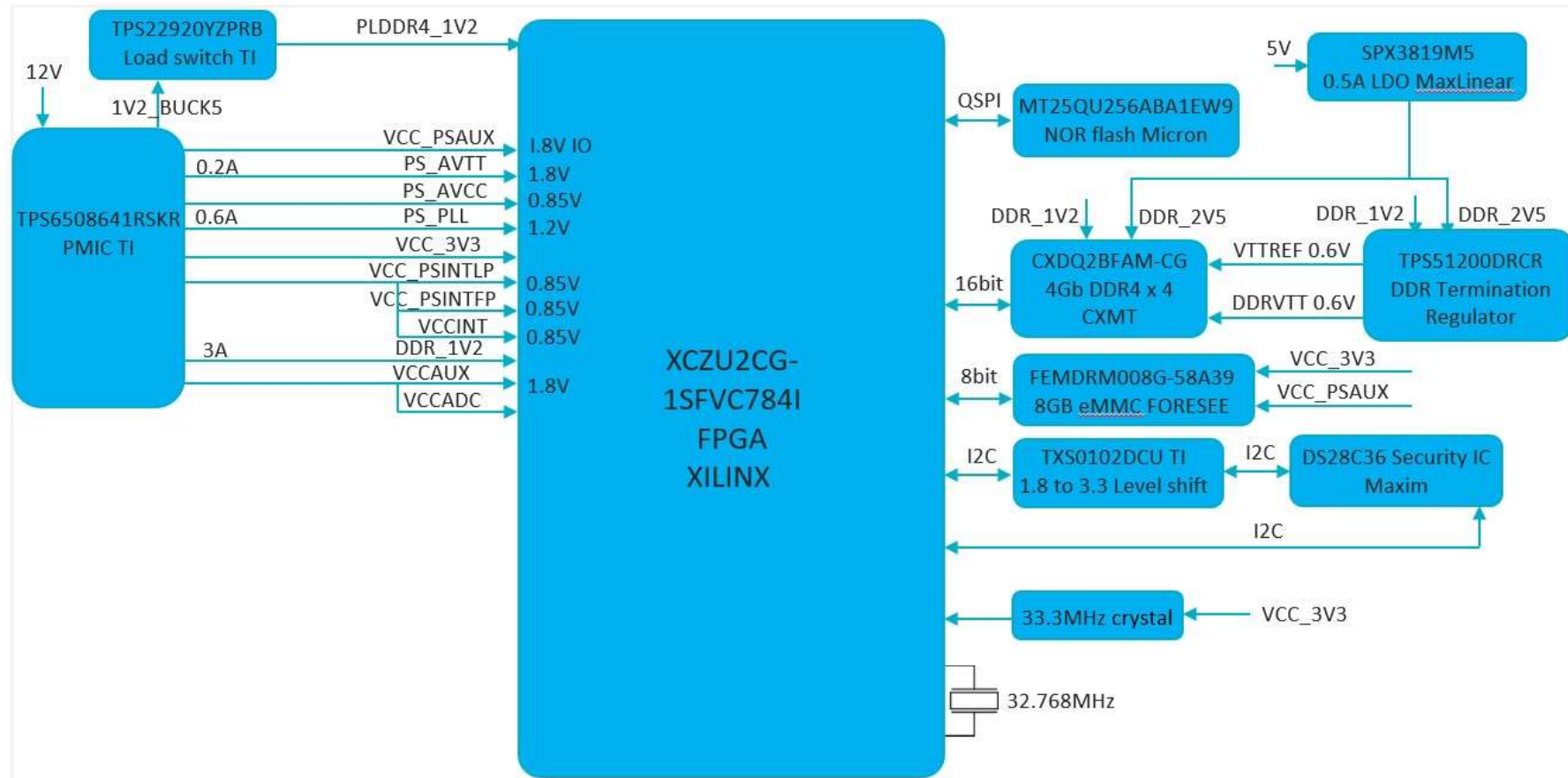


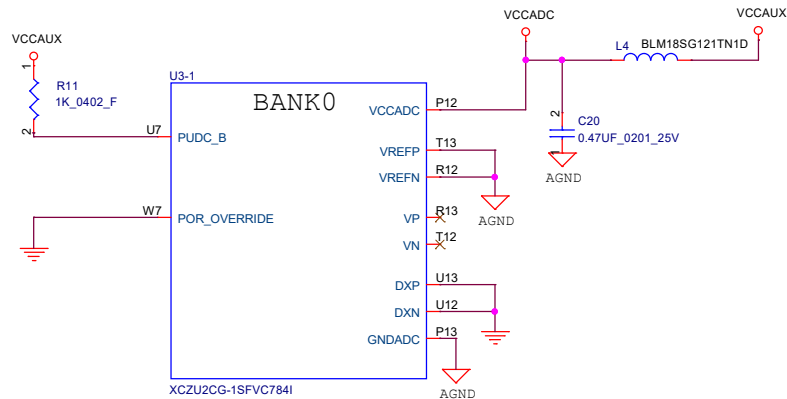
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Title	SCHEMATIC, M/B GA-641 (Block Diagram)		
Size	Document Number	601K39	Rev
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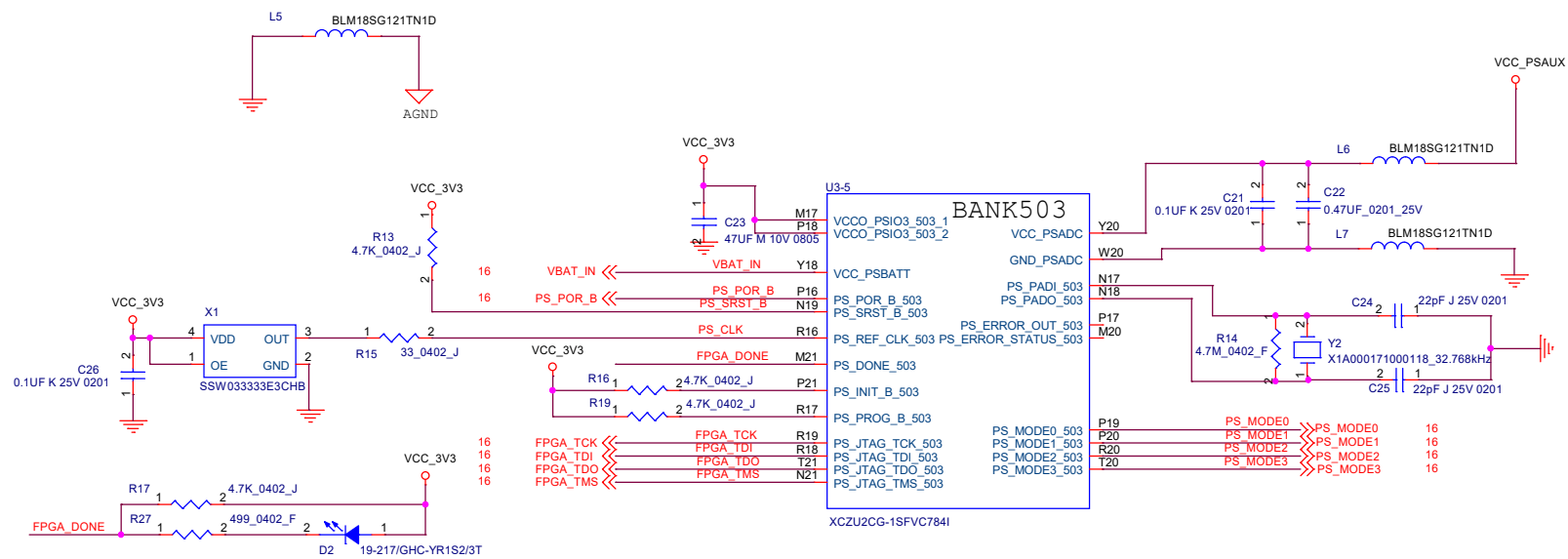


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Title	SCHEMATIC, M/B GA-641 (Power Tree)		
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MODE[3:0]	BOOT MODE	Description
0000	PS JTAG	PS JTAG Interface
0001	Quad_SPI (24b)	24-Bit addresssing (QSPI24)
0010	Quad_SPI (32b)	32-Bit addresssing (QSPI32)
0011	SD0 (2.0)	SD2.0
0100	NAND	Requires 8-bit data bus width
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
1000	PJTAG (MIO #0)	PJTAG connection 0 option
1001	PJTAG (MIO #1)	PJTAG connection 1 option
1110	SD1 LS (3.0)	SD 3.0



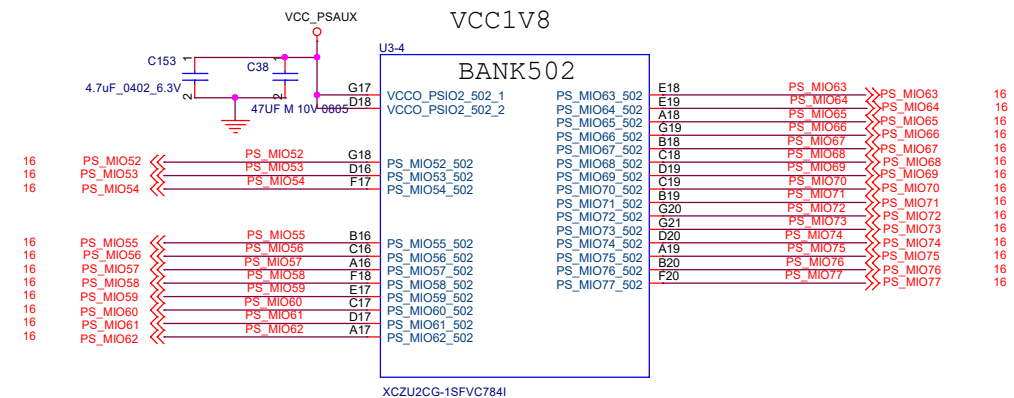
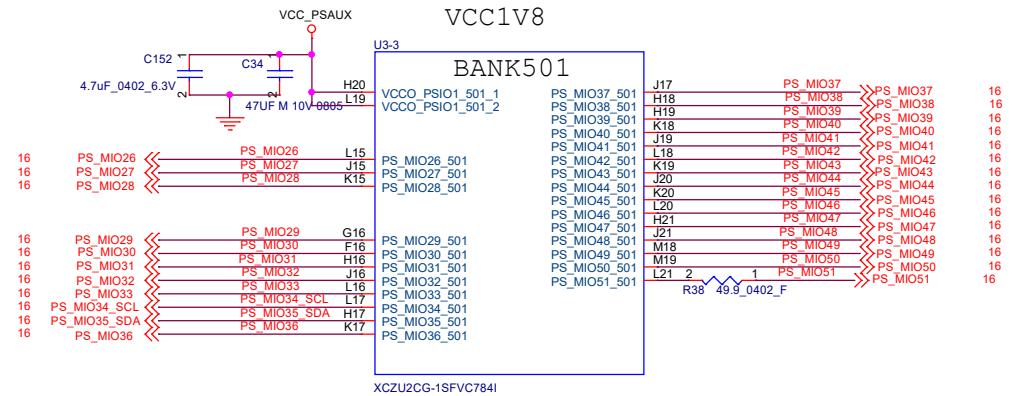
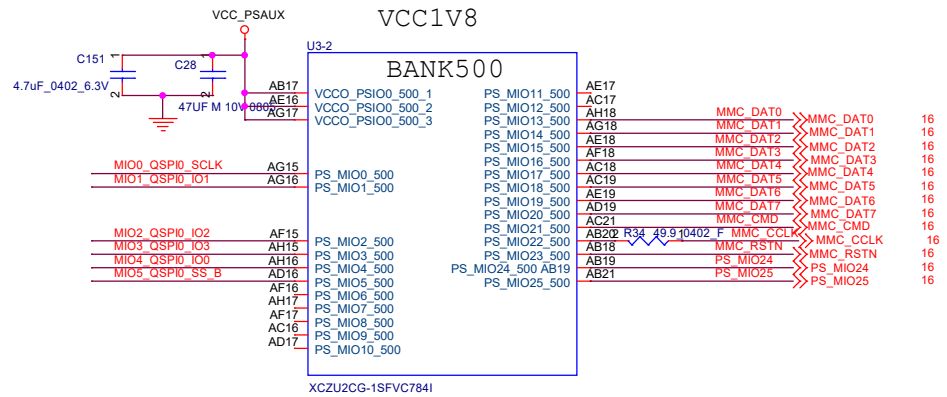
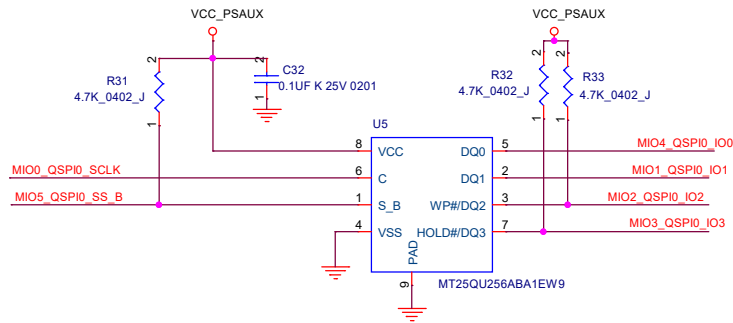
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SCHEMATIC, M/B GA-641 (DBB-2)

File: **AS1** Document Number: **601K99** Rev: **01**

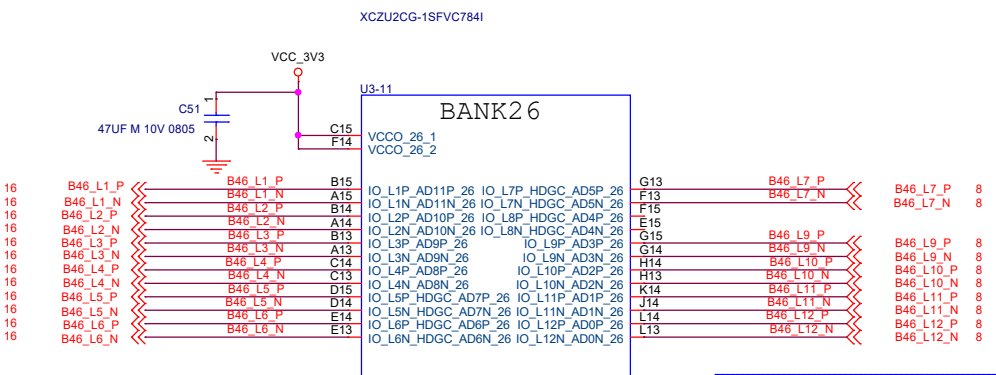
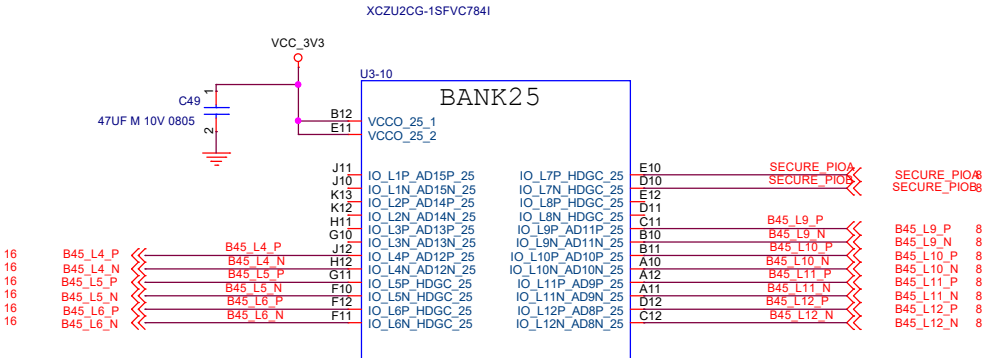
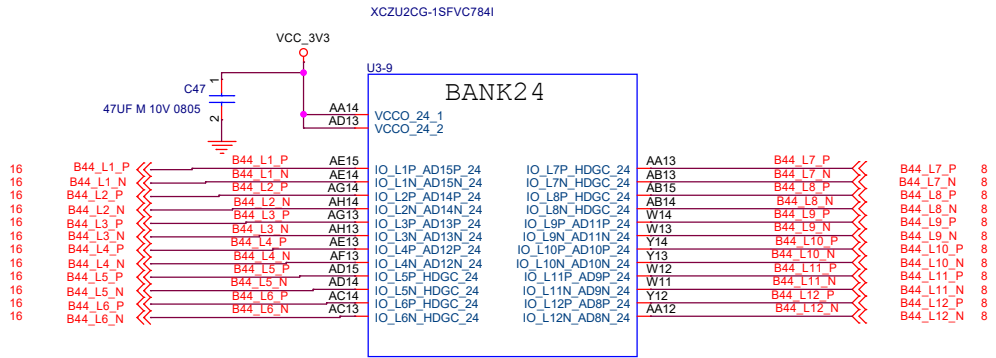
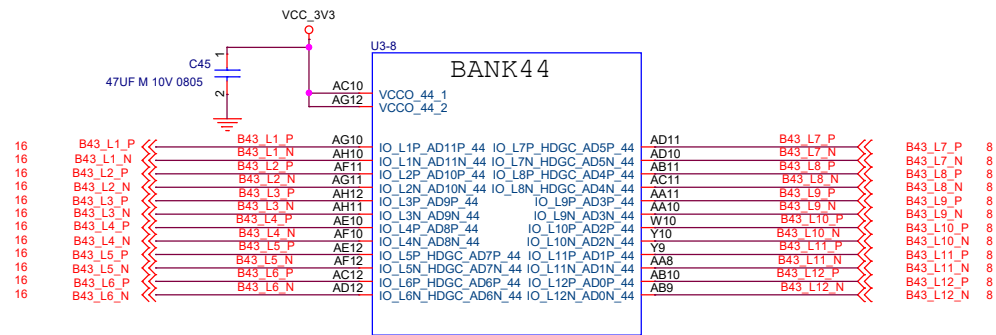
Date: **Fri Feb 09, 2018** Sheet: **9** of **17**

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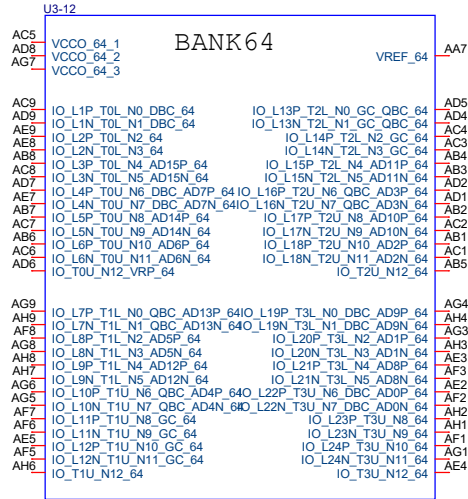
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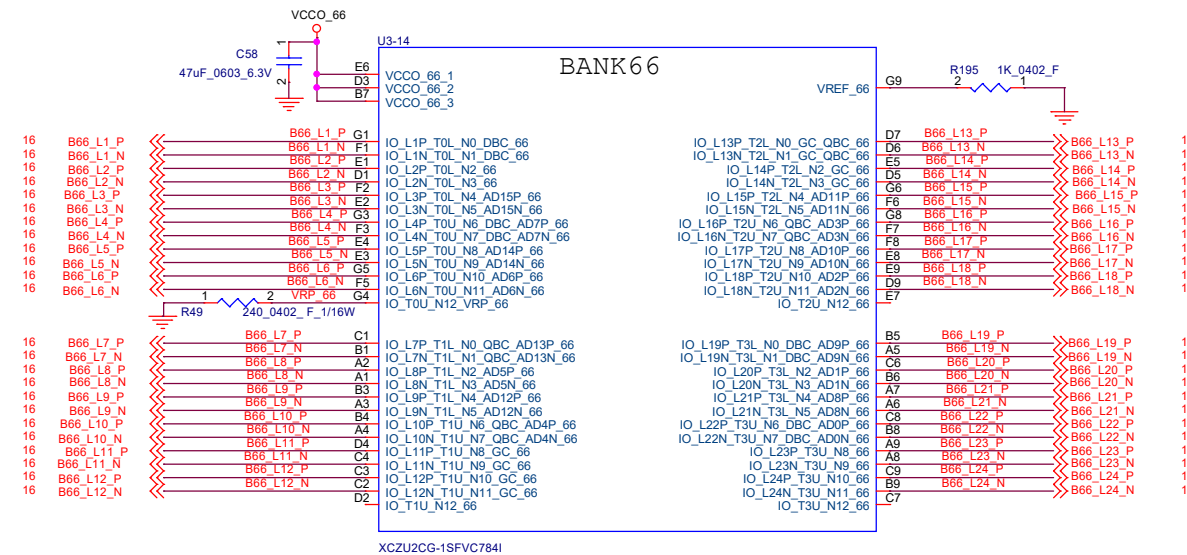
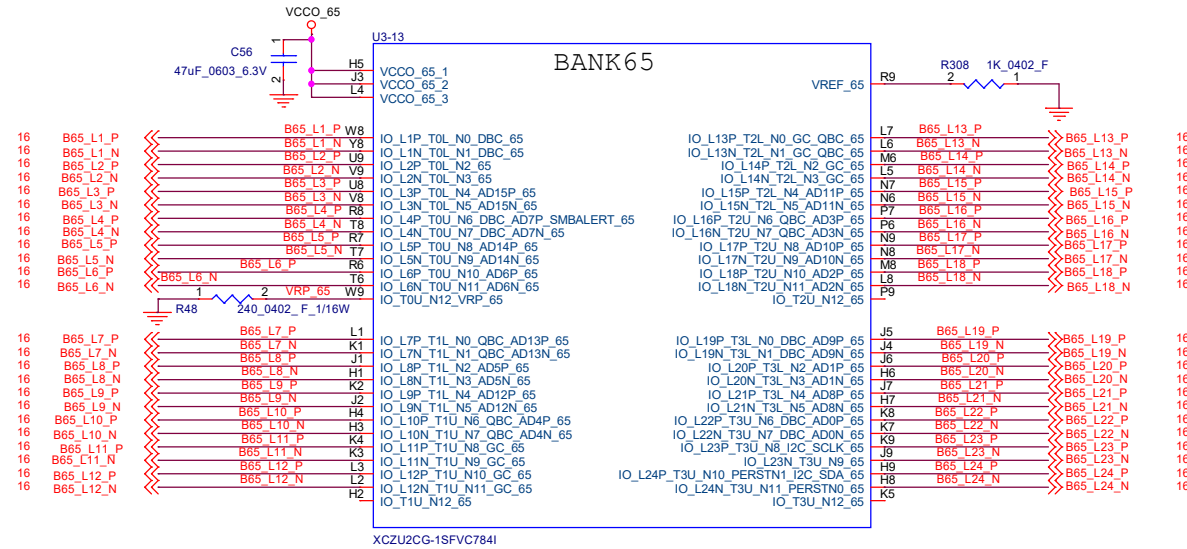
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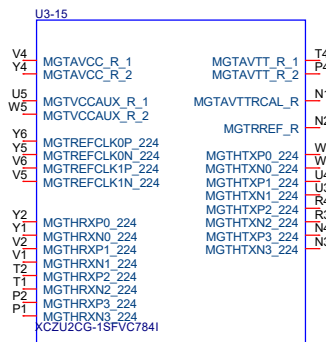
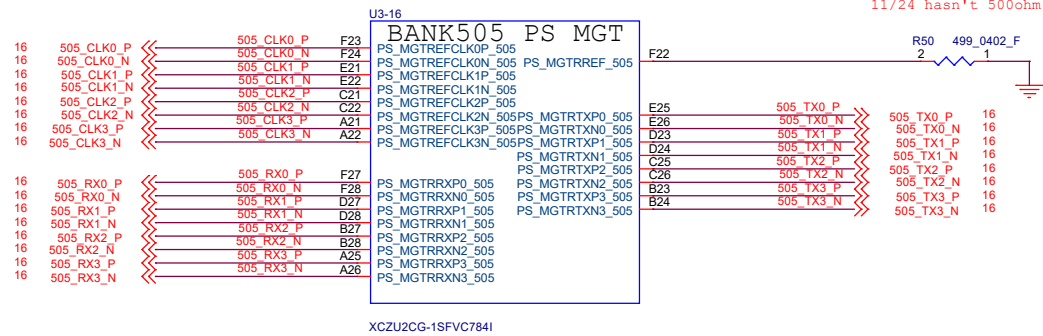
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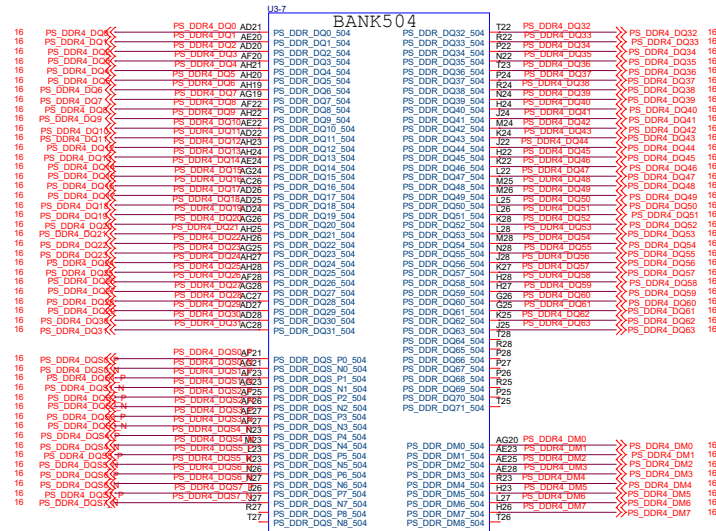
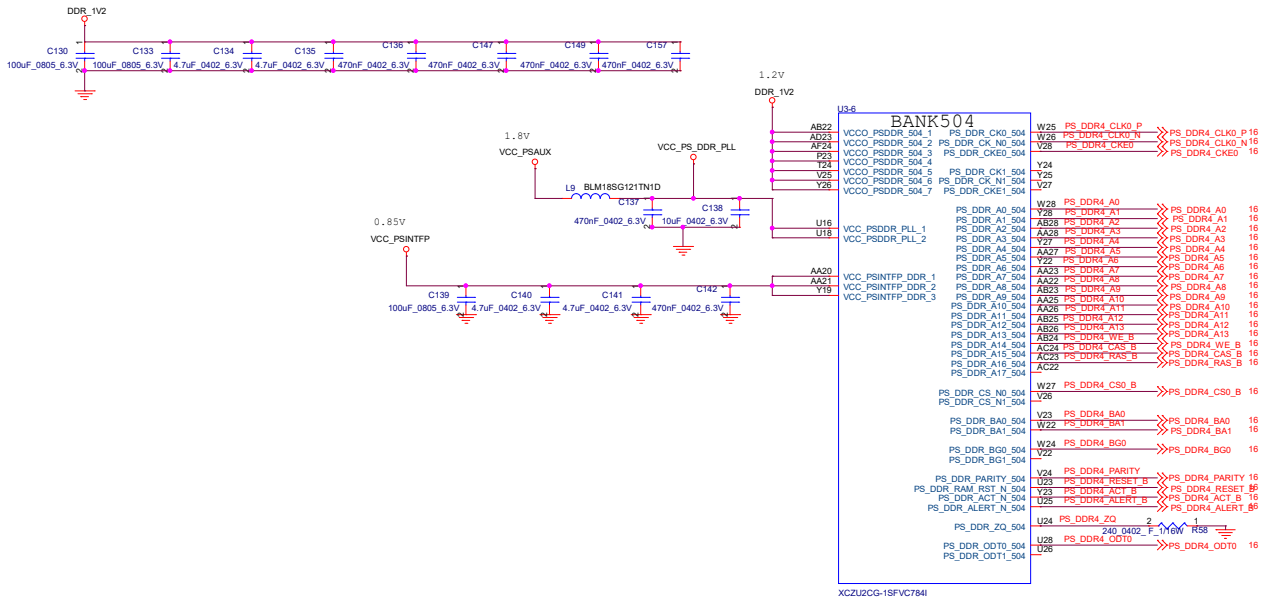
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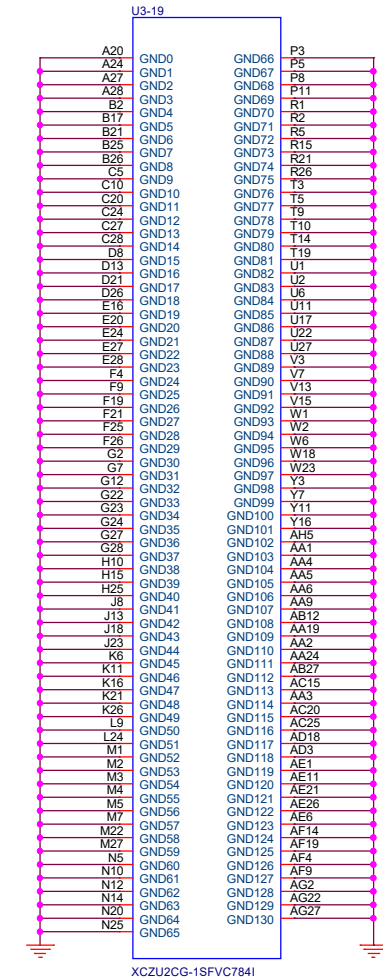
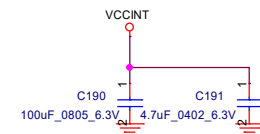
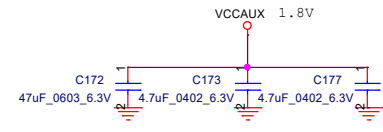
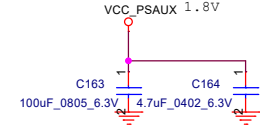
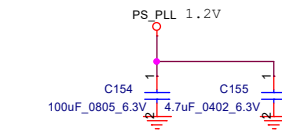
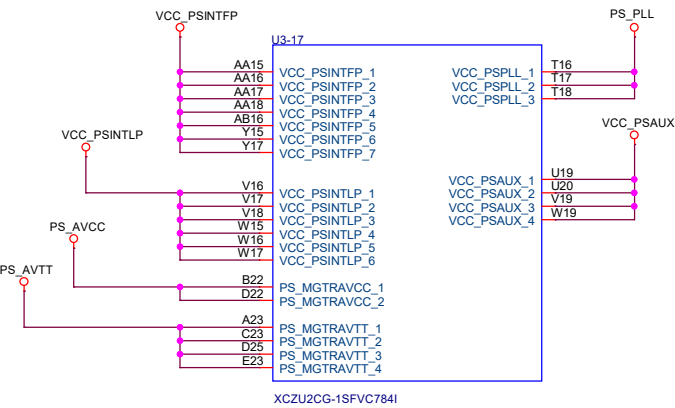
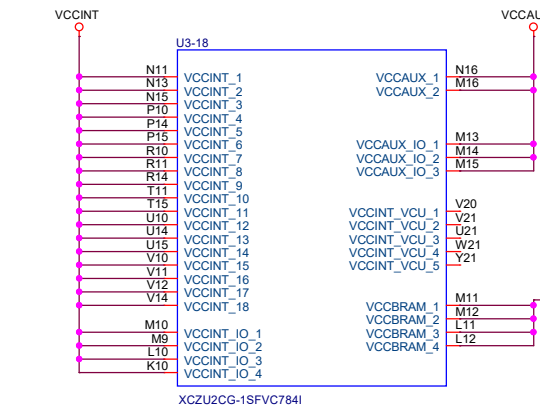
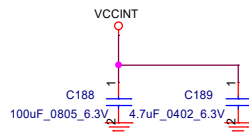
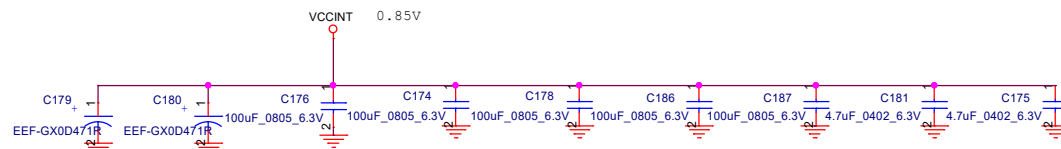
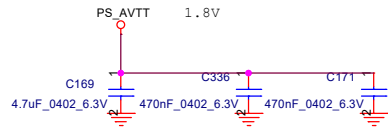
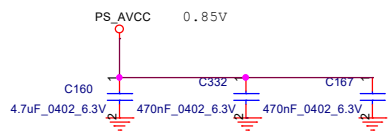
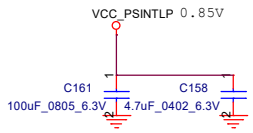
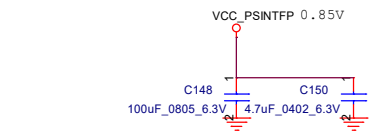
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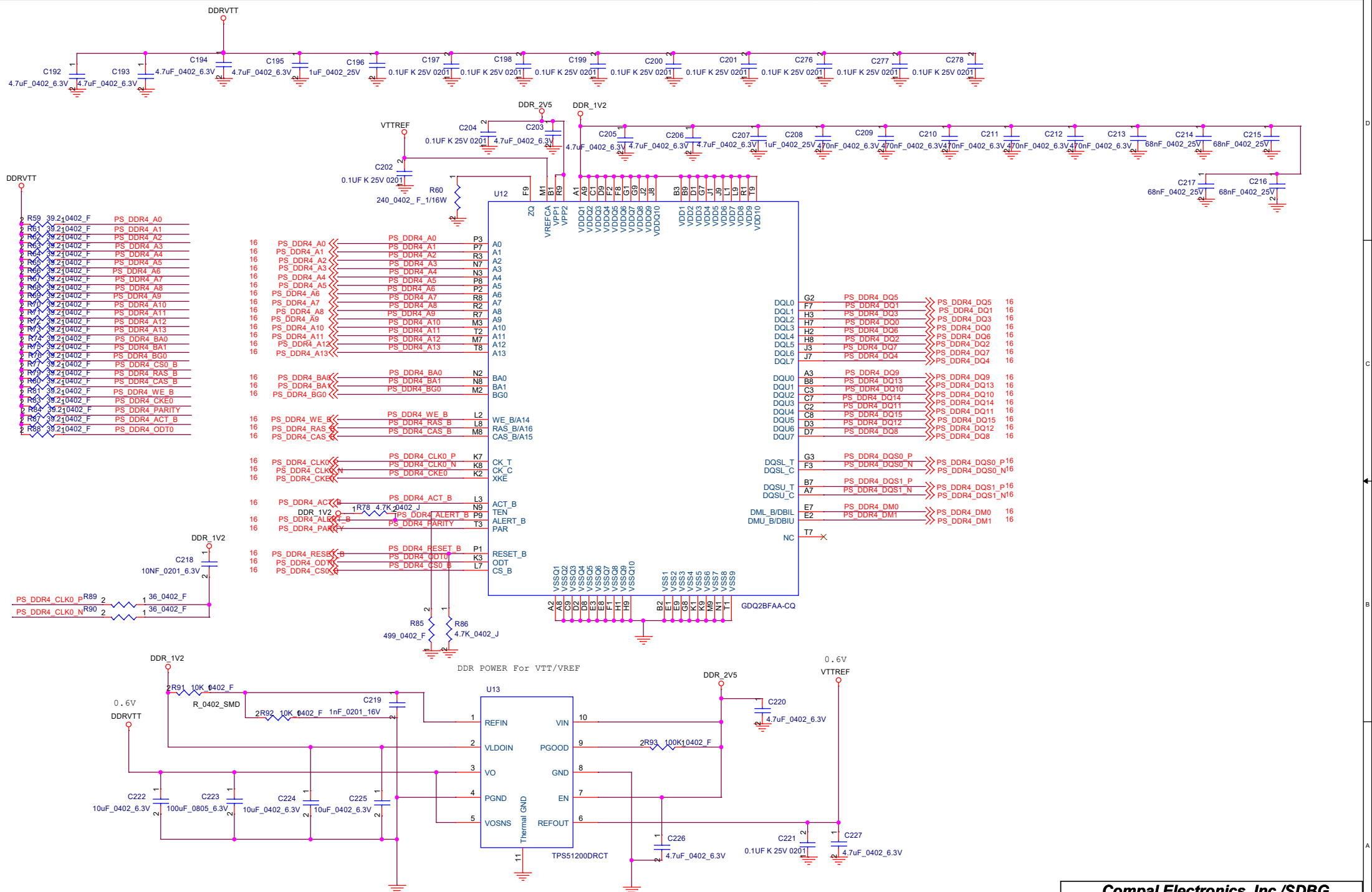
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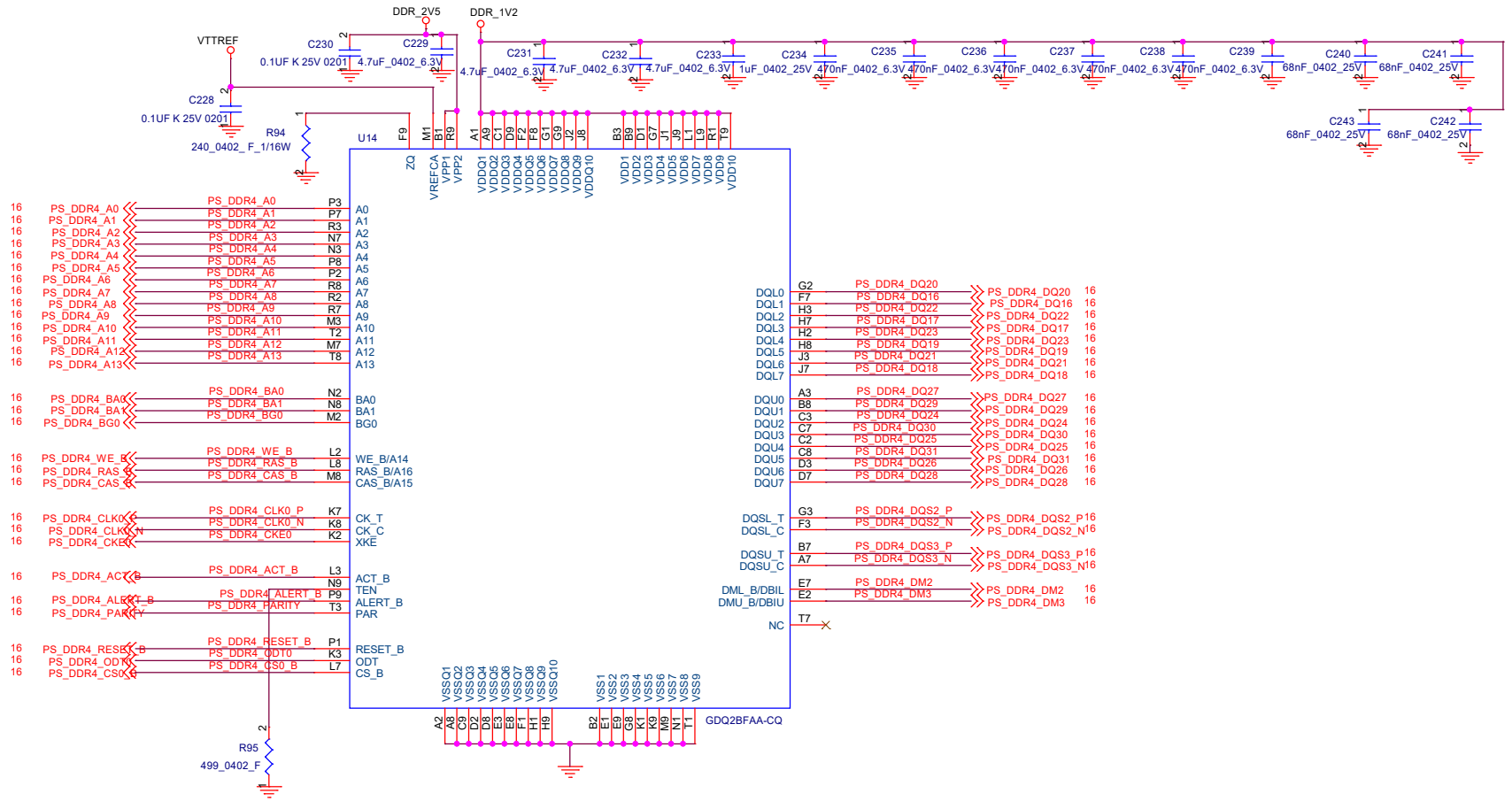
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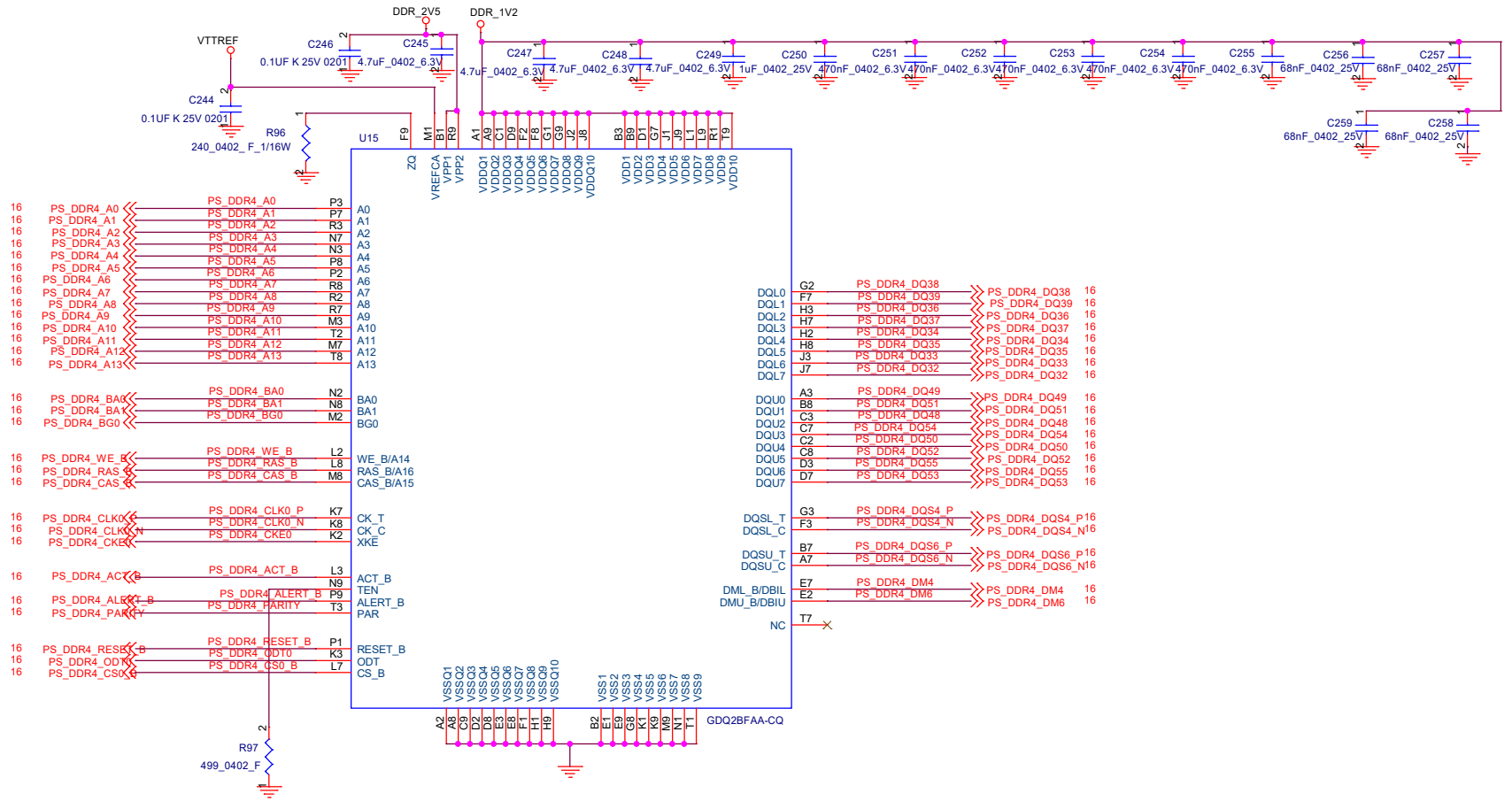
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Title			
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Size	Document Number	601K39	Rev
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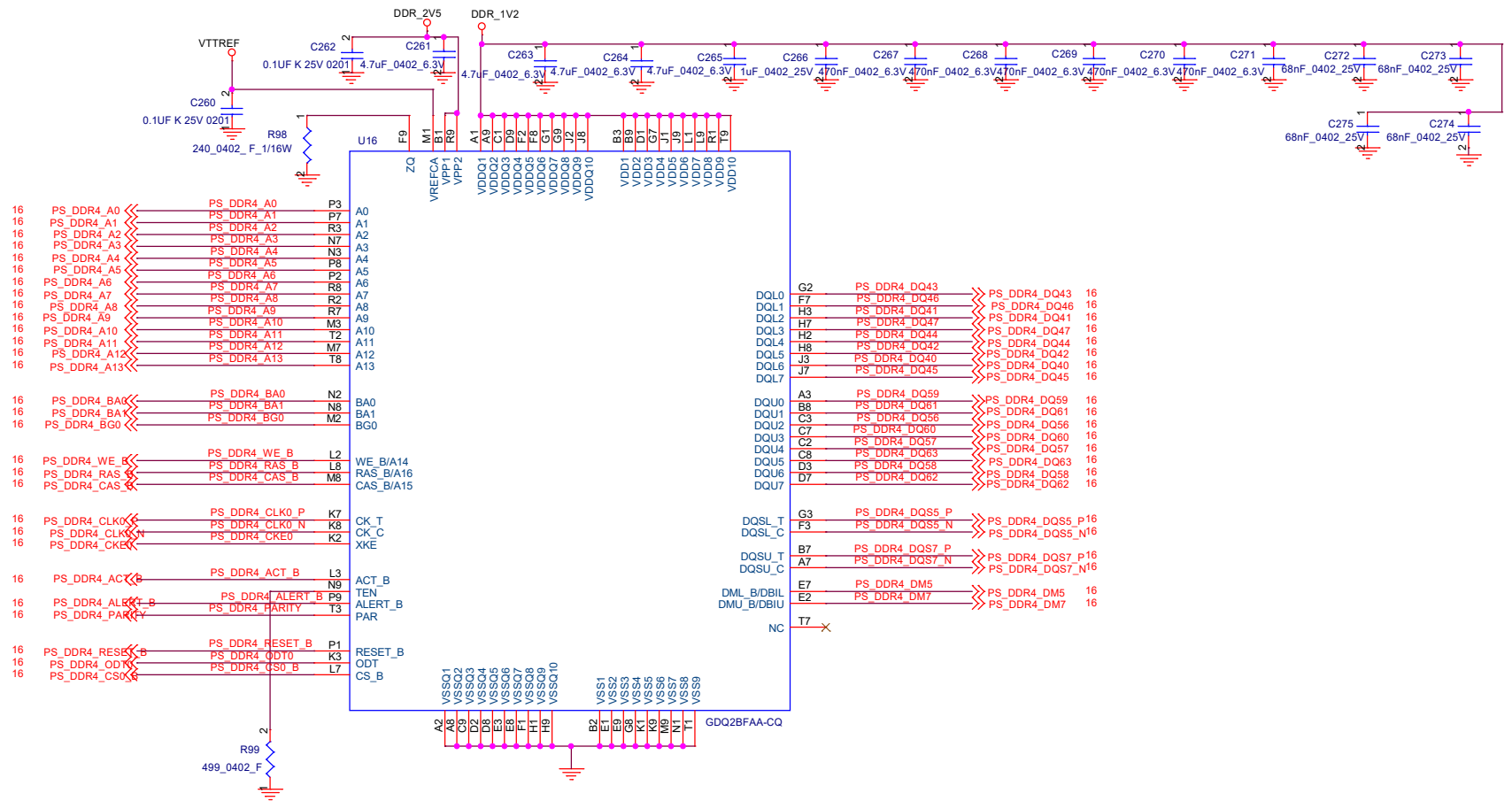
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- 16 PS_DDR4_A2 << PS_DDR4_A2 R3 A2
- 16 PS_DDR4_A3 << PS_DDR4_A3 N7 A3
- 16 PS_DDR4_A4 << PS_DDR4_A4 N3 A4
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- 16 PS_DDR4_A7 << PS_DDR4_A7 R8 A7
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- 16 PS_DDR4_RAS << PS_DDR4_RAS_B L8 RAS_B/A16
- 16 PS_DDR4_CAS << PS_DDR4_CAS_B M8 CAS_B/A15

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- 16 PS_DDR4_CLK0 << PS_DDR4_CLK0_N K8 CK_C
- 16 PS_DDR4_CKE << PS_DDR4_CKE0 K2 XKE

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- 16 PS_DDR4_PARK << PS_DDR4_PARK_T3 PAR

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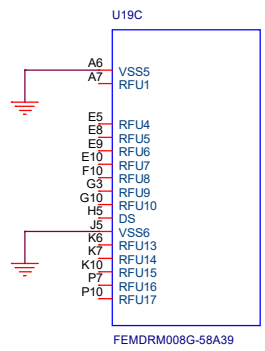
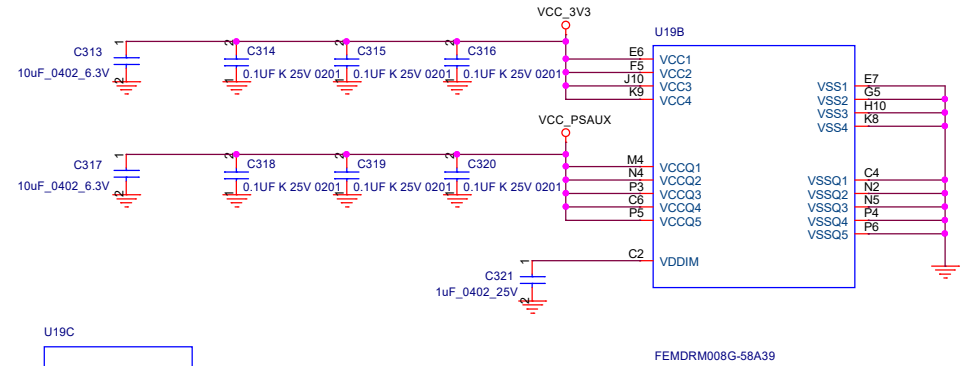
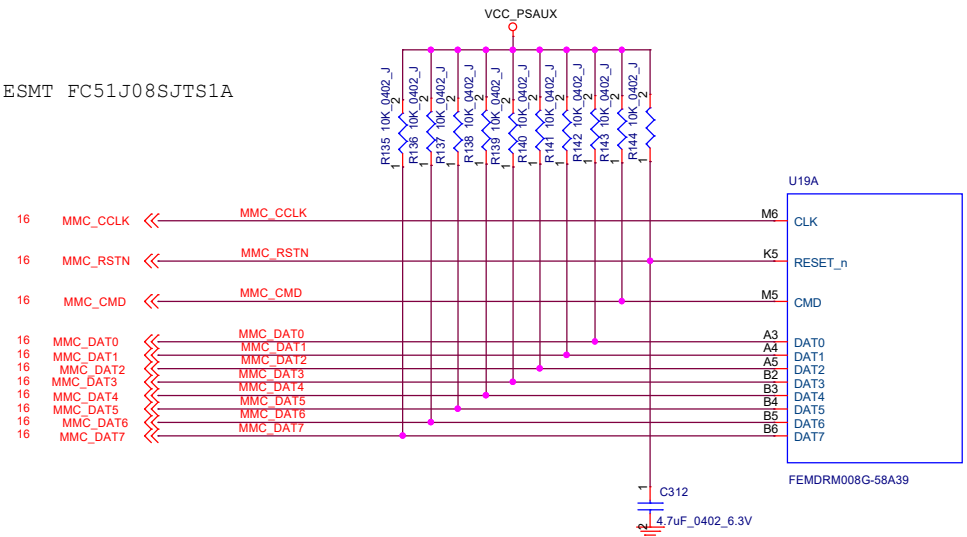
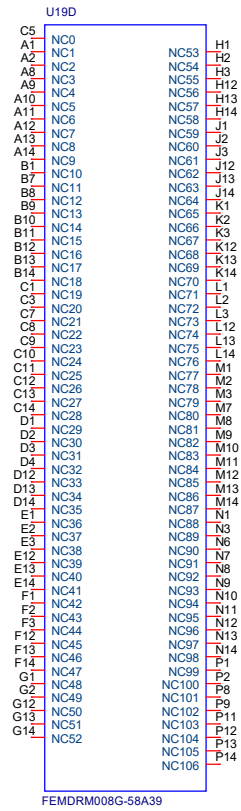
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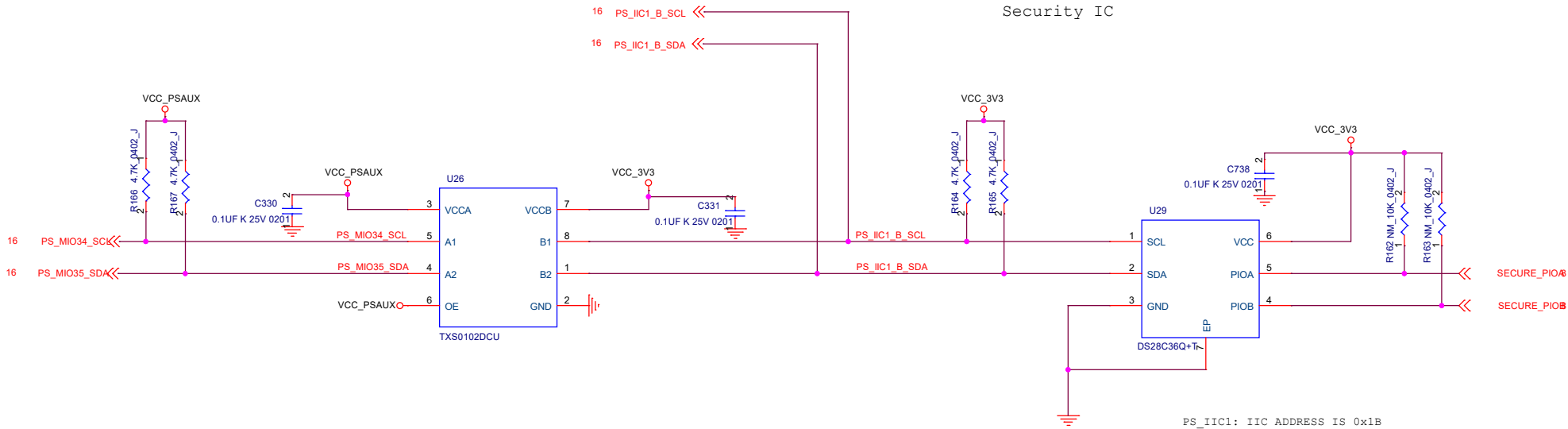
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11/16 reference use FORESEE FEMDRM008G, it's not AVL, PUR syggest ESMT FC51J08SJS1a



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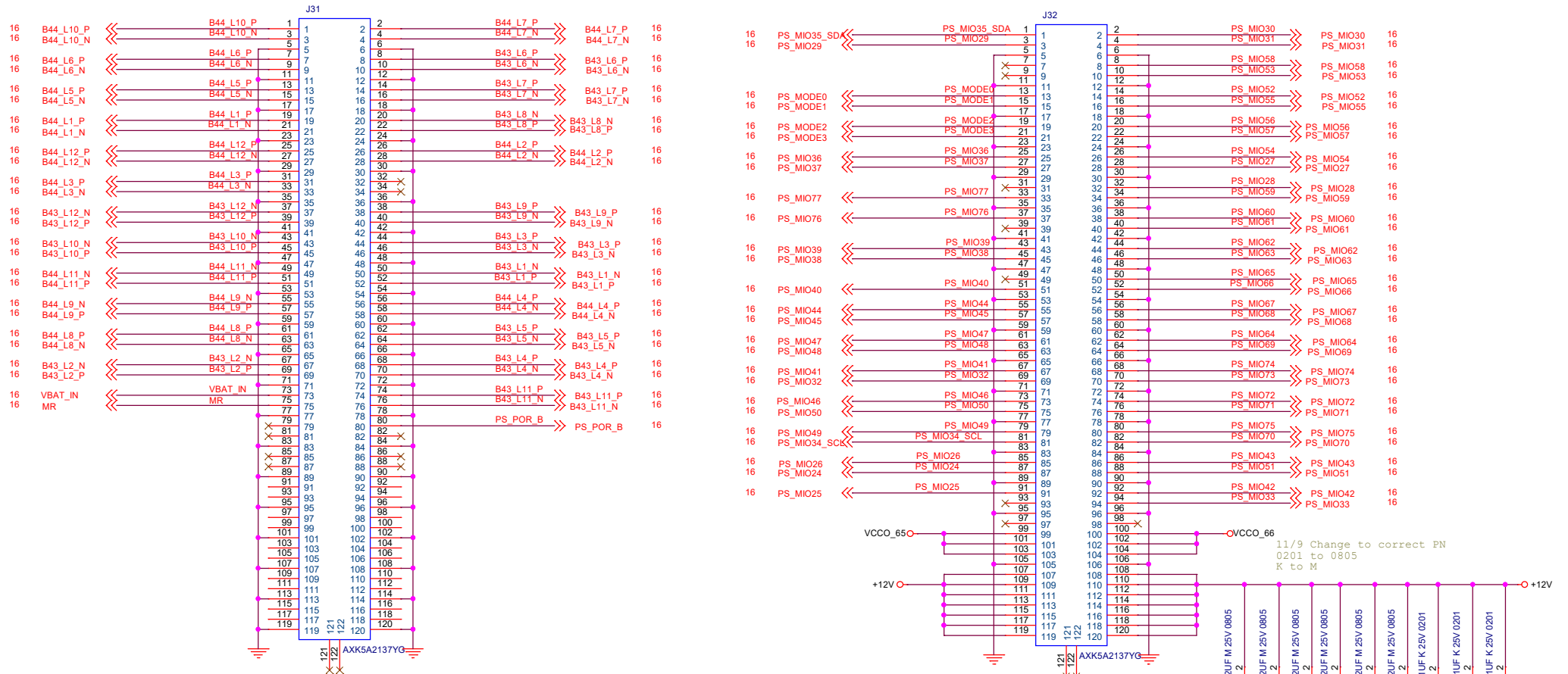


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BANK43, BANK44 IO Voltage is +3.3V Standard

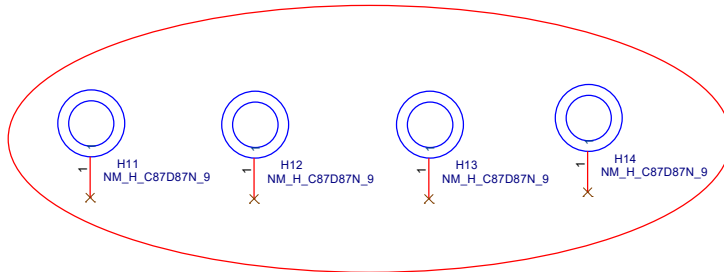
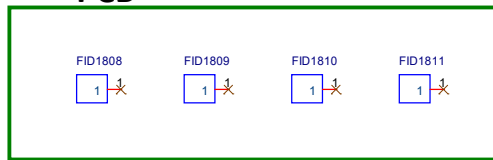
The MIO Voltage is +1.8V Standard



11/9 Change to correct PN
0201 to 0805
K to M

ORIENTATION HOLE

PCB



VCCO_65 VCCO_66 Power supply can not exceed 1.8V

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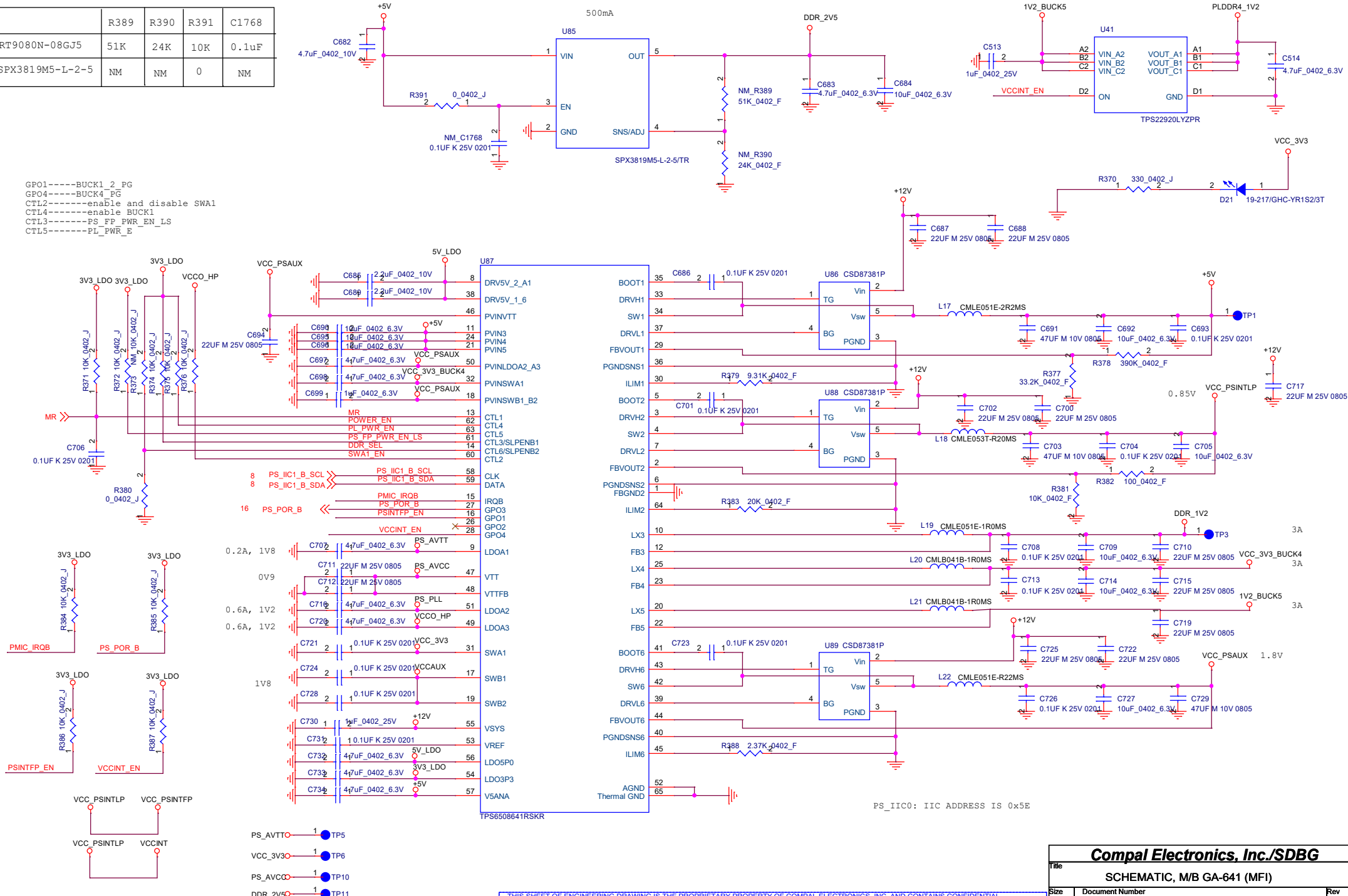
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U85 select

	R389	R390	R391	C1768
RT9080N-08GJ5	51K	24K	10K	0.1uF
SPX3819M5-L-2-5	NM	NM	0	NM

11/24 原本是SPX3819M5-L-2-5不是我們AVL, PUR建議用RT9080N-08GJ5 performance差不多且pin to pin

GPO1-----BUCK1_2_PG
 GPO4-----BUCK4_PG
 CTL2-----enable and disable SWA1
 CTL4-----enable BUCK1
 CTL3-----PS_FP_PWR_EN_LS
 CTL5-----PL_PWR_E



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