

Bluetooth LSIs

OKI

PRODUCT INTRODUCTION SHEET (January 9, 2002)

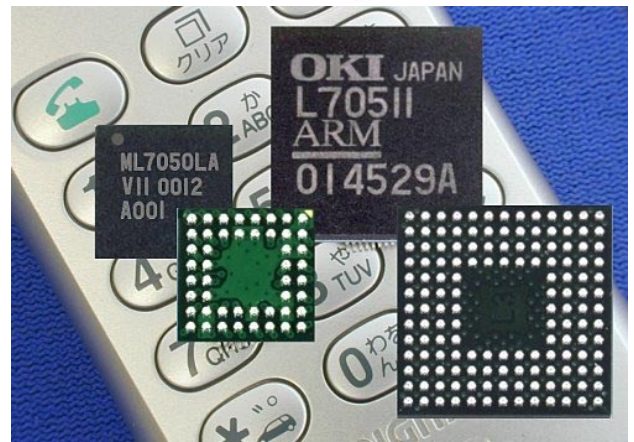
*Oki, Network Solutions
for a Global Society*

BLUETOOTH RF-TRANSCIVER AND BASEBAND LSI

Description

"Bluetooth™" is a name given to a short range (typically up to 10 meters) wireless data link concept comprising hard- and software to interconnect voice/data devices primarily designed for mobile PC equipment and other data terminals and peripherals. Developed as master-slave units, a master can connect up to seven slaves simultaneously within a "piconet". Efficient prevention of interference is managed by means of frequency hopping, forward error correction and automatic repeat request. Using a common protocol, Bluetooth™ aims at compatibility between devices made by different manufacturers. Bluetooth technology was developed by Telefonaktiebolaget LM Ericsson, Sweden and is supported by a Special Interest Group led by nine major enterprises (<http://www.bluetooth.com>).

Typical applications are for computer peripherals, digital cameras, cellulars, diagnostic systems, dial-up networks, headsets, oops...you name it.

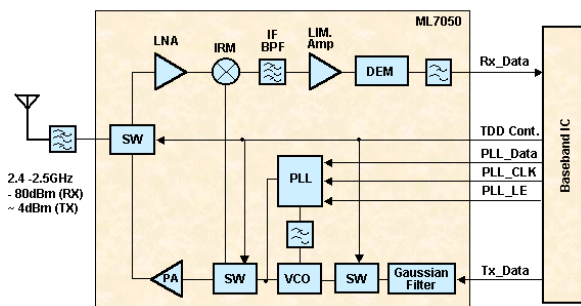


ML70511LA - Baseband Controller

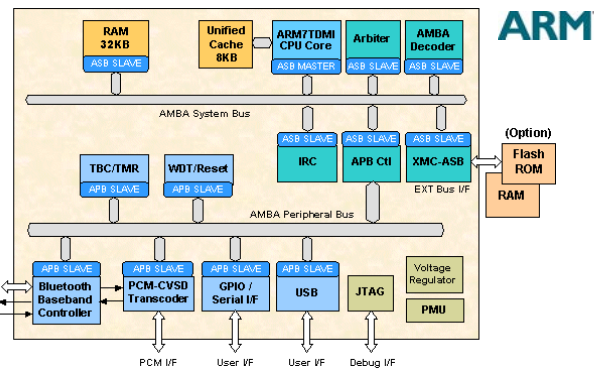
The Oki ML70511LA is a self-contained Bluetooth™ baseband controller LSI coring an ARM7TDMI® with system RAM. The peripheral bus includes user interfaces, such as USB 1.1, I/Os and Voice. A plug-in is provided for a user or application IP as an efficient power management. A built-in Flash memory version is the ML70Q5111LA.

ML7050LA - RF Transceiver

The Oki ML7050LA comprises all necessary functions to eliminate the need for adjustments and external SAW filter. Implemented in RF-CMOS technology and packaged in F-BGA, the small device is a fully featured Bluetooth™ RF transceiver LSI performing at low noise and high efficiency.



- Qualified by Bluetooth Qualification Body
- Conforms to Bluetooth Ver 1.1
- Input Voltage +3V (±0.3V)
- Internal functions include:
 - Antenna switch
 - Low noise amplifier, LNA
 - PLL, VCO
 - PA (0dBm typ.)
- No adjustments required
- No SAW filter required
- Operating temperature -20 to +85°C (0 to +55°C for full spec range)
- Package: 48-FBGA (H=1.41mm) (P-LFBGA48-0707-0.80)



- Qualified by Bluetooth Qualification Body
- Conforms to Bluetooth Ver 1.1
- Input Voltage +3.3V (±0.3V)
- ARM7TDMI® Core
- On-chip 32KB RAM
- Interface bus for external memories
- 8KB unified cache
- UART, General purpose I/Os
- USB 1.1 interface
- CVSD/PCM voice communication interface
- JTAG interface for debugging
- Operating temperature -40 to +85°C
- Package 144-FBGA (H=1.5mm) (P-LFBGA 144-P-1111-0.80)

Oki's Bluetooth System Development Kit (SDK) is a development tool using the Oki ML7050LA/ML70511LA Bluetooth LSIs. Full functions of both chips are realised with the SDK.

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This is a product introduction, not the products' data sheet. Specification are subject to change without notice.

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