

SAMD21 Dev Breakout (DEV-13672)

Arduino Zero compatible

Name	Interrupts	A
Power	Serial	
GND	Serial Com	C/D
Control	Timer	E/F
Arduino	PTC	B
Port	Misc	G/H
DAC	ADC	B

8-bit PWM pins maked with ~

TC - Timer Counter
TCC - Timer Counter - Controller
PTC - Peripheral Touch Controller
NMI - External Non-Maskable Interrupt
Pin can only be A,B,C,D,E,F,G or H at any time
Selecting B disables digital control

LEDs

Power: Red

Charge: Red

D13 (PIN_LED_13): Blue

TX (PIN_LED_TXL): Green

RX (PIN_LED_RXL): Yellow

Programming Header

1. VCC 3.3V
2. SWDIO/TMS
3. GND
4. SWDCLK/TCK
5. GND
6. SWO/TDO
7. Key
8. NC/TDI
9. GNDTCT
10. Nreset

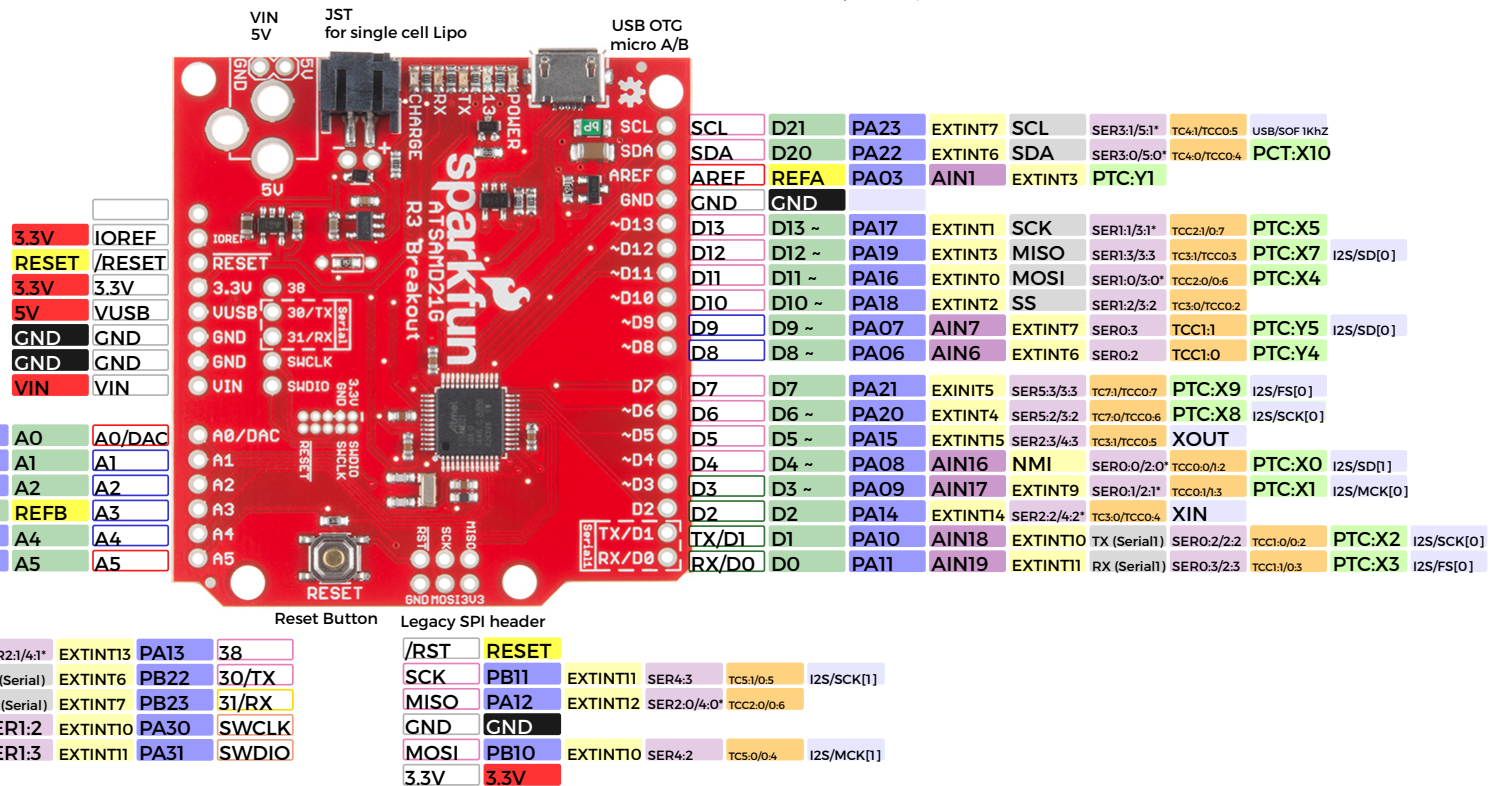


RX LED	PIN_LED_RXL	PB03	AIN11	EXTINT3	SER5:1	TC6:1	PTC:Y9
TX LED	PIN_LED_TXL	PA27	EXTINT15				
D13 LED	D13 ~	PA17	EXTINT1	SCK	SER1:1/3:1*	TCC2:1/0:7	PTC:X5

SJ1
Disconnects R1 from charger circuit
Charge current= 256mA (1000V/R1) where R1=3900



SJ2
remove to disconnect power LED



3.3V	IOREF
RESET	/RESET
3.3V	3.3V
5V	VUSB
GND	GND
GND	GND
VIN	VIN

DAC	PTC:Y0	EXTINT2	AIN0	PA02	A0	A0/DAC
PTC:Y14	TC4:0	SER4:0	EXTINT8	AIN2	PB08	A1
PTC:Y15	TC4:1	SER4:1	EXTINT9	AIN3	PB09	A2
PTC:Y2	TCC0:0	SER0:0	EXTINT4	AIN4	PA04	A3
PTC:Y3	TCC0:1	SER0:1	EXTINT5	AIN5	PA05	A4
PTC:Y8	TC6:0	SER5:0	EXTINT2	AIN10	PB02	A5

TCC2:1/0:7	SER2:1/4:1*	EXTINT13	PA13	38
TC7:0	SER5:2/3:2	TX (Serial)	EXTINT6	PB22
SWCLK	TCC1:0	SER1:2	EXTINT10	PA30
SWDIO	TCC1:1	SER1:3	EXTINT11	PA31

Reset Button

/RST	RESET
SCK	PB11
MISO	PA12
GND	GND
MOSI	PB10
3.3V	3.3V

Power

Vin: 5.5V-5.5V for charger - otherwise 3.5V-6.0V
VBATT: 3.7V Lipo
VCC: 600mA @3.3V

Each pin is 3.3V tolerant and can source/sink no more than 7mA/10mA

Each cluster of I/O pins can source 46mA and sink 65mA. Clusters are defined as **Yellow**, **Pink**, **Green**, **Blue**, **Red**, and **Orange** outlines.

SamD21C18

VCC:1.62-3.63V
Arm Cortex-M0 + (32-bit)
Flash Memory: 256KB
SRAM: 32KB
ADC: 12-bit
48MHz
RTC
USB 2.1 with USB host capability

Serial

USB: SerialUSB
Hardware Serial (TX/D1 and RX/D0): Serial1
Hardware Serial (30/TX and 31/RX): Serial
Only Ports with * can be configured to do I2C
USB host: Set PIN_USB_HOST_ENABLE high

