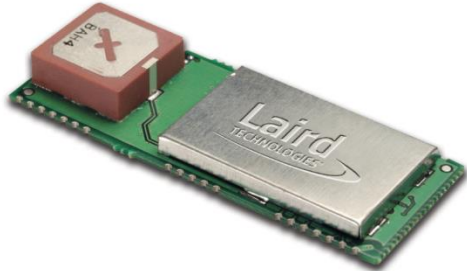# TRBLU24-00100
Embedded Bluetooth® HCI Module

The Laird Embedded Bluetooth® Module is specifically designed for applications that demand a robust and reliable Bluetooth connection. This product is designed with solder connections that allow the module to be mounted directly into your own designs and potted or enclosed within metal housing while exposing a high performance multilayer ceramic antenna.

Key Features 🅱 ✓RoHS

- Integrated antenna with up to 300 meter range
- Option for external antenna via u.FL variant
- Class 1 with +6 dBm transmit power (maximum)
- Current consumption less than 30 mA
- Version 2.0+ EDR Bluetooth
- Data transfer rates up to 3 Mbps
- Industrial -40°C to +85°C operating range
- Optimized for Windows CE
- USB or optional UART (H4, H5, BCSP)
- Piconet and Scatternet support
- Adaptive Frequency Hopping
- Wi-Fi coexistence support
- Bluetooth-approved
- Designed for rugged applications and potting
- Lead free – RoHS compliant

Benefits

- Fastest time to market
- Excellent range
- Rugged design
- Low power consumption
- Low cost of ownership
- Embedded system design
- Optimized for Microsoft Windows CE
- Supports encrypted data
- Industrial design for surface mount applications
- Flat mounting solder down board
- Potable without detriment to performance
- Extensive technical support

global solutions: **local** support.

USA: +1.800.492.2320
Europe: +44.1628.858.940
Asia: +852.2268.6567

wirelessinfo@lairdtech.com
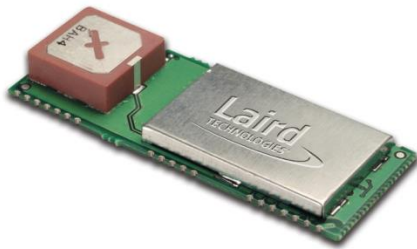www.lairdtech.com/bluetooth

The Host Controller Interface (HCI) is optimized to work with the Microsoft Windows CE embedded protocol stack and supports other HCI compliant Bluetooth stacks including Microsoft Windows XP Service Park 2 onwards. The interface allows the module access to the full range of features available from the Bluetooth version 2.0 specification from the CSR BlueCore BC4 chipset.

FEATURE	IMPLEMENTATION
Bluetooth®	Class 1
Frequency	2.402 – 2.480 GHz
Max Transmit Power	+6 dBm
Low Power	Hold, Sniff, Park
Receive Sensitivity	Better than -84 dB
Range	300 m (free space)
Interface	HCI over USB or optional UART
Lead Free	RoHS compliant
Physical Size	17.7 mm x 46.0 mm x 5.0 mm, 8 g
Bluetooth Qualified	Bluetooth 2.0+EDR
Current Consumption	Less than 36 mA
Temperature Range	-40 ˚C to +85˚ C
Audio	SCO and eSCO supported
Piconet and Scatternet	Supported
Field Upgrades	Supported

Ordering Information

TRBLU24-00100 Embedded Bluetooth HCI Module
TRBLU24-00100-NA Embedded Bluetooth HCI Module –uFL connector for external antenna

The details contained within the document are subject to change. Download the product specification from www.lairdtech.com/bluetooth for the most current specification.