

# 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 manufacturers 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 wearable 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	-25°C to +85°C (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



RoHS compliant

Software embedded module



MBH7BLZ02A



MBH7BLZ01A

#### Evaluation kit

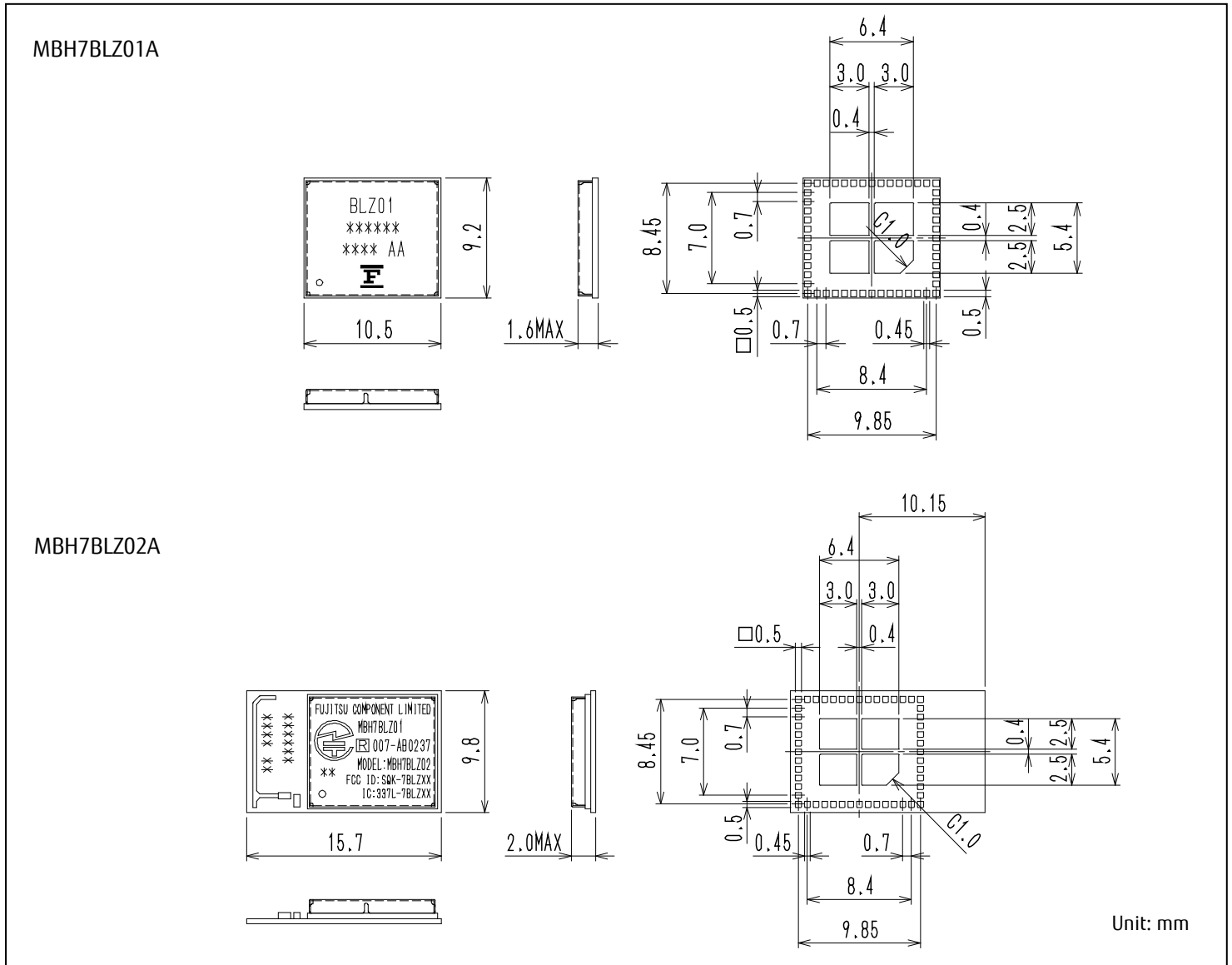
Part number	Details	MOQ
MBH7BLZ02A-EF1-KIT-2	Evaluation kit	1 set

#### 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



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Contact

**Japan**  
 FUJITSU COMPONENT LIMITED  
 Shinagawa Seaside Park Tower  
 12-4, Higashi-shinagawa 4-chome,  
 Tokyo 140 0002, Japan  
 Tel: (81-3) 3450-1682  
 Fax: (81-3) 3474-2385  
 Email: fcl-contact@cs.jp.fujitsu.com  
 Web: www.fujitsu.com/jp/fcl/

**Europe**  
 FUJITSU COMPONENTS EUROPE B.V.  
 Diamantlaan 25  
 2132 WV Hoofddorp  
 Netherlands  
 Tel: (31-23) 5560910  
 Fax: (31-23) 5560950  
 Email: info@fceu.fujitsu.com  
 Web: www.fujitsu.com/uk/components/

**China**  
 FUJITSU ELECTRONIC COMPONENTS  
 (SHANGHAI) CO., LTD.  
 Unit 4306, InterContinental Center  
 100 Yu Tong Road, Shanghai 200070, China  
 Tel: (86 21) 3253 0998  
 Fax: (86 21) 3253 0997  
 Email: fcal@sgfujitsu.com  
 www.fujitsu.com/sg/products/devices/components/

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**North and South America**  
 FUJITSU COMPONENTS AMERICA, INC.  
 2290 North First Street, Suite 212  
 San Jose, CA 95131 U.S.A.  
 Tel: (1-408) 745-4900  
 Fax: (1-408) 745-4970  
 Email: components@us.fujitsu.com  
 Web: http://us.fujitsu.com/components/

**Asia Pacific**  
 FUJITSU COMPONENTS ASIA, Ltd.  
 102E Pasir Panjang Road  
 #01-01 Citilink Warehouse Complex,  
 Singapore 118529  
 Tel: (65) 6375-8560 / Fax: (65) 6273-3021  
 Email: fcal@sg.fujitsu.com  
 www.fujitsu.com/sg/products/devices/components/

**Hong Kong**  
 FUJITSU COMPONENTS HONG KONG Co., Ltd.  
 Unit 503, Inter-Continental Plaza,  
 No.94 Granville Road,  
 Tsim Sha Tsui Kowloon, Hong Kong 118529  
 Tel: (852) 2881 8495 Fax: (852) 2894 9512  
 Email: fcal@sg.fujitsu.com  
 www.fujitsu.com/sg/products/devices/components/