

## Bluetooth™ Multi Chip Module

### Description

The Bluetooth MCM Solution ROK104001 from Infineon Technologies is a complete solution for fast implementation, and cuts your time-to-market.

It is a short-range, compact and cost effective radio-baseband module that supports both voice and data transmission and can be implemented in any electronic device. The module includes a baseband processor with 4 Mbit Flash memory, a radio solution, antenna interfaces and application supporting circuitry. The ROK 104 001 comes with either the Embedded Communication Platform (ECP) firmware, providing the full Bluetooth software stack, including profiles for serial communication, or with the basic Bluetooth firmware for signaling at the HCI (Host Controller Interface) level.

Since this solution is also FCC and ETSI type approved on delivery, cost and time for qualification and type approval is greatly minimized.

### Key Features

- A small and cost effective Bluetooth system
- Output power class 2
- Complete Bluetooth function including:
  - Hardware: Radio, Baseband, Crystal & Memory, Voltage regulator and RC filters



# Bluetooth

- Firmware in two versions:
  - a) Serial Communication (GAP/SPP/DUN/LAN)
  - b) HCI : Standard Bluetooth Interface
- Point-to-Multipoint, 7 slaves with the HCI firmware or 3 slaves with embedded stack
- Power management: PARK, SNIFF & HOLD as well as system power saving
- Pre-qualified for Bluetooth spec. 1.1
- FCC & ETSI type approved
- Multiple interfaces UART, PCM, Bidirectional serial interface/GPIO, GPIO
- Voltage regulator included on module highly reduces the input voltage requirements

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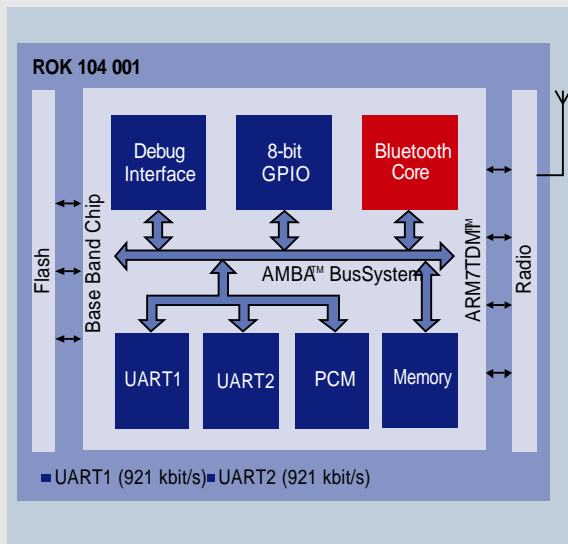
[www.infineon.com/bluetooth](http://www.infineon.com/bluetooth)

## ROK 104 001 Multi Chip Module

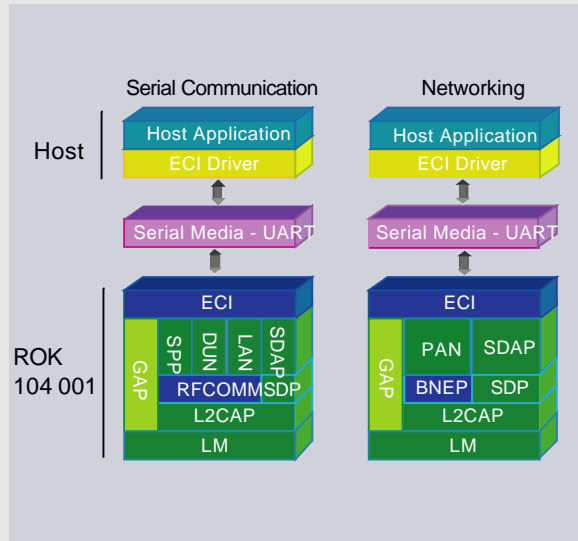


Never stop thinking.

## Configuration



## ECP - Firmware



## Antenna Interface

50 Ohm Bluetooth ISM band antenna (2.4 – 2.5 GHz).

## Module Size

The dimensions of the Bluetooth module are:  
15.5 x 10.5 x 2.0 mm.

## UART's

- UART1 supports baud rates up to 921 kbit/s with maximum throughput.
- UART2 supports baud rates up to 921 kbit/s with reduced throughput.

## PCM

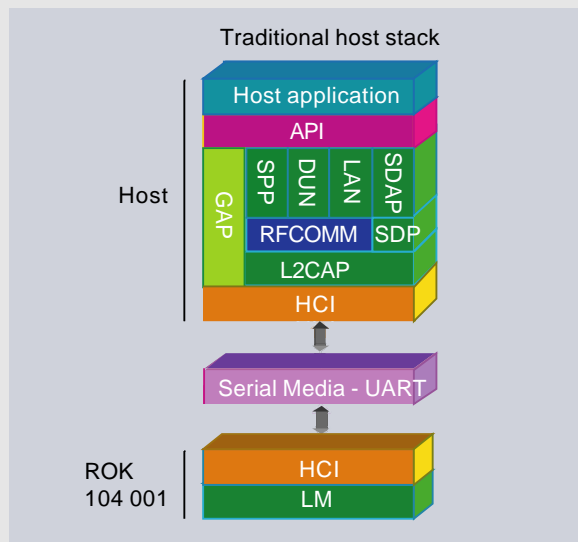
- The PCM interface provides full support for one PCM channel to facilitate voice communication.

## Bidirectional Serial Interface/GPIO

- For example PCM codecs or EEPROM.

## GPIO

- An 8 bit programmable General Purpose IO interface



## Ordering Information

ROK 104 001/21 : With standard HCI firmware

ROK 104 001/22 : With ECP firmware (Serial)

How to reach us:

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Infineon Technologies is an approved CECC manufacturer.

## Information

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