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 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.

Evaluation kit

<table>
<thead>
<tr>
<th>Part number</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>FWM7BLZ20-RED2-1-KIT-2</td>
<td>Evaluation kit</td>
</tr>
<tr>
<td></td>
<td>Contains:</td>
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<td></td>
<td>- MBH-FUJI2-E1 (USB cable is included)</td>
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<td></td>
<td>- FWM7BLZ20-DAU2-DEF2 Module mounted on</td>
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<td></td>
<td>daughter board</td>
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</tbody>
</table>

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 | -40°C to +85°C
Operating voltage | 1.7 ~ 3.6VDC
Power consumption | 5.3mA typical (at 0dBm)
Power consumption Rx 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.
Dimensions

FWM7BLZ20

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