FUJITSU Component Wireless Modules

Bluetooth® Ver.4.1 Modules (Software Embedded)

(Central/Peripheral)

MBH7BLZ01A, MBH7BLZ02A

Bluetooth Core Specification Version 4.1 (*Bluetooth* low energy)

Overview

Bluetooth Core Specification Version 4.1 (*Bluetooth* low energy) conforming software embedded modules with Central/Peripheral function available.

Modules embedded with Fujitsu Components' Data Communication (FDC) profile

It can communicate with up to 8 peripherals at the same time by "GATT Direct Access Function". The function also makes it possible to communicate with other manufacurers Bluetooth modules.

FDC is a unique data transmission profile developed by Fujitsu Components. FDC allows data to transmit with host system by simple text command (via UART). With more than 60 commands and continuous additions, FDC allows for quick product to market and reduction of development resources. For easy connectivity, the FDC embedded central module is designed to pair with the FDC peripheral module.

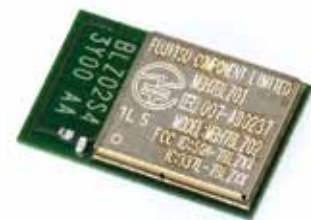FDC is a SPP-like profile ideally suited for sensing, monitoring, and wearble applications.

Based on Nordic Semiconductor nRF51822 SoC Rev.3

Item	Specifications	
Part number	MBH7BLZ01A	MBH7BLZ02A
Antenna	None	Patterned antenna
Bluetooth technology	Conforms to *Bluetooth* Core Specification Version 4.1 (single mode low energy radio)	
RAM	32KB	
Transmit power	+4 dBm max.	
Receiver sensitivity	-88 dBm typical	
Host interface	UART	
Crystal oscillator	Embedded	
Power supply	1.9 V to 3.6 V (LDO)	
Power consumption (current)	Sleep mode	5µA typical
	Tx mode	12mA typical (at 0dBm)
	Rx mode	16.5mA typical
Operating temperature	-25⁰C to +85⁰C (no condensation)	
Dimensions	10.5 x 9.2 x 1.6 mm	15.7 x 9.8 x 2.0 mm
Mounting method	SMD	
Certifications	Radio Act (Japan)/ QDID	FCC / IC / CE / Radio Act (Japan)/ QDID

Bluetooth®

RoHS compliant

Software embedded module

MBH7BLZ02A

MBH7BLZ01A

Evaluation kit

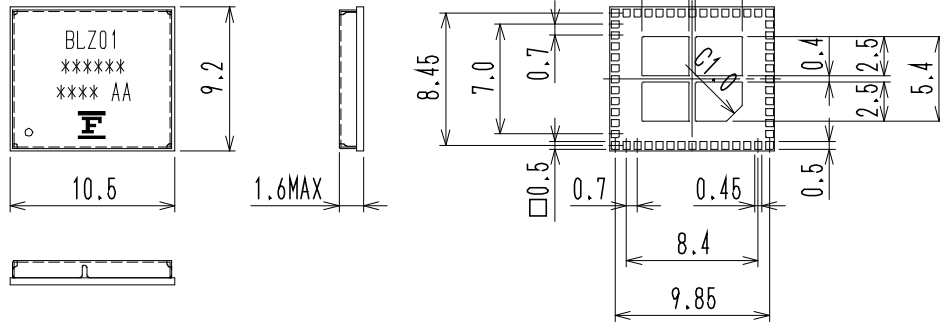| Part number	Details	MOQ
MBH7BLZ02A-EF1-KIT-2	Evaluation kit	1 set

Embedded software & application development tool

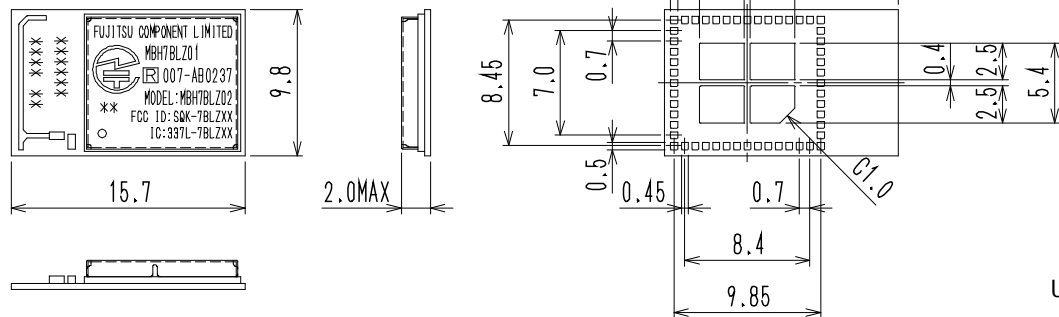Please request firmware specs and sample programs from one of Fujitsu Components' sales offices.

Note: *Bluetooth* SIG registration is required to use this module's QDID.

■ Dimensions

MBH7BLZ01A

MBH7BLZ02A

Unit: mm

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