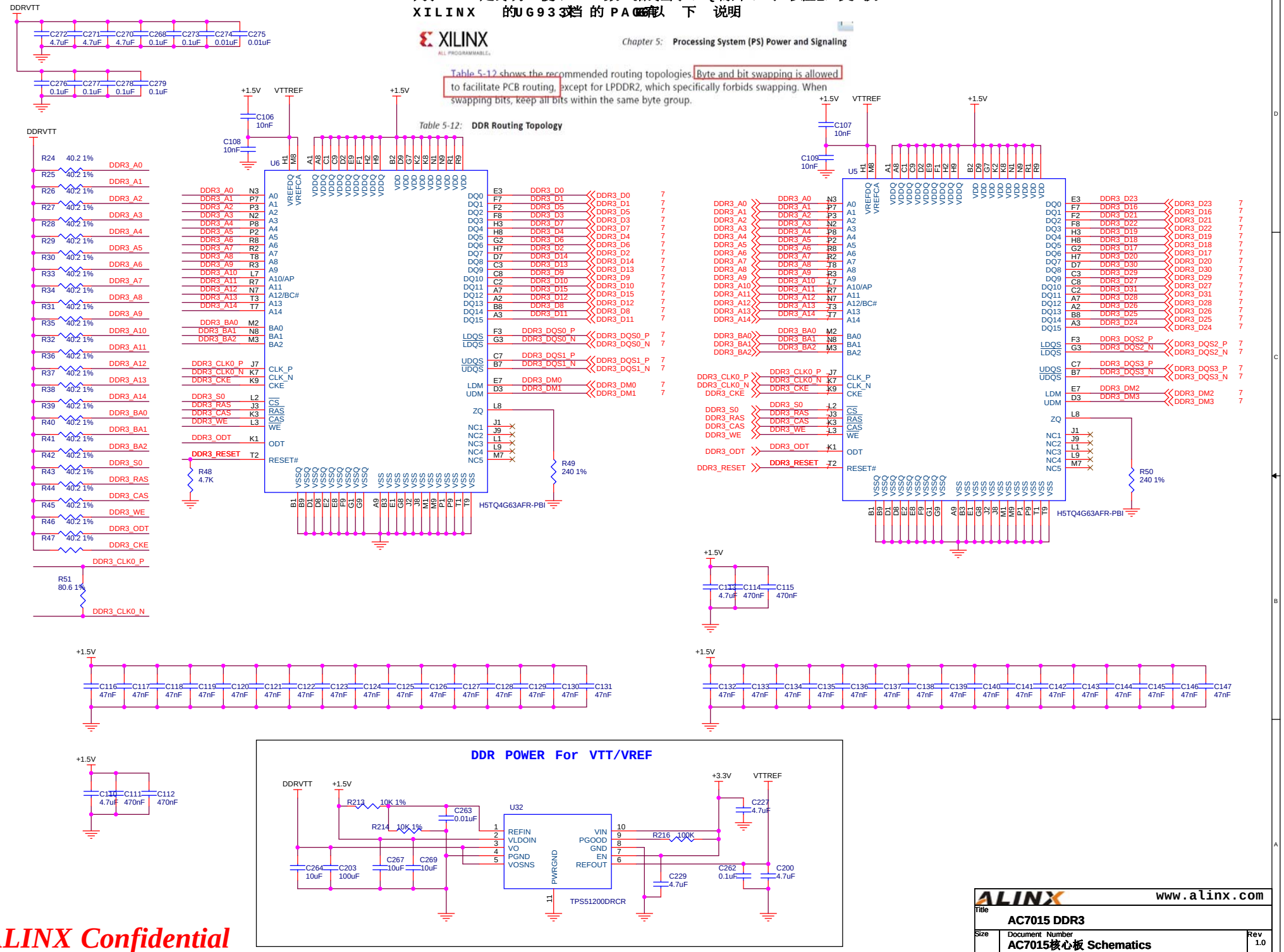
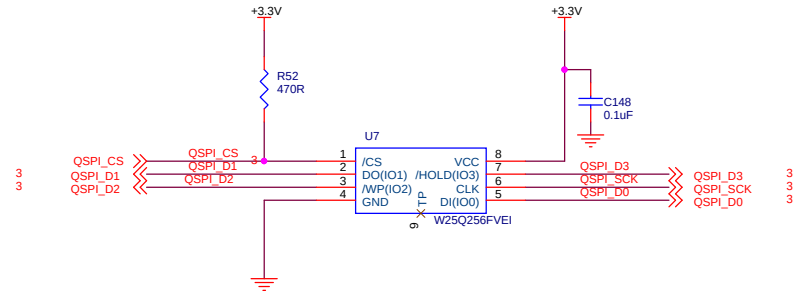
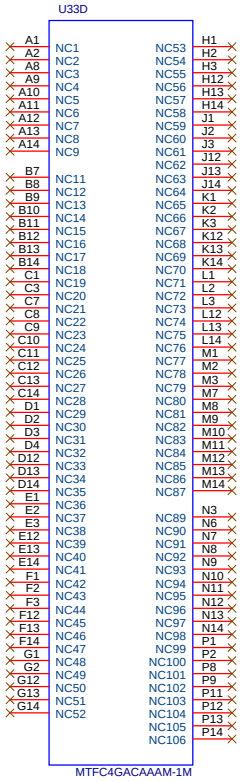
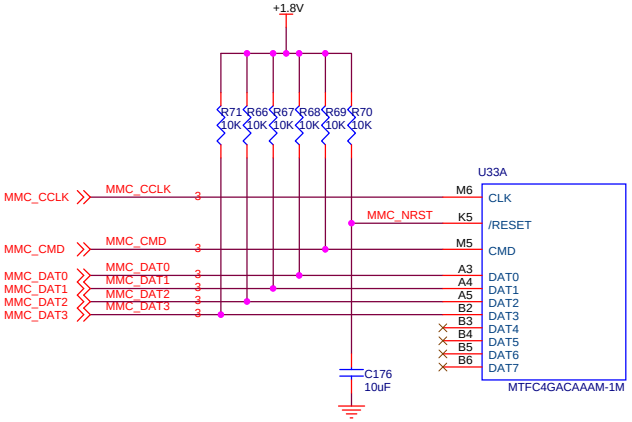
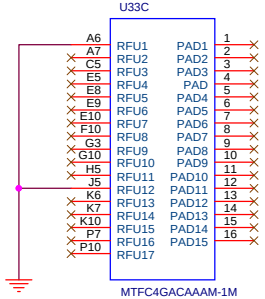
为了 PCB走线 方 便，DDR3 数 据线组内（DQS除外）可 以任意 交 换 。
XILINX 的UG933文档 的 PAGE68页 以 下 说明

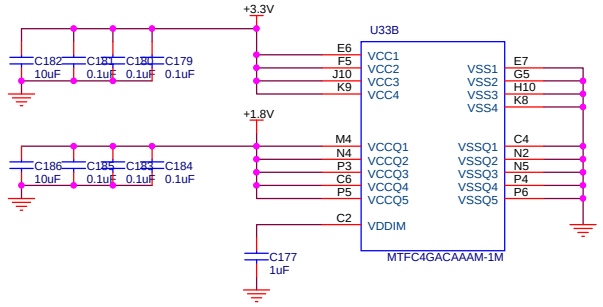












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Title	AC7015 QSPI FLASH	
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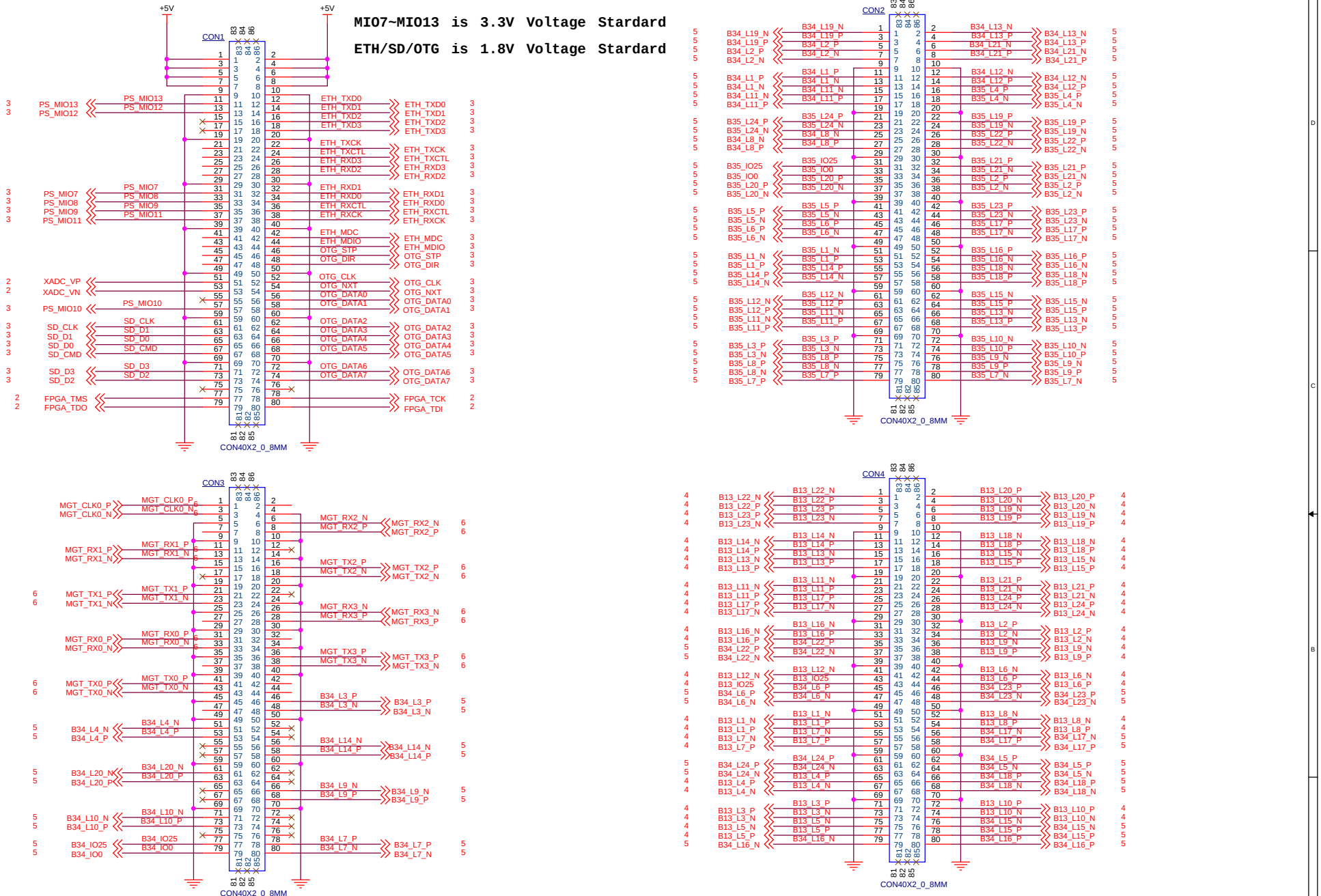

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Title	AC7015 CONNECTOR
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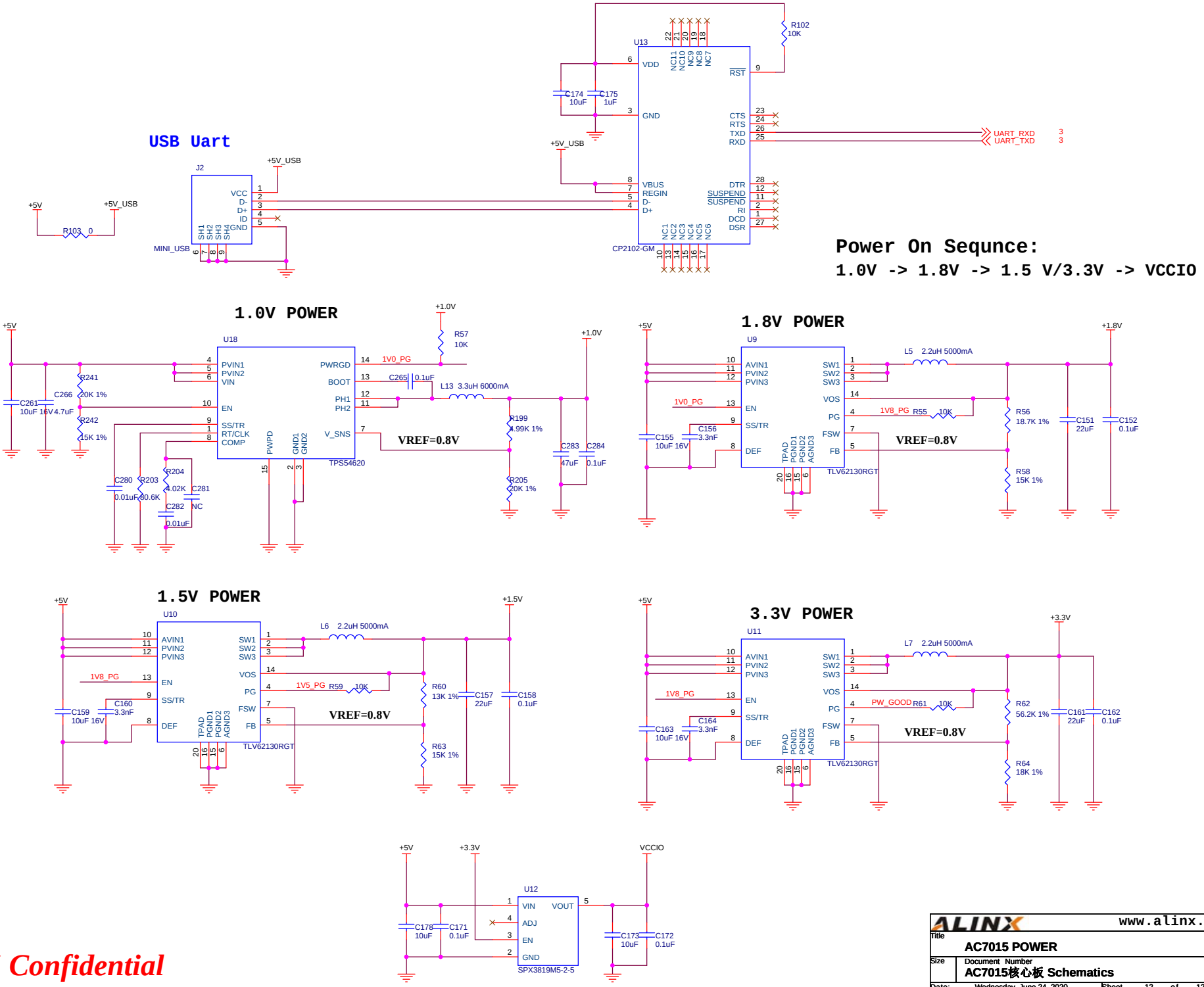
USB Uart
U13
CP2102-GM
R102
10K
C174
10uF
C175
1uF
+5V_USB
UART_RXD
UART_TXD
J2
MINI_USB
R103 0
+5V
Power On Sequnce:
1.0V -> 1.8V -> 1.5 V/3.3V -> VCCIO
1.0V POWER
U18
TPS54620
R57
10K
1V0_PG
C265
0.1uF
L13 3.3uH 6000mA
R241
20K 1%
R242
15K 1%
C261
10uF 16V
C266
4.7uF
R199
4.99K 1%
R205
20K 1%
C283
47uF
C284
0.1uF
C280
0.01uF
R203
80.6K
R204
4.02K
C281
NC
C282
0.01uF
VREF=0.8V
1.8V POWER
U9
TLV62130RGT
L5 2.2uH 5000mA
1V8_PG
R55
10K
R56
18.7K 1%
R58
15K 1%
C151
22uF
C152
0.1uF
C155
10uF 16V
C156
3.3nF
1.5V POWER
U10
L6 2.2uH 5000mA
1V5_PG
R59
10K
R60
13K 1%
R63
15K 1%
C157
22uF
C158
0.1uF
C159
10uF 16V
C160
3.3nF
3.3V POWER
U11
L7 2.2uH 5000mA
PW_GOOD
R61
10K
R62
56.2K 1%
R64
18K 1%
C161
22uF
C162
0.1uF
C163
10uF 16V
C164
3.3nF
VCCIO
U12
SPX3819M5-2-5
C178
10uF
C171
0.1uF
C173
10uF
C172
0.1uF
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