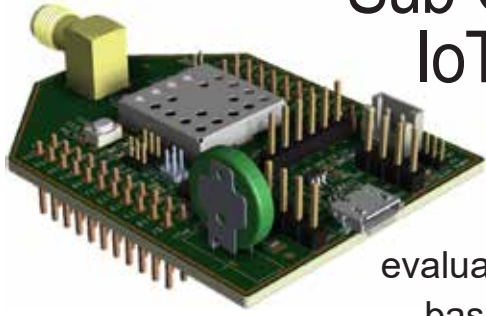


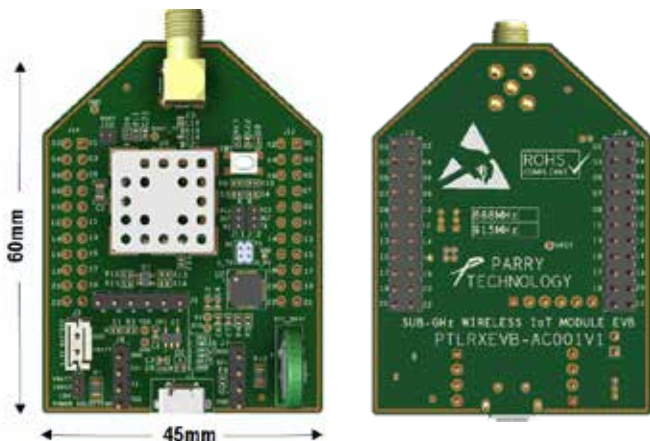
Sub-GHz Wireless IoT module EVB (PTLRXEVB)



is a tool useful for evaluation and development based on Ultra-low power multi-modulation wireless STM32WLE5x micro-controller from ST Microelectronics. The EVB with four-layer PCB is designed for good RF performance, allowing one to be benefited from the best RF sensitivity of the integrated LoRa® RF transceiver SX126x. EVB provides access to program or debug the microcontroller via Serial Debug wire interface pins and external STLINK debugger. USB connector allows easy powering of the target and with onboard USB to UART controller, provides UART for debug during development and flashing the STM32WL MCU on board using UART bootloader feature.

Benefits

- + Four-layer PCB for good RF performance. Easy to manually solder on to the base board
- + Components provision for 50-ohm impedance matching of antenna
- + Standard STM32 debugger and software tools from ST can be used for development



SUB-GHZ WIRELESS IOT MODULE EVB

Arm® Cortex®-M4 core running at 48 MHz, 256 Kbytes of Flash, 64Kbytes of RAM

Integrated sub-GHz radio based-on Semtech SX126x with +22dBm maximum RF output

High RF sensitivity down to -138dBm for LoRa® @ 125KHz, SF12

Analog Inputs, DAC, DIOs, I2C, I2S, SPI, I2C, LPUART, 2 USARTs

Frequency range supporting 863 to 930MHz, SF5 to SF12, Bandwidth of 7.8KHz to 500KHz

Operating voltage of 1.8V to 3.6V, Operating temperature -40°C to +85°

Purchase Notes

For quick start on the development, ParryTech Sub-GHz Wireless IoT Module (PTLRXMOD-AC001V1) is available.

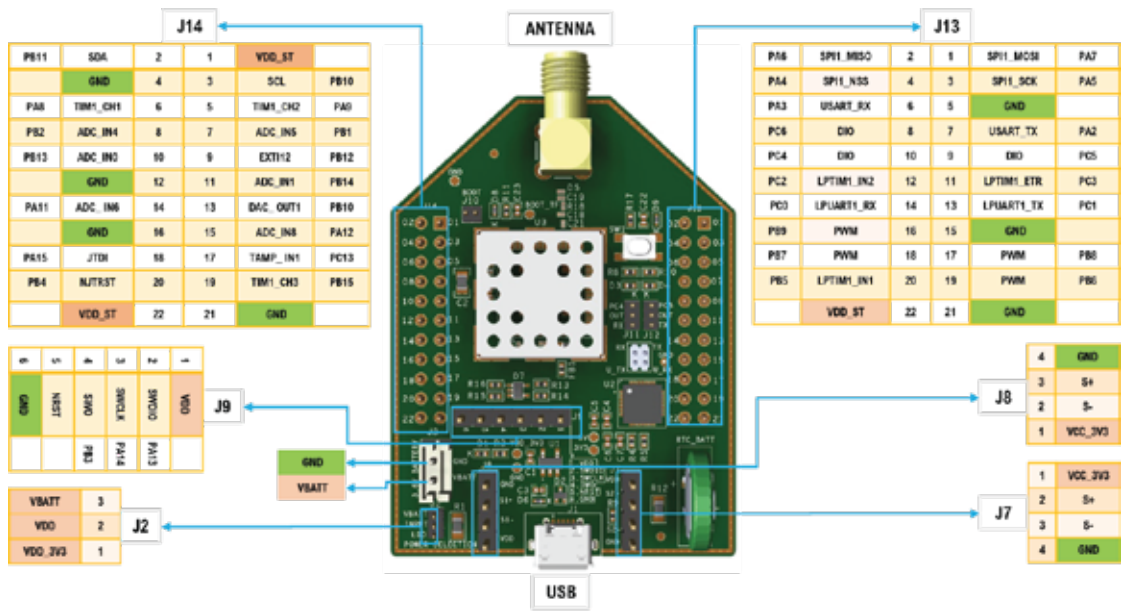
For requirement on Sub-GHz to Wi-Fi/BT gateways (optional 4G LTE GSM Module shield), reach out to estore-enquiry@parrytech.net

LoRa® is a trademark of Semtech Corporation or its subsidiaries

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Pinout Diagram



Getting Started

MCU Datasheet, Reference Manual	https://www.st.com/en/microcontrollers-microprocessors/stm32wle5cc.html#documentation
Software dev IDE	https://www.st.com/en/development-tools/stm32cubeide.html
Debugger/Programmer	To be ordered separately (STLINK-V2 or STLINK-V3E). SWD pins for programming.
I/O Pin functions	All the I/O pins has alternate functions as given in LoRa [®] MCU data sheet
Antenna options	Default external antenna (PCB Impedance Matched). Optional helical antenna.
STM32WL Training	https://www.st.com/content/st_com/en/support/learning/stm32-education/stm32-online-training/stm32wl-online-training.html

Product Ordering Guide

Ordering Part number : PTLR**X**EVb-AC001V1

Variant	Value	Option	Description
X	8	India Band	This module is tuned for 863~870MHz Operation.
	9	Asia Band	This module is tuned for 902~930MHz Operation.

About Parry Technology

- + Engineering/System integration services
- + Total Solutions: Products, platforms and, cloud solutions for end-to-end IoT deployments
- + E-store: Ready to use subsystem modules/products for quick test, develop Internet of Things (IoT) applications