

Turtle Board Pinmap (v1.0)

Comment	Mbed	Turtle	Left	USB	Right	Turtle	Mbed	Comment
			VDD	1	1	VIN		Alternative input voltage (3.4-5V)
			GND	2	2	VDD		
UART RX for debugger	UART2/PWM/ADC	RX	PA15	3	3	GND		
SWO for debugger	SPI1,3-SCK/ADC	SWO	PB3	4	4	PA10	SDA	Optional use for sensors/OLED
	I2C3-SDA/ADC/SPI1,3-MISO		PB4	5	5	PA9	SCL	UART1/I2C1-SCL/ADC/PWM
LoRa-DIO1		DIO1		6	6	PA8	USB pwr	Input high when USB powered
	I2C3-SDA/ADC/SPI1,3-MOSI		PB5	7	7	PB1	LED (red)	Status blinks/LoRa RX
	UART1/I2C1-SCL/ADC/PWM		PB6	8	8	PB0	LED2 (green)	CPU busy/LoRa TX
LoRa-DIO2		DIO2		9	9	VREF		VREF+ output/input
	UART1/ADC		PB7	10	10	PA3	VEXT-SW	Switch (high = VEXT off, low = VEXT on)
LoRa-SCK		SCK	PA5	11	11	PA2	TX	UART TX for debugger
LoRa-MISO		MISO	PA6	12	12	PA1	RST-LoRa	
LoRa-MOSI		MOSI	PA7	13	13	PA0	LoRa-DIO0	LoRa-DIO0 (RX/TX/CAD interrupts)
VDD voltage switchable		Power	VEXT	14	14	VEXT	Power	VDD voltage switchable

- In use with LoRa chip
- In use with debugger, otherwise available
- Free to use (without debugger)
- Custom use when bridge resistor is removed

Debugger

		Left	Right		
RX	PA15	1	2	PB3	SWO
TX	PA2	3	4	NRST	NRST
SWCLK	PA14	5	6	VDD	
SWDIO	PA13	7	8	GND	
					MCU reset

- VDD Voltage between 2.1-3.6V
- VIN Alternative external voltage input (3.4-5V)
- VEXT Switchable VDD voltage for external consumers
- VREF VREF input when VREF+ bridge is removed
- VBAT Batteries source 2.1-3.6V is supported