

AB1602 Product Brief

BT4.2 Low Energy, Single Mode Controller

Product Overview

AB1602 is a low-power, single-chip Bluetooth Low Energy Single mode controller. It integrates a low-power physical layer, a link controller with a security engine. It supports the standard HCI interface which is able to connect to different MCUs for varies applications. The SPI and UART interface are used for connecting to external host MCU and the Bluetooth profiles are implemented on the host MCU as well.

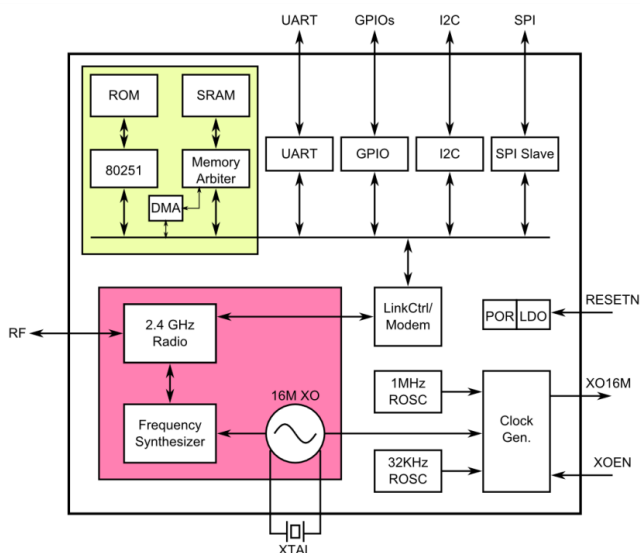
Key Features

- Integrated 1.4V~3.6V LDO regulator
- Support standard HCI interface
- Wide-spread 16MHz crystal support
- AES128 encryption and decryption
- RoHS Compliant
- Package QFN 4x4 28 pin

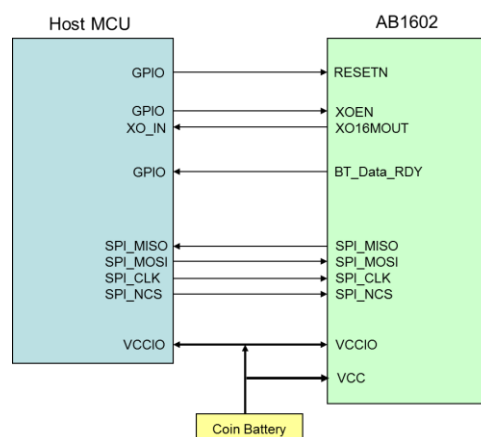
Applications

- Sports and Fitness Devices
- Smart Watch
- Home Automation Devices
- Health Care Devices

Block Diagram



Application Block Diagram



Specifications

Standard	Bluetooth v4.2 Single Mode Controller
Frequency Band	2.4GHz ISM
Bluetooth Profile	ANP v1.0 FMP v1.0 PXP v1.0 HOGP v1.0 CSCP v1.0 HRP v1.0 RSCP v1.0
Output Power	Typical 4 dBm
Sensitivity	-93 dBm
RAM	8KB
IC Package	QFN 4x4 28 pin
Physical Intefaces	UART, SPI
Temperature Range	-40 - 85°C
Power Consumption	Peak Tx/Rx : 16mA (1.5V) Sleep : 4 uA Deep Sleep : 1uA

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