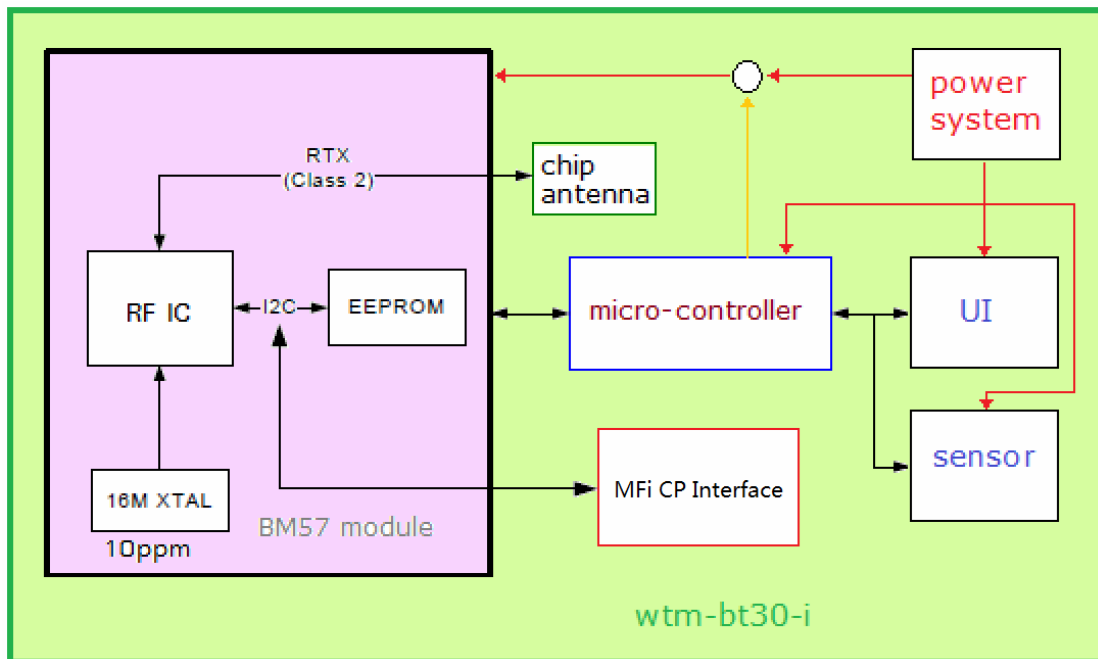
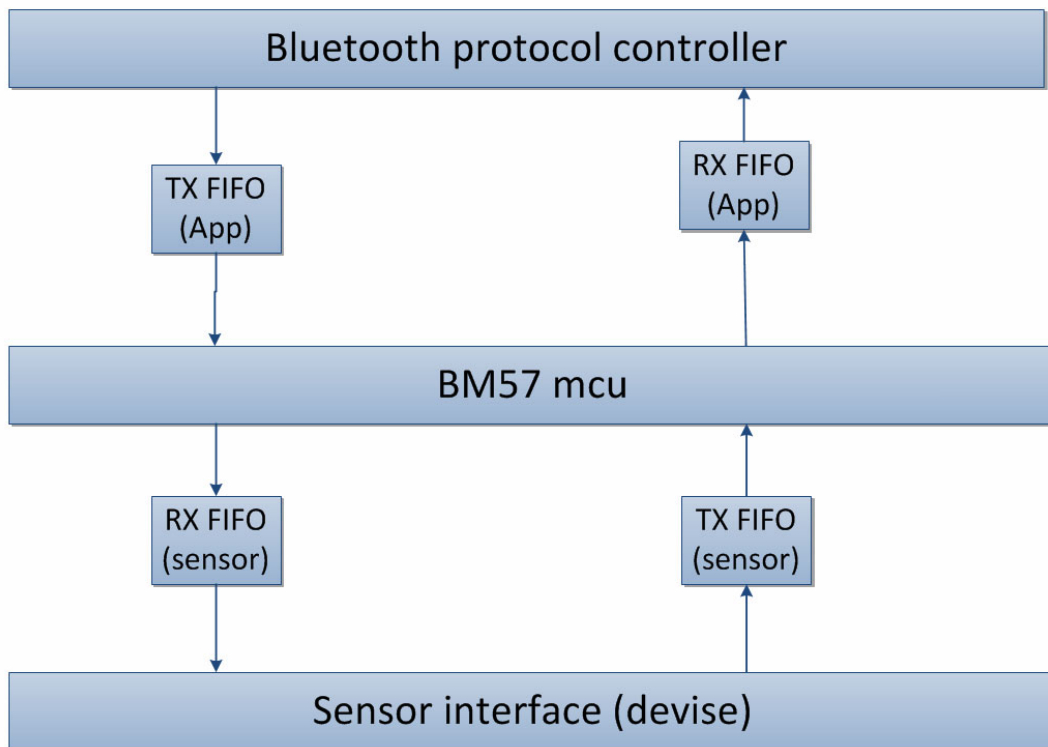


Operational description

The Bluetooth communication module of WTM_BT30_I is BM57SPP02MC2 produced by ISSC. Block diagram of the system as below:



There is two main components in BM57 module , Bluetooth protocol controller and BM57 mcu. The data transmission between blue controller , BM57 mcu and our MCU . Block diagram of the system as below:



According to the block diagram, the RF specification is based on BM57SPP02MC2 and chip antenna. Product RF specifications as below:

Product

wireless thermometer

Model

WTM-BT30-I

Power Supply

Li-ion battery, DC3.7~4.2V

Standard

Bluetooth protocol compliant. This product only supports 1Mbps data rate from GFSK modulation without 2M/3M data rate function.

Frequency Band

2402-2480 MHz

Number of Channels

79 x 1MHz channels

Transmit Power

0~2 dBm

Receiver Sensitivity

GFSK typical -90dBm

Antenna Specification

Omni-directional in azimuth

Peak Gain 0.5dbi

Polarization Linear

Wireless Operating Range

Indoors: Up to 328 feet (100 meters)

Outdoors: Up to 1,312 feet (400 meters)