

Murata Type2AB module is designed as Ultra-small, high quality and lower power consumption UWB module.

Ideally suited for small, battery operated IoT devices and applications.



↓ Features ↓ Product Information ↓ Block Diagram ↓ Evalutation Kit

Features

Main Features

- Support Channels: Band 5 & 9
- UWB Chip set: Qorvo DW3110/3120
- FCC/IC/TELEC Reference Certified
- Hostless module Integrated Nordic IC / nRF52840 which also have Blutooth Low Energy function for waking up UWB and updating FW.
- Integrated 3-Axis sensor for saving battery
- · Reference clock for UWB and MCU are embedded

Contribute to customer product

- Smallest/highly integrated UWB module available in the market
- 75% less square area than CoB solution
- Frequency, Tx power and Antenna delay are calibrated for each device
- Support Multi Antenna design and evaluation

Product Information

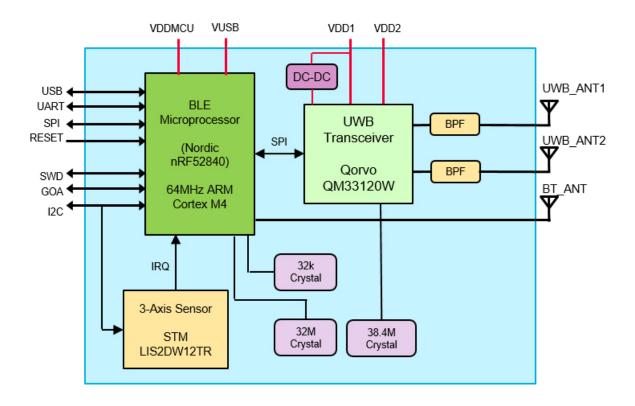
Item	explanation
Part Number	LBUA5QJ2AB-828
Product Type	Module
Product Status	In Production
Grade	Consumer
Frequency	UWB Ch 5 & 9 + Bluetooth LE 2.4GHz
Frequency MHz (min) UWB	6250
Frequency MHz (max) UWB	8250
Chipset	 Qorvo DW3110/3120 Nordic nRF52840
CPU Core	ARM Cortex-M4
Flash / RAM	1MB / 256KB
Antenna	External
RF Conn/ Antenna	Not Included
Sleep Clock	Internal X'tal (32.768kHz)
System Clock	Internal X'tal (32MHz and 38.4MHz)
Operating Temperature Range	-40 to 85
Operating Temperature °C (min)	-40
Operating Temperature °C (max)	85
Mounting Type	SMT
Package	LGA
Dimension	10.5 × 8.3 × 1.44(max)mm
Supply Voltage (Vdc)	3.0V for VDD1,VDD2 and VDDMCU 5.0V for VUSB1.8V
Supply Voltage min	2.5V for VDD1,VDD2 and VDDMCU 4.35V for VUSB
Supply Voltage max	3.6V for VDD1,VDD2 and VDDMCU 5.5V for VUSB
Bluetooth	5.2
Power Class	Class 1
Technology	UWB + Bluetooth Low energy
Host Interface	USB,UART,SPI, I2C
FCC/IC/MIC(Japan) Certified	Yes

ltem	explanation
ETSI report	Yes
ISO9001	Yes

Datasheet and Documentations

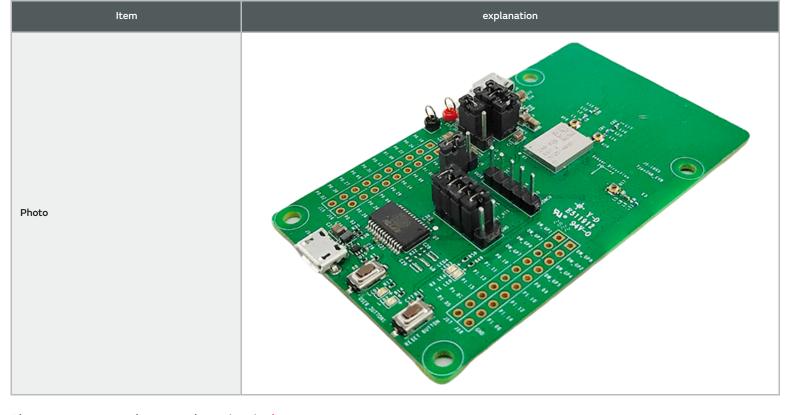
Please contact our sales or send your inquiry <u>here</u> for the latest datasheet and other related documentations.

Block Diagram



Evalutation Kit

Item	explanation
Product P/N	LBUA5QJ2AB-828EVB
Conent	muRata UWB/Bluetooth Low Energy module Type2AB evaluation board. To connect Type-C USB terminal on the board to PC via USB interface, It's powered and serial port is avairable. Customer can evaluate RF performance to enter the AT command via serial terminal. If customer re-program the demo-FW into the module, also can evaluate simple TWR and PDoA functions.



Please contact our sales or send your inquiry <u>here</u>.

On the <u>Qorvo Based UWB Modules/Type2AB Document Site, Forum (my Murata*)</u> \Box , you can find detailed documents including datasheets and design guides. Feel free to visit the website for this supplementary information and additional documents. If it is your first time using this website, please refer to the <u>Access Guide (Documents on How to Register)</u> \Box .

Go to my Murata*

*The registration number that comes with the evaluation kit will be needed to access the website.

*my Murata: A free site that only a registered user can log into and view. When using this website, you will need to agree to the User Policy 📮 and create an account.

Sign up for Murata Newsletter

Murata Newsletter provides a wide range of information once or twice a month, including the latest product information and events.

