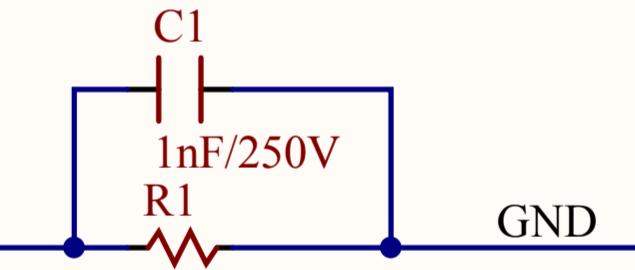
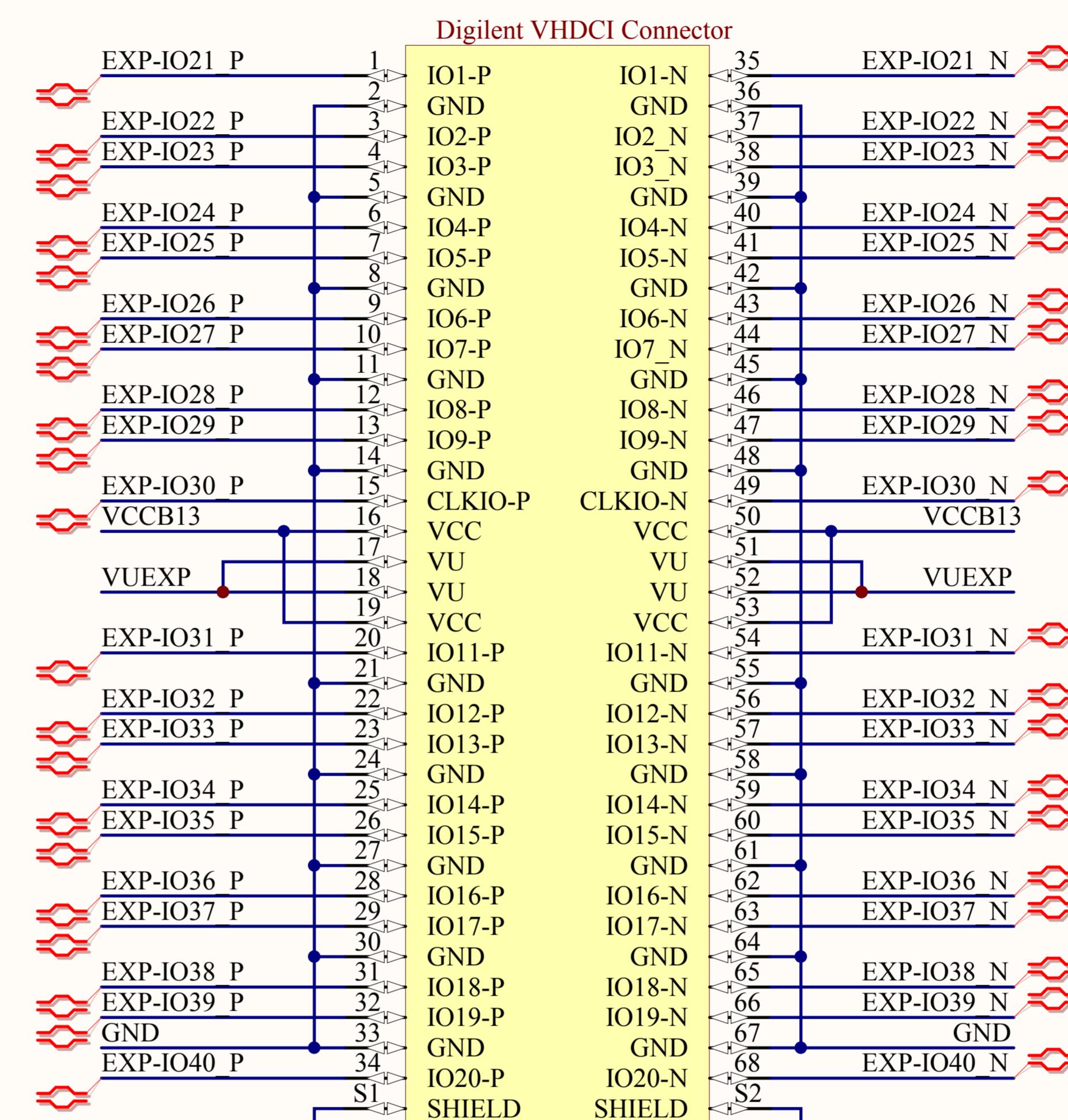
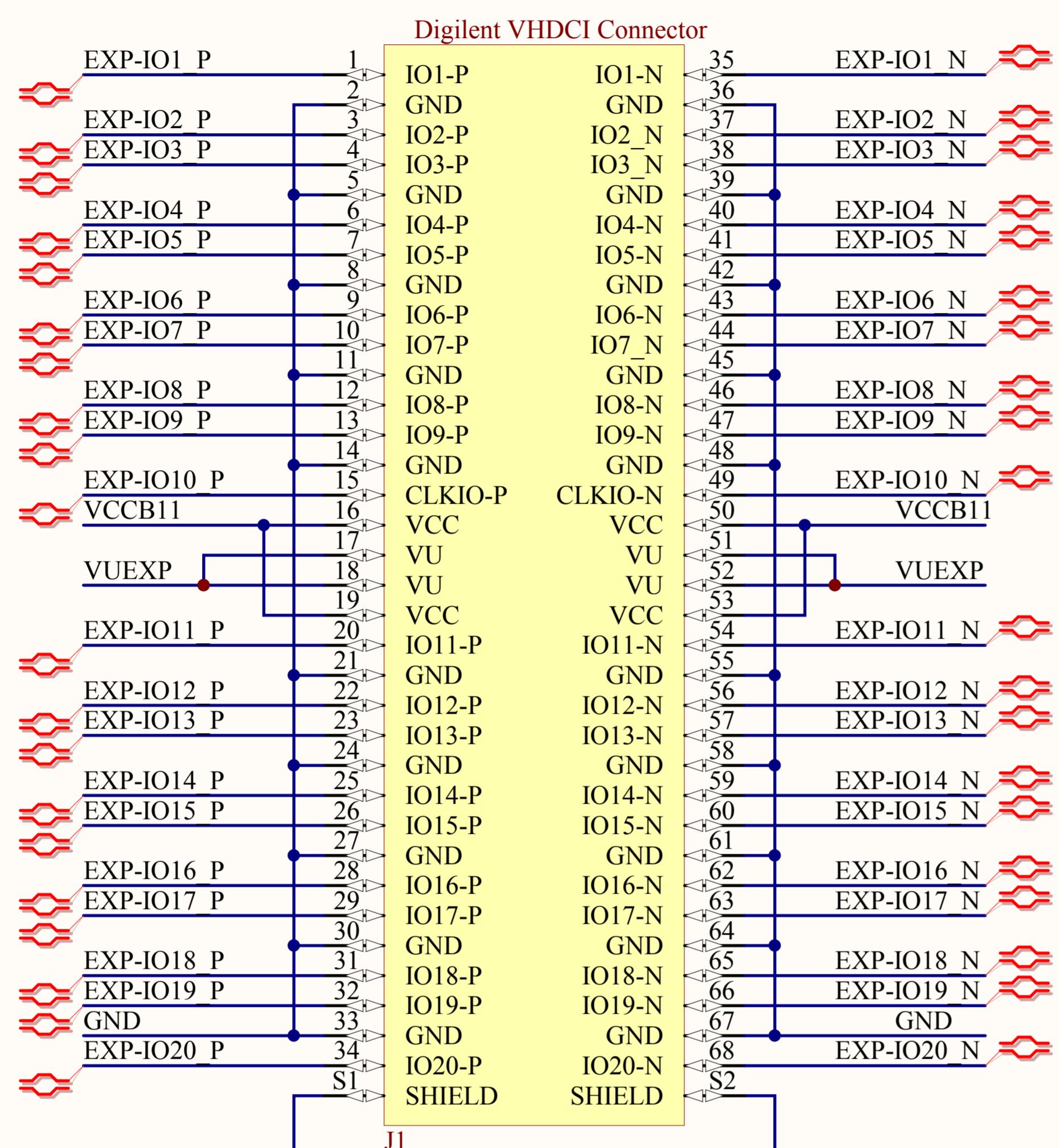


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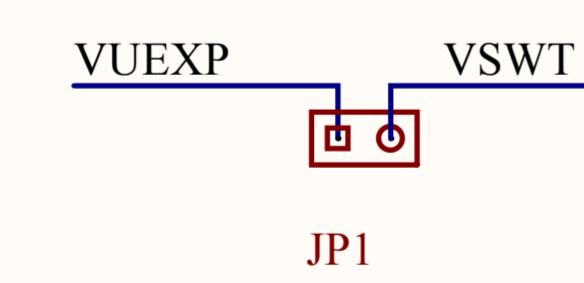
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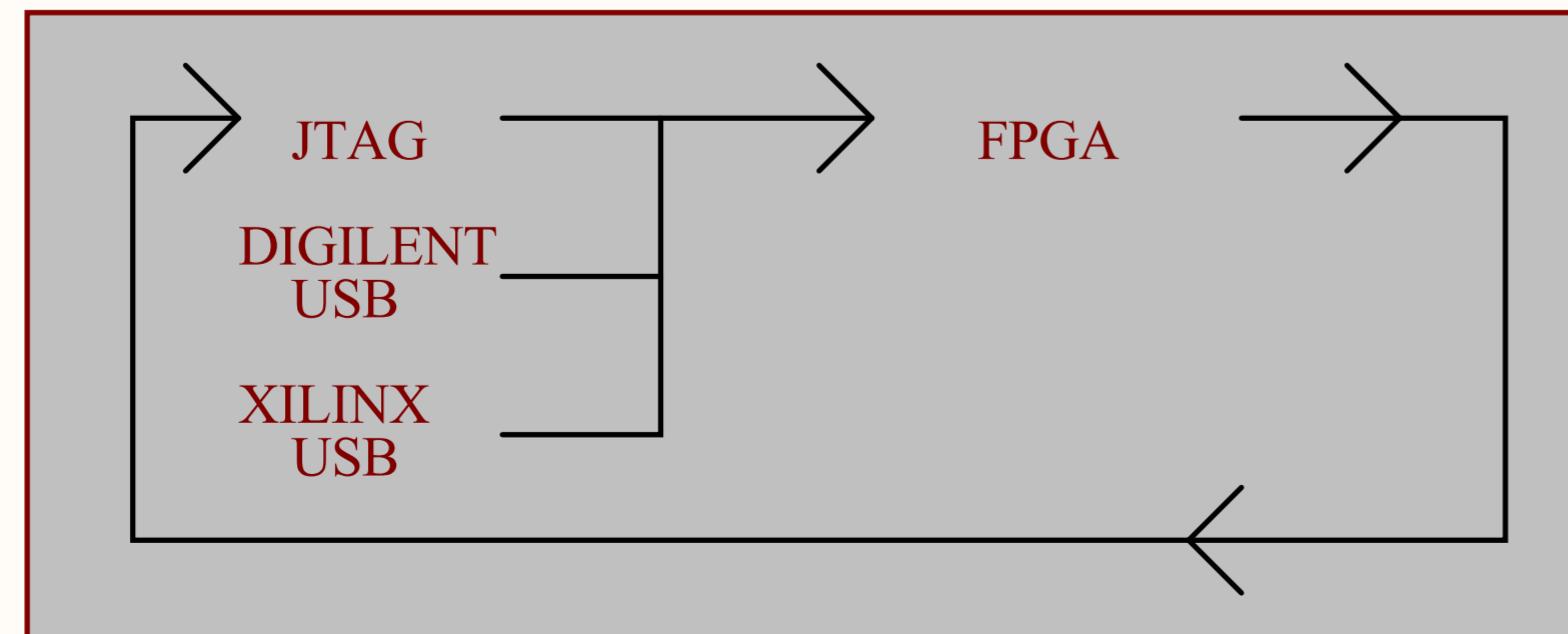
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### JTAG SCAN CHAIN



Genesys

Digilent Inc.

Xilinx

Texas Instruments

Numonyx

ROHS

Chinese ROHS

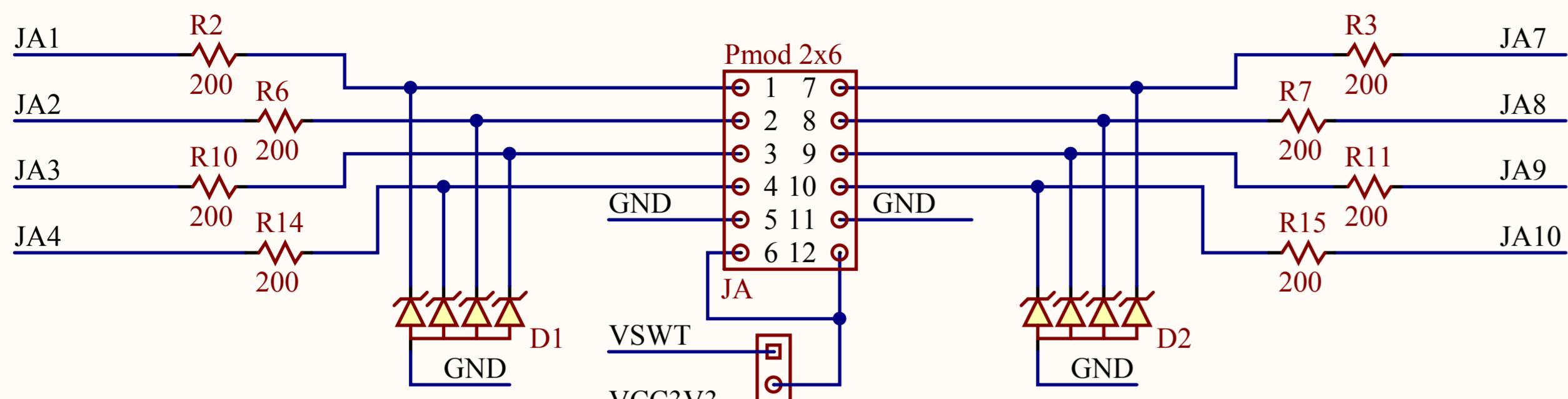
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F1  
Foot  
F2  
Foot  
F3  
Foot  
F4

Title  
**Genesys**  
Circuit Expansion Headers  
Doc# 500-138  
Engineer CC  
Author GMA  
Date 1/5/2010  
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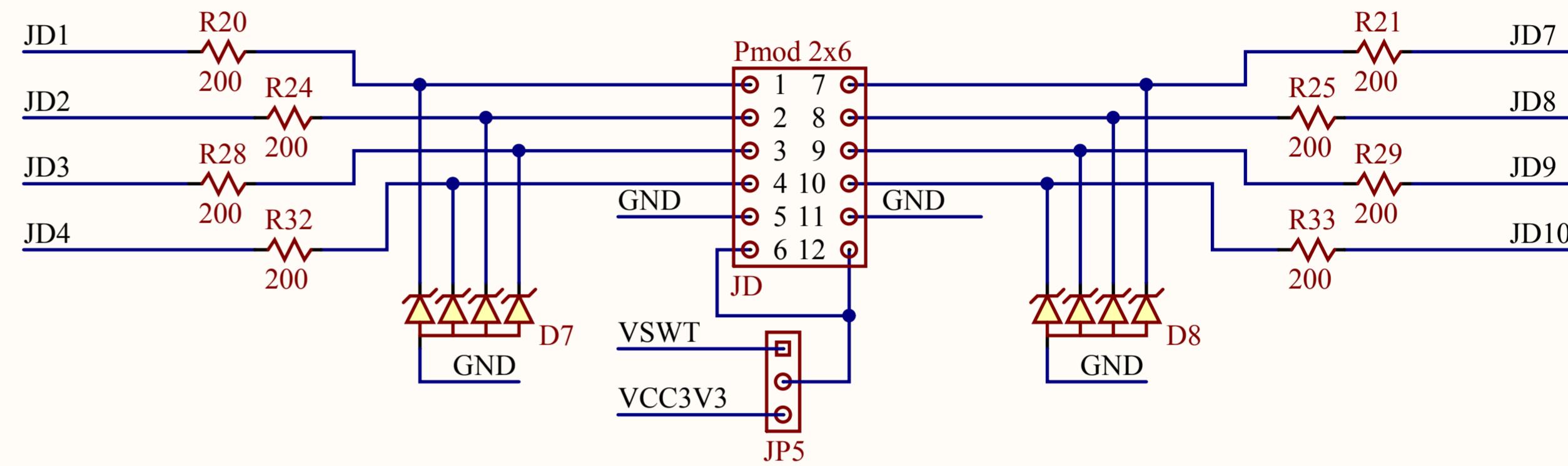
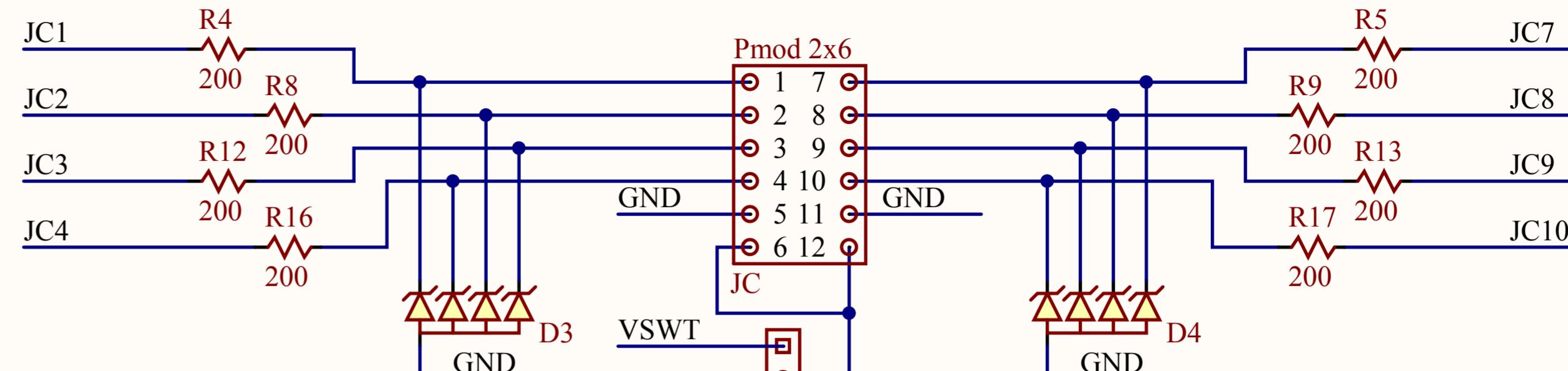
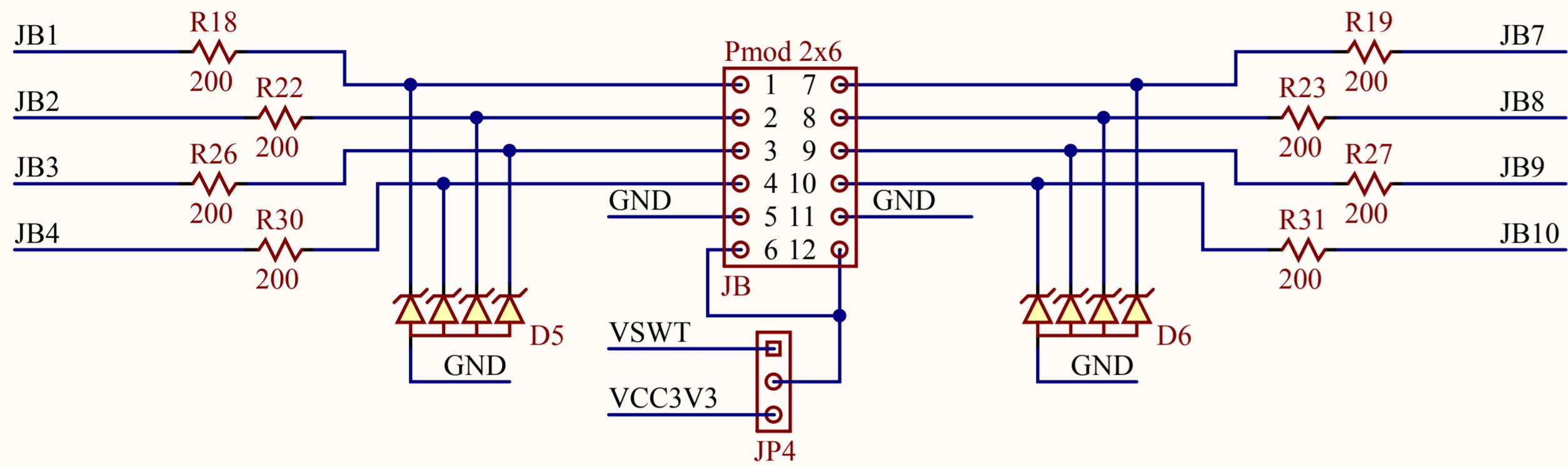
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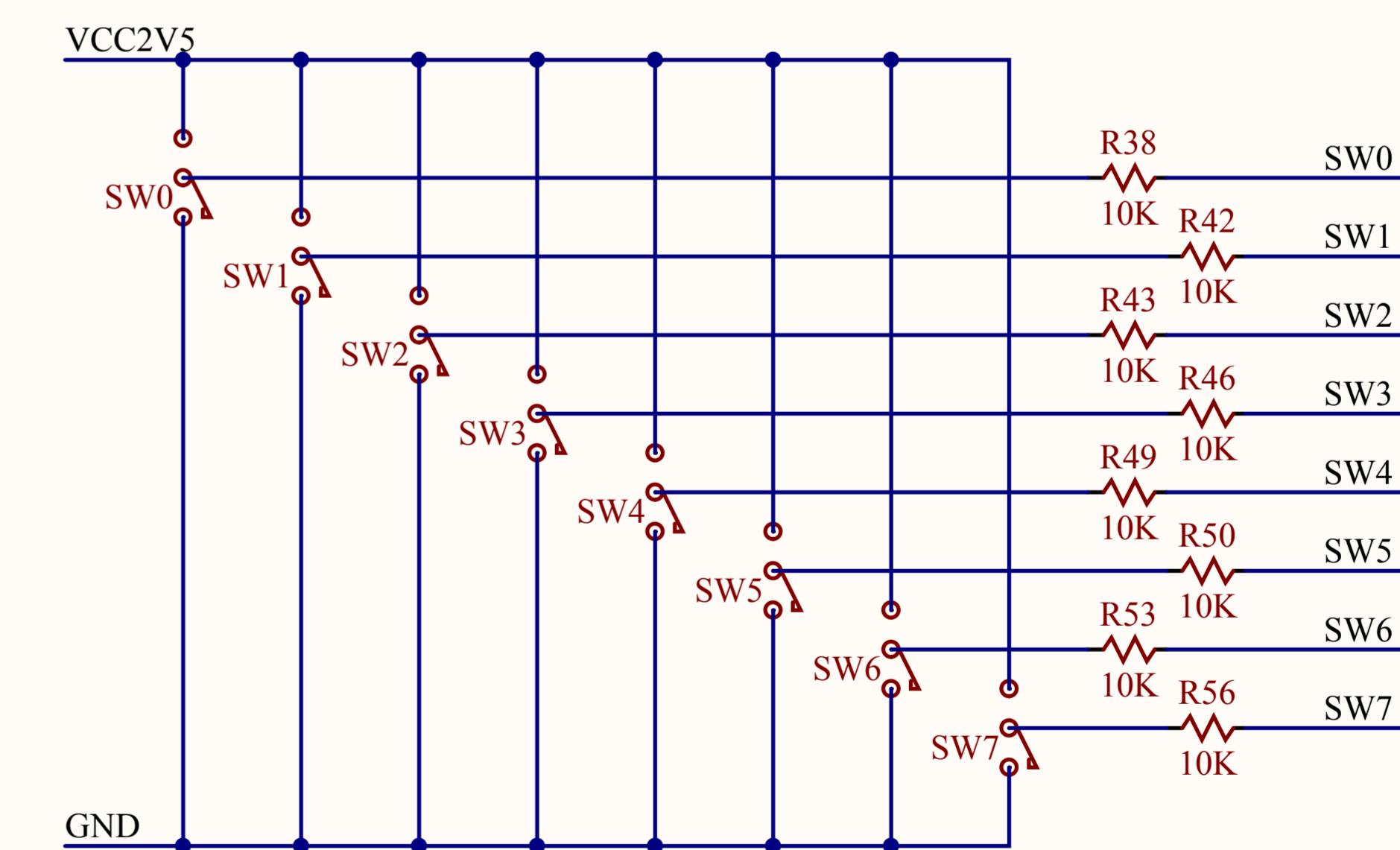
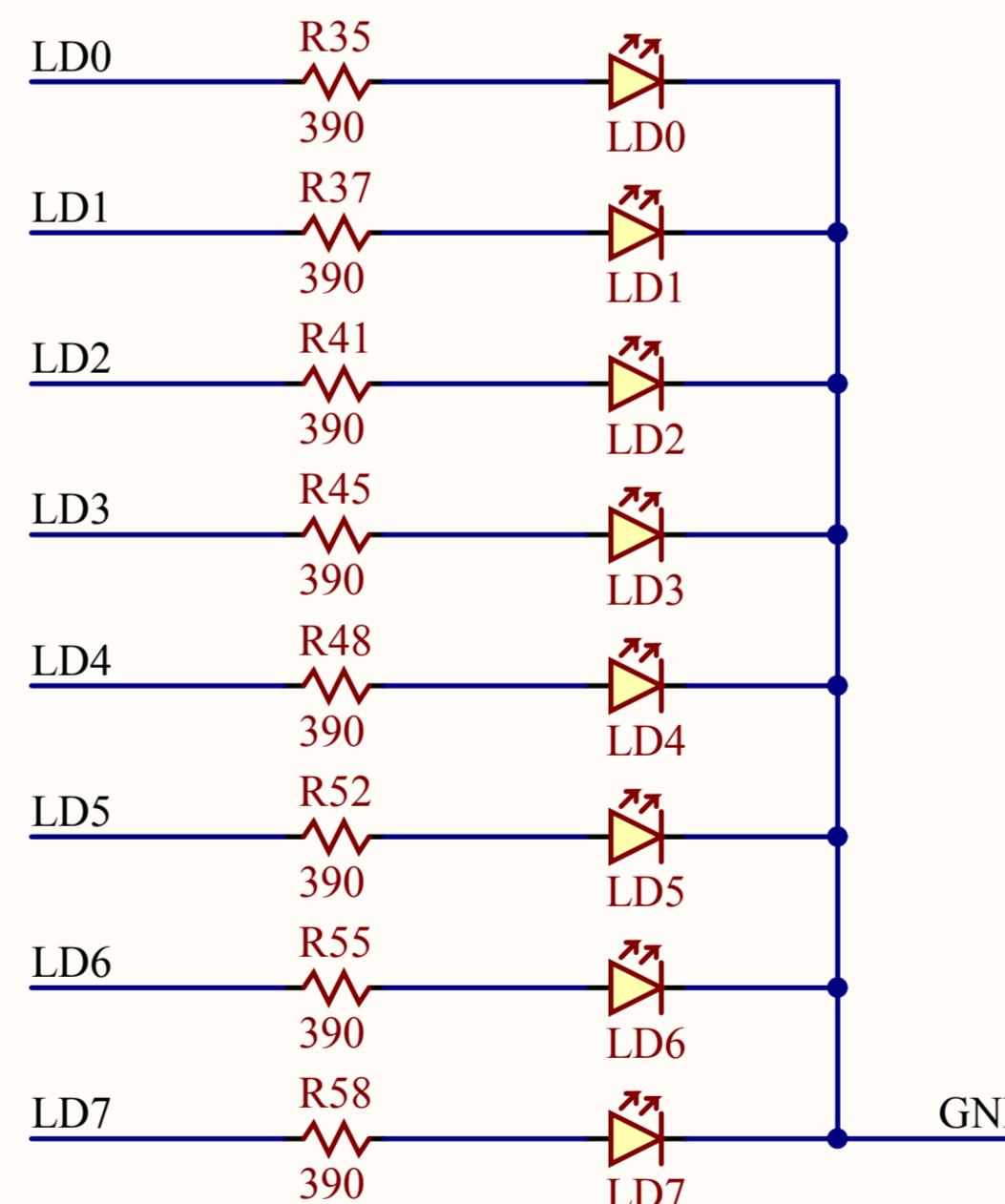
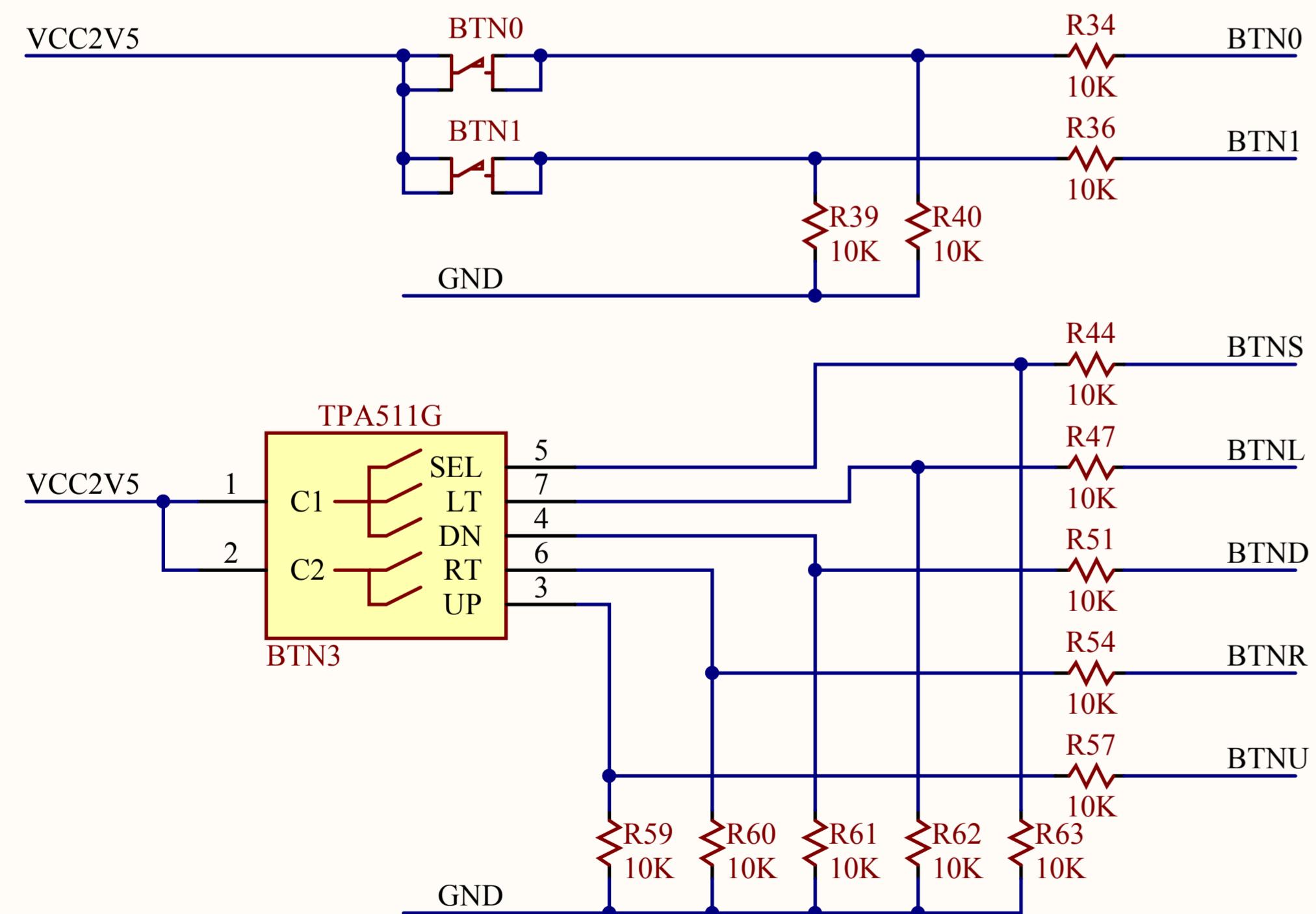
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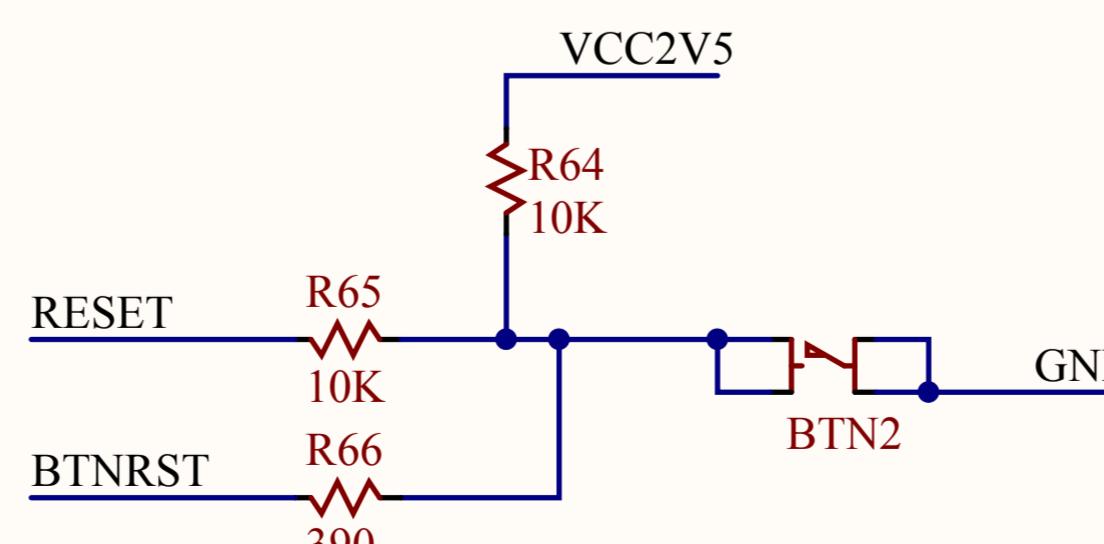
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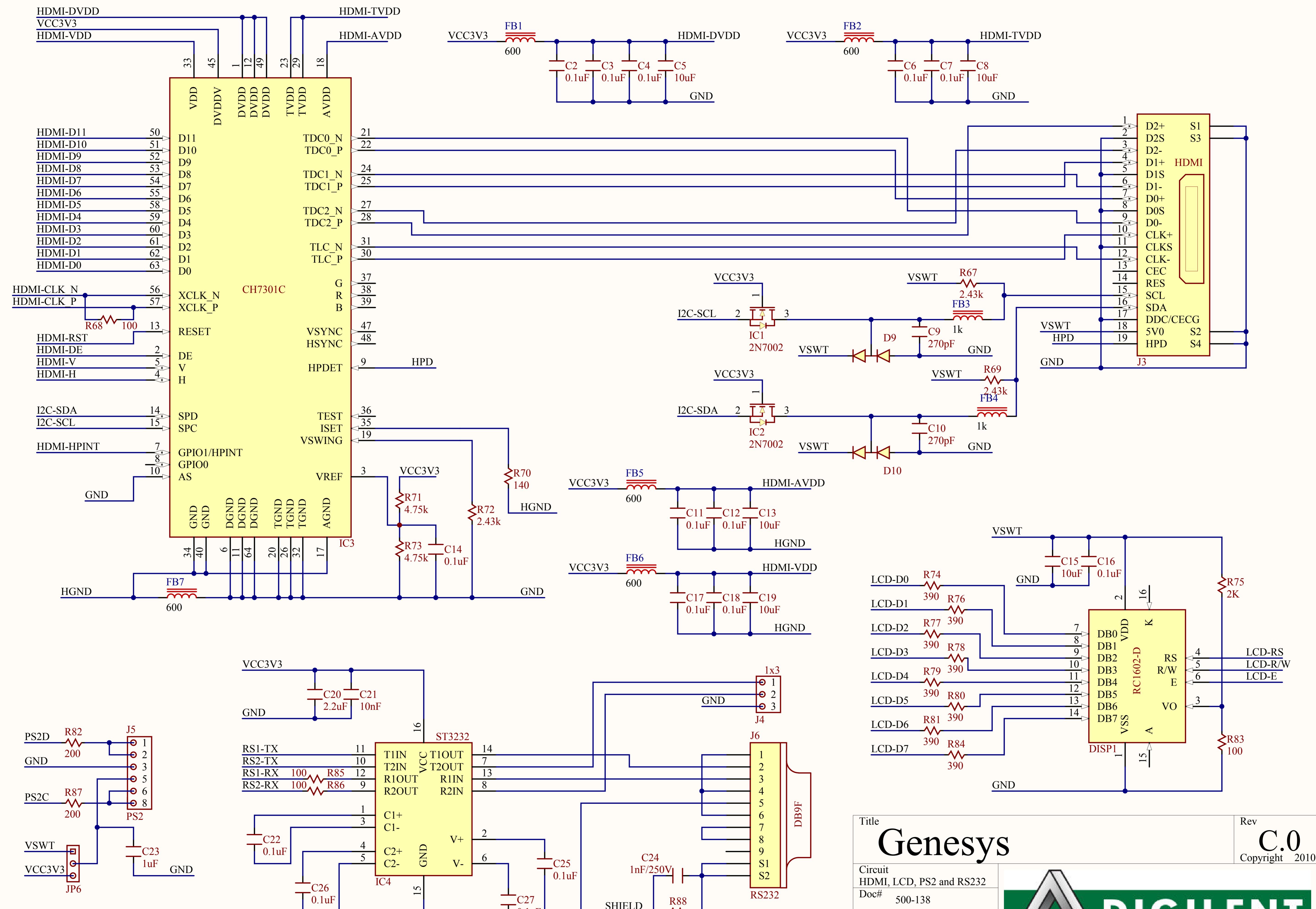


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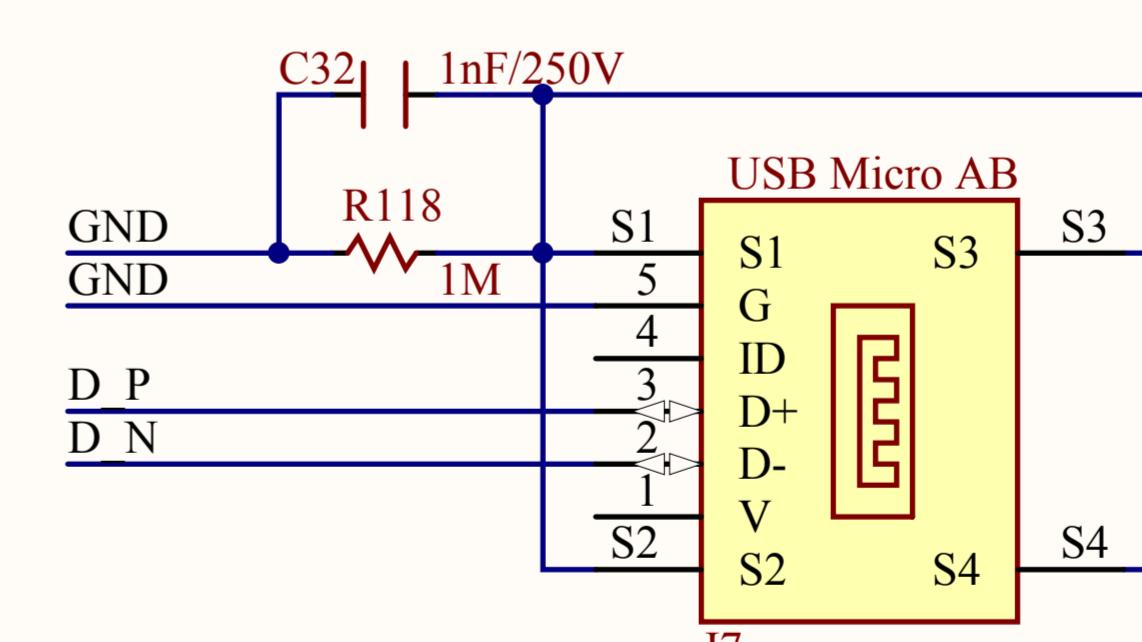
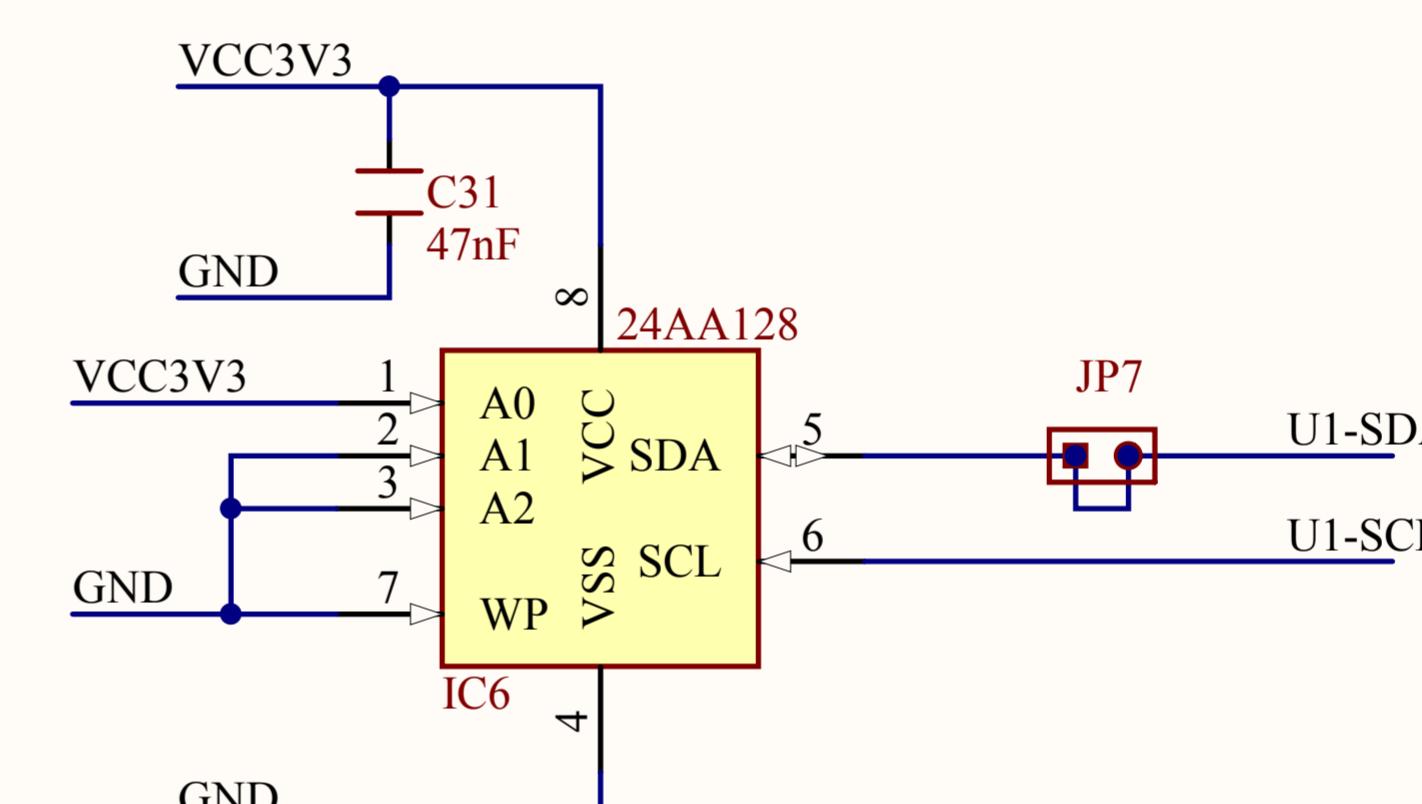
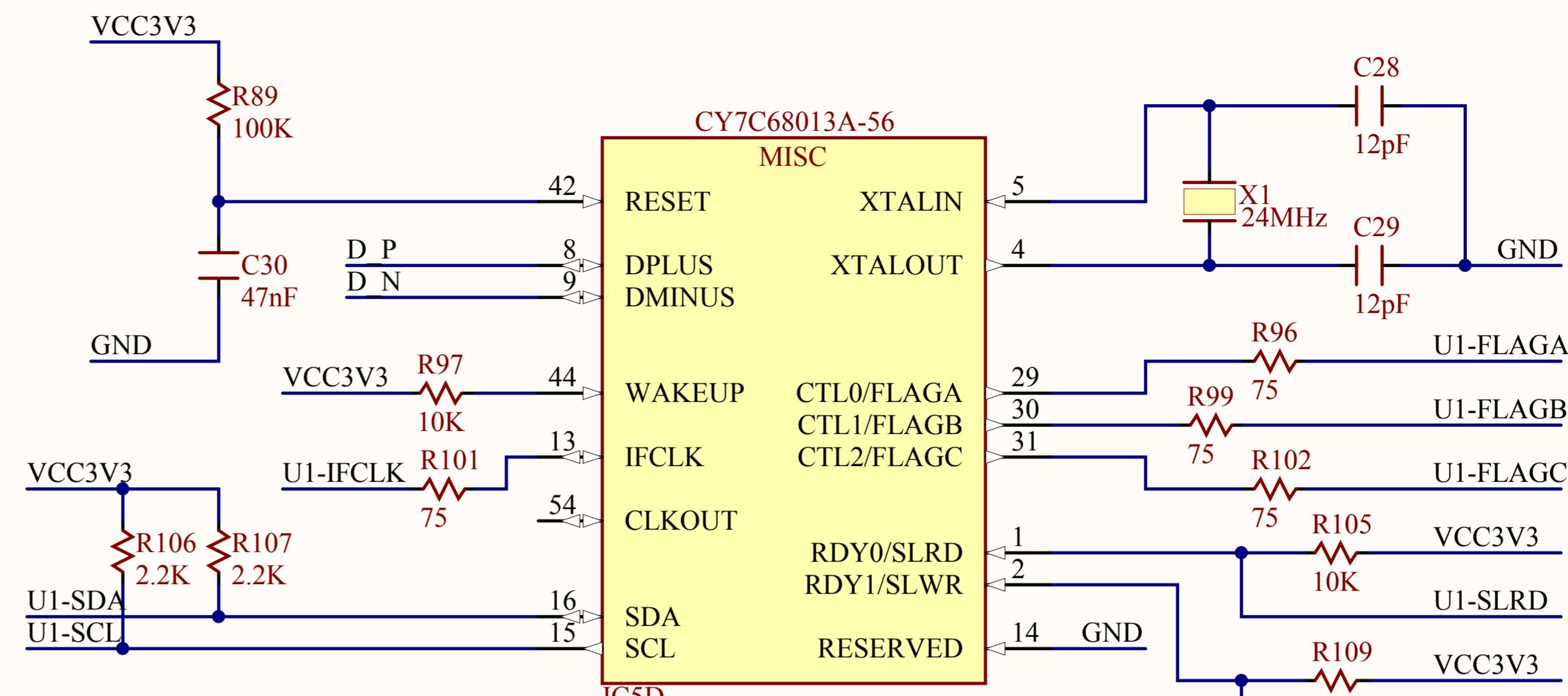
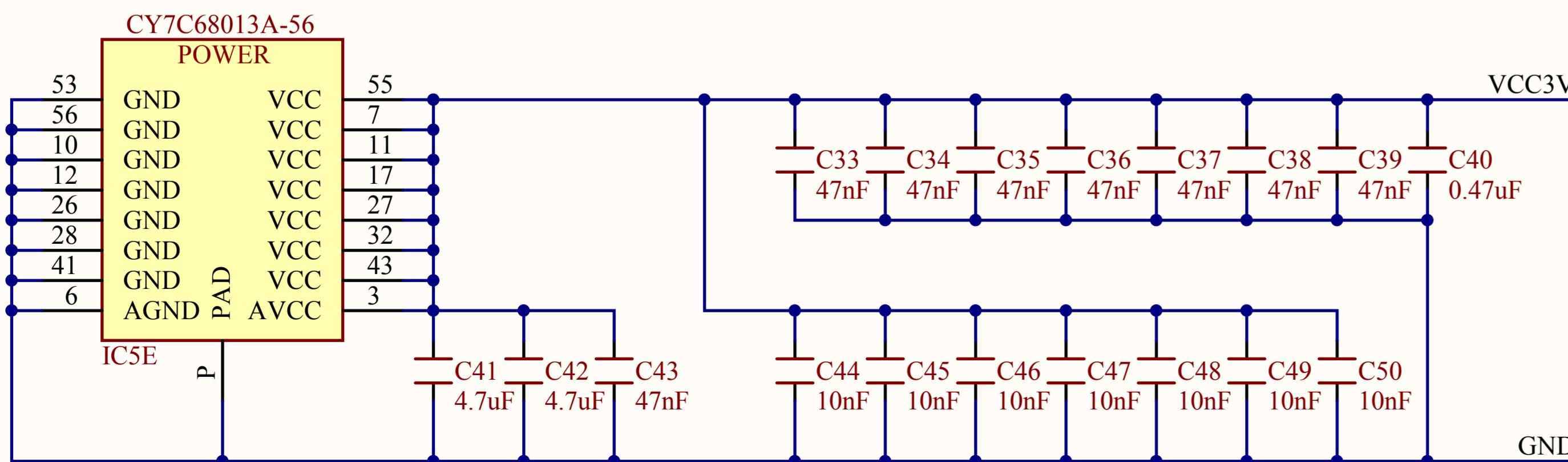
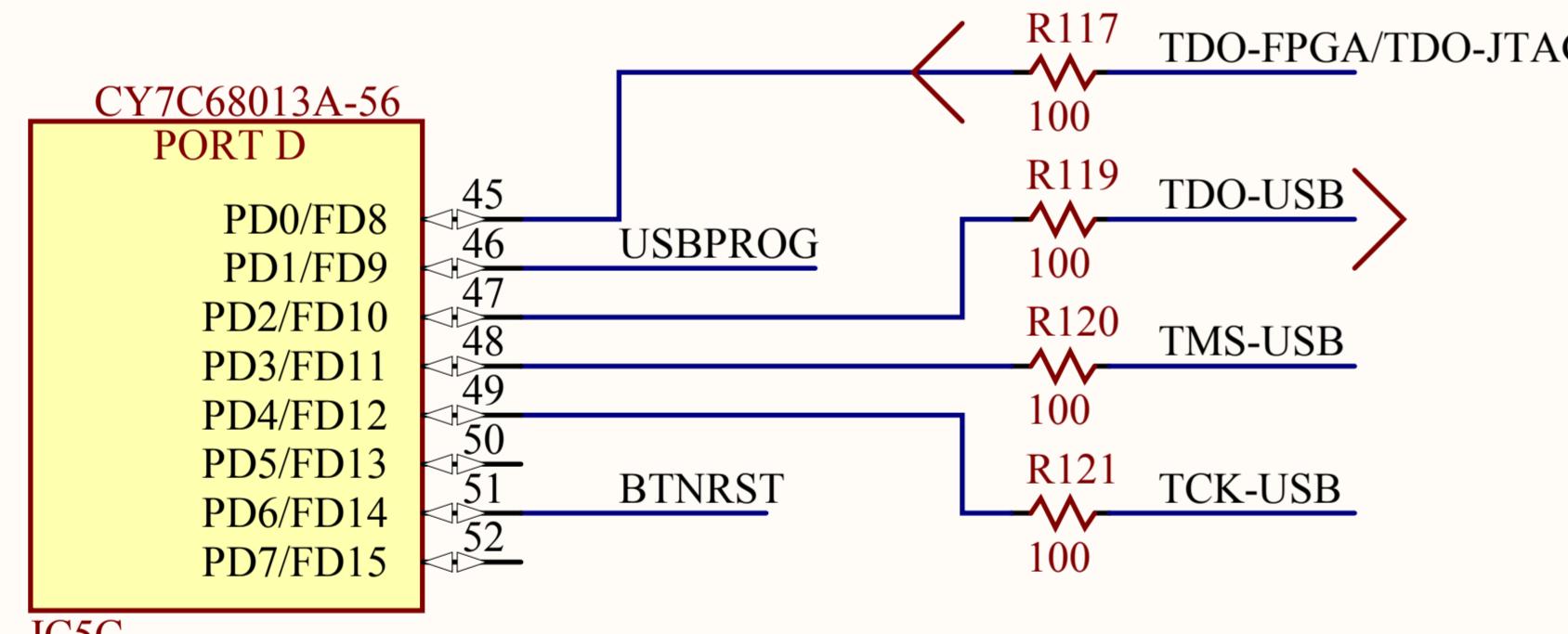
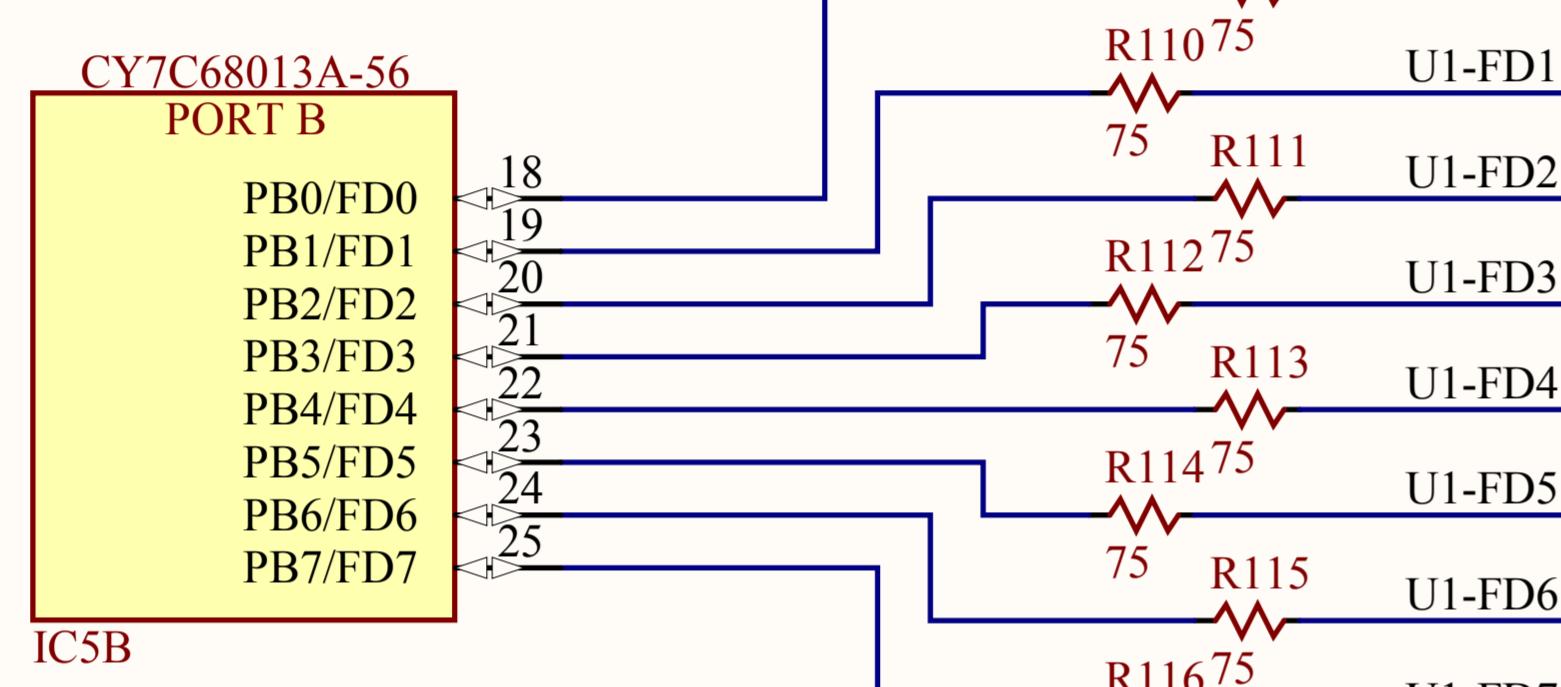
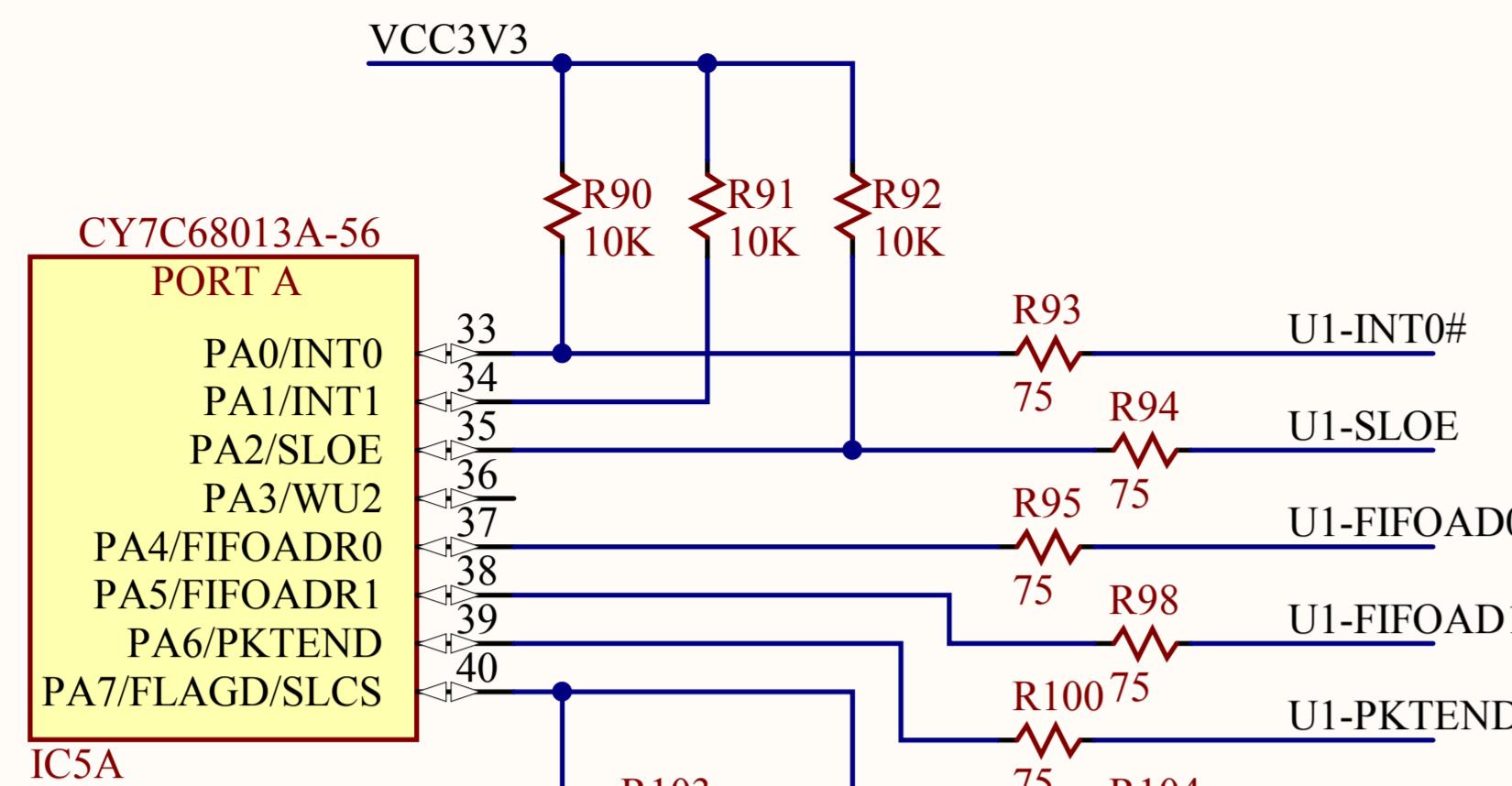


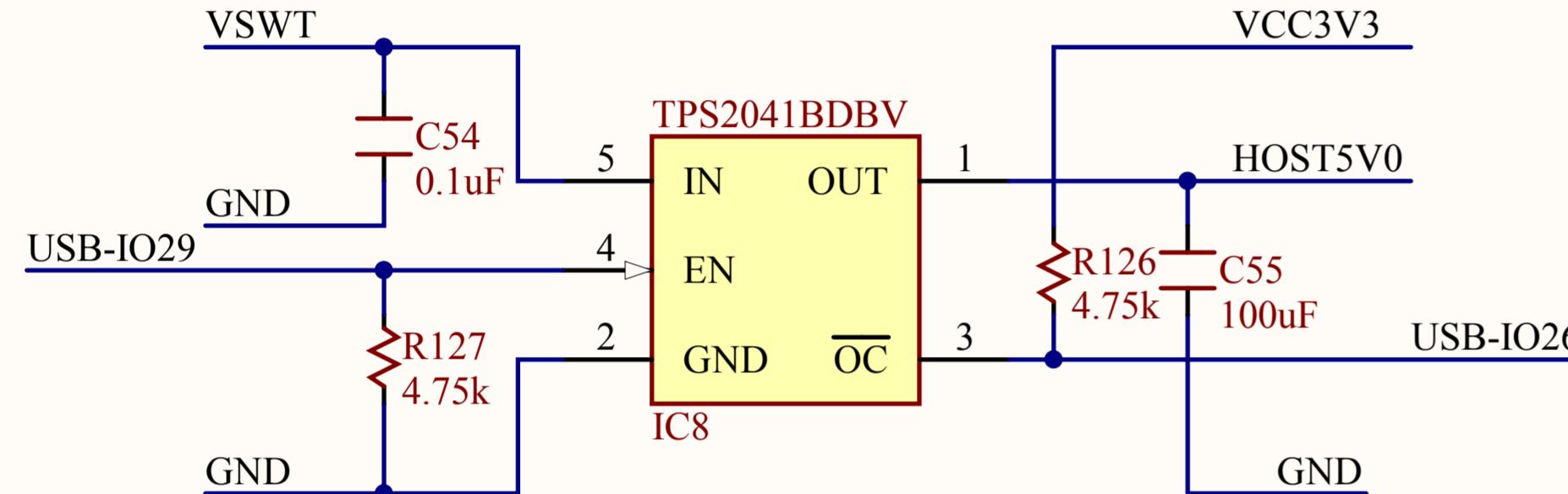
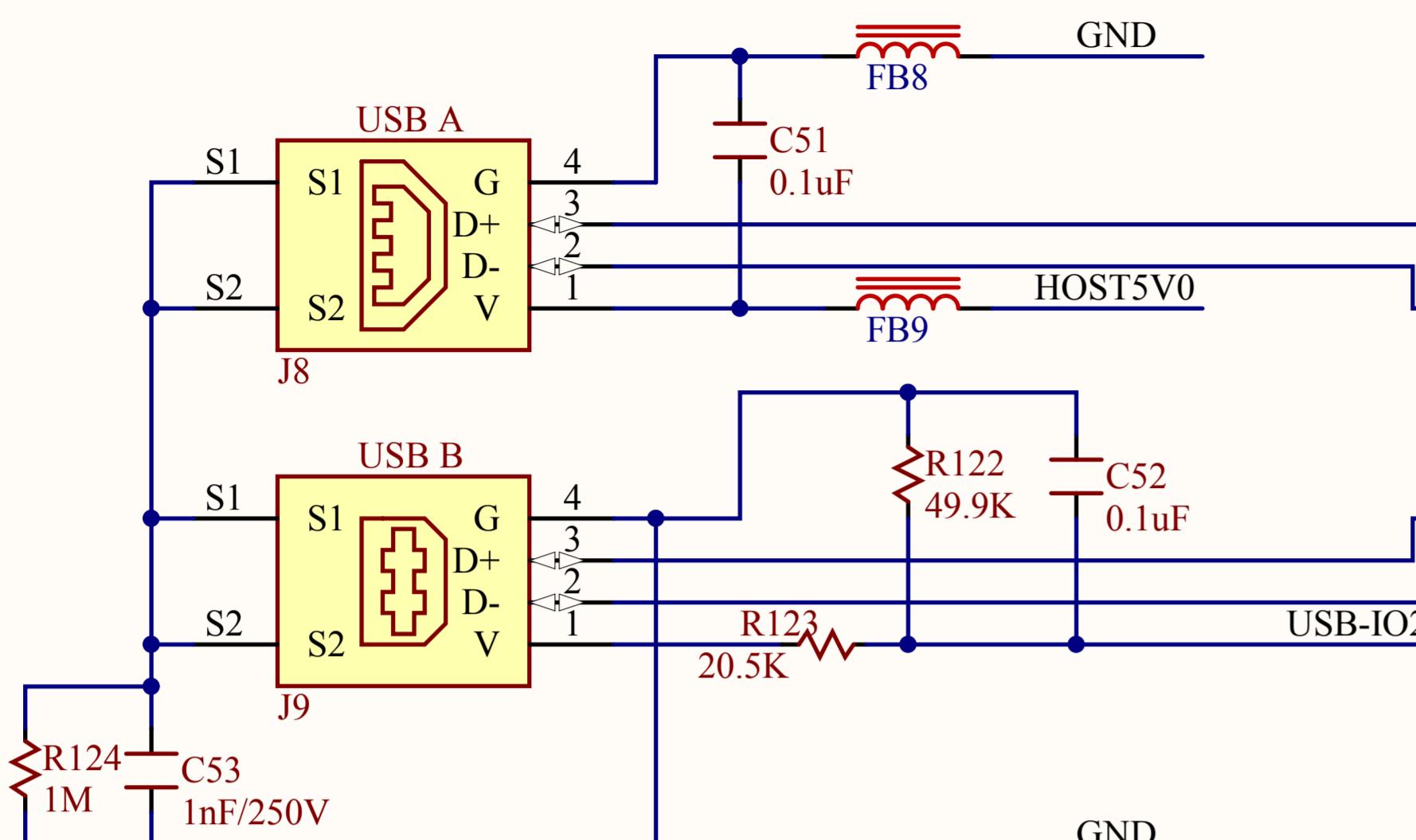
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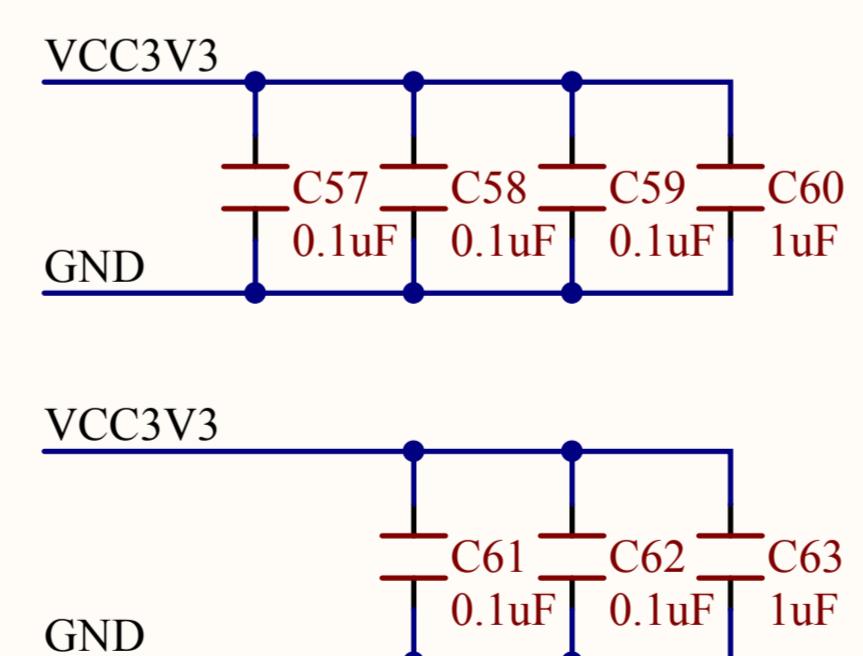
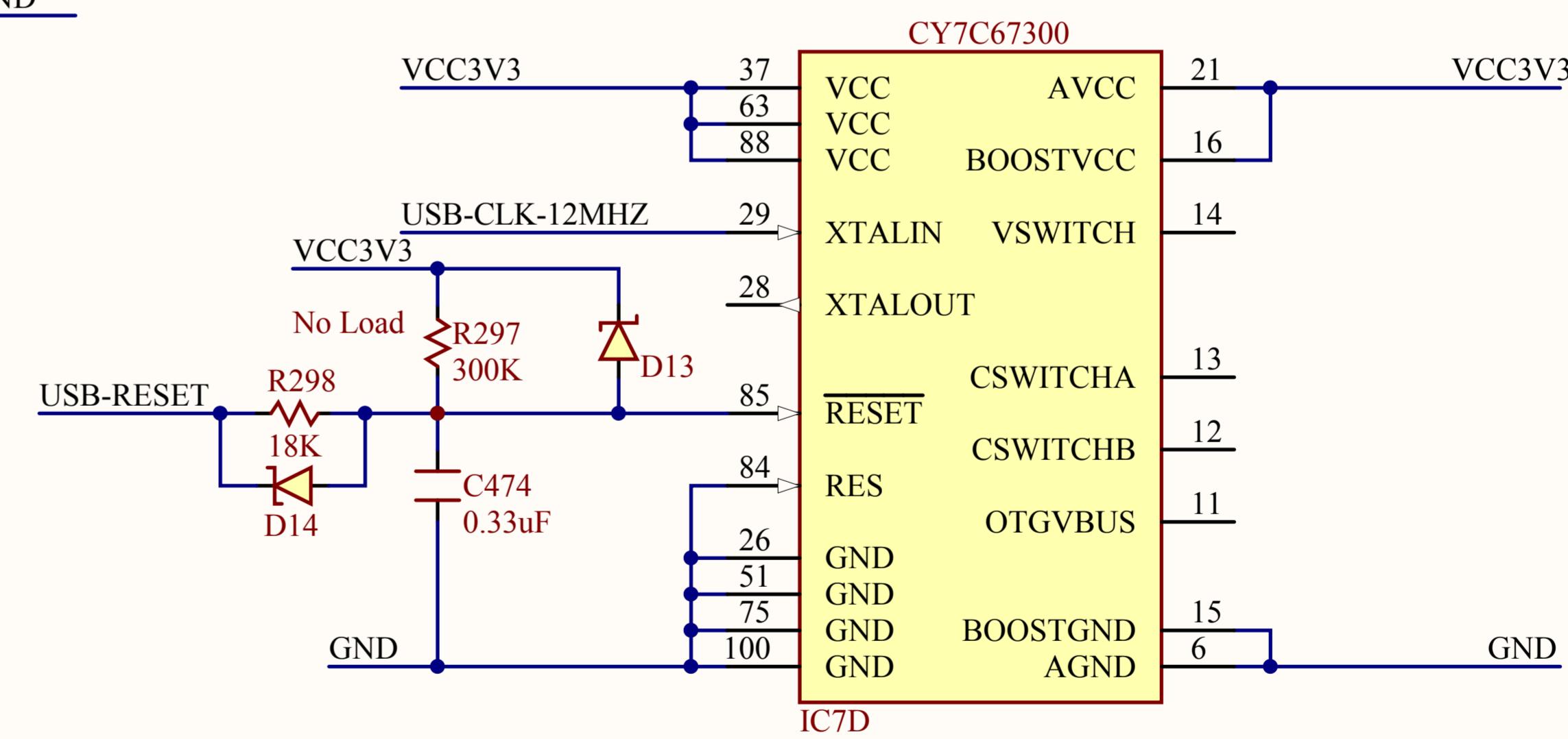
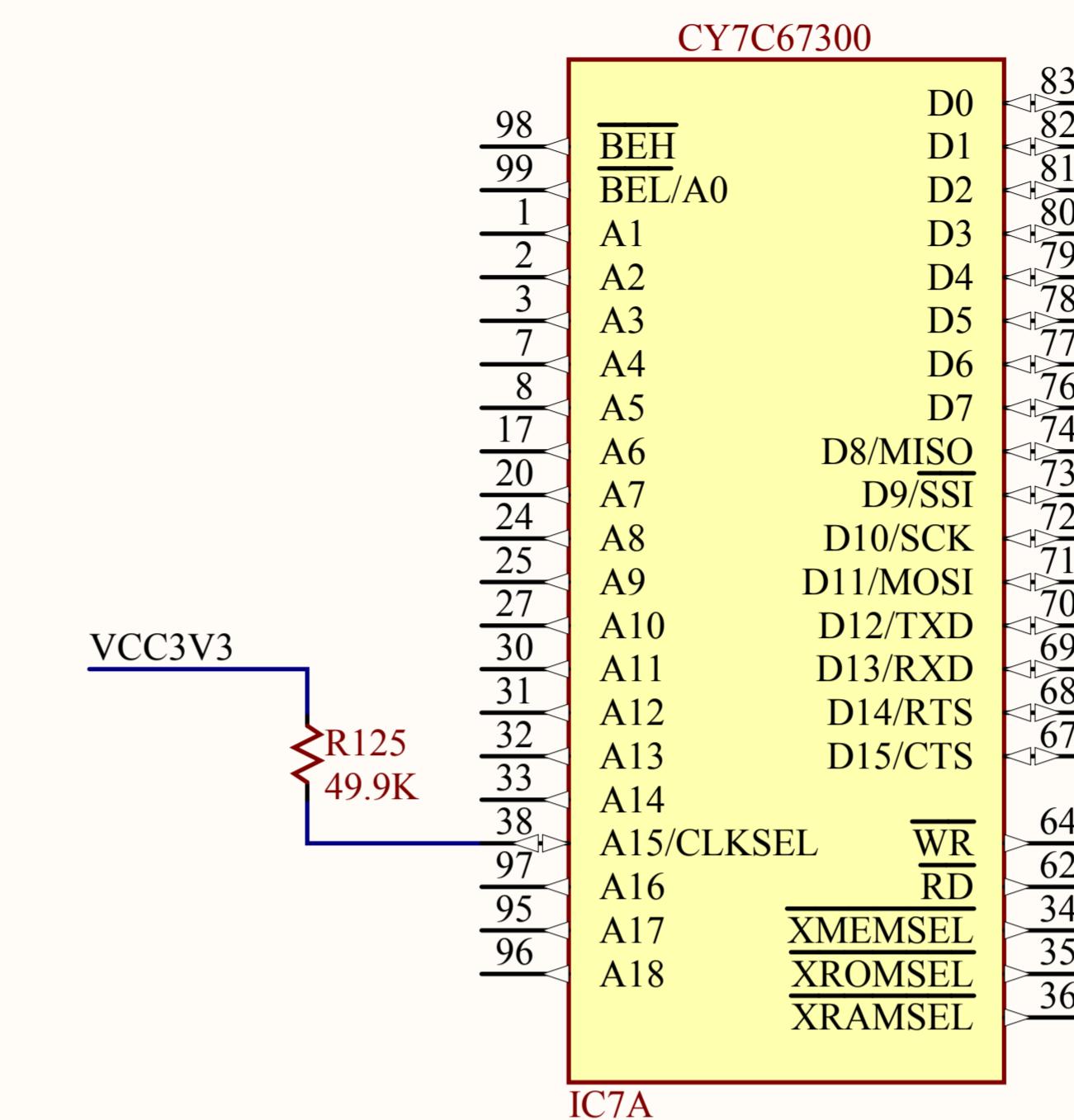
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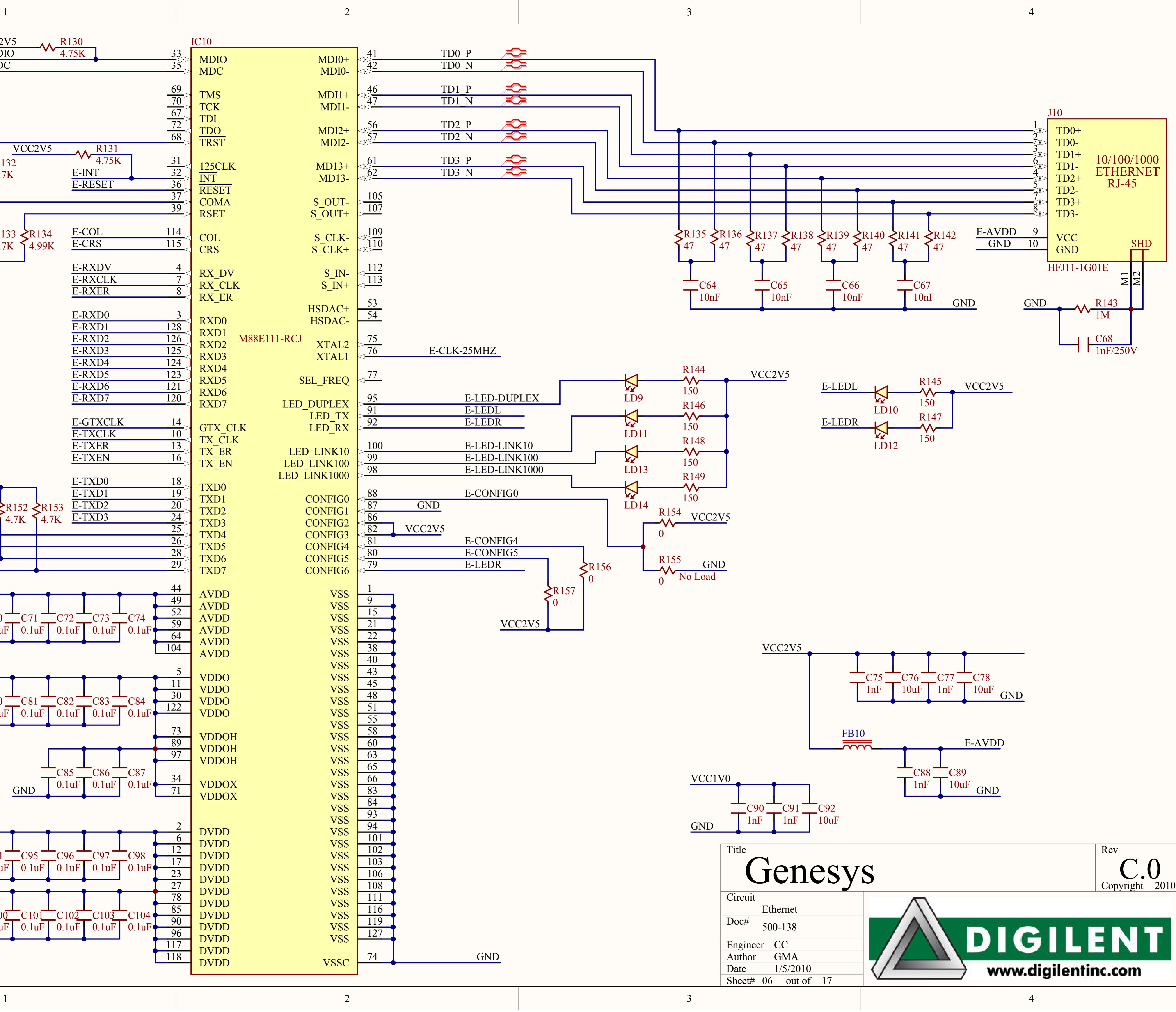
GPIO0/D0	USB-D0
GPIO1/D1	USB-D1
GPIO2/D2	USB-D2
GPIO3/D3	USB-D3
GPIO4/D4	USB-D4
GPIO5/D5	USB-D5
GPIO6/D6	USB-D6
GPIO7/D7	USB-D7
GPIO8/D8/MISO	USB-D8
GPIO9/D9/SSI	USB-D9
GPIO10/D10/SCK	USB-D10
GPIO11/D11/MOSI	USB-D11
GPIO12/D12	USB-D12
GPIO13/D13	USB-D13
GPIO14/D14	USB-D14
GPIO15/D15/SSI	USB-D15
GPIO16/A0/TXD/PWM0	USB-A0
GPIO17/A1/RXD/PWM1	USB-A1
GPIO18/A2/RTS/PWM2	USB-CS
GPIO19/A0/C50	USB-WR
GPIO20/A1/C51	USB-RD
GPIO21/CS	USB-INT
GPIO22/WR/IOW	USB-IO25
GPIO23/RD/IOR	USB-IO26
GPIO24/INT/IORDY/IRQ0	USB-RX
GPIO25/IRQ1	USB-TX
GPIO26/CTS/PWM3	USB-IO29
GPIO27/RX	
GPIO28/TX	
GPIO29/OTGID	
GPIO30/SDA	
GPIO31/SCL	

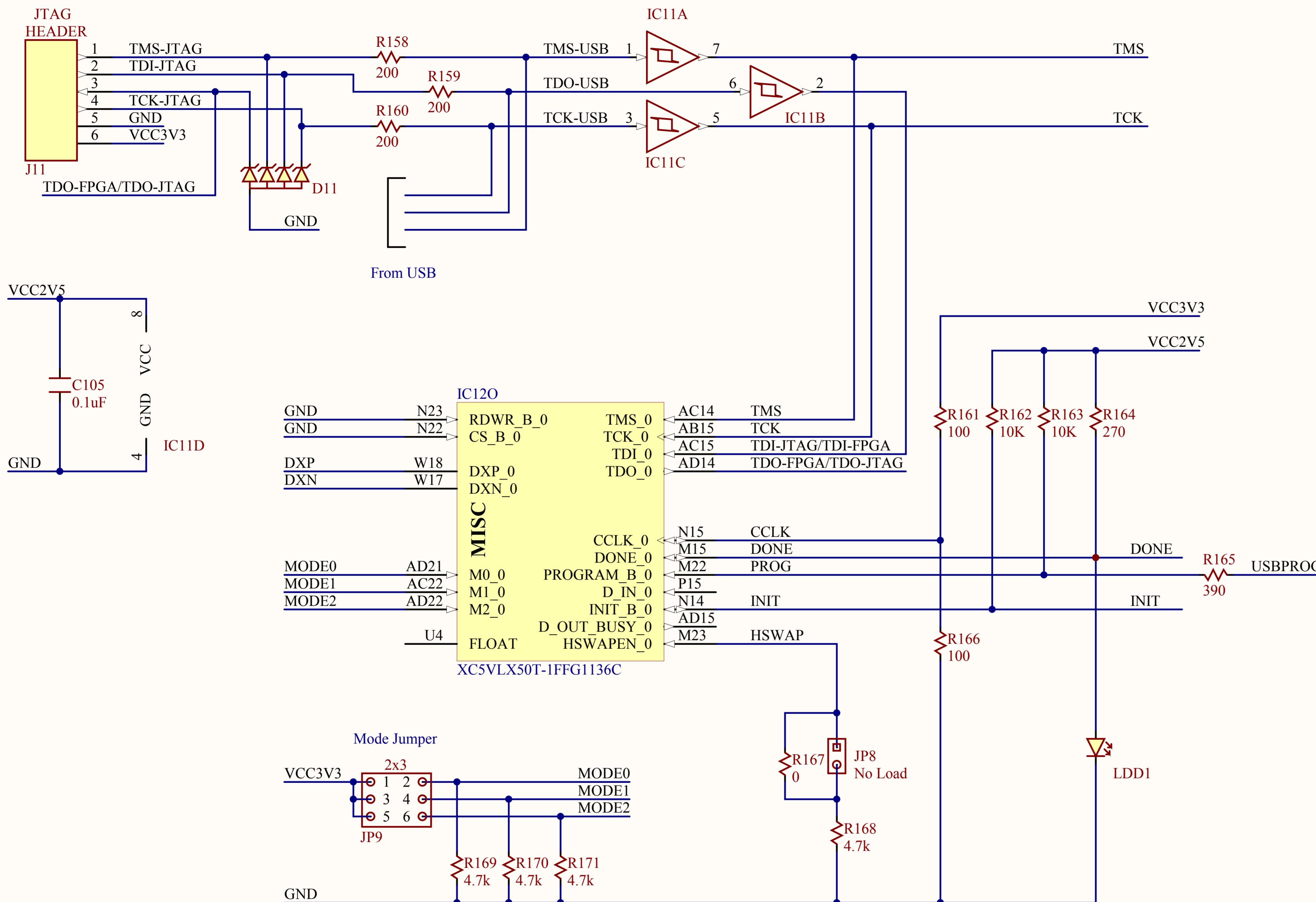
**IC7B**

CY7C67300  
DM1A  
DP1A  
DM1B  
DP1B  
DM2A  
DP2A  
DM2B  
DP2B

IC7C  
DM1A  
DP1A  
DM1B  
DP1B  
DM2A  
DP2A  
DM2B  
DP2B







Title

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Doc#	500-138
Engineer	CC
Author	GMA
Date	1/5/2010
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## IC12A

BANK 1	
IO_L0P_A19_1	L21 P30-A19
IO_L0N_A18_1	L20 P30-A18
IO_L1P_A17_1	L15 P30-A17
IO_L1N_A16_1	L16 P30-A16
IO_L2P_A15_D31_1	J22 P30-A15
IO_L2N_A14_D30_1	K21 P30-A14
IO_L3P_A13_D29_1	K16 P30-A13
IO_L3N_A12_D28_1	J15 P30-A12
IO_L4P_A11_D27_1	G22 P30-A11
IO_L4N_VREF_A10_D26_1	H22 P30-A10
IO_L5P_A9_D25_1	L14 P30-A9
IO_L5N_A8_D24_1	K14 P30-A8
IO_L6P_A7_D23_1	K23 P30-A7
IO_L6N_A6_D22_1	K22 P30-A6
IO_L7P_A5_D21_1	J12 P30-A5
IO_L7N_A4_D20_1	H12 P30-A4
IO_L8P_CC_A3_D19_1	G23 P30-A3
IO_L8N_CC_A2_D18_1	H23 P30-A2
IO_L9P_CC_A1_D17_1	K13 P30-A1
IO_L9N_CC_A0_D16_1	K12 P30-A0

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## IC12B

BANK 2	
IO_L0P_CC_RS1_2	AE13 GCLK2
IO_L0N_CC_RS0_2	AE12 HDMI-RST
IO_L1P_CC_A25_2	AF23 P30-A24
IO_L1N_CC_A24_2	AG23 P30-A23
IO_L2P_AC23_2	AF13 P30-A22
IO_L2N_AC22_2	AG12 P30-A21
IO_L3P_A21_2	AE22 P30-A20
IO_L3N_A20_2	AE23 P30-CE
IO_L4P_FCS_B_2	AE14 P30-OE
IO_L4N_VREF_FOE_B_MOSI_2	AF14 P30-WE
IO_L5P_FWE_B_2	AF20 P30-ADV
IO_L5N_CSO_B_2	AF21 P30-DQ7
IO_L6P_D7_2	AF15 P30-DQ6
IO_L6N_D6_2	AE16 P30-DQ5
IO_L7P_D5_2	AE21 P30-DQ4
IO_L7N_D4_2	AD20 P30-DQ3
IO_L8P_D3_2	AF16 P30-DQ2
IO_L8N_D2_FS2_2	AE17 P30-DQ1
IO_L9P_D1_FS1_2	AE19 P30-DQ0
IO_L9N_D0_FS0_2	AD19 P30-DQ0

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## IC12C

BANK 3	
IO_L0P_CC_GC_3	H17 SW4
IO_L0N_CC_GC_3	H18 SW3
IO_L1P_CC_GC_3	K17 SW5
IO_L1N_CC_GC_3	L18 SW1
IO_L2P_GC_VRN_3	G15 SW7
IO_L2N_GC_VRP_3	G16 SW6
IO_L3P_GC_3	K18 SW2
IO_L3N_GC_3	J19 SW0
IO_L4P_GC_3	J16 E-TXCLK
IO_L4N_GC_VREF_3	J17 BTNR
IO_L5P_GC_3	L19 E-RXCLK
IO_L5N_GC_3	K19 BTNL
IO_L6P_GC_3	H14
IO_L6N_GC_3	H15 BTND
IO_L7P_GC_3	J20 E-GTXCLK
IO_L7N_GC_3	J21 BTNS
IO_L8P_GC_3	J14 GCLK4_P
IO_L8N_GC_3	H13 GCLK4_N
IO_L9P_GC_3	H19 GCLK5_P
IO_L9N_GC_3	H20 GCLK5_N

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## IC12D

BANK 4	
IO_L0P_GC_D15_4	AG22 P30-DQ15
IO_L0N_GC_D14_4	AH22 P30-DQ14
IO_L1P_GC_D13_4	AH12 P30-DQ13
IO_L1N_GC_D12_4	AG13 P30-DQ12
IO_L2P_GC_D11_4	AH20 P30-DQ11
IO_L2N_GC_D10_4	AH19 P30-DQ10
IO_L3P_GC_D9_4	AH14 P30-DQ9
IO_L3N_GC_D8_4	AH13 P30-DQ8
IO_L4P_GC_4	AG21 P30-CLK
IO_L4N_GC_VREF_4	AG20 AUD-SDO
IO_L5P_GC_4	AH15 GCLKS
IO_L5N_GC_4	AG15 RS1-RX
IO_L6P_GC_4	AG18 GCLK0
IO_L6N_GC_4	AF19 RS1-TX
IO_L7P_GC_VRN_4	AH17 AUD-BIT-CLK
IO_L7N_GC_VRP_4	AG16 RS2-TX
IO_L8P_CC_GC_4	AF18 RS2-RX
IO_L8N_CC_GC_4	AE18 AUD-SDI
IO_L9P_CC_GC_4	AH18 P30-WAIT
IO_L9N_CC_GC_4	AG17 P30-RST

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## IC12E

BANK 11	
IO_L0P_11	B32 EXP-IO1_P
IO_L0N_11	A33 EXP-IO1_N
IO_L1P_11	B33 EXP-IO3_P
IO_L1N_11	C33 EXP-IO3_N
IO_L2P_11	C32 EXP-IO2_P
IO_L2N_11	D32 EXP-IO2_N
IO_L3P_11	C34 EXP-IO5_P
IO_L3N_11	D34 EXP-IO5_N
IO_L4P_11	G32 EXP-IO6_P
IO_L4N_VREF_11	H32 EXP-IO6_N
IO_L5P_11	F33 EXP-IO7_P
IO_L5N_11	E34 EXP-IO7_N
IO_L6P_11	E32 EXP-IO4_P
IO_L6N_11	E33 EXP-IO4_N
IO_L7P_11	G33 EXP-IO9_P
IO_L7N_11	F34 EXP-IO9_N
IO_L8P_CC_11	J32 EXP-IO8_P
IO_L8N_CC_11	H33 EXP-IO8_N
IO_L9P_CC_11	H34 EXP-IO11_P
IO_L9N_CC_11	J34 EXP-IO11_N
IO_L10P_CC_SM15P_11	L34 EXP-IO12_P
IO_L10N_CC_SM15N_11	K34 EXP-IO12_N
IO_L11P_CC_SM14P_11	K33 EXP-IO10_P
IO_L11N_CC_SM14N_11	K32 EXP-IO10_N
IO_L12P_VRN_11	N33 EXP-IO14_P
IO_L12N_VRP_11	M33 EXP-IO14_N
IO_L13P_11	L33 EXP-IO13_P
IO_L13N_11	M32 EXP-IO13_N
IO_L14P_11	P34 EXP-IO16_P
IO_L14N_VREF_11	N34 EXP-IO16_N
IO_L15P_SM13P_11	P32 EXP-IO15_P
IO_L15N_SM13N_11	N32 EXP-IO15_N
IO_L16P_SM12P_11	T33 EXP-IO18_P
IO_L16N_SM12N_11	R34 EXP-IO18_N
IO_L17P_SM11P_11	R33 EXP-IO17_P
IO_L17N_SM11N_11	R32 EXP-IO17_N
IO_L18P_SM10P_11	U33 EXP-IO20_P
IO_L18N_SM10N_11	T34 EXP-IO20_N
IO_L19P_SM9P_11	U32 EXP-IO19_P
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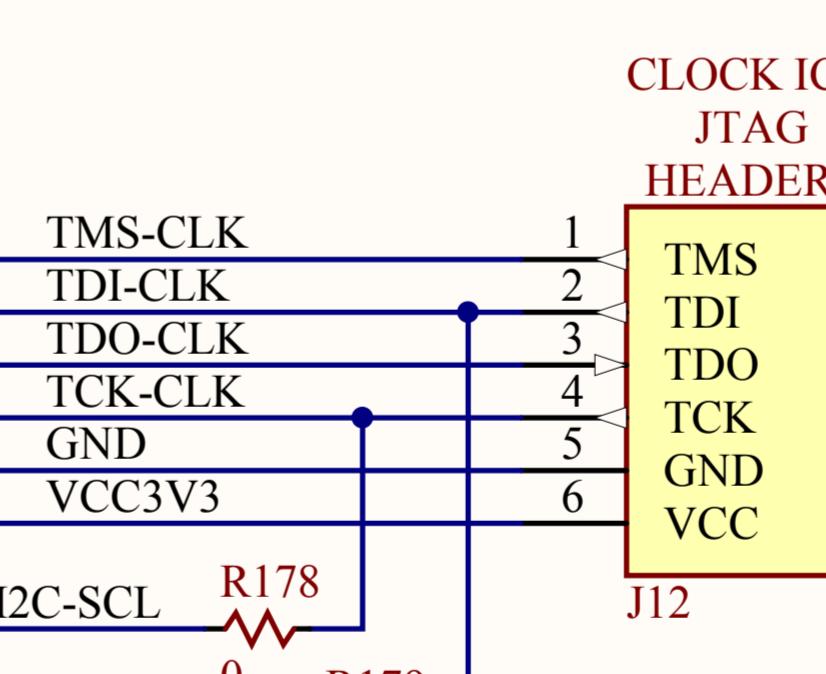
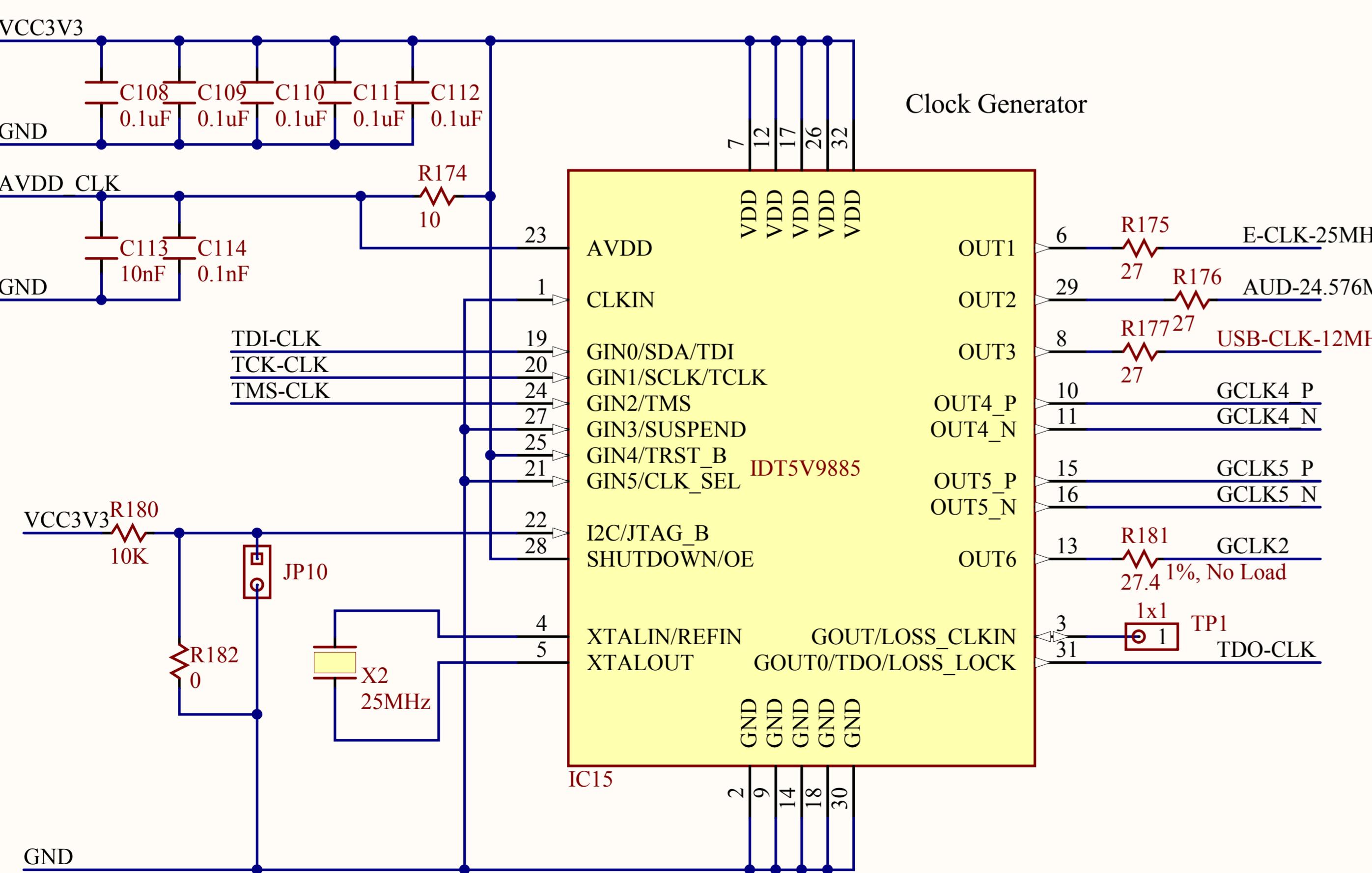
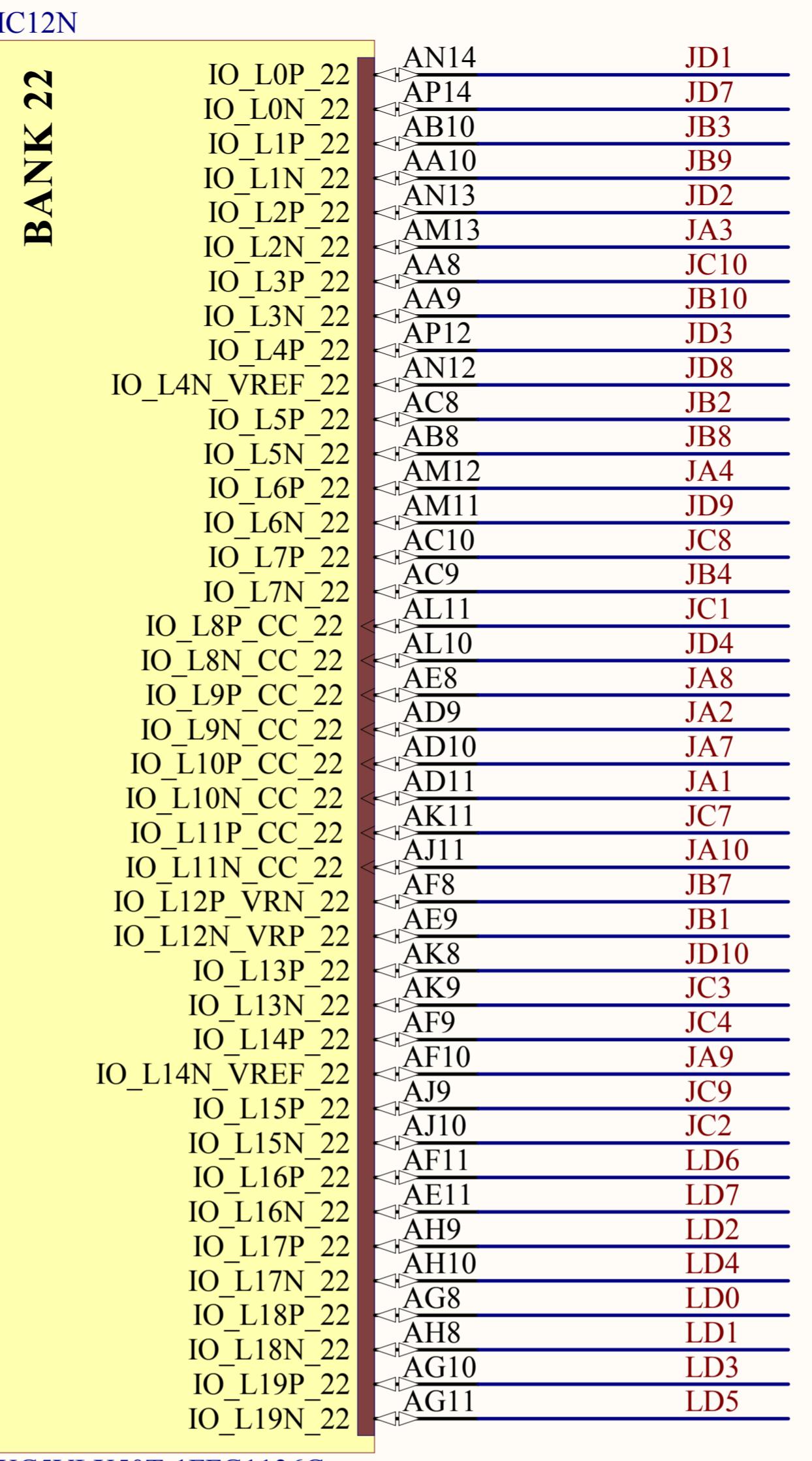
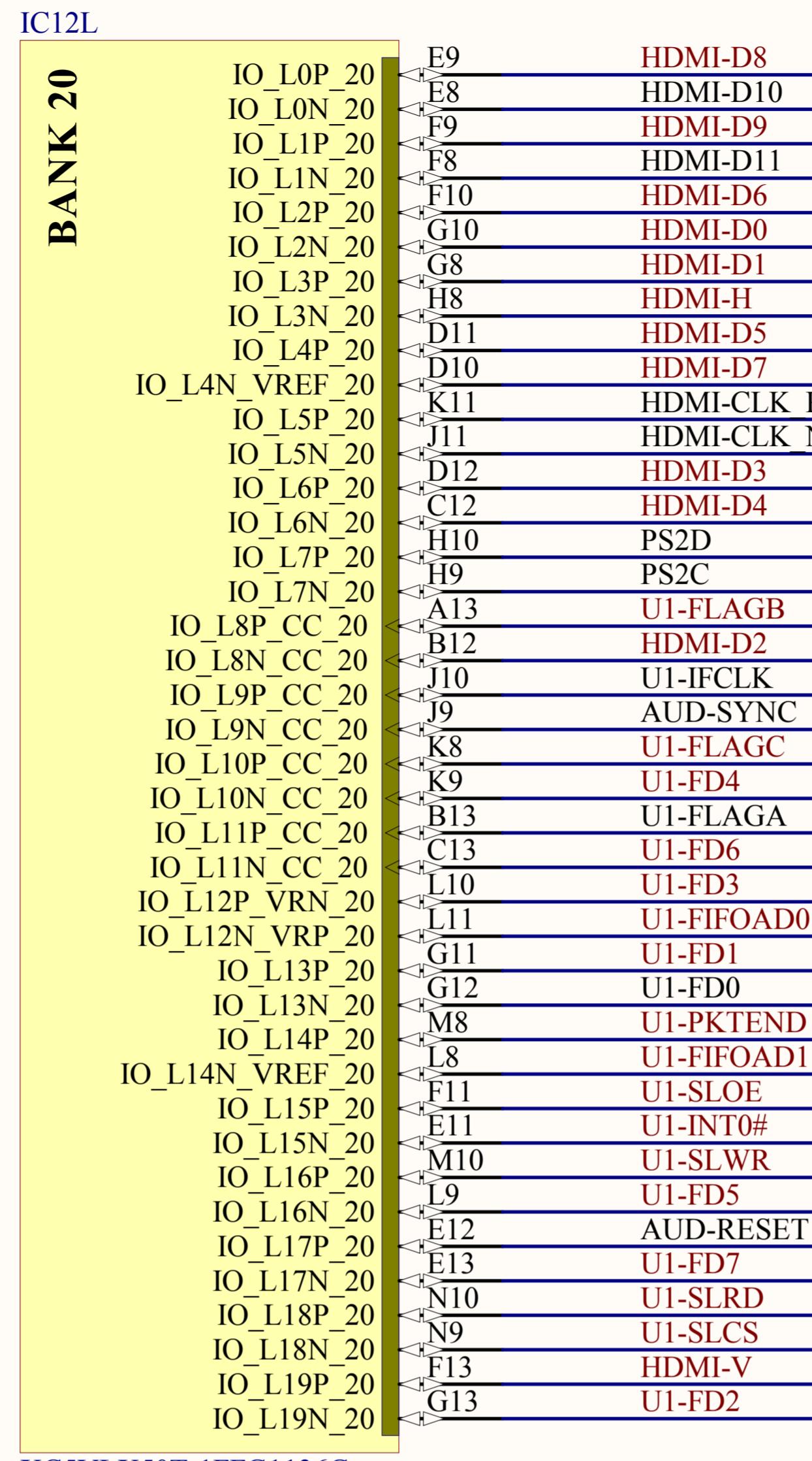
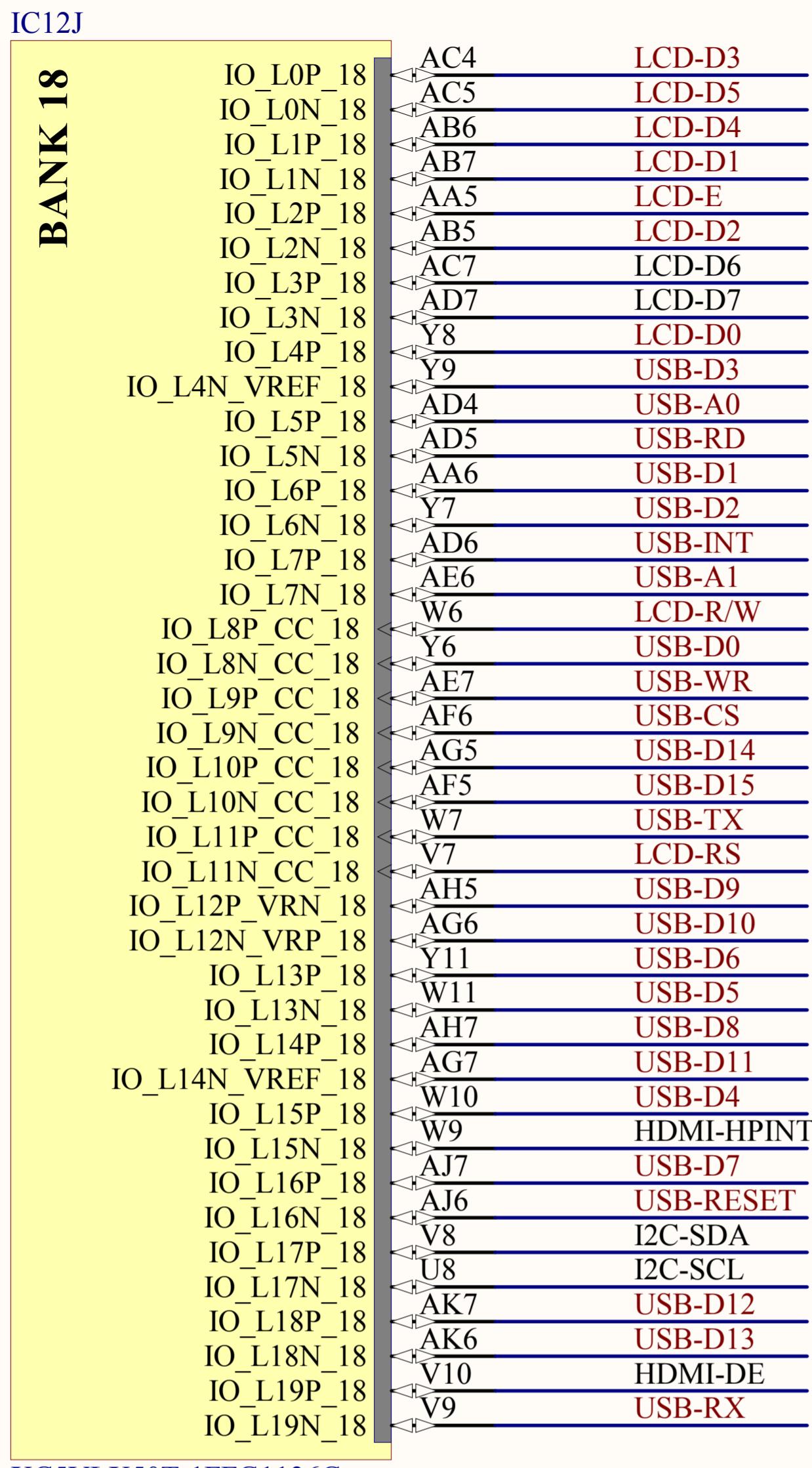
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BANK 12	
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IO_L0N_12	M5 E-RXD6
IO_L1P_12	N8 E-RXDV
IO_L1N_12	N7 E-RXD0
IO_L2P_12	M7 E-RXD4
IO_L2N_12	L6 E-RXD7
IO_L3P_12	N5 E-MDC
IO_L3N_12	P5 E-RXD3
IO_L4P_12	L4 E-RESET
IO_L4N_VREF_12	L5 E-CRS
IO_L5P_12	P7 E-RXER
IO_L5N_12	P6 E-RXD2
IO_L6P_12	K7 E-COL
IO_L6N_12	R6 E-RXD1
IO_L7P_12	T6 E-INT
IO_L7N_12	J6 E-TXD0
IO_L8P_CC_12	R7 E-TXD3
IO_L8N_CC_12	R8 E-TXER
IO_L9P_CC_12	T8 E-TXD4
IO_L9N_CC_12	U7 E-TXD7
IO_L10P_CC_12	V9 VRN-12
IO_L10N_CC_12	P9 VRP-12
IO_L11P_CC_12	F5 E-TXD2
IO_L11N_CC_12	F6 E-TXD1
IO_L12P_VRN_12	T10 E-TXEN
IO_L12N_VRP_12	T11 E-TXD6
IO_L13P_12	G6 BTN0
IO_L13N_12	G7 BTN1
IO_L14P_12	T9 E-MDIO
IO_L14N_VREF_12	U10 E-MDIO
IO_L15P_11	F5 E-TXD2
IO_L15N_12	F6 E-TXD1
IO_L16P_12	T10 E-TXEN
IO_L16N_12	T11 E-TXD6
IO_L17P_12	G6 BTN0
IO_L17N_12	G7 BTN1
IO_L18P_12	T9 E-MDIO
IO_L18N_12	U10 E-MDIO
IO_L19P_12	E6 BTNU
IO_L19N_12	E7 RESET

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## IC12G

BANK 13	
IO_L0P_SM8P_13	V32 EXP-IO22_P
IO_L0N_SM8N_13	V33 EXP-IO22_N
IO_L1P_SM7P_13	W34 EXP-IO21_P
IO_L1N_SM7N_13	V34 EXP-IO21_N
IO_L2P_SM6P_13	Y33 EXP-IO24_P
IO_L2N_SM6N_13	AA33 EXP-IO24_N
IO_L3P_SM5P_13	AA34 EXP-IO23_P
IO_L3N_SM5N_13	Y34 EXP-IO23_N
IO_L4P_CC_13	Y32 EXP-IO26_P
IO_L4N_VREF_13	W32 EXP-IO26_N
IO_L5P_SM4P_13	AC34 EXP-IO27_P
IO_L5N_SM4N_13	AD34 EXP-IO27_N
IO_L6P_SM3P_13	AC32 EXP-IO28_P
IO_L6N_SM3N_13	AB32 EXP-IO28_N
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IO_L7N_SM2N_13	AB33 EXP-IO25_N
IO_L8	

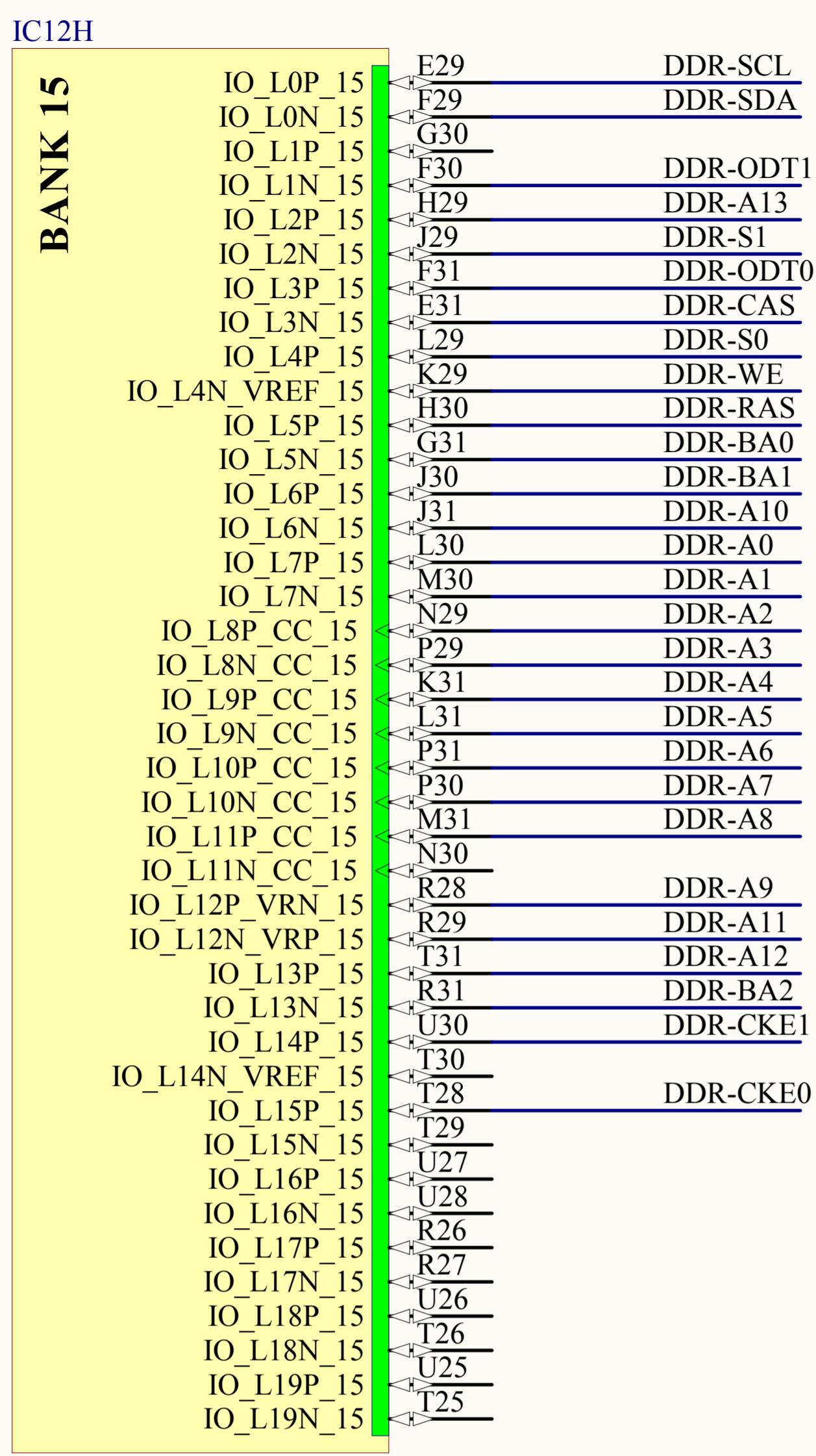


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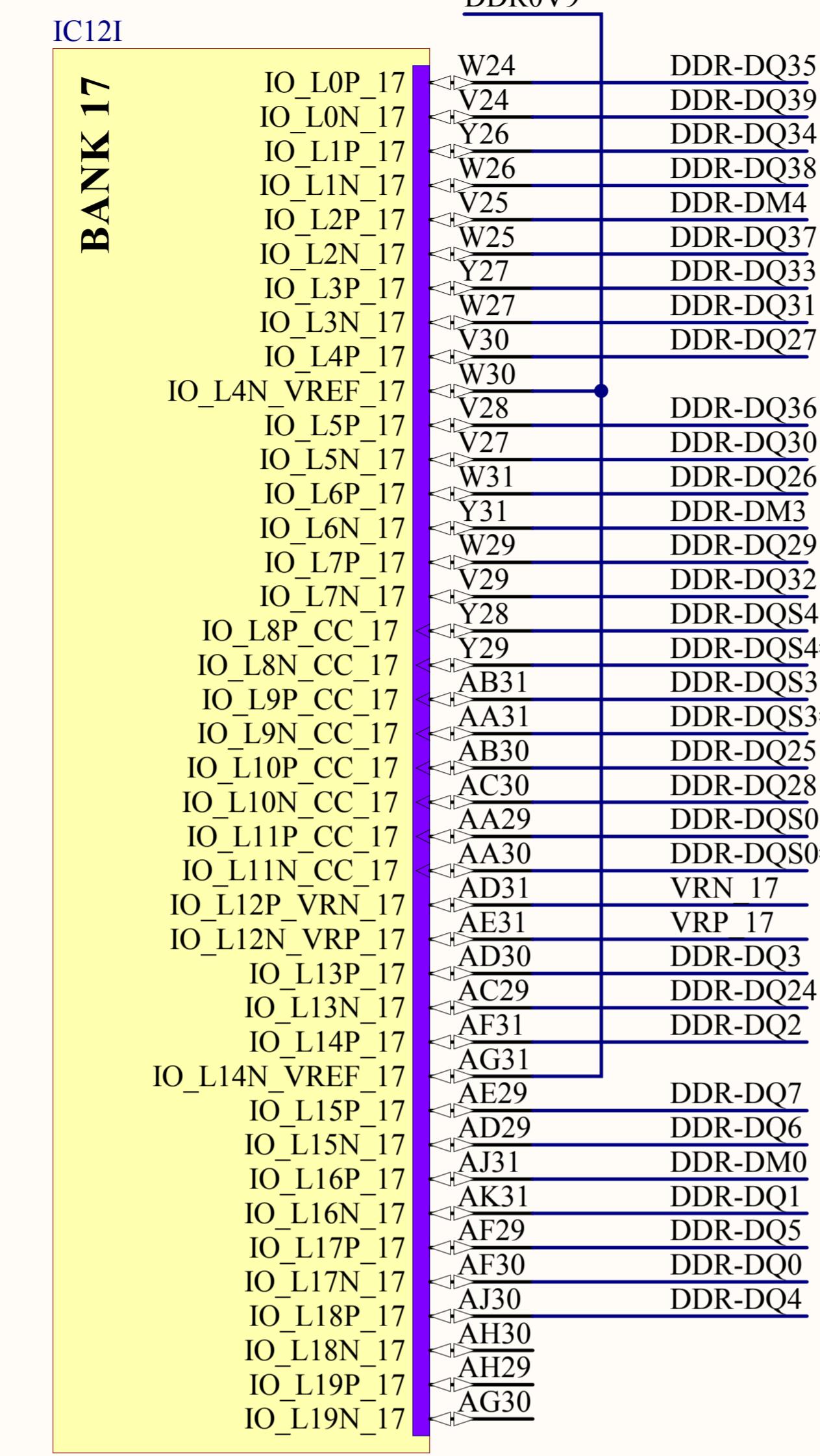
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Circuit	Virtex 5 And Clock IC
Doc#	500-138
Engineer	CC
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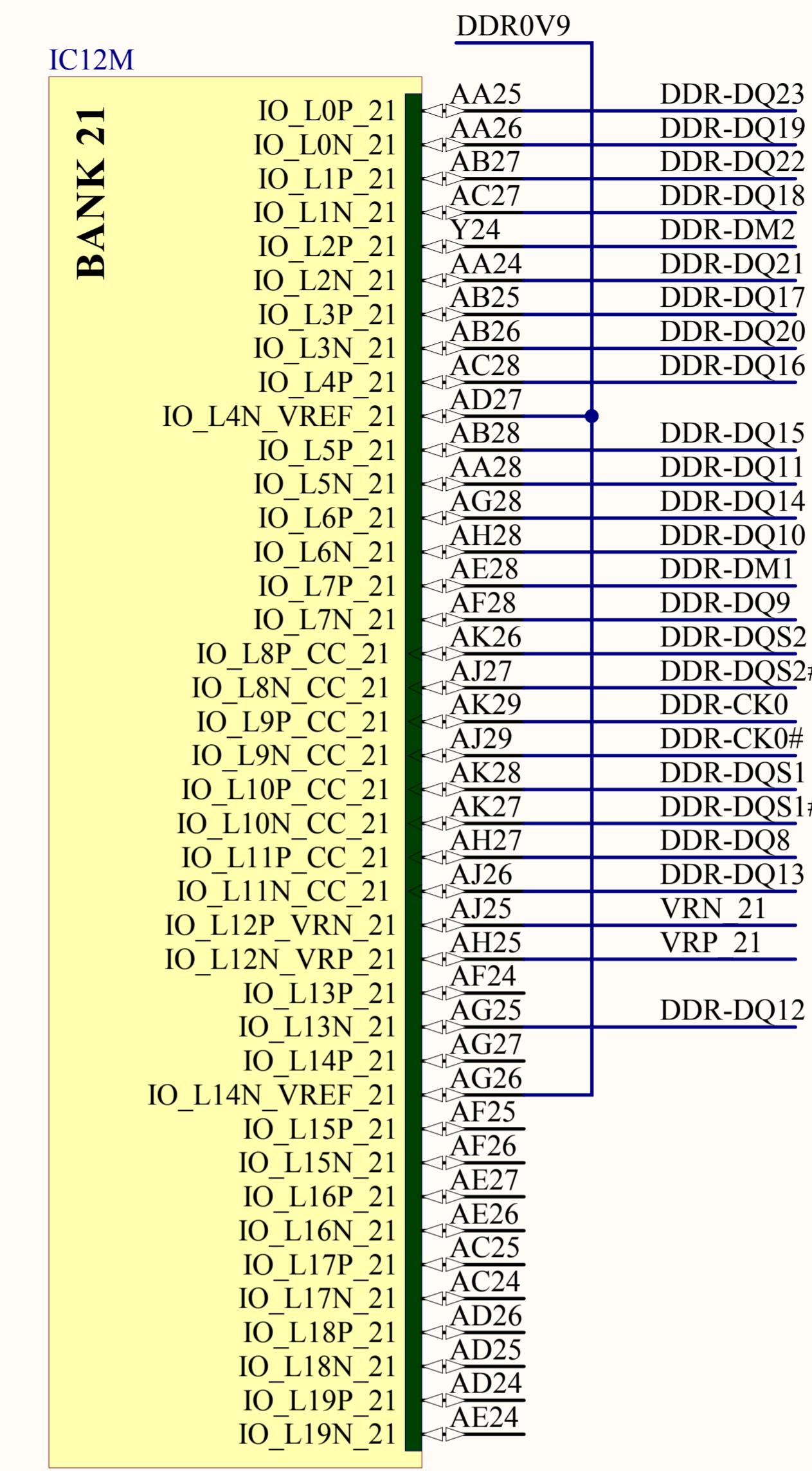




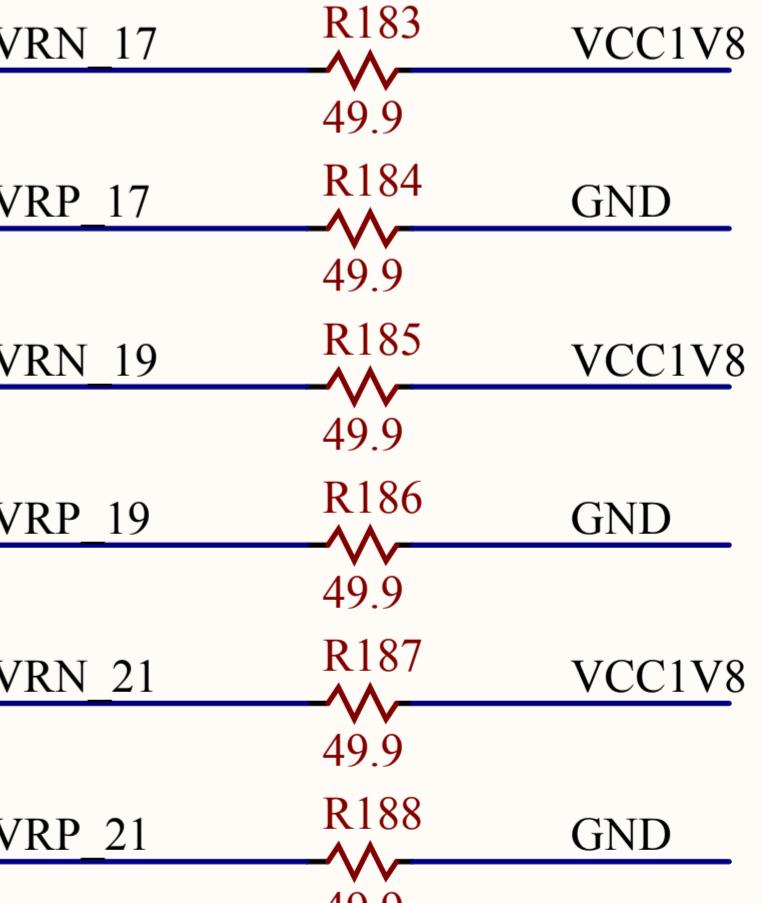
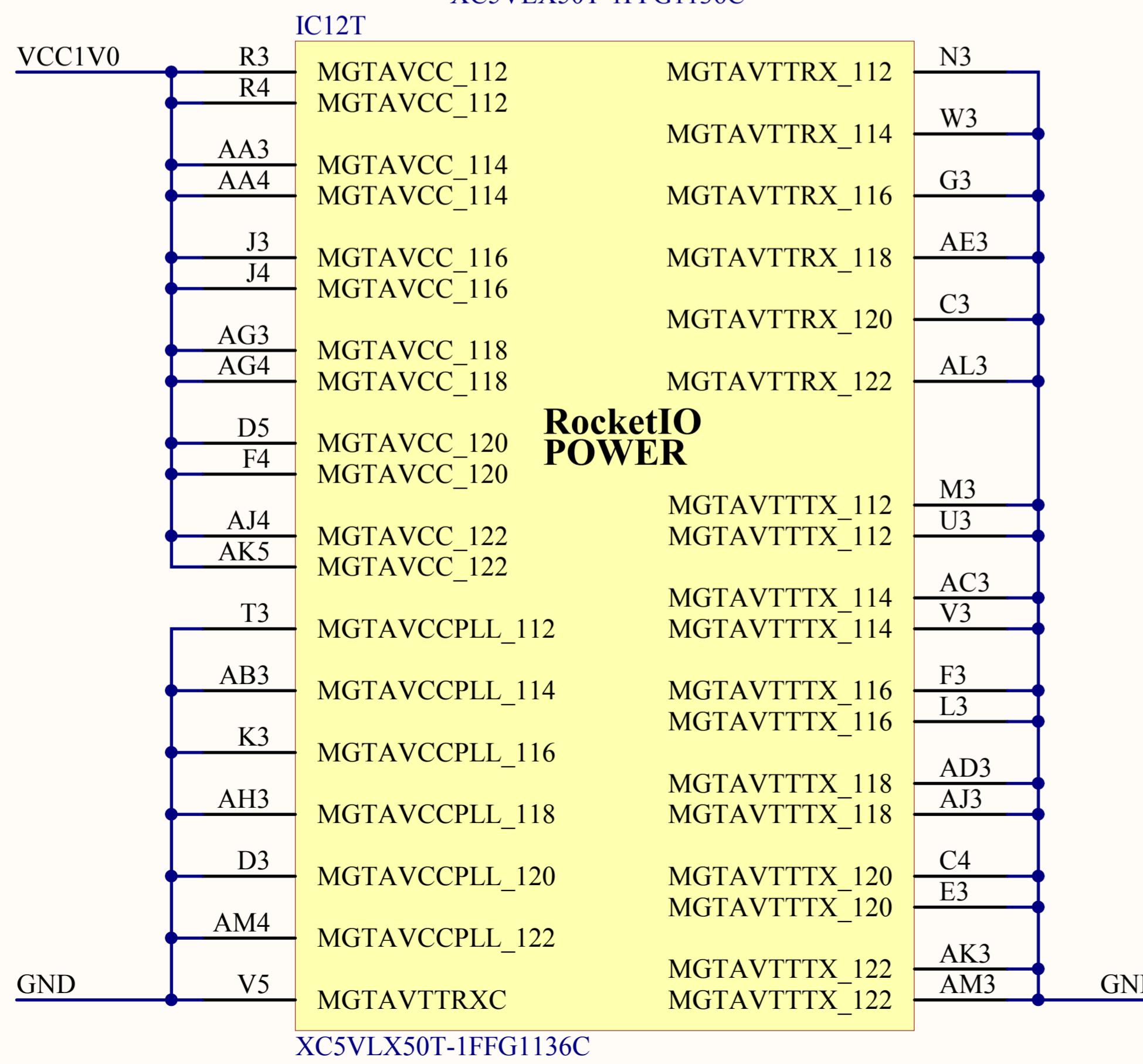
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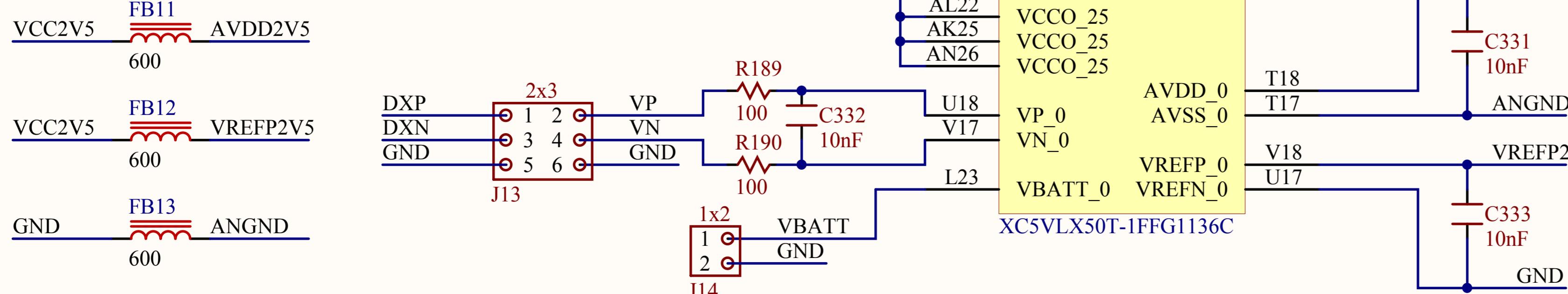
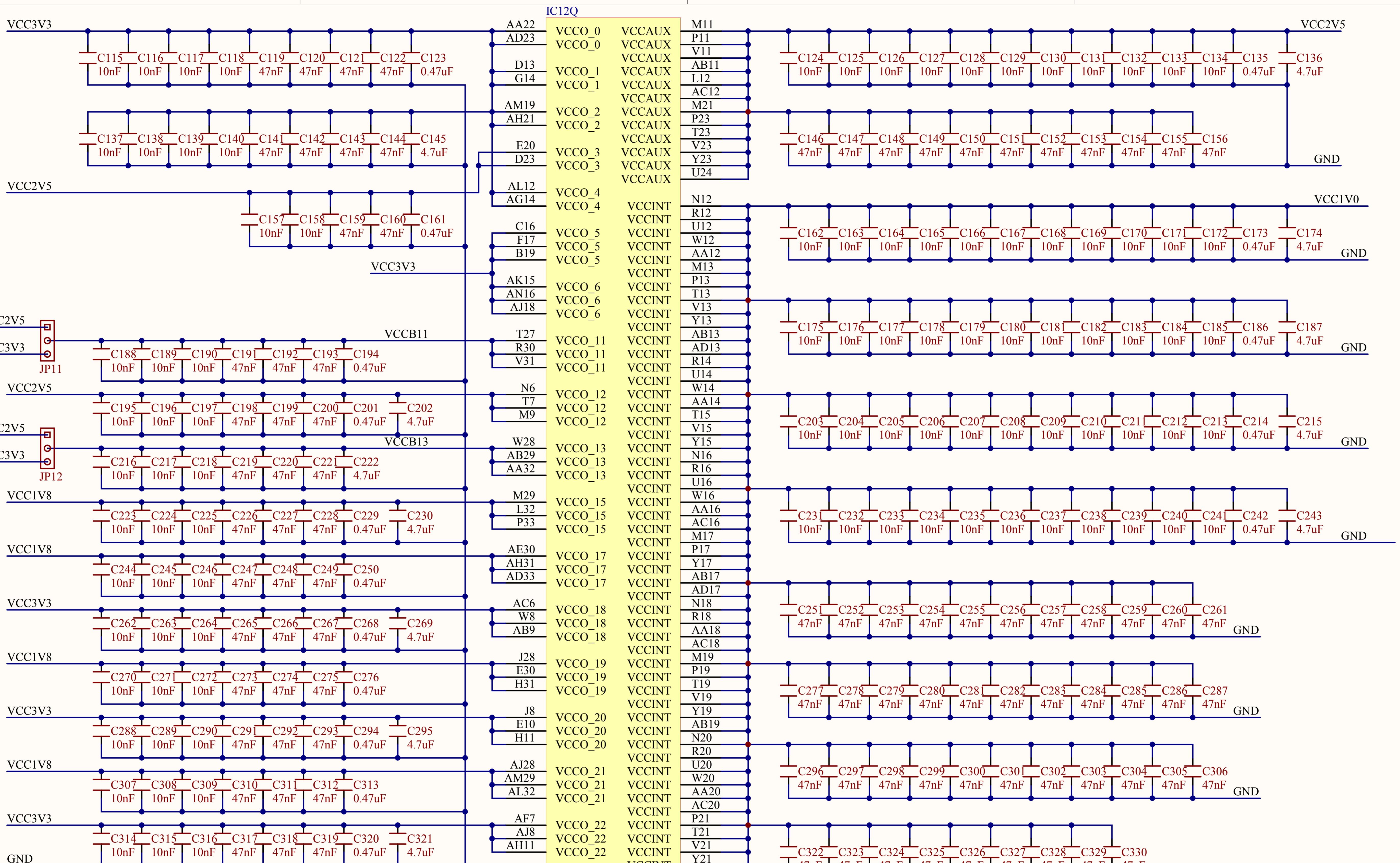


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XC5VLX50T-1FFG1136C





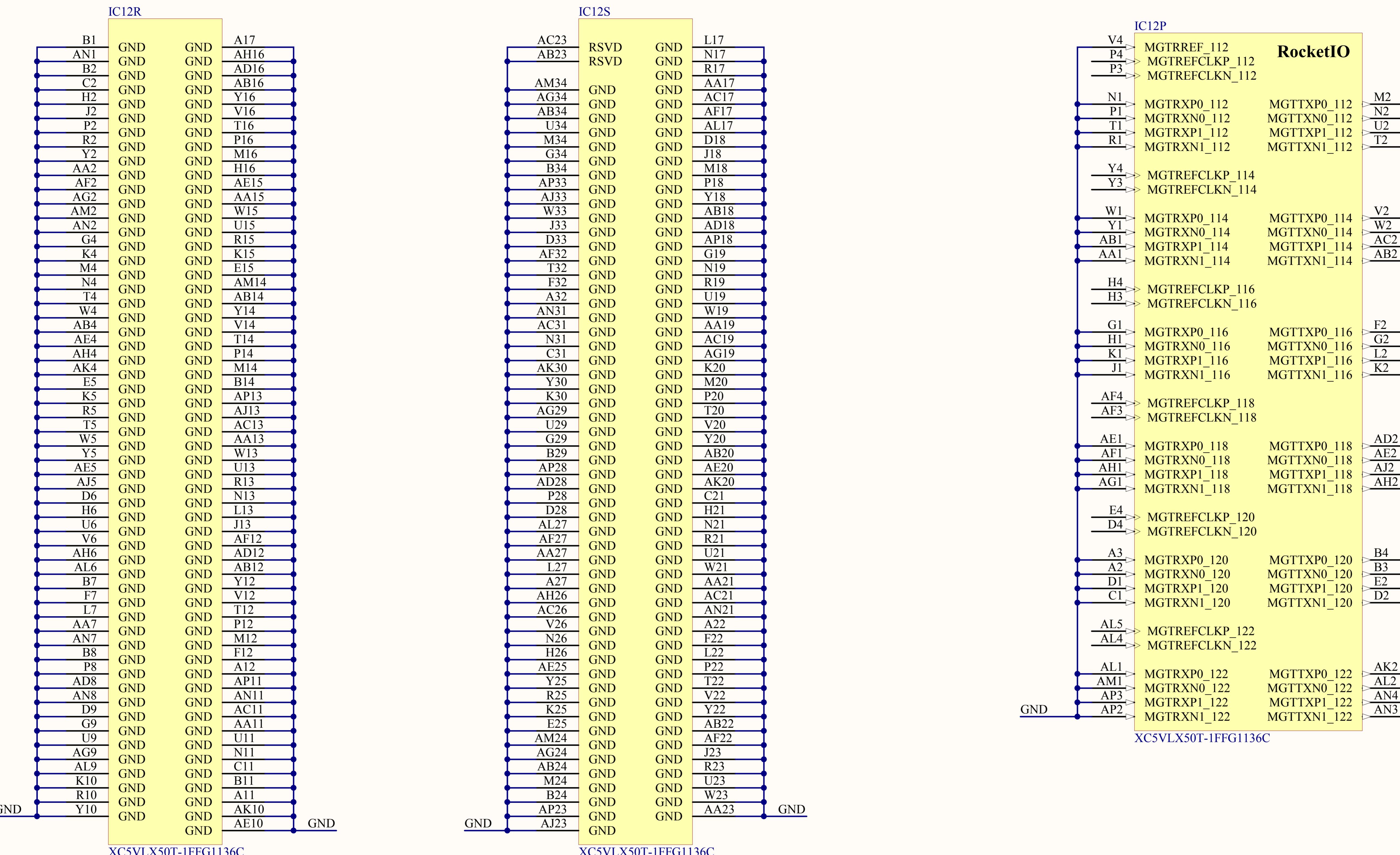
# Title

# Genesys

Circuit	Virtex 5 Power
Doc#	500-138
Engineer	CC
Author	GMA
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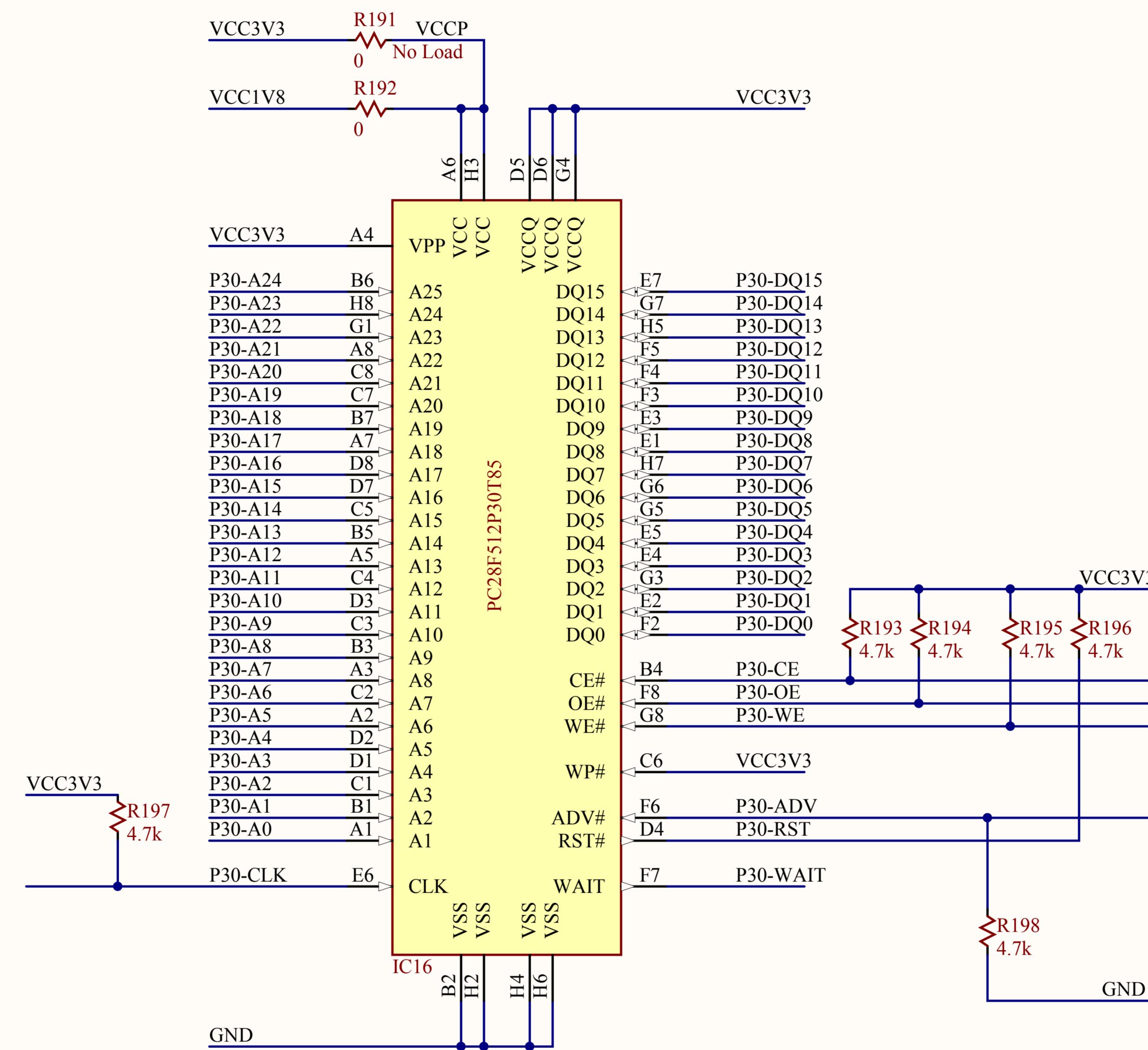
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A

Note: Load resistor to 3.3V and  
remove resistor to 1.8V for P33



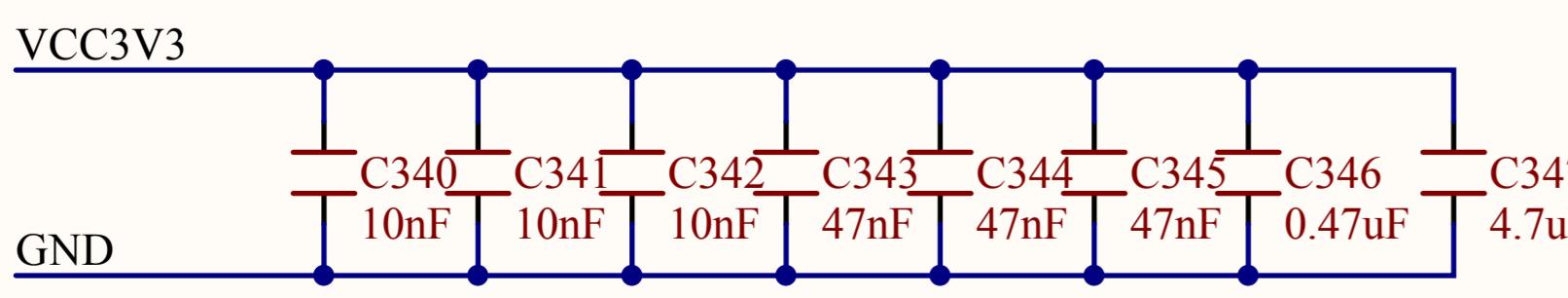
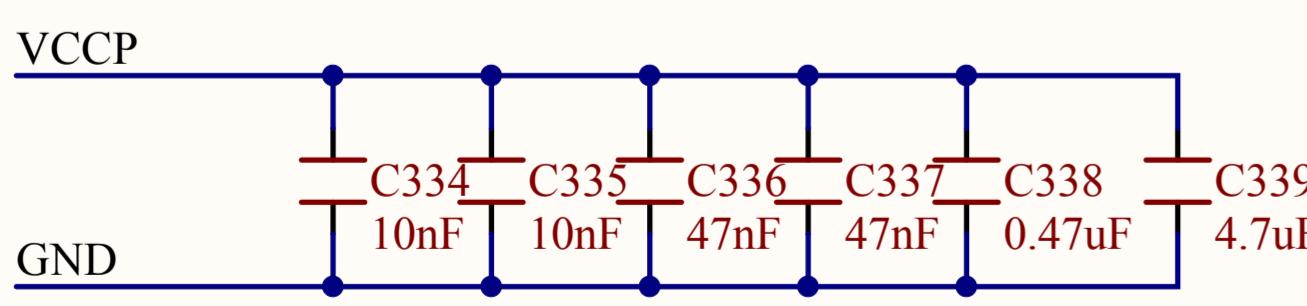
B

A

B

C

C



D

D

Title

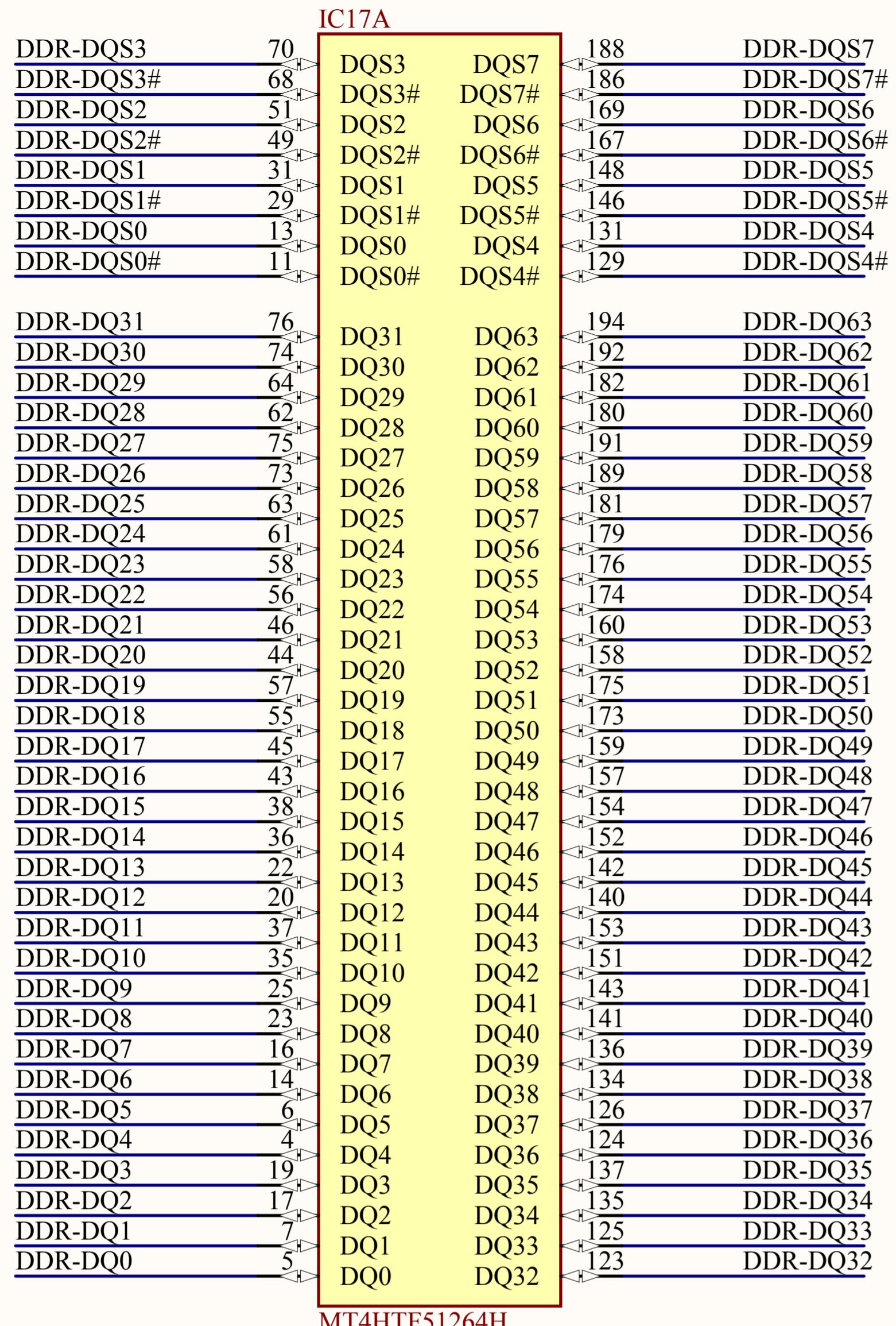
# Genesys

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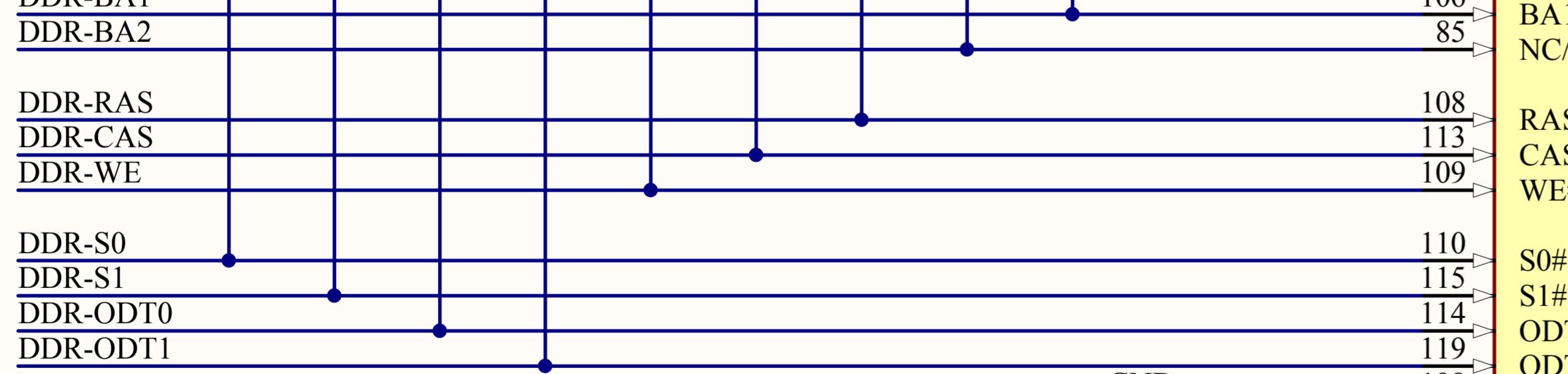
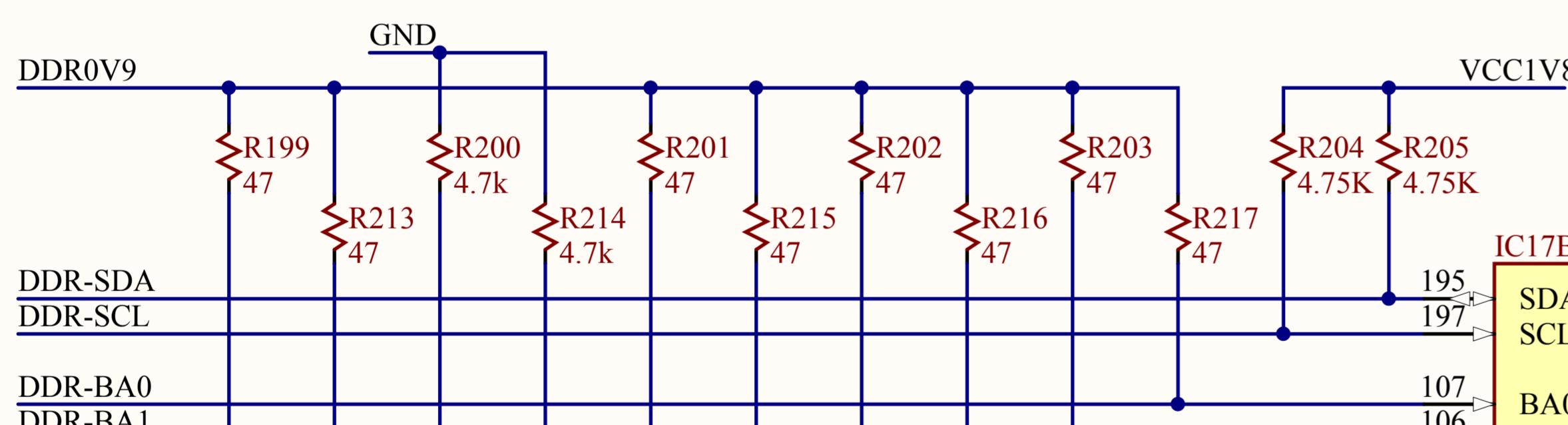
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Circuit  
P33 Strata Flash  
Doc# 500-138  
Engineer CC  
Author GMA  
Date 1/5/2010  
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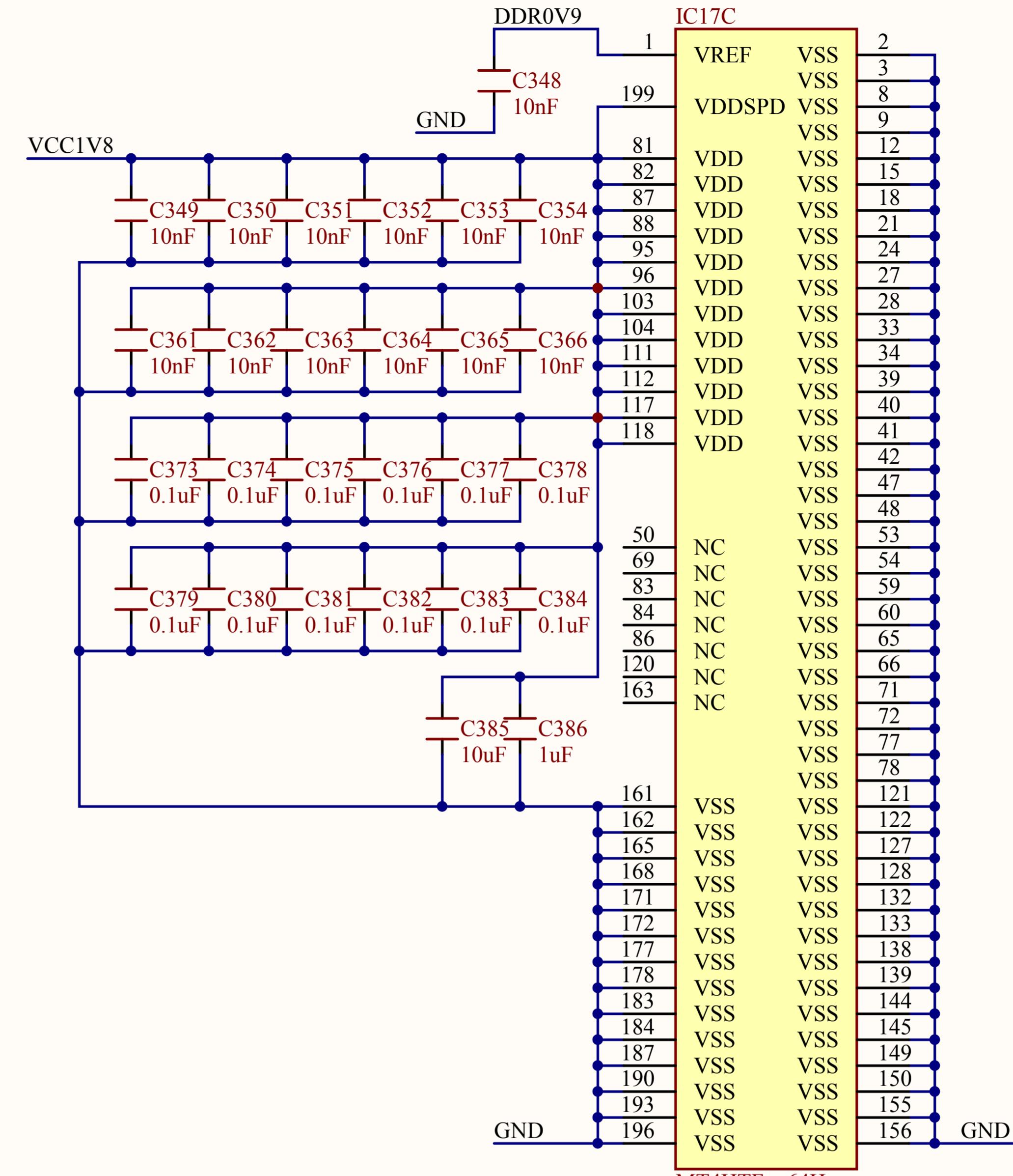
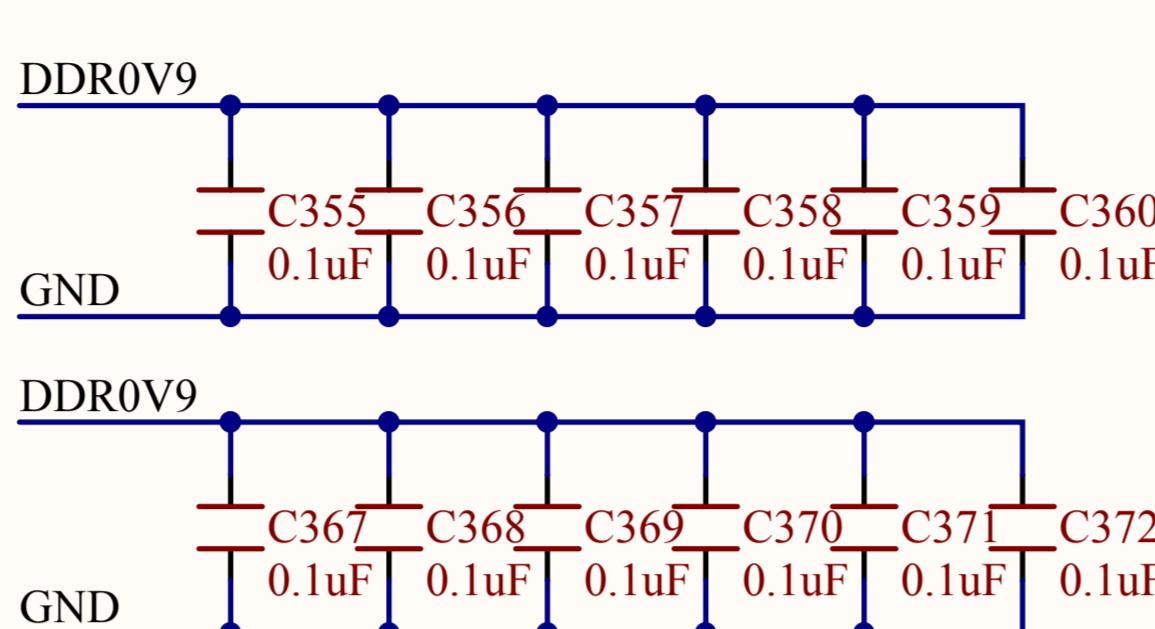
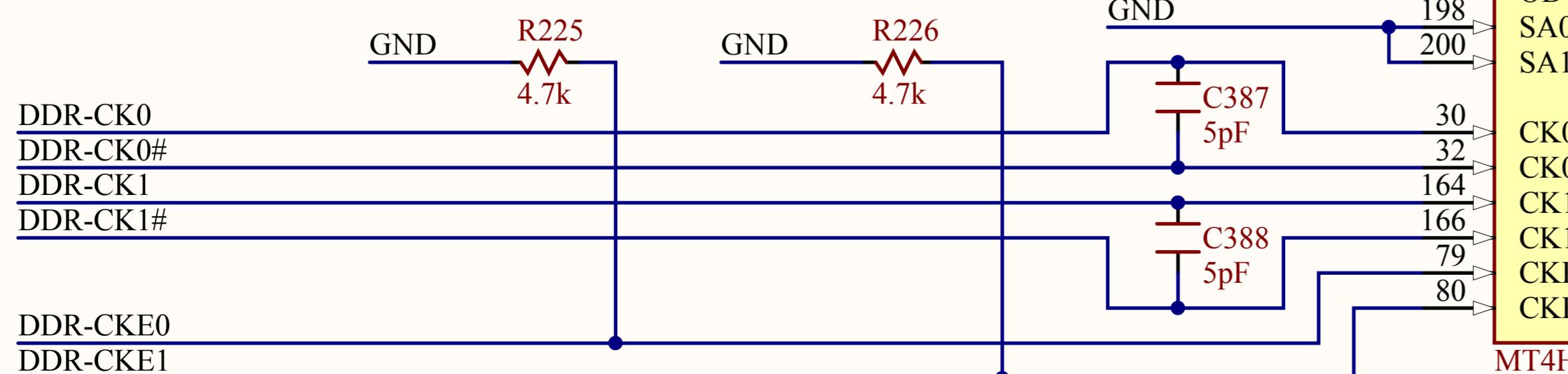




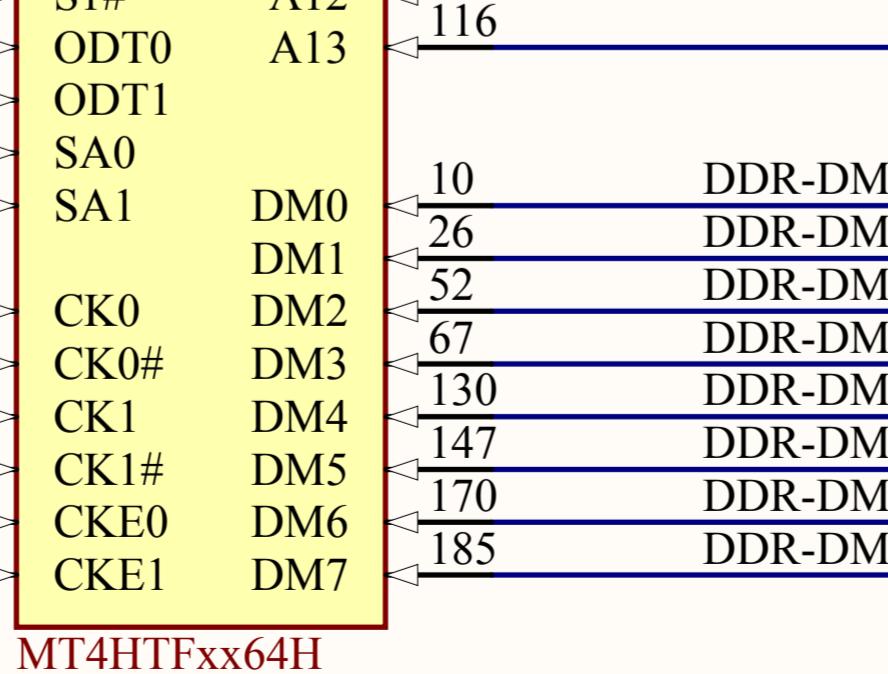
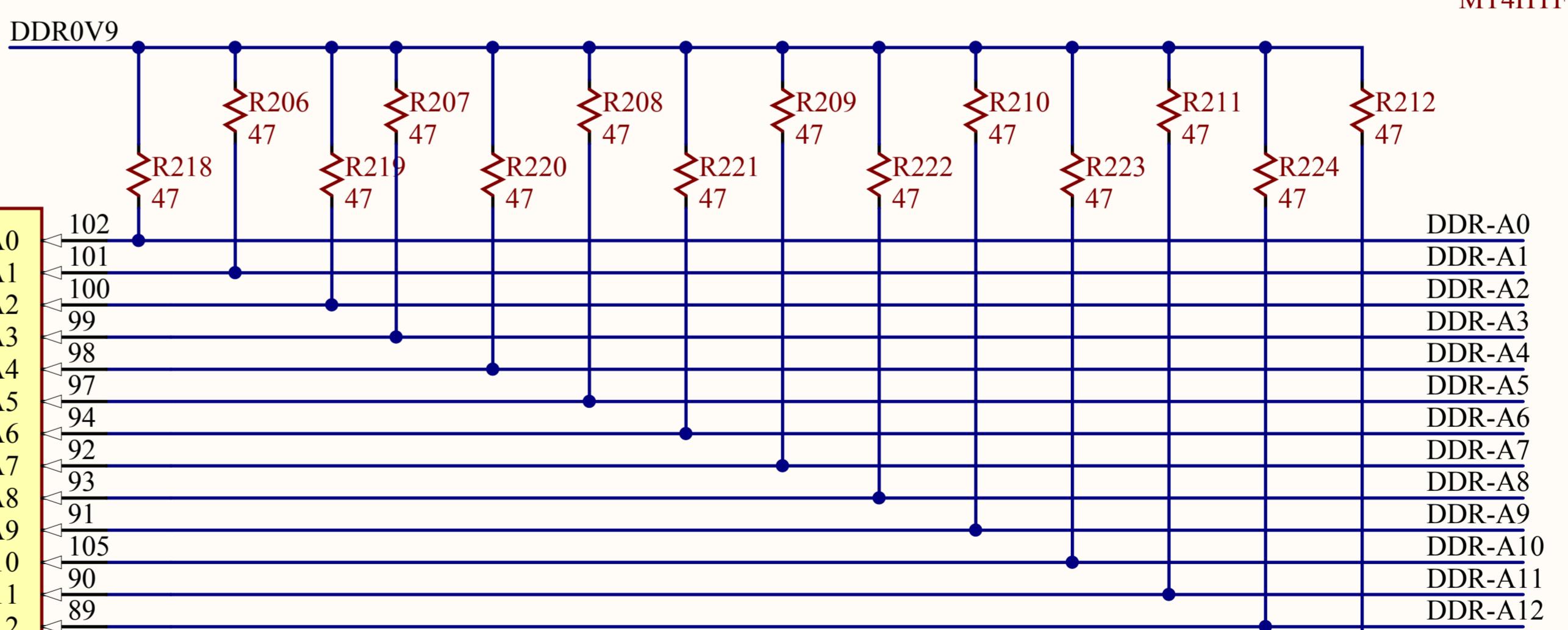
MT4HTF51264H



MT4HTFxx64H



MT4HTFxx64H



# Title

# Genesys

Circuit	DDR2
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