## Type 1YM module

# Wireless connectivity module

## Shielded ultra-small dual band Wi-Fi® 11a/b/g/n/ac 2x2 MIMO + Bluetooth® 5.2 module

## Features

- 2.4GHz & 5 GHz Wi-Fi® + Bluetooth® module
- Network topology: uAP and STA dual mode
- Chipset: NXP 88W8997
- Processor: No
- Modulation: DSSS / CCK / OFDM
- FCC/CE/IC/TELEC 'reference' certified

## Flexible solution for IoT

- For Industrial IoT, smart home, audio/video/voice, gateway
- 802.11 a/b/g/n/ac 2x2 MIMO 866Mbps
- NXP i.MX Linux, Android

## Description

Type 1YM is a small and very high performance module based on NXP 88W8997 combo chipset which supports Wi-Fi® 802.11a/b/g/n/ac 2x2 MIMO + Bluetooth® 5.2 BR/EDR/LE up to 866Mbps PHY data rate on Wi-Fi® and 3Mbps PHY data rate on Bluetooth®.

The WLAN section supports PCIe 3.0 interface, with optional support for SDIO 3.0 and USB 3.0 interfaces. The Bluetooth® section supports high-speed 4-wire UART interface (optional support for USB/SDIO) and PCM for audio data.

The 88W8997 implements highly sophisticated enhanced collaborative coexistence hardware mechanisms and algorithms, which ensure that WLAN and Bluetooth® collaboration is optimized for maximum performance.

In IEEE 802.11ac mode, the WLAN operation supports rates of MCS0 - MCS9 (up to 256 QAM) in 20MHz, 40MHz and 80MHz channels for data rate up to 866Mbps.

Type 1YM module is packaged in an impressively small form factor that facilitates integration into size- and power-sensitive applications such as IoT applications, handheld wireless system, gateway and more.

## More details:

- https://wireless.murata.com/type-1ym.html

- Size: 11.8 x 8.4 x 1.3mm

Actual size

### Type 1YM Specifications

| | |
|---|---|
| **Murata part number** | LBEE5XV1YM-574 |
| **Embedded Artists M.2 module P/N** | EAR00370 |
| **Technology** | Wi-Fi + Bluetooth |
| **Chipset** | NXP 88W8997 |
| **Wi-Fi specification** | 802.11 a/b/g/n/ac 2x2 MIMO |
| **Bluetooth specification** | 5.2 |
| **Frequency (GHz)** | 2.4 & 5 |
| **Hosted/Hostless architecture** | Hosted |
| **Software** | Linux, Android |
| **Wi-Fi interface** | PCIe, SDIO 3.0 |
| **Bluetooth interface** | UART |
| **MAX data rate - Wi-Fi (Mbps)** | 866 |
| **MAX data rate - Bluetooth (Mbps)** | 3 |
| **Interface voltage (V)** | 1.8 or 3.3 |
| **Operating temp. Range (°C)** | -30 to +85 |
| **Antenna configuration** | U.FL connected patch antenna |
| **Regulatory certification** | FCC/IC, CE, MIC |

Note: CE marking and declaration should be done by customer as a final product

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