

Wireless connectivity module

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

Features

- 2.4GHz & 5 GHz Wi-Fi® + Bluetooth® module
- Network topology: AP and STA dual mode
- Chipset: Infineon (CYW54591)
- Processor: No
- Modulation: DSSS / CCK / OFDM
- FCC/IC/CE/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 RSDB 866 Mbps
- NXP i.MXLinux

Description

Type 1XA is a small and very high-performance module based on Infineon CYW54591 combo chipset which supports Wi-Fi® 802.11a/b/g/n/ac 2x2 MIMO RSDB +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 v3.0 Gen 1 interface and the Bluetooth® section supports high-speed 4-wire UART interface and PCM for audio data.

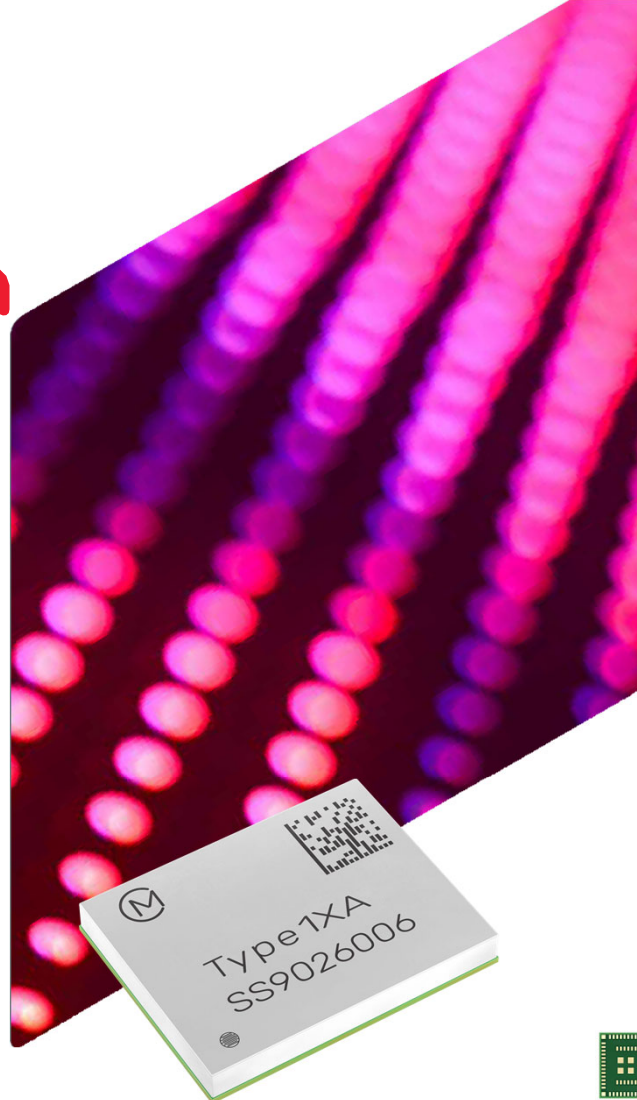
The CYW54591 implements highly sophisticated enhanced collaborative coexistence hardware mechanisms and algorithms, which ensure that WLAN and Bluetooth® collaboration is optimized for maximum performance.

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. Real Simultaneous Dual Band (RSDB) technology enables two unique data streams to run at full throughput simultaneously.

Type 1XA 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. It is also good for industrial applications with operating temperature up to +85C.

More details:

- <https://www.murata.com/products/connectivitymodule/wi-fi-bluetooth/overview/lineup/type1xa>



Size: 11.4 x 8.9 x 1.4mm



Actual size

Type 1XA Specifications

Murata part number	LBEE5XV1XA-540
Embedded Artists M.2 module P/N	EAR00373
Technology	Wi-Fi +Bluetooth
Chipset	CYW54591
Wi-Fi specification	802.11a/b/g/n/ac 2x2 MIMORSDB
Bluetooth specification	5.2
Frequency (GHz)	2.4 & 5
Hosted/Hostless architecture	Hosted
Software	Linux
Wi-Fi interface	PCIe
Bluetooth interface	UART
MAX data rate - Wi-Fi (Mbps)	866
MAX data rate - Bluetooth (Mbps)	3
Interface voltage (V)	1.8, 3.3
Operating temp. Range (°C)	-40 to +85
Antenna configuration	U.FL connected patch antennas
Regulatory certification	FCC/IC, CE, MIC

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