| RPI | | | | | |
|---|---|---|---|---|---|
| J8 pin# | Name | RPi rev2.0 Name | ALT0 | ALT1 | ALT2 |
| 1 | 3.3v | 3.3v | | | |
| 2 | 5v | 5v | | | |
| 3 | GPIO02 | SDA1 (I2c) | SDA1 | | |
| 4 | 5v | 5v | | | |
| 5 | GPIO03 | SCL1 (I2c) | SCL1 | | |
| 6 | GND | Ground | | | |
| 7 | GPIO04 | GPIO_GCLK | GPCLK0 | | |
| 8 | GPIO14 | TXD0 | TXD0 | | |
| 9 | GND | Ground | | | |
| 10 | GPIO15 | RXD0 | RXD0 | | |
| 11 | GPIO17 | GPIO_GEN0 | | | |
| 12 | GPIO18 | GPIO_GEN1 | PCM_CLK | | |
| 13 | GPIO27 | GPIO_GEN2 | | | |
| 14 | GND | Ground | | | |
| 15 | GPIO22 | GPIO_GEN3 | | | |
| 16 | GPIO23 | GPIO_GEN4 | | | |
| 17 | 3.3v | 3.3v | | | |
| 18 | GPIO24 | GPIO_GEN5 | | | |
| 19 | GPIO10 | SPI_MOSI | SPI0_MOSI | | |
| 20 | GND | Ground | | | |
| 21 | GPIO09 | SPI_MISO | SPI0_MISO | | |
| 22 | GPIO25 | GPIO_GEN6 | | | |
| 23 | GPIO11 | SPI_CLK | SPI0_SCLK | | |
| 24 | GPIO08 | SPI0_CE0_N | SPI0_CE0_N | | |
| 25 | GND | | | | |
| 26 | GPIO07 | SPI0_CE1_N | SPI0_CE1_N | | |

| Reverse Mapping | | | | |
|---|---|---|---|---|
| SAMD21E | | | RPi | |
| pin# | Name | Function | Pin | Name |
| 1 | PA00 | PWM | GPIO17 | GPIO_GEN0 |
| 2 | PA01 | PWM | GPIO22 | GPIO_GEN3 |
| 3 | PA02 | SS Emul | GPIO07 | SPI0_CE1_N |
| 4 | PA03 | NC | NC | |
| 5 | PA04 | PWM | GPIO18 | GPIO_GEN1 |
| 6 | PA05 | PWM | GPIO23 | GPIO_GEN4 |
| 7 | PA06 | PWM | GPIO27 | GPIO_GEN2 |
| 8 | PA07 | PWM | GPIO24 | GPIO_GEN5 |
| 9 | VDDANA | | | |
| 10 | GND | | | |
| 11 | PA08 | SPI | GPIO10 | SPI_MOSI |
| 12 | PA09 | SPI | GPIO09 | SPI_MISO |
| 13 | PA10 | SPI | GPIO08 | SPI_CLK |
| 14 | PA11 | SPI | GPIO11 | SPI0_CE0_N |
| 15 | PA14 | UART | GPIO14 | TXD0 |

| 16 | PA15 | UART | GPIO15 | RXD0 |
|----|------|------|--------|------|
| 17 | PA16 | I²C | GPIO02 | SDA1 (I2c) |
| 18 | PA17 | I²C | GPIO03 | SCL1 (I2c) |
| 19 | PA18 | NC | NC | |
| 20 | PA19 | NC | NC | |
| 21 | PA22 | GCLK | GPIO04 | GPIO_GCLK |
| 22 | PA23 | PWM | GPIO25 | |
| 23 | PA24 | USB | NC | |
| 24 | PA25 | USB | NC | |
| 25 | PA27 | BUTTON A | NC | |
| 26 | RESETN | BUTTON B | NC | |
| 27 | PA28 | LED | NC | |
| 28 | GND | GND | | |
| 29 | VDDCORE | | | |
| 30 | VDDIN | | | |
| 31 | PA30 | CORTEX DBG | NC | |
| 32 | PA31 | CORTEX DBG | NC | |

| ALT3 | ALT4 | ALT5 | Pull | Source | Name |
|------|------|------|------|--------|------|
|  |  |  |  | Regulator | Vout |
|  |  |  |  | USB | Vbus |
|  |  |  | High | PA16 | SERCOM1 |
|  |  |  |  | USB | Vbus |
|  |  |  | High | PA17 | SERCOM1 |
|  |  |  |  | USB | GND |
|  |  | ARM_TDI | High | PA22 | GCLK |
|  |  | TXD1 | Low | PA14 | SERCOM2 |
|  |  |  |  | USB | GND |
|  |  | RXD1 | Low | PA15 | SERCOM2 |
| RTS0 |  | RTS1 | Low | PA00 | TCC2 |
| SDA/MOSI | PWM0 |  | Low | PA04 | TCC0 |
| SD1_DAT3 | ARM_TMS |  | Low | PA06 | TCC1 |
|  |  |  |  | USB | GND |
| SD1_CLK | ARM_TRST |  | Low | PA01 | TCC2 |
| SD1_CMD | ARM_RTCK |  | Low | PA05 | TCC0 |
|  |  |  |  | Regulator | Vout |
| SD1_DAT0 | ARM_TDO |  | Low | PA07 | TCC1 |
|  |  |  | Low | PA08 | SERCOM0 |
|  |  |  |  | USB |  |
|  |  |  | Low | PA09 | SERCOM0 |
| SD1_DAT1 | ARM_TCK |  | Low | PA23 | TCC0 |
|  |  |  | Low | PA11 | SERCOM0 |
|  |  |  | High | PA10 | SERCOM0 |
|  |  |  |  | USB |  |
|  |  |  | High | PA02 | Emulated |

| |
|---|
| I²C |
| UART |
| SPI |
| GCLK |
| GPIO/PWM |
| NC |

| DonglePi | | |
|---|---|---|
| Port | Purpose | Alt Modes |
| | Power | |
| | Power | |
| PAD[0] | I²C | C |
| | Power | |
| PAD[1] | I²C | C |
| | GND | |
| GCLK_IO[6] | GCLK | H |
| PAD[2] | UART | C |
| | GND | |
| PAD[3] | UART | C |
| WO[0] | PWM | E |
| WO[0] | PWM | E |
| WO[0] | PWM | E |
| | GND | |
| WO[1] | PWM | E |
| WO[1] | PWM | E |
| | Power | |
| WO[1] | PWM | E |
| PAD[0] | SPI | |
| | GND | |
| PAD[1] | SPI | |
| WO[5] | PWM | F |
| PAD[2] | SPI | |
| PAD[3] | SPI | |
| | GND | |
| Emulated | SPI | |