Laird TECHNOLOGIES®

Innovative **Technology**
for a **Connected** World

BISMS02BI
Embedded Bluetooth® AT Module

The Embedded Bluetooth® AT Module is designed for applications that demand a robust and reliable Bluetooth connection. This product is designed with solder connections that allow it to be mounted directly onto a main pcb. The integrated high performance, multilayer ceramic antenna is highly resistant to de-tuning, allowing great flexibility in positioning.

As well as incorporating a fully approved Bluetooth protocol stack, the module includes a comprehensive AT style interface that dramatically reduces the development time of applications from months to days.

The Bluetooth surface mount module is shipped with the powerful Laird Technologies Terminal Control Center software that allows simple configuration of the adapter for rapid product development. Combined with the Laird Technologies AT style interface, the development time required to add wireless connectivity is reduced from months to days.

KEY FEATURES

- Integrated antenna with up to 300 metre range
- Class 1 with +6dBm transmit power (maximum)
- Current consumption less than 36 mA
- Version 2.0 Bluetooth
- Fully integrated Bluetooth stack
- Audio supported through PCM connection
- Simple AT style command set interface
- -40°C to +85°C operating range
- Data transfer rate up to 300kbps
- Lead free – RoHS compliant
- Multipoint support
- Adaptive frequency hopping
- Field upgradeable
- 2 year warranty
- Supports Wi-Fi co-existence
- Fully approved end product – No approval cost
- Surface mounted design
- Wide ranging profile support: SPP, DUN and FTP
- HCI version available
- Field upgradeable over UART

BENEFITS

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

global solutions: local **support** ™

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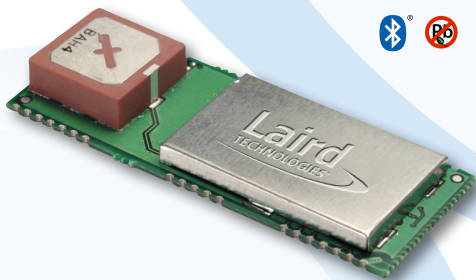| FEATURE	IMPLEMENTATION
Bluetooth®	Class 1
Frequency	2.402 – 2.480 GHz
Max Transmit Power	+6dBm
Min Transmit Power	-27dBm
Lowe Power Sniff	2.5mA typical
Receive Sensitivity	Better than -84 dB
Range	Up to 300 m (free space)
Serial Interface	3.0v UART
GPIO	6 x digital GPIO
Serial Parameters (UART version only)	Default 9600,n,8,1
	From 1,200 to 921,600 bps
	DTR, DSR, RTS, CTS, DCD, RI
	DCE or DTE mode
Current Consumption	Less than 36mA
Physical Size	18.0 x 46.0 x 5.5mm
Supply Voltage	3.3 V - 7.0 V
Lead Free	RoHS compliant
Temperature Range	-40°C to +85°C
Interface Levels	3.0V
Multipoint	Supported
Field Upgrades	Over UART
ADC	1 x 8bit
Protocols	AT command set (BISMS02BI)
	HCI (TRBLU24-0100)
Audio	Supported through PCM connection

ORDERING INFORMATION
TRBLU23-00200 Bluetooth Serial Module with integrated antenna
TRBLU23-00300 Bluetooth Serial Module with u.fl connector for external antenna
TRBLU24-0100 Bluetooth USB Module with HCI interface

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

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