USB-C 2.0 Data & Power connector **MYRA SIP SENSOR ISLAND** J1 USB-C_GCT_USB4105-GF-A VBUS can be 5V only due to ESD diode V_RWM U1 Myra-231F1F08 +3V3 SHT45's I2C device address: 0x44 12C1_SDA H17 PWR_FLAG VBUS I2C1_SCL +BATT ← +3V3 **←** ± C26 TP15 O T FTDI_RESET SPI_CS2 1 0 TP17 SPI_CS3 1 0 TP16 SPI2_MISO 1 0 TP20 SPI2_MOSI 1 0 TP18 SPI2_SCK 1 0 TP19 SPI_CS2 CLK_EN SHT45 SPI_CS3 H1 90 Ohm diff Sensirion GND TP14 O 1 USB_MCU_P Q12 USB_MCU_P TP13 O 1 USB_MCU_N Q11 USB_MCU_N I2C 1 SCL SPI2_MISO L1 SPI2_MOSI J1 90 Ohm diff SHT45-AD1B-R2 USB_D_P USB_D_N A13 USB_D_P A12 USB_D_N LD2 Q14 GPIO_PC10 N17 GPIO_PC10 1 O TP10 O GPIO_PC12 1 O TP9 G GPIO_PC11 P17 GPIO_PC11 1 O TP8 GND TP11 O 1 CBUS1 TP12 O 1 CBUS2 A16 CBUS1 CBUS2 +3V3 D1 D2 ESD9X5.0ST5G ESD9X5.0ST5G SWCLK-JTCK C17 SWDIO-JTMS B17 SWDIO-JTMS D5 +3V3 TPD2E009_SOT-9X3 $\mathsf{GND}\ \ensuremath{\buildrel \buildrel \bui$ C27 GNDREF GND GND GND ↓ GND VBUS GND GND C2 100n BME280 LD1 Green USB_CC2 USB_CC1 R36 100k R3 5k1 R4 5k1 R12 470R ESD9X5.0ST5G SDO ===== High GND Low | I2C addr. GNDREF GND GND R2 Pull-down to disable 8MHz generator Leave floating to enable Island Qwiic connector Misc **Test Points** Mainland Qwiic connector 12C_1_SCL 12C_1_SDA I2C_1_SCL SM04B-SRSS-TB(LF)(SN) I2C_1_SDA_ NRST TP1 0 1 TP3 01 SWDIO-JTMS TP4 O1 SWCLK-JTCK C25 D9 ESD9X5.0ST5G 102 GND D6 TP5 $0^{1} \rightarrow +3V3$ Green ESD9X5.0ST5G $\begin{array}{cccc} \text{TP6} & 0 & \stackrel{1}{\longrightarrow} & \text{GND} \\ \text{TP21} & 0 & \stackrel{1}{\longrightarrow} & \text{GND} \end{array}$ TPD2E009_S0T-9X3 TPD2E009_SOT−9X3 🕹 BAT-HLD-012-SMT-TR GND Mechanical www.antmicro.com Antmicro Sheet: / Logo N2 oshw_logo File: environment-sensor-sip-baseboard.kicad_sch Title: MYRA SiP Baseboard MP1 MP_Pad5.4mm_Drill2.7mm MP2 MP_Pad5.4mm_Drill2.7mm MP3 MP_Pad5.4mm_Drill2.7mm Logo N1 antmicro_logo Size: A3 Date: 2024-06-28 KiCad E.D.A. kicad-cli 7.0.11 Rev: 1.0.0:b40d8