

ISP2454

Product Sheet

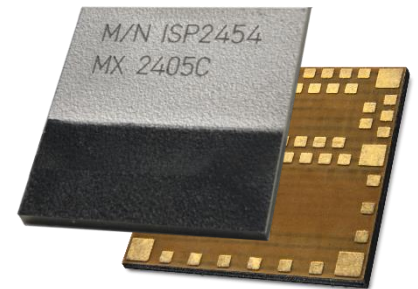


Bluetooth 5.4 Low Energy Module

Supporting Bluetooth Mesh, Thread and Matter

With built-in MCU & Antenna

This ultra-compact LGA module, 8 x 8 x 1 mm, is based on the ultra-low power nRF54L15 chip that offers a multi-protocol radio and advanced security features. With its powerful Cortex-M33 processor, expanded memory and new set of peripherals, combined with Insight SiP capability for best-in-class antenna design, this module provides the perfect solution for drop-in Bluetooth connectivity. It is also a direct upgrade to the ISP1507 and ISP1807 series with pin-to-pin compatibility.



Key Features

- Bluetooth Mesh, Thread, Matter
- 8 x 8 x 1 mm
- Integrated antenna
- Pin compatibility with 1507 / 1907
Core compatibility with ISP1807
- nRF54L15 Nordic Chip (22nm process node)
- 1xArm Cortex-M33 128MHz
- NVM 1.5MB / RAM 256 KB
- 32GPIOs
- -40° to +105°C
- +8dBm Tx power / -98dBm Rx sensitivity
- New 4Mbps data rate option for 2.4GHz proprietary protocol
- Rx energy saving enabling more compact batteries
- Peripheral set: SPI, UART, I2C, NFC
- PSA Certified Level 3



Applications

- Smart Home & Matter
- Industrial IoT
- Wellness & Medical Devices
- Advanced Wearables
- Remote & Gaming Controllers
- Virtual & Augmented Reality

Planned Certifications

- Bluetooth SIG certified
- CE certified
- FCC, IC certified
- TELEC, KCC certified
- RoHS and Reach compliant
- Conflict Mineral Declaration

