Type 1XL module

Wireless connectivity module

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

Features

- 2.4GHz & 5 GHz Wi-Fi® + Bluetooth®
- module Network topology: uAP and STA
- dual mode Chipset: NXP 88W9098
- Processor: No
- Modulation: DSSS / CCK / OFDMA
- 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/ax 2x2 MIMO 1200Mbps
- NXP i.MX Linux, Android

Description

Type 1XL is a small and very high performance module based on NXP 88W9098 combo chipset which supports Wi-Fi® 802.11a/b/g/n/ac/ax 2x2 MIMO + Bluetooth® 5.2 BR/EDR/LE up to 1200Mbps 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. The Bluetooth® section supports high-speed 4-wire UART interface (optional support for SDIO) and PCM for audio data.
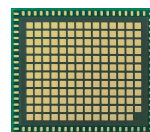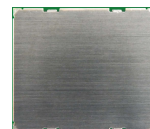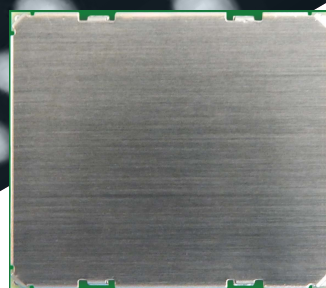
The 88W9098 implements highly sophisticated enhanced collaborative coexistence hardware mechanisms and algorithms, which ensure that WLAN and Bluetooth® collaboration is optimized for maximum performance. Dual 2x2 Wi-Fi operation is supported with implicit and explicit beamforming.

In IEEE 802.11ax mode, the WLAN operation supports rates of MCS0 - MCS9 (up to 1024 QAM) in 20MHz, 40MHz and 80MHz channels for data rate up to 1200 Mbps.

Type 1XL 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, video streaming solutions and more.

More details:

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

- Size: 19.1 x 16.5 x 2.1mm

Actual size

Type 1XL Specifications

Murata part number	LBEE5ZZ1XL-774
Embedded Artists M.2 module P/N	EAR00387
Technology	Wi-Fi + Bluetooth
Chipset	NXP 88W9098
Wi-Fi specification	802.11 a/b/g/n/ac/ax 2x2 MIMO
Bluetooth specification	5.2
Frequency (GHz)	2.4 & 5
Hosted/Hostless architecture	Hosted
Software	Linux, Android
Wi-Fi interface	PCIe 3.0 or SDIO 3.0
Bluetooth interface	UART
MAX data rate - Wi-Fi (Mbps)	1200
MAX data rate - Bluetooth (Mbps)	3
Interface voltage (V)	1.8 or 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

Contents are subject to change without notice.

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