# SparkFun Thing Plus - SAMD51 (DEV-14713)



|                             |         |       |      |        |        |              | 255F04<br>255F04<br>255F04 |        |      |      |      |       |      |         |       |
|-----------------------------|---------|-------|------|--------|--------|--------------|----------------------------|--------|------|------|------|-------|------|---------|-------|
| 3:0/5:                      | SDA     | INT6  | PA22 | D20    | SDA    | SDA          |                            | D4 0   | D4   | D4   | PA06 | AIN6  | INT6 | 0:2     | VREFC |
| 3:1/5:                      | SCL     | INT7  | PA23 | D21    | SCL    | SCL          |                            | D1     | D1   | D1   | PA12 | INT12 | RX   | 2:0/4:1 |       |
|                             | 2:3/4:3 | INT15 | PA15 | D5     | D5     | D5           |                            | D0     | D0   | D0   | PA13 | INT13 | TX   | 2:1/4:0 |       |
|                             | 5:2/3:2 | INT4  | PA20 | D6     | D6     |              | ATSAN<br>1905<br>1905      | MINO   | MISO | D22  | PB11 | INT11 | MISO | 4:3     |       |
| 0:3                         | INT7    | AIN7  | PA07 | D9     | D9     | IIV B        |                            |        | MOSI | D23  | PB12 | INT12 | MOSI | 4:0     |       |
|                             | 1:2/3:2 | INT2  | PA18 | D10    | D10    | 1110         | M NO                       |        | SCK  | D24  | PB13 | INT13 | SCK  | 4:1     |       |
|                             | 1:0/3:1 | INT0  | PA16 | D11    | D11    | D11          | _ !!!!!!!!!!!!             |        | A5   | A5   | PB02 | AIN14 | INT2 | 5:0     |       |
|                             | 1:3/3:3 | INT3  | PA19 | D12    | D12    | <b>□</b> D12 | DESET                      | * (A4) | A4   | A4   | PA05 | AIN5  | INT5 | 0:1     | DAC1  |
| LED                         | 1:1/3:1 | INT1  | PA17 | D13    | D13    | D13          |                            | A3     |      | A3   | PA04 | AIN4  | INT4 | 0:0     | VREFB |
|                             |         |       |      | VUSB   | VUSB   | VUSB         | 84                         | A2     |      | A2   | PB09 | AIN3  | INT9 | 4:1     |       |
| I2C Pullups Jumpers VREG EN |         |       | EN   |        | A1     | A1           | A1                         | PB08   | AIN2 | INT8 | 4:0  |       |      |         |       |
| I hing Plus                 |         |       |      | VRAT I |        | A0           |                            | A0     | PA02 | AIN0 | INT2 | DAC0  |      |         |       |
|                             |         |       |      | Conn   | actorc | Sc. 600      |                            | CNID   |      | CNID |      |       |      |         |       |





| SWDIO   | 1:3  | INT15 | PA31 | SWDIO |
|---------|------|-------|------|-------|
| SWCLK   | 1:2  | INT14 | PA30 | SWCLK |
| 1:1/3:0 | INT1 | PA17  | D13  | LED   |

Connectors

JST- PH (2-pin) Single Cell Lipo

JST-SH (4-pin) Qwiic (I2C) Connector

microB USB Power, Programming **Battery Charging** 

## IGND GND GND NC 3V3 3.3V RESET RESET

Reset Button Must double tap to program

#### Power

Vin:2.5V - 6V

VCC: 3.3V @ 600mA JST: Single Cell LiPo battery Battery Charging via USB Vreg Enable: On by default with

10k resistor

## SAMD51J20A

120MHz ARM Cortex - M4 VCC: 1.71V - 3.63V 6 Sercom Channels 1MB Flash Memory 256kB SRAM

### Hardware

4MB Flash Memory **UF2** Bootloader Feather compatible PWM available on all GPIO Charge LED: Yellow D13 LED: Blue

