



Wi-Fi 6

Wi-Fi 6 plus Bluetooth System On **Module for Enterprise IoT Applications**







IM-100-MHF

IM-100-PAD

Self contained wireless module with on board Processor and Memory ideal for a wide range of applications

IM-100, based on NXP's RW610, is a highly integrated, low-power wireless MCU with an integrated MCU and Wi-Fi® 6 + Bluetooth® Low Energy (LE) 5.4 radios designed for a broad array of applications. IM-100 is a full-featured 1x1 dual-band (2.4 GHz/5 GHz) 20 MHz Wi-Fi 6 (802.11ax) module bringing higher throughput, better network efficiency, lower latency, and improved range over previous generation Wi-Fi standards.

Features

Low Development Costs and Fast Time to Market

Offload Main CPU

IM-100

Free up the Main CPU running wireless drivers, network stack & applications on IM-100's on board Processor.



No wireless driver development saves significant engineering development time!

Customer Product

■ Big Value with Firmware and Hardware Customization

Customers can customize the radio functionality and even build custom applications for their products by using NXP MCUXpresso's SDK, IDE, and configuration tools. Silex also offers a full range of hardware customization services, including baseboards and chassis.



Specifications



Embedded Wi-Fi

External Bridge/Access Point product

NXP RW610 (Arm® Cortex®-M33 260MHz)

Small Form Factor & Industrial Temperature **Support for a Broad Array of Applications**

- Size: 17mm x 18mm
- Operating Temperature: -45°C ~ +85°C



■ Enterprise-Grade Operation Modes in Firmware

With Ethernet/Serial/USB(RNDIS) to Wi-Fi bridging and Access Point mode functionality supported in the firmware, the IM-100 virtually becomes platform and OS agnostic. It makes adding wireless connectivity to a customer's product extremely easy with no development.

If you want to make your Windows laptop wireless:









Model

Chipset

ROM: 2MB (Add-on option) Memory RAM: 1.2MB (built-in) + Add-on option WLAN Spec IEEE 802.11a/b/g/n/ac/ax (1x1) 2.4/5GHz Bluetooth® LE v5.4 Bluetooth Spec IM-100-MHF: MHF x 1 Antenna Connector IM-100-PAD: None (Antenna Trace) Standard:LAN(100Base), USB2.0, (RNDIS), UARTx2 Interfaces Optional: SPI, SDIO, I2C, I2S WPATM / WPA2TM / WPA3TM Security IEEE 802.1X(EAP-TLS/EAP-TTLS/PEAP/EAP-FAST) Operating Voltage -40 ~ +85℃ Operating Temp -40 ~ +90℃ Storage Temp 17.0 × 18.0 × 2.65 mm Package Type 108 Pins (Surface Mount) USA, Canada, Europe, UK, Japan Certifications

IM-100-MHF / IM-100-PAD

* Specifications can be changed without notice.

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