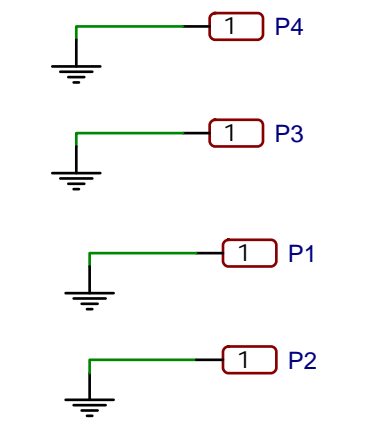
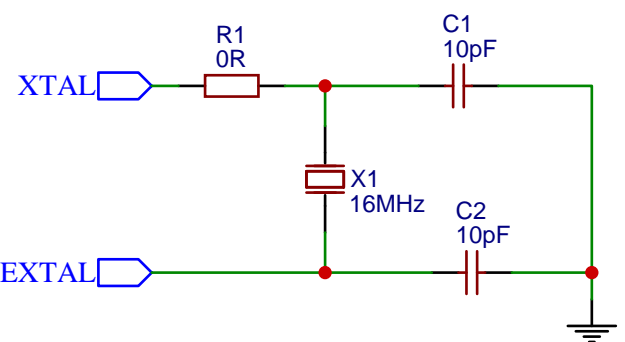
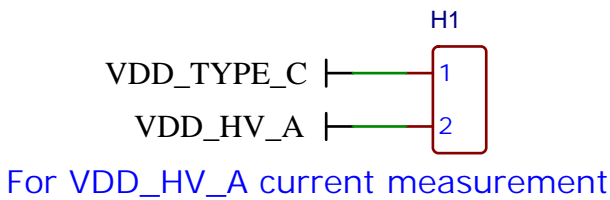


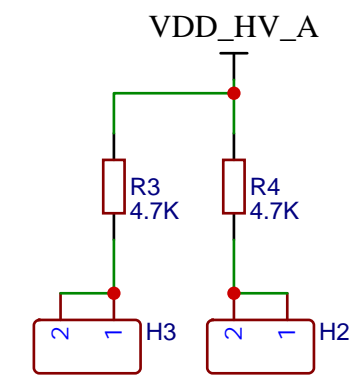
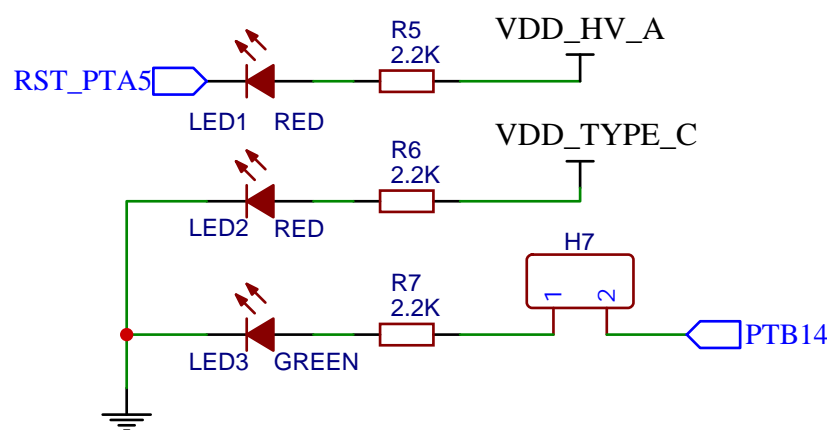
Type C power connector



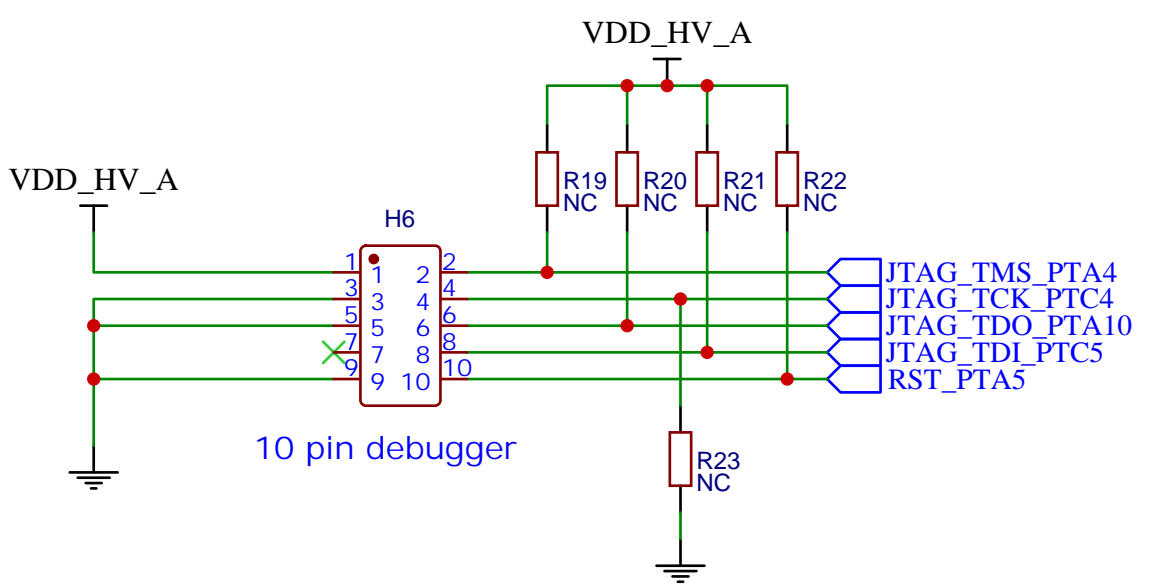
Additional power supply



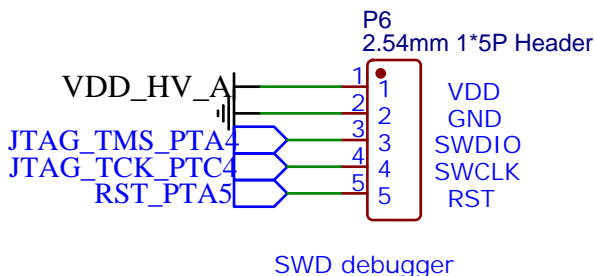
Crystal for OSC



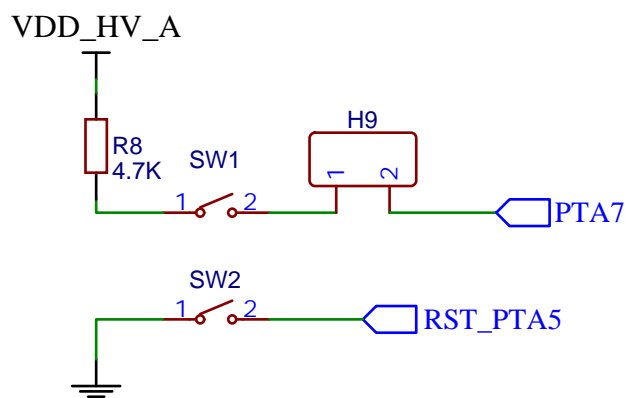
Header for I2C pull up



10 pin debugger



SWD debugger



User and reset switch

TITLE: User peripherals		REV: 1.0
	Company:	Sheet: 1/1
	Date: 2023-06-20	Drawn By:

A

B

C

D

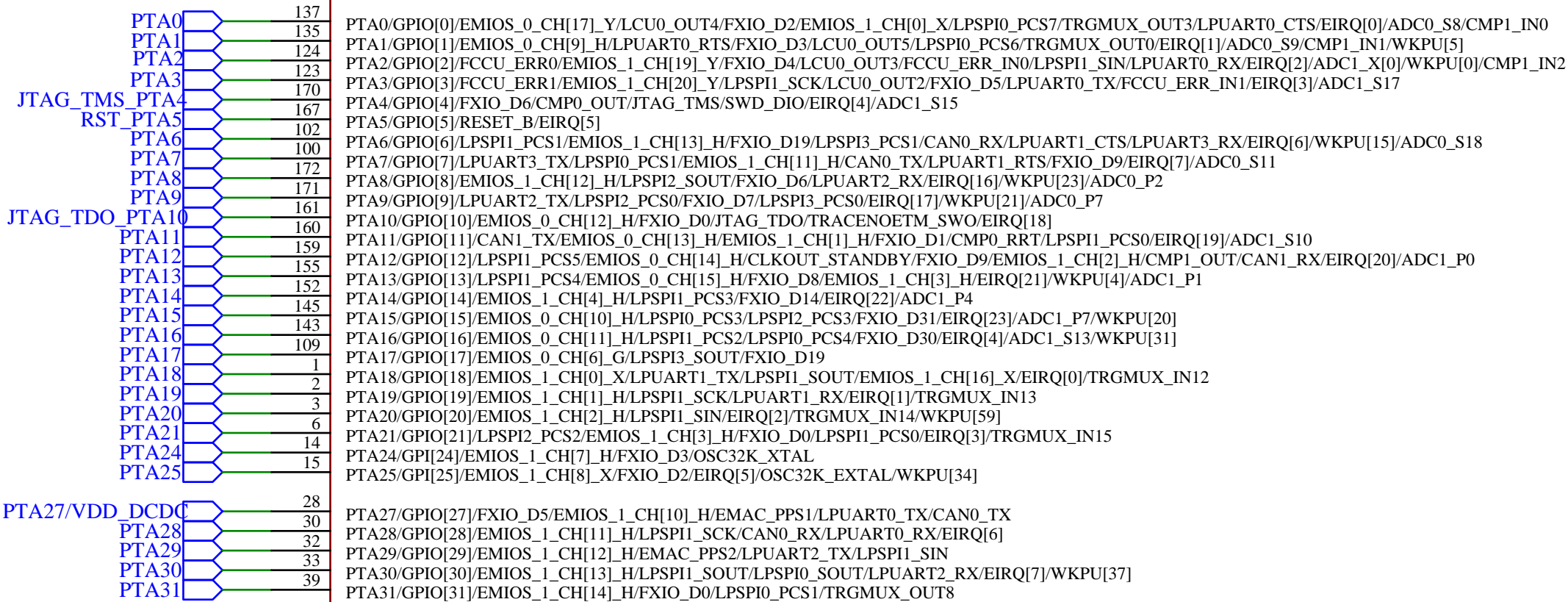
A

B

C

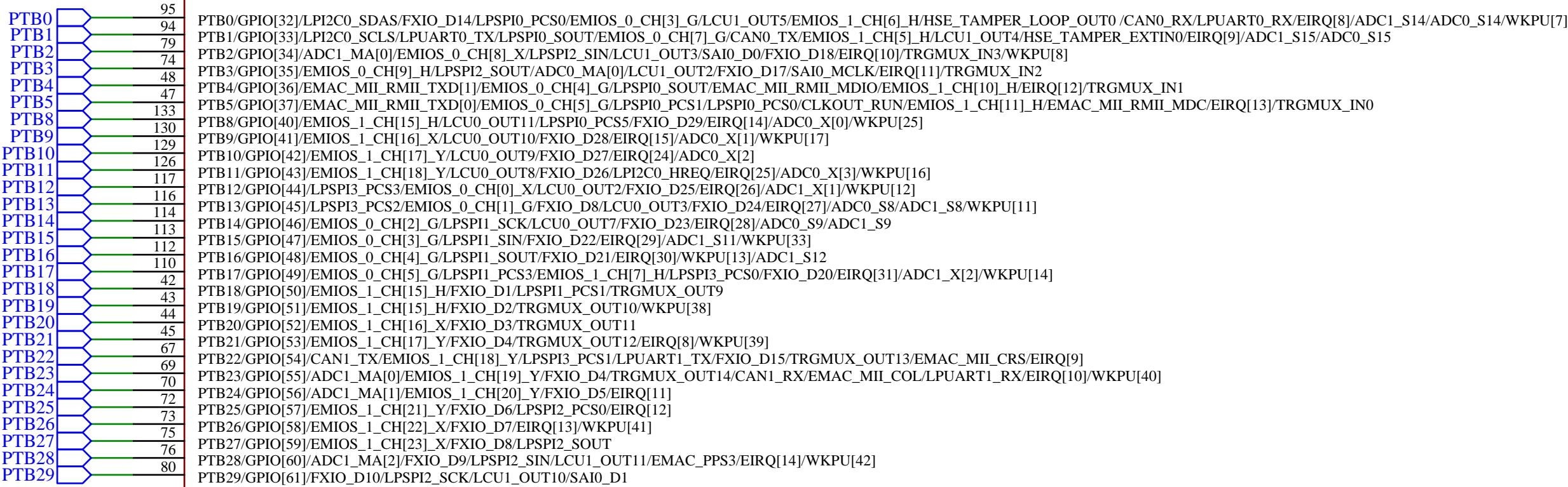
D

U1.1 S32K344



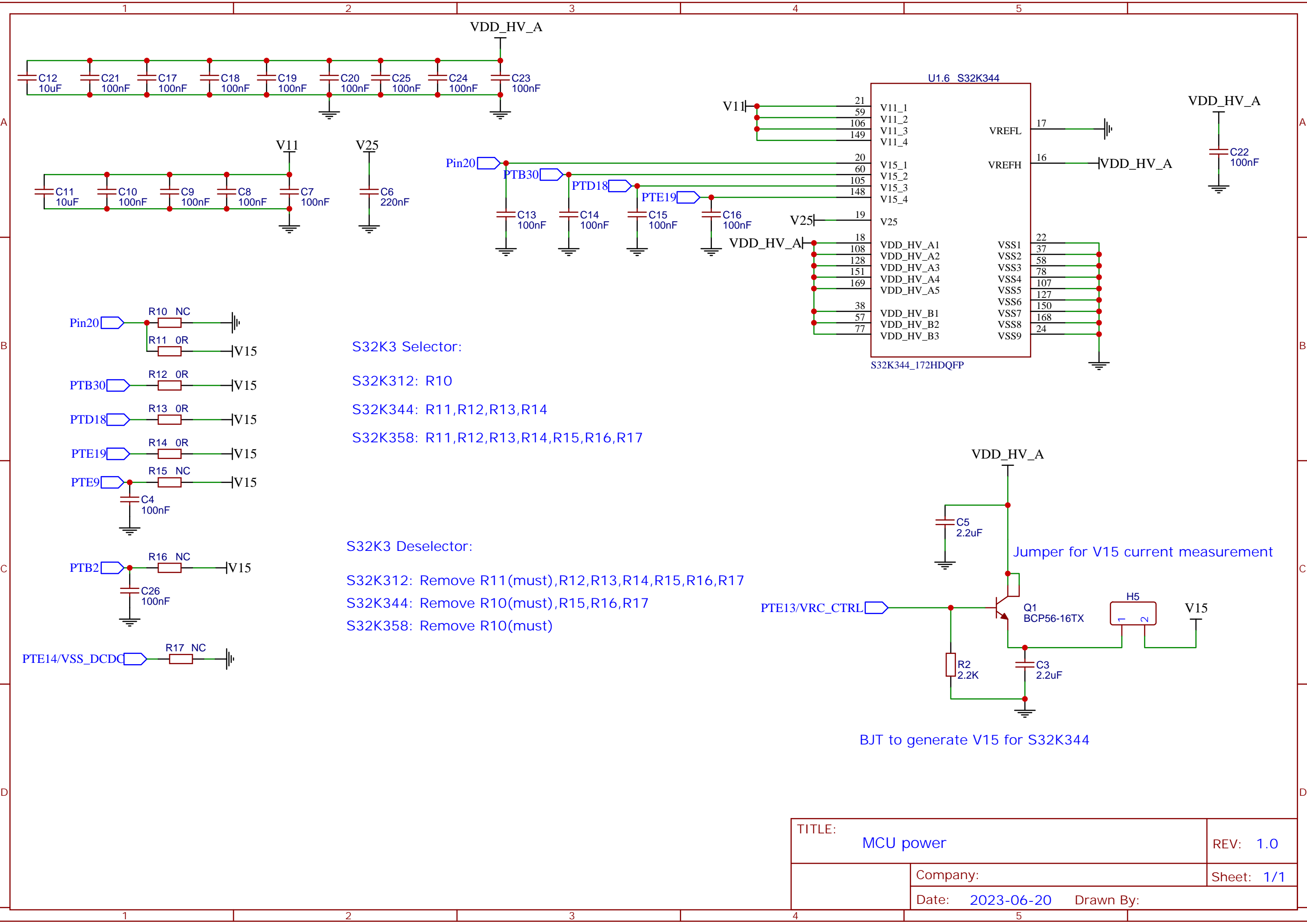
S32K344_172HDQFP

U1.2 S32K344



S32K344_172HDQFP

TITLE:		MCU(PORT A&B)	REV: 1.0
	Company:		Sheet: 1/1
	Date: 2023-06-20 Drawn By:		



S32K3 Selector:

S32K312: R10

S32K344: R11,R12,R13,R14

S32K358: R11,R12,R13,R14,R15,R16,R17

S32K3 Deselector:

S32K312: Remove R11(must),R12,R13,R14,R15,R16,R17

S32K344: Remove R10(must),R15,R16,R17

S32K358: Remove R10(must)

BJT to generate V15 for S32K344

TITLE: MCU power		REV: 1.0
	Company:	Sheet: 1/1
	Date: 2023-06-20	Drawn By:

1	2	3	4	5	
U1.3 S32K344					
A	PTC0	62	PTC0/GPIO[64]/CAN3_TX/EMIOS_0_CH[0]_X/EMAC_MII_RMII_RXD[0]/EMIOS_0_CH[14]_H/EMAC_MII_RMII_TX_CLK/EMAC_MII_RMII_RXD[1]/EIRQ[0]		
	PTC1	61	PTC1/GPIO[65]/EMIOS_0_CH[1]_G/FXIO_D5/EMAC_MII_RMII_RXD[1]/EMIOS_0_CH[15]_H/CAN3_RX/EMAC_MII_RMII_RXD[0]/EMAC_MII_RX_CLK/EIRQ[1]		
	PTC2	50	PTC2/GPIO[66]/EMAC_MII_RMII_TXD[1]/EMIOS_0_CH[2]_G/LPSPI3_PCS2/LPSPI0_PCS2/EMAC_MII_RMII_TXD[0]/TRACE_ETM_CLKOUT/QUADSPI_IOFA3/CAN0_RX/LPUART0_RX/EIRQ[2]/CMP0_IN2		
	PTC3	49	PTC3/GPIO[67]/EMIOS_0_CH[3]_G/CAN0_TX/LPUART0_TX/QUADSPI_PCSFA/EIRQ[3]/CMP0_IN4		
	JTAG_TCK_PTC4	166	PTC4/GPIO[68]/EMIOS_0_CH[8]_X/FXIO_D5/JTAG_TCK/SWD_CLK/EIRQ[4]/CMP1_IN3		
	JTAG_TDI_PTC5	165	PTC5/GPIO[69]/EMIOS_0_CH[16]_X/FXIO_D4/JTAG_TDI/LPI2C1_HREQ/EIRQ[5]/ADC1_S14		
	PTC6	141	PTC6/GPIO[70]/LPI2C1_SDA/FXIO_D11/LPSPI1_PCS1/LCU0_OUT7/EMIOS_1_CH[6]_H/LPSPI0_PCS1/ADC0_MA[2]/CAN2_RX/LPUART1_RX/EIRQ[6]/WKPU[3]/ADC1_S18		
	PTC7	140	PTC7/GPIO[71]/FXIO_D10/LPUART1_TX/LPI2C1_SCL/LCU0_OUT6/EMIOS_1_CH[7]_H/LPSPI0_PCS0/CAN2_TX/LPI2C0_HREQ/EIRQ[7]/WKPU[2]/ADC1_S16		
	PTC8	98	PTC8/GPIO[72]/LPI2C0_SCL/CAN1_TX/EMIOS_1_CH[9]_H/LCU1_OUT7/LPSPI0_SCK/FXIO_D12/LPUART0_CTS/LPUART1_RX/EIRQ[16]/ADC0_S12		
	PTC9	97	PTC9/GPIO[73]/LPI2C0_SDA/LPUART1_TX/LPUART0_RTS/EMIOS_1_CH[8]_X/LCU1_OUT6/LPSPI0_SIN/FXIO_D13/CAN1_RX/EIRQ[17]/ADC0_S13/WKPU[10]		
	PTC10	92	PTC10/GPIO[74]/EMIOS_0_CH[6]_G/LPSPI2_PCS1/LCU1_OUT11/EMIOS_1_CH[0]_X/EIRQ[18]/TRGMUX_IN11/ADC1_X[3]		
	PTC11	90	PTC11/GPIO[75]/EMIOS_1_CH[1]_H/FXIO_D15/FXIO_D19/LCU1_OUT10/EIRQ[19]/TRGMUX_IN10/WKPU[18]/ADC0_S17		
	PTC12	83	PTC12/GPIO[76]/ADC1_MA[2]/EMIOS_1_CH[2]_H/EMIOS_0_CH[22]_X/LPSPI2_PCS1/FXIO_D19/LCU1_OUT9/SAI0_BCLK/EIRQ[20]		
	PTC13	81	PTC13/GPIO[77]/EMIOS_1_CH[3]_H/EMIOS_0_CH[23]_X/ADC1_MA[1]/FXIO_D16/LCU1_OUT8/SAI0_SYNC/EIRQ[21]		
	PTC14	71	PTC14/GPIO[78]/EMIOS_0_CH[10]_H/LPSPI2_PCS0/ADC0_MA[1]/EMIOS_1_CH[4]_H/LCU1_OUT1/FXIO_D16/CAN2_RX/EMAC_MII_COL/EMAC_MII_RMII_RX_ER/EMAC_MII_RXD3/EIRQ[22]/TRGMUX_IN9		
	PTC15	68	PTC15/GPIO[79]/CAN2_TX/EMIOS_0_CH[11]_H/LPSPI2_SCK/ADC0_MA[2]/LPUART2_TX/LCU1_OUT0/LPI2C1_SCL/EMAC_MII_CRS/EMAC_MII_RMII_RX_DV/EMAC_MII_RXD2/EIRQ[23]/TRGMUX_IN8		
	PTC16	66	PTC16/GPIO[80]/LPSPI3_SIN/EMIOS_1_CH[9]_H/LPI2C1_SDAS/I3C0_SDA/FXIO_D15/LPI2C1_SDA/CAN2_RX/EMAC_MII_RMII_RX_ER/LPUART2_RX		
	PTC17	65	PTC17/GPIO[81]/LPSPI3_SCK/I3C0_SCL/CAN2_TX/LPI2C1_SCLS/EMAC_MII_RMII_RX_DV/FXIO_D14		
	PTC18	82	PTC18/GPIO[82]/FXIO_D6/FXIO_D12/LCU1_OUT7/SAI0_D2/WKPU[36]		
	PTC19	84	PTC19/GPIO[83]/FXIO_D13/LPSPI2_PCS1/LCU1_OUT6/SAI0_D3		
	PTC20	85	PTC20/GPIO[84]/FXIO_D14/ADC1_MA[2]/LCU1_OUT5/EIRQ[16]/WKPU[43]		
	PTC21	86	PTC21/GPIO[85]/FXIO_D15/ADC1_MA[1]/LCU1_OUT4/EIRQ[17]		
	PTC23	87	PTC23/GPIO[87]/FXIO_D16/LCU1_OUT0/EIRQ[18]/WKPU[44]		
	PTC24	88	PTC24/GPIO[88]/EMIOS_1_CH[0]_X/FXIO_D17/LCU1_OUT1/TRGMUX_OUT15/EIRQ[19]/WKPU[46]		
	PTC25	89	PTC25/GPIO[89]/EMIOS_1_CH[1]_H/FXIO_D18/LCU1_OUT2/EIRQ[20]/ADC0_S20/WKPU[45]		
	PTC26	91	PTC26/GPIO[90]/EMIOS_1_CH[3]_H/FXIO_D19/LCU1_OUT9/EIRQ[21]/ADC0_S21/WKPU[48]		
	PTC27	93	PTC27/GPIO[91]/EMIOS_1_CH[4]_H/FXIO_D20/ADC1_MA[0]/LCU1_OUT3/EIRQ[22]		
	PTC28	96	PTC28/GPIO[92]/CAN3_TX/EMIOS_1_CH[7]_H/FXIO_D21/FXIO_D2/LPI2C1_SCL/LCU1_OUT8/I3C0_SCL		
	PTC29	99	PTC29/GPIO[93]/EMIOS_1_CH[10]_H/FXIO_D22/LPI2C1_SDA/I3C0_SDA/FXIO_D3/CAN3_RX/EIRQ[23]/WKPU[47]		
	PTC30	101	PTC30/GPIO[94]/EMIOS_1_CH[12]_H/FXIO_D0/FXIO_D23		
	PTC31	103	PTC31/GPIO[95]/EMIOS_1_CH[14]_H/FXIO_D1/FXIO_D24/WKPU[49]		
S32K344_172HDQFP					
U1.4 S32K344					
B	PTD0	8	PTD0/GPIO[96]/EMIOS_0_CH[2]_G/LPSPI3_SOUT/EMIOS_0_CH[16]_X/FXIO_D0/TRGMUX_OUT1/EIRQ[8]/WKPU[6]/ADC0_P1		
	PTD1	7	PTD1/GPIO[97]/EMIOS_0_CH[3]_G/LPSPI3_SCK/EMIOS_0_CH[17]_Y/FXIO_D1/TRGMUX_OUT2/EIRQ[9]/ADC0_P0		
	PTD2	121	PTD2/GPIO[98]/LCU0_OUT1/EMIOS_1_CH[21]_Y/LPSPI1_SOUT/FXIO_D4/FXIO_D6/LPUART3_TX/EIRQ[10]/TRGMUX_IN5/WKPU[9]/ADC0_S16		
	PTD3	120	PTD3/GPIO[99]/EMIOS_1_CH[22]_X/LPSPI1_PCS0/FXIO_D5/FXIO_D7/LCU0_OUT0/LPUART3_RX/EIRQ[11]/TRGMUX_IN4/NMI_B/WKPU[1]/ADC0_S10		
	PTD4	119	PTD4/GPIO[100]/EMIOS_1_CH[23]_X/LPSPI1_PCS1/LCU0_OUT6/EIRQ[12]/ADC0_S19/WKPU[22]		
	PTD5	53	PTD5/GPIO[101]/EMAC_MII_TXD2/EMIOS_0_CH[19]_Y/EMIOS_0_CH[2]_G/EMAC_MII_TXD3/FXIO_D15/LPSPI0_PCS1/EMAC_MII_RX_CLK/EIRQ[13]/TRGMUX_IN7		
	PTD6	52	PTD6/GPIO[102]/EMAC_MII_TXD3/EMIOS_1_CH[12]_H/EMAC_MII_RMII_TX_CLK/EMAC_MII_TXD2/FXIO_D13/LPSPI0_PCS0/LPUART2_RX/EIRQ[14]/CMP0_IN7		
	PTD7	51	PTD7/GPIO[103]/EMAC_MII_RMII_TXD[0]/LPUART2_TX/LPSPI3_PCS3/LPSPI0_PCS3/EMAC_MII_RMII_TXD[1]/TRACE_ETM_D0/QUADSPI_IOFA1/EIRQ[15]/CMP0_IN6		
	PTD8	64	PTD8/GPIO[104]/LPSPI3_SOUT/LPI2C1_SDA/EMAC_MII_RXD3/I3C0_SDA/FXIO_D1/EMIOS_0_CH[12]_H/FXIO_D11/EMAC_MII_RMII_RXD[1]/EIRQ[24]		
	PTD9	63	PTD9/GPIO[105]/EMAC_MII_RXD2/LPI2C1_SCL/FXIO_D0/I3C0_SCL/EMIOS_0_CH[13]_H/FXIO_D10/EMAC_MII_RMII_RXD[0]/EIRQ[25]		
	PTD10	56	PTD10/GPIO[106]/EMAC_MII_TXD3/EMIOS_0_CH[16]_X/EMIOS_1_CH[10]_H/TRACE_ETM_D3/LPSPI0_SIN/CLKOUT_RUN/QUADSPI_SCKFA/EMAC_MII_RX_CLK/EIRQ[26]		
	PTD11	55	PTD11/GPIO[107]/EMAC_MII_TXD2/EMIOS_0_CH[17]_Y/EMAC_MII_RMII_TX_EN/TRACE_ETM_D2/EMAC_MII_RMII_TX_CLK/LPSPI0_SCK/QUADSPI_IOFA0/LPUART2_CTS/EIRQ[27]		
	PTD12	54	PTD12/GPIO[108]/EMAC_MII_RMII_TX_CLK/EMIOS_0_CH[18]_Y/LPUART2_RTS/TRACE_ETM_D1/EMAC_MII_RMII_TX_EN/LPSPI0_SOUT/QUADSPI_IOFA2/LPI2C1_HREQ/EIRQ[28]		
	PTD13	41	PTD13/GPIO[109]/EMIOS_0_CH[20]_Y/FXIO_D7/LPI2C0_SDA/EMAC_PPS1/SAI1_D0/LPUART1_RX/EIRQ[29]/WKPU[24]		
	PTD14	40	PTD14/GPIO[110]/EMIOS_0_CH[21]_Y/LPUART1_TX/LPI2C0_SCL/EMAC_PPS0/CMP0_RRT/CLKOUT_RUN/SAI1_MCLK/EIRQ[30]		
	PTD15	35	PTD15/GPIO[111]/FXIO_D6/EMIOS_0_CH[0]_X/EMIOS_1_CH[14]_H/LPSPI0_SCK/EMAC_PPS2/SAI1_SYNC/FXIO_D10/CAN3_RX/LPUART2_CTS/EIRQ[31]/CMP0_IN1		
	PTD16	34	PTD16/GPIO[112]/EMIOS_0_CH[1]_G/EMAC_MII_RMII_MDIO/LPSPI0_SIN/EMIOS_1_CH[15]_H/LPUART2_RTS/CMP0_IN5		
	PTD17	31	PTD17/GPIO[113]/EMIOS_0_CH[18]_Y/EMAC_MII_RMII_MDC/LPSPI3_PCS0/FXIO_D9/EMAC_PPS2/LPUART2_RX/EIRQ[24]		
	PTD20	111	PTD20/GPIO[116]/EMIOS_1_CH[17]_Y/FXIO_D25/LPSPI1_PCS2/LPSPI3_SIN/EIRQ[25]/ADC0_S22/WKPU[54]		
	PTD21	115	PTD21/GPIO[117]/EMIOS_1_CH[18]_Y/FXIO_D26/LCU0_OUT4/EIRQ[26]/ADC0_S23		
	PTD22	118	PTD22/GPIO[118]/EMIOS_1_CH[19]_Y/FXIO_D27/LCU0_OUT5/EIRQ[27]		
	PTD23	122	PTD23/GPIO[119]/EMIOS_1_CH[20]_Y/FXIO_D28/HSE_TAMPER_LOOP_OUT0/LCU0_OUT10/EIRQ[28]/WKPU[50]		
	PTD24	125	PTD24/GPIO[120]/EMIOS_1_CH[21]_Y/FXIO_D29/LCU0_OUT11/HSE_TAMPER_EXTIN0/EIRQ[29]/ADC1_S20		
	PTD26	131	PTD26/GPIO[122]/EMIOS_1_CH[23]_X/FXIO_D7/FXIO_D30/LCU0_OUT0		
	PTD27	132	PTD27/GPIO[123]/FXIO_D31/LCU0_OUT1/EIRQ[30]/ADC1_S21/WKPU[51]		
	PTD28	134	PTD28/GPIO[124]/LCU0_OUT2/EIRQ[31]/ADC1_S22		
	PTD29	136	PTD29/GPIO[125]/LCU0_OUT3/ADC1_S23/WKPU[52]		
	PTD30	138	PTD30/GPIO[126]/LCU0_OUT8		
	PTD31	139	PTD31/GPIO[127]/FXIO_D6/LCU0_OUT9/WKPU[53]		
	S32K344_172HDQFP				
	TITLE:			MCU(PORT C&D)	
			Company:		Sheet: 1/1
			Date: 2023-06-20 Drawn By:		
1	2	3	4	5	

