| X0A | | Pin | Pad type | ADC | Optical flow | Mikrobus adapter | GPS | Optical flow + GPS | Camera head | Display | Microphone | Opamp | Motor control | Dual motor control | Speaker driver | SDIO shield | Trace DBG |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | PGND | | | | | | | | | | | | | | | |
| 3 | | 5V | | | | | | | | | | | | | | | |
| 5 | | 5V | | | | | | | | | | | | | | | |
| 7 | | 5V | | | | | | | | | | | | | | | |
| 9 | | PGND | | | | | | | | | | | | | | | |
| 11 | | PGND | | | | | | | | | | | | | | | |
| 13 | | VDD_BAT | | | | | | | | | | | | | | | |
| 15 | | 3V3 | | | | | | | | | | | | | | | |
| 17 | T17 | 3V3 | | | | | | | | | | | | | | | |
| 19 | | PGND | | | | | | | | | | | | | | | |
| 21 | | PGND | | | | | | | | | | | | | | | |
| 23 | P4_0 | FC2_P0 | slow | | | | | FC2_P0 | | | | | | | | | |
| 25 | P4_1 | FC2_P1 | slow | | | | | FC2_P1 | | | | | | | | | |
| 27 | | GND | | | | | | | | | | | | | | | |
| 29 | P4_2 | FC2_P2 | slow | ADC0_A4/ADC1_A4 | | | | FC2_P2 | | | | | CMP1_IN4N | CMP1_IN4N | DAC0_OUT | | |
| 31 | P4_3 | FC2_P3 | slow | ADC0_B4/ADC1_B4 | | | | FC2_P3 | | | | | CMP1_IN5N | CMP1_IN5N | DAC1_OUT | | |
| 33 | | GND | | | | | | | | | | | | | | | |
| 35 | P4_23 | FC2_P6 | slow | ADC0_A2/ADC0_B2/ADC1_B3 | | | | FC2_P6 | | | | OPAMP2_OUT | | CMP2_IN4P | | | |
| 37 | P4_20 | FC2_P4 | slow | ADC1_A6 | | | | FC2_P4 | | FLEXIO0_D28 | | OPAMP2_INP0 | | | | | |
| 39 | | GND | | | | | | | | | | | | | | | |
| 41 | ANA_22 | OPAMP2_INN | | | | | | | | | | OPAMP2_INN | | | | | |
| 43 | ANA_6 | DAC2_OUT | | ADC0_A3/ADC1_A3 | | | | | | | | | | | DAC2_OUT | | |
| 45 | | GND | | | | | | | | | | | | | | | |
| 47 | P0_23 | FLEXIO0_D7 | med | ADC0_A15 | | | | | | FLEXIO0_D7 | | | | CMP2_IN2 | | | |
| 49 | | GND | | | | | | | | | | | | | | | |

| X0B | | Pin | Pad type | ADC | Optical flow | Mikrobus adapter | GPS | Optical flow + GPS | Camera head | Display | Microphone | Opamp | Motor control | Dual motor control | Speaker driver | SDIO shield | Trace DBG |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | | PGND | | | | | | | | | | | | | | | |
| 4 | | 5V | | | | | | | | | | | | | | | |
| 6 | | 5V | | | | | | | | | | | | | | | |
| 8 | | 5V | | | | | | | | | | | | | | | |
| 10 | | PGND | | | | | | | | | | | | | | | |
| 12 | | PGND | | | | | | | | | | | | | | | |
| 14 | | 3V3 | | | | | | | | | | | | | | | |
| 16 | | 3V3 | | | | | | | | | | | | | | | |
| 18 | | PGND | | | | | | | | | | | | | | | |
| 20 | | PGND | | | | | | | | | | | | | | | |
| 22 | | 1V8 | | | | | | | | | | | | | | | |
| 24 | | PGND | | | | | | | | | | | | | | | |
| 26 | P1_8 | FC4_P0 | med | ADC1_A8 | I3C1_SDA | ADC1_A8 | | I3C1_SDA | I3C1_SDA | | | | | | | | |
| 28 | P1_9 | FC4_P1 | med | ADC1_A9 | I3C1_SCL | ADC1_A9 | | I3C1_SCL | I3C1_SCL | | | | | | | | |
| 30 | | GND | | | | | | | | | | | | | | | |
| 32 | P3_1 | FC6_P0 | fast | | SPI_SDO | SPI_SDO | | SPI_SDO | SmartDMA_PIO1 | | | | | PWM0_B0 | | | |
| 34 | P3_6 | FC6_P1 | fast | | SPI_SCK | SPI_SCK | | SPI_SCK | SmartDMA_PIO6 | | | | | PWM0_A1 | | | |
| 36 | | GND | | | | | | | | | | | | | | | |
| 38 | P3_10 | FC6_P2 | fast | | SPI_SDI | SPI_SDI | | SPI_SDI | SmartDMA_PIO10 | FLEXIO0_D18 | | | | PWM0_A3 | | | |
| 40 | P3_11 | FC6_P3 | fast | | SPI_CS0 | SPI_CS0 | | SPI_CS0 | SmartDMA_PIO11 | FLEXIO0_D19 | | | | PWM0_B3 | | | |
| 42 | P3_18 | FC6_P6 | fast | | SPI_HREQ | SPI_HREQ | | SPI_HREQ | SmartDMA_PIO18 | | | | | | | | |
| 44 | | GND | | | | | | | | | | | | | | | |
| 46 | 2_10 | TRACE_DATA2 | fast | | | | | | | | | | | | | | TRACE_DATA2 |
| 48 | 2_11 | TRACE_DATA3 | fast | | | | | | | | | | | | | | TRACE_DATA3 |
| 50 | | GND | | | | | | | | | | | | | | | |

| X1A | | Pin | Pad type | ADC | Optical flow | Mikrobus adapter | GPS | Optical flow + GPS | Camera head | Display | Microphone | Opamp | Motor control | Dual motor control | Speaker driver | SDIO shield | Trace DBG |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | GND | | | | | | | | | | | | | | | |
| 3 | P2_5 | uSDHC0_CMD | fast | | FC9_P2 | SPI_SDI | | FC9_P2 | SmartDMA_PIO25 | FLEXIO0_D13 | | | PWM1_B1 | PWM1_B1 | SAI0_TXD1 | uSDHC0_CMD | |
| 5 | P2_4 | uSDHC0_CLK | fast | | FC9_P0 | SPI_SDO | | FC9_P0 | SmartDMA_PIO24 | FLEXIO0_D12 | | | PWM1_A1 | PWM1_A1 | SAI0_RXD1 | uSDHC0_CLK | |
| 7 | | GND | | | | | | | | | | | | | | | |
| 9 | P2_3 | uSDHC0_D0 | fast | | FC9_P1 | SPI_SCK | | FC9_P1 | SmartDMA_PIO23 | FLEXIO0_D11 | | | PWM1_B2 | PWM1_B2 | SAI0_RXD0 | uSDHC0_D0 | |
| 11 | P2_2 | uSDHC0_D1 | fast | | FC9_P3 | SPI_CS0 | | FC9_P3 | CLKOUT | FLEXIO0_D10 | | | PWM1_A2 | PWM1_A2 | SAI0_TXD0 | uSDHC0_D1 | |
| 13 | | GND | | | | | | | | | | | | | | | |
| 15 | P2_7 | uSDHC0_D2 | fast | | | | | | SmartDMA_PIO27 | FLEXIO0_D15 | | | PWM1_B0 | PWM1_B0 | SAI0_TX_FS | uSDHC0_D2 | |
| 17 | P2_6 | uSDHC0_D3 | fast | | | PWM1_A0 | | | SmartDMA_PIO26 | FLEXIO0_D14 | | | PWM1_A0 | PWM1_A0 | SAI0_TX_BCLK | uSDHC0_D3 | |
| 19 | | GND | | | | | | | | | | | | | | | |
| 21 | P2_1 | uSDHC0_D4 | fast | | | RST2 | | | SmartDMA_PIO21 | FLEXIO0_D9 | | | PWM1_B3 | PWM1_B3 | SAI0_RX_FS | uSDHC0_D4 | TRACE_CLK |
| 23 | P2_0 | uSDHC0_D5 | fast | | FC9_P6 | SPI_HREQ | | FC9_P6 | SmartDMA_PIO20 | FLEXIO0_D8 | | | PWM1_A3 | PWM1_A3 | SAI0_RX_BCLK | uSDHC0_D5 | |
| 25 | | GND | | | | | | | | | | | | | | | |
| 27 | P2_9 | uSDHC0_D6 | fast | | | RST1 | | | SmartDMA_PIO29 | FLEXIO0_D17 | | | | | | uSDHC0_D6 | TRACE_DATA1 |
| 29 | P2_8 | uSDHC0_D7 | fast | | | | | | SmartDMA_PIO28 | FLEXIO0_D16 | | | | | | uSDHC0_D7 | TRACE_DATA0 |
| 31 | | GND | | | | | | | | | | | | | | | |
| 33 | P3_2 | FC7_P0 | fast | | SPI_SDO | I2C_SDA | FC7_P0 | SPI_SDO | I2C_SDA | | | | | | | | |
| 35 | P3_3 | FC7_P1 | fast | | SPI_SCK | I2C_SCL | FC7_P1 | SPI_SCK | I2C_SCL | | | | | | | | |
| 37 | | GND | | | | | | | | | | | | | | | |
| 39 | P3_4 | FC7_P2 | fast | | SPI_SDI | UART_TXD | FC7_P2 | SPI_SDI | UART_TXD | | | | | | | | |
| 41 | P3_5 | FC7_P3 | fast | | SPI_CS0 | UART_RXD | FC7_P3 | SPI_CS0 | UART_RXD | | | | | | | | |
| 43 | | GND | | | | | | | | | | | | | | | |
| 45 | P3_19 | FC7_P6 | fast | | SPI_HREQ | HREQ | FC7_P6 | SPI_HREQ | HREQ | FLEXIO0_D27 | | | | | | | |
| 47 | P3_12 | FC7_P4 | fast | | | | | | SmartDMA_PIO12 | FLEXIO0_D20 | | | | | | | |
| 49 | | GND | | | | | | | | | | | | | | | |

| X1B | | Pin | Pad type | ADC | Optical flow | Mikrobus adapter | GPS | Optical flow + GPS | Camera head | Display | Microphone | Opamp | Motor control | Dual motor control | Speaker driver | SDIO shield | Trace DBG |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | | GND | | | | | | | | | | | | | | | |
| 4 | P3_0 | SmartDMA_PIO0 | fast | | | PWM0_A0 | | | SmartDMA_PIO0 | | | | | PWM0_A0 | | | |
| 6 | P3_7 | SmartDMA_PIO7 | fast | | | | | | SmartDMA_PIO7 | | | | | PWM0_B1 | | | |
| 8 | | GND | | | | | | | | | | | | | | | |
| 10 | P3_8 | SmartDMA_PIO8 | fast | | | | | | SmartDMA_PIO8 | | | | | PWM0_A2 | | | |
| 12 | P3_9 | SmartDMA_PIO9 | fast | | | | | | SmartDMA_PIO9 | | | | | PWM0_B2 | | | |
| 14 | | GND | | | | | | | | | | | | | | | |
| 16 | P1_0 | FC3_P0 | med | ADC0_A16 | | I2C_SDA | | | | I2C_SDA | | | ADC0_A16 | ADC0_A16 | | | |
| 18 | P1_1 | FC3_P1 | med | ADC0_A17 | | I2C_SCL | | | | I2C_SCL | | | CMP1_IN0 | CMP1_IN0 | | | |
| 20 | | GND | | | | | | | | | | | | | | | |
| 22 | P1_2 | FC3_P2 | med | ADC0_A18 | | UART_TXD | | | | | | | | CMP2_IN0 | | | |
| 24 | P1_3 | FC3_P3 | med | ADC0_A19 | | UART_RXD | | | | | | | ADC0_A19 | ADC0_A19 | | | |
| 26 | | GND | | | | | | | | | | | | | | | |
| 28 | P1_18 | FC3_P6 | med | ADC1_A18 | | HREQ | | | SmartDMA_PIO14 | FLEXIO0_D26 | | | | | | | |
| 30 | | GND | | | | | | | | | | | | | | | |
| 32 | P1_16 | FC3_P4 | med | ADC1_A16 | FC5_P0 | | | | | FLEXIO0_D24 | | | | | | | |
| 34 | P1_17 | FC3_P5 | med | ADC1_A17 | FC5_P1 | | | | | FLEXIO0_D25 | | | | | | | |
| 36 | | GND | | | | | | | | | | | | | | | |
| 38 | P0_16 | FC0_P0 | med | ADC0_A8 | | ADC0_A8 | | | | | PDM0_CLK | | | ADC0_A8 | | | |
| 40 | P0_17 | FC0_P1 | med | ADC0_A9 | | | | | | | PDM0_DATA0 | | | ADC0_A9 | | | |
| 42 | | GND | | | | | | | | | | | | | | | |
| 44 | P0_18 | FC0_P2 | med | ADC0_A10 | | ADC0_A10 | | | | | PDM0_DATA1 | | | ADC0_A10 | | | |
| 46 | P0_7 | FC0_P3 | med | | | | | | | | | | | CMP2_IN1 | | | |
| 48 | P0_22 | FC0_P6 | med | ADC0_A14 | | | | | | FLEXIO0_D6 | | | CMP1_IN2 | CMP1_IN2 | | | |
| 50 | | GND | | | | | | | | | | | | | | | |