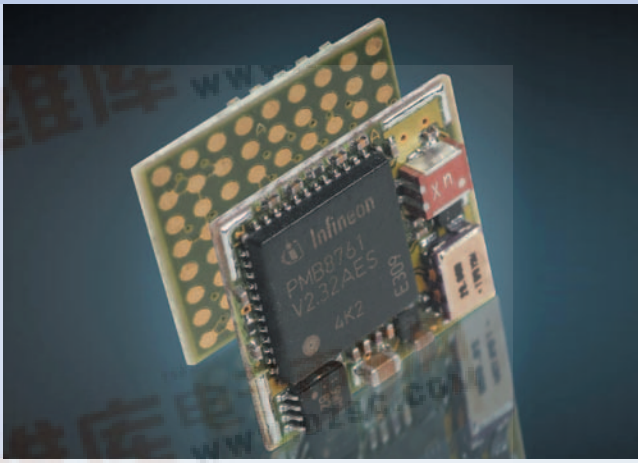

SingleStone

PBA 31307

The Bluetooth® module SingleStone

offers a qualified ready-to-use solution for accelerated time-to-market. It is based on Infineon's successful BlueMoon® Single Cellular IC, a single-chip Bluetooth solution.
The high level of integration of the BlueMoon Single Cellular IC resulted into a competitive module footprint providing an optimized pad layout for easy design-in. The SingleStone module is qualified for a temperature range from -40 to +85 °C enabling a wide spectrum of applications in a variety of different environments. Additionally, SingleStone is Bluetooth 1.2 compliant and supports features such as Adaptive Frequency Hopping, Enhanced SCO and Fast Connection Setup. Thus the SingleStone module is the perfect match for today's and future requirements of a standard Bluetooth HCI application.

Key Features

- Supporting all released Bluetooth 1.1 profiles
- Bluetooth 1.2 support
  - Adaptive frequency hopping
  - Extended SCO
  - Fast connection setup
- Programmable power-down modes
- On-module Bluetooth reference clock oscillator
- On-module E²PROM for Bluetooth device data
- Full automatic tuning and trimming (no manual or SW tuning)
- High RF sensitivity (-85 dBm @ 0.1% BER)
- On-chip 2.4 GHz RF driver amplifier with max. +7dBm output power
- Automatic control of output power for reduced power consumption

Key Benefits

- Bluetooth qualified module component
- Reduced time-to-market
- Easy production handling
- Reduced cost of ownership

Applications

- Consumer, Automotive & Industrial Applications
- Hands-free gateway
- Dial-up networking
- Data transfer & synchronization
- Advanced Audio

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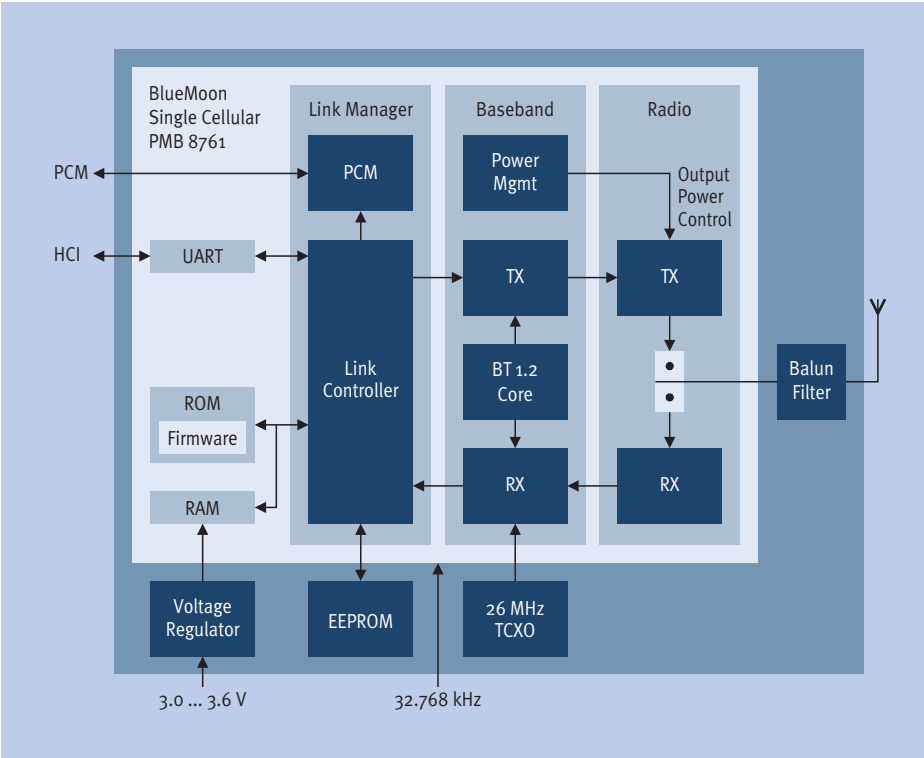
www.infineon.com/bluetooth

Wireless Communication

Infineon technologies



Block Diagram

- HCI-UART (2, 4 wired)
- PCM (A-law, µ-law)
- Wake up line
- On-module E²PROM for Bluetooth device data
- On-module 26 MHz reference clock
- On-module balun/filter
- On-module voltage regulator

Product Summary

Product	Sales Code	Package
SingleStone	PBA 31307	Module 11.86 x 10.6 mm², 72 pads at 1.27 mm pitch

Home Infotainment

Bringing mobile connectivity to your home. Due to its standardized HCI-UART interface, SingleStone is the perfect module for easy integration into all kinds of consumer electronic devices. Having all RF components integrated and being Bluetooth 1.2 pre-qualified, it allows shortest time-to-market at unbeatable value for money.
Similarly, all these applications can be realized in the automotive and industrial environment (e.g. car infotainment), as SingleStone meets segments' extended quality requirements.

Application Example

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Published by
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St.-Martin-Strasse 53,
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Template: pb_tmplt.fm/4

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