

## Product Brief

### Type 1LV Module

# Wireless connectivity module

## Shielded ultra-small dual band WiFi 11a/b/g/n+Bluetooth 5.0 module

### Features

- 2.4GHz & 5 GHz WiFi+Bluetooth module
- Network topology: AP and STA dual mode
- Chipset: Infineon (CYW43012)
- Processor: No
- NXP i.MX Linux and FreeRTOS, Infineon WICED
- FCC/IC “reference” certified

### High performance capabilities for IoT

- For industrial IoT, smart home, sensor network, gateway
- 802.11 a/b/g/n 78Mbps
- NXP i.MX Linux, Infineon WICED

### Description

Type 1LV is a small and high performance module based on Infineon CYW43012 combo chipset which supports WiFi 802.11a/b/g/n + Bluetooth 5.0 BR/EDR/LE up to 72.2Mbps PHY data rate on Wifi and 3Mbps PHY data rate on Bluetooth. 2Mbps LE PHY is also supported. The WLAN section supports SDIO v2.0 interface and the Bluetooth section supports high-speed 4-wire UART interface and PCM for audio data.

In IEEE 802.11ac-friendly mode, the WLAN operation supports MCS8 (256 QAM) in 20MHz channel for data rate up to 78Mbps.

The CYW43012 implements highly sophisticated enhanced collaborative coexistence hardware mechanisms and algorithms, which ensure that WLAN and Bluetooth collaboration is optimized for maximum performance.

Embedded IPv6 network stack for use with WICED SDK and TCP keepalive is handled internally, so that host processor can keep sleeping.

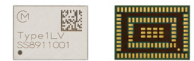
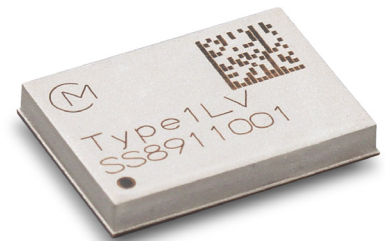
In addition to Bluetooth 5.0 2Mbps PHY support, all of optional Bluetooth 4.2 features, LE Secure Connections, LE Privacy 1.2 and LE Data Packet Length Extension, are supported.

Type 1LV module is packaged in an impressively small shielded form factor that facilitates integration into size- and power-sensitive applications such as IoT applications, handheld wireless system, gateway and more. RF matching, antenna design and regulatory certification are already taken care of and tested.

For more details see: <https://wireless.murata.com/type-1lv.html>



Part number: LBEE59B1LV



Actual size  
(10.0 x 7.2 x 1.4 mm)