

BB1735-46

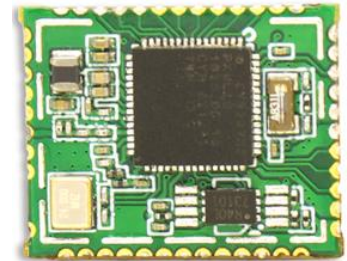
Bluetooth 5.0 Module, BR/BLE, External antenna, no shield cover,
384KB RAM, 4 Mbit SPI flash,
Max 12 dBm (>100m), High speed UART 4Mbps, SIG Mesh, Alexa Gadgets



High-performance Wireless Modules and Solution Provider

DESCRIPTIONS

This module is designed around Cypress® CYW20735B1, a Bluetooth 5.0 compliant, 96 MHz Cortex™ M4 core, ultra-low-power SoC. This module has built in libraries to support full features of Bluetooth SIG BLE Mesh protocol. Its 384KB RAM and 4 SPI Mbit flash size support all node roles defined as Friend, Proxy, Relay, or Low Power nodes. It can also support advanced features including provisioning over mesh, OTA over mesh. Together with the module, an iOS or Android phone App can be provided together with the module to demonstrate typical SIG mesh lighting control features.



FEATURES

- Complies with Bluetooth core specification V5.0 with LE 2-Mbps support
- Supports Basic Rate (BR) and Bluetooth Low Energy (BLE)
- Supports BLE HID over GATT (HOGP) profile V1.0
- Supports Bluetooth Device ID profile version 1.3
- Supports Generic Access Profile (GAP)
- Supports Adaptive Frequency Hopping (AFH)
- Auxiliary ADC with up to 15 analog channels
- Programmable 8 × 8 key-scanning matrix
- BLE Mesh Friend, Proxy, Relay, or Low Power nodes
- BLE Mesh feature: provision over mesh
- BLE Mesh feature: Over-the-Air (OTA) upgrading over mesh
- Companion IOS and Android APP supporting different lighting controls scenario

APPLICATIONS



Mesh for Kitchen



Mesh for Grow Lamps



Mesh for Smart Building



100m Long Distance Connection



Amazon gadgets

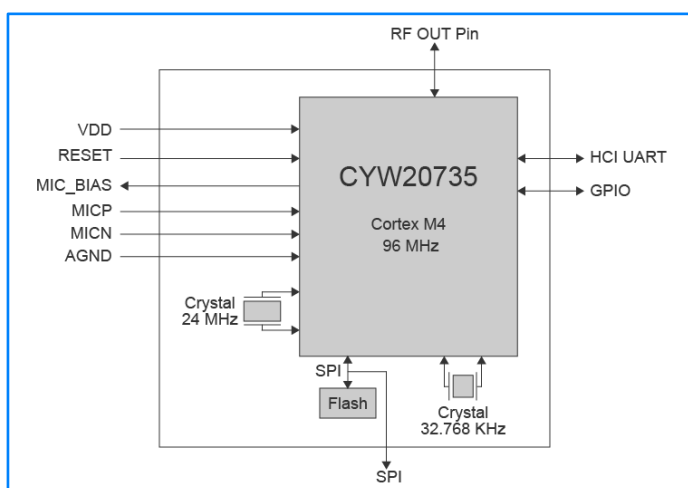


Mesh for Lighting

MODULE CHARACTERISTICS

Category	Description
Module Design	External antenna, No shield cover,
Module Size	15.2x 18.8 x 1.7mm
CPU/RAM/Flash	ARM-M4F 96Mhz ,384KB RAM, 4 Mbit flash
Frequency range	2402MHz – 2480Mhz
RX sensitivity	-91.5dBm
Class 1:GFSK TX Power	Typical 10dBm ,Max 12dBm
Power control step	4dBm(Typical)
BLE RX sensitivity	-94.5dBm (GFSK,0.1%,1Mbps)
BLE TX power	Typical 9dBm ,Max 12dBm
Power Supply Voltage (VDD)	1.75~3.6V
Configurable Interface	UART, SPI, 6×PWM
Operating Temperature	-30 °C ~ +85 °C
Application	SIG Mesh, Alexa Gadgets, BLE Device/Client (1 to 4),Apple MFi
Certifications	BQB,REACH

BB 1735-46 BLOCK DIAGRAM



ORDERING INFORMATION

Part Number	Pin/Package

▶▶▶ GET STARTED AT



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