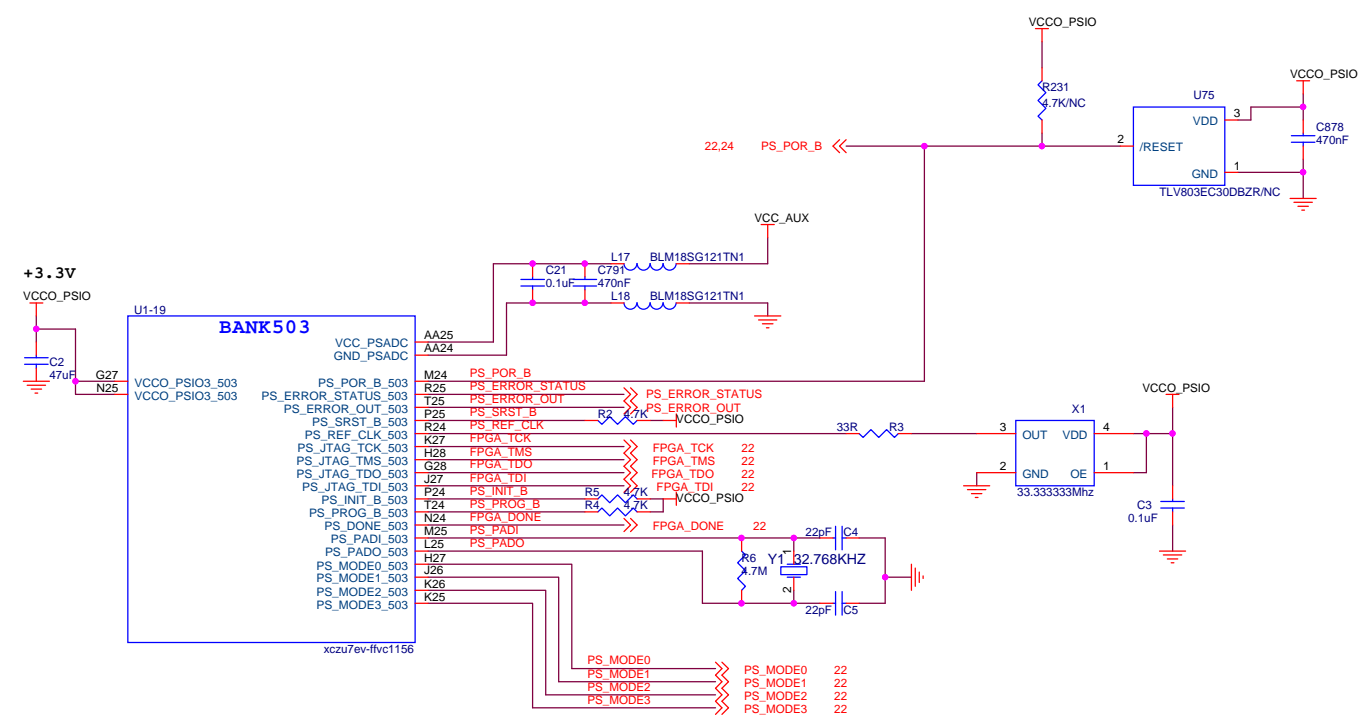
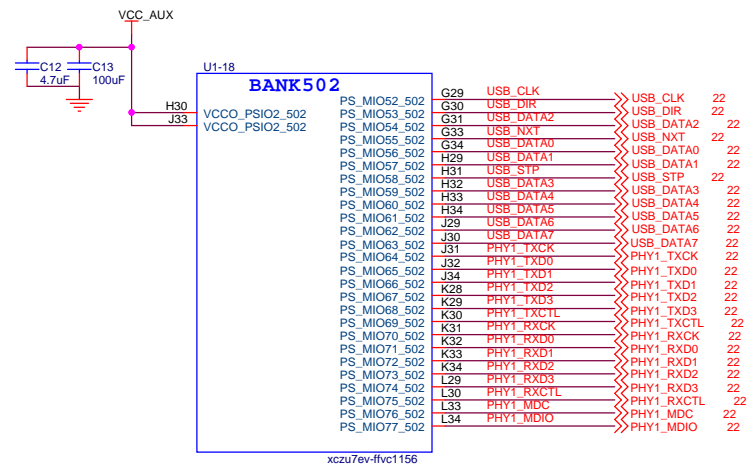
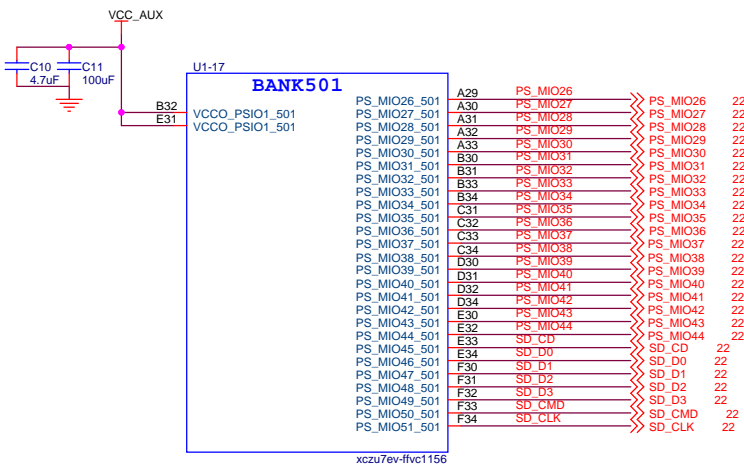
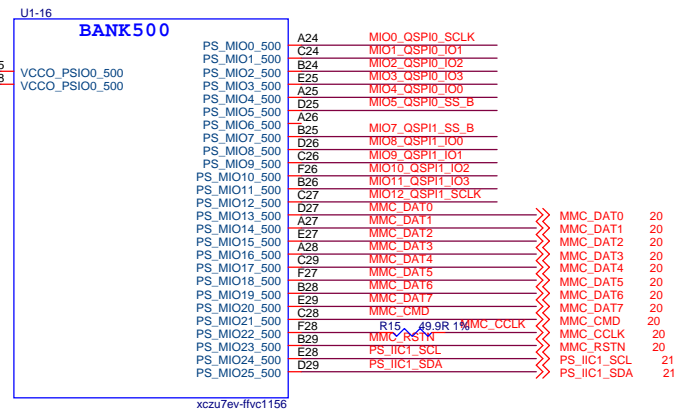
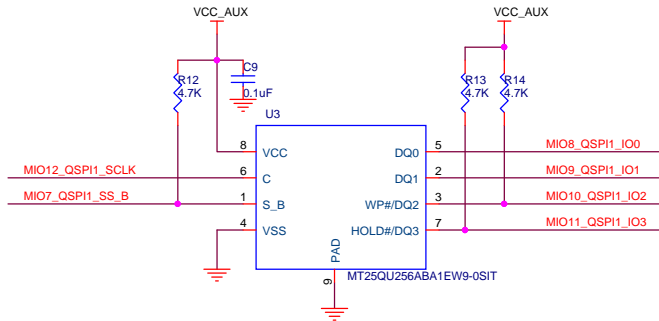
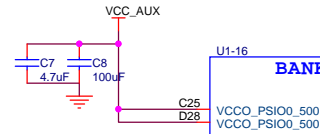
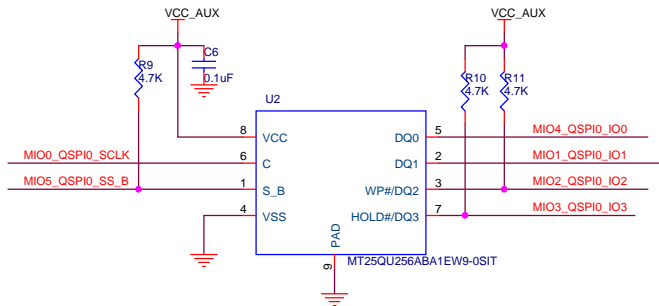
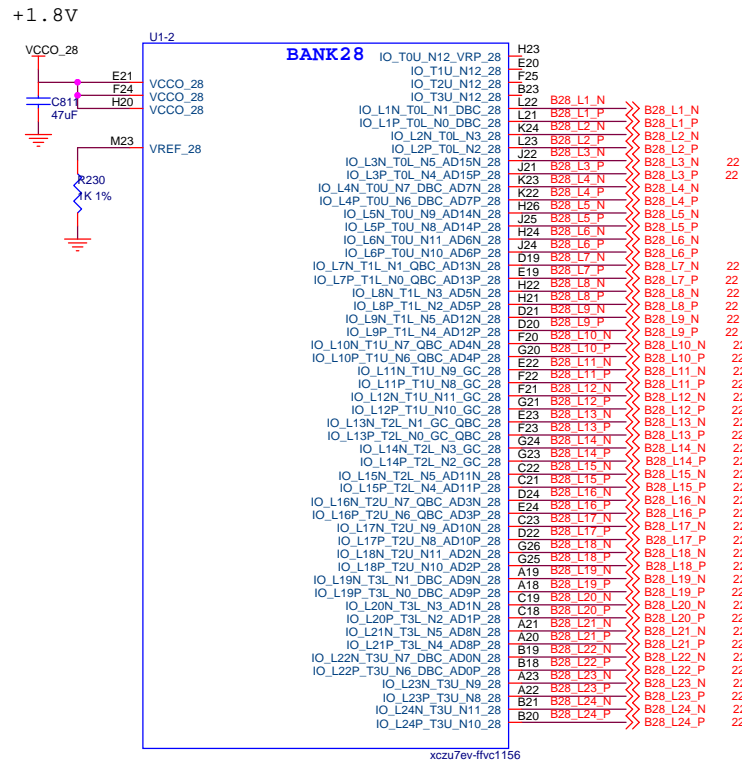
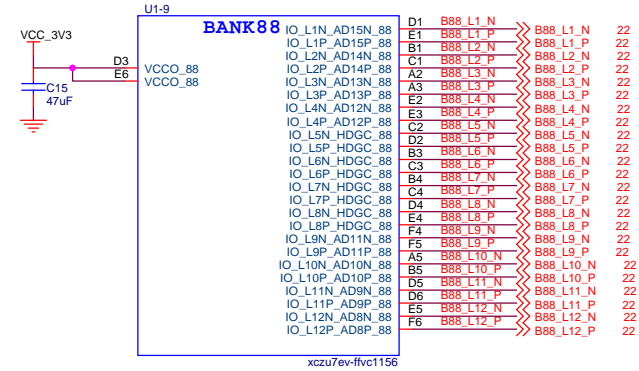
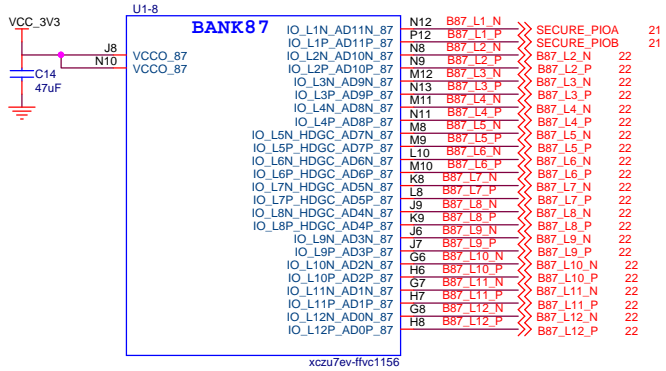
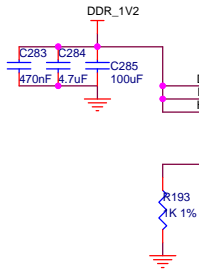


MODE[3:0]	BOOT MODE	Description
0000	PS JTAG	PS JTAG Interface
0001	Quad_SPI(24b)	24-Bit addresssing(QSPI24)
0010	Quad_SPI(32b)	32-Bit addresssing(QSPI32)
0011	SD0(2.0)	SD2.0
0101	SD1(2.0)	SD2.0
0110	eMMC(1.8V)	eMMC version 4.5 at 1.8V
0111	USB0(2.0)	USB 2.0 only
1110	SD1 LS(3.0)	SD 3.0





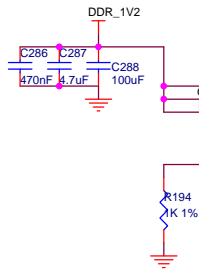




BANK 67

IO_T0U_N12_VRP_67	C14	VRP_67	240 1%	R195	
IO_T1U_N12_67	E13				
IO_T2U_N12_67	J19				
IO_T3U_N12_67	J20				
IO_L1N_T0L_N1_DBC_67	A16				
IO_L1P_T0L_N0_DBC_67	A17	PL_DDR4_DM1	>>>	PL_DDR4_DM1	16
IO_L2N_T0L_N3_67	B15	PL_DDR4_DQ12	>>>	PL_DDR4_DQ12	16
IO_L2P_T0L_N2_67	B16	PL_DDR4_DQ8	>>>	PL_DDR4_DQ8	16
IO_L3N_T0L_N5_AD15N_67	A14	PL_DDR4_DQ14	>>>	PL_DDR4_DQ14	16
IO_L3P_T0L_N4_AD15P_67	A15	PL_DDR4_DQ10	>>>	PL_DDR4_DQ10	16
IO_L4N_T0U_N7_DBC_AD7N_67	B14	PL_DDR4_DQS1_P	>>>	PL_DDR4_DQS1_N	16
IO_L4P_T0U_N6_DBC_AD7P_67	A12	PL_DDR4_DQ13	>>>	PL_DDR4_DQS1_P	16
IO_L5N_T0U_N9_AD14N_67	A13	PL_DDR4_DQ11	>>>	PL_DDR4_DQ11	16
IO_L5P_T0U_N8_AD14P_67	C12	PL_DDR4_DQ15	>>>	PL_DDR4_DQ15	16
IO_L6N_T0U_N11_AD6N_67	C13	PL_DDR4_DQ5	>>>	PL_DDR4_DQ5	16
IO_L6P_T0U_N10_AD6P_67	C16				
IO_L7N_T1L_N1_QBC_AD13N_67	D16	PL_DDR4_DM0	>>>	PL_DDR4_DM0	16
IO_L7P_T1L_N0_QBC_AD13P_67	C17	PL_DDR4_DQ7	>>>	PL_DDR4_DQ7	16
IO_L8N_T1L_N3_AD5N_67	D17	PL_DDR4_DQ2	>>>	PL_DDR4_DQ2	16
IO_L8P_T1L_N2_AD5P_67	E17	PL_DDR4_DQ0	>>>	PL_DDR4_DQ0	16
IO_L9N_T1L_N5_AD12N_67	E18	PL_DDR4_DQ4	>>>	PL_DDR4_DQ4	16
IO_L9P_T1L_N4_AD12P_67	F13	PL_DDR4_DQS0_N	>>>	PL_DDR4_DQ4	16
IO_L10N_T1U_N7_QBC_AD4N_67	G14	PL_DDR4_DQS0_P	>>>	PL_DDR4_DQS0_N	16
IO_L10P_T1U_N6_QBC_AD4P_67	D14	PL_DDR4_DQ5	>>>	PL_DDR4_DQS0_P	16
IO_L11N_T1U_N9_GC_67	D15	PL_DDR4_DQ1	>>>	PL_DDR4_DQ5	16
IO_L11P_T1U_N8_GC_67	E14	PL_DDR4_DQ3	>>>	PL_DDR4_DQ1	16
IO_L12N_T1U_N11_GC_67	E15	PL_DDR4_DQ6	>>>	PL_DDR4_DQ3	16
IO_L12P_T1U_N10_GC_67	F16			PL_DDR4_DQ6	16
IO_L13N_T2L_N1_GC_QBC_67	F17	PL_DDR4_DM2	>>>	PL_DDR4_DM2	17
IO_L13P_T2L_N0_GC_QBC_67	F15	PL_DDR4_DQ21	>>>	PL_DDR4_DQ21	17
IO_L14N_T2L_N3_GC_67	G15	PL_DDR4_DQ23	>>>	PL_DDR4_DQ23	17
IO_L14P_T2L_N2_GC_67	G19	PL_DDR4_DQ20	>>>	PL_DDR4_DQ23	17
IO_L15N_T2L_N5_AD11N_67	H19	PL_DDR4_DQ16	>>>	PL_DDR4_DQ20	17
IO_L15P_T2L_N4_AD11P_67	H17	PL_DDR4_DQS2_N	>>>	PL_DDR4_DQ16	17
IO_L16N_T2U_N7_QBC_AD3N_67	H18	PL_DDR4_DQS2_P	>>>	PL_DDR4_DQS2_N	17
IO_L16P_T2U_N6_QBC_AD3P_67	F18	PL_DDR4_DQ22	>>>	PL_DDR4_DQ22	17
IO_L17N_T2U_N9_AD10N_67	G18	PL_DDR4_DQ18	>>>	PL_DDR4_DQ18	17
IO_L17P_T2U_N8_AD10P_67	G16	PL_DDR4_DQ19	>>>	PL_DDR4_DQ18	17
IO_L18N_T2U_N11_AD2N_67	H16	PL_DDR4_DQ17	>>>	PL_DDR4_DQ19	17
IO_L18P_T2U_N10_AD2P_67	K20			PL_DDR4_DQ17	17
IO_L19N_T3L_N1_DBC_AD9N_67	L20	PL_DDR4_DM3	>>>	PL_DDR4_DM3	17
IO_L19P_T3L_N0_DBC_AD9P_67	J15	PL_DDR4_DQ31	>>>	PL_DDR4_DQ31	17
IO_L20N_T3L_N3_AD1N_67	J16	PL_DDR4_DQ29	>>>	PL_DDR4_DQ31	17
IO_L20P_T3L_N2_AD1P_67	J17	PL_DDR4_DQ25	>>>	PL_DDR4_DQ29	17
IO_L21N_T3L_N5_AD8N_67	K17	PL_DDR4_DQ27	>>>	PL_DDR4_DQ25	17
IO_L21P_T3L_N4_AD8P_67	K15	PL_DDR4_DQS3_N	>>>	PL_DDR4_DQ27	17
IO_L22N_T3U_N7_DBC_AD0N_67	L15	PL_DDR4_DQS3_P	>>>	PL_DDR4_DQS3_N	17
IO_L22P_T3U_N6_DBC_AD0P_67	K18	PL_DDR4_DQ30	>>>	PL_DDR4_DQS3_P	17
IO_L23N_T3U_N9_67	K19	PL_DDR4_DQ26	>>>	PL_DDR4_DQ30	17
IO_L23P_T3U_N8_67	L16	PL_DDR4_DQ24	>>>	PL_DDR4_DQ26	17
IO_L24N_T3U_N11_67	L17	PL_DDR4_DQ28	>>>	PL_DDR4_DQ24	17
IO_L24P_T3U_N10_67	L17	PL_DDR4_DQ28	>>>	PL_DDR4_DQ28	17

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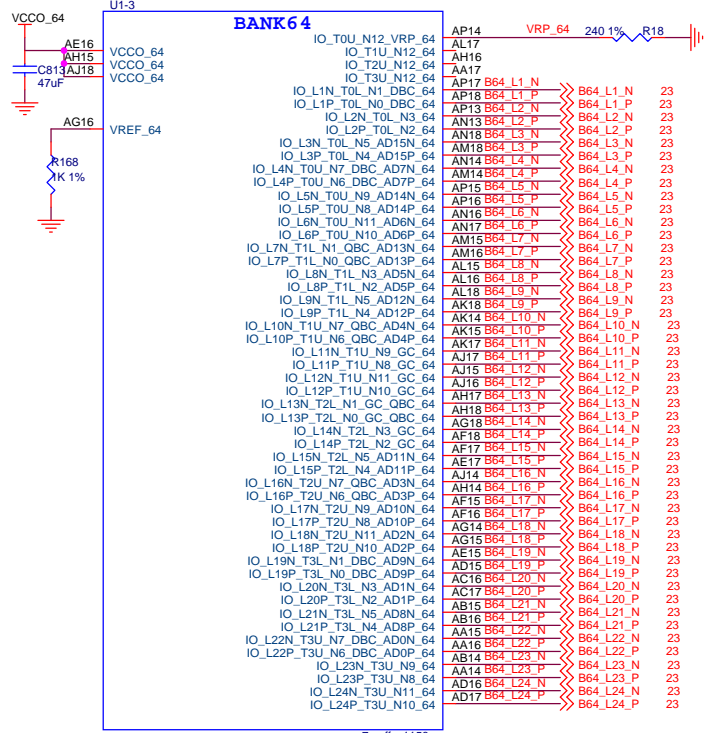


BANK 68

IO_T0U_N12_VRP_68	H14	VRP_68	240 1%	R196	
IO_T1U_N12_68	D7				
IO_T2U_N12_68	G13				
IO_T3U_N12_68	A9				
IO_L1N_T0L_N1_DBC_68	L13				
IO_L1P_T0L_N0_DBC_68	M13	PL_DDR4_DM7	>>>	PL_DDR4_DM7	19
IO_L2N_T0L_N3_68	J10	PL_DDR4_DQ62	>>>	PL_DDR4_DQ62	19
IO_L2P_T0L_N2_68	K10	PL_DDR4_DQ59	>>>	PL_DDR4_DQ62	19
IO_L3N_T0L_N5_AD15N_68	L11	PL_DDR4_DQ83	>>>	PL_DDR4_DQ59	19
IO_L3P_T0L_N4_AD15P_68	L12	PL_DDR4_DQ61	>>>	PL_DDR4_DQ63	19
IO_L4N_T0U_N7_DBC_AD7N_68	J11	PL_DDR4_DQS7_N	>>>	PL_DDR4_DQ61	19
IO_L4P_T0U_N6_DBC_AD7P_68	K12	PL_DDR4_DQS7_P	>>>	PL_DDR4_DQS7_N	19
IO_L5N_T0U_N9_AD14N_68	J14	PL_DDR4_DQ56	>>>	PL_DDR4_DQS7_P	19
IO_L5P_T0U_N8_AD14P_68	K14	PL_DDR4_DQ58	>>>	PL_DDR4_DQ56	19
IO_L6N_T0U_N11_AD6N_68	K13	PL_DDR4_DQ57	>>>	PL_DDR4_DQ58	19
IO_L6P_T0U_N10_AD6P_68	L14	PL_DDR4_DQ60	>>>	PL_DDR4_DQ57	19
IO_L7N_T1L_N1_QBC_AD13N_68	E7	PL_DDR4_DM6	>>>	PL_DDR4_DQ60	19
IO_L7P_T1L_N0_QBC_AD13P_68	C5	PL_DDR4_DQ50	>>>	PL_DDR4_DM6	19
IO_L8N_T1L_N3_AD5N_68	C9	PL_DDR4_DQ54	>>>	PL_DDR4_DQ50	19
IO_L8P_T1L_N2_AD5P_68	E8	PL_DDR4_DQ51	>>>	PL_DDR4_DQ54	19
IO_L9N_T1L_N5_AD12N_68	F8	PL_DDR4_DQ49	>>>	PL_DDR4_DQ51	19
IO_L9P_T1L_N4_AD12P_68	D9	PL_DDR4_DQS6_N	>>>	PL_DDR4_DQ49	19
IO_L10N_T1U_N7_QBC_AD4N_68	E9	PL_DDR4_DQS6_P	>>>	PL_DDR4_DQS6_N	19
IO_L10P_T1U_N6_QBC_AD4P_68	G9	PL_DDR4_DQ55	>>>	PL_DDR4_DQS6_P	19
IO_L11N_T1U_N9_GC_68	H9	PL_DDR4_DQ53	>>>	PL_DDR4_DQ55	19
IO_L11P_T1U_N8_GC_68	F10	PL_DDR4_DQ52	>>>	PL_DDR4_DQ53	19
IO_L12N_T1U_N11_GC_68	G10	PL_DDR4_DQ48	>>>	PL_DDR4_DQ52	19
IO_L12P_T1U_N10_GC_68	G11			PL_DDR4_DQ48	19
IO_L13N_T2L_N1_GC_QBC_68	H11	PL_DDR4_DM4	>>>	PL_DDR4_DM4	18
IO_L13P_T2L_N0_GC_QBC_68	E10	PL_DDR4_DQ39	>>>	PL_DDR4_DQ39	18
IO_L14N_T2L_N3_GC_68	F11	PL_DDR4_DQ35	>>>	PL_DDR4_DQ39	18
IO_L14P_T2L_N2_GC_68	H12	PL_DDR4_DQ37	>>>	PL_DDR4_DQ35	18
IO_L15N_T2L_N5_AD11N_68	H13	PL_DDR4_DQ38	>>>	PL_DDR4_DQ37	18
IO_L15P_T2L_N4_AD11P_68	D10	PL_DDR4_DQS4_N	>>>	PL_DDR4_DQ38	18
IO_L16N_T2U_N7_QBC_AD3N_68	D11	PL_DDR4_DQS4_P	>>>	PL_DDR4_DQS4_N	18
IO_L16P_T2U_N6_QBC_AD3P_68	E12	PL_DDR4_DQ34	>>>	PL_DDR4_DQS4_P	18
IO_L17N_T2U_N9_AD10N_68	F12	PL_DDR4_DQ33	>>>	PL_DDR4_DQ34	18
IO_L17P_T2U_N8_AD10P_68	C11	PL_DDR4_DQ32	>>>	PL_DDR4_DQ33	18
IO_L18N_T2U_N11_AD2N_68	D12	PL_DDR4_DQ36	>>>	PL_DDR4_DQ32	18
IO_L18P_T2U_N10_AD2P_68	C6	PL_DDR4_DM5	>>>	PL_DDR4_DQ36	18
IO_L19N_T3L_N1_DBC_AD9N_68	B8	PL_DDR4_DQ40	>>>	PL_DDR4_DM5	18
IO_L19P_T3L_N0_DBC_AD9P_68	B9	PL_DDR4_DQ42	>>>	PL_DDR4_DQ40	18
IO_L20N_T3L_N3_AD1N_68	A6	PL_DDR4_DQ41	>>>	PL_DDR4_DQ42	18
IO_L20P_T3L_N2_AD1P_68	B6	PL_DDR4_DQ45	>>>	PL_DDR4_DQ41	18
IO_L21N_T3L_N5_AD8N_68	A10	PL_DDR4_DQS5_N	>>>	PL_DDR4_DQ45	18
IO_L21P_T3L_N4_AD8P_68	B10	PL_DDR4_DQS5_P	>>>	PL_DDR4_DQS5_N	18
IO_L22N_T3U_N7_DBC_AD0N_68	A7	PL_DDR4_DQ43	>>>	PL_DDR4_DQS5_P	18
IO_L22P_T3U_N6_DBC_AD0P_68	A8	PL_DDR4_DQ47	>>>	PL_DDR4_DQ43	18
IO_L23N_T3U_N9_68	A11	PL_DDR4_DQ46	>>>	PL_DDR4_DQ47	18
IO_L23P_T3U_N8_68	B11	PL_DDR4_DQ44	>>>	PL_DDR4_DQ46	18
IO_L24N_T3U_N11_68				PL_DDR4_DQ44	18
IO_L24P_T3U_N10_68					

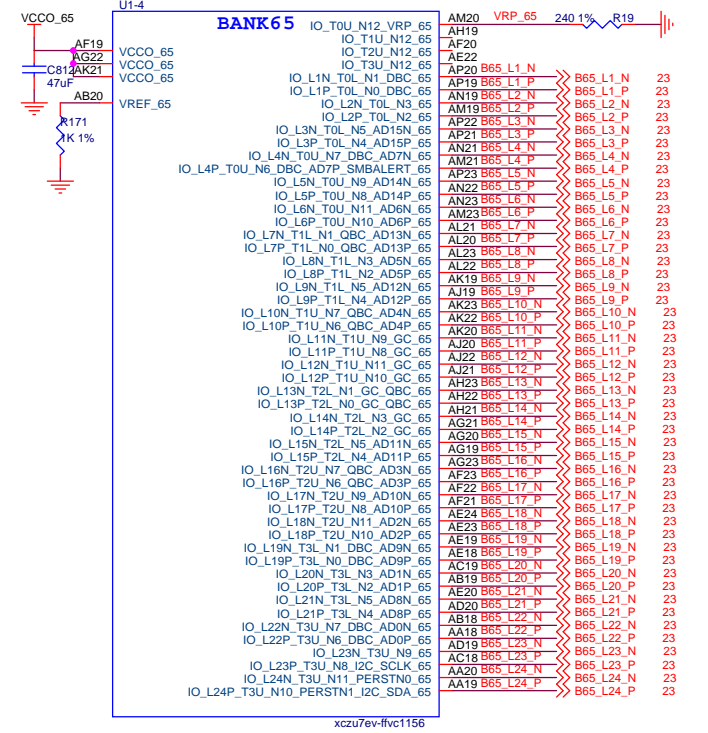
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+1.8V



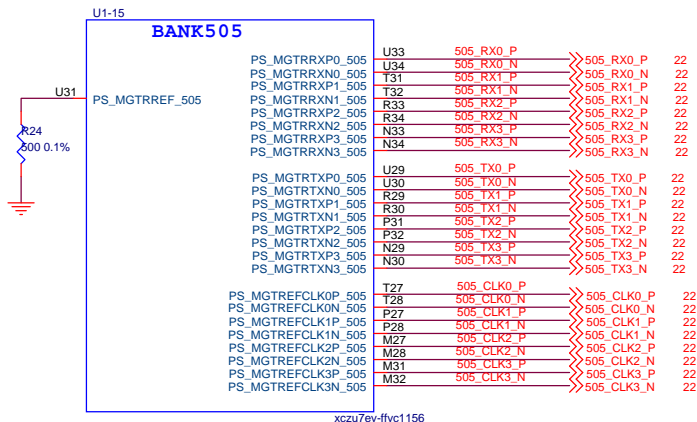
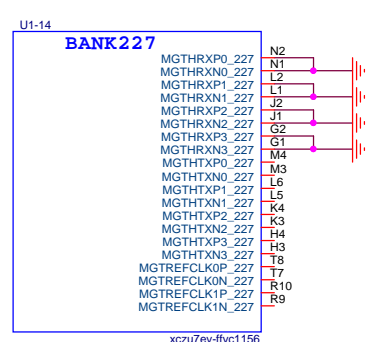
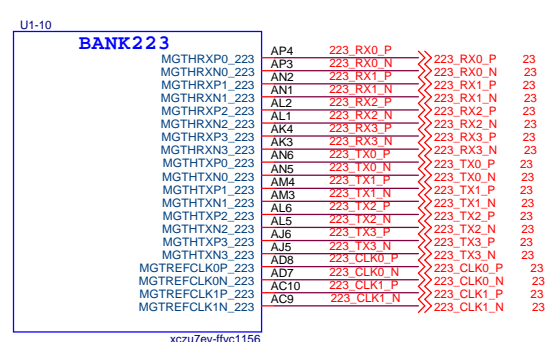
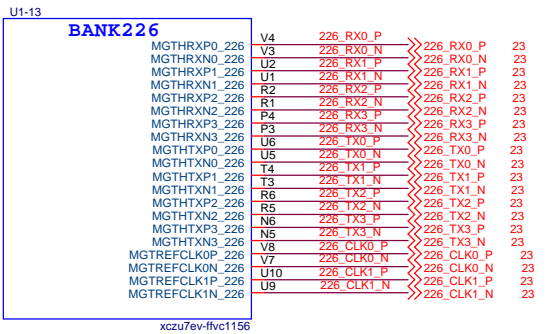
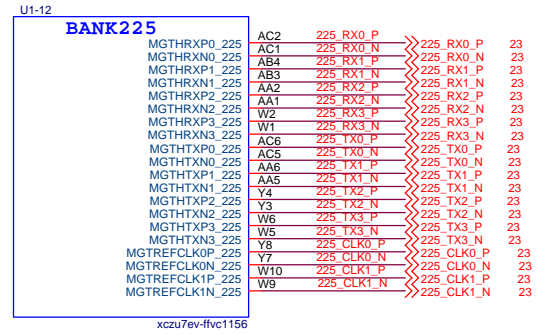
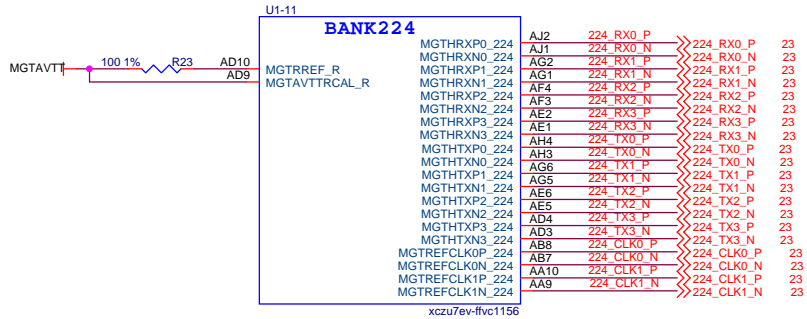
xczu7ev-fvc1156

+1.8V



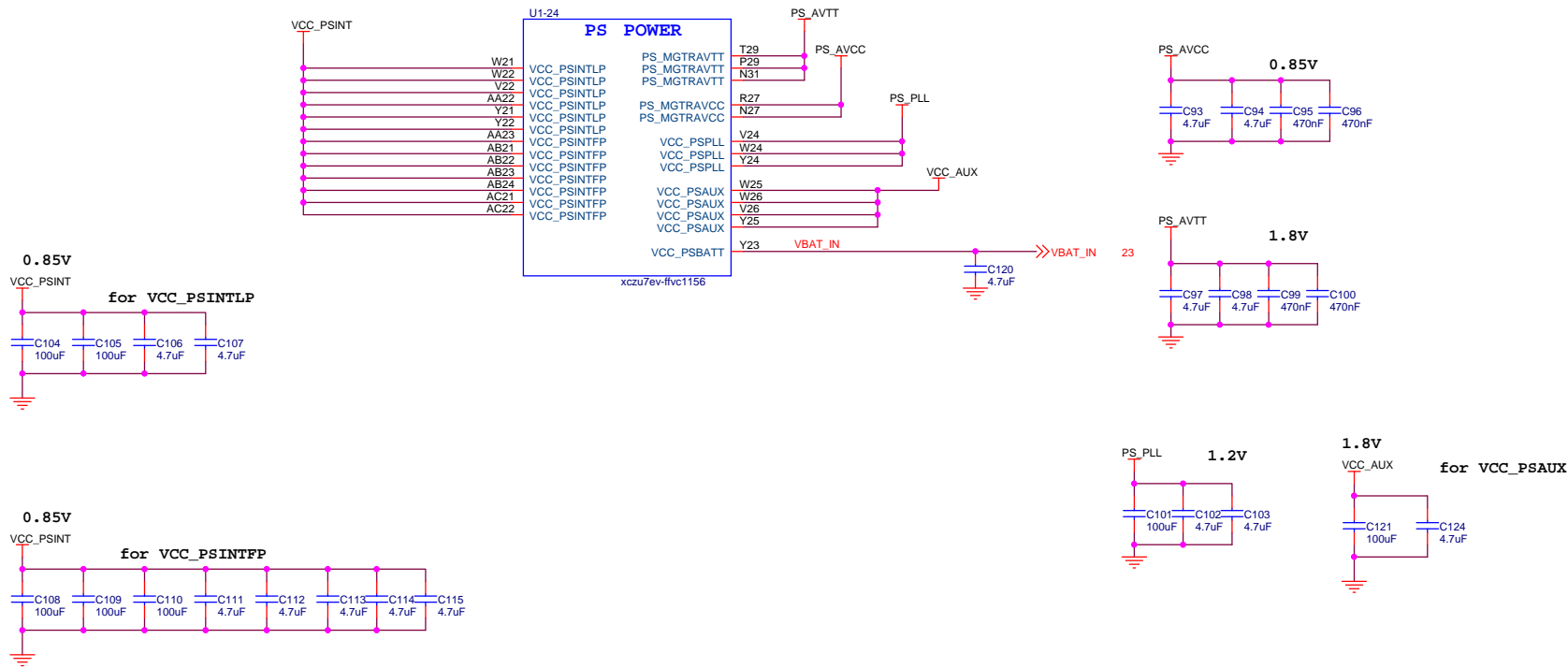
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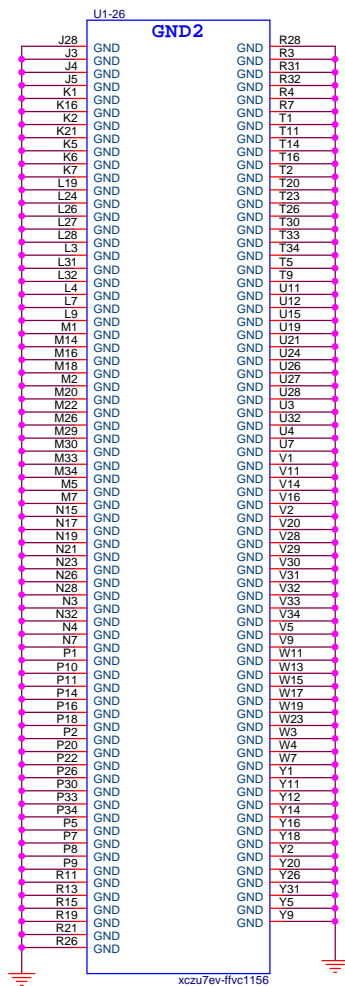
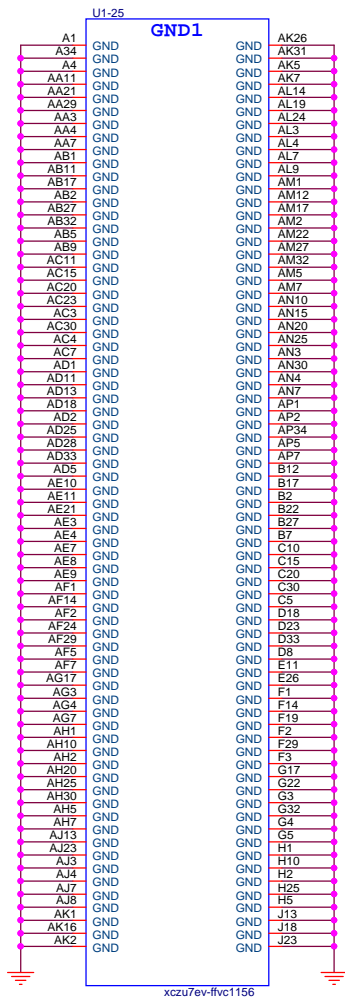
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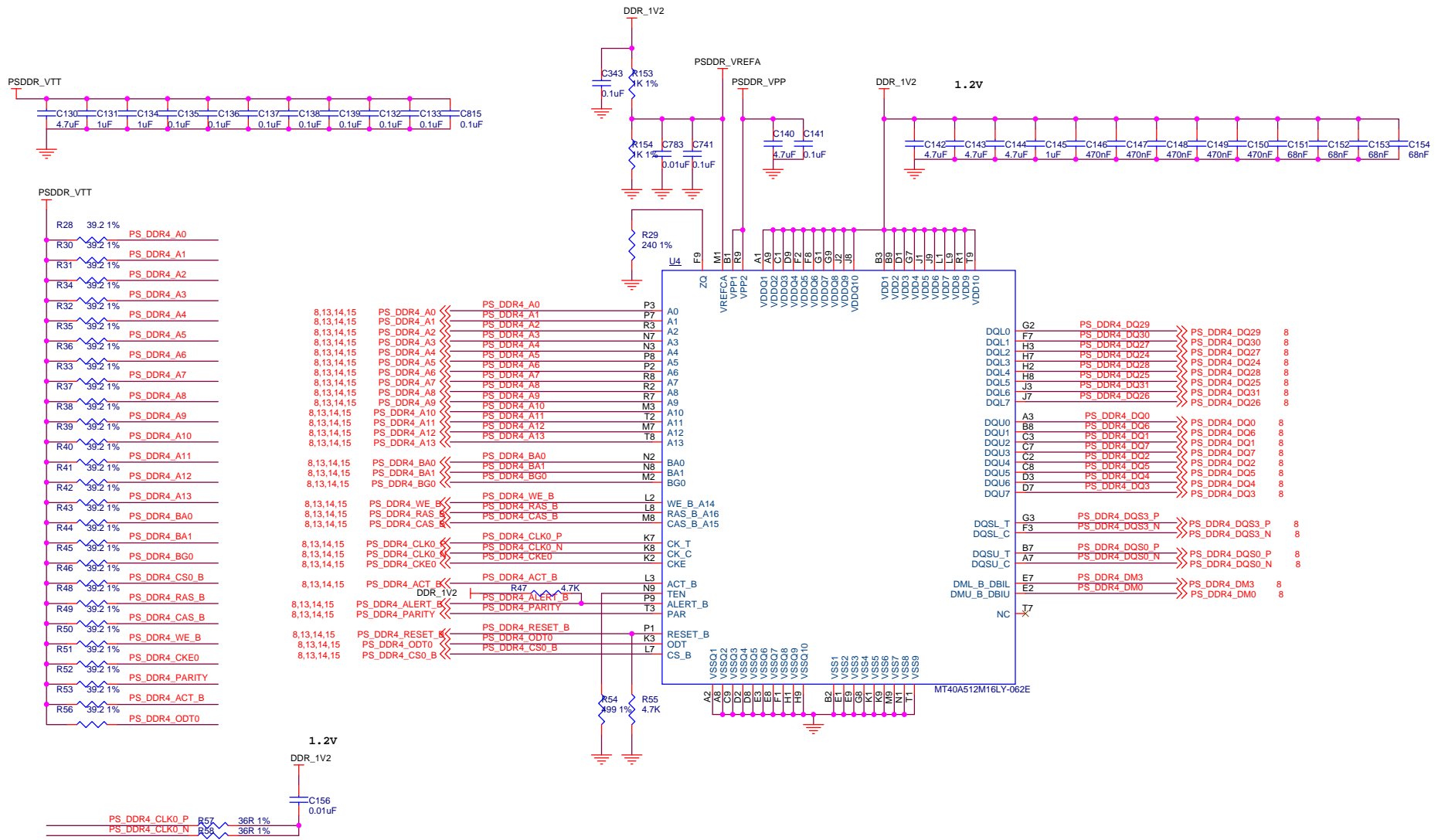


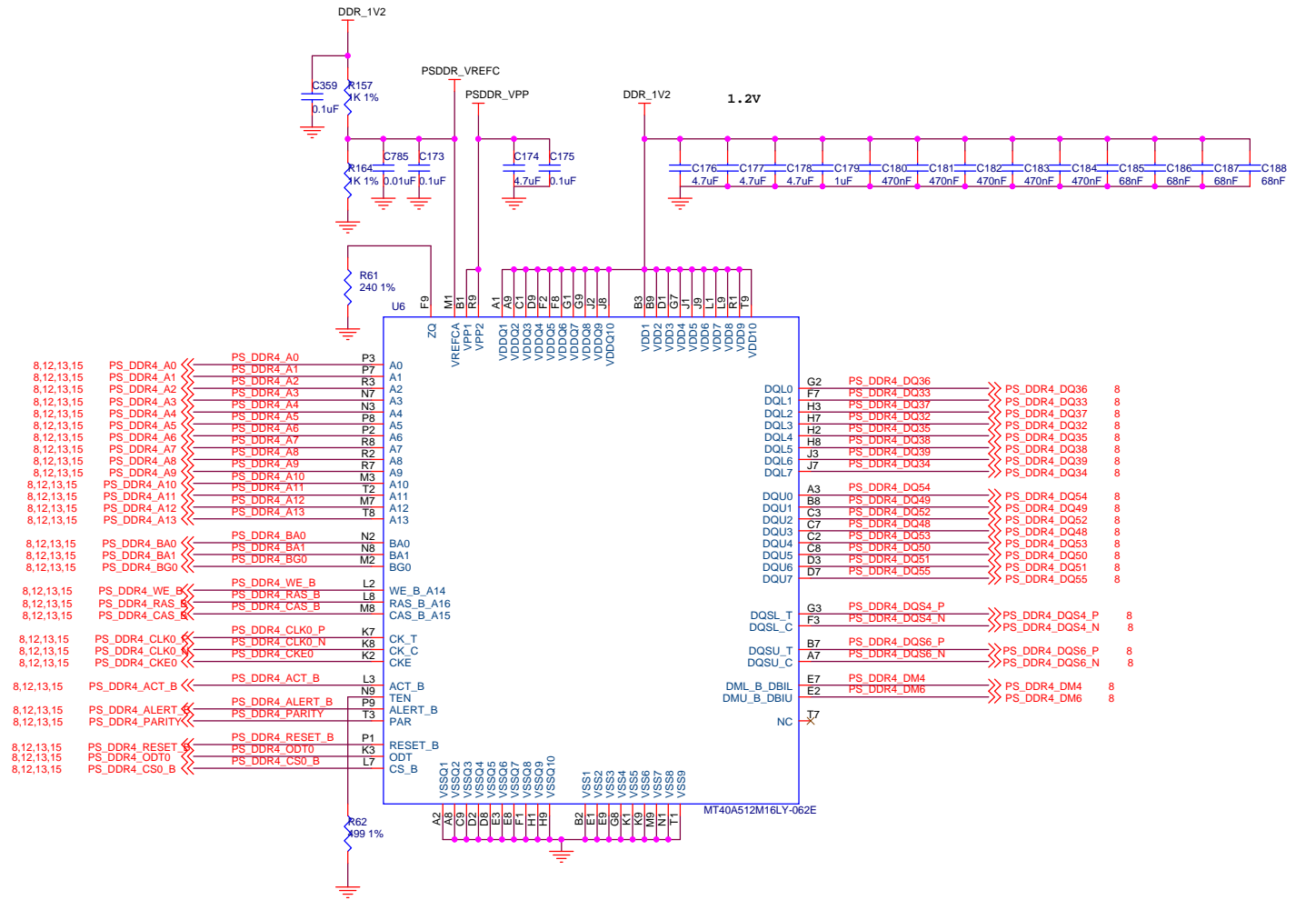
POWER ON: VCC_PSINTFP/VCC_PSINTFP_DDR(+0.85V)->VPS_MGTRAVCC(+0.9V),VCC_PSDDR_PLL(+1.8V)->VPS_MGTRAVTT(+1.8V),VCCO_PSDDR()

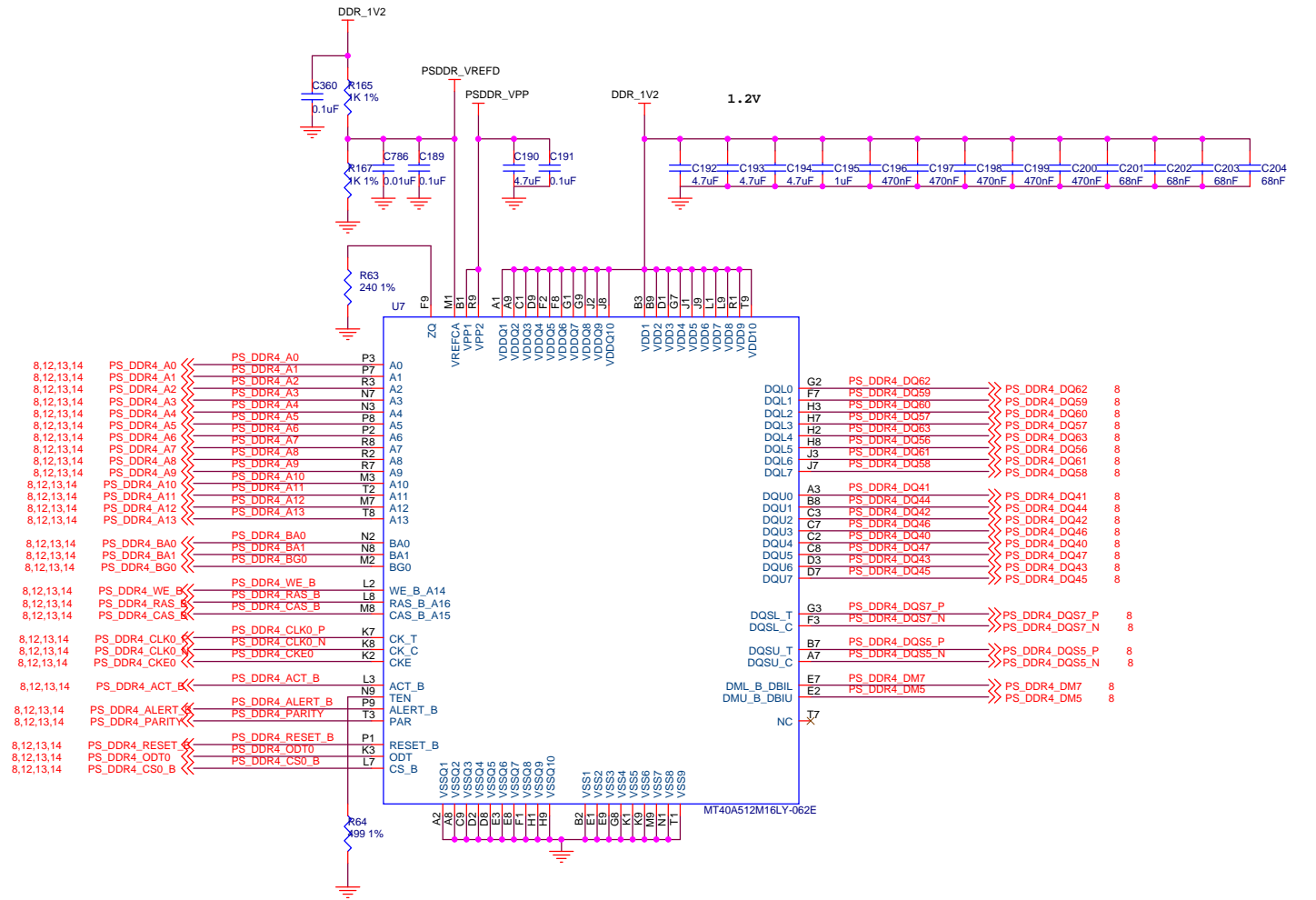
POWER ON: VCC_PSINTLP(+0.85V)->VCC_PSAUX(+1.8V),VCC_PSADC(+1.8V),VCC_PSPLL(+1.2V)->VCCO_PSIO(+1.8V)

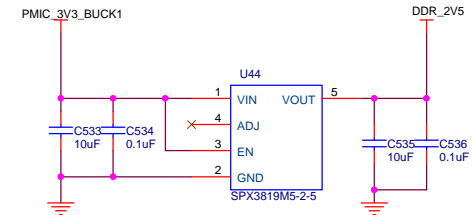
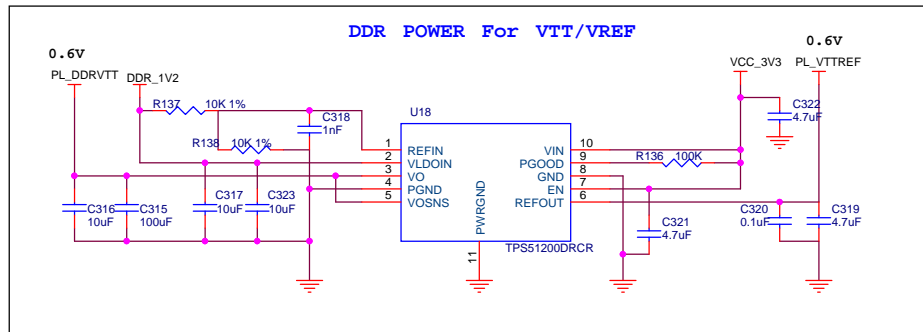
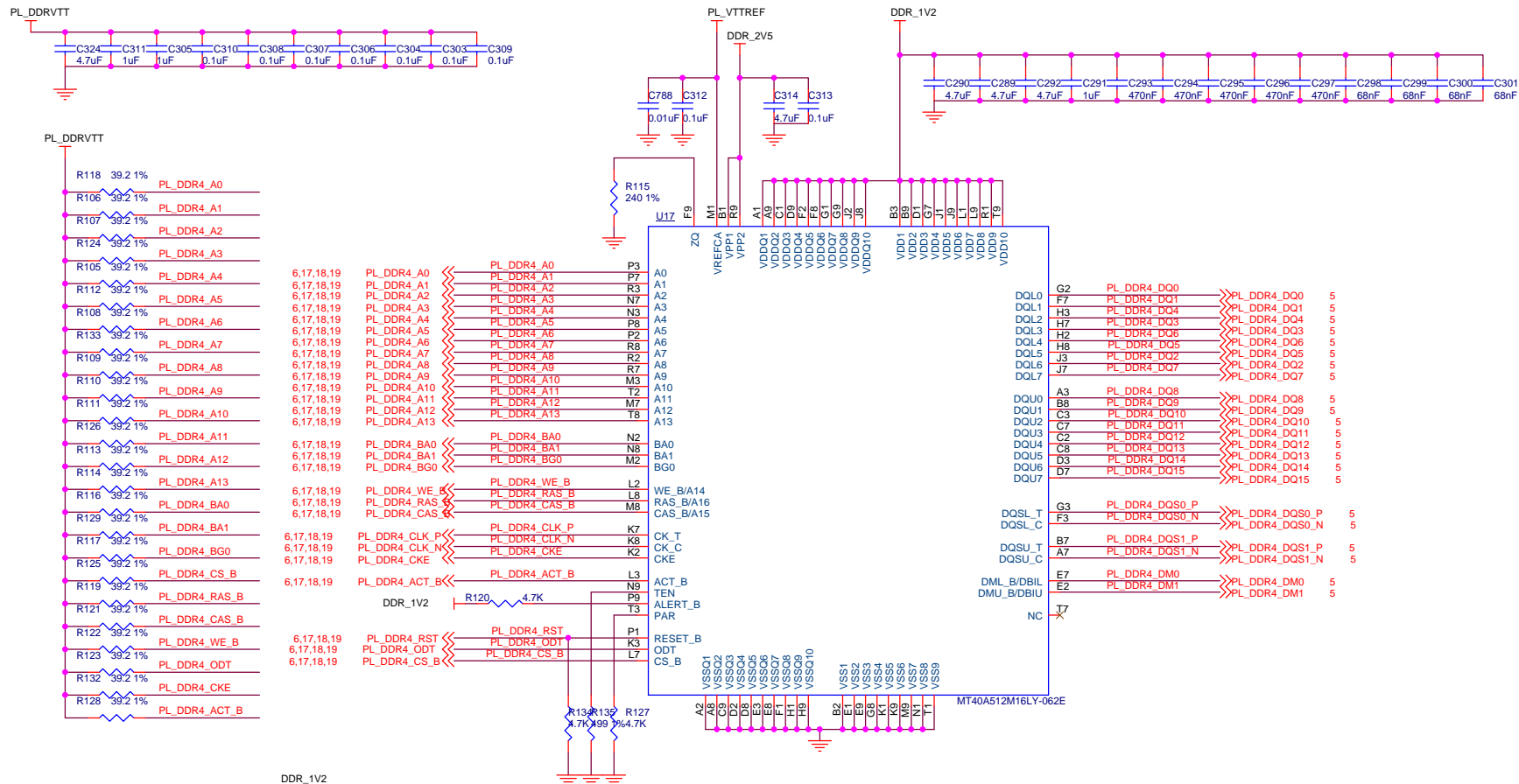


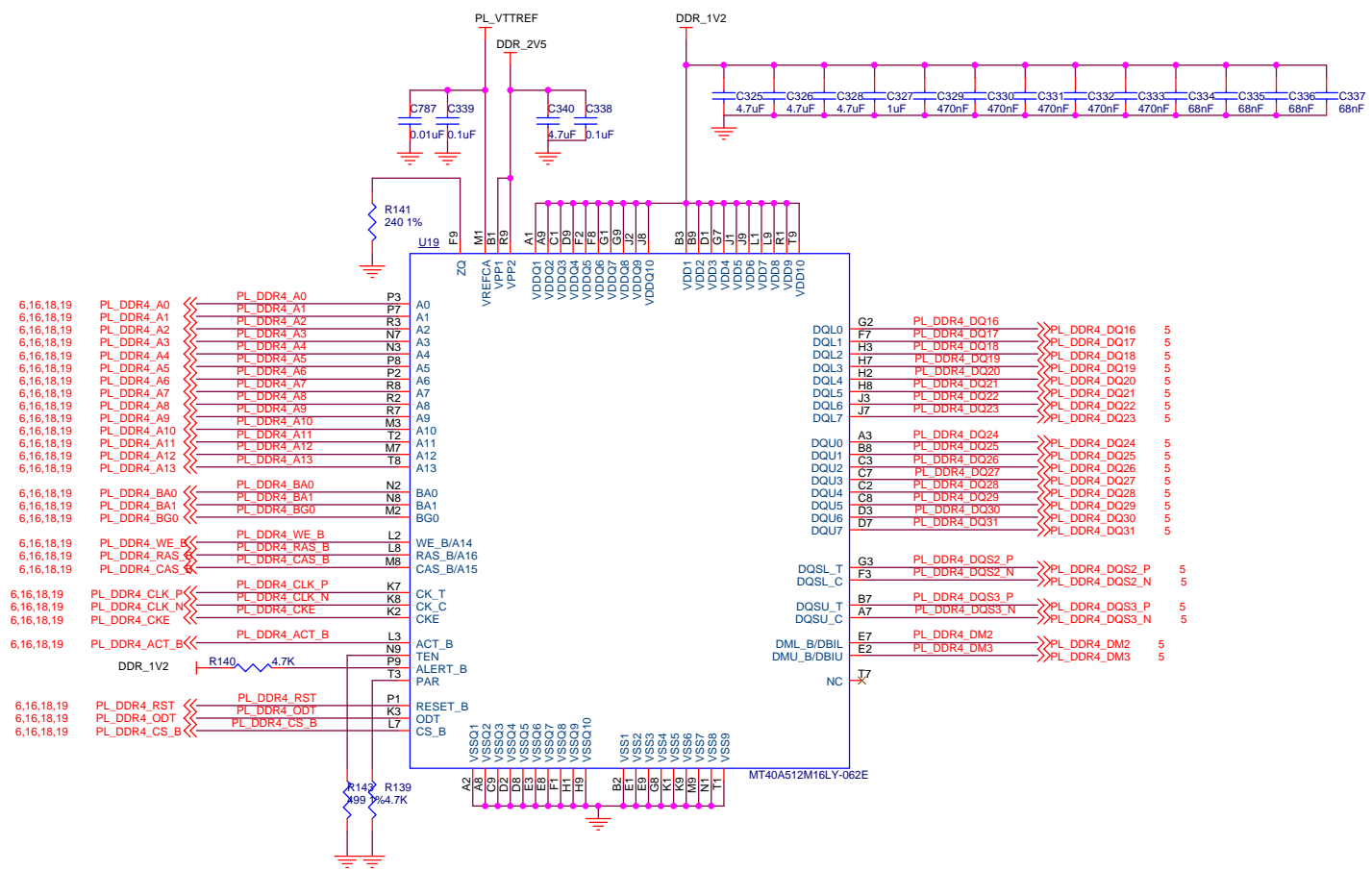


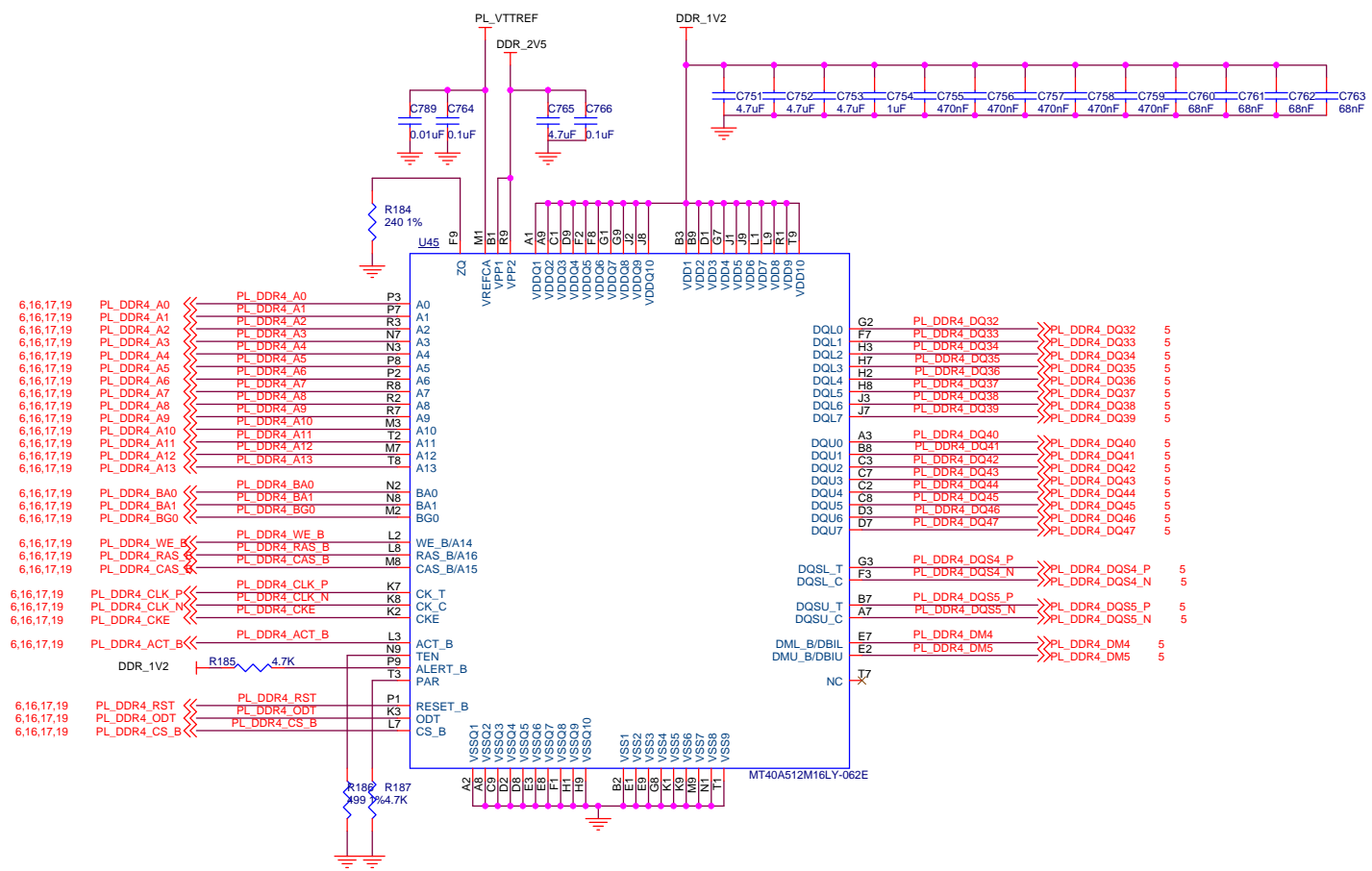


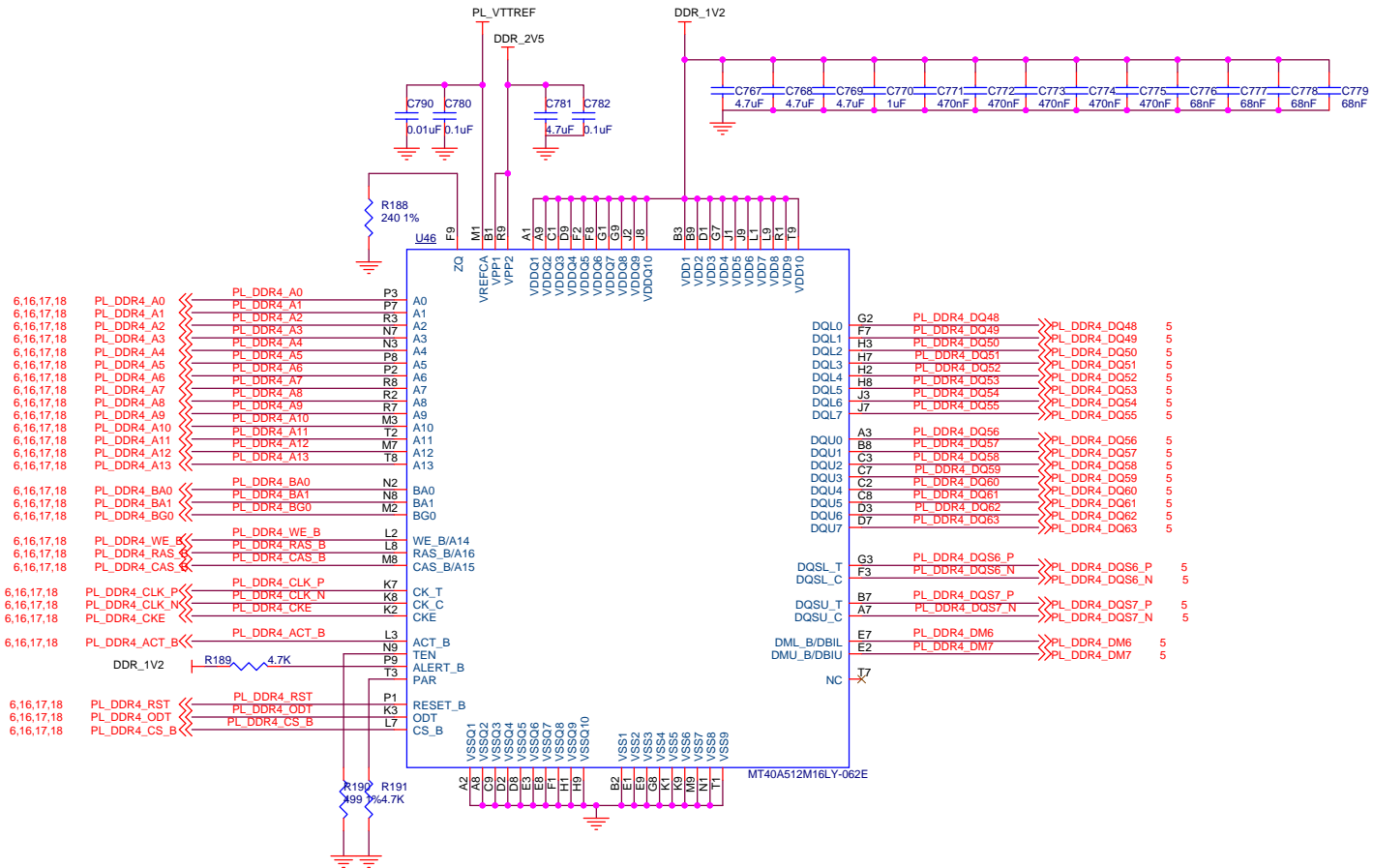


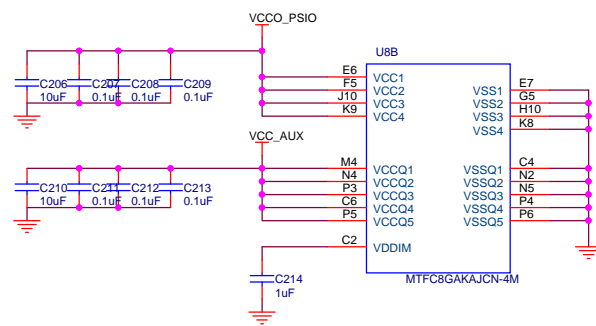
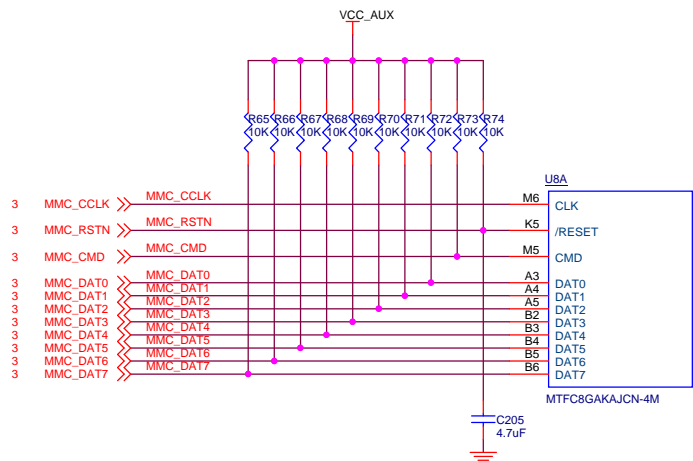
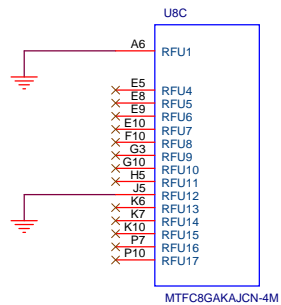
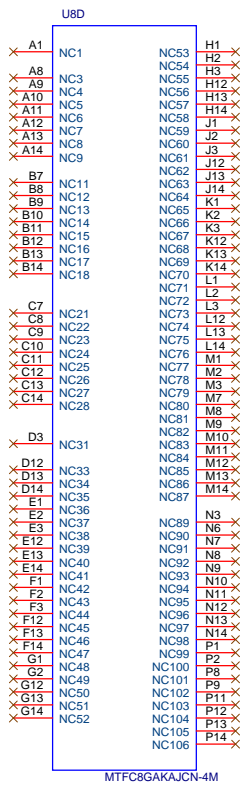






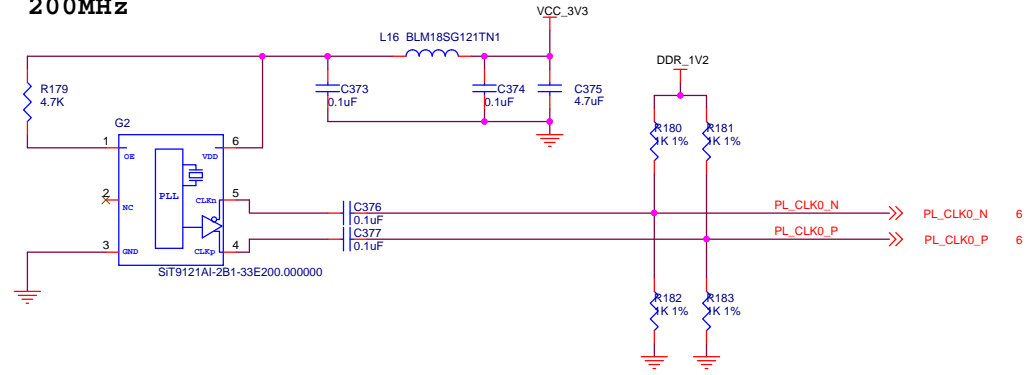




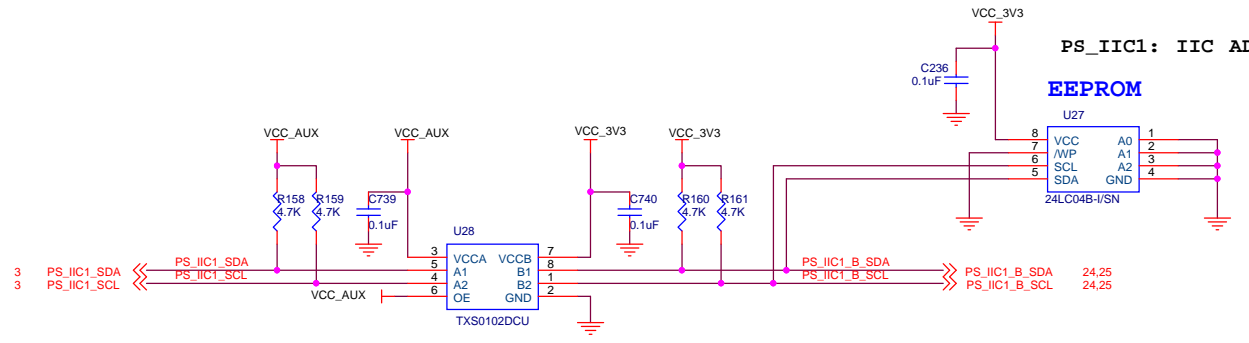


PL SYSTEM CLOCK

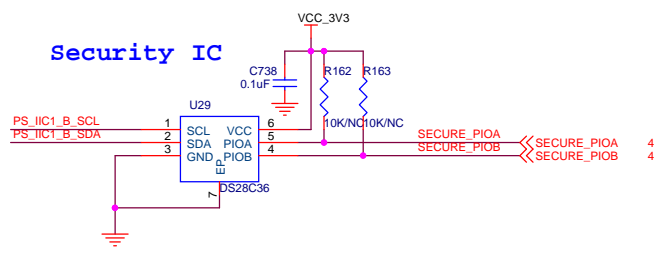
200MHz

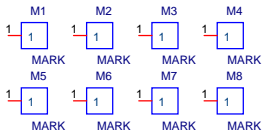


PS_IIC1: IIC ADDRESS IS 0x50



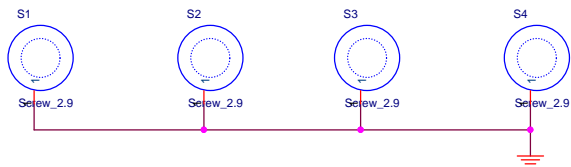
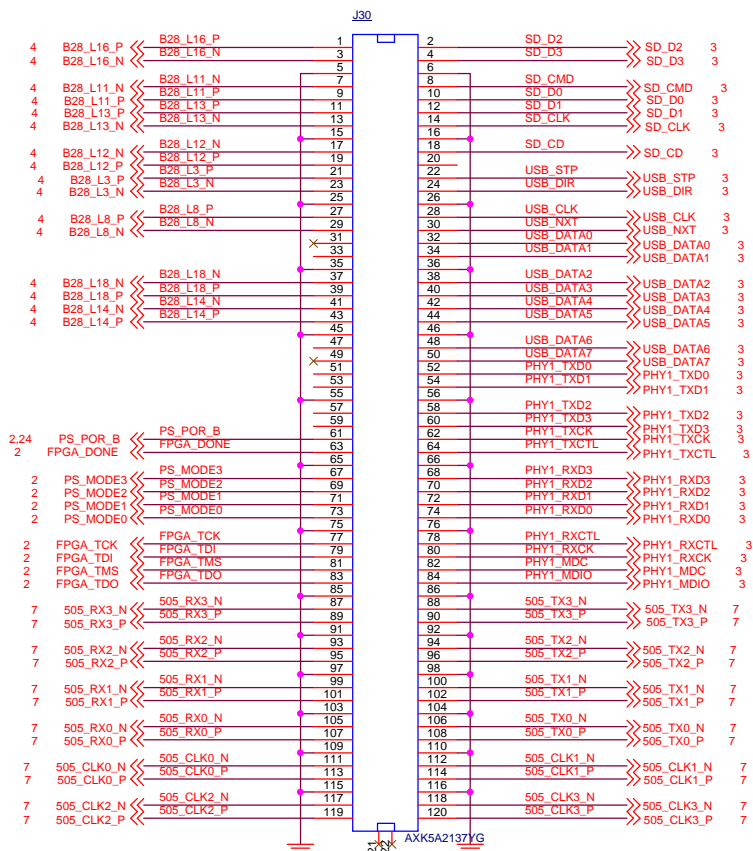
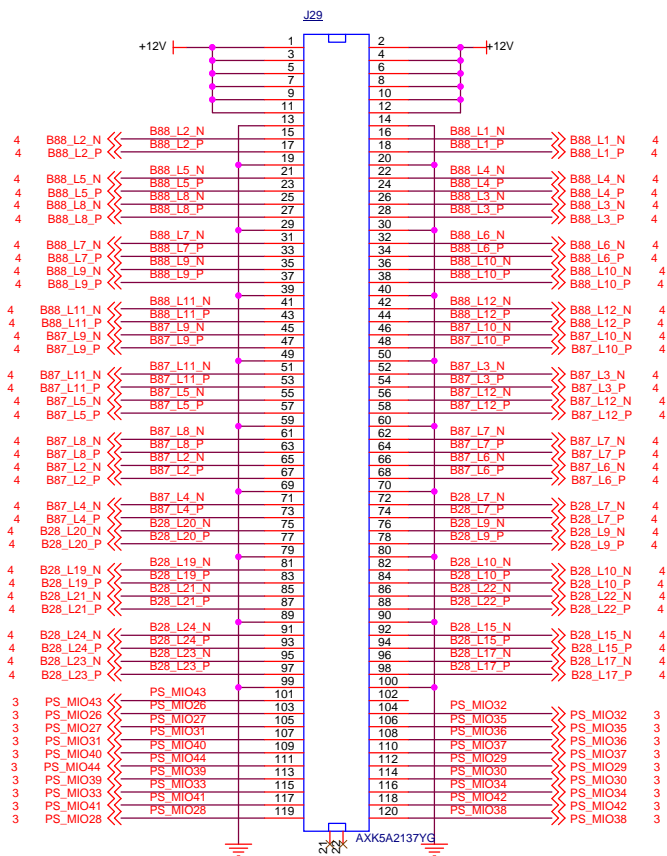
Security IC



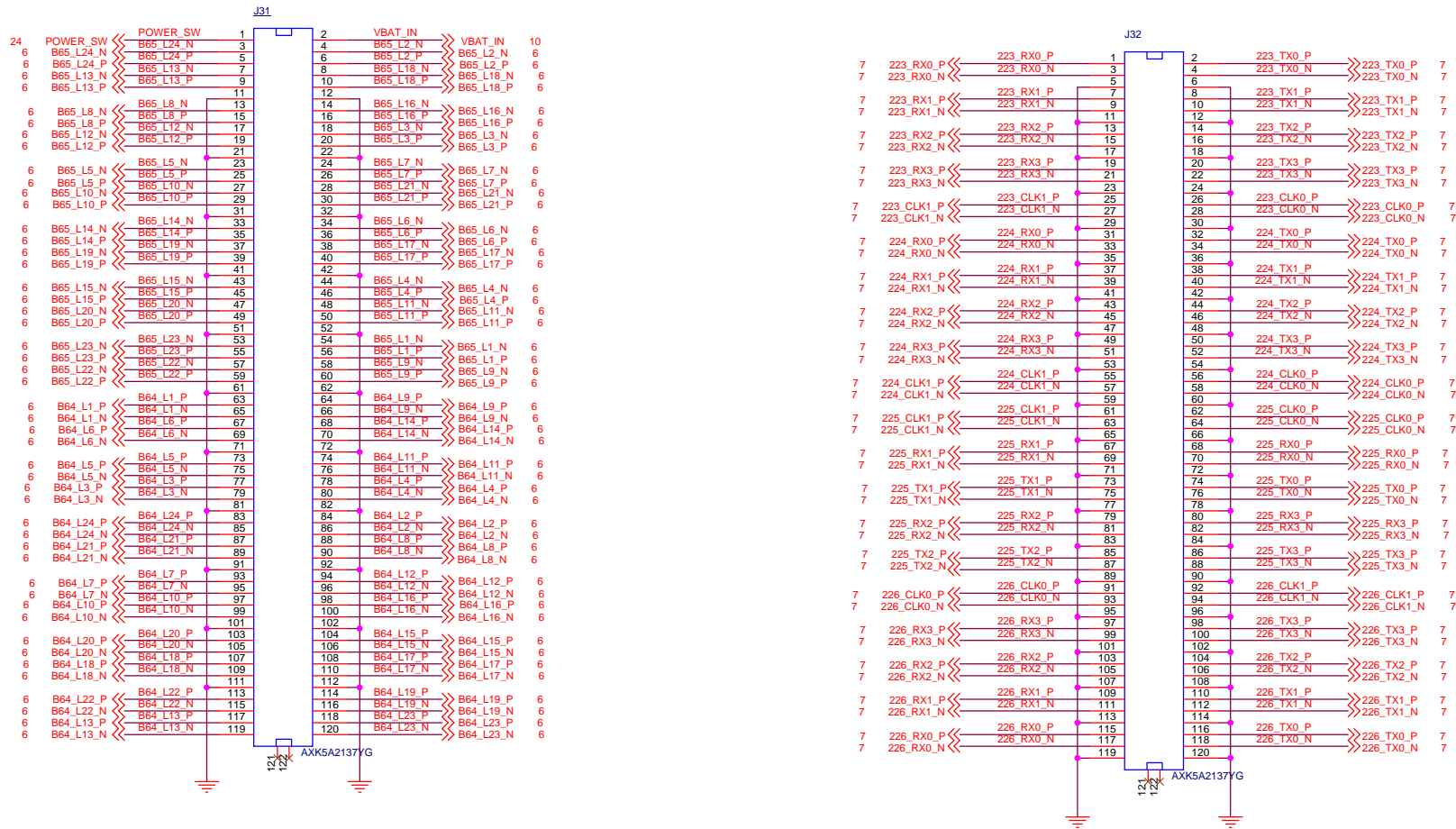


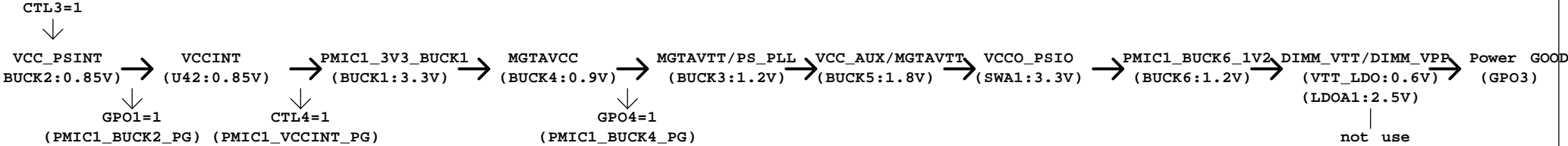
BANK28 IO Voltage is 1.8V Standard
 BANK87,88 IO Voltage is 3.3V Standard

MIO/SD/USB/ETH IO Voltage is 1.8V Standard



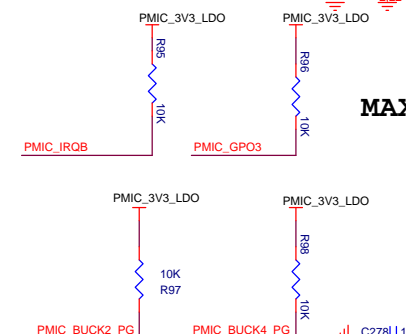
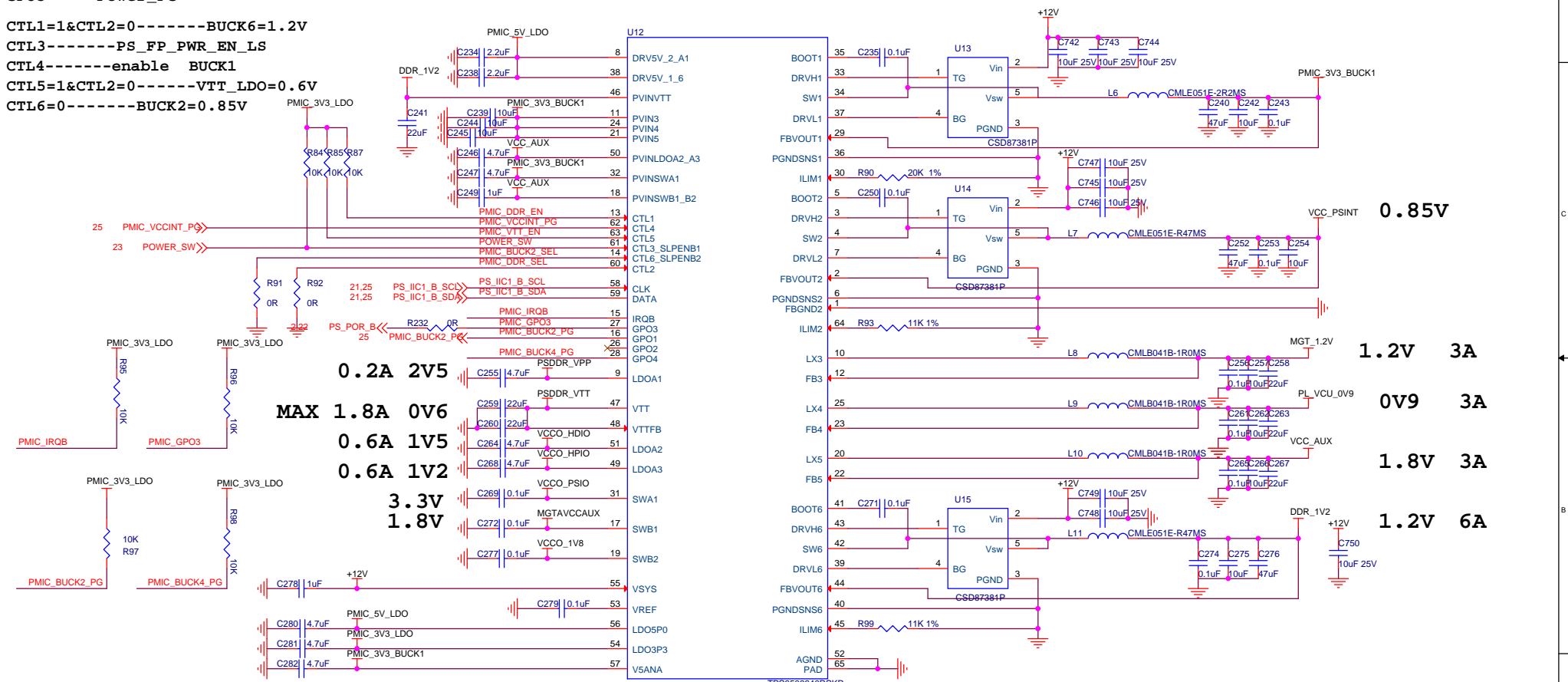
BANK65,66 IO Voltage is 1.8V Standard





GPO1-----BUCK2_PG
 GPO4-----BUCK4_PG
 GPO3-----Power_PG

CTL1=1&CTL2=0-----BUCK6=1.2V
 CTL3-----PS_FP_PWR_EN_LS
 CTL4-----enable BUCK1
 CTL5=1&CTL2=0-----VTT_LDO=0.6V
 CTL6=0-----BUCK2=0.85V



0.2A 2V5
 MAX 1.8A 0V6
 0.6A 1V5
 0.6A 1V2
 3.3V
 1.8V

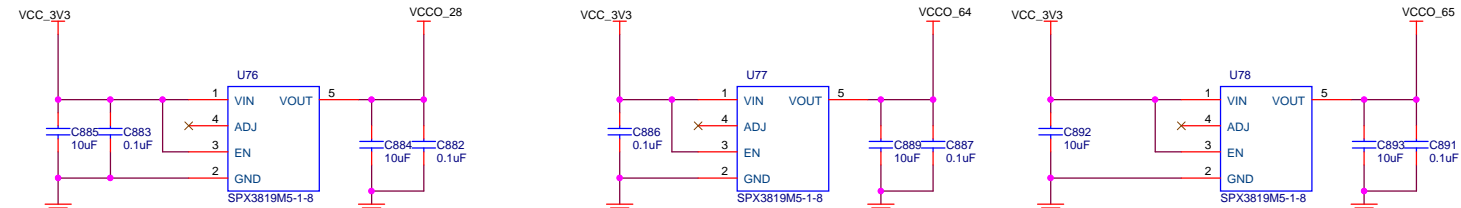
0.85V

1.2V 3A

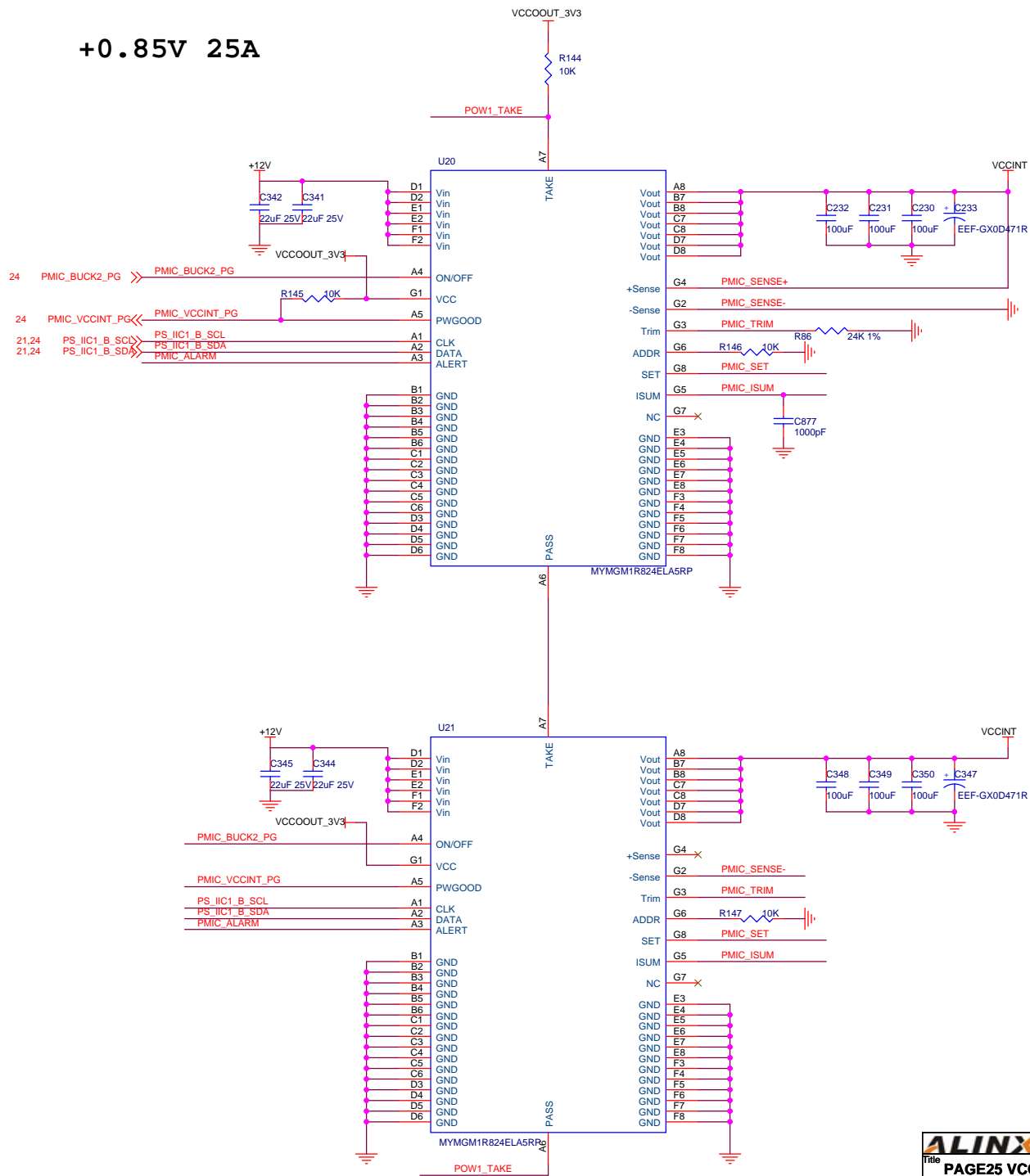
0V9 3A

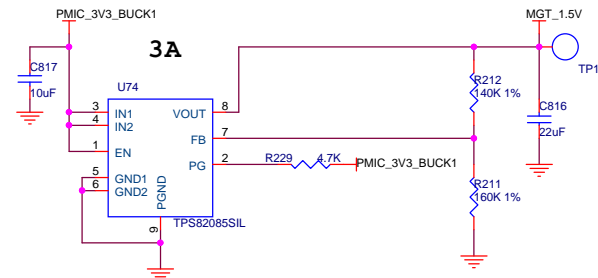
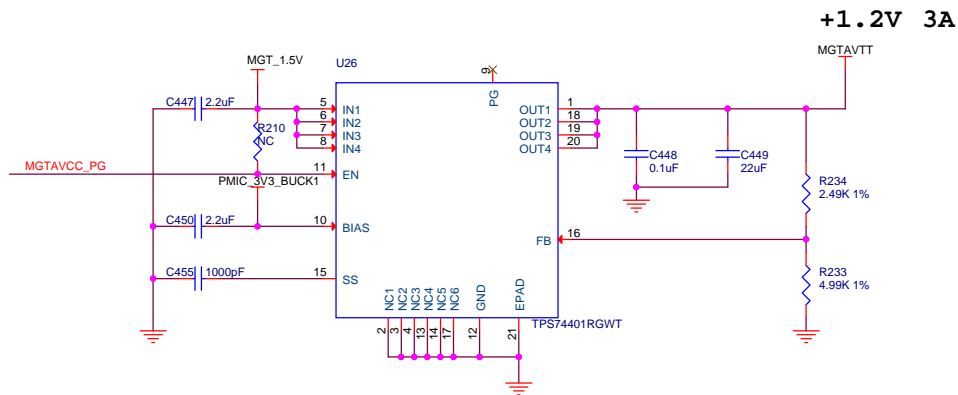
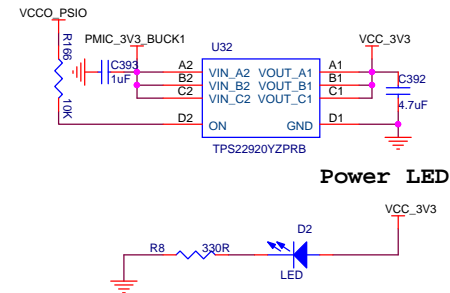
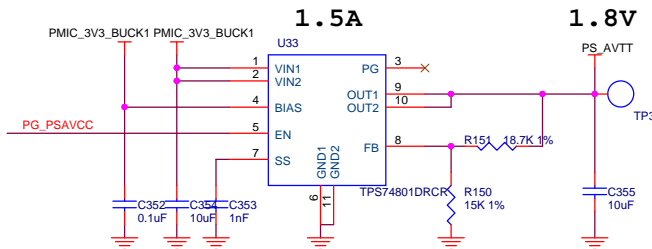
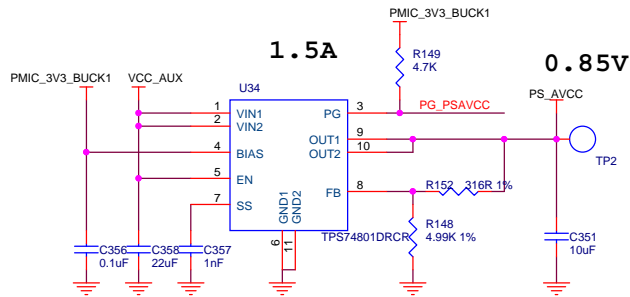
1.8V 3A

1.2V 6A

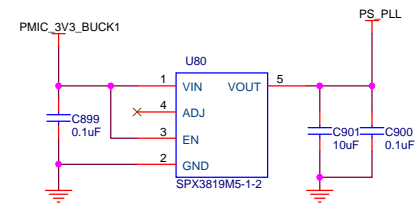
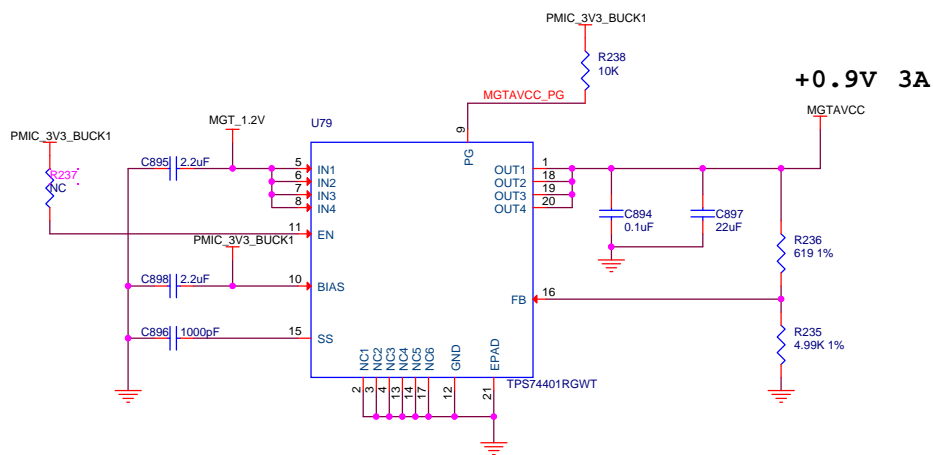


+0.85V 25A





$$V_{out} = 0.8 \times (1 + R1/R2)$$



$$V_{out} = 0.8 \times (1 + R1/R2)$$