

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.

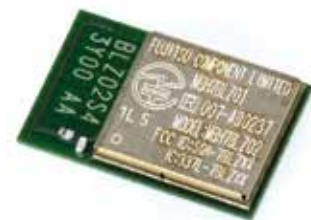
Based on Nordic Semiconductor nRF51822 SoC Rev.3

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

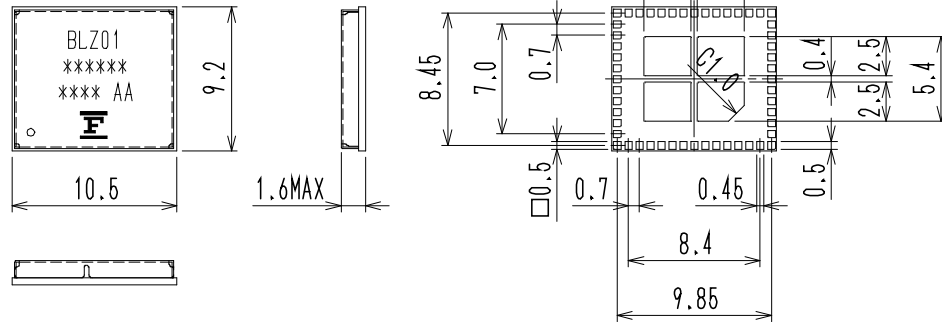
Embedded software & application development tool

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

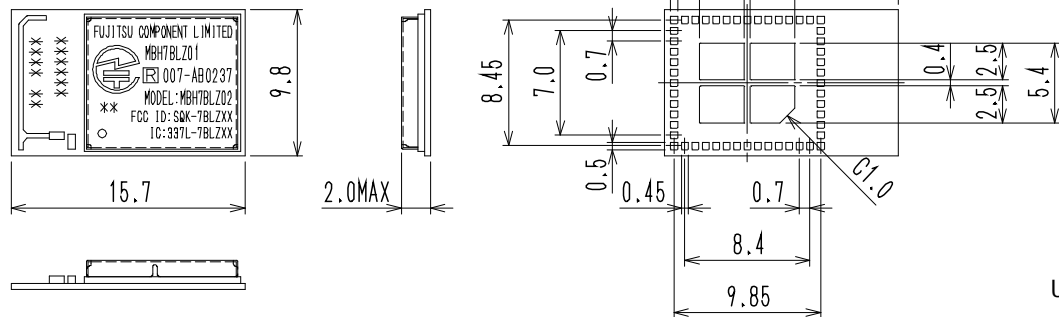
Note: Bluetooth SIG registration is required to use this module's QDID.

■ Dimensions

MBH7BLZ01A



MBH7BLZ02A



Unit: mm

Note: The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by Fujitsu Component is under license.

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/

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/

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/

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
Web: www.fujitsu.com/sg/products/devices/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
Web: 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
Web: www.fujitsu.com/sg/products/devices/components/

Copyright

All trademarks or registered trademarks are the property of their respective owners.
Fujitsu Components America or its affiliates do not warrant that the content of datasheet is error free. In a continuing effort to improve our products Fujitsu Components America, Inc. or its affiliates reserve the right to change specifications/ datasheets without prior notice. Copyright ©2016 Fujitsu Components America, Inc.
All rights reserved.
Revised December 21, 2016.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Fujitsu:

[MBH7BLZ02A](#) [MBH7BLZ01A](#)