

FUJITSU Component Wireless Modules

Bluetooth® Version 4.2 (low energy)

(Blank Version & Central/Peripheral)

FWM7BLZ20-1090xx

Overview

Compact *Bluetooth* Low energy module with high performance processor, half the power consumption than its predecessor and double the transmission distance.



| Features | |
|----------|---|
| ■ | Bluetooth specification Version 4.2 (LE single mode) compliant |
| ■ | Based on Nordic Semiconductor nRF52832 (ARM Cortex-M4F, 512KB flash, and 64KB RAM embedded) |
| ■ | Complete <i>Bluetooth</i> protocol stack provided by Nordic Semiconductor |
| ■ | External interface: 30 GPIO pins for NFC, SPI, TWI, UART, and ADC |
| ■ | Out-of-Band pairing by use of NFC-A Tag interface |



FWM7BLZ20-109049

| Item | Specifications |
|-----------------------|--|
| Part number | FWM7BLZ20-1090xx |
| Antenna | Pattern antenna |
| Softdevice | S132 (ver. 3.0.0 or later) |
| Bluetooth technology | Conforms to <i>Bluetooth</i> Core Specification Version 4.2 (single mode low energy radio) |
| RAM | 64KB |
| Transmit power | +4 dBm max. |
| Receiver sensitivity | -94 dBm typical |
| Interface | NFC (via external antenna), UART, SPI, GPIO, SWDCLK, SWIDO, nRESET, TWI, ADC |
| Crystal oscillator | Embedded |
| Operating temperature | -40°C to +85°C |
| Operating voltage | 1.7 ~ 3.6VDC |
| Power consumption | Tx mode LDO mode: 11.6 mA typical (at 0dBm), DC/DC mode: 5.3mA typical (at 0dBm) |
| | Rx mode LDO mode: 11.7 mA typical DC/DC mode: 5.4mA typical |
| Number of GPIO | 30 |
| Dimensions | 15.7 x 9.3 x 1.7 mm |
| Mounting method | Surface mount (SMD) |
| Certifications | Bluetooth qualification (QDID) / Radio Act (Japan) / FCC / IC / CE |

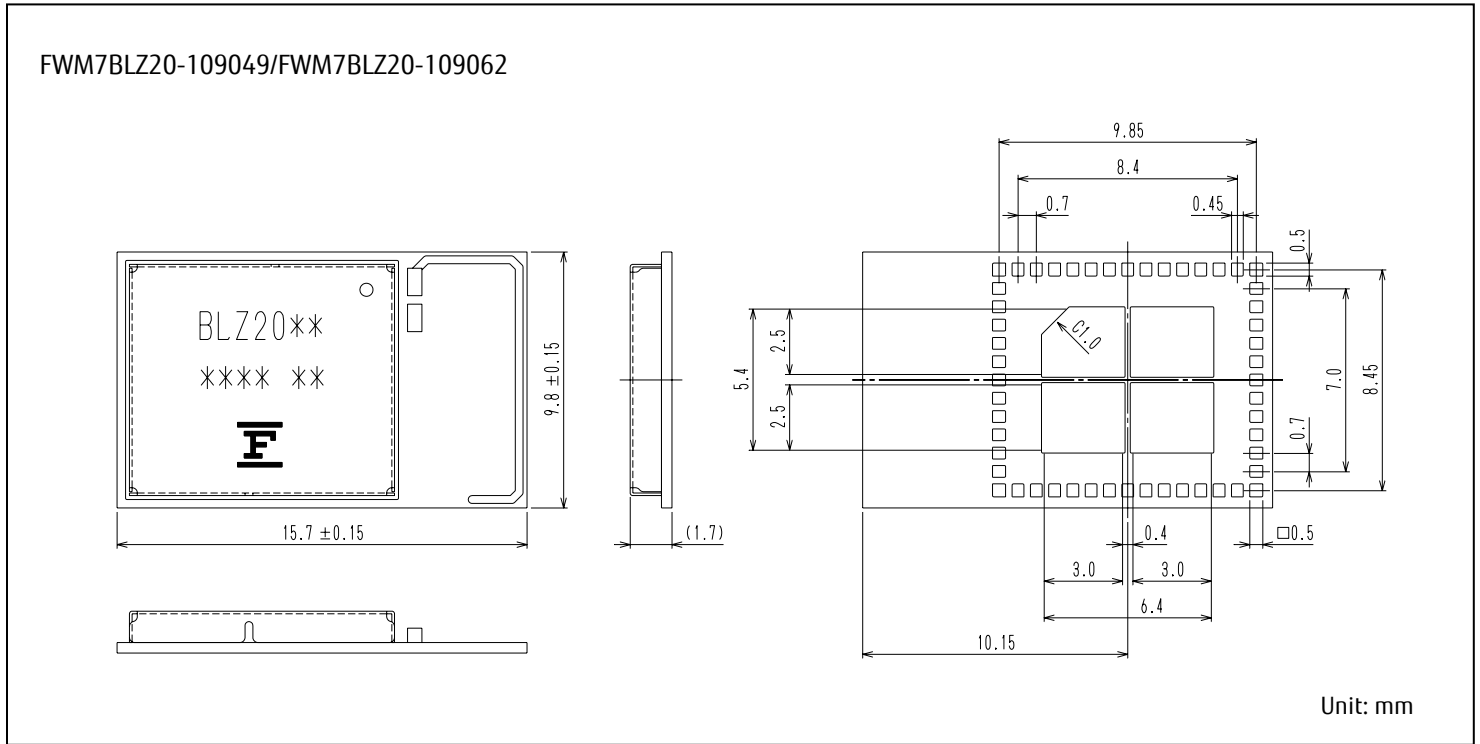
Note: *Bluetooth* SIG registration is required to use this module's QDID.

Evaluation kit

| Part number | Details |
|--|----------------------------------|
| FWM7BLZ20-EB2-KIT-2 | Evaluation kit |
| Contains: | |
| - MBH-FUJ12-E1 (USB cable is included) | Evaluation board |
| - FWM7BLZ20-DAU2-EB2 | Module mounted on daughter board |

| Part number | Softdevice version |
|------------------|--------------------|
| FWM7BLZ20-109049 | S132 ver. 3.0.0 |
| FWM7BLZ20-109062 | S132 ver. 3.1.0 |

■ 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/group/fcl/en/

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: emea.fujitsu.com/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@fcal.fujitsu.com
 www.fujitsu.com/sg/products/devices/
 components/

Korea
 FUJITSU COMPONENTS KOREA, LTD.
 Alpha Tower #403,
 645 Sampyeong-dong,
 Bundang-gu, Seongnam-si,
 Gyeonggi-do, 13524 Korea
 Tel: (82 31) 708-7108
 Fax: (82 31) 709-7108
 Email: fcal@fcal.fujitsu.com
 www.fujitsu.com/sg/products/
 devices/components/

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@fcal.fujitsu.com
 www.fujitsu.com/sg/products/devices/
 components/

Hong Kong
 FUJITSU COMPONENTS HONG KONG Co., Ltd.
 Room 06, 28/F, Greenfield Tower, Concordia
 Plaza, No.1 Science Museum Road,
 Tsim Sha Tsui East, Kowloon, Hong Kong
 Tel: (852) 2881 8495 Fax: (852) 2894 9512
 Email: fcal@fcal.fujitsu.com
 www.fujitsu.com/sg/products/devices/
 components/

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