

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	GND	
UART RX for debugger	UART2/PWM/ADC	RX	PA15	3		3	VDD	
SWO for debugger	SPI1,3-SCK/ADC	SWO	PB3	4		4	PA 9	SCL Optional use for sensors/OLED
	I2C3-SDA/ADC/SPI1,3-MISO	-	PB4	5		5	PA 10	SDA UART1/I2C1-SDA/ADC/PWM
LoRa-DIO1			DIO1	6		6	PA 8	USB pwr ADC/PWM Input high when USB powered
	I2C3-SDA/ADC/SPI1,3-MOSI	-	PB5	7		7	PB 1	LED (red) ADC/PWM Status blinks/LoRa RX
	UART1/I2C1-SCL/ADC/PWM	-	PB6	8		8	PB 0	LED2 (green) ADC/PWM CPU busy/LoRa TX
LoRa-DIO2			DIO2	9		9	VREF	VREF+ output/input
	UART1/ADC	-	PB7	10		10	PA 3	VEXT-SW UART2/ADC/PWM/LPUART Switch (high = VEXT off, low = VEXT on)
LoRa-SCK		SCK	PA 5	11		11	PA 2	TX UART2/ADC/PWM/LPUART UART TX for debugger
LoRa-MISO		MISO	PA 6	12		12	PA 1	RST-LoRa ADC/PWM/SPI1-SCK
LoRa-MOSI		MOSI	PA 7	13		13	PA 0	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	

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