

# BT Module

# OKI

PRODUCT INTRODUCTION SHEET (Preliminary January 18, 2002)

*Oki, Network Solutions  
for a Global Society*

## BLUETOOTH MODULE AND CONTROL KIT

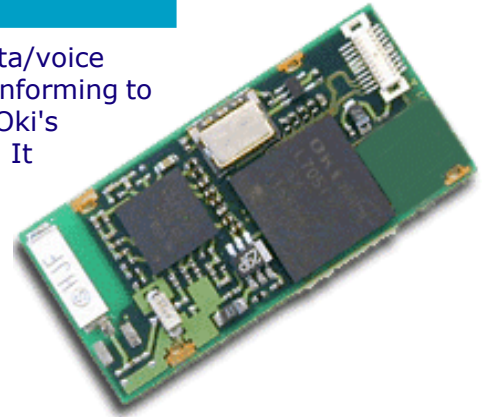


### General Description

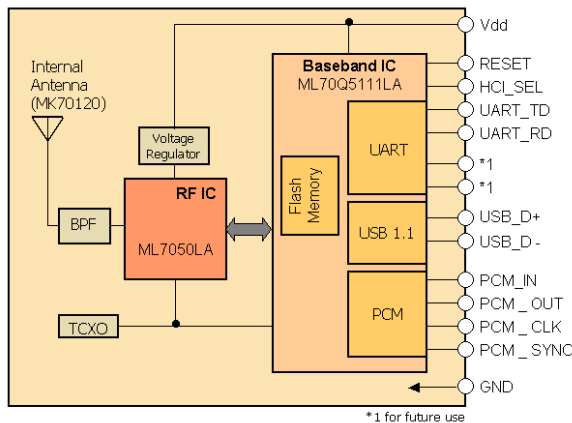
These modules are ready-made functional 2.4GHz Bluetooth data/voice communication systems for shortest possible design-in time. Conforming to Bluetooth Version 1.1, the 18 x 39 mm sized module integrates Oki's Bluetooth chip set, Bluetooth software and a 20-pin connector. It provides Class 2 output power and is offered in two variations:

**MK70110** with coaxial connector,  
U.FL.R-SMT/HRS, (no antenna)

**MK70120** with on-board chip antenna,  
ANCM12G45/Murata, (no coaxial connector)



### Block Schematic



### Essential Specification

#### Electrical:

- USB 1.1 Interface (12Mbps)
- UART Interface (1200bps to 921.6kbps)
- PCM Interface:
  - Application side: 8/16-bit linear, A-Law,  $\mu$ -Law
  - Bluetooth side: CVSD, A-Law,  $\mu$ -Law
- Integrates TCXO: 13 MHz
- Integrates HCI Firmware
- 20 pin connector for HCI Interface
- Integrates Flash ROM (4 Megabits)
- Voltage Supply: DC +3.3V ( $\pm 5\%$ )
- Operating Temperature: 0 ~ +50°C
- Weight: 3.4gr (MK70120 with antenna)

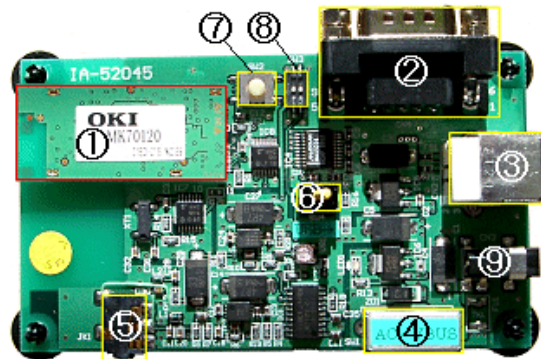
#### Radio:

- Conforms to Bluetooth Ver 1.1
- Frequency range: 2402 to 2480MHz
- 79 Channels (1MHz spacing)
- Output Power: Class 2
- Receive Sensitivity:
  - 75 dBm typ (BER 0.1%)
- Modulation System: GFSK (1Mbps)



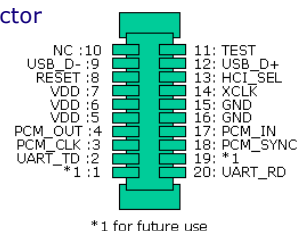
### Module Control Kit, MCK

The MCK is an inexpensive board with a socket for the Bluetooth module. Connected to a host PC the MCK allows evaluation and functional verification of module functions. It is not designed for the purpose of software development.



1. BT Module (not included with the MCK)
2. Serial port RS 232C
3. USB port
4. Switch: ext. power or USB bus power
5. Headset jack
6. HCI select switch: USB or RS232C
7. Reset button
8. Switch: PCM A-Law or  $\mu$ -Law
9. AC adapter input jack

Module to MCK connector



BLUETOOTH is a trademark owned by Bluetooth SIG, Inc. and licensed to OKI Electric Industry Co., Ltd.

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

OKI Electric Industry Co., Ltd., Silicon Solutions Company, Marketing Communications, 10-3, Shibaura, 4-chome, Minato-ku, Tokyo 108-8551, Japan, Tel.: +81-3-5445-6027, Fax.: +81-3-5445-6058  
Japan: www.oki.co.jp/semi/, USA: www.okisemi.com/, Europe: www.oki-europe.de, Taiwan: www.ost.oki.co.jp/, Hong Kong: www.okisemi.com.hk/, Singapore: www.oki.com.sg/osa/