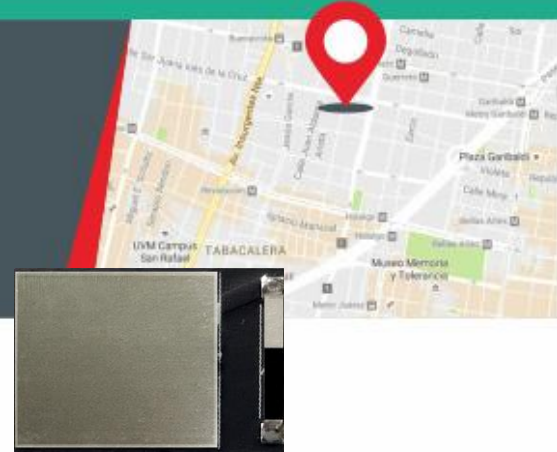


# Module Series

Bluetooth® 5.0 Module



## ITM-9420

- Bluetooth® 5, IEEE 802.15.4-2006, 2.4 GHz transceiver
- ARM® Cortex®-M4 32-bit processor with FPU, 64 MHz
- ARM® TrustZone® Cryptocell 310 security subsystem
- Secure erase / Flexible power management
- 1 MB flash and 256 KB RAM
- Advanced on-chip interfaces

- Nordic SoftDevice ready with support for concurrent multiprotocol
- 12-bit, 200 ksps ADC-8 configurable channels with programmable gain
- 64 level comparator / Temperature sensor
- 15 level low-power comparator with wake-up from System OFF mode

ITM-9420 InstantFind® Module is an ultra-low-power Bluetooth Module (long distance/ultra-low power consumption). It transmits once every 2 seconds and only requires < 0.08mW. It can replace any Bluetooth Module on the market. Provide original Bluetooth functions and services.

This module features a fully integrated 2.4GHz radio transceiver and baseband processor for Bluetooth 5.0 applications. It can be used as a standalone application-specific communication processor or as a wireless data link in hosted MCU systems where ultra-low power is critical. It supports flexible memory architecture for storing profiles, stacks and custom application codes, and can be updated using Over-The-Air (OTA) technology.

ITM-9420 module uses Nordic nRF52840 BLE chipset. It combines the excellent performance of a leading RF transceiver with a low-power ARM Cortex-M4 and rich powerful supporting features and peripherals. It also contains 256KB RAM, and 1MB flash memory.

### General Specification

|                |  |
|----------------|--|
| Main Chip      | SCLCI04M01   |
| Type           | BLE Module   |
| Memory         | 1 MB+2MB flash and 256 KB RAM  |
| Modulation     | Bluetooth 5 (2Mbps/1Mbps/500kpbs/125kpbs)<br>IEEE 802.15.4-2006 (250kpbs)<br>Proprietary 2.4 GHz (2Mbps/1Mbps) |
| Host Interface | USB/UART/SPI   |
| Application    | Low-power Wireless IOT Product   |
| Antenna_Type   | On-board chip antenna  |
| Tx Power       | 28.0 dBm   |
| Rx Sensitivity | LE 1Mbps: -95 dBm<br>LE 2Mbps : -92 dBm<br>LE 125Kbps: -103 dBm<br>LE 500Kbps: -99 dBm                         |
| Operation Temp | -40~85°C   |
| Dimension      | 10.5mm(L)*15.5mm(W)*1.9(H) mm  |
| Power Supply   | 3.3VDC   |

### What is InstantFind®?

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