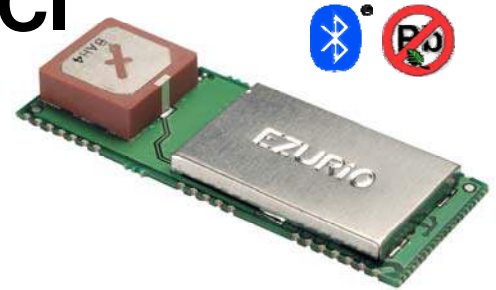# Embedded *Bluetooth*® HCI Module

Part No: TRBLU24 – 00100

The Ezurio Embedded *Bluetooth* Module is specifically designed for applications that demand a robust and reliable *Bluetooth* connection. This product has been 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
- Integrated antenna with up to 300 metre range
- Class 1 with +6dBm transmit power (maximum)
- Current consumption less than 30 mA
- Version 2.0+ EDR *Bluetooth*
- Data transfer rate up to 3Mbps
- -40°C to +85°C operating range
- Optimised for Windows CE
- USB or optional UART (H4, H5, BCSP)
- Piconet and Scatternet supported
- Adaptive frequency hopping
- Support Wi-Fi coexistence
- *Bluetooth* approved
- Designed for rugged applications and potting
- Lead free – RoHS compliant
- 2 year warranty

The HCI interface has been optimised to work with the Microsoft Windows CE embedded protocol stack and also supports other HCI compliant *Bluetooth* stacks including Microsoft Windows XP. The interface allows the module to access to the full range of features available from the *Bluetooth* version 2.0 specification from the latest CSR BlueCore BC4 chipset.
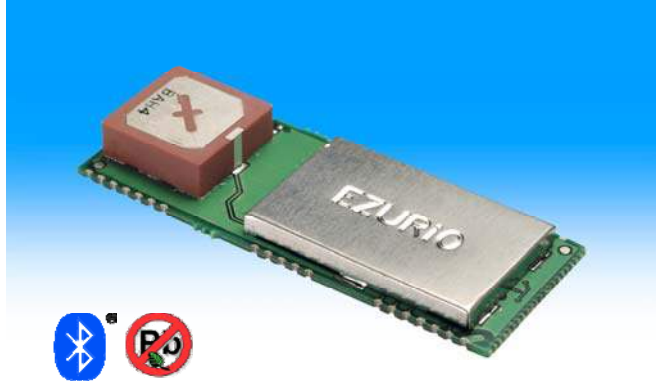
Key Benefits
- Fastest time to market
- Excellent range
- Rugged design
- Low power
- Low cost of ownership
- Flat mounting solder down board
- Pottable without detriment to performance

For further information please visit our website at www.ezurio.com
Alternatively contact: sales@ezurio.com - ☎+44 (0) 20 8938 1072
Bluetooth is a trademark owned by Bluetooth SIG, Inc., USA and licensed to EZURIO Ltd.

Embedded *Bluetooth* Module – HCI

Features

Features
Version 2.0+EDR *Bluetooth*
Adaptive Frequency Hopping
Supports Wi-Fi co-existence
Bluetooth qualified
Optimised for Microsoft Windows CE
Integrated antenna with up to 300m range
Surface mounted design
Low current consumption
Data rates up to 3Mbps (raw data rate)
Industrial Temperature range
Piconet, Scatternet and audio supported
Field upgradeable
2 Year warranty

Key benefits

Fastest time to market	Embedded system design	Supports encrypted data	Low power consumption
Lowest cost of ownership	Optimised for Microsoft Windows CE	Industrial design for surface mount applications	Extensive technical support

Overview of the technical specification

Feature	Implementation	Feature	Implementation
Bluetooth	Class 1	Physical Size	25 X 35 X 10mm, 8g
Frequency	2.400 – 2.485 GHz	*Bluetooth* Qualified	*Bluetooth* 2.0+EDR
Max Transmit Power	+ 6dBm	Current Consumption	Less than 36mA
Low Power	Hold, Sniff, Park	Temperature Range	-40°C to +85°
Receive Sensitivity	Better than -84dB	Audio	SCO and eSCO supported
Range	300m (free space)	Piconet and Scatternet	Supported
Interface	HCI over USB or optional UART	Field Upgrades	Supported
Lead Free	RoHS compliant		