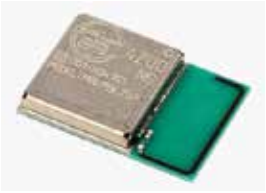
# FUJITSU Component Wireless Modules
## *Bluetooth*® Ver. 4.1 Module (Software Embedded)
## MBH7BLZ07

### Overview
Ultra small, low power consumption Bluetooth low energy module with embedded software.

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

RoHS compliant



MBH7BLZ07

### Based on Nordic Semiconductor nRF51822 SoC Rev.3

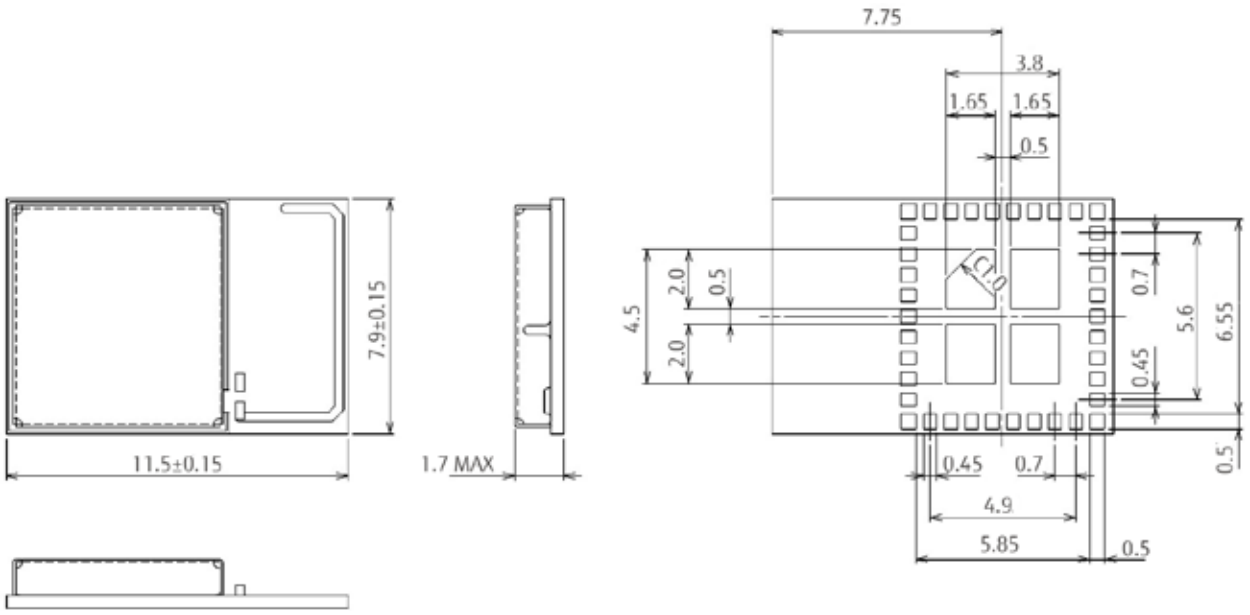
| Item | | Specifications |
|---|---|---|
| Part number | | MBH7BLZ07 |
| Antenna | | Pattern antenna |
| *Bluetooth* technology | | Conforms to *Bluetooth* Core Specification Version 4.1 (single mode low energy radio) |
| RAM | | 16KB |
| Transmit power | | +4 dBM max. (switchable by command) |
| Receiver sensitivity | | -88 dBM typical |
| Interface | | UART |
| Crystal oscillator | | Embedded |
| Operating temperature & power supply | LDO mode | -40ºC to +85ºC, 1.9 VDC to 3.6 VDC<br>-25ºC to +75ºC, 1.8 VDC to 3.6 VDC |
| | Low voltage mode | -25ºC to +75ºC, 1.75 VDC to 1.95 VDC |
| Power consumption | Sleep mode | 5µ A typical |
| | Tx mode | 12mA typical (at 0dBm) |
| | Rx mode | 16.5mA typical |
| Dimensions | | 11.5 x 7.9 x 1.7 mm |
| Mounting method | | Surface mount (SMD) |
| Certifications | | Bluetooth qualification (QDID)/ Radio Act (Japan) / FCC / IC / CE |

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

| Evaluation kit | |
|---|---|
| Part number | Details |
| MBH7BLZ07-EF1-KIT-2 | Evaluation kit |
| Contains: | |
| - MBH-FUJI2-E1 | Evaluation board |
| - MBH7BLZ07-DAU-EF1 | Module mounted on daughter board |
| - USB cable | |

## ■ Dimensions

MBH7BLZ07




Unit: mm

Note: The *Bluetooth*® word mark and logos are registered trademarks owened by Bluetooth SIG, Inc. and any use of such marks by Fujitsu Component is under license. Other trademarks and trade names are those of their respective oweners.

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