To our customers,

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Renesas Electronics website: http://www.renesas.com

April 1st, 2010
Renesas Electronics Corporation

Issued by: Renesas Electronics Corporation (http://www.renesas.com)

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RENESAS

User's Manual

Release-it

ZigBee™-ready
Wireless Network Evaluation Board
Using the 78K0/KF1+ Microcontroller

Board Set-up Guide

Document No. U17585EE1V0UM00
Date Published June 2005

Printed in Germany

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- Product release schedule
- Availability of related technical literature
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- Network requirements

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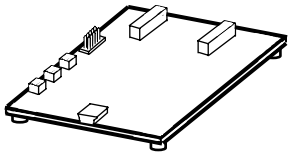
This equipment should be handled like a CMOS semiconductor device. The user must take all precautions to avoid build-up of static electricity while working with this equipment. All test and measurement tool including the workbench must be grounded. The user/operator must be grounded using the wrist strap. The connectors and/or device pins should not be touched with bare hands.

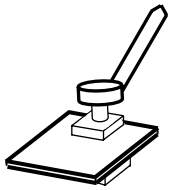
Boards and cables

Please find the following boards and cables in the box.

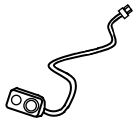
MCU Board x 2



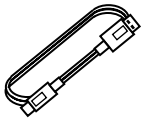
RF Board x 2



Battery Adapter x 2



Cable x 2



CD-ROM and Documents

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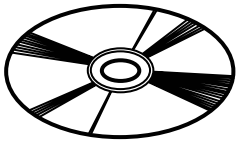
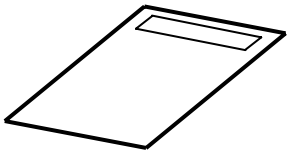
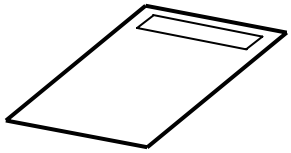
CD-ROM



Board Set Up Guide
(this document)

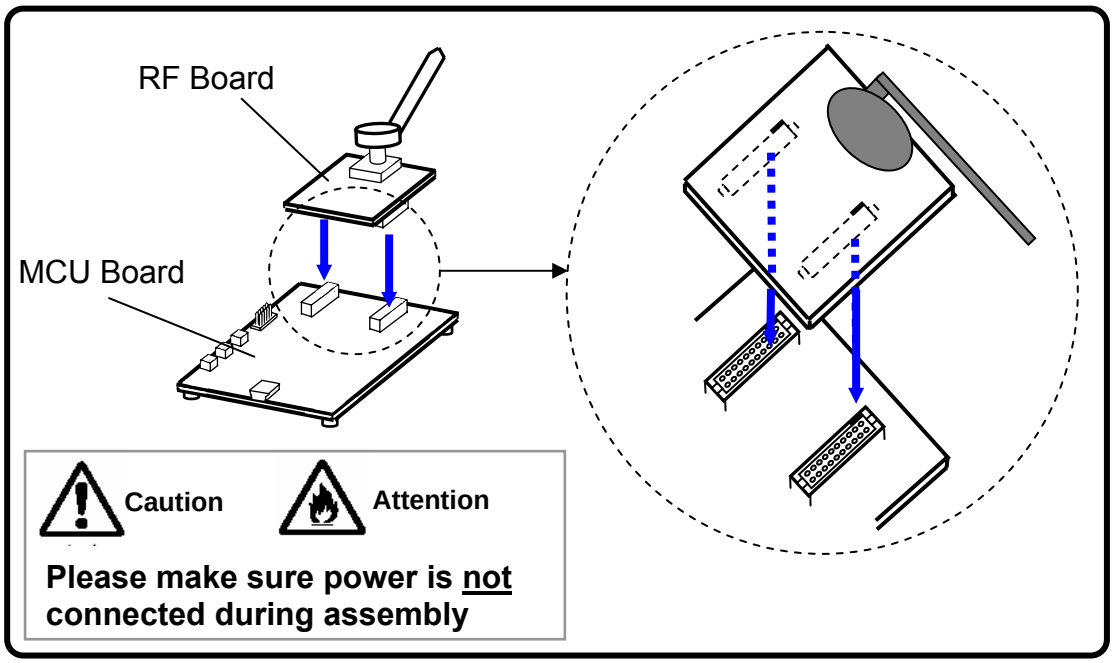


License Agreement

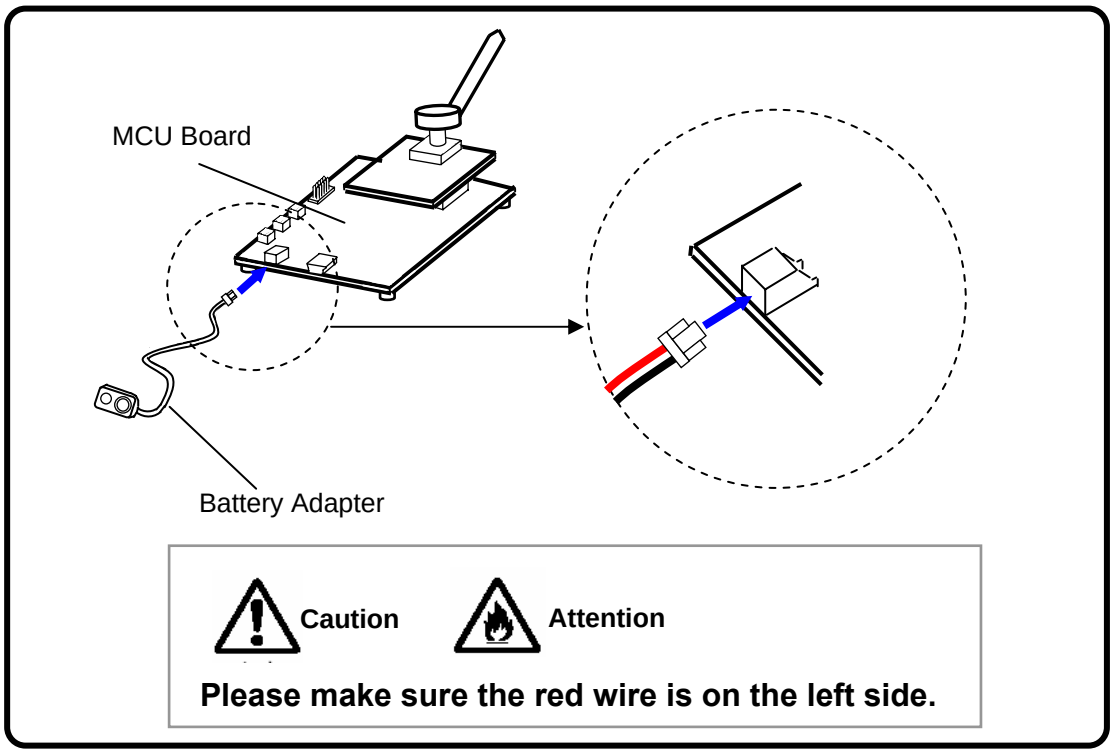


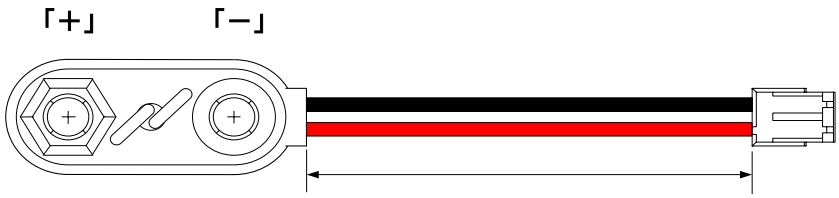
Assembly Procedures

(1) Connecting RF Board to MCU Board



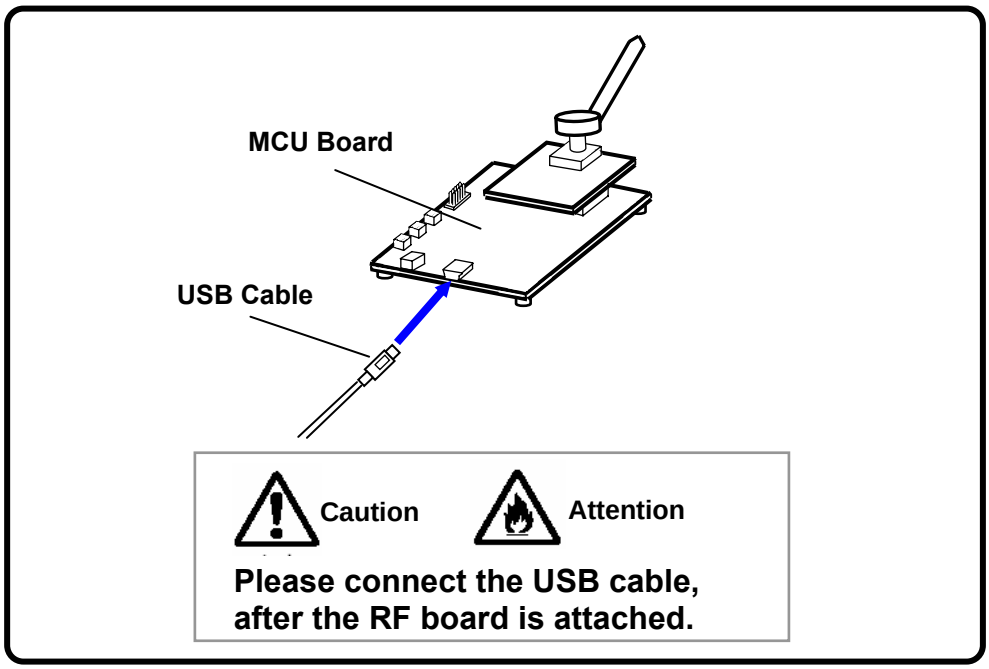
(2) Connection of the battery adapter





- Please do not remove the battery adapter from the board, once it is connected.
- Please set the JP1 (Jumper 1) to the CN2 to supply power from battery. Please find the location of the JP1 in the chapter 4 of the hardware manual.
- While not in use, please remove the battery.

(3) Connection of the USB cable



- Please set the JP1 (Jumper 1) to the USB to supply power from USB cable.
- Please find the location of the JP1 in the chapter 4 of the hardware manual.
- Please make sure the other end of the USB cable is connected to a USB slot, which is capable of supplying power, if the JP2 is set to USB.

Specifications

Product Name	ZB78K0/KF1+CC
Protocol	IEEE 802.15.4
Rate	Max 250Kbps, depends on the environment
Interfaces	UART ・TxD, RxD, Two Wire UART Serial ・Baud Rate 38.4kbps/8 bits/No Parity/1 Stop Bit A/D I/F CSI I/F GPIO I/F ＵＳＢ I/F
Power Supply	006P Battery (9.0V) or 5.0V±5% via USB cable
Supply Current	Max. 150mA @5V Actual consumed current depends on the amount data of TX and/or RX, and mode settings of the transceiver
Operation Environment	Temperature: 0 – 40 deg C Humidity: 80 %
Dimensions	MCU Board: 70mm x 60mm RF Board: 40mm x 30mm、 Assembled: 80mm x 60mm x 83 mm (H) with an antenna

Attention

If the voltage applied to the battery adapter is less than 6.5 V. the board may not work as specified.