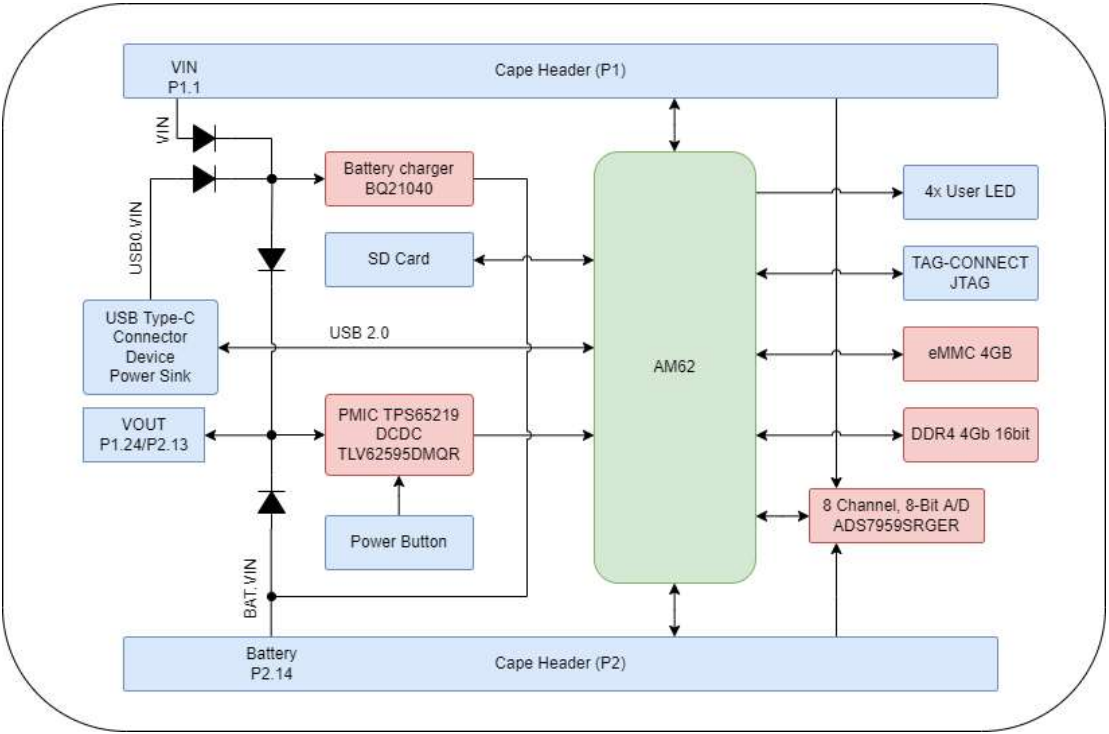


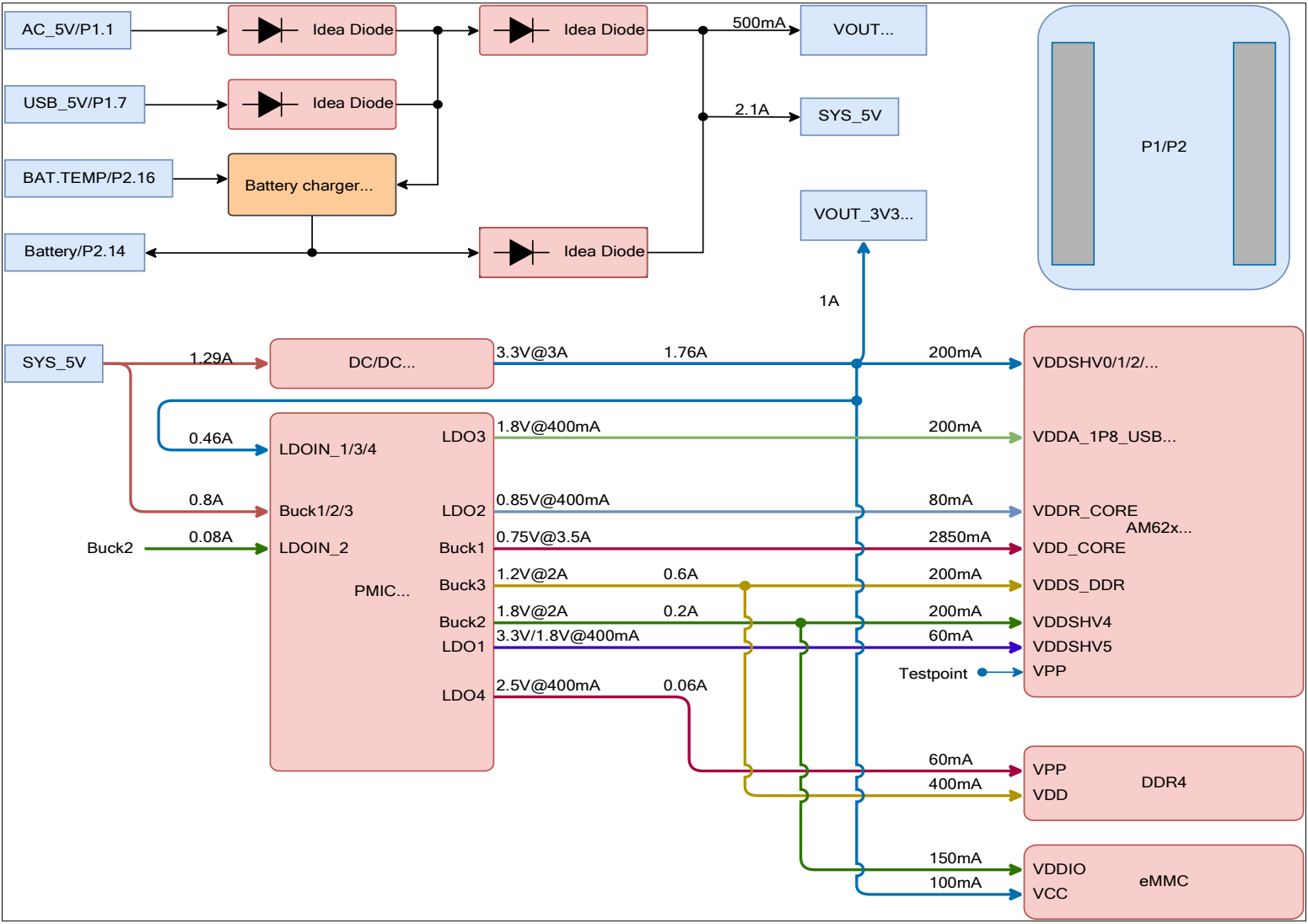
PAGE LIST	
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001	Revision History
002	002_Block Diagram
003	003_Power Tree
004	004_I2C Usage Diagram
005	005_PMIC & Charger
006	006_SoC Power
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008	008_SoC DDR & DDR4
009	009_SoC MMC & eMMC & SD
010	010_SoC WKUP/MCU/System
011	011_SoC Bootstrap
012	012_SoC RGMII/OSPI
013	013_SoC GPIO/MCASP/VOUT
014	014_SoC USB/OLDI/CSI & USB C
015	015_SoC JTAG & MISC
016	016_BP P1 & P2

REVISION HISTORY			
VER #	DATE	DESCRIPTION OF CHANGES	AUTHOR
0.1	28 Oct. 2022	First release	qxn
0.2	1 Nov. 2022	1. Remove unused nets 2. Use WKUP_I2C0 for PMIC 3. Add pull-down to VPP 4. Move eMMC_RSTn to GPIO0_7 5. Add USER button for boot mode seletion 6. Try to add a CSI connector 7. Using processor boall numbers for signal name on P1 and P2 8. Change SoC to AM6232, change eMMC to 4GB, change DDR to 512MB	qxn
0.3	2 Nov. 2022	1. Remove CSI 2. Add SD card, move LDO0 to VDD_SD 3. Power the VPP with VDD_1V8 through a jumper	qxn
			qxn

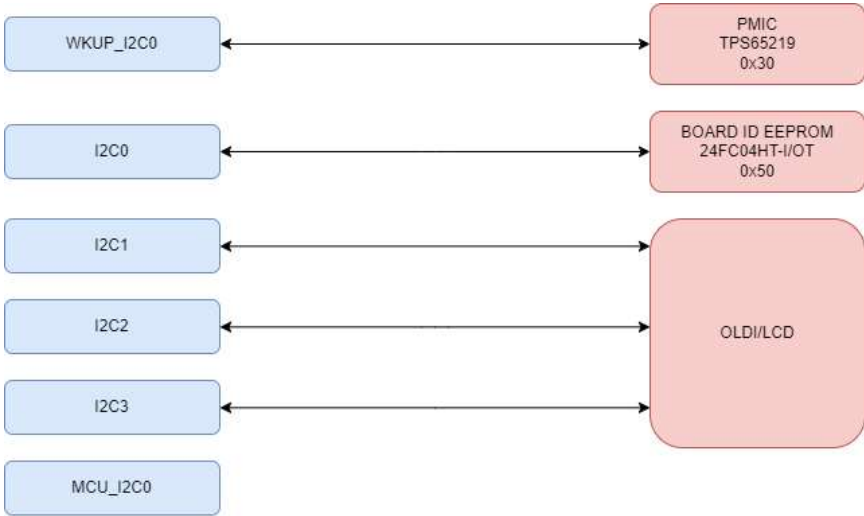
Block Diagram



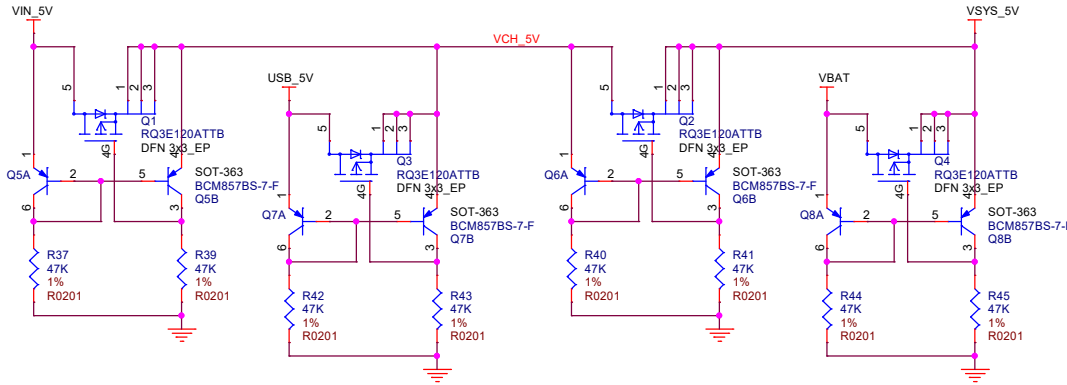
Power tree



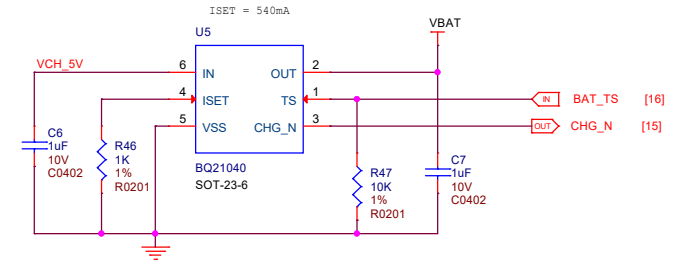
I2C Usage Diagram



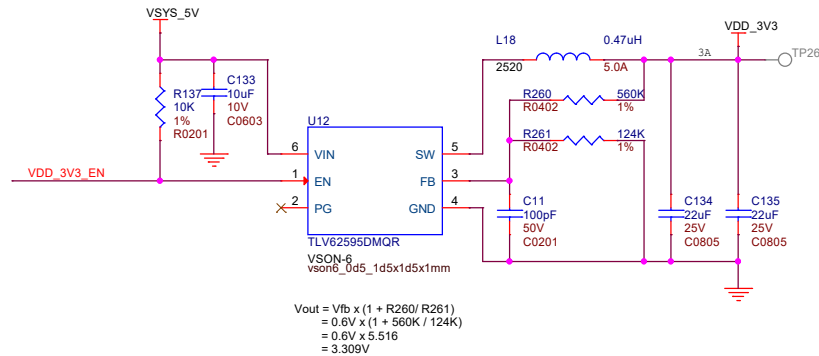
Power Path



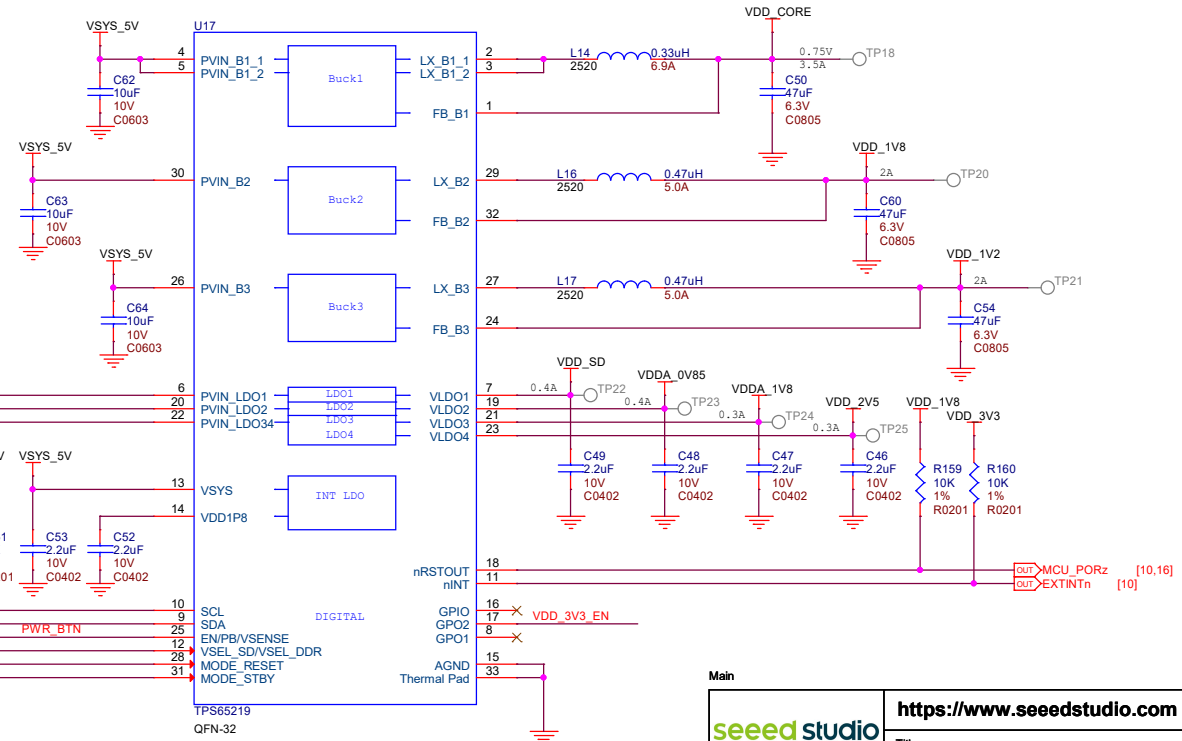
Battery Charger



DCDC 3V3

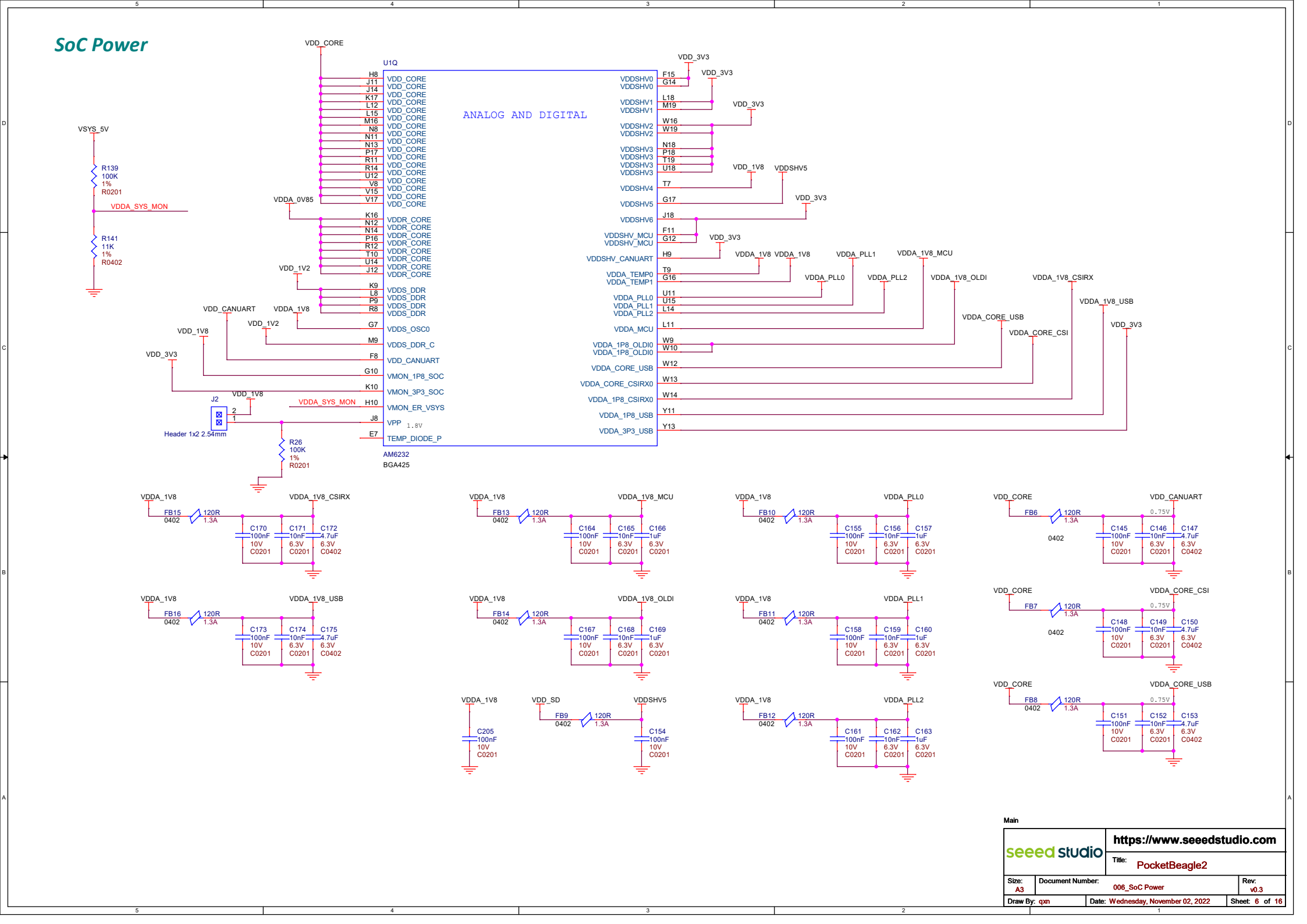


PMIC

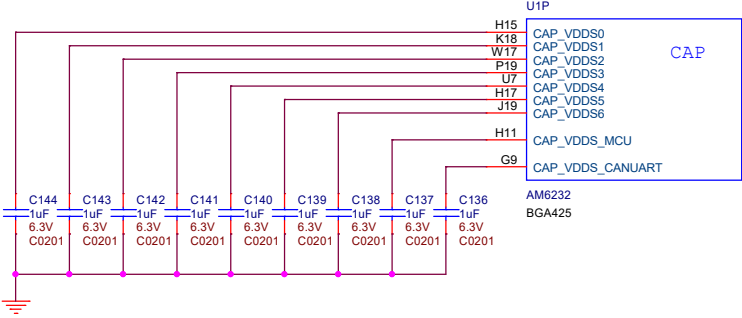
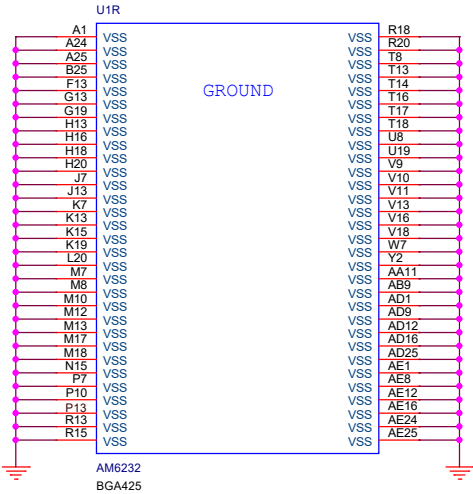
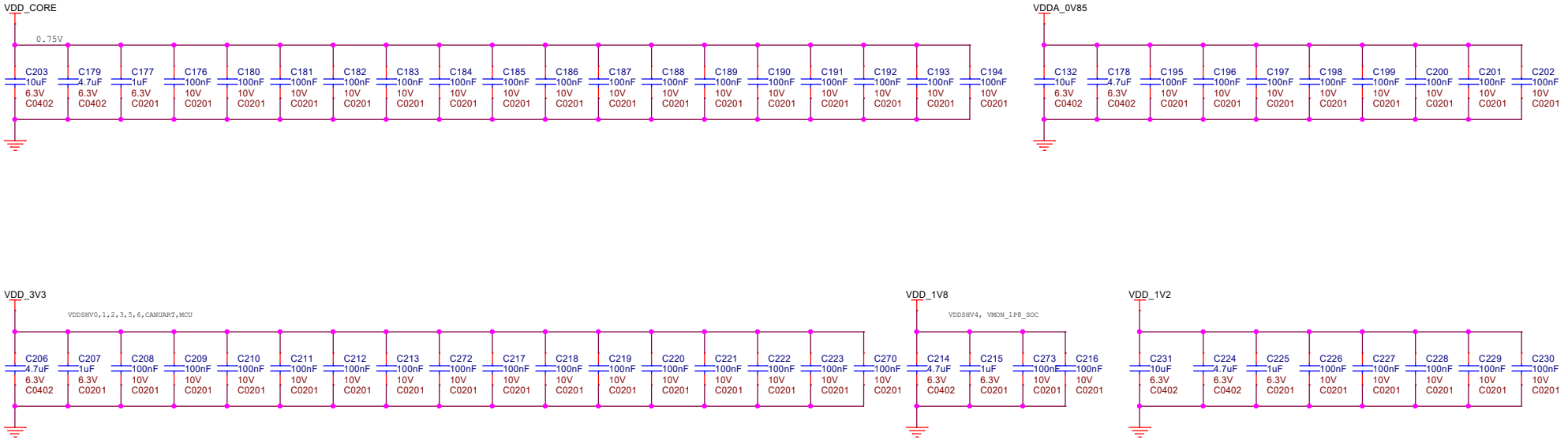


Main

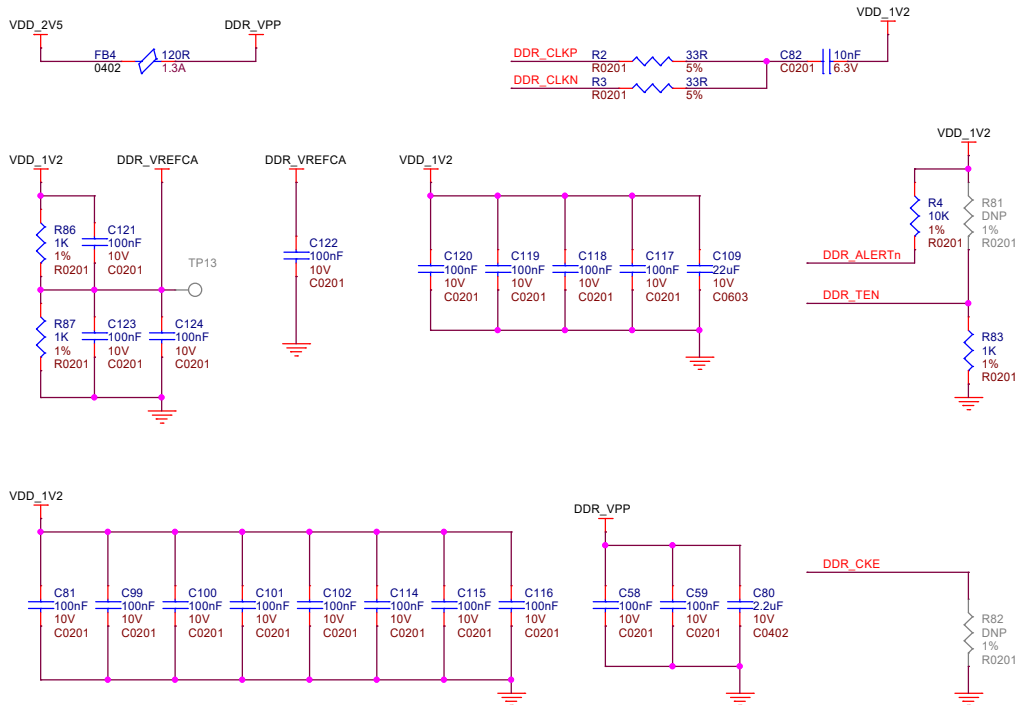
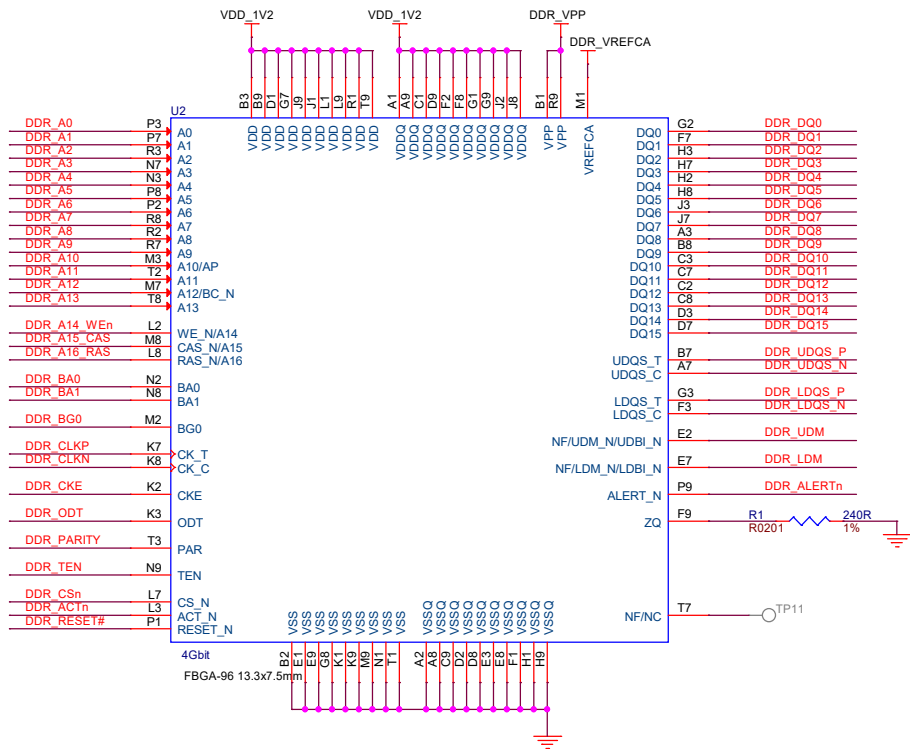
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Size: A3	Document Number: 005_PMIC & Charger	Rev: v0.3	
Draw By: qxm	Date: Wednesday, November 02, 2022	Sheet: 5 of 16	



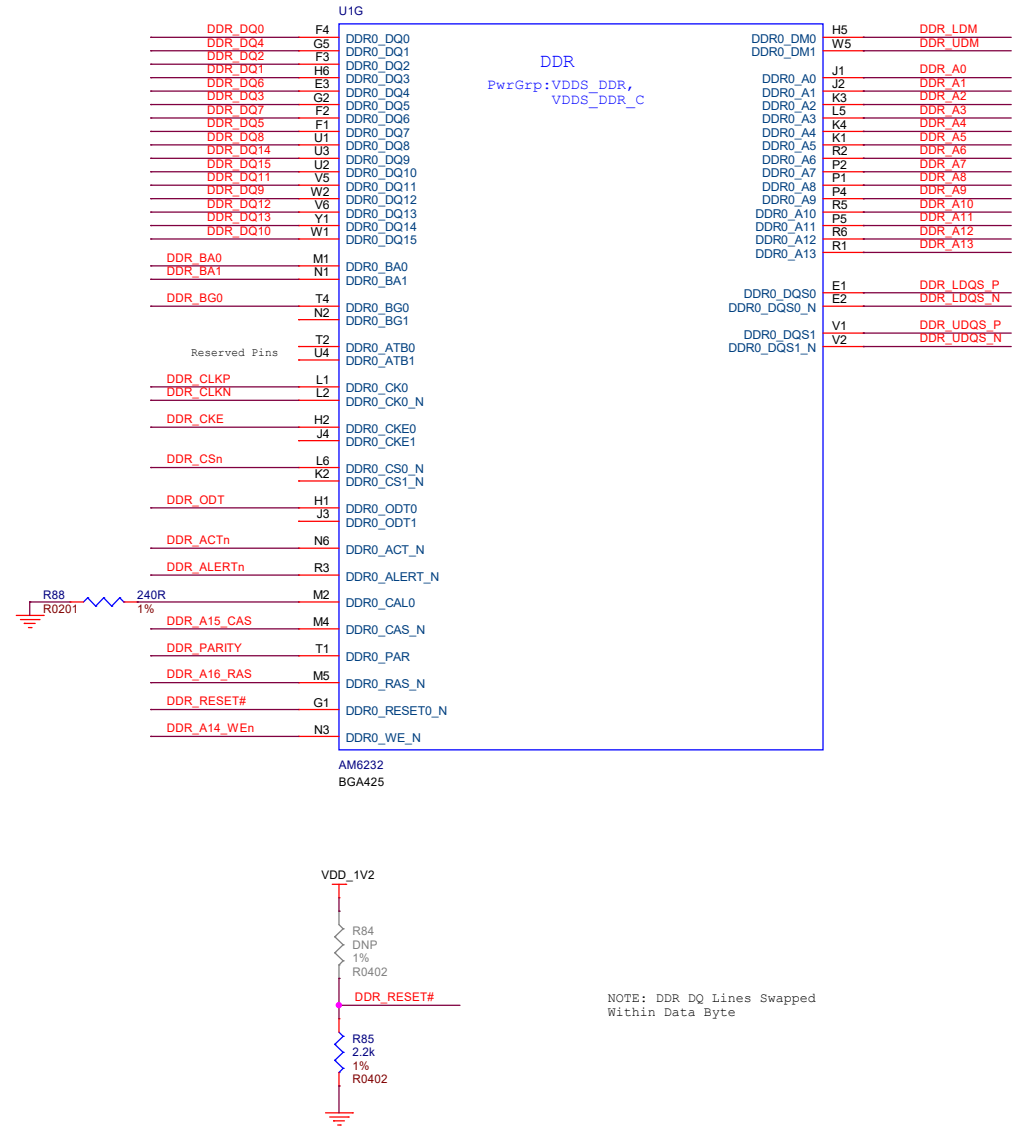
SoC DCAPs



DDR4

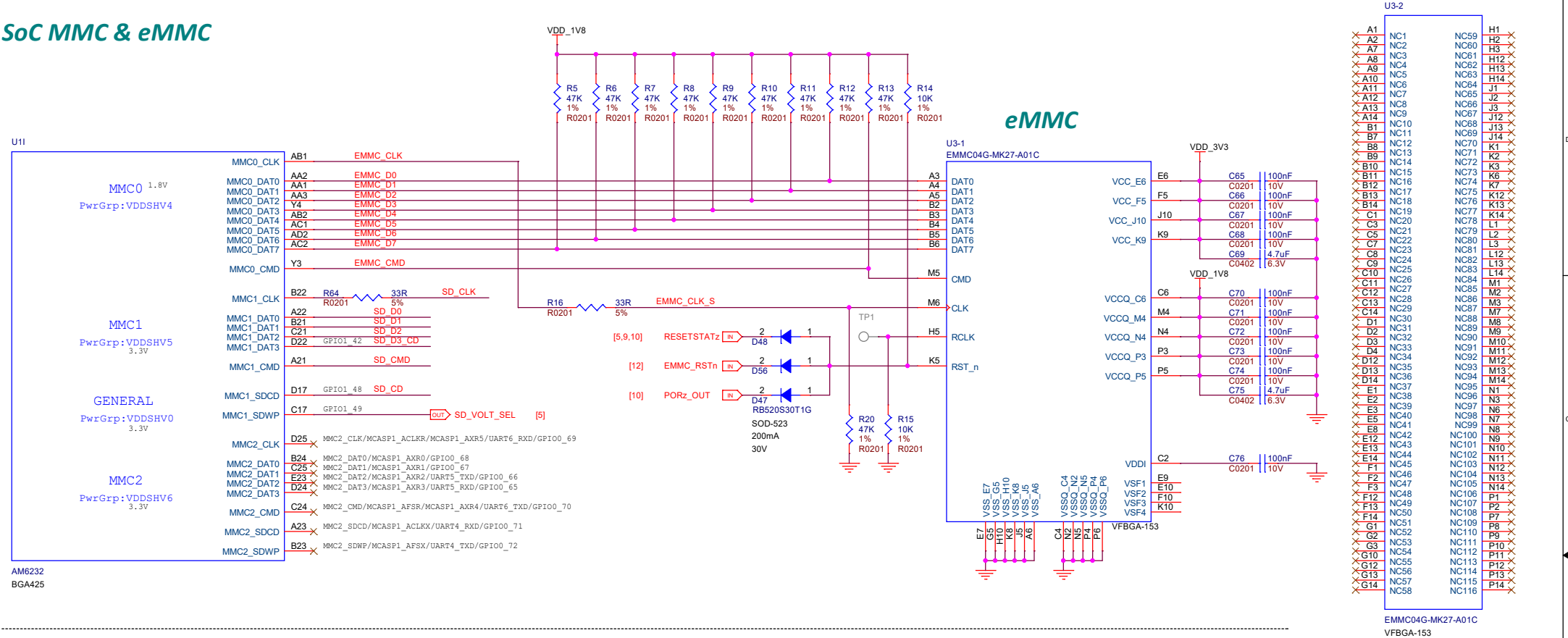


SoC DDR controller

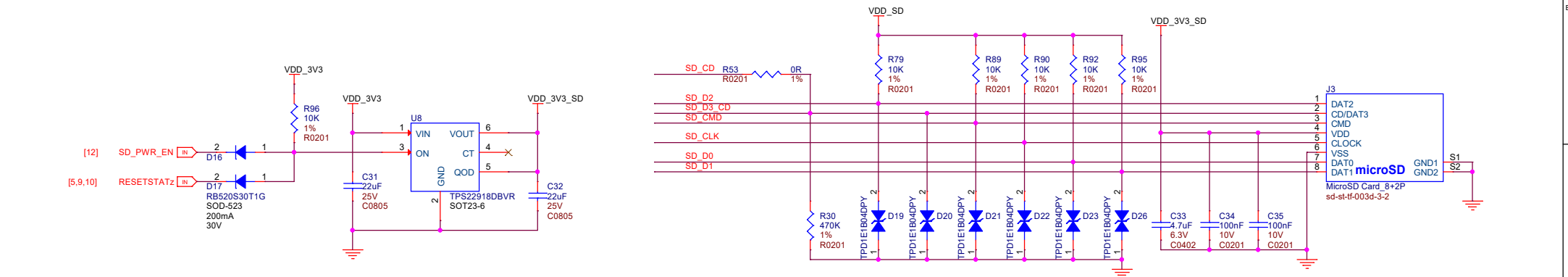


NOTE: DDR DQ Lines Swapped
Within Data Byte

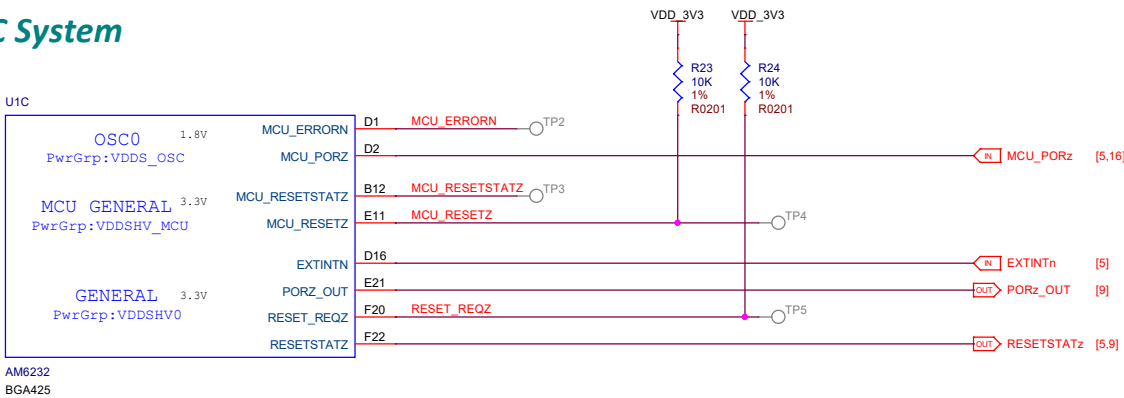
SoC MMC & eMMC



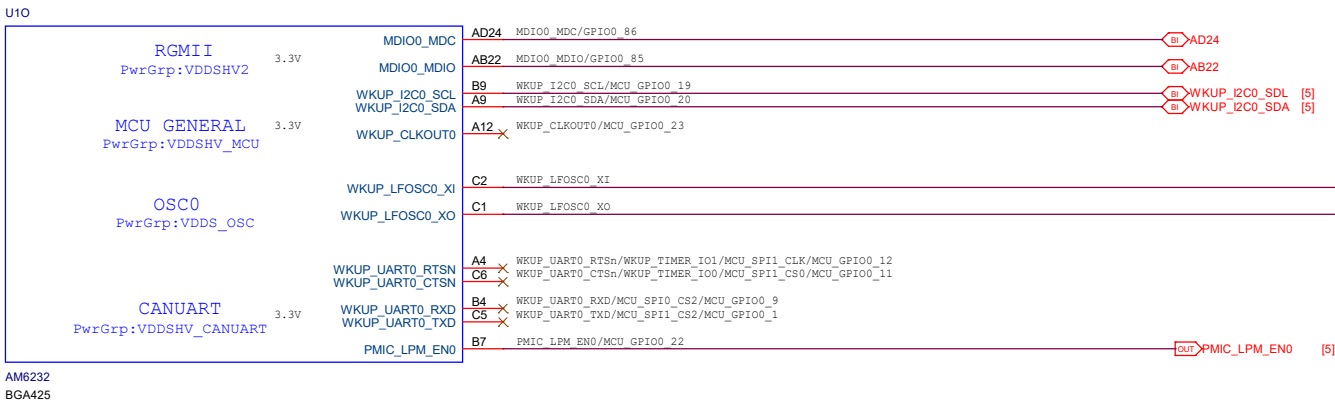
MICRO SD CARD



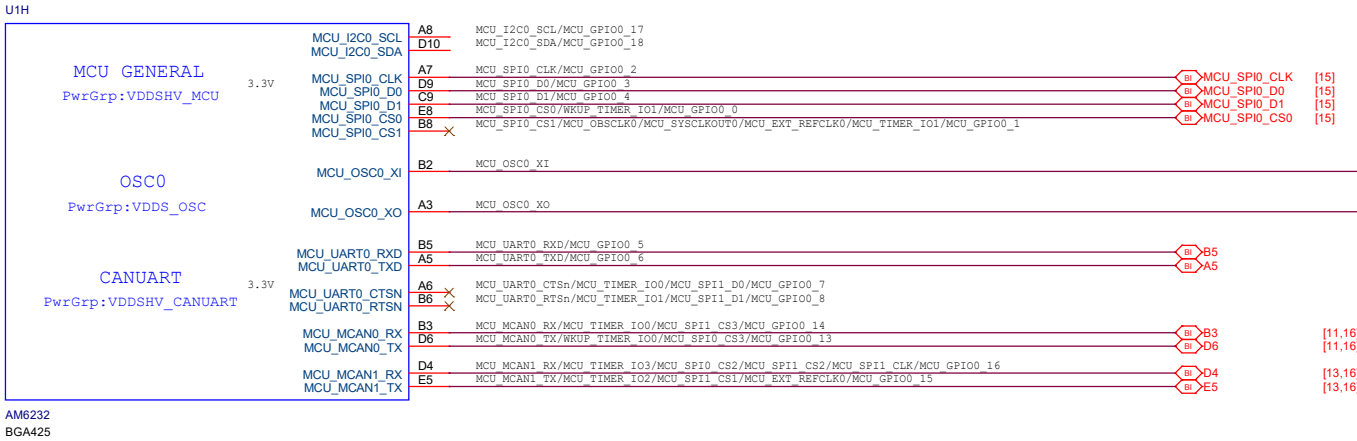
SoC System



WKUP Domain



MCU Domain

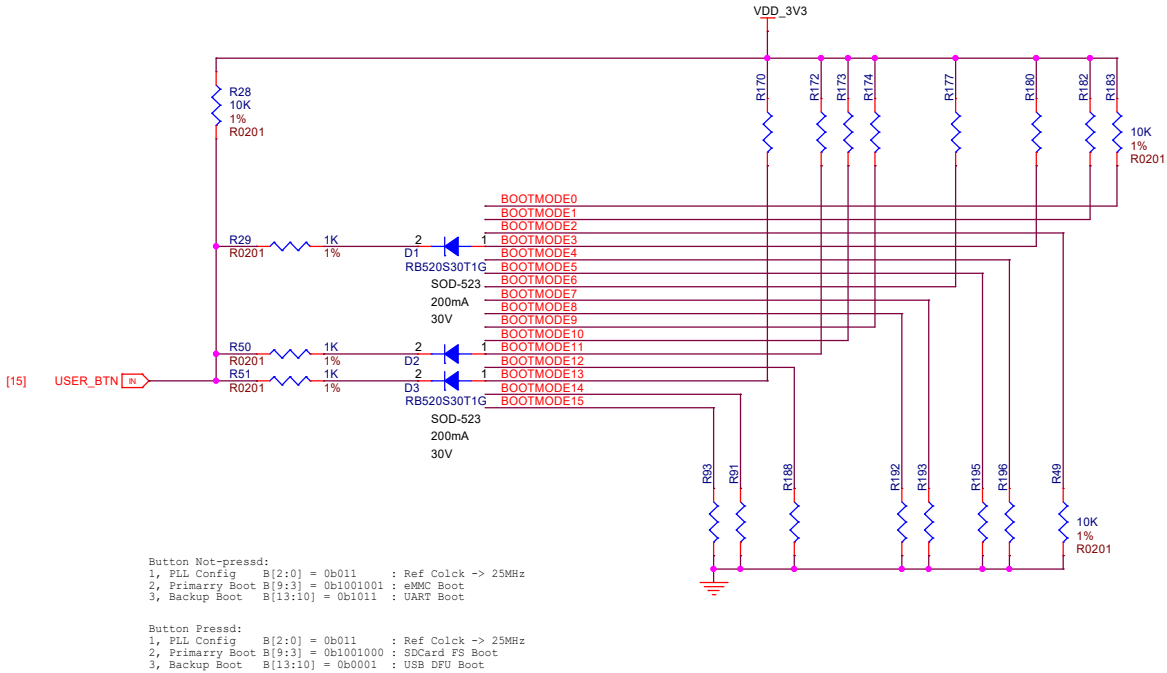


SoC GPIO 1.8V

U1F

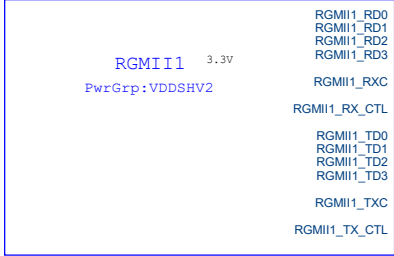


Bootstrap



RGMII

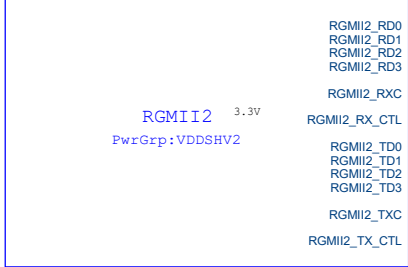
U1M



AM6232
BGA425

AB17	RGMII1_RD0/RMII1_RXD0/GPIO0_81		
AC17	RGMII1_RD1/RMII1_RXD1/GPIO0_82		
AB16	RGMII1_RD2/PR0_UART0_RTSn/GPIO0_83		
AA15	RGMII1_RD3/GPIO0_84		
	RGMII10		
AD17	RGMII1_RXC/RMII1_REF_CLK/PR0_UART0_CTSn/GPIO0_80		
AE17	RGMII1_RX_CTL/RMII1_RX_ER/GPIO0_79		
AE20	RGMII1_TD0/RMII1_TXD0/GPIO0_75		
AD20	RGMII1_TD1/RMII1_TXD1/GPIO0_76		
AE18	RGMII1_TD2/PR0_UART0_RXD/GPIO0_77	AE18	[13,16]
AD18	RGMII1_TD3/PR0_UART0_TXD/GPIO0_78	AD18	[13,16]
AE19	RGMII1_TXC/RMII1_CRS_DV/GPIO0_74		
AD19	RGMII1_TX_CTL/RMII1_TX_EN/GPIO0_73		

U1S

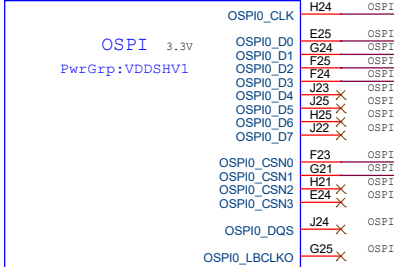


AM6232
BGA425

AE23	RGMII2_RD0/RMII2_RXD0/MCASP2_AXR2/PR0_PRU0_GPO2/PR0_PRU0_GPI2/PR0_UART0_RTSn/GPIO1_3	AE23	[15,16]
AB20	RGMII2_RD1/RMII2_RXD1/MCASP2_AFSR/PR0_PRU0_GPO3/PR0_PRU0_GPI3/MCASP2_AXR7/GPIO1_4	AB20	[15,16]
AC21	RGMII2_RD2/MCASP2_AXR0/PR0_PRU0_GPO4/PR0_PRU0_GPI4/PR0_UART0_RXD/GPIO1_5/EQEP2_A	AC21	[15,16]
AE22	RGMII2_RD3/AUDIO_EXT_REFCLK0/PR0_PRU0_GPO16/PR0_PRU0_GPI16/PR0_UART0_TXD/GPIO1_6/EQEP2_B	AE22	[15,16]
AD23	RGMII2_RXC/RMII2_REF_CLK/MCASP2_AXR1/PR0_PRU0_GPO1/PR0_PRU0_GPI1/PR0_ECAP0_SYNC_IN/GPIO1_2	AD23	[16]
AD22	RGMII2_RX_CTL/RMII2_RX_ER/MCASP2_AXR3/PR0_PRU0_GPO0/PR0_PRU0_GPI0/GPIO1_1	AD22	[15,16]
Y18	RGMII2_TD0/RMII2_TXD0/MCASP2_AXR6/PR0_PRU1_GPO2/PR0_PRU1_GPI2/GPIO0_89	Y18	[13,16]
AA18	RGMII2_TD1/RMII2_TXD1/MCASP2_ACLKR/PR0_PRU1_GPO3/PR0_PRU1_GPI3/MCASP2_AXR8/GPIO0_90	AA18	[13,16]
AD21	RGMII2_TD2/MCASP2_AFSX/PR0_PRU1_GPO4/PR0_PRU1_GPI4/PR0_ECAP0_IN_APMW_OUT/GPIO0_91/EQEP2_I	AD21	[16]
AC20	RGMII2_TD3/MCASP2_ACLKX/PR0_PRU1_GPO16/PR0_PRU1_GPI16/PR0_ECAP0_SYNC_OUT/PR0_UART0_CTSn/GPIO1_0/EQEP2_S	AC20	[16]
AE21	RGMII2_TXC/RMII2_CRS_DV/MCASP2_AXR5/PR0_PRU1_GPO1/PR0_PRU1_GPI1/GPIO0_88	AE21	[16]
AA19	RGMII2_TX_CTL/RMII2_TX_EN/MCASP2_AXR4/PR0_PRU1_GPO0/PR0_PRU1_GPI0/GPIO0_87	AA19	[13,15,16]

OSPI

U1J



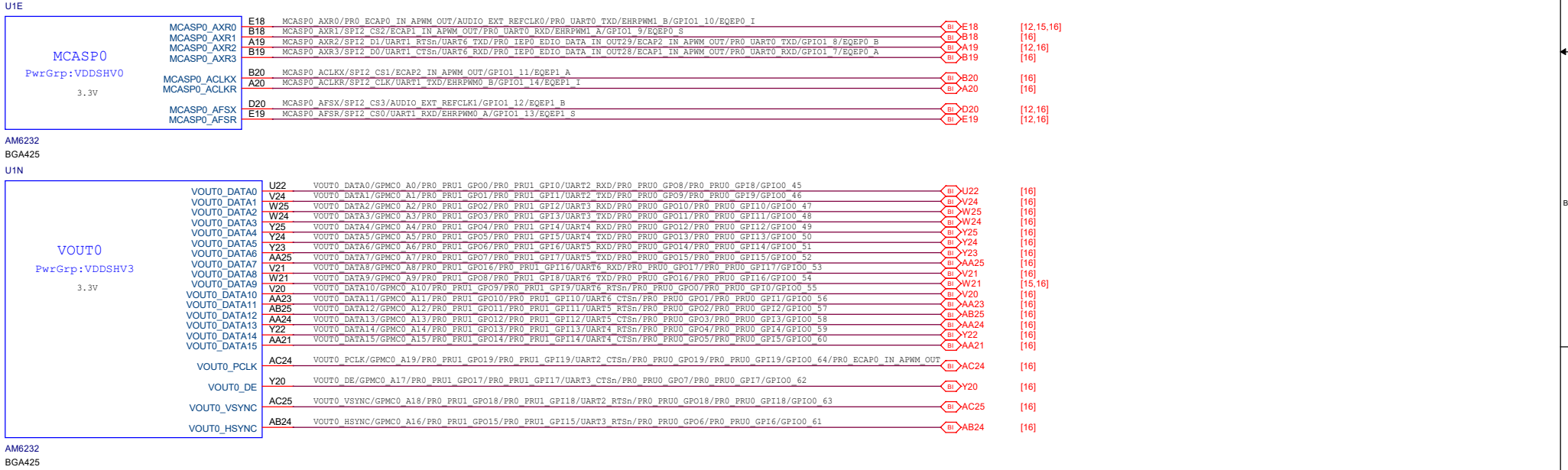
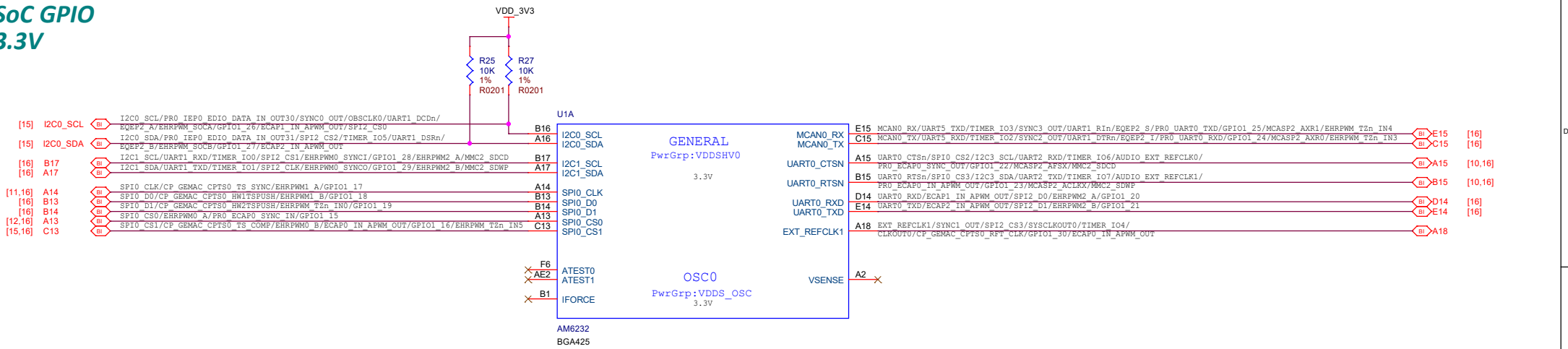
AM6232
BGA425

H24	OSPI0_CLK/GPIO0_0	SD_PWR_EN	[9]
E25	OSPI0_D0/GPIO0_3	GPI00_3	[15]
G24	OSPI0_D1/GPIO0_4	GPI00_4	[15]
F25	OSPI0_D2/GPIO0_5	GPI00_5	[15]
F24	OSPI0_D3/GPIO0_6	GPI00_6	[15]
J23	OSPI0_D4/SP11_CSN0/MCASP1_AXR1/UART6_RXD/GPIO0_7		
J25	OSPI0_D5/SP11_CLK/MCASP1_AXR0/UART6_TXD/GPIO0_8		
H25	OSPI0_D6/SP11_D0/MCASP1_ACLKX/UART6_RTSn/GPIO0_9		
J22	OSPI0_D7/SP11_D1/MCASP1_AFSX/UART6_CTSn/GPIO0_10		
F23	OSPI0_CSN0/GPIO0_11	EMMC_RSTn	[9]
G21	OSPI0_CSN1/GPIO0_12	EEP_WP	[15]
H21	OSPI0_CSN2/SP11_CSN1/OSPI0_RESET_OUT1/MCASP1_AFSR/MCASP1_AXR2/UART5_RXD/GPIO0_13		
E24	OSPI0_CSN3/OSPI0_RESET_OUT0/OSPI0_ECC_FAIL/MCASP1_ACLKR/MCASP1_AXR3/UART5_TXD/GPIO0_14		
J24	OSPI0_DQS/UART5_CTSn/GPIO0_2		
G25	OSPI0_LBCLKO/UART5_RTSn/GPIO0_1		

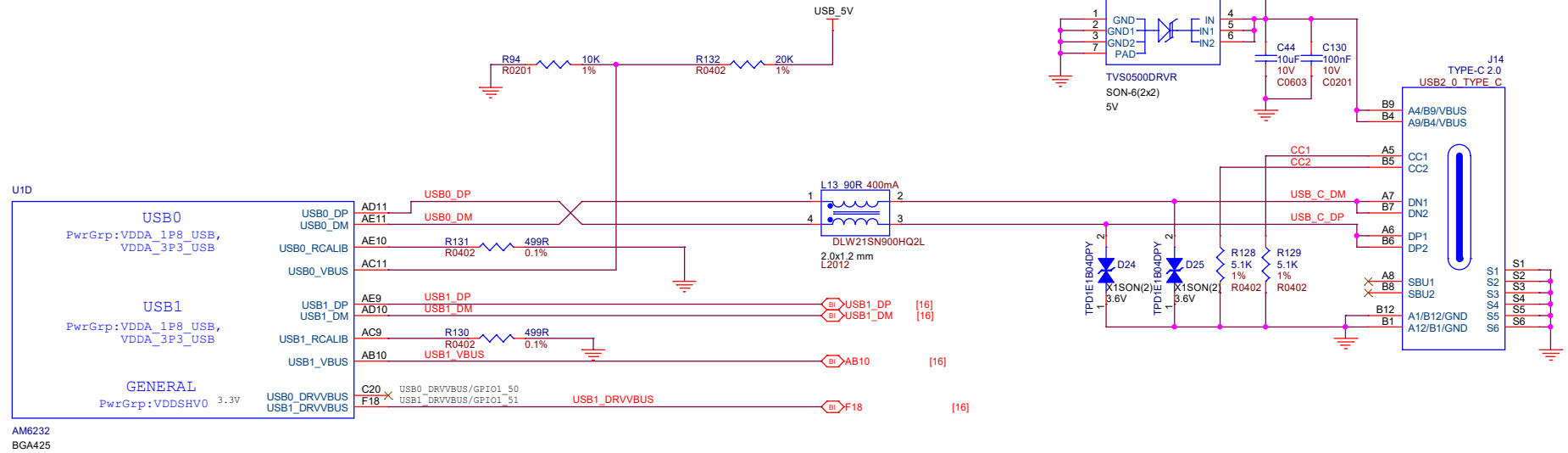
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Draw By: qm	Date: Wednesday, November 02, 2022	Sheet: 12 of 16	

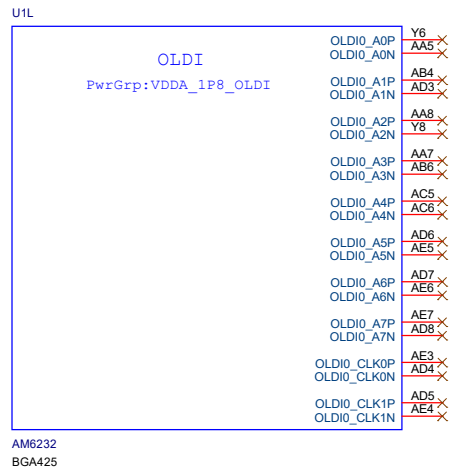
SoC GPIO 3.3V



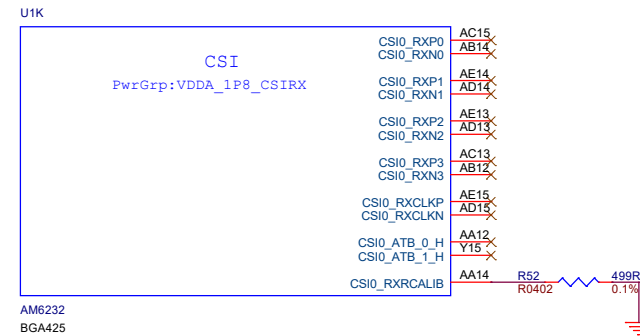
USB_A & USB_C



OLDI



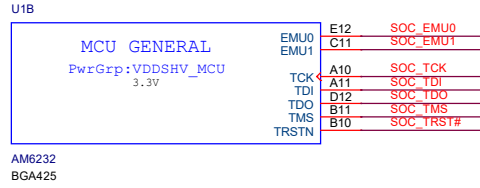
CSI



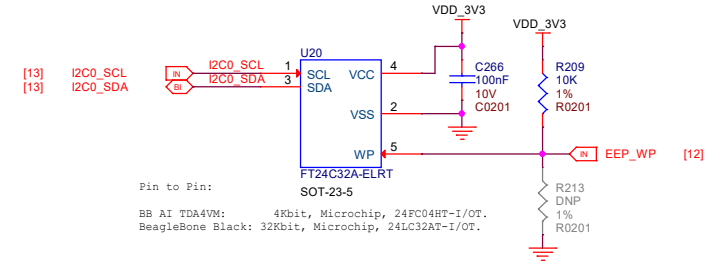
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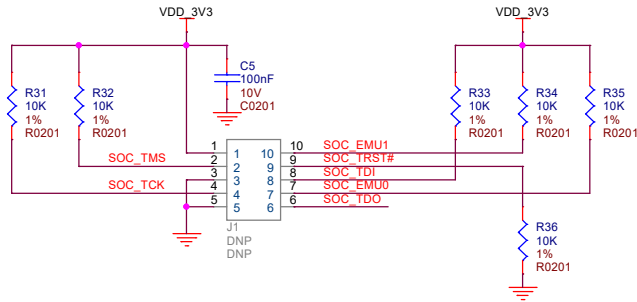
JTAG



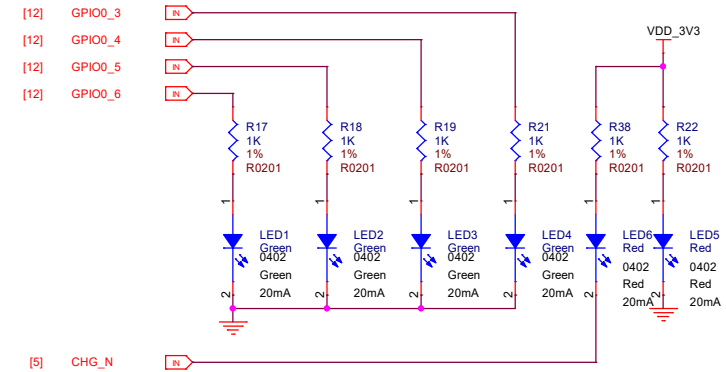
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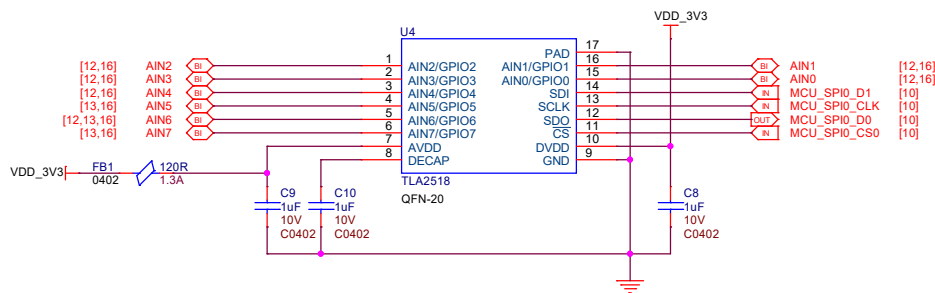
Tag-Connect



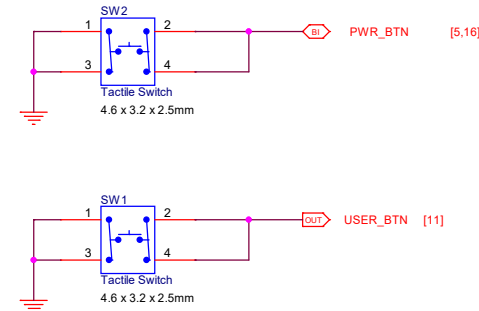
LEDs



ADC

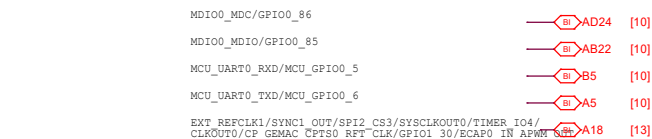
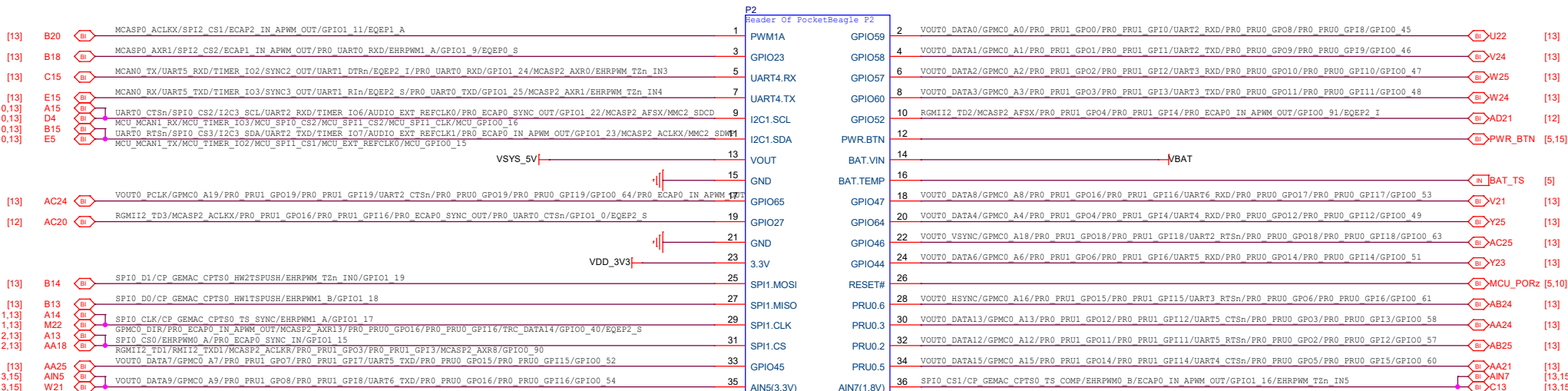
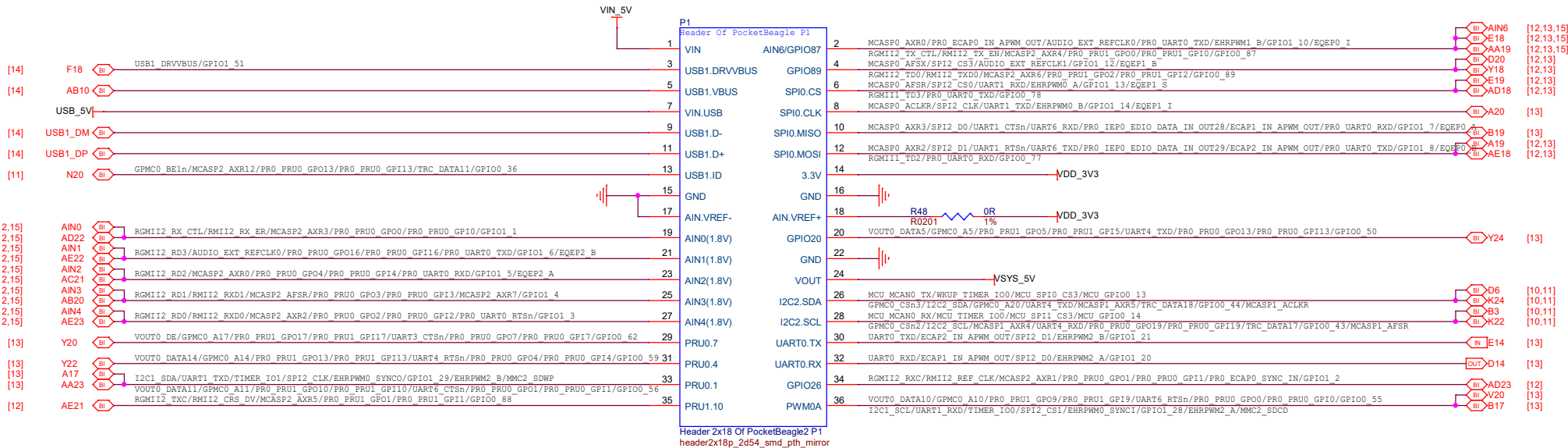


Power Button



Main

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TBD:Where to put these signals?

Main

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