

FUJITSU Component Wireless Modules

Bluetooth® Smart Modules (Software Embedded)

(Central/Peripheral)

MBH7BLZ01A, MBH7BLZ02A

Bluetooth Core Specification Version 4.1 (Bluetooth Smart)

Overview

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

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

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 |

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

Bluetooth Smart Module

RoHS compliant

Software embedded module



MBH7BLZ02A



MBH7BLZ01A

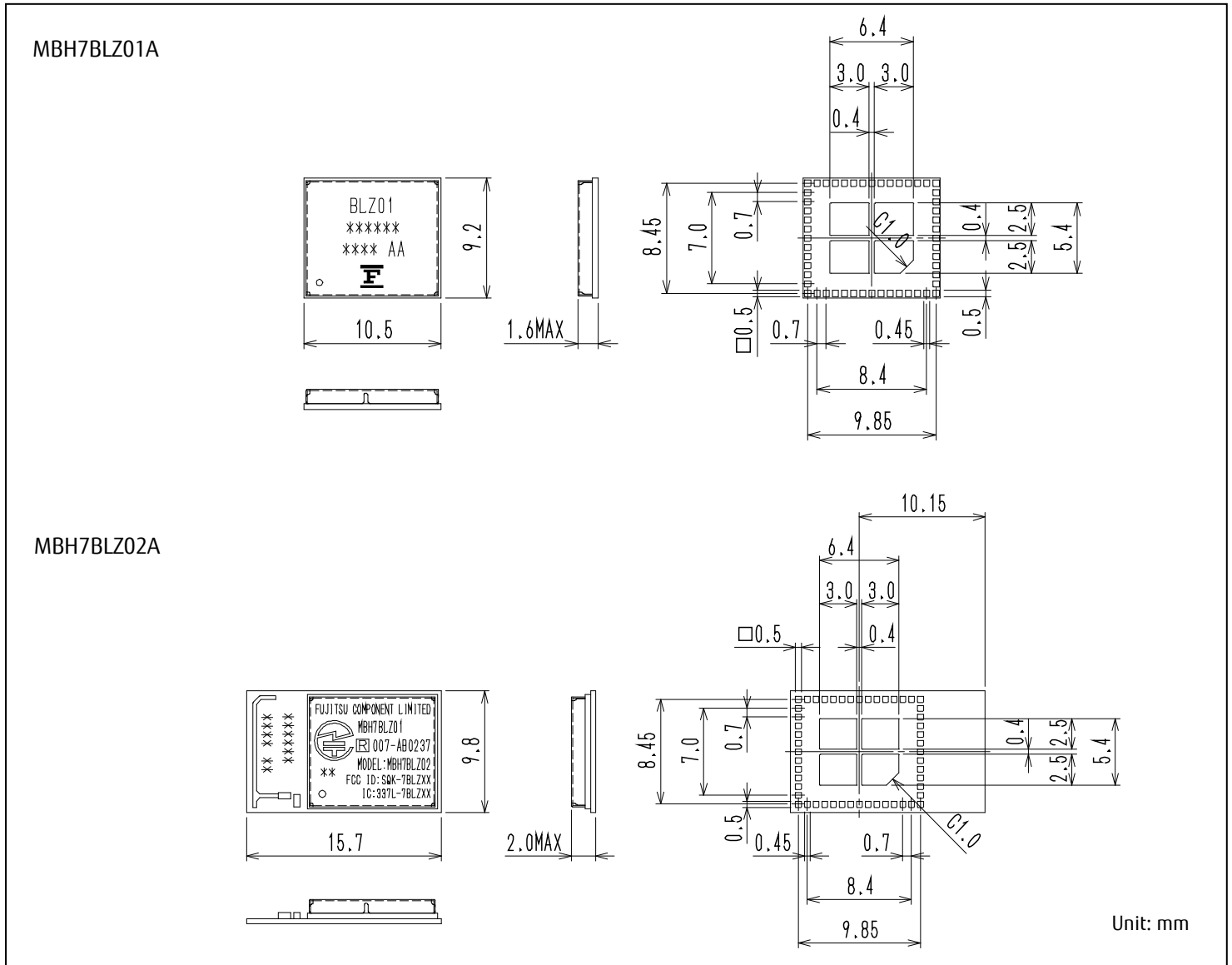
Evaluation kit

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

Embedded software & application development tool

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

■ Dimensions



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