

Product Brief

Type 2EL Module

Wireless Connectivity Module

Shielded ultra-small dual band
Wi-Fi® 802.11a/b/g/n/ac/ax +
Bluetooth® 5.3 + 802.15.4 Tri-Radio module

Features

- 2.4 GHz and 5 GHz Wi-Fi® + Bluetooth® + 802.15.4 module
- Network topology: uAP and STA dual mode
- Chipset: NXP IW612
- Processor: No
- Modulation: DSSS/CCK/OFDM
- FCC/IC/MIC "reference" certified, ETSI ready

Flexible Solution for IoT

- For Smart Home, Sensor Network, Audio/Video/Voice, Gateway
- 802.11 a/b/g/n/ac/ax 1x1 601 Mbps
- NXP i.MX Linux, Android, MCUXpresso/FreeRTOS

Description

Type 2EL is a small and very high-performance module based on NXP IW612 combo chipset which supports Wi-Fi® 802.11a/b/g/n/ac/ax + Bluetooth® 5.3 BR/EDR/LE + 802.15.4 up to 601 Mbps PHY data rate on Wi-Fi®, 3 Mbps PHY data rate on Bluetooth®, and 802.15.4 based features. The WLAN section supports SDIO v3.0 DDR50 interface and the Bluetooth® section supports high-speed 4-wire UART interface and PCM for audio data.

The IW612 implements highly sophisticated enhanced collaborative coexistence hardware mechanisms and algorithms, which ensure that WLAN, Bluetooth®, and 802.15.4 collaboration is optimized for maximum performance.

In IEEE 802.11ax mode, the WLAN operation supports rates of MCS0-MCS11 (up to 1024 QAM) in 20 MHz, 40 MHz and 80 MHz channels for data rate up to 601 Mbps.

Type 2EL 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.

More details: [Murata Type 2EL product page](#)



Size: 7.7 x 8.8 x 1.3 mm

Type 2EL Specifications	
Murata P/N	LBES5PL2EL-923
Embedded Artists M2 Module P/N	EAR00409
Technology	Wi-Fi + Bluetooth + 802.15.4
Chipset	NXP IW612
Wi-Fi Specification	802.11 a/b/g/n/ac/ax
Bluetooth Specification	5.3
Frequency (GHz)	2.4 & 5
Hosted/Hostless Architecture	Hosted
Software	Linux, Android, MCUXpresso/FreeRTOS
Wi-Fi Interface	SDIO 3.0
Bluetooth Interface	UART
MAX data rate – Wi-Fi (Mbps)	601
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 antenna
Regulatory Certification	FCC/IC, MIC ETSI test report is ready

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