ARDUINO
MKR NB 1500

Battery Charger LED

Power

Li-Po 3.7 V

GND
PA08   SDA
PA09   SCL
PA21
+5V

LED_BUILTIN

AREF/AIN[1]	PA03	AREF
DAC0/AIN[0]	PA02	A0 D15
AIN[10]	PB02	A1 D16
AIN[11]	PB03	A2 D17
AIN[4]	PA04	A3 D18~
AIN[5]	PA05	A4 D19~
AIN[6]	PA06	A5 D20
AIN[7]	PA07	A6 D21
	PA22	D0~
	PA23	D1~
	PA10	D2~
	PA11	D3~
	PB10	D4~
	PB11	D5~

+5V
VIN
+3V3
GND
RESET

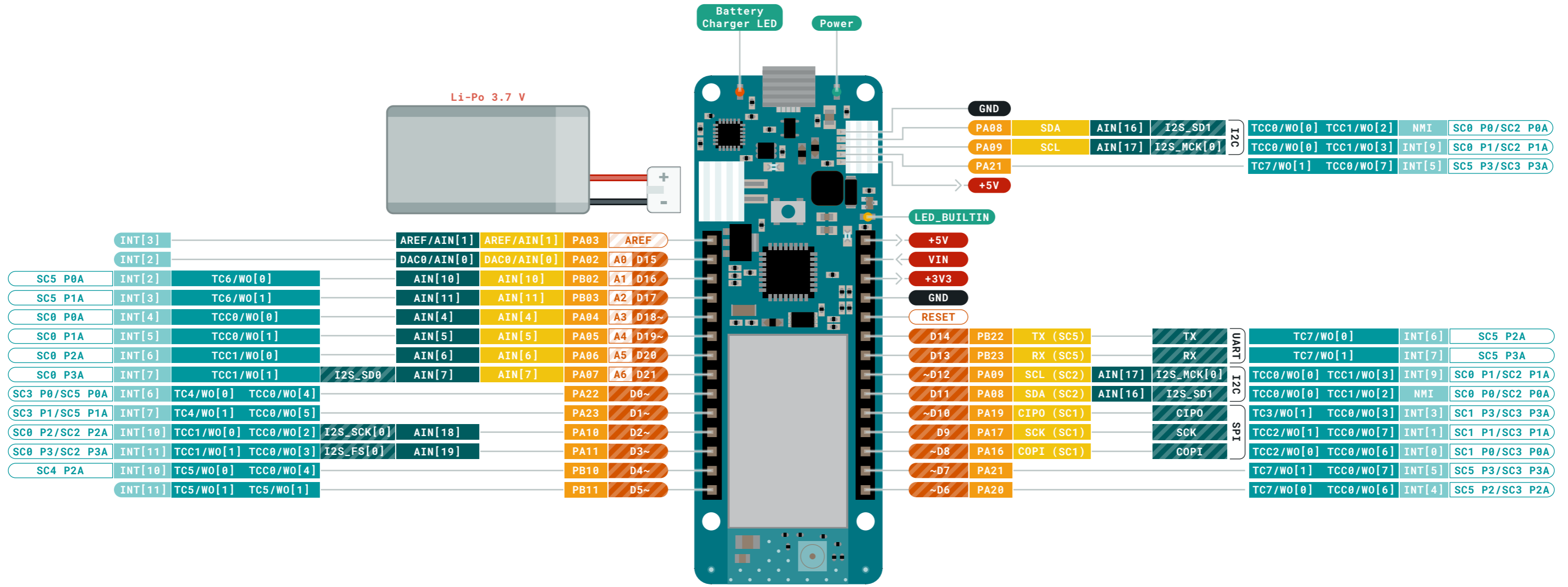|		
D14	PB22	TX (SC5)
D13	PB23	RX (SC5)
~D12	PA09	SCL (SC2)
D11	PA08	SDA (SC2)
~D10	PA19	CIPO (SC1)
D9	PA17	SCK (SC1)
~D8	PA16	COPI (SC1)
~D7	PA21	
~D6	PA20	

Ground

Power

LED

Internal Pin

SWD Pin

Digital Pin

Analog Pin

Other Pin

Microcontroller's Port

Default

⚠ **MAXIMUM** current per pin is 7mA

⚠ **MAXIMUM** source current is 46mA

⚠ **MAXIMUM** sink current is 65mA per pin group

VIN Input voltage to the board.

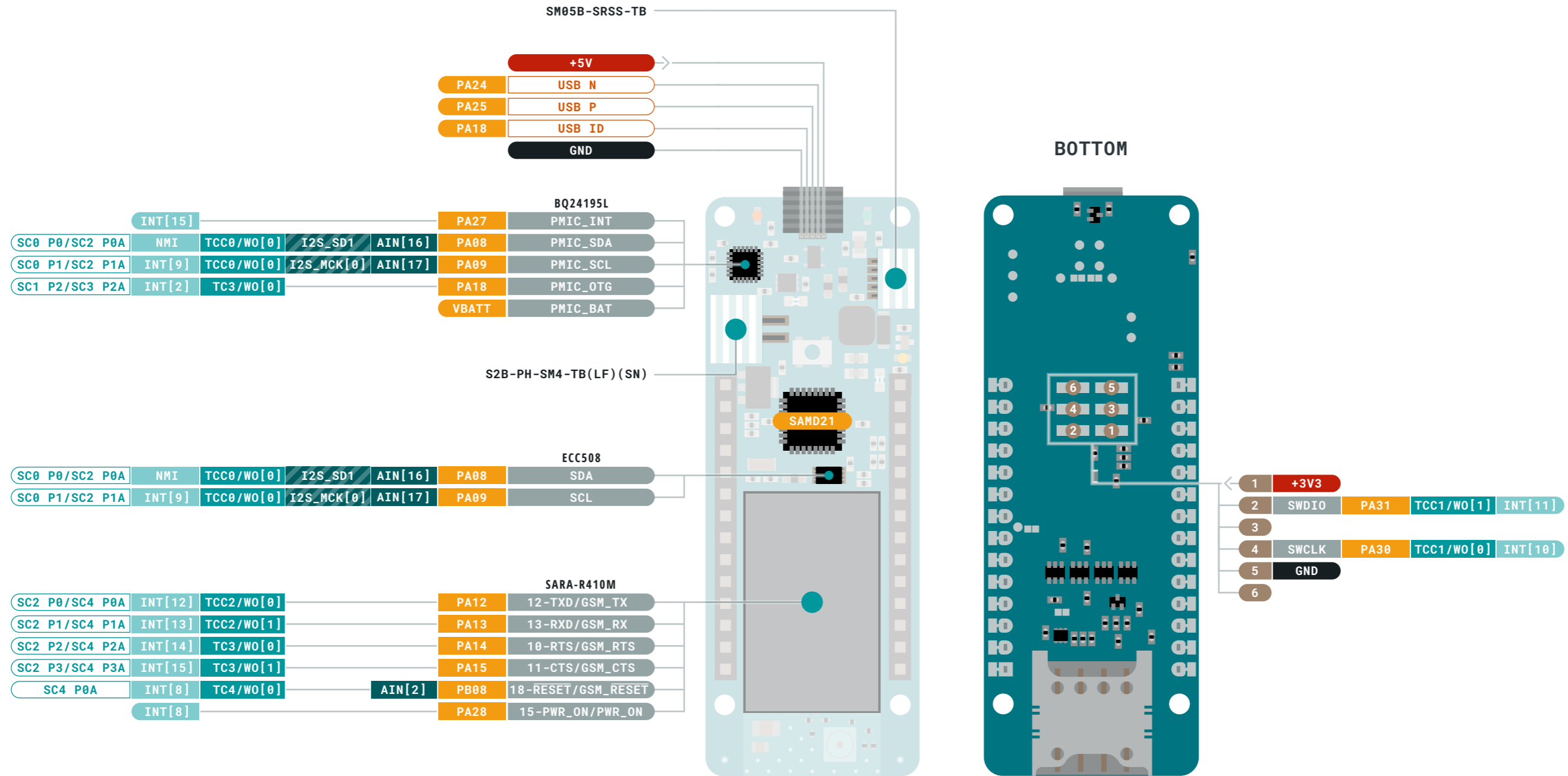NOTE: CIPO/COPI have previously been referred to as MISO/MOSI

ARDUINO
MKR NB 1500

STORE.ARDUINO.CC/MKR-NB-1500

Battery Charger LED

Power

Li-Po 3.7 V

GND
PA08 | SDA | AIN[16] | I2S_SD1 | I2C | TCC0/WO[0] TCC1/WO[2] | NMI | SC0 P0/SC2 P0A
PA09 | SCL | AIN[17] | I2S_MCK[0] | TCC0/WO[0] TCC1/WO[3] | INT[9] | SC0 P1/SC2 P1A
PA21 | TC7/WO[1] TCC0/WO[7] | INT[5] | SC5 P3/SC3 P3A
+5V

LED_BUILTIN

+5V
VIN
+3V3
GND
RESET

INT[3] | AREF/AIN[1] | AREF/AIN[1] | PA03 | AREF
INT[2] | DAC0/AIN[0] | DAC0/AIN[0] | PA02 | A0 | D15
SC5 P0A | INT[2] | TC6/WO[0] | AIN[10] | AIN[10] | PB02 | A1 | D16
SC5 P1A | INT[3] | TC6/WO[1] | AIN[11] | AIN[11] | PB03 | A2 | D17
SC0 P0A | INT[4] | TCC0/WO[0] | AIN[4] | AIN[4] | PA04 | A3 | D18~
SC0 P1A | INT[5] | TCC0/WO[1] | AIN[5] | AIN[5] | PA05 | A4 | D19~
SC0 P2A | INT[6] | TCC1/WO[0] | AIN[6] | AIN[6] | PA06 | A5 | D20
SC0 P3A | INT[7] | TCC1/WO[1] | I2S_SD0 | AIN[7] | AIN[7] | PA07 | A6 | D21
SC3 P0/SC5 P0A | INT[6] | TC4/WO[0] TCC0/WO[4] | PA22 | D0~
SC3 P1/SC5 P1A | INT[7] | TC4/WO[1] TCC0/WO[5] | PA23 | D1~
SC0 P2/SC2 P2A | INT[10] | TCC1/WO[0] TCC0/WO[2] | I2S_SCK[0] | AIN[18] | PA10 | D2~
SC0 P3/SC2 P3A | INT[11] | TCC1/WO[1] TCC0/WO[3] | I2S_FS[0] | AIN[19] | PA11 | D3~
SC4 P2A | INT[10] | TC5/WO[0] TCC0/WO[4] | PB10 | D4~
INT[11] | TC5/WO[1] TC5/WO[1] | PB11 | D5~

D14 | PB22 | TX (SC5) | UART | TX | TC7/WO[0] | INT[6] | SC5 P2A
D13 | PB23 | RX (SC5) | RX | TC7/WO[1] | INT[7] | SC5 P3A
~D12 | PA09 | SCL (SC2) | AIN[17] | I2S_MCK[0] | I2C | TCC0/WO[0] TCC1/WO[3] | INT[9] | SC0 P1/SC2 P1A
D11 | PA08 | SDA (SC2) | AIN[16] | I2S_SD1 | TCC0/WO[0] TCC1/WO[2] | NMI | SC0 P0/SC2 P0A
~D10 | PA19 | CIPO (SC1) | CIPO | SPI | TC3/WO[1] | TCC0/WO[3] | INT[3] | SC1 P3/SC3 P3A
D9 | PA17 | SCK (SC1) | SCK | TCC2/WO[1] TCC0/WO[7] | INT[1] | SC1 P1/SC3 P1A
~D8 | PA16 | COPI (SC1) | COPI | TCC2/WO[0] TCC0/WO[6] | INT[0] | SC1 P0/SC3 P0A
~D7 | PA21 | TC7/WO[1] TCC0/WO[7] | INT[5] | SC5 P3/SC3 P3A
~D6 | PA20 | TC7/WO[0] TCC0/WO[6] | INT[4] | SC5 P2/SC3 P2A

Ground
Power
LED
Internal Pin
SWD Pin

Digital Pin
Analog Pin
Other Pin
Microcontroller's Port
Default

Analog
Communication
Timer
Interrupt
Sercom

⚠ MAXIMUM current per pin is 7mA

⚠ MAXIMUM source current is 46mA

⚠ MAXIMUM sink current is 65mA per pin group

VIN Input voltage to the board.

NOTE: CIPO/COPI have previously been referred to as MISO/MOSI

ARDUINO.CC

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SM05B-SRSS-TB

	+5V
PA24	USB N
PA25	USB P
PA18	USB ID
	GND

BOTTOM

BQ24195L

INT[15]					PA27	PMIC_INT
SC0 P0/SC2 P0A	NMI	TCC0/WO[0]	I2S_SD1	AIN[16]	PA08	PMIC_SDA
SC0 P1/SC2 P1A	INT[9]	TCC0/WO[0]	I2S_MCK[0]	AIN[17]	PA09	PMIC_SCL
SC1 P2/SC3 P2A	INT[2]	TC3/WO[0]			PA18	PMIC_OTG
					VBATT	PMIC_BAT

S2B-PH-SM4-TB(LF)(SN)

SAMD21

ECC508

SC0 P0/SC2 P0A	NMI	TCC0/WO[0]	I2S_SD1	AIN[16]	PA08	SDA
SC0 P1/SC2 P1A	INT[9]	TCC0/WO[0]	I2S_MCK[0]	AIN[17]	PA09	SCL

1	+3V3		
2	SWDIO	PA31	TCC1/WO[1] INT[11]
3			
4	SWCLK	PA30	TCC1/WO[0] INT[10]
5	GND		
6			

SARA-R410M

SC2 P0/SC4 P0A	INT[12]	TCC2/WO[0]		PA12	12-TXD/GSM_TX
SC2 P1/SC4 P1A	INT[13]	TCC2/WO[1]		PA13	13-RXD/GSM_RX
SC2 P2/SC4 P2A	INT[14]	TC3/WO[0]		PA14	10-RTS/GSM_RTS
SC2 P3/SC4 P3A	INT[15]	TC3/WO[1]		PA15	11-CTS/GSM_CTS
SC4 P0A	INT[8]	TC4/WO[0]	AIN[2]	PB08	18-RESET/GSM_RESET
	INT[8]			PA28	15-PWR_ON/PWR_ON

Legend			
◼ Ground	◼ Digital Pin	◼ Analog	⚠ **MAXIMUM** current per pin is 7mA
◼ Power	▨ Analog Pin	▨ Communication	⚠ **MAXIMUM** source current is 46mA
◼ LED	◻ Other Pin	◼ Timer	⚠ **MAXIMUM** sink current is 65mA per pin group
◼ Internal Pin	◼ Microcontroller's Port	◼ Interrupt	
◼ SWD Pin	◼ Default	◻ Sercom	

VIN Input voltage to the board.

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