FCL Components Wireless Modules
Bluetooth® Version 4.2 (low energy) (Firmware Embedded & Central/Peripheral) FWM7BLZ20

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

RoHS compliant

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 Bluetooth protocol stack provided by Nordic Semiconductor
- External interface: 30 GPIO pins for SPI, TWI, UART, and ADC
- Capable to communicate with up to 8 peripherals simultaneously through the "GATT Direct Access Function". This function allows communication with other manufacturers' Bluetooth modules.

FWM7BLZ20

Item		Specifications
Part number		FWM7BLZ20
Antenna		Pattern antenna
Bluetooth technology		Conforms to *Bluetooth* Core Specification Version 4.2 (single mode low energy radio)
RAM		64KB
Transmit power		+4 dBM max.
Receiver sensitivity		-94 dBM typical
Interface		UART, SPI, GPIO, SWDCLK, SWIDO, nRESET, TWI, ADC
Crystal oscillator		Embedded
Operating temperature		-40ºC to +85ºC
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

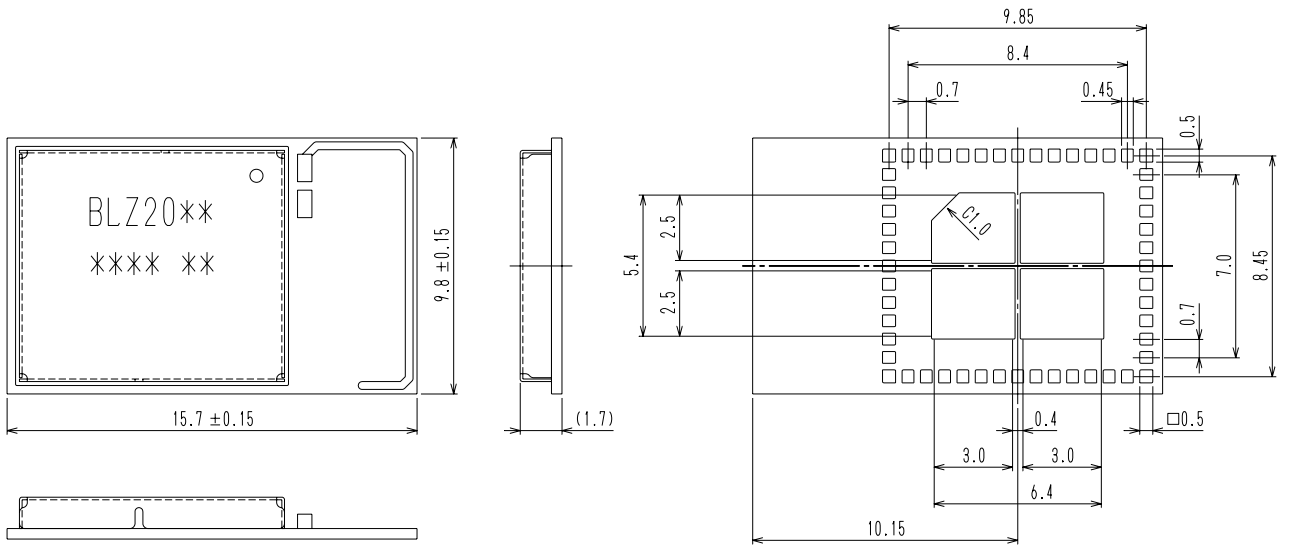
Note: *Bluetooth* SIG registration is required to use this module's QDID.

Evaluation kit

Part number	Details
FWM7BLZ20-EF2-KIT-2	Evaluation kit
Contains:	
- MBH-FUJI2-E1 (USB cable is included)	Evaluation board
- FWM7BLZ20-DAU2-EF2	Module mounted on daughter board

■ Dimensions

FWM7BLZ20



Unit: mm

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