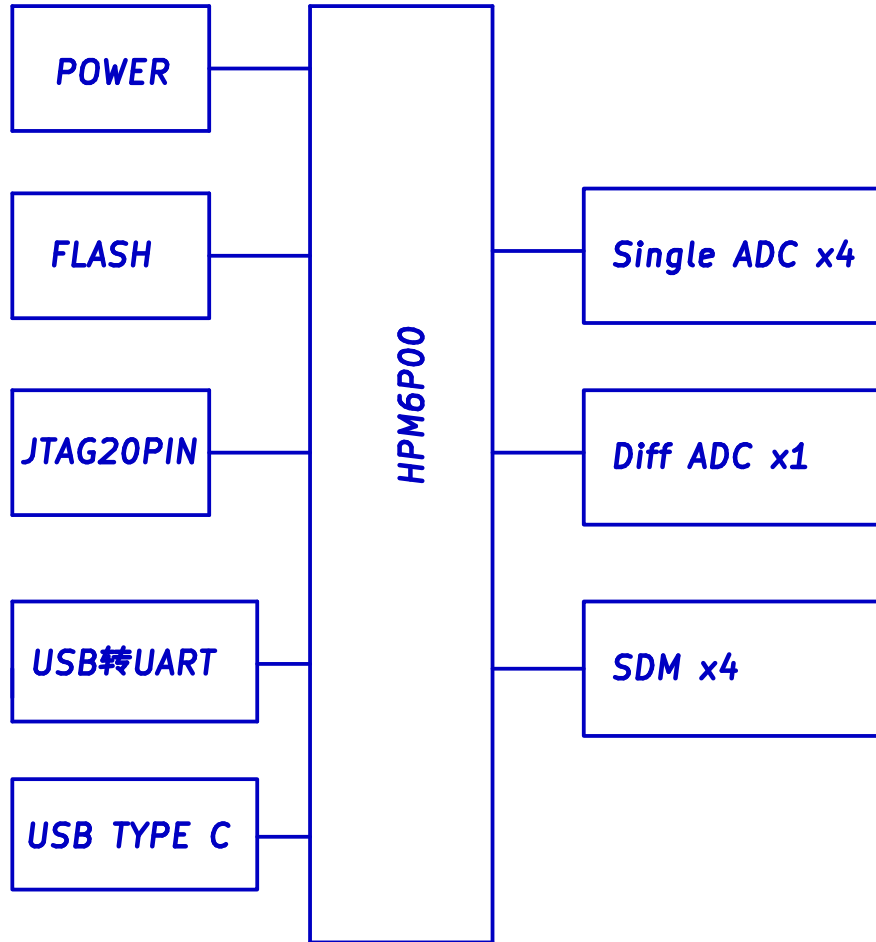


HPM6P00ADCEVK MAINENTRY

### System Block Diagram



File: HPM6P00ADCEVK MAINENTRY.kicad\_sch

### 修订历史

| 内容                | 时间       |
|-------------------|----------|
| HPM6P00ADCEVKRevB | 20241013 |

## System Block Diagram

先楦半导体

Sheet File: 根目录

Title: HPM6P00EVKRevB

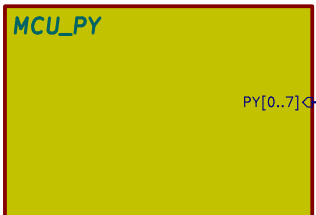
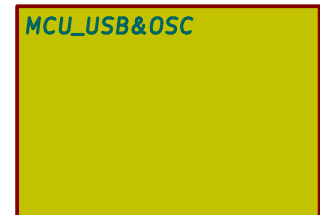
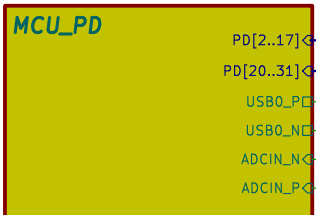
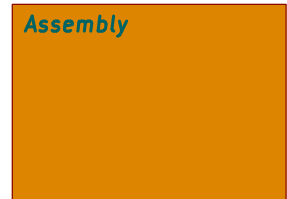
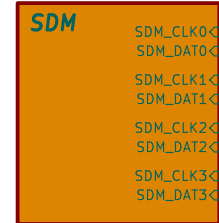
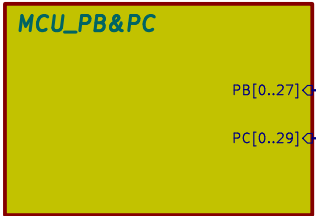
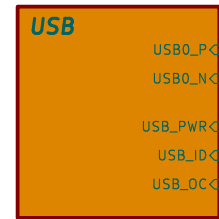
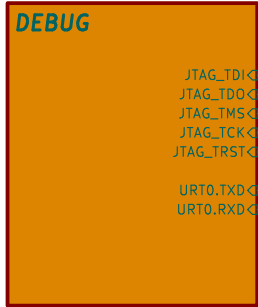
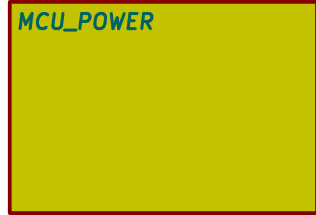
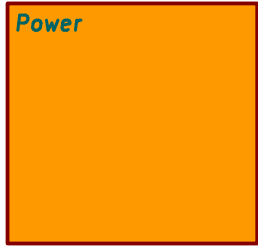
Size: A4

Date: 2024-10-13

Rev: RevB

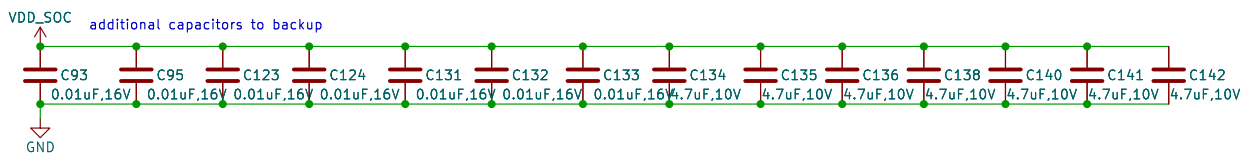
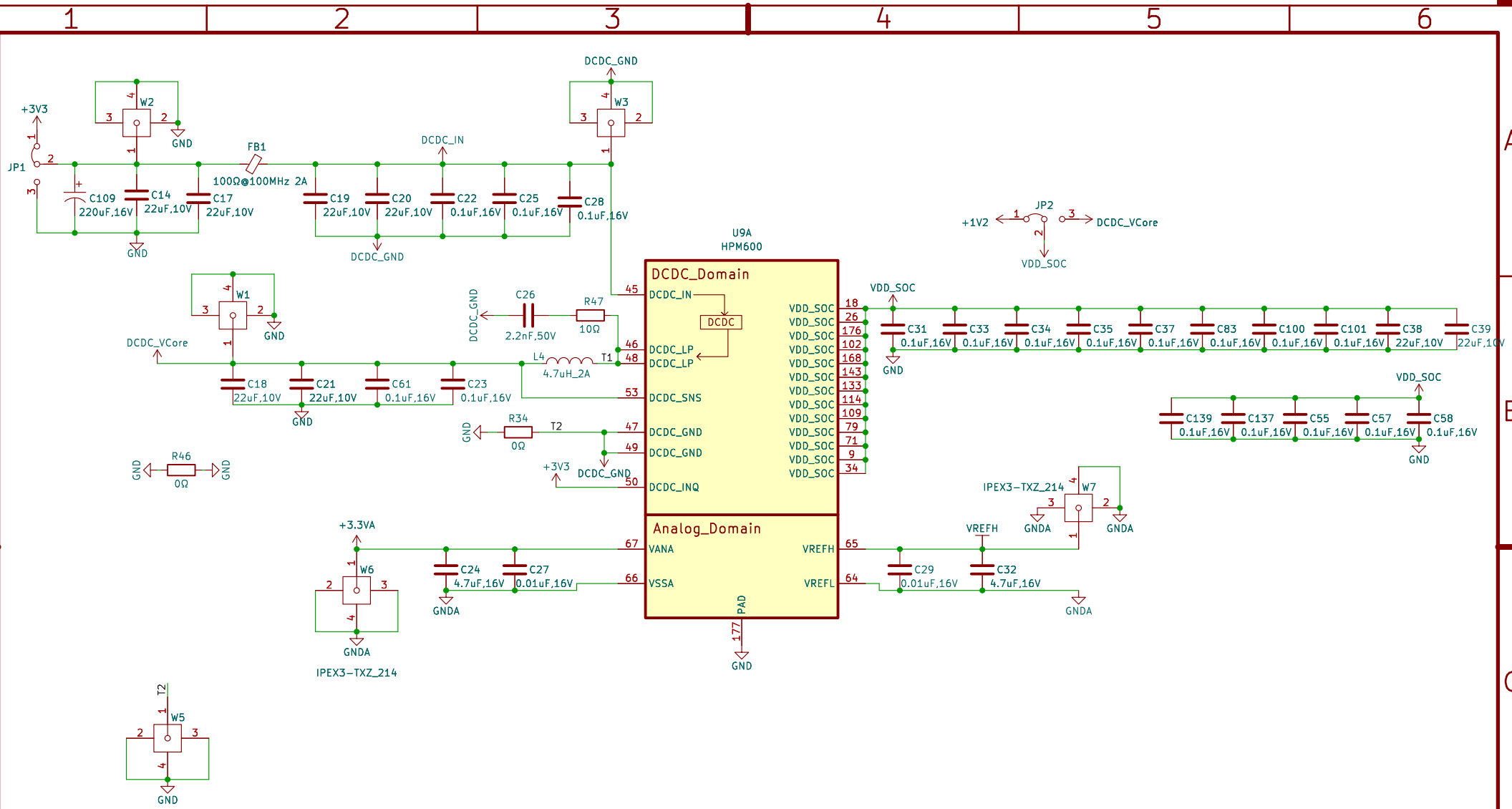
KiCad E.D.A. 8.0.9

Id: 1/15



**MAINENTRY**

|                                     |                  |           |
|-------------------------------------|------------------|-----------|
| Sheet File: HPM6P00ADCEVK MAINENTRY |                  |           |
| Title: HPM6P00ADCEVKRevB            |                  |           |
| Size: A4                            | Date: 2024-10-13 | Rev: RevB |
| KiCad E.D.A. 8.0.9                  |                  | Id: 2/15  |



# MCU\_POWER



Sheet File: MCU\_POWER

Title: HPM6P00ADCEVKRevB

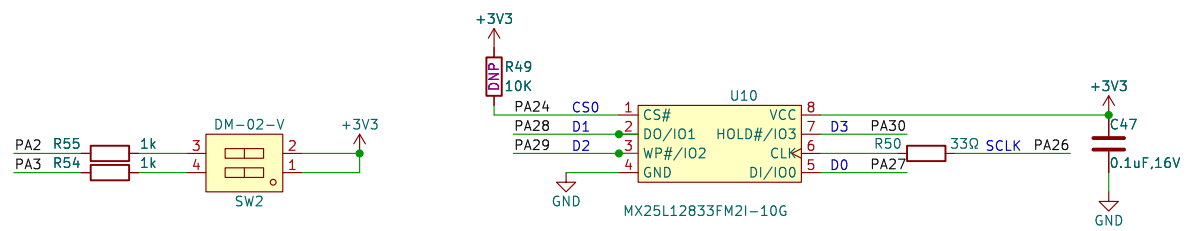
Size: A4

Date: 2024-10-13

Rev: RevB

KiCad E.D.A. 8.0.9

Id: 3/15

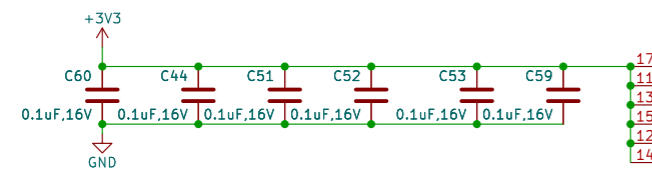


**MCU\_PA&JTAG**

Sheet File: MCU\_PA&JTAG&FLASH

Title: HPM6P00ADCEVKRevB

|                    |                  |           |
|--------------------|------------------|-----------|
| Size: A4           | Date: 2024-10-13 | Rev: RevB |
| KiCad E.D.A. 8.0.9 |                  | Id: 4/15  |

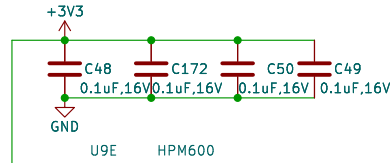


U9D HPM600

|            |     |   |
|------------|-----|---|
| VIO_B01    | 173 | VIO_B01   |
| VIO_B01    | 115 | VIO_B01   |
| VIO_B01    | 138 | VIO_B01   |
| VIO_B01    | 158 | VIO_B01   |
| VIO_B01    | 121 | VIO_B01   |
| VIO_B01    | 148 | VIO_B01   |
| <hr/>      |     |   |
| PB[0..27]D |     |   |
| PB0        | 4   | PB00/GPTMR2.COMP0/UART5.TXD/LIN1.TXD/CAN2.TXD/I2S0.TXD3/PDM0.CLK/FEMC.A00/PPIO.DQ16/XPIO.CA_SCLK/PWM0.P0/TRGM.P31/ETH0.TXCK/RDC0.PWM_N/QE01.A/SEI1.TX/XPL.SLV.ADQ3                                |
| PB1        | 3   | PB01/GPTMR2.CAPT0/UART5.RXD/LIN1.RXD/CAN2.RXD/I2S1.MCLK/PDM0.D0/FEMC.A01/PPIO.DQ17/XPIO.CA_D0/PWM0.P1/TRGM.P30/ETH0.TXEN/RDC0.PWM_P/QE01.B/SEI1.RX/XPL.SLV.ADQ2                                   |
| PB2        | 2   | PB02/GPTMR2.COMP1/UART5.DE/UART5.RTS/I2C2.SCL/LIN1.TREN/CAN2.STBY/I2S1.TXD0/PDM0.D1/FEMC.A02/PPIO.DQ18/XPIO.CA_D1/PWM0.P2/TRGM.P29/ETH0.TXD0/QE10.H1/QE01.Z/SEI1.DE/SDM0.CLK0/XPL.SLV.ADQ1        |
| PB3        | 1   | PB03/GPTMR2.CAPT1/UART5.CTS/I2C2.SDA/SPI0.CS3/CAN0.STBY/I2S1.TXD1/PDM0.D2/FEMC.A03/PPIO.DQ19/XPIO.CA_D2/PWM0.P3/TRGM.P28/ETH0.TXD1/QE10.F/SEI1.CK/SDM0.DAT0/XPL.SLV.ADQ0                          |
| PB4        | 175 | PB04/UART1.CTS/SPI0.SCLK/CAN0.RXD/I2S1.TXD2/PDM0.D3/FEMC.A04/PPIO.DQ20/XPIO.CA_D3/PWM0.P4/TRGM.P27/ETH0.TXD2/QE10.H0/SEI0.CK/SDM0.CLK1/CPU0.NMI/XPL.SLV.CLK                                       |
| PB5        | 174 | PB05/GPTMR2.COMP2/UART1.DE/UART1.RTS/SPI1.CS0/LIN2.TREN/CAN0.TXD/I2S1.TXD3/PDM0.CLK/FEMC.A05/PPIO.DQ21/PWM0.P5/TRGM.P26/ETH0.TXD3/QE10.Z/QE00.Z/SEI0.DE/SDM0.DAT1/CPU1.NMI/XPL.SLV.CSN            |
| PB6        | 172 | PB06/GPTMR0.CAPT0/UART1.RXD/I2C3.SDA/SPI1.MISO/LIN2.TXD/PWM0.P6/TRGM.P25/ETH0.TXEN/QE10.B/SEI0.RX   |
| PB7        | 171 | PB07/GPTMR0.COMP0/UART1.TXD/I2C3.SCL/SPI1.MOSI/LIN2.RXD/PWM0.P7/TRGM.P24/QE10.A/QE00.A/SEI0.TX  |
| PB8        | 170 | PB08/GPTMR0.COMP1/UART2.TXD/I2C0.SCL/SPI0.CS2/CAN3.TXD/PWM1.P0/TRGM.P23/RDC0.PWM_N/QE00.B/SEI1.TX   |
| PB9        | 169 | PB09/GPTMR0.CAPT1/UART2.RXD/I2C0.SDA/SPI0.CS1/CAN3.RXD/PWM1.P1/TRGM.P22/RDC0.PWM_P/QE00.A/SEI1.RX   |
| PB10       | 167 | PB10/GPTMR0.COMP2/UART2.DE/UART2.RTS/SPI1.SCLK/LIN0.RXD/CAN3.STBY/PWM1.P2/TRGM.P21/QE11.F/QE00.Z/SEI1.DE  |
| PB11       | 166 | PB11/UART2.CTS/SPI0.CS0/LIN0.TXD/PWM1.P3/TRGM.P20/QE11.H1/SEI1.CK   |
| PB12       | 165 | PB12/UART3.CTS/I2C1.SDA/SPI0.MISO/LIN0.TREN/DAO.LN/FEMC.A06/PPIO.DQ22/XPIO.CB_DQS/PWM1.P4/TRGM.P19/ETH0.MDC/QE11.H0/SEI0.CK/SDM0.CLK2/WDG0.RST/XPL.SLV.ERR  |
| PB13       | 164 | PB13/GPTMR2.COMP3/UART3.DE/UART3.RTS/I2C1.SCL/SPI0.MOSI/LIN3.TREN/CAN1.STBY/DAO.LP/FEMC.A07/PPIO.DQ23/XPIO.CB_CS0/PWM1.P5/TRGM.P18/ETH0.MDIO/QE11.Z/QE01.Z/SEI0.DE/SDM0.DAT2/WDG1.RST/XPL.SLV.RDY |
| PB14       | 163 | PB14/UART3.RXD/SPI0.DAT2/LIN3.RXD/CAN1.RXD/DAO.RN/FEMC.A08/PPIO.DQ24/XPIO.CB_CS1/PWM1.P6/TRGM.P17/QE11.B/SEI0.RX/SDM0.CLK3/SOC.REFO/ETH0.EVTO2/XPL.SLV.DQS  |
| PB15       | 162 | PB15/GPTMR0.COMP3/UART3.TXD/SPI0.DAT3/LIN3.TXD/CAN1.TXD/DAO.RP/FEMC.A09/PPIO.DQ25/XPIO.CB_SCLK/PWM1.P7/TRGM.P16/QE11.A/QE01.A/SEI0.TX/SDM0.DAT3/SOC.REF1/ETH0.EVTO3                               |
| PB16       | 161 | PB16/GPTMR3.COMP0/UART4.TXD/LIN0.TXD/CAN2.TXD/FEMC.A11/PPIO.DQ27/XPIO.CB_D0/PWM2.P0/TRGM.P15/RDC0.PWM_N/QE01.A/SEI1.TX/SYSCTL.CLK_OBS0/ETH0.EVT11   |
| PB17       | 160 | PB17/GPTMR3.CAPT0/UART4.RXD/LIN0.RXD/CAN2.RXD/FEMC.A12/PPIO.DQ28/XPIO.CB_D1/PWM2.P1/TRGM.P14/RDC0.PWM_P/QE01.B/SEI1.RX/SYSCTL.CLK_OBS1/ETH0.EVT01   |
| PB18       | 159 | PB18/GPTMR3.COMP1/UART4.DE/UART4.RTS/I2C2.SCL/LIN0.TREN/CAN2.STBY/FEMC.CKE/PPIO.DQ31/XPIO.CB_D2/PWM2.P2/TRGM.P13/QE10.H1/QE01.Z/SEI1.DE/SYSCTL.CLK_OBS2/ETH0.EVTO2                                |
| PB19       | 157 | PB19/GPTMR3.CAPT1/UART4.CTS/I2C2.SDA/SPI2.CS3/CAN0.STBY/FEMC.CLK0/PPIO.CLK/XPIO.CB_D3/PWM2.P3/TRGM.P12/QE10.F/SEI1.CK/SYSCTL.CLK_OBS3/ETH0.EVTO3  |
| PB20       | 156 | PB20/UART0.CTS/SPI3.SCLK/CAN0.RXD/FEMC.DQ5/PPIO.CTR1/PWM2.P4/TRGM.P11/QE10.H0/SEI0.CK   |
| PB21       | 155 | PB21/GPTMR3.COMP2/UART0.DE/UART0.RTS/SPI3.CS0/LIN2.TREN/CAN0.TXD/FEMC.SCLK1/PWM2.P5/TRGM.P10/QE10.Z/QE00.Z/SEI0.DE  |
| PB22       | 154 | PB22/GPTMR1.CAPT0/UART0.RXD/I2C3.SDA/SPI3.MISO/LIN2.TXD/FEMC.SCS1/PPIO.CS3/PWM2.P6/TRGM.P09/QE10.B/QE00.B/SEI0.RX   |
| PB23       | 153 | PB23/GPTMR1.COMP0/UART0.TXD/I2C3.SCL/SPI3.MOSI/LIN2.RXD/PWM2.P7/TRGM.P08/QE10.A/QE00.A/SEI0.TX  |
| PB24       | 152 | PB24/GPTMR1.COMP1/UART6.TXD/I2C0.SCL/SPI2.CS2/CAN3.TXD/PWM3.P0/TRGM.P07/RDC0.PWM_N/QE00.A/SEI1.TX   |
| PB25       | 151 | PB25/GPTMR1.CAPT1/UART6.RXD/I2C0.SDA/SPI2.CS1/CAN3.RXD/PPIO.CTR7/PWM3.P1/TRGM.P06/RDC0.PWM_P/QE00.B/SEI1.RX   |
| PB26       | 150 | PB26/GPTMR1.COMP2/UART6.DE/UART6.RTS/SPI2.SCLK/LIN1.RXD/CAN3.STBY/PPIO.CTR6/PWM3.P2/TRGM.P05/QE11.H1/QE00.Z/SEI1.DE   |
| PB27       | 149 | PB27/UART6.CTS/SPI2.CS0/LIN1.TXD/PPIO.CTR5/PWM3.P3/TRGM.P04/QE11.F/SEI1.CK  |
| <hr/>      |     |   |
| PC[0..29]D |     |   |
| PC0        | 147 | PC00/GPTMR1.COMP0/UART0.TXD/LIN0.TXD/CAN2.TXD/PWM0.P0/TRGM.P00/RDC0.PWM_N/QE01.A/SEI1.TX/SDM0.CLK0  |
| PC1        | 146 | PC01/GPTMR1.CAPT0/UART0.RXD/LIN0.RXD/CAN2.RXD/PWM0.P1/TRGM.P01/RDC0.PWM_P/QE01.B/SEI1.RX/SDM0.DAT0  |
| PC2        | 145 | PC02/GPTMR1.COMP1/UART0.DE/UART0.RTS/I2C2.SCL/LIN0.TREN/CAN2.STBY/PWM0.P2/TRGM.P02/QE10.H1/QE01.Z/SEI1.DE/SDM0.CLK1   |
| PC3        | 144 | PC03/GPTMR1.CAPT1/UART0.CTS/I2C2.SDA/SPI1.CS3/CAN0.STBY/FEMC.DM1/PPIO.DM1/PWM0.P3/TRGM.P03/QE10.F/SEI1.CK/SDM0.DAT1   |
| PC4        | 142 | PC04/UART1.CTS/SPI0.SCLK/CAN0.RXD/FEMC.DQ08/PPIO.DQ08/PWM0.P4/TRGM.P04/QE10.H0/SEI0.CK/SDM0.CLK2  |
| PC5        | 141 | PC05/GPTMR1.COMP2/UART1.DE/UART1.RTS/SPI0.CS0/LIN2.TREN/CAN0.TXD/FEMC.DQ09/PPIO.DQ09/PWM0.P5/TRGM.P05/QE10.Z/QE00.Z/SEI0.DE/SDM0.DAT2   |
| PC6        | 140 | PC06/GPTMR0.CAPT0/UART1.RXD/I2C3.SDA/SPI0.MISO/LIN2.TXD/FEMC.DQ10/PPIO.DQ10/PWM0.P6/TRGM.P06/QE10.B/QE00.B/SEI0.RX/SDM0.CLK3  |
| PC7        | 139 | PC07/GPTMR0.COMP0/UART1.TXD/I2C3.SCL/SPI0.MOSI/LIN2.RXD/FEMC.DQ11/PPIO.DQ11/PWM0.P7/TRGM.P07/QE10.A/QE00.A/SEI0.TX/SDM0.DAT3  |
| PC8        | 137 | PC08/GPTMR0.COMP1/UART2.TXD/I2C0.SCL/SPI1.CS2/CAN3.TXD/FEMC.DQ12/PPIO.DQ12/PWM1.P0/TRGM.P08/RDC0.PWM_N/QE00.B/SEI1.TX   |
| PC9        | 136 | PC09/GPTMR0.CAPT1/UART2.RXD/I2C0.SDA/SPI1.CS1/CAN3.RXD/FEMC.DQ13/PPIO.DQ13/PWM1.P1/TRGM.P09/RDC0.PWM_P/QE00.A/SEI1.RX   |
| PC10       | 135 | PC10/GPTMR0.COMP2/UART2.DE/UART2.RTS/SPI1.SCLK/LIN1.RXD/CAN3.STBY/FEMC.DQ14/PPIO.DQ14/PWM1.P2/TRGM.P10/QE11.F/QE00.Z/SEI1.DE  |
| PC11       | 134 | PC11/UART2.CTS/SPI1.CS0/LIN1.TXD/FEMC.DQ15/PPIO.DQ15/PWM1.P3/TRGM.P11/QE11.H1/SEI1.CK   |
| PC12       | 132 | PC12/UART6.CTS/I2C1.SDA/SPI1.MISO/LIN1.TREN/FEMC.DQ00/PPIO.DQ00/PWM1.P4/TRGM.P12/QE11.H0/SEI0.CK  |
| PC13       | 131 | PC13/GPTMR1.COMP3/UART6.DE/UART6.RTS/I2C1.SCL/SPI1.MOSI/LIN3.TREN/CAN1.STBY/I2S0.MCLK/FEMC.DQ01/PPIO.DQ01/PWM1.P5/TRGM.P13/QE11.Z/QE01.Z/SEI0.DE/USB0.ID  |
| PC14       | 130 | PC14/UART6.RXD/SPI1.DAT2/LIN3.RXD/CAN1.RXD/I2S0.BCLK/FEMC.DQ02/PPIO.DQ02/PWM1.P6/TRGM.P14/ETH0.MDC/QE11.B/QE01.B/SEI0.RX/USB0.OC  |
| PC15       | 129 | PC15/GPTMR0.COMP3/UART6.TXD/SPI1.DAT3/LIN3.TXD/CAN1.TXD/I2S0.FCLK/FEMC.DQ03/PPIO.DQ03/PWM1.P7/TRGM.P15/ETH0.MDIO/QE11.A/QE01.A/SEI0.TX/USB0.PWR   |
| PC16       | 126 | PC16/GPTMR3.COMP0/UART4.TXD/LIN0.TXD/CAN2.TXD/DAO.LN/FEMC.DQ04/PPIO.DQ04/PWM2.P0/TRGM.P16/ETH0.CRS/QE10.H1/CPU0.NMI   |
| PC17       | 128 | PC17/GPTMR3.CAPT0/UART4.RXD/LIN0.RXD/CAN2.RXD/DAO.LP/FEMC.DQ05/PPIO.DQ05/PWM2.P1/TRGM.P17/ETH0.COL/QE10.F/CPU1.NMI  |
| PC18       | 127 | PC18/GPTMR3.COMP1/UART4.DE/UART4.RTS/I2C2.SCL/LIN0.TREN/CAN2.STBY/DAO.RN/FEMC.DQ06/PPIO.DQ06/PWM2.P2/TRGM.P18/QE10.H0/SEI0.CK/WDG2.RST  |
| PC19       | 125 | PC19/GPTMR3.CAPT1/UART4.CTS/I2C2.SDA/SPI3.CS3/CAN0.STBY/DAO.RP/FEMC.DQ07/PPIO.DQ07/PWM2.P3/TRGM.P19/QE10.Z/QE00.Z/SEI0.DE/WDG3.RST  |
| PC20       | 124 | PC20/UART5.CTS/SPI2.SCLK/CAN0.RXD/FEMC.DM0/PPIO.DM0/PWM2.P4/TRGM.P20/QE10.B/QE00.B/SEI0.RX  |
| PC21       | 123 | PC21/GPTMR3.COMP2/UART5.DE/UART5.RTS/SPI2.CS0/LIN2.TREN/CAN0.TXD/FEMC.SRDY/PPIO.CTR0/PWM2.P5/TRGM.P21/QE10.A/QE00.A/SEI0.TX   |
| PC22       | 122 | PC22/GPTMR2.CAPT0/UART5.RXD/I2C3.SDA/SPI2.MISO/LIN2.TXD/PWM2.P6/TRGM.P22/CPU0.NMI   |
| PC23       | 120 | PC23/GPTMR2.COMP0/UART5.TXD/I2C3.SCL/SPI2.MOSI/LIN2.RXD/PWM2.P7/TRGM.P23/CPU1.NMI   |
| PC24       | 119 | PC24/GPTMR2.COMP1/UART3.TXD/I2C0.SCL/SPI3.CS2/CAN3.TXD/PDM0.CLK/PWM3.P0/TRGM.P24/ETH0.EVT10   |
| PC25       | 118 | PC25/GPTMR2.CAPT1/UART3.RXD/I2C0.SDA/SPI3.CS1/CAN3.RXD/PDM0.D0/PWM3.P1/TRGM.P25/USB0.ID/ETH0.EVTO0  |
| PC26       | 117 | PC26/GPTMR2.COMP2/UART3.DE/UART3.RTS/SPI3.SCLK/LIN1.RXD/CAN3.STBY/PDM0.D1/PWM3.P2/TRGM.P26/USB0.OC/ETH0.EVT11   |
| PC27       | 116 | PC27/UART3.CTS/SPI3.CS0/LIN1.TXD/PDM0.D2/PWM3.P3/TRGM.P27/USB0.PWR/ETH0.EVT01   |
| PC28       | 113 | PC28/UART7.CTS/I2C1.SDA/SPI3.MISO/LIN1.TREN/PDM0.D3/PWM3.P4/TRGM.P28/ETH0.EVTO2   |
| PC29       | 112 | PC29/GPTMR3.COMP3/UART7.DE/UART7.RTS/I2C1.SCL/SPI3.MOSI/LIN3.TREN/CAN1.STBY/PDM0.CLK/PWM3.P5/TRGM.P29/ETH0.EVTO3  |

**MCU\_PB&PC**

Sheet File: MCU\_PB&PC  
 Title: HPM6P00ADCEVKRevB  
 Size: A3      Date: 2024-10-13      Rev: RevB  
 KiCad E.D.A. 8.0.9      Id: 5/15



- 80 VIO\_B02
- 70 VIO\_B02
- 97 VIO\_B02
- 74 VIO\_B02

|             |     |  |
|-------------|-----|--|
| PD[2..17]D  | 106 | PD00/GPTMR1.COMP0/UART7.TXD/SPI2.SCLK/LIN0.TXD/CAN2.TXD/PWM3.P0/TRGM.P00/ETH0.RXCK/QEI1.H1/SDM0.CLK0/ADC0.IN00/ADC1.IN00/CMP0.INN1/CMP1.INN1/CMP2.INN1/CMP3.INN1                                       |
|             | 105 | PD01/GPTMR1.CAPT0/UART7.RXD/SPI2.MISO/LIN0.RXD/CAN2.RXD/I2S0.MCLK/PWM3.P1/TRGM.P01/ETH0.RXDV/QEI1.F/SDM0.DAT0/ADC0.IN01/ADC1.IN01/CMP0.INP1/CMP1.INP1/CMP2.INP1/CMP3.INP1                              |
|             | 104 | PD02/GPTMR1.COMP1/UART7.DE/UART7.RTS/I2C2.SCL/SPI2.MOSI/LIN0.TREN/CAN2.STBY/I2S0.BCLK/PWM3.P2/TRGM.P02/ETH0.RXER/QEI1.H0/SEIO.CK/SDM0.CLK1/ADC0.IN02/ADC1.IN02/CMP0.INN2/CMP1.INN2/CMP2.INN2/CMP3.INN2 |
|             | 103 | PD03/GPTMR1.CAPT1/UART7.CTS/I2C2.SDA/SPI2.DAT2/CAN0.STBY/I2S0.FCLK/PWM3.P3/TRGM.P03/ETH0.RXD0/QEI1.Z/QEI01.Z/SEIO.DE/SDM0.DAT1/ADC0.IN03/ADC1.IN03/CMP0.INP2/CMP1.INP2/CMP2.INP2/CMP3.INP2             |
|             | 101 | PD04/UART1.CTS/SPI2.DAT3/CAN0.RXD/I2S0.RXD0/PWM3.P4/TRGM.P04/ETH0.RXD1/QEI1.A/QEI01.B/SEIO.RX/SDM0.CLK2/ADC0.IN04/ADC1.IN04/CMP0.INN3/CMP1.INN3/CMP2.INN3/CMP3.INN3                                    |
|             | 100 | PD05/GPTMR1.COMP2/UART1.DE/UART1.RTS/SPI2.CS0/LIN2.TREN/CAN0.TXD/I2S0.RXD1/PWM3.P5/TRGM.P05/ETH0.RXD2/QEI1.B/QEI01.A/SEIO.TX/SDM0.DAT2/ADC0.IN05/ADC1.IN05/CMP0.INP3/CMP1.INP3/CMP2.INP3/CMP3.INP3     |
|             | 99  | PD06/GPTMR0.CAPT0/UART1.RXD/I2C3.SDA/SPI2.CS2/LIN2.TXD/I2S0.RXD2/PWM3.P6/TRGM.P06/ETH0.RXD3/SDM0.CLK3/ADC0.IN06/ADC1.IN06/CMP0.INN4/CMP1.INN4/CMP2.INN4/CMP3.INN4                                      |
|             | 98  | PD07/GPTMR0.COMP0/UART1.TXD/I2C3.SCL/SPI2.CS1/LIN2.RXD/I2S0.RXD3/PWM3.P7/TRGM.P07/ETH0.TXER/SDM0.DAT3/ADC0.IN07/ADC1.IN07/DAC0.OUT/CMP0.INP4/CMP1.INP4/CMP2.INP4/CMP3.INP4                             |
|             | 96  | PD08/GPTMR0.COMP1/UART2.TXD/I2C0.SCL/SPI2.CS3/CAN3.TXD/PWM1.P0/TRGM.P08/ADC0.IN08/ADC1.IN08/CMP0.INN5/CMP1.INN5/CMP2.INN5/CMP3.INN5  |
|             | 95  | PD09/GPTMR0.CAPT1/UART2.RXD/I2C0.SDA/CAN3.RXD/PWM1.P1/TRGM.P09/ADC0.IN09/ADC1.IN09/CMP0.INP5/CMP1.INP5/CMP2.INP5/CMP3.INP5   |
|             | 94  | PD10/GPTMR0.COMP2/UART2.DE/UART2.RTS/SPI0.SCLK/LIN1.RXD/CAN3.STBY/PWM1.P2/TRGM.P10/ETH0.EVTI0/ADC0.IN10/ADC1.IN10/CMP0.INN6/CMP1.INN6/CMP2.INN6/CMP3.INN6  |
|             | 93  | PD11/UART2.CTS/SPI0.CS0/LIN1.TXD/PWM1.P3/TRGM.P11/ETH0.EVT00/ADC0.IN11/ADC1.IN11/CMP0.INP6/CMP1.INP6/CMP2.INP6/CMP3.INP6   |
|             | 92  | PD12/UART3.CTS/I2C1.SDA/SPI0.MISO/LIN1.TREN/PWM1.P4/TRGM.P12/ETH0.EVTI1/ADC0.IN12/ADC1.IN12/CMP1.INN7/CMP3.INN7  |
|             | 91  | PD13/GPTMR1.COMP3/UART3.DE/UART3.RTS/I2C1.SCL/SPI0.MOSI/LIN3.TREN/CAN1.STBY/PWM1.P5/TRGM.P13/ETH0.EVT01/ADC0.IN13/ADC1.IN13/CMP0.INN7/CMP2.INN7  |
|             | 90  | PD14/UART3.RXD/LIN3.RXD/CAN1.RXD/PWM1.P6/TRGM.P14/ETH0.EVT02/ADC0.IN14/ADC1.IN14/CMP1.INP7/CMP3.INP7   |
|             | 89  | PD15/GPTMR0.COMP3/UART3.TXD/LIN3.TXD/CAN1.TXD/PWM1.P7/TRGM.P15/ETH0.EVT03/ADC0.IN15/ADC1.IN15/CMP0.INP7/CMP2.INP7  |
|             | 88  | PD16/GPTMR3.COMP0/UART4.TXD/SPI3.SCLK/LIN0.TXD/CAN2.TXD/PWM2.P0/TRGM.P16/ETH0.TXCK/QEI1.H1/ADC2.IN00/ADC3.IN00/CMP4.INN1/CMP5.INN1/CMP6.INN1/CMP7.INN1   |
|             | 87  | PD17/GPTMR3.CAPT0/UART4.RXD/SPI3.MISO/LIN0.RXD/CAN2.RXD/PWM2.P1/TRGM.P17/ETH0.TXEN/QEI0.F/ADC2.IN01/ADC3.IN01/DAC1.OUT/CMP4.INP1/CMP5.INP1/CMP6.INP1/CMP7.INP1   |
|             | 86  | PD18/GPTMR3.COMP1/UART4.DE/UART4.RTS/I2C2.SCL/SPI3.MOSI/LIN0.TREN/CAN2.STBY/I2S0.TXD0/PWM2.P2/TRGM.P18/ETH0.TXD0/QEI0.H0/SEIO.CK/ADC2.IN02/ADC3.IN02/CMP4.INN2/CMP5.INN2/CMP6.INN2/CMP7.INN2           |
|             | 85  | PD19/GPTMR3.CAPT1/UART4.CTS/I2C2.SDA/SPI3.DAT2/CAN0.STBY/I2S0.TXD1/PWM2.P3/TRGM.P19/ETH0.TXD1/QEI0.Z/QEI00.Z/SEIO.DE/ADC2.IN03/ADC3.IN03/CMP4.INP2/CMP5.INP2/CMP6.INP2/CMP7.INP2                       |
|             | 84  | PD20/UART5.CTS/SPI3.DAT3/CAN0.RXD/I2S0.TXD2/PWM2.P4/TRGM.P20/ETH0.TXD2/QEI0.B/QEI00.B/SEIO.RX/ADC2.IN04/ADC3.IN04/CMP4.INN3/CMP5.INN3/CMP6.INN3/CMP7.INN3  |
|             | 83  | PD21/GPTMR3.COMP2/UART5.DE/UART5.RTS/SPI3.CS0/LIN2.TREN/CAN0.TXD/I2S0.TXD3/PWM2.P5/TRGM.P21/ETH0.TXD3/QEI0.A/QEI00.A/SEIO.TX/ADC2.IN05/ADC3.IN05/CMP4.INP3/CMP5.INP3/CMP6.INP3/CMP7.INP3               |
|             | 82  | PD22/GPTMR2.CAPT0/UART5.RXD/I2C3.SDA/SPI3.CS2/LIN2.TXD/PDM0.CLK/PWM2.P6/TRGM.P22/QEI1.F/ADC2.IN06/ADC3.IN06/CMP4.INN4/CMP5.INN4/CMP6.INN4/CMP7.INN4  |
|             | 81  | PD23/GPTMR2.COMP0/UART5.TXD/I2C3.SCL/SPI3.CS1/LIN2.RXD/PDM0.D0/PWM2.P7/TRGM.P23/QEI1.H1/USB0.ID/ADC2.IN07/ADC3.IN07/CMP4.INP4/CMP5.INP4/CMP6.INP4/CMP7.INP4  |
|             | 78  | PD24/GPTMR2.COMP1/UART6.TXD/I2C0.SCL/SPI3.CS3/CAN3.TXD/PDM0.D1/PWM0.P0/TRGM.P24/QEI1.H0/SEIO.CK/USB0.OC/ADC2.IN08/ADC3.IN08/CMP4.INN5/CMP5.INN5/CMP6.INN5/CMP7.INN5                                    |
|             | 77  | PD25/GPTMR2.CAPT1/UART6.RXD/I2C0.SDA/CAN3.RXD/PDM0.D2/PWM0.P1/TRGM.P25/QEI1.Z/QEI01.Z/SEIO.DE/USB0.PWR/ADC2.IN09/ADC3.IN09/CMP4.INP5/CMP5.INP5/CMP6.INP5/CMP7.INP5                                     |
|             | 76  | PD26/GPTMR2.COMP2/UART6.DE/UART6.RTS/SPI1.SCLK/LIN1.RXD/CAN3.STBY/PDM0.D3/PWM0.P2/TRGM.P26/QEI1.B/QEI01.B/SEIO.RX/ADC2.IN10/ADC3.IN10/CMP4.INN6/CMP5.INN6/CMP6.INN6/CMP7.INN6                          |
|             | 75  | PD27/UART6.CTS/SPI1.CS0/LIN1.TXD/PDM0.CLK/PWM0.P3/TRGM.P27/QEI1.A/QEI01.A/SEIO.TX/ADC2.IN11/ADC3.IN11/CMP4.INP6/CMP5.INP6/CMP6.INP6/CMP7.INP6  |
|             | 73  | PD28/UART0.CTS/I2C1.SDA/SPI1.MISO/LIN1.TREN/PWM0.P4/TRGM.P28/ADC2.IN12/ADC3.IN12/CMP5.INN7/CMP7.INN7   |
|             | 72  | PD29/GPTMR3.COMP3/UART0.DE/UART0.RTS/I2C1.SCL/SPI1.MOSI/LIN3.TREN/CAN1.STBY/PWM0.P5/TRGM.P29/ADC2.IN13/ADC3.IN13/CMP4.INN7/CMP6.INN7   |
|             | 69  | PD30/UART0.RXD/LIN3.RXD/CAN1.RXD/PWM0.P6/TRGM.P30/ADC2.IN14/ADC3.IN14/CMP5.INP7/CMP7.INP7  |
|             | 68  | PD31/GPTMR2.COMP3/UART0.TXD/LIN3.TXD/CAN1.TXD/PWM0.P7/TRGM.P31/ADC2.IN15/ADC3.IN15/CMP4.INP7/CMP6.INP7   |
| PD[20..31]D | 86  | ADCIN_PD   |
|             | 85  | ADCIN_ND   |
|             | 84  | PD20   |
|             | 83  | PD21   |
|             | 82  | PD22   |
|             | 81  | PD23   |
|             | 78  | PD24   |
|             | 77  | PD25   |
|             | 76  | PD26   |
|             | 75  | PD27   |
|             | 73  | PD28   |
|             | 72  | PD29   |
|             | 69  | PD30   |
|             | 68  | PD31   |

# MCU\_PD



Sheet File: MCU\_PD

Title: HPM6P00ADCEVKRevB

Size: A4

Date: 2024-10-13

Rev: RevB

KiCad E.D.A. 8.0.9

Id: 6/15



# MCU\_PY



Sheet File: MCU\_PY

Title: HPM6P00ADCEVKRevB

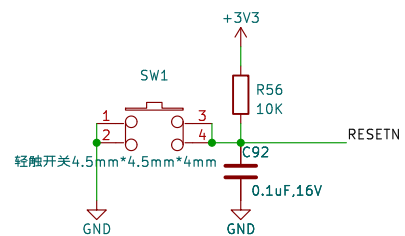
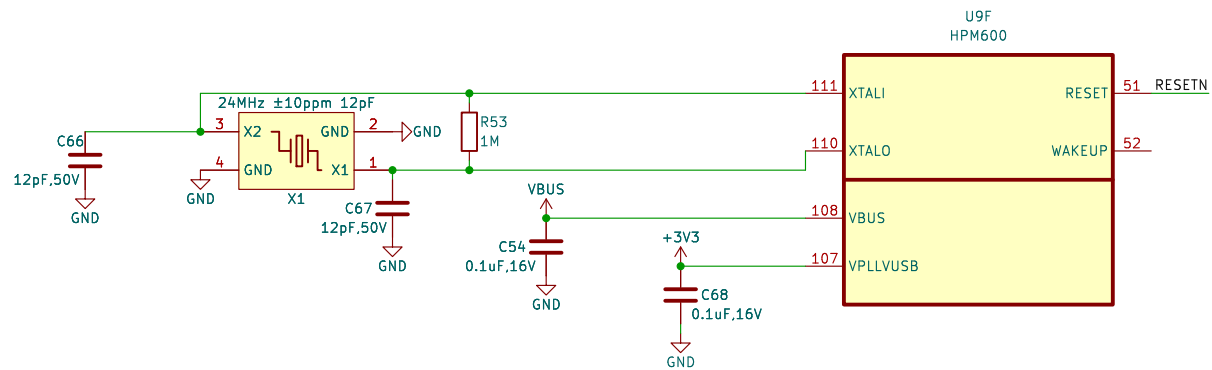
Size: A4

Date: 2024-10-13

Rev: RevB

KiCad E.D.A. 8.0.9

Id: 9/15



# MCU\_USB&OSC



Sheet File: MCU\_USB&OSC

Title: HPM6P00ADCEVKRevB

Size: A4

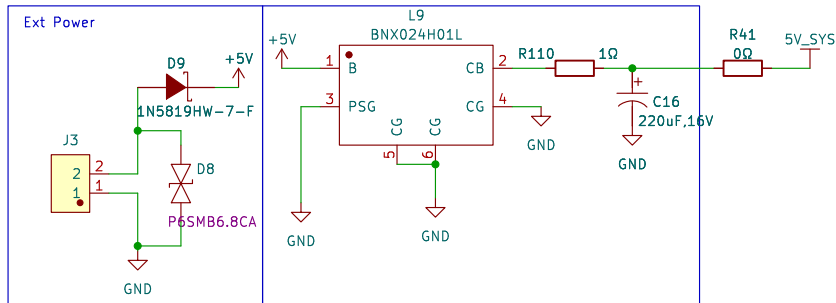
Date: 2024-10-13

Rev: RevB

KiCad E.D.A. 8.0.9

Id: 10/15

### INPUT Filter



### DCDC 5V-3.3V

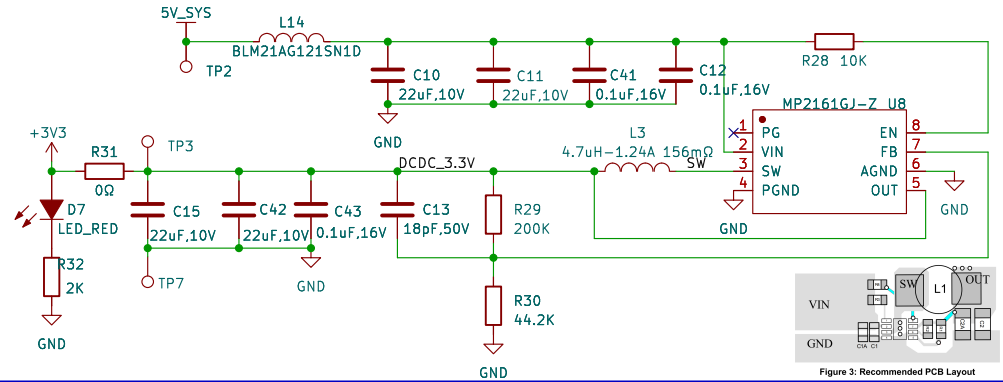
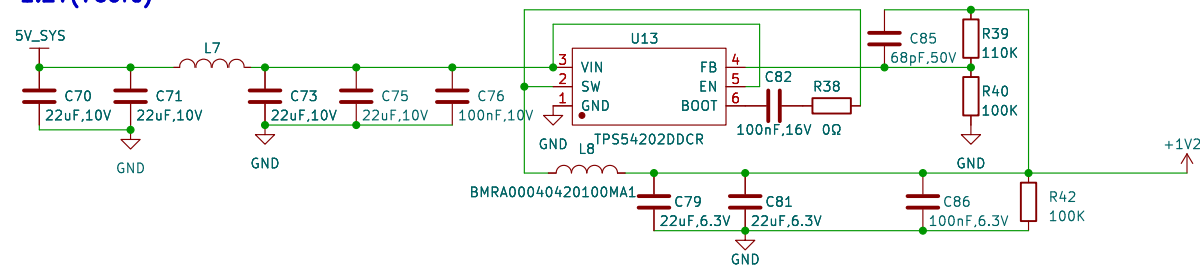
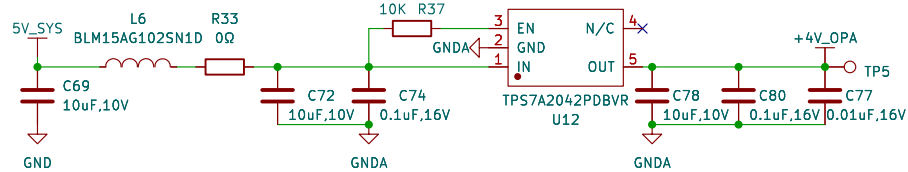


Figure 3: Recommended PCB Layout

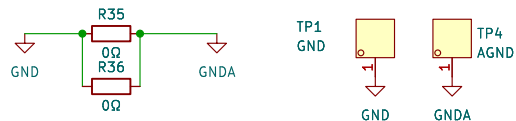
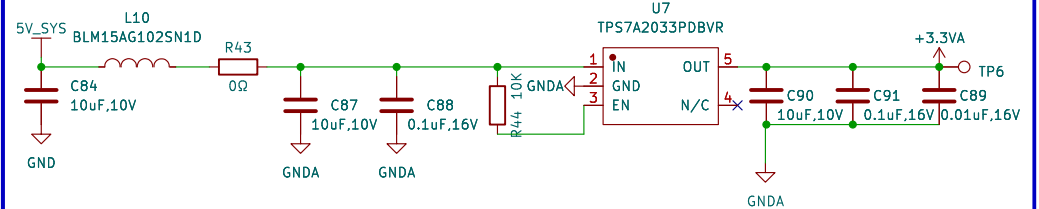
### DCDC 5V-1.2V(VCore)



### OPA VDD



### LDO 5V-3.3V(ADC)



## Power



Sheet File: Power

Title: HPM6P00ADCEVKRevB

Size: A4

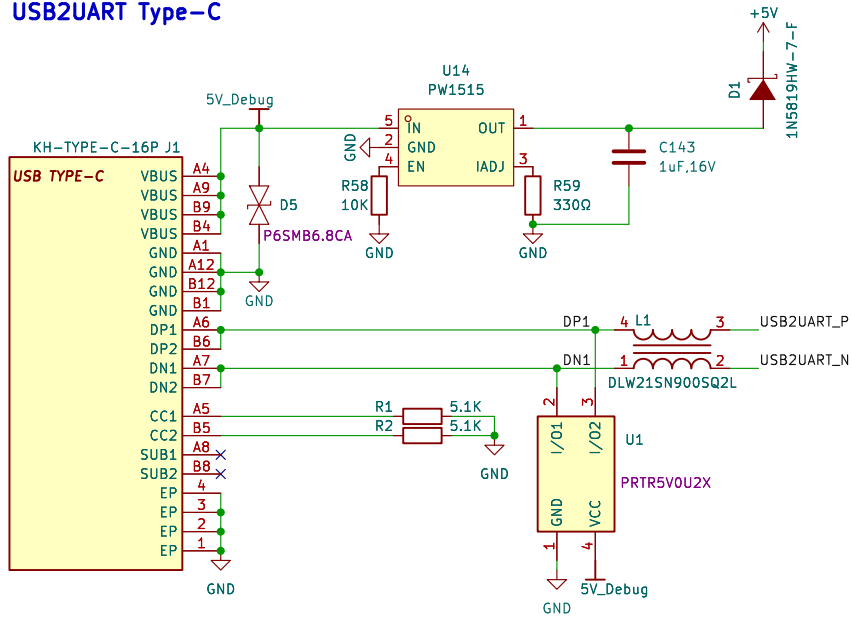
Date: 2024-10-13

Rev: RevB

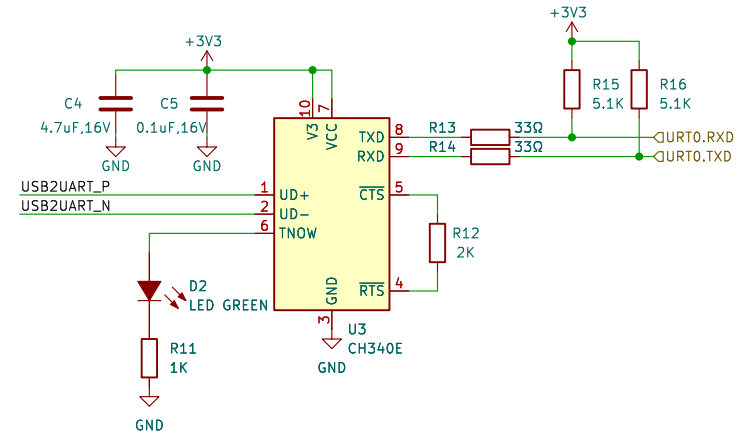
KiCad E.D.A. 8.0.9

Id: 11/15

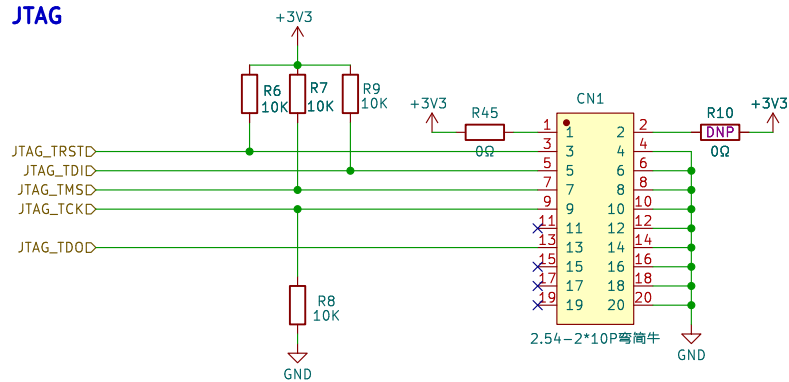
### USB2UART Type-C



### USB2UART



### JTAG



## Debug



Sheet File: DEBUG

Title: HPM6P00ADCEVKRevB

Size: A4

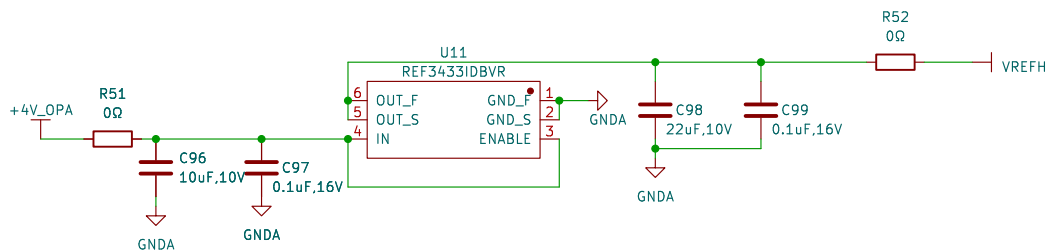
Date: 2024-10-13

Rev: RevB

KiCad E.D.A. 8.0.9

Id: 12/15





# VREF



Sheet File: VREF

Title: HPM6P00ADCEVKRevB

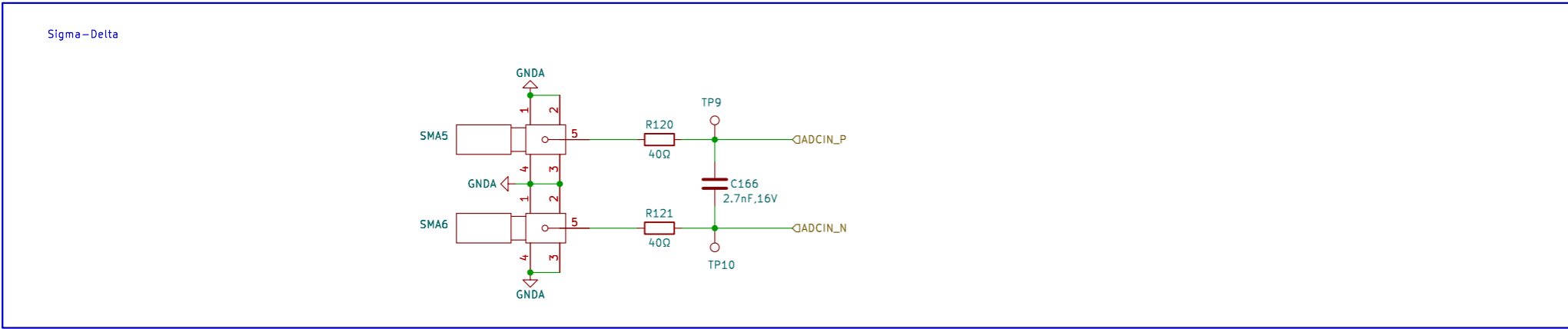
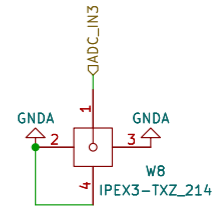
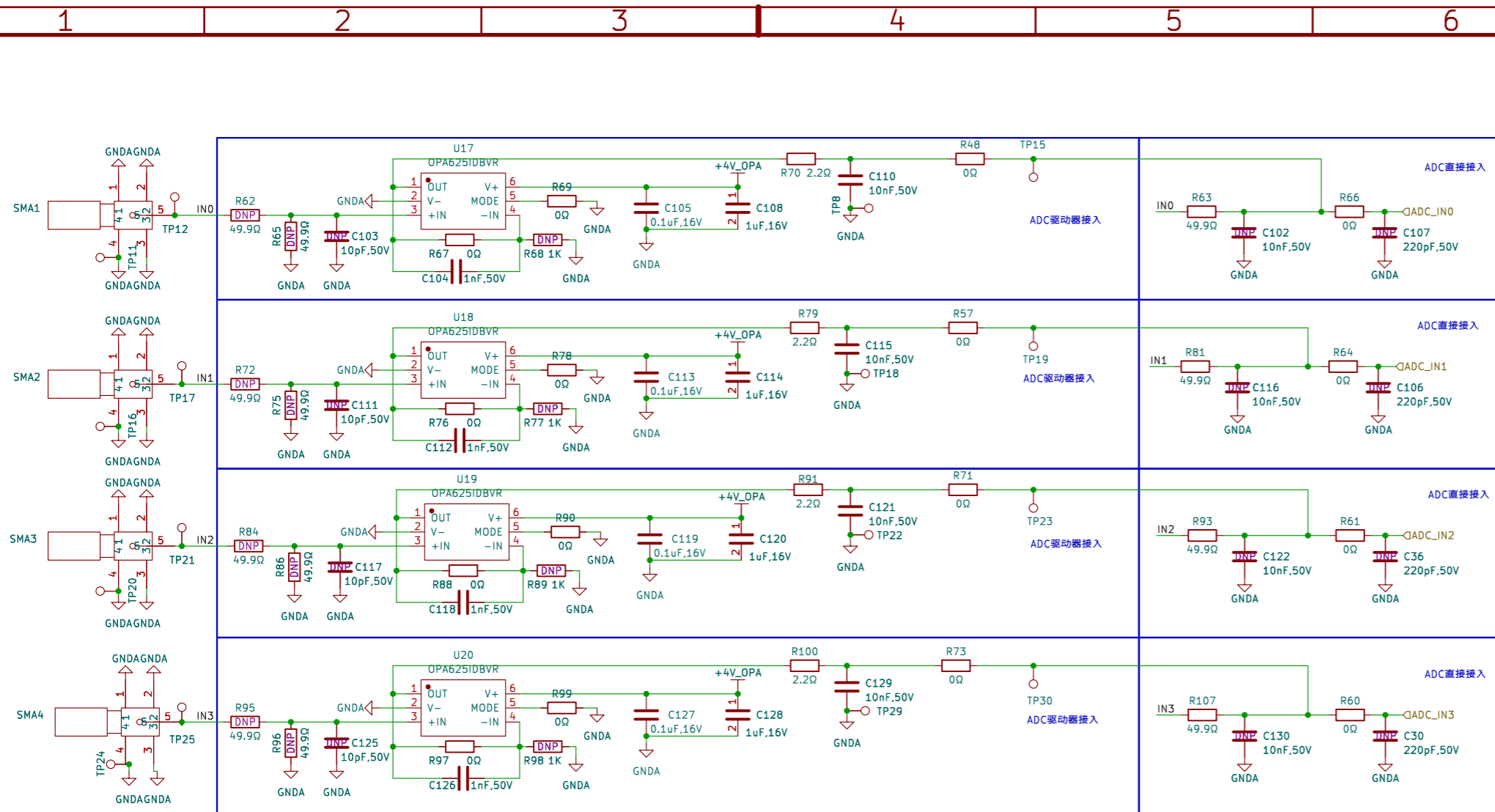
Size: A4


Date: 2024-10-13

Rev: RevB

KiCad E.D.A. 8.0.9

Id: 14/15



|                           |                  |   |  |
|---------------------------|------------------|---|--|
| <b>ADC</b>                |                  |  |  |
| Sheet File: ADC_Signal_IN |                  |   |  |
| Title: HPM6P00ADCEVKRevB  |                  |   |  |
| Size: A3                  | Date: 2024-10-13 | Rev: RevB   |  |
| KiCad E.D.A. 8.0.9        |                  | Id: 15/15   |  |

1

2

3

4

5

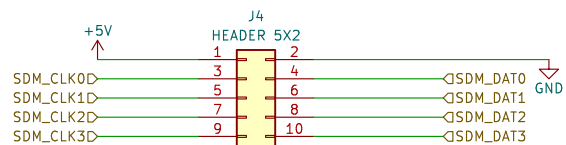
6

A

B

C

D



|                          |                  |           |
|--------------------------|------------------|-----------|
| Sheet File: SDM          |                  |           |
| Title: HPM6P00ADCEVKRevB |                  |           |
| Size: A4                 | Date: 2024-10-13 | Rev: RevB |
| KiCad E.D.A. 8.0.9       | Id: 16/15        |           |

1

2

3

4

5

6

A

B

C

D



# Assembly



Sheet File: Assembly

Title: HPM6P00ADCEVKRevB

Size: A4

Date: 2024-10-13

Rev: RevB

KiCad E.D.A. 8.0.9

Id: 17/15

A4