

# FCL Components Wireless Modules

## Bluetooth® Version 5.0 with Firmware

### Central/Peripheral

### FWM7BLZ20B

#### Overview

Compact Bluetooth Version 5.0 (low energy single mode) module with FCL Components firmware, works as Central/Peripheral.



RoHS compliant

#### Features

- Capable to communicate with up to 8 peripherals simultaneously through the “GATT Direct Access Function”. This function allows communication with other manufacturers’ Bluetooth modules.
- It embeds “X2 speed” which increase communication speed, and “LE Advertising Extensions” which increase communication capacity and number of channels. Symbol rate and data rate support both modes.
- 1Mbps and 2Mbps (actual speed depends on communication partner).
- It corresponds maximum 255 bytes long packet.
- Good for IoT-related devices and its remote maintenance.



FWM7BLZ20B

#### ■ Evaluation board

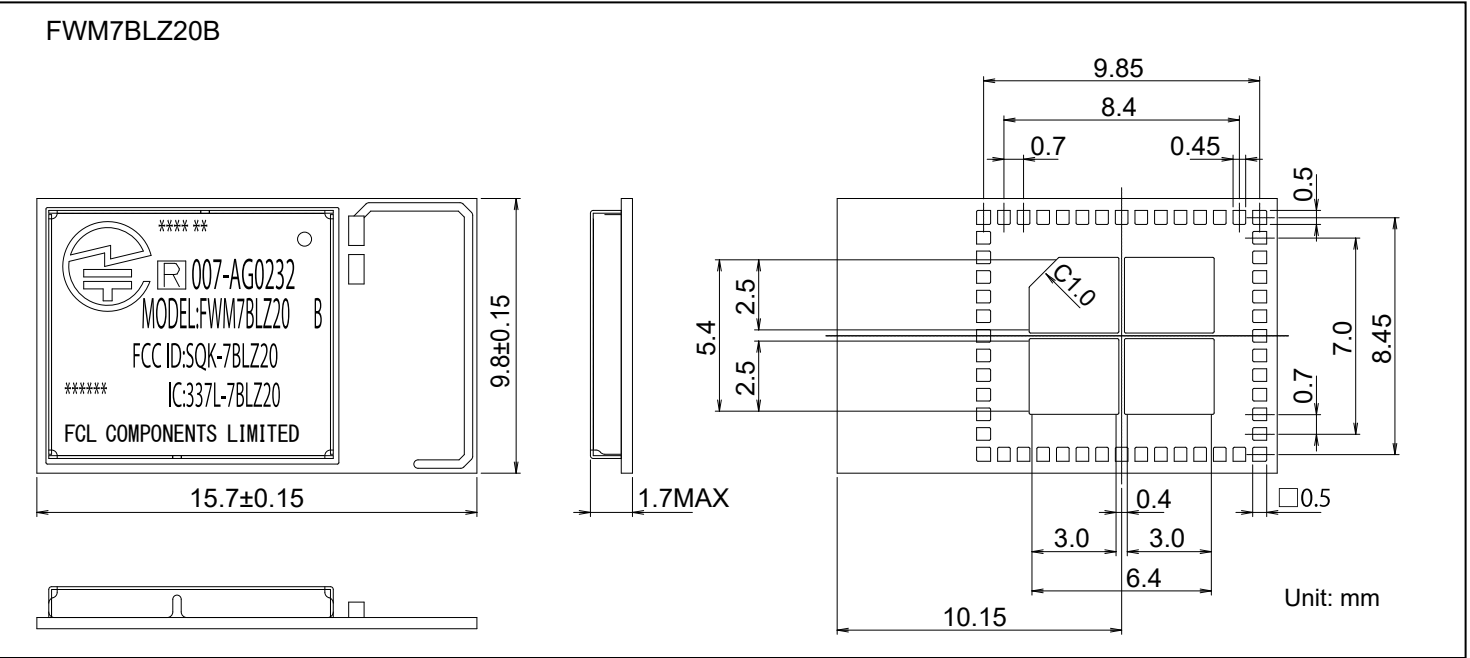
Part number	Details
FWM7BLZ20B-EVB-EF1	Evaluation board (FWM7BLZ20B x 1 is mounted)

■ Specifications

Item	Specifications	
Part number	FWM7BLZ20B	
Antenna	Embedded (Pattern antenna)	
Bluetooth technology	Conforms to Bluetooth Core Specification Version 5.0 technology (Low energy singel mode)	
RAM	64Kbytes	
ROM	512Kbytes	
Transmit power	+4 dBm max.	
Receiver sensitivity	-94 dBm typical	
Interface	UART, GPIO, SWDCLK, SWDIO, nRESET	
Crystal oscillator	Embedded	
Operating voltage	1.7V to 3.6VDC	
Symbol rate	1Mbps / 2 Mbps (depending on communication partner)	
Data rate	1Mbps / 2 Mbps (depending on communication partner)	
Advertising size	255 bytes	
IC chip	nRF52832 (Nordic Semiconductor)	
Power consumption	Tx mode	LDO mode: 16.8mA typical (at 0dBm), DC/DC mode: 7.8mA typical (at 0dBm)
	Rx mode	LDO mode: 17.1mA typical (data rate 1Mbps), 18.3mA typical (data rate 2Mbps) DC/DC mode: 8.0mA typical (data rate 1Mbps), 8.5mA typical (data rate 2Mbps)
Operating temperature	-40°C to +85°C	
Dimensions	15.7 x 9.8 x 1.7mm	
Mounting method	Surface mount (SMT)	
Certifications	Bluetooth qualification (QDID)*1, Radio Act (Japan), FCC, IC, CE	

Note: \*1: Bluetooth SIG registration is required to use modules QDID

■ Dimensions



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