



LG Electronics

19-1, Cheongho-ri Jinwi-myeon, Pyeongtaek-si, Gyeonggi-do, 451-713, Korea

MB8811C0

Bluetooth Adapter Card

User Guide

Version 1.1

July, 2013



LG Electronics

19-1, Cheongho-ri Jinwi-myeon, Pyeongtaek-si, Gyeonggi-do, 451-713, Korea

Revision History

Release	Date	Revision	Initials
1.1	2013-07-11	First release.	

STATEMENT and Warning



This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

FCC RF Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.



This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.

French:

Cet appareil radio est conforme au CNR-210 d'Industrie Canada. L'utilisation de ce dispositif est autorisée seulement aux deux conditions suivantes : (1) il ne doit pas produire de brouillage, et (2) l'utilisateur du dispositif doit être prêt à accepter tout brouillage radioélectrique reçu, même si ce brouillage est susceptible de compromettre le fonctionnement du dispositif.

Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps.

NCC

「依據低功率電波輻射性電機管理辦法

第十二條

經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。

第十四條

低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。

前項合法通信，指依電信法規定作業之無線電通信。

低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。」

任一平台若裝置本模組，其平台標籤須標示“內建藍芽模組 NCC:XXXXXXXXXX”

This device is intended only for OEM integrators under the following conditions:

- The antenna must be installed such that 20 cm is maintained between the antenna and users, and
- The transmitter module may not be co-located with any other transmitter or antenna.

As long as 2 conditions above are met, further transmitter test will not be required. However, the OEM integrator is still responsible for testing their end-product for any additional compliance requirements required with this module installed

IMPORTANT NOTE: In the event that these conditions can not be met (for example certain laptop configurations or co-location with another transmitter), then the FCC authorization is no longer considered valid and the FCC ID cannot be used on the final product. In these circumstances, the OEM integrator will be responsible for re-evaluating the end product (including the transmitter) and obtaining a separate FCC authorization.

End Product Labeling

This transmitter module is authorized only for use in device where the antenna may be installed such that 20 cm may be maintained between the antenna and users. The final end product must be labeled in a visible area with the following: "Contains FCC ID: BEJ9QK-DMMB8811C0", "contains IC: 2703H-DMMB8811C0". The grantee's FCC ID can be used only when all FCC/ IC compliance requirements are met.

Manual Information To the End User

The OEM integrator has to be aware not to provide information to the end user regarding how to install or remove this RF module in the user's manual of the end product which integrates this module.

CE

Hereby declares that this WiFi module is in compliance with the essential requirements and other relevant provisions of R&TTE Directive 1999/5/EC. The standards for complying are as following:

ETSI EN 301 489-1 V1.9.2: 2011-09

ETSI EN 301 489-17 V2.2.1: 2012-09

ETSI EN 300 328 V1.8.1:2012-06

EN 62311: 2008

EN 60950-1: 2006 +A11:2009

C E0984

This is a class B product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

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This device is intended for home and office use in all EU countries

CONTENTS

Package Contents	7
Chapter 1 Introduction.....	8
1.1 Overview of the Product	8
1.2 Features.....	8
Chapter 2 Installation Guide (For Consumer Electronics)	9
2.1 Hardware Installation.....	9
2.2 Software Installation	9
Appendix A: Specifications	12

Package Contents

The following items should be found in your package:

- MB8811C0 Bluetooth Adapter Card

Conventions:

The 'Module' mentioned in this user guide stands for MB8811C0 Bluetooth Adapter Card without any explanation.

Chapter 1 Introduction

Thank you for choosing the **MB8811C0 Bluetooth Adapter Card!**

1.1 Overview of the Product

MB8811C0 is a fully integrated Bluetooth module. It is based on CSR's Bluecore 8811 chip with specific interface design to meet LG Electronics's needs. MB8811C0 is compatible with Bluetooth specification version 4.0. It integrates RF, Baseband controller, etc., a completed Bluetooth subsystem.

1.2 Features

- Operation Range (Class II) : 10 meters
- Fully Compatible with Bluetooth Specification 4.0
- Dual-mode Bluetooth / Bluetooth low energy
- Operating Temperature Range : -10°C ~ 70°C
- Operating VDD Range : 3.0 V- 3.6 V Normal: 3.3 V
- Interface : UART
- Internal Antenna
- RoHS Compliant

Chapter 2 Linux Installation Guide (For Consumer Electronics)

2.1 Hardware Installation

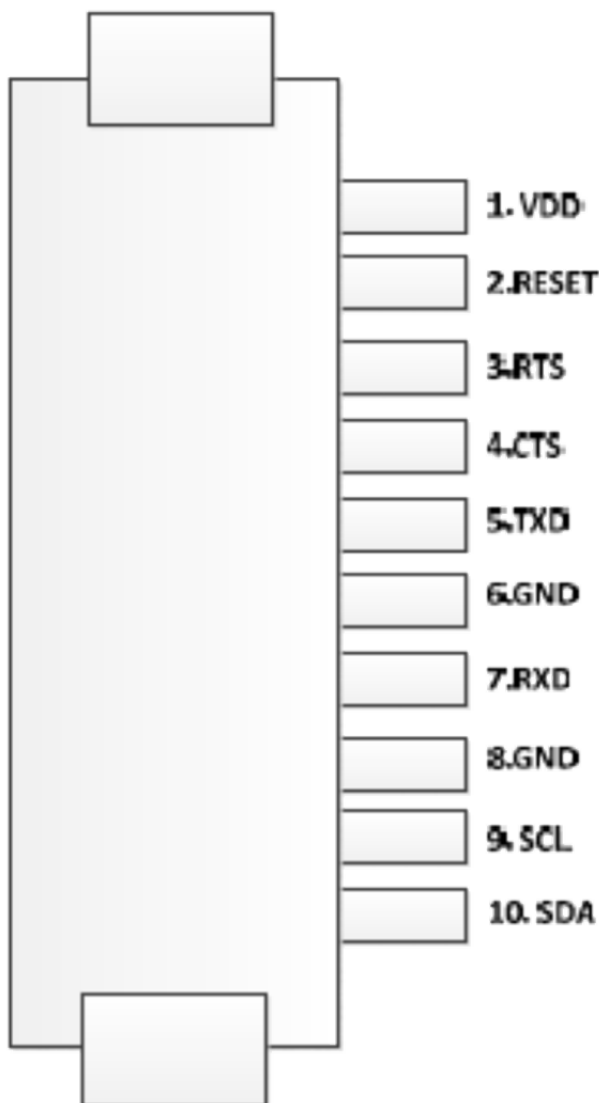
For the Consumer Electronics products which use MB8811C0, it must provide a corresponding connector for the module. After connecting the module to the device, the hardware installation is finished.

2.2 Software Installation

For the Consumer Electronics products, the Linux Driver of MB8811C0 is embedded in default. So the module is a plug and play device. After connecting the module to the device, MB8811C0 will work well.

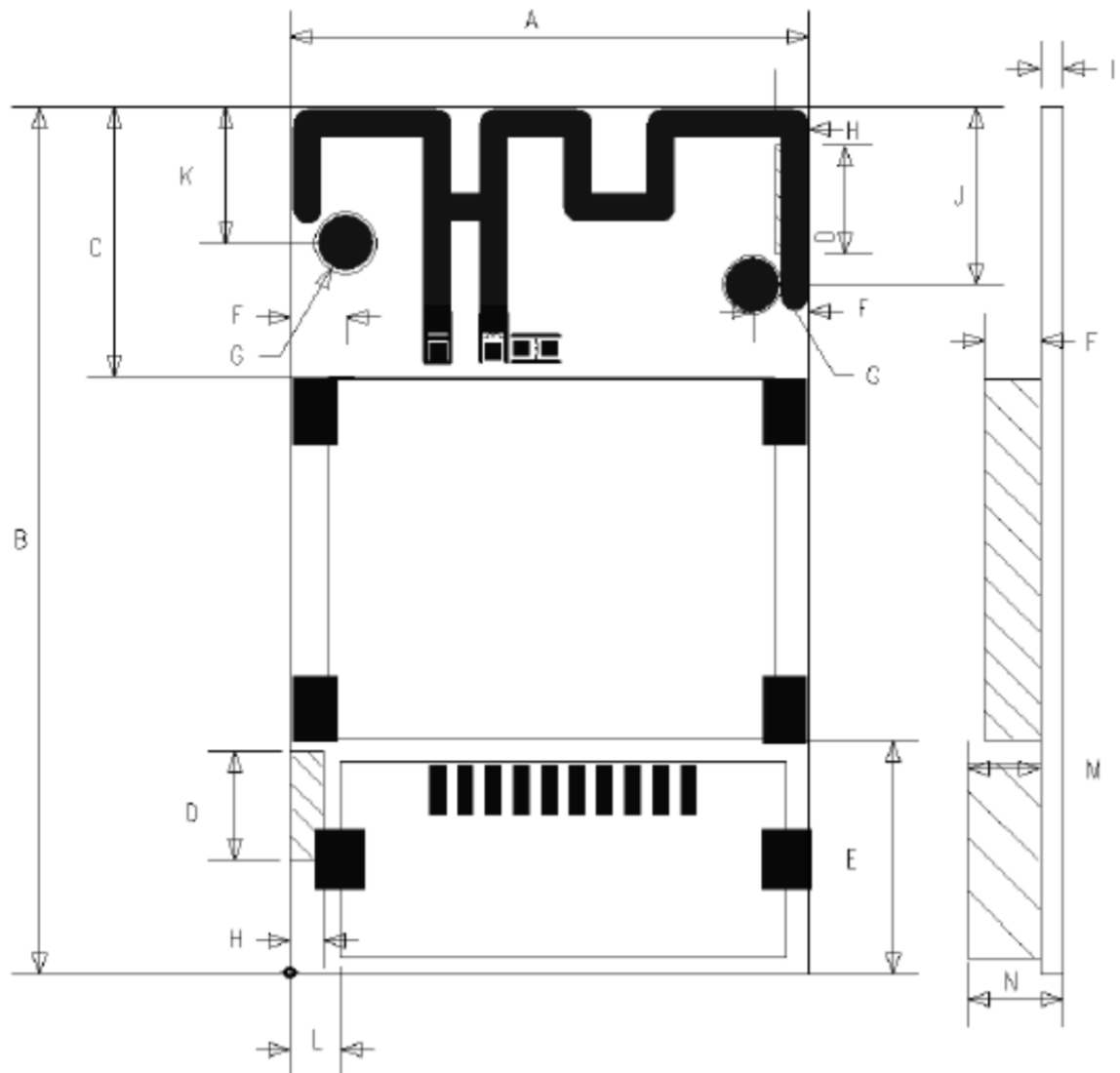
2.3 Pin Definitions

NO.	Pin Name	I/O	Description
1	VDD	I	Positive Input for the internal regulator (3.0 ~ 3.6V)
2	RESET	I	Reset if low. Input debounced so must be low for >5ms to cause a reset
3	RTS	O	Bluetooth UART Request to Send. Active-low request.
4	CTS	I	Bluetooth UART Clear to Send.Active-low clear.
5	TXD	O	Bluetooth UART Serial Output.
6	GND	-	Ground.
7	RXD	I	Bluetooth UART Serial Input.
8	GND	-	Ground
9	SXL	O	I2C interface Clock
10	SDA	I/O	I2C interface DATA



2.4 Mechanical Dimension

TOP View



Mark	Dimension	Mark	Dimension	Mark	Dimension	Mark	Dimension	Mark	Dimension
A	18.60±0.5	D	3.90±0.2	G	2.0±0.2	J	6.4±0.2	M	2.6±0.2
B	31.20±0.5	E	8.40±0.3	H	1.2±0.2	K	4.9±0.2	N	3.4±0.2
C	9.70±0.3	F	2.0±0.3	I	0.8±0.1	L	1.80±0.3		

(Unit : mm)

Appendix A: Specifications

Normal	
Interface	UART
Operating System	Windows XP, Vista, 7, Linux
Radio Data Rate	Up to 3Mbps
Modulation	GFSK, $\pi/4$ DQPSK, 8DPSK
Frequency	2.402 ~ 2.480GHz
Channel Number	11 for BLE, 79 for BT4.0
Spread Spectrum	FHSS/ DSSS for BLE
Antenna	Integrated, PIFA
Safety & Emissions	FCC/ IC/ NCC, CE, Japan
Environmental and Physical	
Operating Temp.	-40°C ~ 85°C
Storage Temp.	-10°C ~ 70°C
Humidity	10% ~ 90% RH, Non-condensing

