



Product Overview

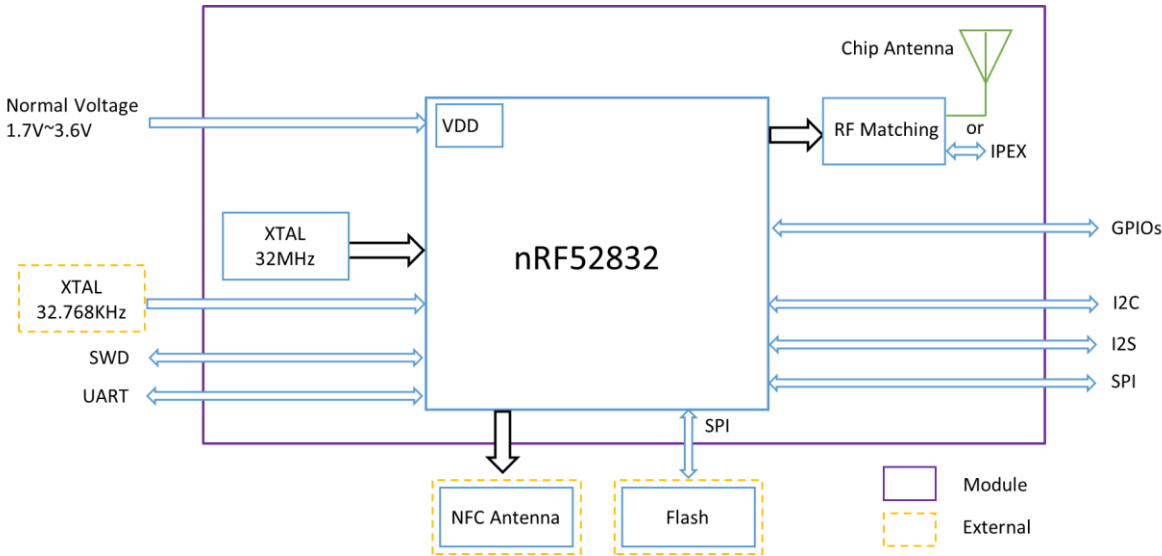
BT5X series is a LGA type Bluetooth 5.3 module based on Nordic nRF52832 SoC solution, which can be easily SMT on PCB for easy production, and the cost can be lower than design-in SoC at any quantity. It is a full feature module with all 32 GPIOs of nRF52832 accessibility. The inductors for DC-DC converted integrated and with 2 options for either chip antenna or MFH4 for selection.

Key Feature

- **Bluetooth 5.3 (2.4 GHz transceiver)**
- **Support Bluetooth mesh (2Mbps)**
- **ARM Cortex-M4F 32-bit processor with FPU, 64MHz**
- **Internal 512KB flash and 64KB RAM**
- **Over-the-air (OTA) firmware update**
- **Supported data rates:**
 - Bluetooth 5.3 : 2Mbps (high throughput), 1Mbps
- **Support NFC-A tag**
- **Integrated DC-DC converter**
- **32 General purpose I/O pins** include the following:
 - 1x UART (CTS/RTS) with EasyDMA
 - Up to 3x SPI masters or slaves
 - Up to 2x I2C compatible 2-wire masters/slaves
 - 1x I2S with EasyDMA
 - Type 2 NFC-A tag

BT5XLCANI01 chip antenna	BT5XLEXNI02 MHF4 connector
	

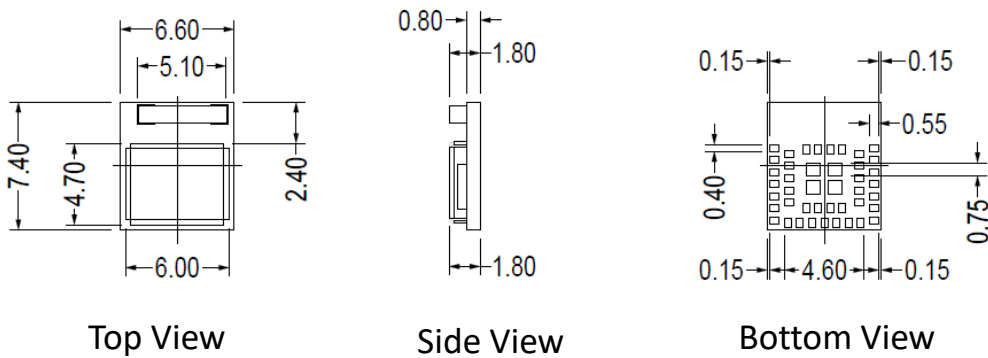
Block Diagram



Technical Specifications

Chipset	Nordic nRF52832
Host Interface	UART
Operating Frequency	2.4GHz band
Transmit Power	Max. +4dBm @ BLE
Receiver Sensitivity	Min. -96dBm @ BLE 1Mbps
Current Consumption	Max. Tx @ +4dBm: 7.5mA, Rx: 5.4mA, Sleep: 1.6uA @ BLE 1Mbps
Form Factor	LGA 43 pins
Antenna	Chip antenna (BT5XLCANI01) MHF4 connector (BT5XLEXNI02)
Operating Voltage	1.7 to 3.6V
Operating Temperature	-40 to 85°C
Storage Temperature	-40 to 125°C
Certifications	FCC, IC, CE, TELEC

BT5XLCANI01 Dimension : 6.6mm x 7.4mm x 1.8mm (± 0.1mm)



BT5XLEXNI02 Dimension : 6.6mm x 8.0mm x 1.8mm (± 0.1mm)

