

## Bluetooth™ MCM Solution

### Key Features

- Complete Bluetooth function
- Output power class 2
- Qualified for Bluetooth 1.0b + (CE)
- FCC and ETSI type approved
- Internal crystal oscillator
- Built-in RF shield
- Supports Bluetooth protocol layers up to HCI
- Point to Point connection

### Suggested Applications

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



### Description

The Bluetooth module from Ericsson Microelectronics is a complete solution for fast implementation, cutting your time-to-market. It is a short-range, compact and low-cost radio/baseband module that can be implemented in any kind of electronic device.

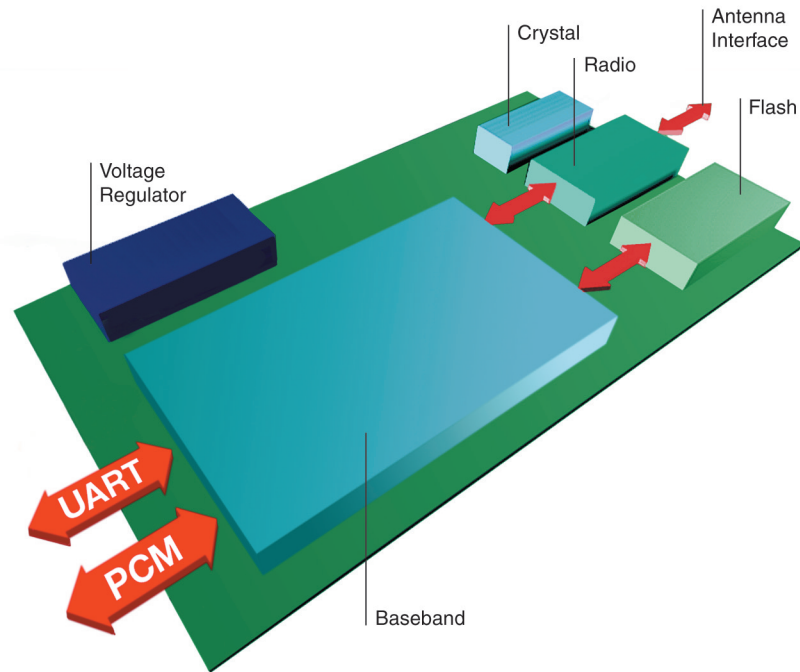
The module includes a baseband processor, Bluetooth Radio, application and antenna interfaces and supporting circuitry, together with basic Bluetooth software for signalling at HCI (Host Control Interface) level. As the module is a generic product, it can be used for many different types of application that require a

Bluetooth capability. The module supports both voice and data transmission.

Communication is carried out using the module's built-in high-speed UART or PCM interface. The module is a power class 2 Bluetooth device, and is qualified for version 1.0b + critical errata of the Bluetooth specification. Since it is also type-approved for global use (including FCC/ETSI) on delivery you can be sure that cost and time for qualification and type approval is kept to a minimum.

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## Block diagram



## External interfaces to the module

There are two ways of communicating from the host to the module: 1. UART and 2. PCM. UART communication is achieved using HCI.

### 1. UART

Signals supported are Rx, Tx, RTS and CTS. The module is DCE, Data Circuit-terminal Equipment. The maximum UART speed is 460.8 kbs.

### 2. PCM

The PCM data can be: Linear PCM 13-16 bit,  $\mu$ -law 8 bit, A-law 8 bit. The PCM sync is 8 kHz and the PCM clock 200 kHz – 2 MHz.

## Antenna interface

50  $\Omega$  Bluetooth ISM band antenna (2.4 -2.5 GHz).

## Software

The module includes software for communication at HCI-level. Included layers are BB (Base Band), LM (Link Manager) and HCI. Additional software (Bluetooth layers L2CAP and RFCOMM) is available separately in a generic form, i.e. to be adapted to various operating systems.

## Module size

The dimensions of the Bluetooth module are:  
**Length = 33 mm Width = 17 mm Height = 3 mm**

## Ordering information

This Bluetooth module from Ericsson Microelectronics may be ordered as: ROK 101 008.

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**Product Brief**

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