

1. INTRODUCTION

FSC-BT826 is a fully integrated Bluetooth module that complies with Bluetooth 4.2 dual mode protocols (BR/EDR/BLE). It supports SPP, BLE, ANCS, iBeacon, profiles. It integrates Baseband controller in a small package (Integrated chip antenna), so the designers can have better flexibilities for the product shapes.

FSC-BT826 can be communicated by UART port. With Feasycom's Bluetooth stack, Customers can easily transplant to their software. Please refer to Feasycom stack design guide.

1.1 Block Diagram

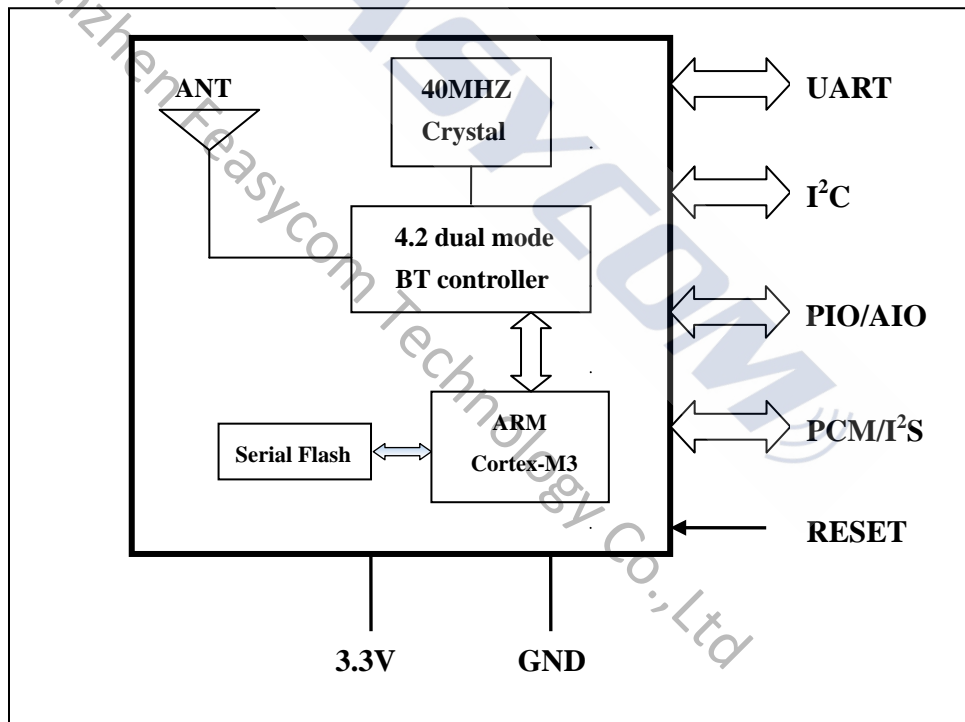


Figure 1

1.2 Feature

- ◆ Fully qualified Bluetooth 4.2/4.0/3.0/2.1/2.0/1.2/1.1
- ◆ Postage stamp sized form factor.
- ◆ Low power.
- ◆ Class 1.5 support (high output power)
- ◆ The default UART Baud rate is 115.2Kbps and can support from 1200bps up to 921Kbps.
- ◆ UART, I²C, PCM / I²S data connection interfaces.
- ◆ Support the OTA upgrade.
- ◆ Bluetooth stack profiles support: SPP, HID, MAP, and all BLE protocols.

1.3 Application

- ◆ Smart Watch and Bluetooth Bracelet
- ◆ Health & Medical devices
- ◆ Wireless POS
- ◆ Measurement and monitoring systems
- ◆ Industrial sensors and controls
- ◆ Asset Tracking

2. GENERAL SPECIFICATION

General Specification	
Chipset	Realtek RTL8761
Product	FSC-BT826
Dimension	13mm x 26.9mm x 2mm
Bluetooth Specification	Bluetooth V4.2 (Dual Mode)
Power Supply	3.3 Volt DC
Output Power	5.5 dBm
Sensitivity	-82dBm@0.1%BER
Frequency Band	2.402GHz -2.480GHz ISM band
Modulation	FHSS,GFSK,DPSK,DQPSK
Baseband Crystal OSC	40MHz
Hopping & channels	1600hops/sec, 1MHz channel space,79 Channels(BT 4.2 to 2MHz channel space)
RF Input Impedance	50 ohms
Antenna	Integrated chip antenna
Interface	Data: UART, I ² C, PCM / I ² S
Profile	SPP, GATT(BLE Standard) MFI,Airsync,ANCS, iBeacon, MAP(optional),OTA(optional)
Temperature	-20°C to +70 °C
Humidity	10%~95% Non-Condensing
Environmental	RoHS Compliant

Table 1