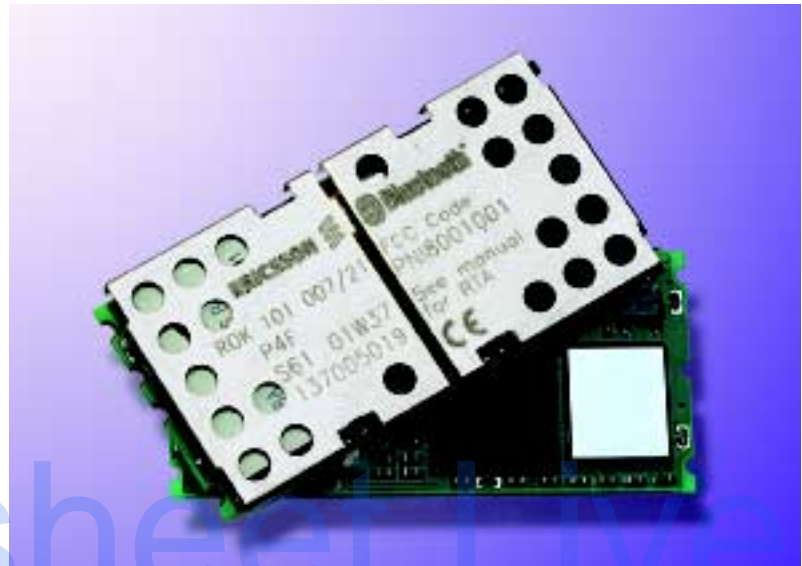# Bluetooth™
Multi Chip Module

Key Features

- Complete Bluetooth function
- Output power class 2
- Qualified for Bluetooth 1.1
- FCC and ETSI type approved
- Internal crystal oscillator
- Built-in RF shield
- Supports Bluetooth protocol layers up to HCI
- Point to Multipoint

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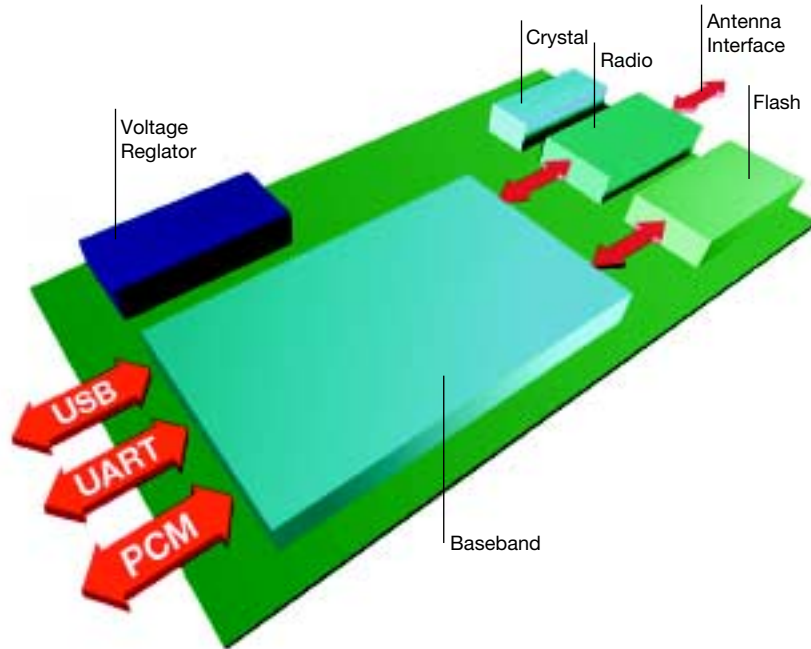
The module includes a baseband processor, Bluetooth Radio, application and antenna interfaces and supporting circuitry, together with basic Bluetooth software for signalling at HCI (Host Control Interface) level. As the module is a generic product, it can be used for many different types of application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

Communication is carried out using the module's built-in full-speed USB, UART or PCM interface. The module is a power class 2 Bluetooth device, and is qualified for version 1.1 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.

ERICSSON

Block diagram

Crystal

Antenna Interface

Radio

Flash

Voltage Reglator

USB

UART

PCM

Baseband

External interfaces to the module

There are three ways of communicating from the host to the module:
1. USB, 2. UART and 3. PCM.
USB and UART communication is achieved using HCI.

1. USB
USB 2.0 compliant. The module is a USB full-speed class device (12 Mbps) and has the full functionality of a USB slave.

2. 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.

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

Antenna interface

50 Ω 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 101 007.

Please note that this is to be considered brief information only.
For more detailed information plaese refer to separate data sheet.