# LM514 Wi-Fi 6 (802.11ax) and Bluetooth® 5.2 Industrial M.2 Card
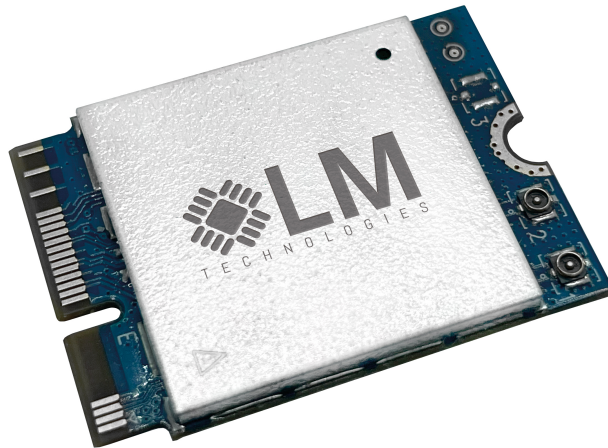## PCIe + USB Interface, M.2 2330 (A-E Key) Form Factor

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## Features

- Wi-Fi 6 (802.11 a/b/g/n/ac/ax)

- Bluetooth® 5.2
  (Backwards compatible with all previous Bluetooth versions)

- WPA, WPA2, WPA3, 802.1x and
  WEP (64bit & 128bit) encryption schemes

- MU-MIMO and data rate up to 1201Mbps

- Dual Mode simultaneous LE and BR/EDR support

- PCIe Interface for Wi-Fi, USB Interface for Bluetooth

- Operating temperature: -30°C to +85°C

- Supports Bluetooth adaptive power management

- 2.4~2.484 GHz and 5.0~5.8 Ghz

- M.2 2230 (A-E) Key form factor

- 2 x IPEX connector receptacle

- 30mm x 22mm x 2.25mm

- Linux and Windows 10 – 11 compatible

- See the website for this product's certifications.
  RoHS, REACH and WEEE compliant

## Overview

The LM514 module is a high-performance and highly intergrated Wi-Fi 6 solution that offers coexistence for Bluetooth® Dual Mode and Wi-Fi operations, allowing the host computer to wirelessly communicate with other Bluetooth and Wi-Fi enabled devices.

The LM514 is ideal for industrial applications, delivering both high throughput and low power consumption. The compact form factor saves valuable space within your product, making it ideal for laptops, desktops, medical devices and industrial PCs.

The LM514 supports IEEE 802.11a/b/g/n/ac/ax and Bluetooth 2.0, 2.1, 3.0, 4.0, 4.2 and 5.2 standards and is compatible with Linux (Kernel 5.4), Windows 10 – 11 platforms.

*Please contact our sales team for further information.

## LM514 Wi-Fi 802.11ax and Bluetooth® 5.2 M.2 Card
PCIe + USB Interface, M.2 2330 (A-E Key) Form Factor

### General Specification

| | |
|---|---|
| Wireless Standard | Wi-Fi:<br><br>802.11 a/b/g/n/ac/ax<br><br>Bluetooth:<br><br>2.1+EDR/3.0/4.0/4.2/5.2 - BR/EDR and Low Energy |
| Module Type | M.2 Card |
| OS Compatibility | Linux, Windows 10 – 11 |
| Security | Wi-Fi:<br><br>WPA, WPA2, WPA3 , WEP (64bit & 128bit), TKIP, AES, 802.1x<br><br>Bluetooth:<br><br>Secure Simple Paring |
| Chipset | Realtek |
| Antenna | 2 x IPEX Connectors |
| Interfaces | Wi-Fi: PCIe, Bluetooth: USB 2.0 |
| Tx Output Power | Wi-Fi:<br><br>24GHz<br><br>17 dBm – 802.11b@11Mbps<br><br>15 dBm – 802.11g@54Mbps<br><br>14 dBm – 802.11n@MCS7_HT20<br><br>14 dBm – 802.11n@MCS11_HT40<br><br>5GHz<br><br>14 dBm – 802.11a@54Mbps<br><br>13 dBm – 802.11n@MCS7_HT20<br><br>12 dBm – 802.11n@MCS7_HT40<br><br>12 dBm – 802.11ac@MCS8_VHT20<br><br>11 dBm – 802.11ac@MCS9_VHT40<br><br>11 dBm – 802.11ac@MCS9_VHT80<br><br>12 dBm – 802.11ax@MCS11_HE20<br><br>11 dBm – 802.11ax@MCS11_HE40 |
| | Bluetooth:<br><br>Typical 6 dBm |
| Frequency | 24~2484 GHz , 5.0~5.8 GHz |

## LM514 Wi-Fi 802.11ax and Bluetooth® 5.2 M.2 Card
PCIe + USB Interface, M.2 2330 (A-E Key) Form Factor

### General Specification (Continued)

#### Physical Characteristics

| | |
|---|---|
| Operating Temperature | -30°C to +85°C ambient temperature 5 to 90 % (non-condensing) |
| Storage Temperature | -40°C to +90°C ambient temperature 5 to 90 % (non-condensing) |
| Dimensions (L x W x H) | 25mm x 12mm x 2.25mm |
| Weight | TBA |
| Certifications | See the website for this product's certifications. |
| Compliance | RoHS, REACH and WEEE |