PHILSAR SEMICONDUCTOR
Helping to build a wireless world

PH2410 Bluetooth Baseband Controller

Low Power Bluetooth Baseband Controller

Preliminary Product Sheet V1.0

Features

- Compliant with Bluetooth Specification 1.0b,
- Full-featured hardware link controller is the core of the low-power architecture:
- Hardware support for all1.0b packet types (ACLs & SCOs),
- ACL links with data rates up to 712kbytes/s,
- Flexible voice formats to host and over air,
- Point-to-point and point-to-multipoint support,
- Ultra-low power consumption (1.8V operation),
- Encryption/Decryption an Authentication,
- Integrated ARM7TDMI RISC processor,
- Integrated RAM & ROM to support buffering and Protocol Stacks requirements,
- Protocol stacks available, including drivers, link manager and HCI,
- Full-speed UART(2), RS232 and USB host interface,
- On-board CODEC & RSSI features for dynamic Tx power control
- Seamless interface to external memory interface (non-volatile code storage) and to Philsar PH240X Bluetooth Radio,
- Small Footprint package.

Application

- Personal Wireless Communications.
- PDAs, Mobile Computers, Peripherals & Headset
- Cellular Phones & Handsets.

Product Description

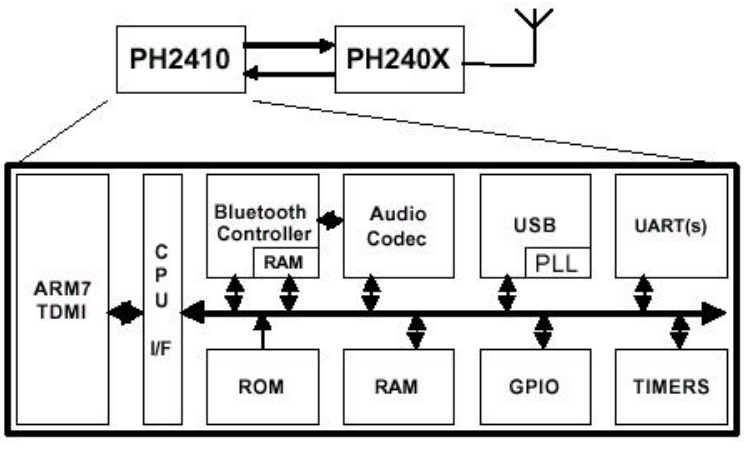
The PH2410 Bluetooth Baseband controller is part of the Philsar family of devices which provides low power, low cost integrated RF plus baseband solutions for Bluetooth applications. The PH2410 interfaces directly with the Bluetooth Philsar RF transceiver (PH240X) offering a fully compliant and integrated 2 chip solution compliant with Bluetooth SIG Version 1.0b Specification radio modem.

Bluetooth is a world-wide recognized wireless communication standard, which operates in the ISM band (2.4GHz), offering a cost effective and convenient wireless replacement for data/voice cable links between fixed and mobile electronic devices.

The PH2410 is a highly integrated Bluetooth baseband controller designed to be complaint with version 1.0 of the Bluetooth specification. Specifically engineered for low power consumption and small form factor, it integrates a RISC processor, the Bluetooth Baseband Controller (BBC), peripherals and memory into a single package.

The PH2410 is available with Bluetooth 1.0b compliant protocol stack, including hardware drivers, link manager (LM) and host controller interface (HCI). Designed to interface seamlessly to the Philsar Bluetooth RF transceiver (PH240X), the PH2410 is a key component of a system-level solution that reduces development time, risk and cost.

Figure 1: PH2410 Functional Block Diagram



Preliminary Data Sheet Available Under Non Disclosure Agreement

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