

# *ISM43341-L77 Dual Band Wi-Fi ... BT4.0 ... NFC Embedded SIP*

*Integrates 2.4 GHz / 5 GHz Wi-Fi, IEEE 802.11 a/b/g/n  
and Bluetooth 4.0 and Near Field Communications in a  
SINGLE system in a package.*

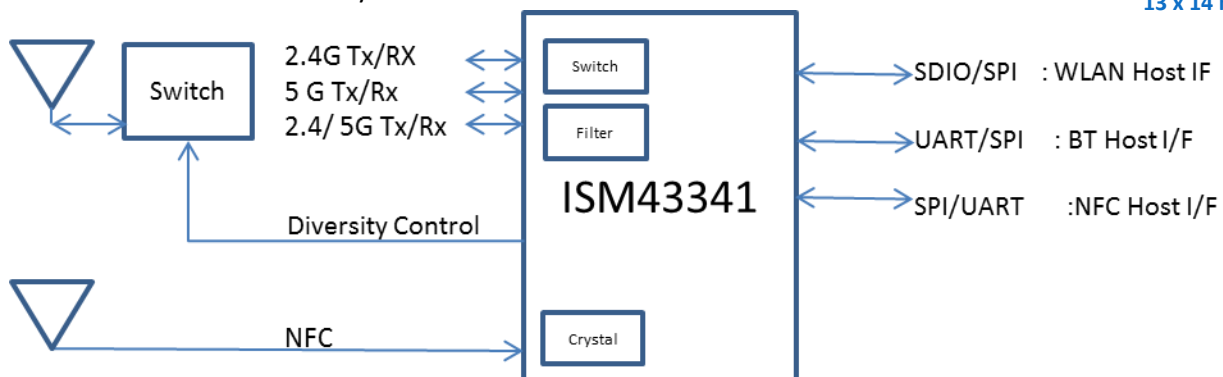
The Inventek ISM43341 SIP is designed based on Broadcom BCM43341 chipset solution. The ISM43341 single-chip quad-radio device provides the highest level of integration for a mobile or handheld wireless system, with integrated dual band (2.4 GHz / 5 GHz) IEEE 802.11 a/b/g and single-stream IEEE 802.11n MAC/baseband/radio and Bluetooth 4.0. It also integrates a low power NFC controller. The ISM43341 includes integrated power amplifiers, LNAs and T/R switches for the 2.4 GHz and 5 GHz WLAN bands, greatly reducing the external part count, PCB footprint, and cost of solutions.

## Features:

The ISM43341 implements the highly sophisticated Enhanced Collaborative Coexistence algorithms and hardware mechanisms, allowing for an extremely collaborative Bluetooth coexistence scheme along with coexistence support for external radios (such as cellular and LTE, GPS, WiMAX, and Ultra-Wideband) and a single shared 2.4 GHz antenna for Bluetooth and WLAN. As a result, enhanced overall quality for simultaneous voice, video, and data transmission on a handheld system is achieved.



13 x 14 mm



For the WLAN section, two host interface options are included: an SDIO v2.0 interface (including gSPI) and a High-Speed Inter-Chip (HSIC) interface (a USB 2.0 derivative for short-distance on-board connections). An independent, high-speed UART is provided for the Bluetooth host interface. Separate independent interfaces (I<sup>2</sup>C-compatible Broadcom Serial Control [BSC], SPI, and UART) for NFC are also provided.

#### IEEE 802.11x Key Features:

- Dual-band 2.4 GHz and 5 GHz IEEE 802.11 a/b/g/n
- Single-stream IEEE 802.11n supports for 20 MHz and 40 MHz channels provides PHY layer rates up to 150 Mbps for typical upper-layer throughput in excess of 90 Mbps
- Supports the 802.11n STBC (space-time block coding) RX and LDPC (low-density parity check) Tx options for improved range and power efficiency
- Supports a single 2.4 GHz antenna shared between WLAN and Bluetooth
- Supports standard SDIO v2.0 and gSPI (48 MHz) host interfaces
- Alternative host interface supports HSIC v1.0 (short-distance USB device)
- OneDriver™ software architecture for easy migration from existing embedded WLAN and Bluetooth devices as well as future devices

#### Bluetooth Features

- Support for ISO/IEC 18092, ISO/ IEC 21481,ISO/IEC 14443 Types A, B and B', Japanese Industrial Standard (JIS) (X) 6319-4, and ISO/IEC 15693 standards
- Bluetooth Core Specification 4.0
- Bluetooth Class 1 or Class 2 Transmitter
- Bluetooth Low energy support
- Bluetooth Smart Audio technology improves voice and music quality to headsets

#### Reader/ Writer

#### NFC Key Features:

- Support for ISO/IEC 18092, ISO/ IEC 21481,ISO/IEC 14443 Types A, B and B', Japanese Industrial Standard (JIS) (X) 6319-4, and ISO/IEC 15693 standards
- Reader/ Writer (R/W) mode
- Active and Passive Peer-to-Peer (P2P) mode
- Ability to recover card emulation personality data
- NFC Forum controller Interface (NCI) for host interface

#### ***Product Availability:***

Part Number	Description
ISM43341-L77	2.4 / 5G Wi-Fi, Bluetooth and NFC SIP Module – Commercial Temp