

# ICM100-Series Bluetooth Modules

## Key Features

- Bluetooth v1.1 compliant
- Two power classes available: ICM101 (class 1), and ICM102 (Class2/3)
- Multiple interfaces for different applications; USB v1.1, UART and PCM
- Easy to use, plug&play
- Utilizes Bluetronics EmbeddedRF technology with integrated filter, switch, baluns, decoupling etc.
- HCI layer software interface
- Wide power supply range 2.7-3.6 V
- Two mounting alternatives available:
  - Surface mountable LGA (-L)
  - Socket connector (-C)

## Suggested Applications

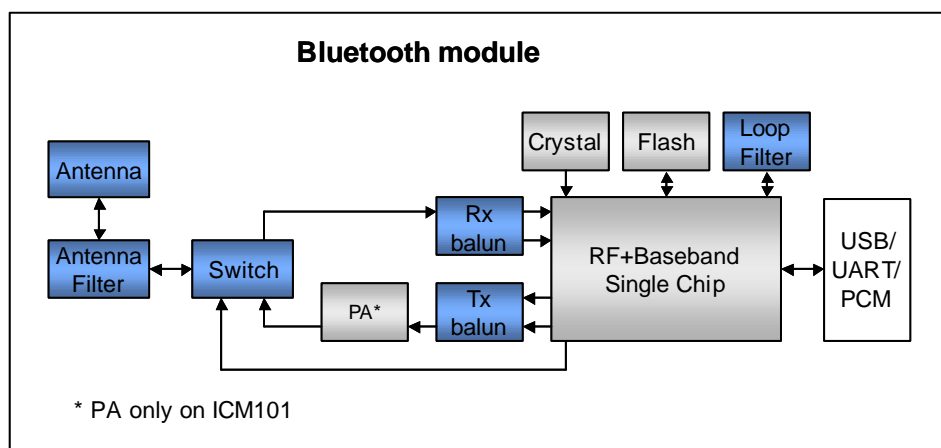
- Computers and peripherals
- Access points
- Handheld devices and accessories

## The ICM100-Series

Bluetronics ICM100 is a series of Bluetooth version 1.1 compliant modules. The modules are available in two power classes ICM101 (class 1), and ICM102 (Class2/3). Each product is also available with two different mounting options, LGA (-L) and socket connector (-C).

## General Description

The module has multiple digital communication interfaces, USB (Full-speed, 12Mbit/s), UART (max. 921 kbit/s) and PCM (A-Law,  $\mu$ -Law or CVSD codec formats). It provides a short-range wireless communication link in the free ISM band (2.4 GHz). The module includes everything from the antenna to the digital interfaces. The software interface is according to the HCI transport layer in the Bluetooth specification. The module is ideal as an add-on to an embedded system or as a USB dongle.

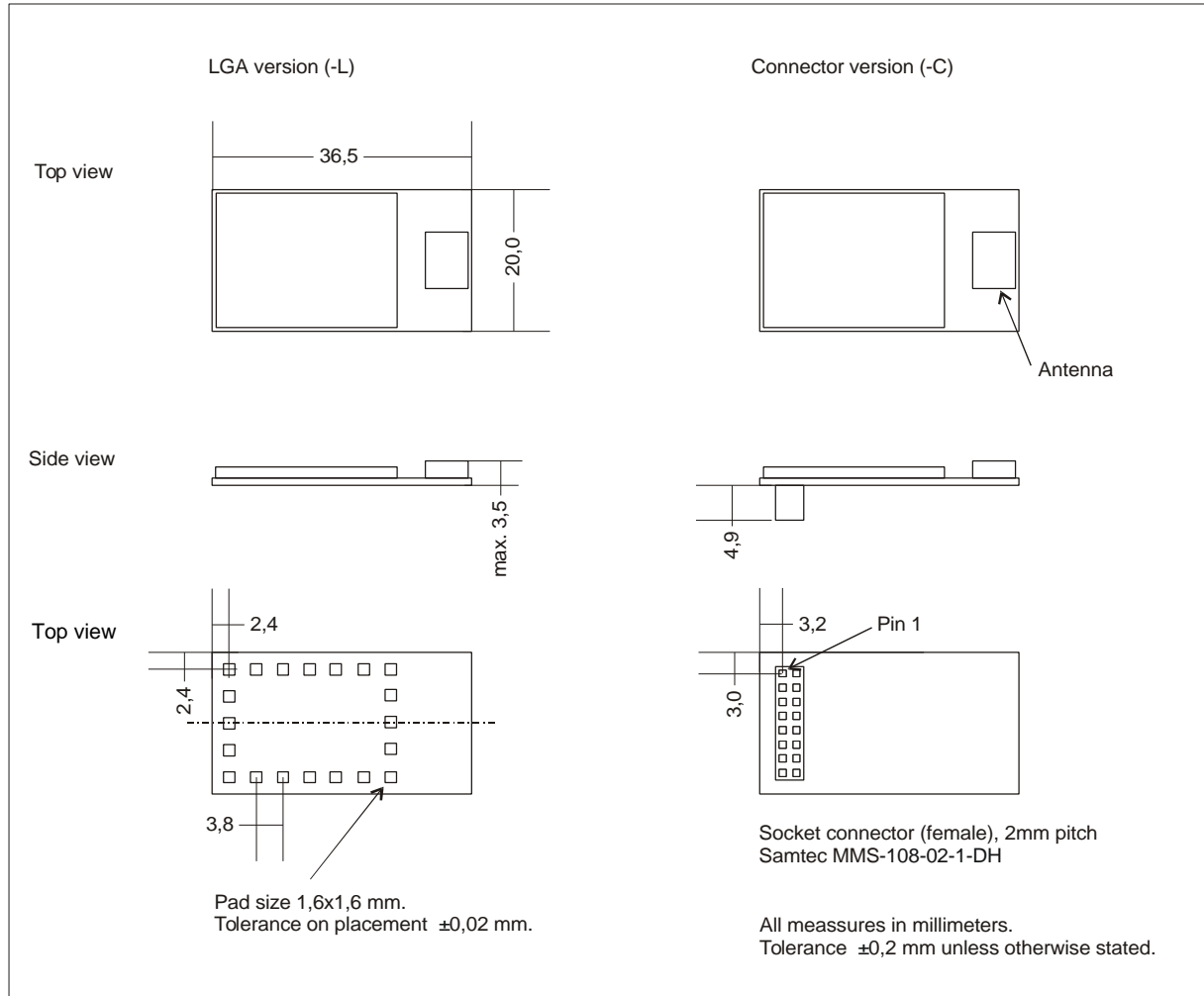


## Electrical Characteristics

Parameter	Condition	Symbol	Min	Typ	Max	Unit
<b>Power Supply</b>						
Supply voltage	Non-USB configuration	$V_{DD}$	2.7	3.3	3.6	V
Supply voltage	USB configuration (to comply with signal levels according to USB spec.)	$V_{DD}$	3.0	3.3	3.6	V
<b>Receiver</b>						
Sensitivity				-81		dBm
<b>Transmitter</b>						
Output power	ICM101			14		dBm
	ICM102			0		dBm
<b>Antenna</b>						
Average Gain				-1		dBi

# ICM100-Series Bluetooth Modules

## Mechanical Specification



## Ordering Information

Order Number	Connector	Description
<b>Bluetooth Modules</b>		
ICM101-L	LGA	Bluetooth class 1 module.
ICM101-C	Socket Connector	Bluetooth class 1 module.
ICM102-L	LGA	Bluetooth class 2/3 module.
ICM102-C	Socket Connector	Bluetooth class 2/3 module.
ICM100-Dev		Development kit

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