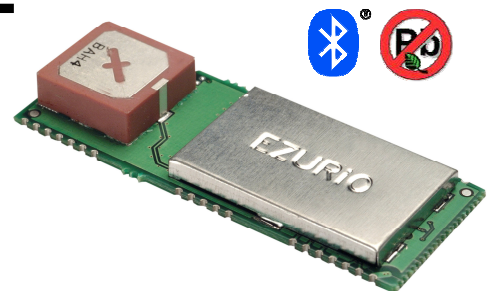# EZURiO

Embedded *Bluetooth*® AT Module

Part No: BISMSO2BI-01

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 a metal housing, while exposing a high performance multilayer ceramic antenna.

Key Features
- Integrated antenna with up to 250 metre range
- Class 1 with +6dBm transmit power (maximum)
- Current consumption less than 36 mA
- Version 2.0
- Fully integrated *Bluetooth* stack
- Comprehensive AT style interface
- -40°C to +85°C operating range
- Data transfer rate up to 300kbps
- Designed for rugged applications and potting
- Lead free – RoHS compliant
- Multipoint supported
- UART 3.0v interface
- Adaptive frequency hopping
- Field upgradeable
- 2 year warranty

As well as incorporating a fully approved *Bluetooth* protocol stack, the module includes a comprehensive AT style interface, which dramatically reduces the development time of applications from months to days. The UART interface allows the module to be connected any serial port giving access to the full range of features available from the *Bluetooth* version 2.0 specification.
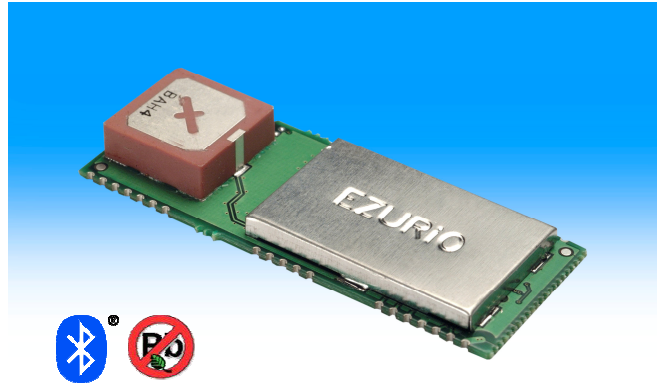
Key Benefits
- Fastest time to market
- Excellent range
- Rugged design
- Low power
- Low cost of ownership
- Flat mounting solder down board
- Pottable without detriment to performance

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 – AT

Features

Features
Version 2.0 *Bluetooth*
Adaptive Frequency Hopping
Supports Wi-Fi co-existence
Fully integrated *Bluetooth* stack
Integrated antenna with up to 250m range
Simple AT style command set interface
Surface mounted design
Low current consumption
Data rates up to 300 kbps
Industrial Temperature range
Wide ranging profile support: SPP, DUN and FTP
Multipoint supported
Field upgradeable over UART
2 Year warranty

Key benefits

Fastest time to market	Embedded system design	Supports encrypted data	Low power consumption
Lowest cost of ownership	Fully integrated Bluetooth stack	Robust design for surface mount applications	Extensive technical support

Overview of the technical specification

Feature	Implementation
Bluetooth	Class 1
Frequency	2.400 – 2.485 GHz
Max Transmit Power	+ 6dBm
Min Transmit Power	- 27dBm
Low Power Sniff	2.5mA typical
Receive Sensitivity	Better than -84dB
GPIO	6 x Digital (DTR can also be configured as I/O)
Range	300m (free space)
Serial Interface	3.0v UART
Serial Parameters	Default 9600,n,8,1 From 1200 to 921600bps DTR, DSR, RTS, CTS, DCD, RI DCE or DTE mode

Feature	Implementation
Physical Size	18 X 46 X 5.5 mm
Supply Voltage	3.3v – 7.0v
Current Consumption	Less than 36mA
Temperature Range	-40℃ to +85°
Interface Levels	3.0V
Multipoint	Supported
ADC	1 x 8bit
Audio	Support for dual slave PCM connections
Protocols	UART AT command set Multipoint
Lead Free	RoHS compliant