

CPU Module PM9263 v1.4

PM9263 v1.4 release notes:

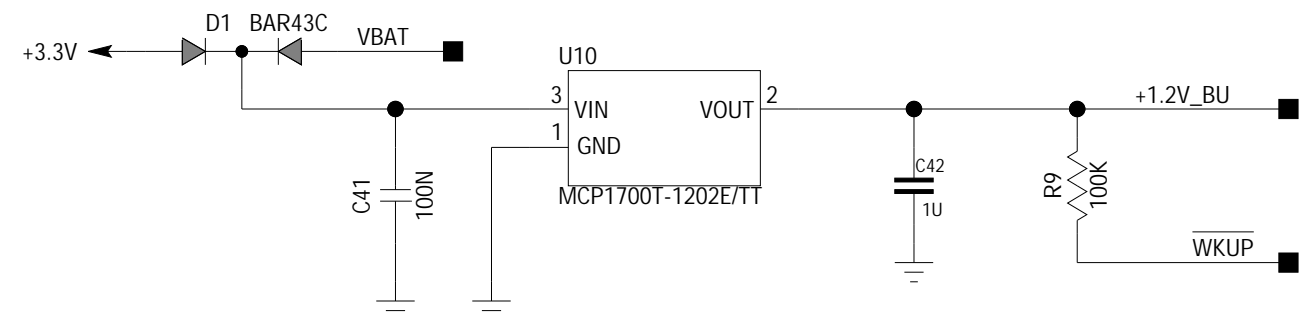
- Changed 1.2V regulator to TPS60500
- VDDIOMx, VDDIOPx applied after power good of VDDCORE
- Assembling option for BMS=0

PM9263 v1.3 release notes:

- 1.2V BU regulator changed from TPS77012 to MCP1700
- removed alternative 1.2V regulator (TPS72010D)
- changed 1.2V regulator to SC189A
- added RC termination to A14
- added serial 0R and pull-up 100k to CS of DataFlash
- added possibility to use PSRAM with 3.3V core voltage
- PSRAM changed to FMP3216CA5-H60E
- added possibility for SPI Flash AT25DF in SO8
- DataFlash and SPI Flash not populated by default
- added possibility to route PD13 to pin 200 of SODIMM

PM9263 v1.2 release notes:

- added serial 22R to SDWE, RAS, CAS, SDA10
- added pull-up/pull-down terminating for SDCK
- added R53, serial to XOUT
- add R55 - a possibility to use 50MHz for XIN
- add R56 - if not populated, then the 50MHz is permanent enabled
- populated R50 (version coding)
- changed U7 (NOR Flash): BGA64 -> BGA48

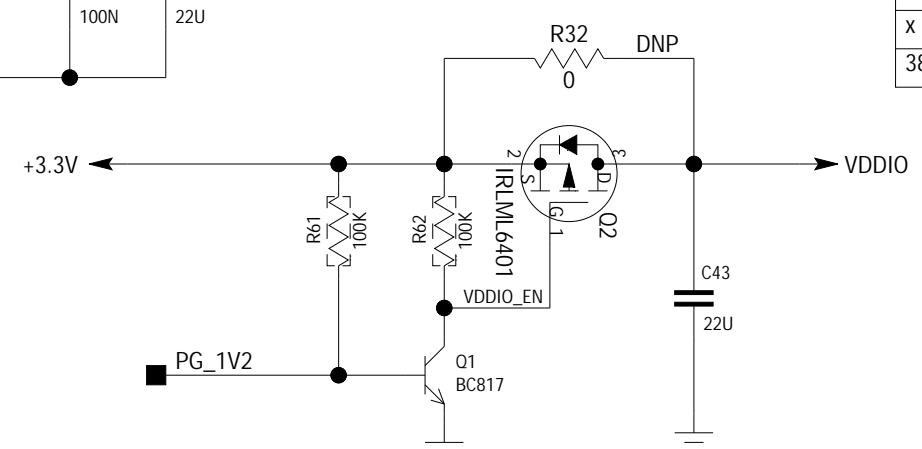
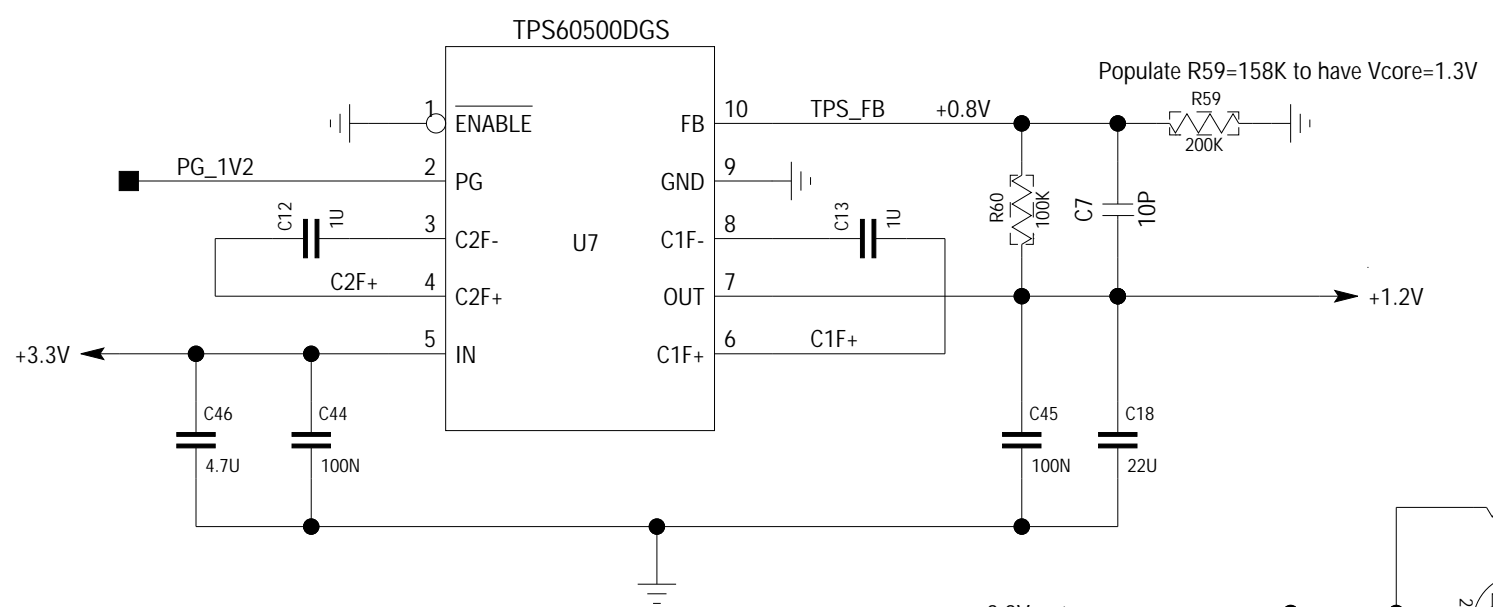


Marking label:

PM9263 - XYZ
v1.4-x
3811

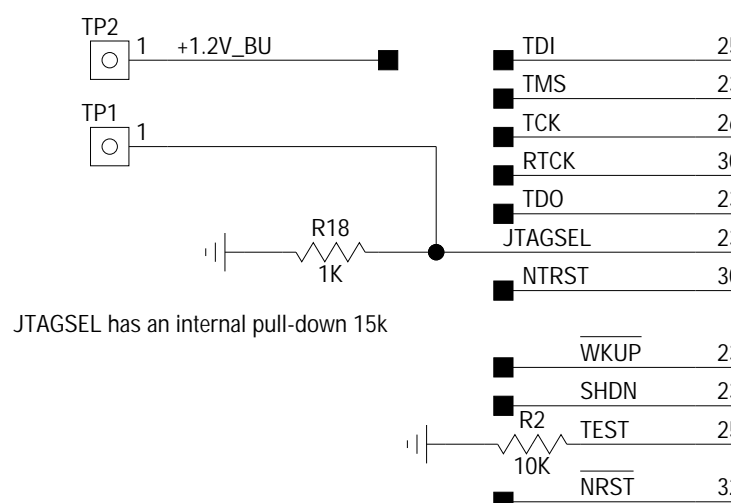
Available options:

X=	None - 64MB SDRAM
X=	128M - 128MB SDRAM
Y=	None - Temp. range: 0° +70°C
Y=	I - Temp. range: -40° +85°C
Z=	None - No DataFlash, No SPI Flash
Z=	D - assembled with DataFlash AT45DB321
Z=	S - assembled with SPI Flash AT25DF321
x	- assembling variant, see PM9263_marking.pdf
3811	- Date code: week, year

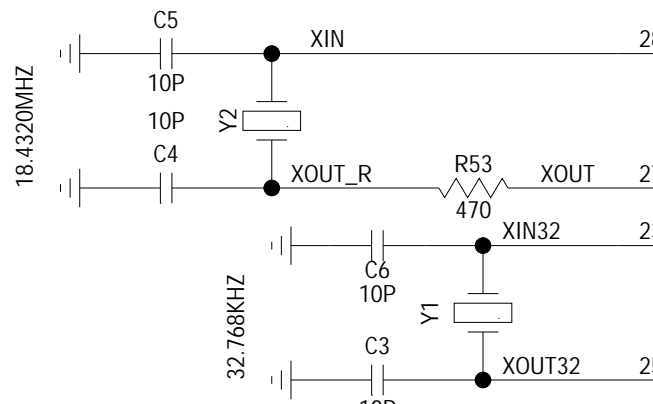


JTAG Boundary scan tester should short TP1 and TP2

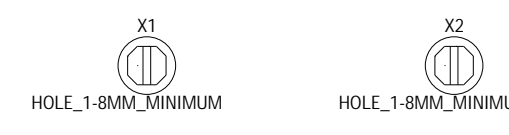
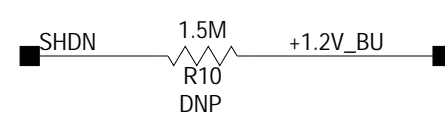
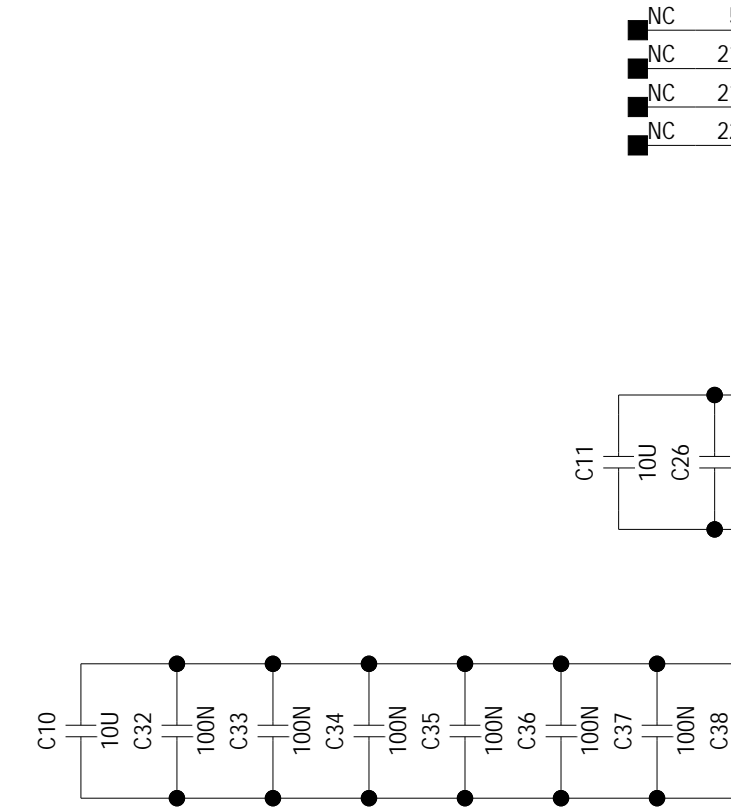
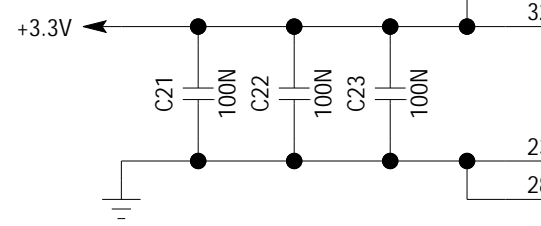
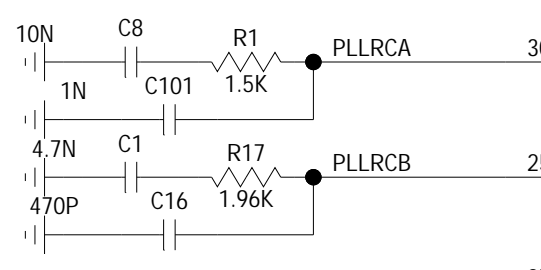
Place TP1 and TP2 close to another



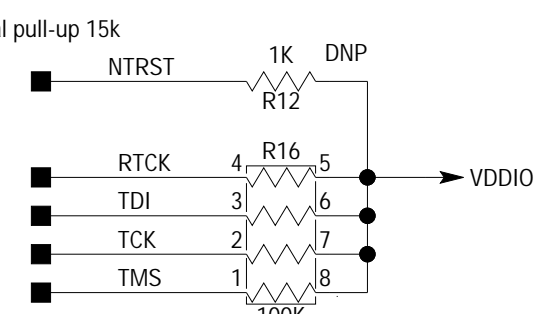
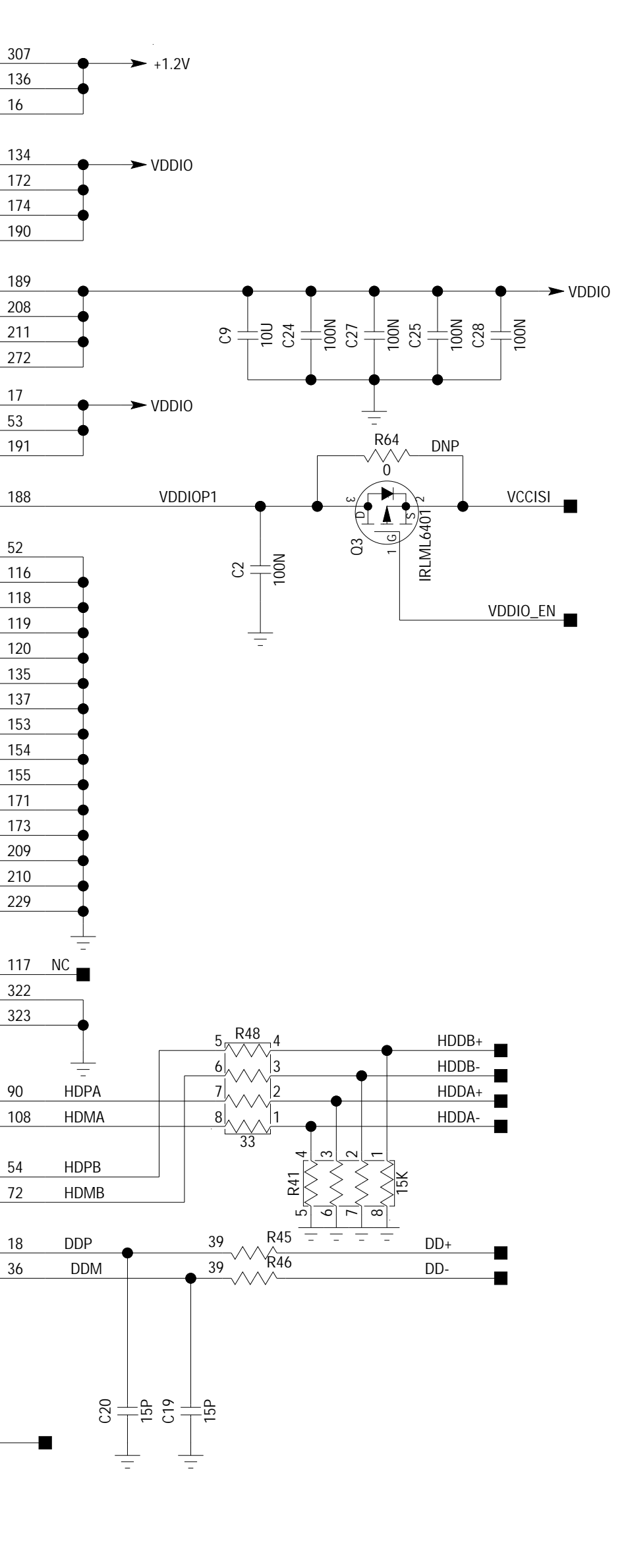
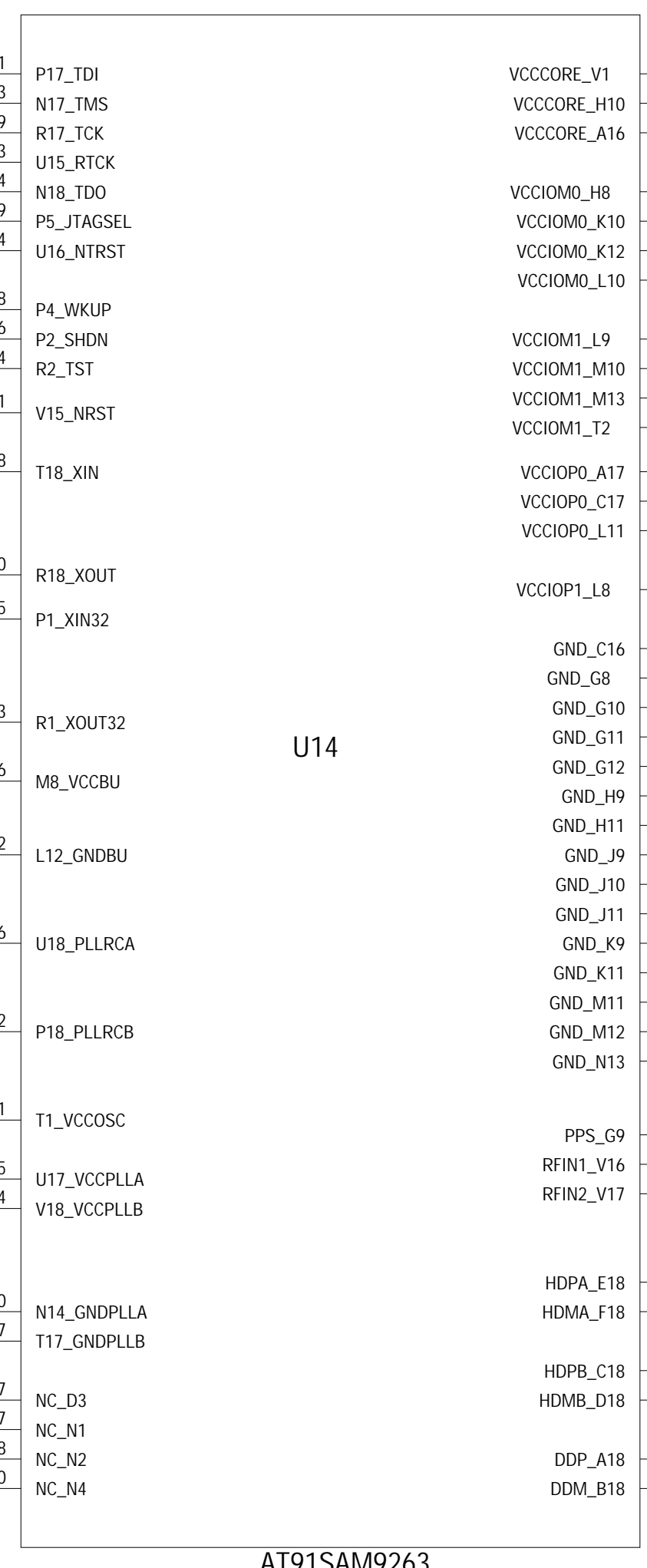
JTAGSEL has an internal pull-down 15k



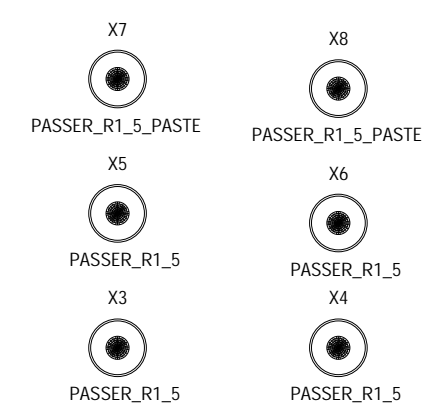
32.768KHZ

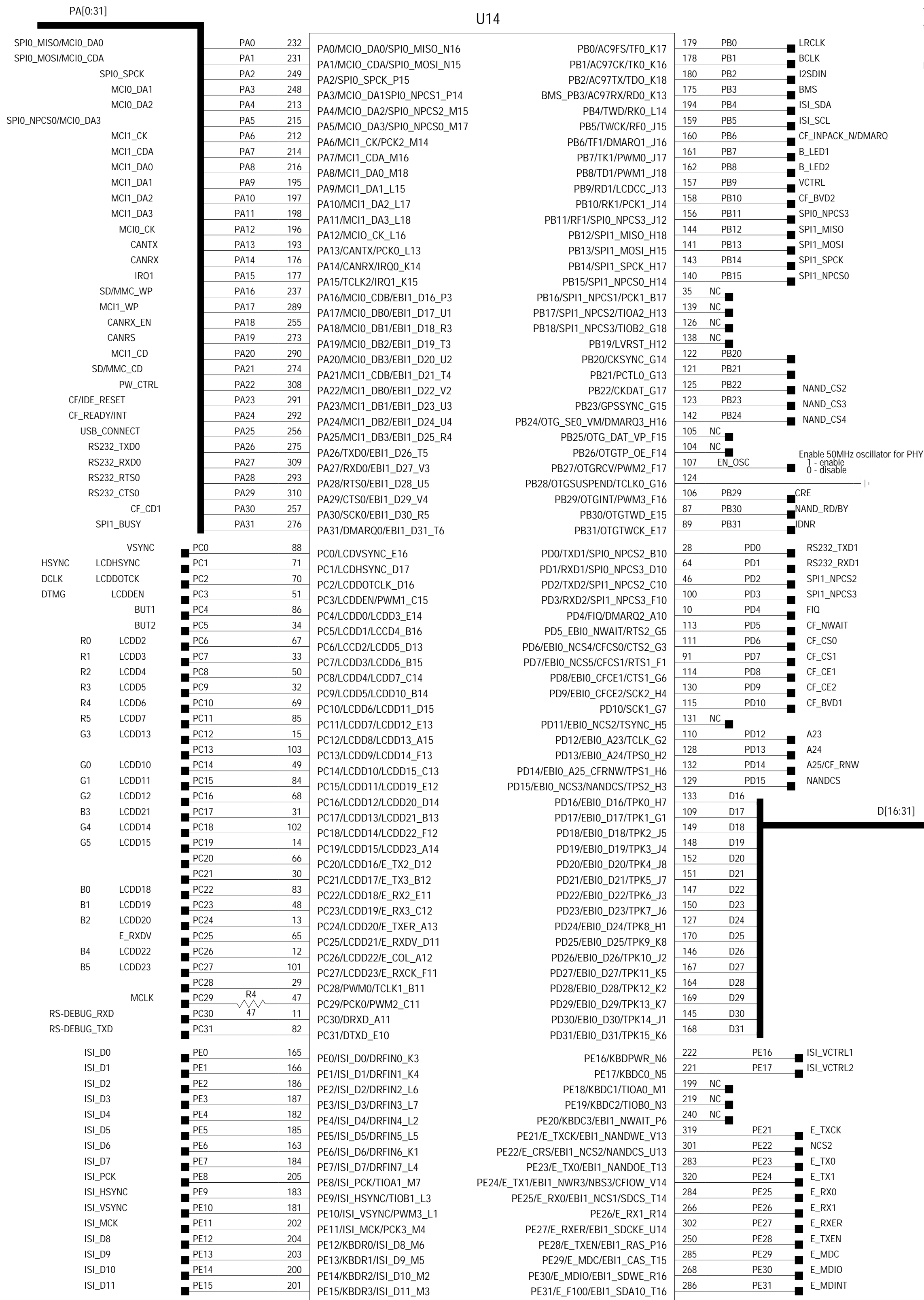


U14

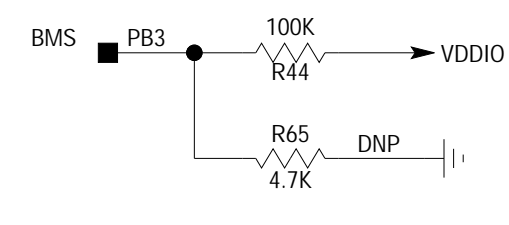


TRST has an internal pull-up 15k

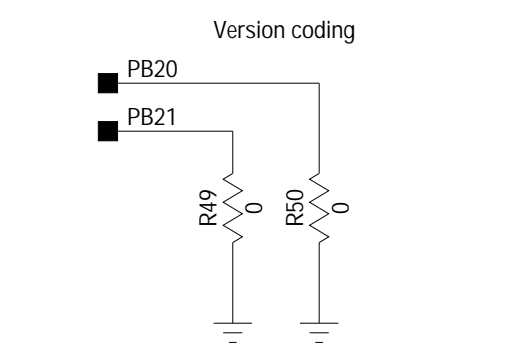




The Base Board should have a 1.0k pull-down to boot from NOR Flash

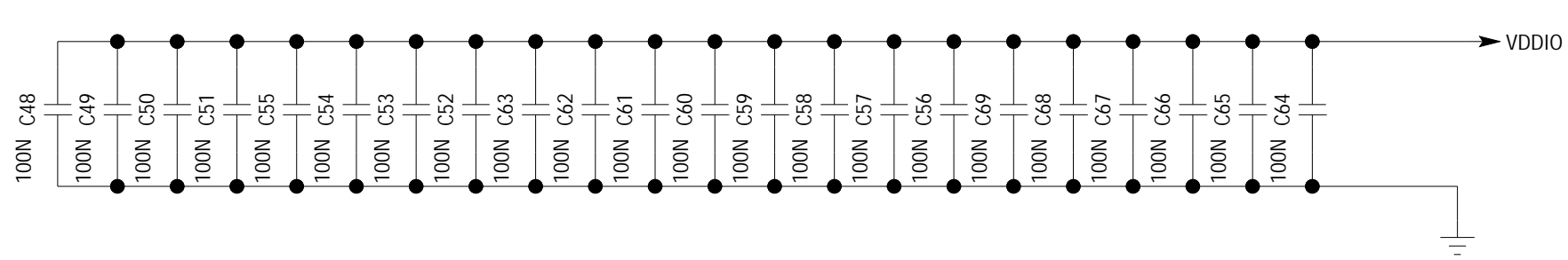


Boot Mode:
BMS = 0 - boot from NOR Flash
BMS = 1 - start internal boot loader

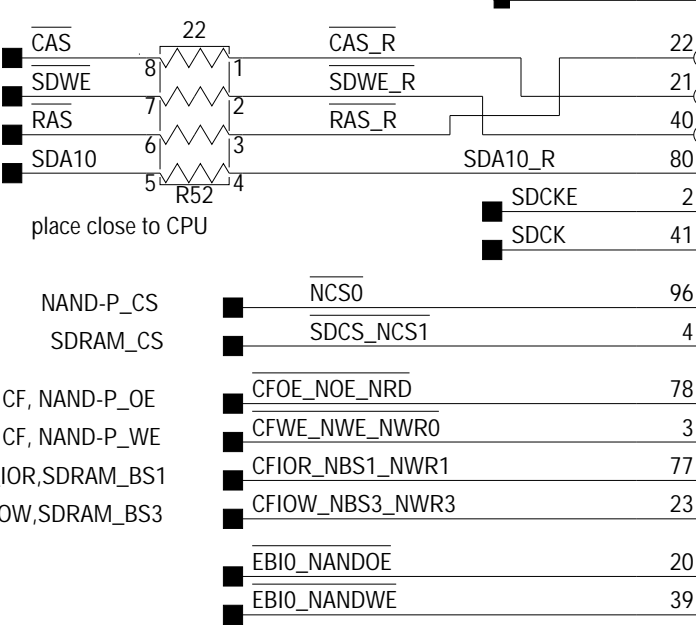
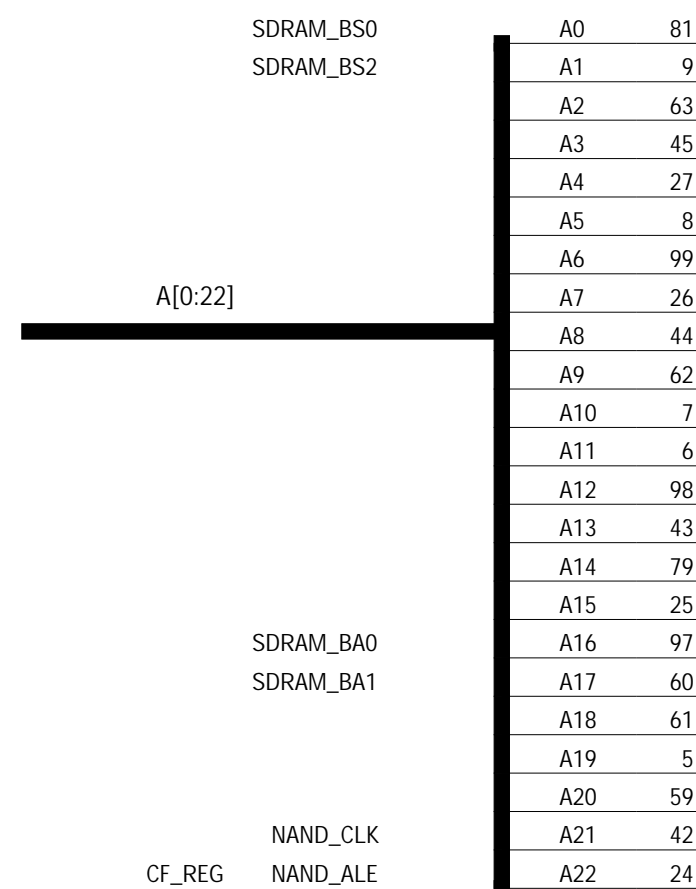
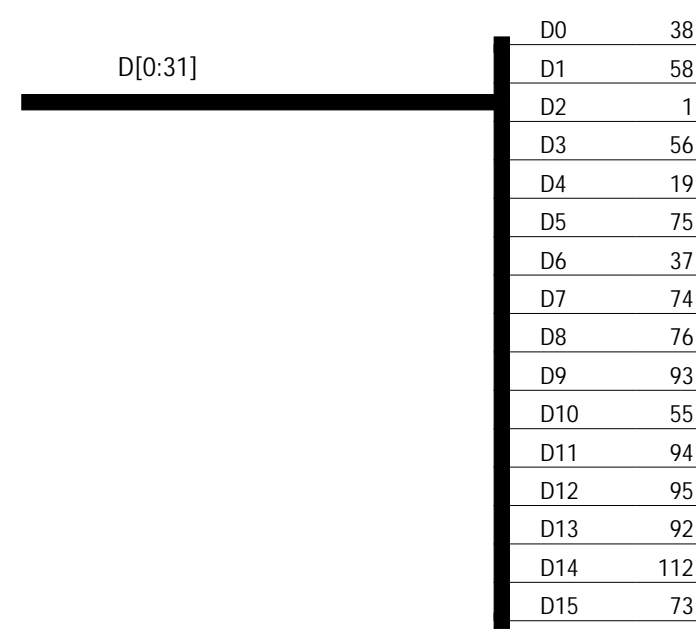


	Populated	
PM9263	R49	R50
v1.1	no	no
v1.2	no	yes
v1.3	yes	no
v1.4	yes	yes

AT91SAM9263



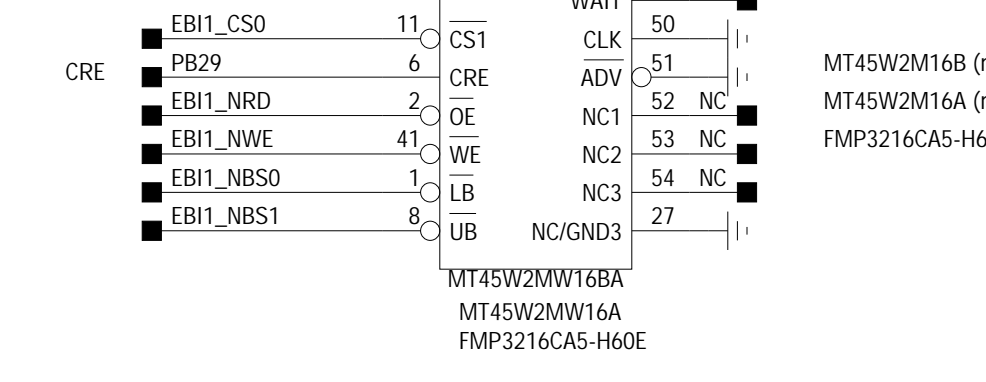
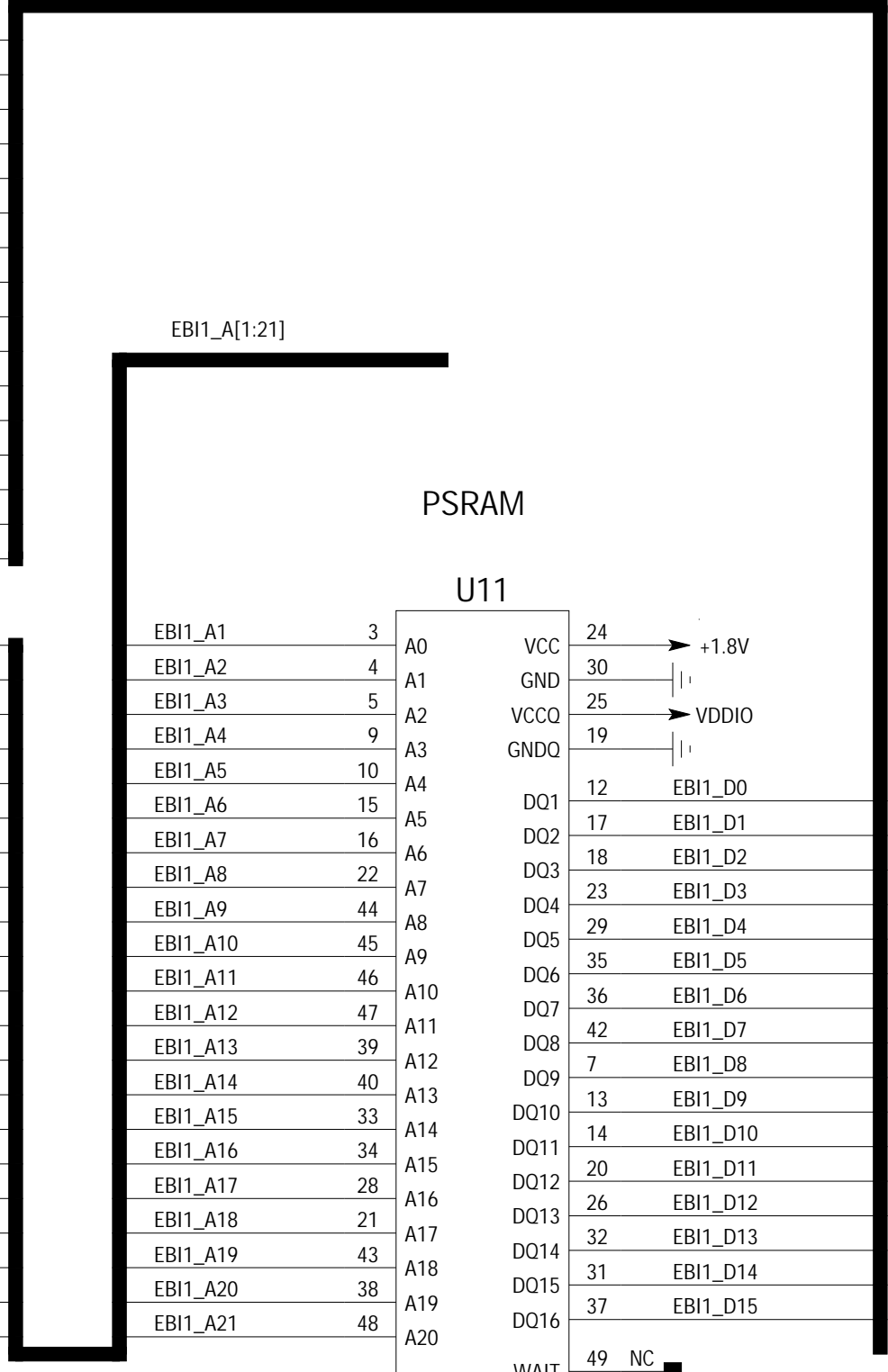
U14



D0	38	EBIO_D0_C2	EBI1_D0_T10	280	EBI1_D0
D1	58	EBIO_D1_D4	EBI1_D1_R10	262	EBI1_D1
D2	1	EBIO_D2_A1	EBI1_D2_N10	226	EBI1_D2
D3	56	EBIO_D3_D2	EBI1_D3_U11	299	EBI1_D3
D4	19	EBIO_D4_B1	EBI1_D4_P12	246	EBI1_D4
D5	75	EBIO_D5_E3	EBI1_D5_V11	317	EBI1_D5
D6	37	EBIO_D6_C1	EBI1_D6_N11	227	EBI1_D6
D7	74	EBIO_D7_E2	EBI1_D7_T11	281	EBI1_D7
D8	76	EBIO_D8_E4	EBI1_D8_R11	263	EBI1_D8
D9	93	EBIO_D9_F3	EBI1_D9_N12	228	EBI1_D9
D10	55	EBIO_D10_D1	EBI1_D10_P13	247	EBI1_D10
D11	94	EBIO_D11_F4	EBI1_D11_V12	318	EBI1_D11
D12	95	EBIO_D12_F5	EBI1_D12_U12	264	EBI1_D12
D13	92	EBIO_D13_F2	EBI1_D13_R12	300	EBI1_D13
D14	112	EBIO_D14_G4	EBI1_D14_T12	282	EBI1_D14
D15	73	EBIO_D15_E1	EBI1_D15_R13	265	EBI1_D15
A0	81	EBIO_NBS0/A0_E9	EBI1_NBS0/A0_U6	294	EBI1_NBS0
A1	9	EBIO_NBS2/NWR2/A1_A9	EBI1_NWR2/A1_V5	311	EBI1_A1
A2	63	EBIO_A2_D9	EBI1_A2_R6	258	EBI1_A2
A3	45	EBIO_A3_C9	EBI1_A3_V6	312	EBI1_A3
A4	27	EBIO_A4_B9	EBI1_A4_P8	242	EBI1_A4
A5	8	EBIO_A5_A8	EBI1_A5_U7	295	EBI1_A5
A6	99	EBIO_A6_F9	EBI1_A6_N7	223	EBI1_A6
A7	26	EBIO_A7_B8	EBI1_A7_T7	277	EBI1_A7
A8	44	EBIO_A8_C8	EBI1_A8_P7	241	EBI1_A8
A9	62	EBIO_A9_D8	EBI1_A9_V7	313	EBI1_A9
A10	7	EBIO_A10_A7	EBI1_A10_U8	296	EBI1_A10
A11	6	EBIO_A11_A6	EBI1_A11_N8	224	EBI1_A11
A12	98	EBIO_A12_F8	EBI1_A12_T8	278	EBI1_A12
A13	43	EBIO_A13_C7	EBI1_A13_R8	260	EBI1_A13
A14	79	EBIO_A14_E7	EBI1_A14_R7	259	EBI1_A14
A15	25	EBIO_A15_B7	EBI1_A15_V8	314	EBI1_A15
A16	97	EBIO_BA0/A16_F7	EBI1_BA0/A16_U9	297	EBI1_A16
A17	60	EBIO_BA1/A17_D6	EBI1_BA1/A17_R9	261	EBI1_A17
A18	61	EBIO_A18_D7	EBI1_A18_T9	279	EBI1_A18
A19	5	EBIO_A19_A5	EBI1_A19_P9	243	EBI1_A19
A20	59	EBIO_A20_D5	EBI1_A20_V9	315	EBI1_A20
A21	42	EBIO_A21_C6	EBI1_A21_M9	207	EBI1_A21
A22	24	EBIO_A22_B6	EBI1_A22_N9	225	NC
		EBIO_RAS_B4	EBI1_SDCK_R15	267	NC
		EBIO_CAS_B3	EBI1_NCS0_P10	244	EBI1_CS0
		EBIO_SDWE_C4			
		EBIO_SDA10_E8			
		EBIO_SDCKE_A2			
		EBIO_SDCK_C5			
		EBIO_NCS0_F6			
		EBIO_SDCS/NCS1_A4			
		EBIO_NRD/CFOE_E6	EBI1_NRD/CFOE_U10	298	EBI1_NRD
		EBIO_NWE/NWRO/CFWE_A3	EBI1_NWE/NWRO/CFWE_P11	245	EBI1_NWE
		EBIO_NBS1/NWR1/CFIOR_E5	EBI1_NBS1/NWR1/CFIOR_V10	316	EBI1_NBS1
		EBIO_NBS3/NWR3/CFIOW_B5			
		EBIO_NANDOE_B2			
		EBIO_NANDWE_C3			

AT91SAM9263

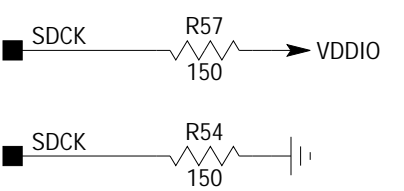
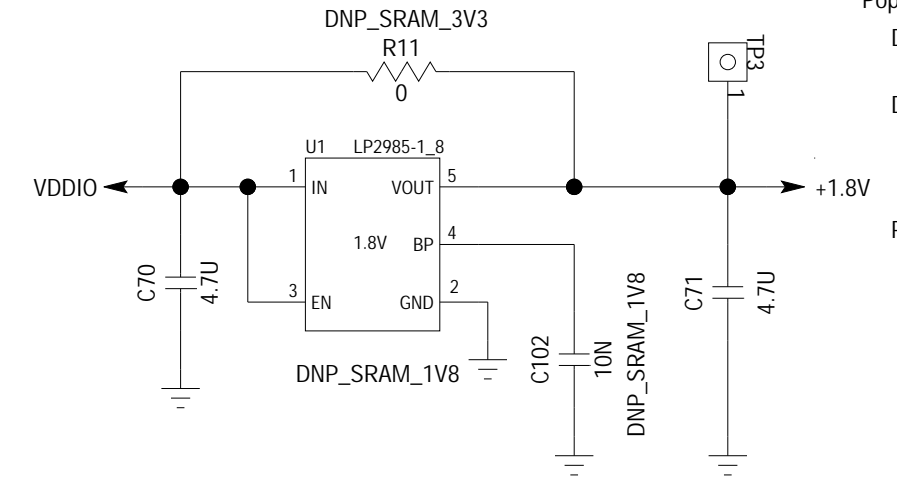
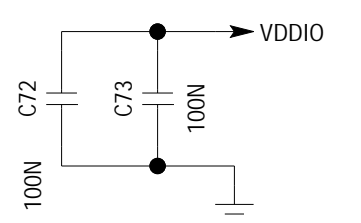
EBI1_D[0:15]

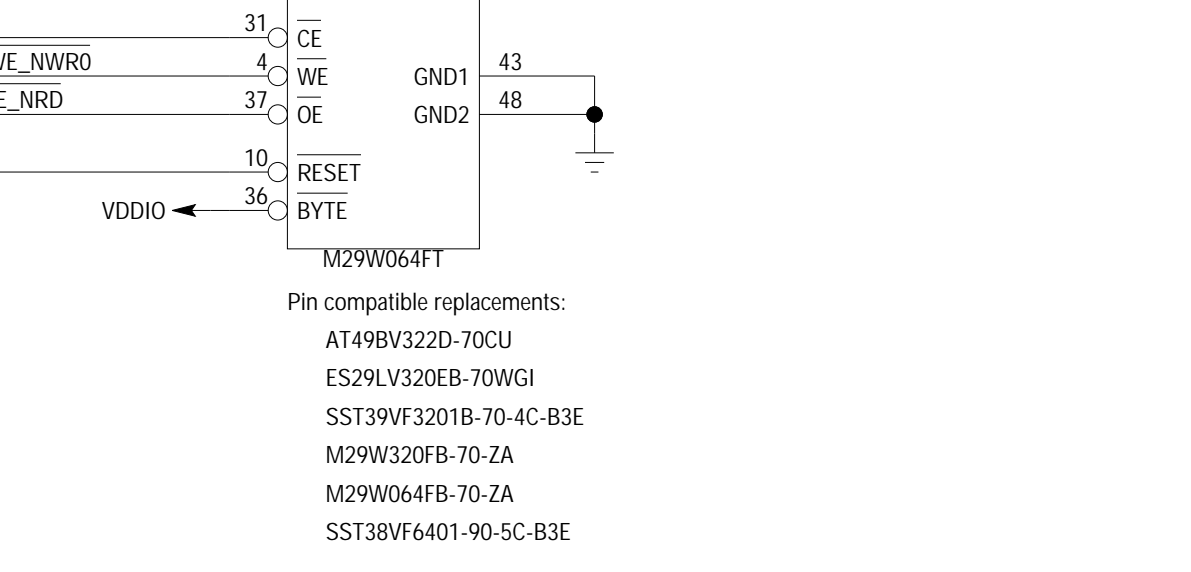
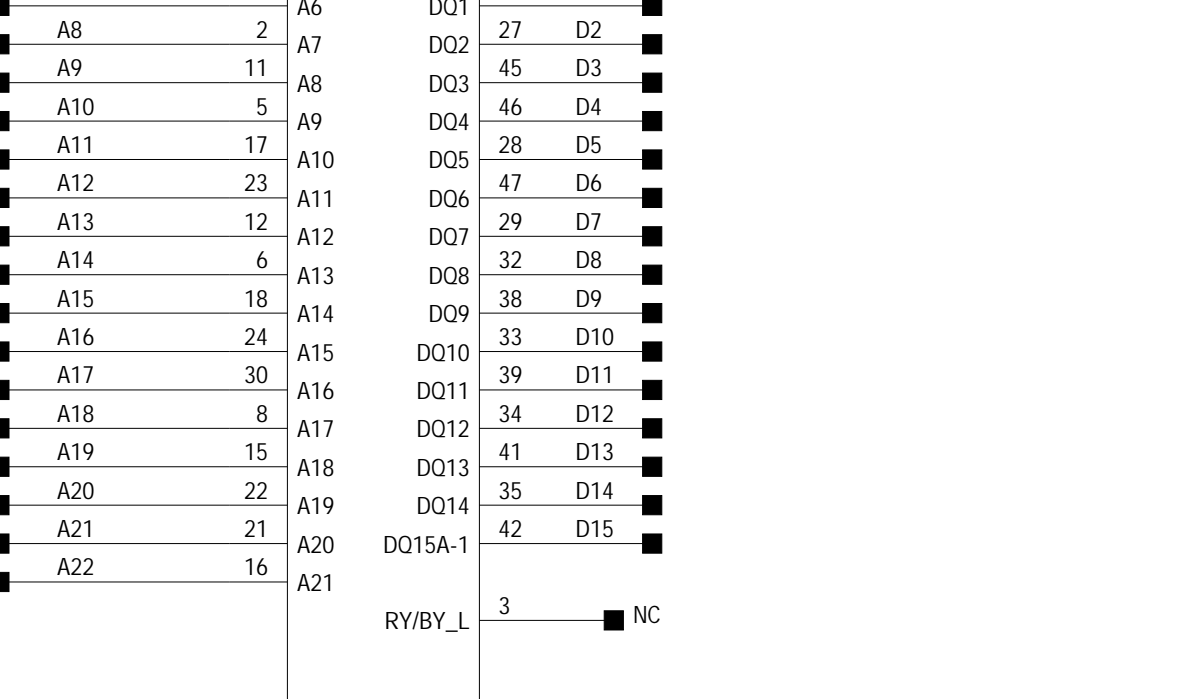
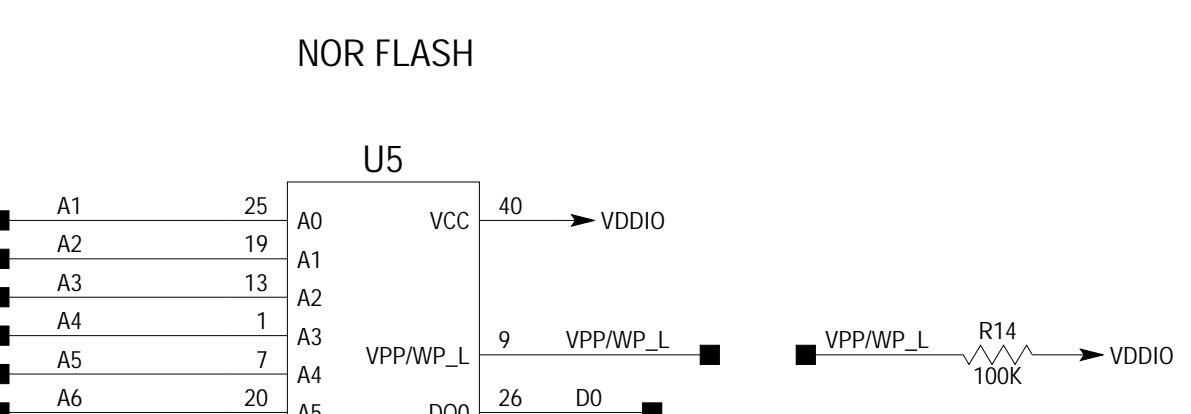
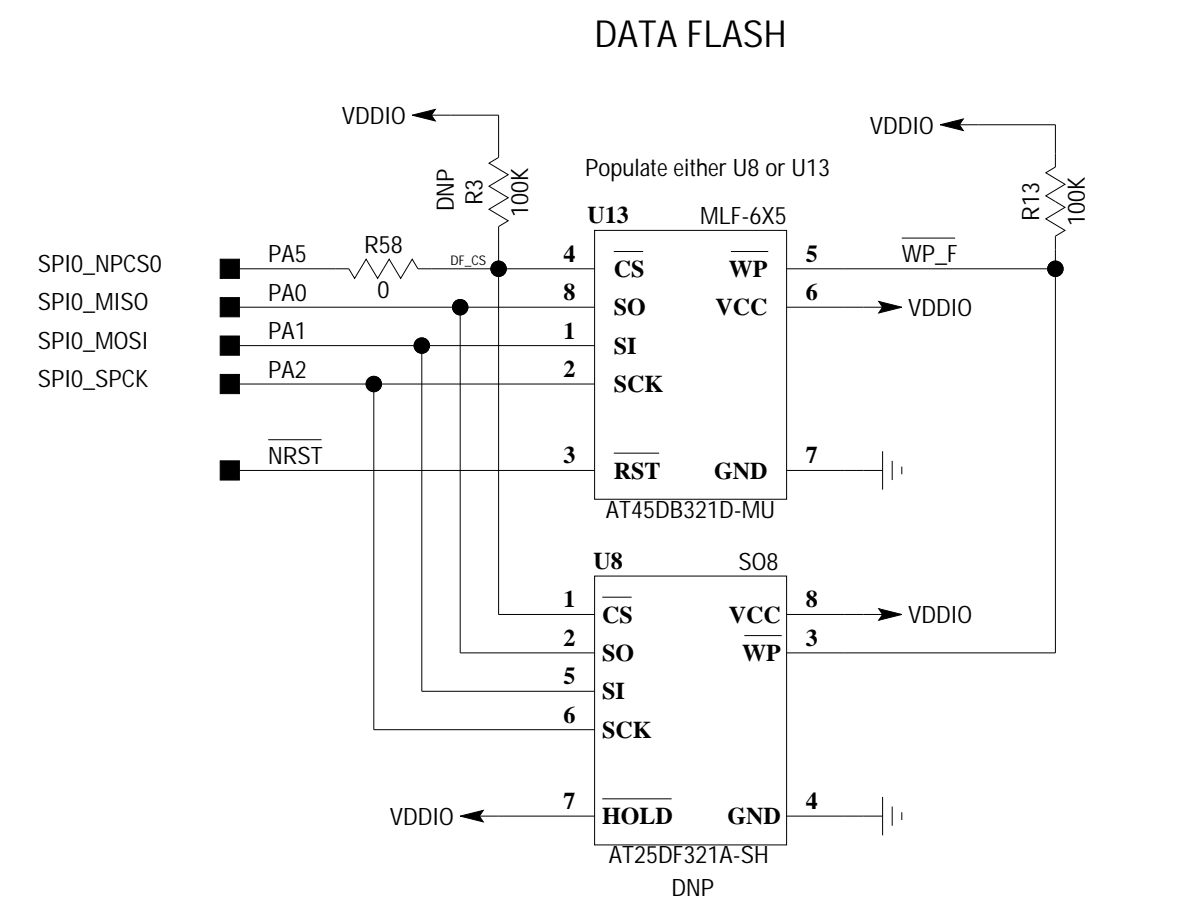
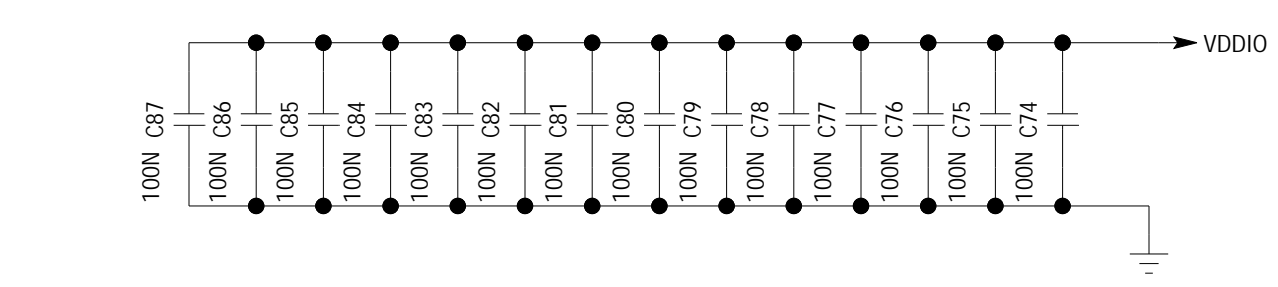
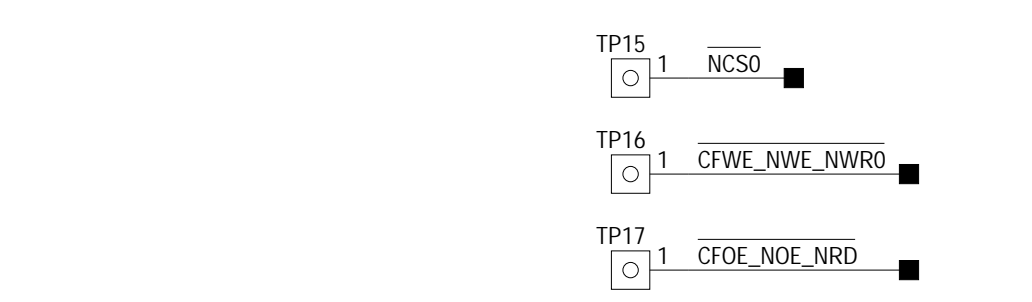
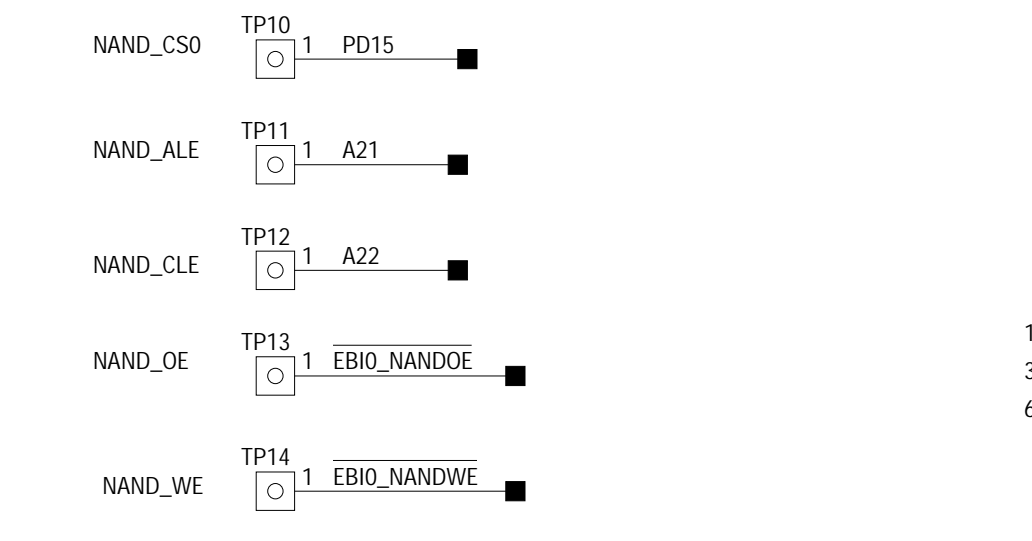
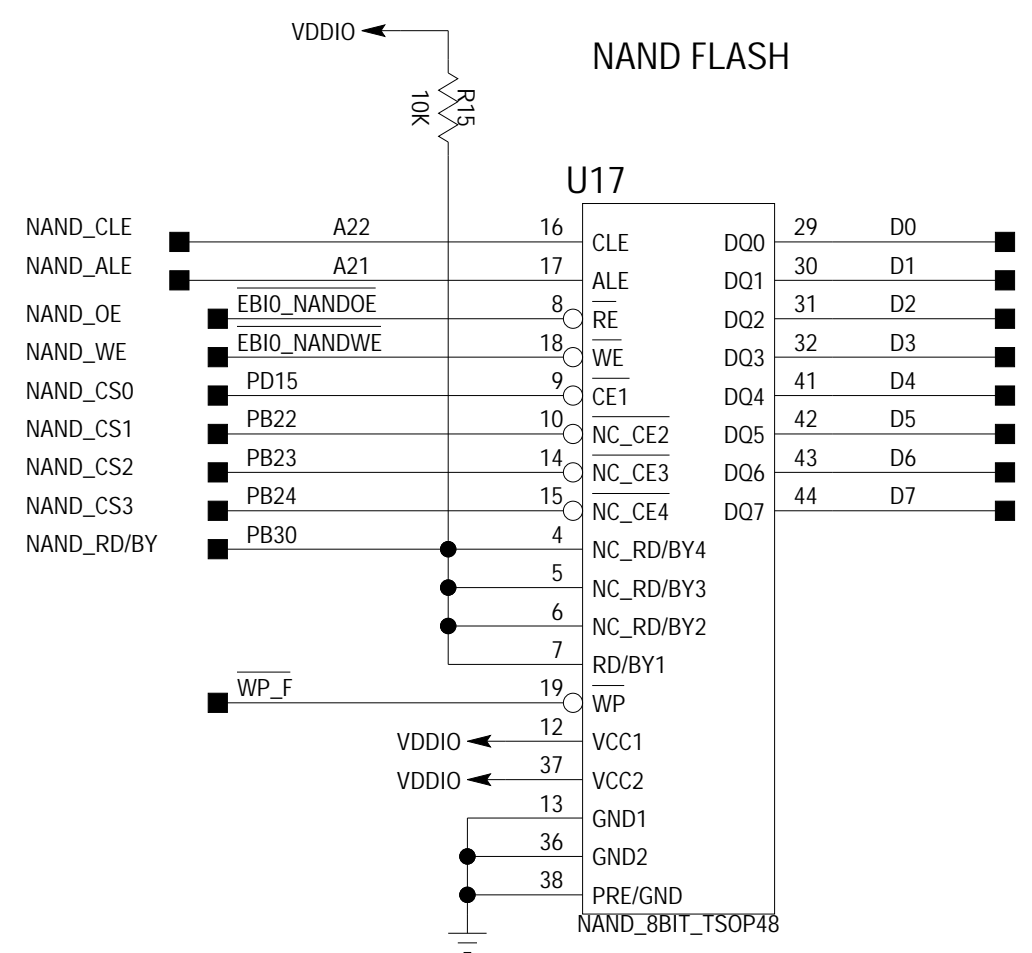
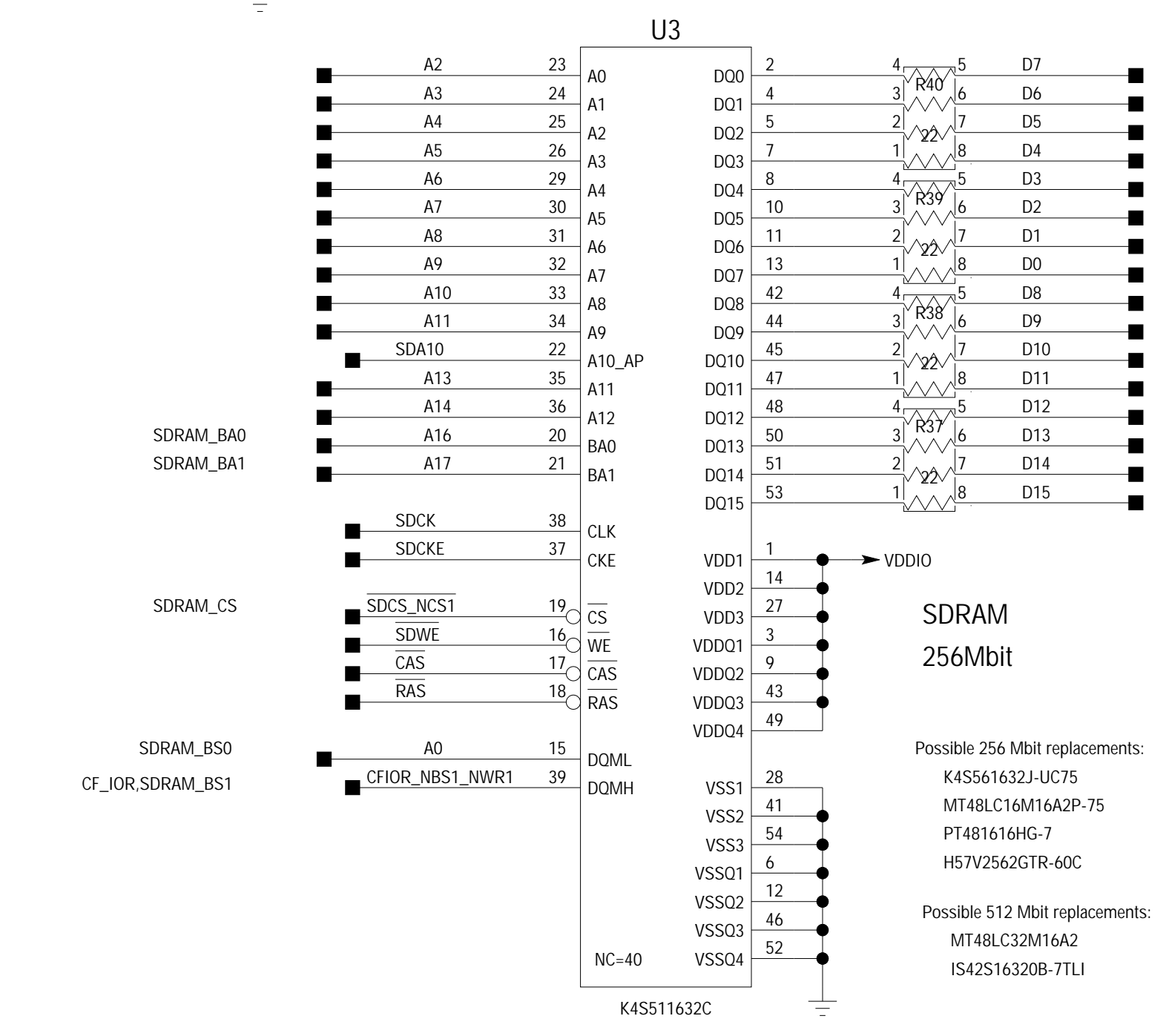
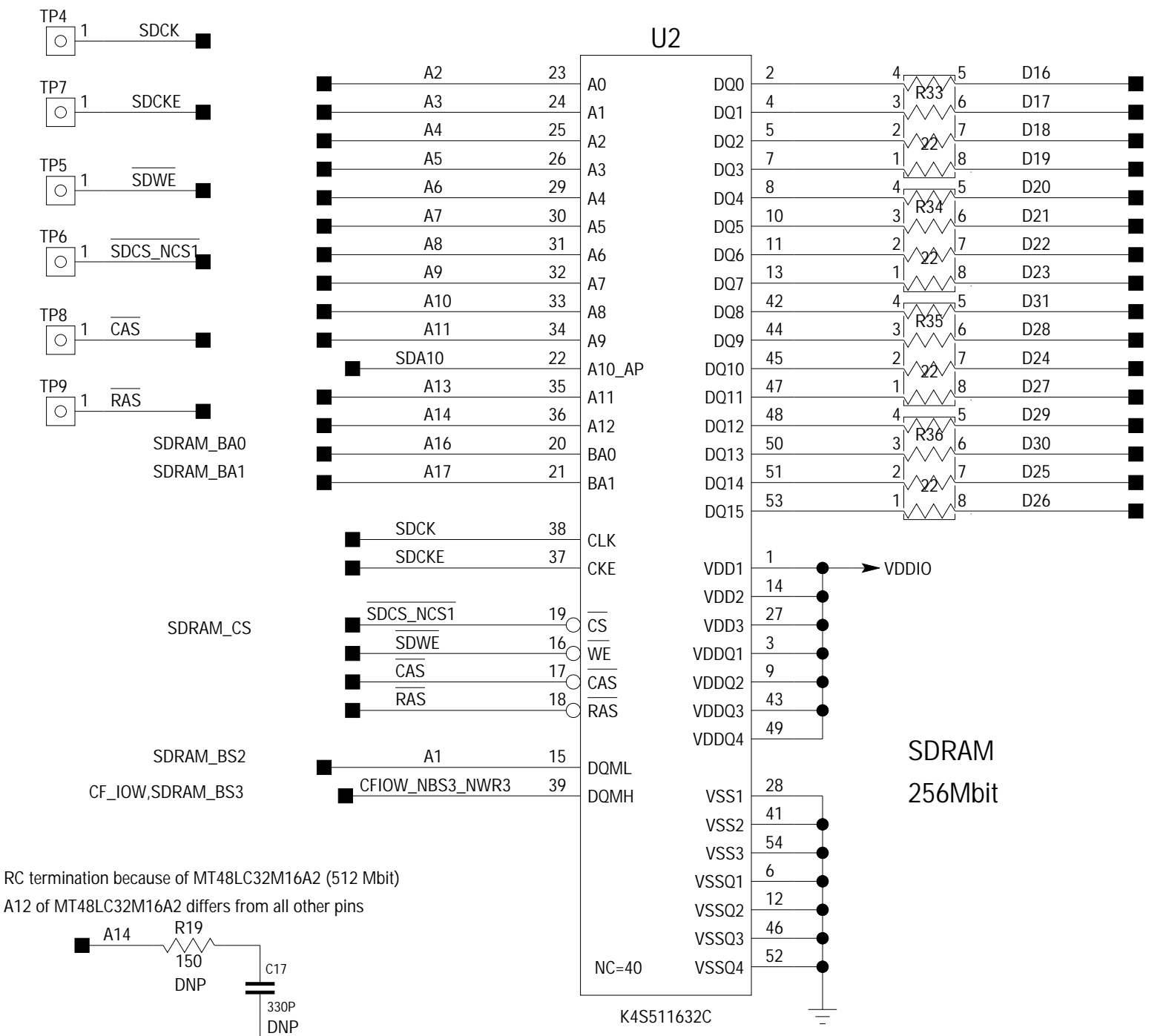


MT45W2M16B (marking code PW420) - CRE must be 0
 MT45W2M16A (marking code PW751) - CRE must be 1
 FMP3216CA5-H60E - CRE must be 1

Populate parts with label:
 DNP_SRAM_3V3 - if SRAM needs 3.3V core power supply (FMP3216CA5-H60E)
 DNP_SRAM_1V8 - if SRAM needs 1.8V core power supply (MT45W2MW16A or MT45W2MW16B)

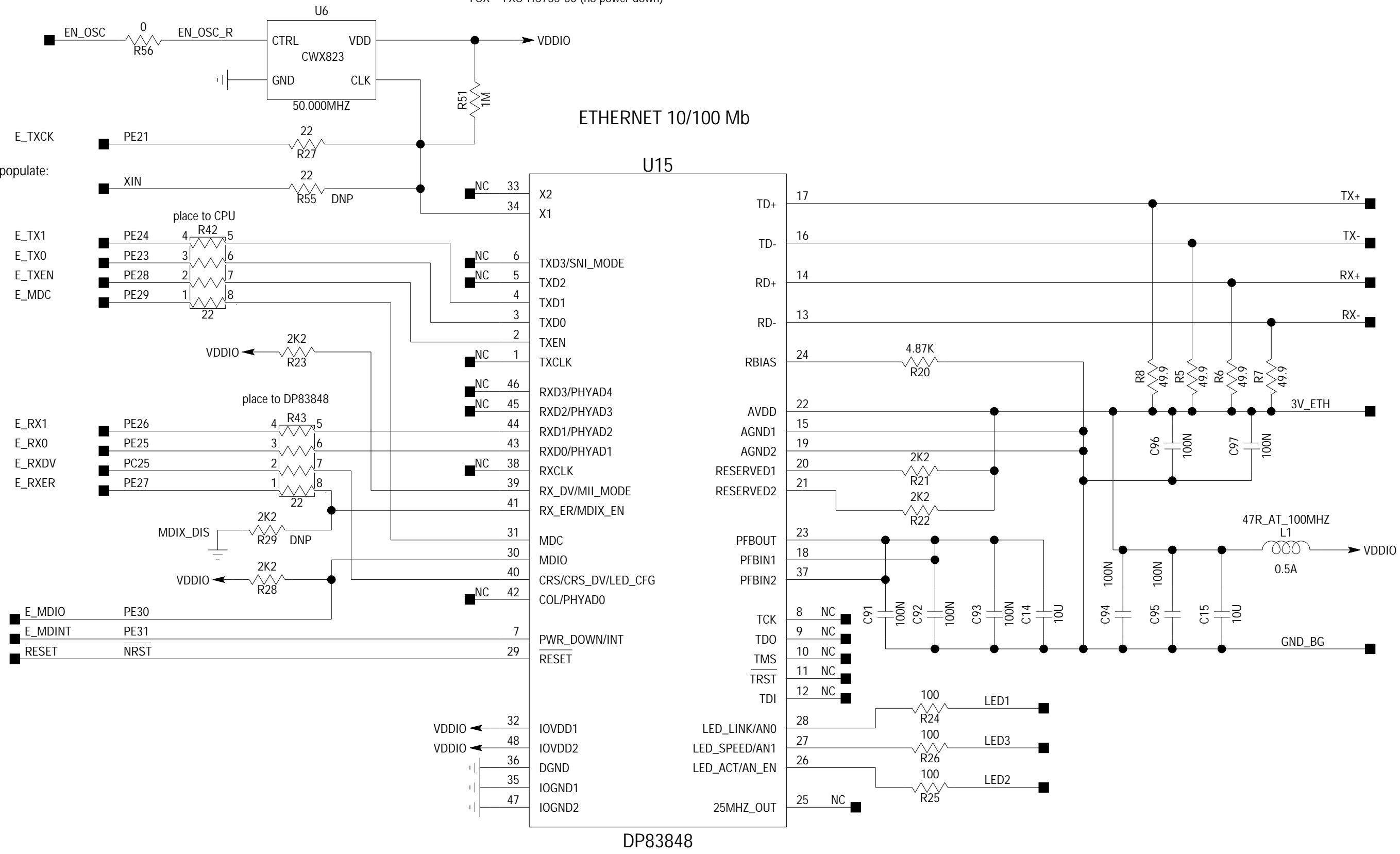
Populate either R11 or U1



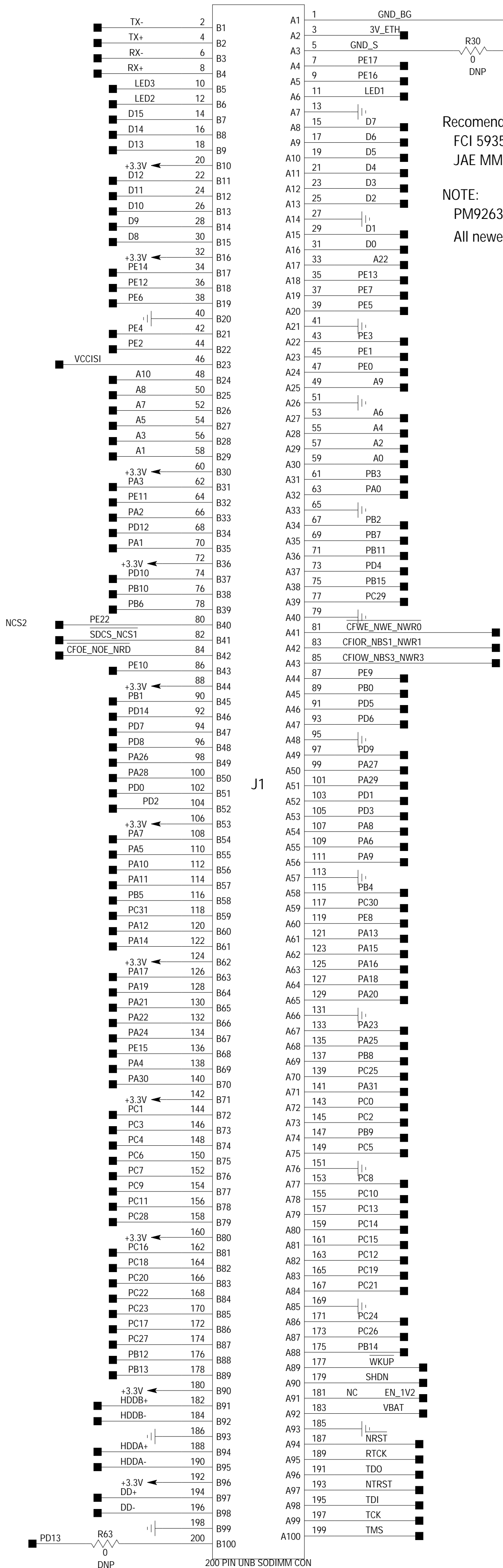


CONNOR-WINFIELD - CWX823-50.0M
 AVX/KYOCERA - K50-3C0SE50.0000MR
 ABRACON - ASV-50.000MHZ-EJ-T
 FOX - FXO-HC735-50 (no power down)

if R55 is populated, then don't populate:
 Y2, C4, C4, R53, R56



2.5V DDR1 SODIMM200 CONNECTOR



Recommended SODIMM200 2.5V connectors:

- FCI 59354-052FSLF
- JAE MM50-200B1-1E

NOTE:

- PM9263 v1.0 fits in 1.8V and 2.5V SODIMM200 connectors
- All newer versions fit only in 2.5V SODIMM200 connectors

