CW8761

H. W. Data Sheet

CW8761 H.W.Data Sheet	SOUNDMAX [®]
	BLUE TOOTH 4.0

Revision

18-11-2016 Version 1.0

16–12–2016 Version 1.1 BOM added, Operating Temperature correction



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1 General Descriptions

Features

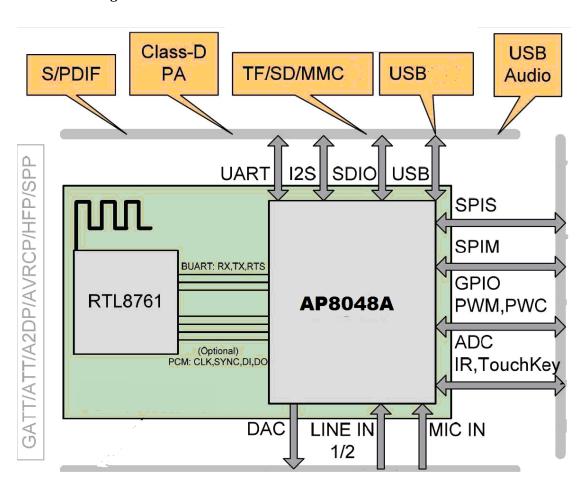
- REALTEK chip set RTL8761
- BLUETOOTH v4.0 mode requirement.
- Support of enhanced audio applications
- Small and easy to integrate.

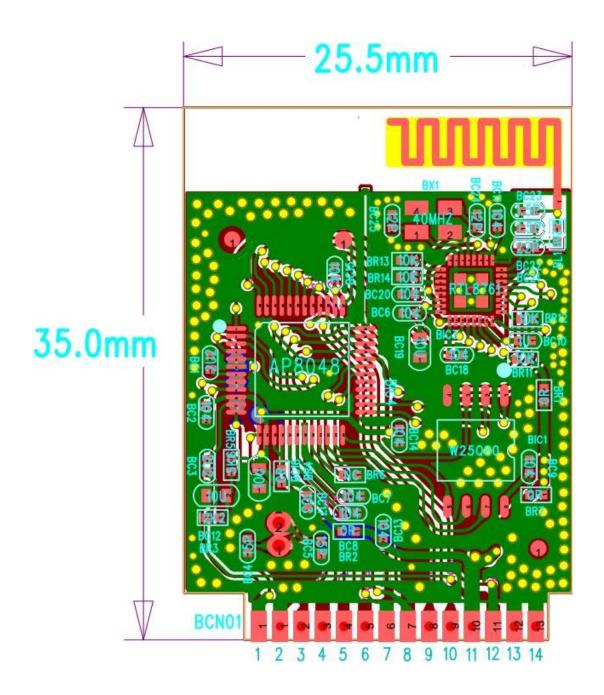
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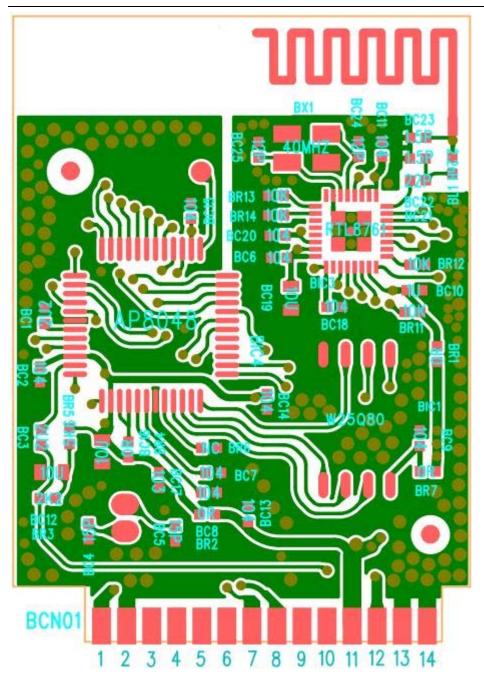
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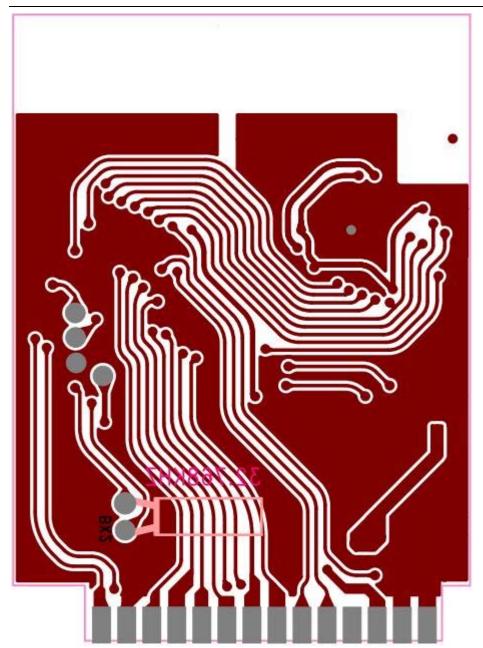
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2 Block Diagram









BLUE TOOTH 4.0 BT-L BT-R 0 14 15 **GND GND** 0 1 16 32K CLK 32K_CLK 0 2 3 4 5 7 17 BUART TXD 0 BUART_RXD 0 **BUART RTS** 0 PCM_SYNC B/D-0 18 PCM CLK 0 B/D+ 19 PCM MISO 0 8 PCM MOSI 0 9 BT+3V3 0 10 BT LDO EN MIC-IN 0 11 20 **GND** 0 12 **GND** 0 13

PIN ASSIGMENT

FINASSIGNENT					
PIN	Name	Type	Description		
1	GND		GROUND		
2	I/O	I	N.C.		
3	BUART TXD	0	UART TX OUT		
4	BUART RXD	I	UART RX IN		
5	BUART RTS	I	UART REQUEST TO SEND		
6	PCM SYNC	О	PCM SYNC OUT		
7	PCM CLK	О	PCM CLOCK OUT		
8	PCM MOSI	О	PCM DATA OUT		
9	PCM MISO	I	PCM DATA IN		
10	BT3V3		3.3v DC IN		
11	BT_LDO_EN	I	LDO ENABLE		
12	GND		GROUND		
13	GND		GROUND		
14	BT	О	AUDIO L		
15	BT R	0	AUDIO R		
16	GND		GROUND		
17	I/O	I			
18	USB D-	I	USB UPGRADE		
19	USB D+	I	USB UPGRADE		
20	MIC IN	I	AUDIO INPUT		



4 Electrical Specifications

4.1. Absolute Maximum Rating

Item	Symbol	Rating	Unit
Power supply voltage (logic)	VDD	-0.5 to 4.0	V
Input voltage	Vin	-0.5 to VDD+0.5	
Power dissipation(Ta=70C)	Pd	200	mW
Storage Temperature	Tstg	-30 to 85	$^{\circ}\mathbb{C}$
Operating Temperature	Topr	-20 to 70	$^{\circ}$ C

4.2. Recommended Operating Condition

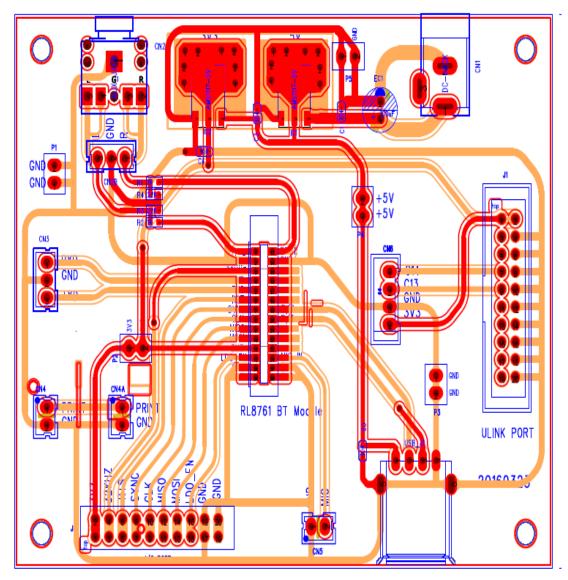
Item	Symbol	Min	Typ.	Max	Unit
Power supply voltage	VDD	2.8	-	3.6	V
Input voltage	Vin	0	-	VDD	V
Operating temperature	Topr	-20	-	70	\mathbb{C}

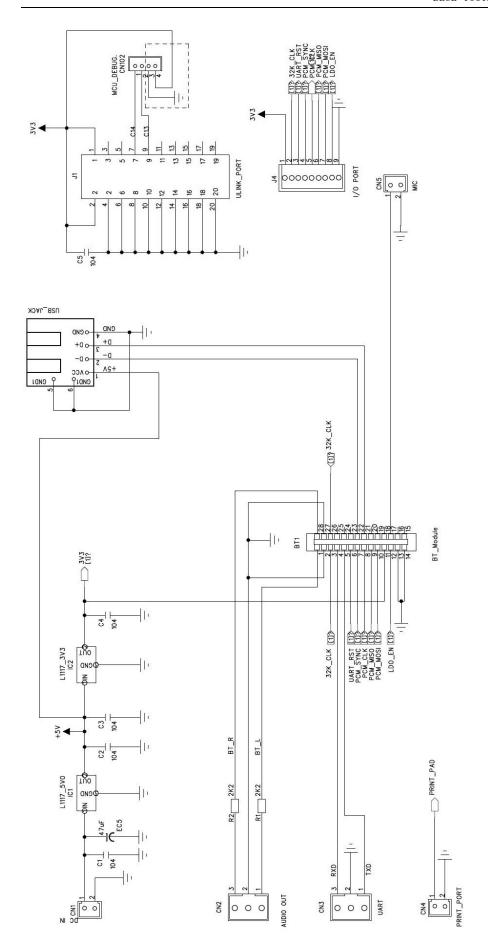
4.3. Electrical Characteristics

Symbol	Parameter	Condition	Min.	Тур.	Max.	Unit
VDD	Supply voltage		2.8	-	3.6	V
VIH	Input high voltage		1.6V	-	-	V
VIL	Input low voltage		-	-	1.4V	V
RPU	Pull-up resistance	Vin = 0V	100K	-	-	Ohm
RPD	Pull-down resistance	Vin = VDD	100K	-	-	Ohm

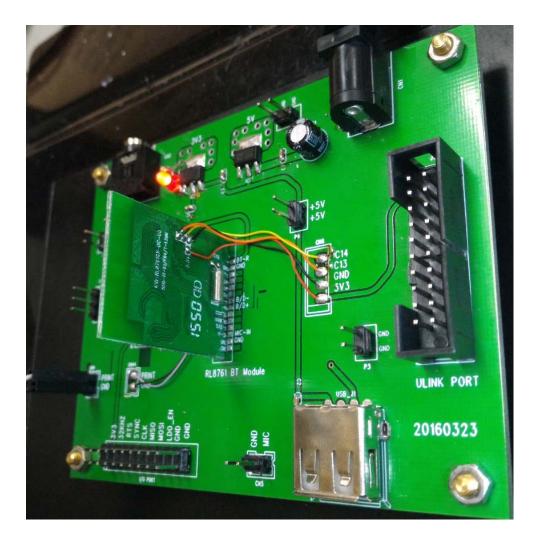
5 Test platform:

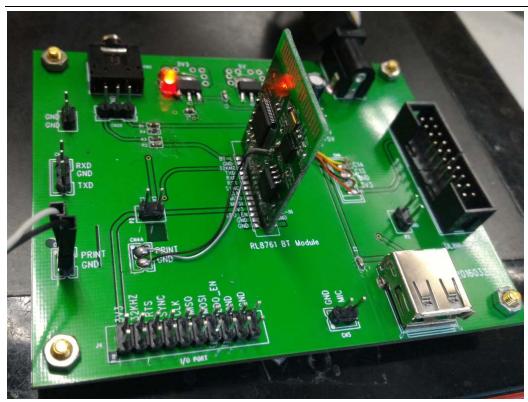
Interface board:







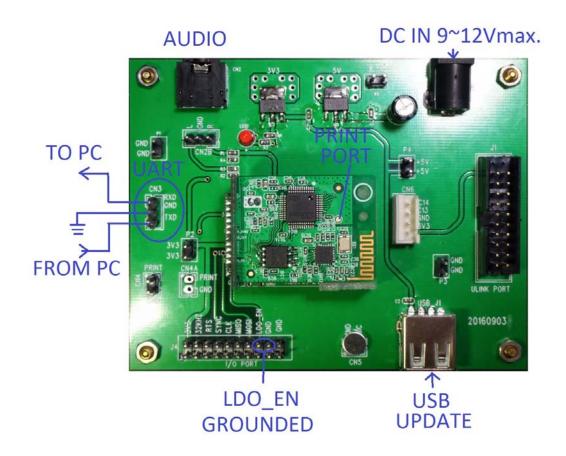




CW8761 BT4.0 蓝牙模组



PIN	NAME	TYPE	DESCRIPTION
1	GROUND		DIGITAL CROUND
2	GROUND		DIGITAL CROUND
3	PCM CLK	I/O	N.C. (NO CONNECTION)
4	PCM SYNC	I/O	N.C. (NO CONNECTION)
5	MIC-IN		MICROPHONE INPUT
6	BT_LDO_EN		ACTIVATE AT LOW LEVEL
7	BT 3V3		DC POWER 3v3 IN
8	BT 3V3		DC POWER 3v3 IN
9	PCM MOSI	I/O	N.C. (NO CONNECTION)
10	PCM MISO	I/O	N.C. (NO CONNECTION)
11	B/D+		USB D+ (FIRMWARE UPDATE)
12	B/D-		USB D- (FIRMWARE UPDATE)
13	B UART RTS	I/O	N.C. (NO CONNECTION)
14	B UART RX	DATA PORT	BT MODULE DATA INPUT
15	B UART TX	DATA PORT	BT MODULE DATA OUTPUT
16	32K_CLK	I/O	N.C. (NO CONNECTION)
17	GROUND		AUDIO CROUND
18	GROUND		AUDIO CROUND
19	BT-R		AUDIO R OUTPUT
20	BT-L		AUDIO L OUTPUT



FCC Statement

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.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

If the FCC identification number is not visible when the module is installed inside another device, then the outside of the device into which the module is installed must also display a label referring to the enclosed module. This exterior label can use wording such as the following: "Contains Transmitter Module FCC ID: 2AB7S-CW8761 Or Contains FCC ID: 2AB7S-CW8761"

When the module is installed inside another device, the user manual of the host must contain below warning statements;

- 1. 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.
- (2) This device must accept any interference received, including interference that may cause undesired operation.
- 2. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

The devices must be installed and used in strict accordance with the manufacturer's instructions as described in the user documentation that comes with the product.

Any company of the host device which install this modular with limit modular approval should perform the test of radiated emission and spurious emission according to FCC part 15C: 15.247 and 15.209 requirement, Only if the test result comply with FCC part 15C: 15.247 and 15.209 requirement, then the host can be sold legally.

IC STATEMENT

This device complies with Industry Canada's licence-exempt RSSs. 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.

 Cet appareil est conforme aux CNR exemptes de licence d'Industrie Canada . Son fonctionnement est soumis aux deux conditions suivantes :
- (1) Ce dispositif ne peut causer d'interférences; et
- (2) Ce dispositif doit accepter toute interférence , y compris les interférences qui peuvent causer un mauvais fonctionnement de l'appareil.

If the IC number is not visible when the module is installed inside another device, then the outside of the device into which the module is installed must also display a label referring to the enclosed module. This exterior label can use wording such as the following:

"Contains IC: 11888A-CW8761"

when the module is installed inside another device, the user manual of this device must contain below warning statements;

- 1. This device complies with Industry Canada's licence-exempt RSSs. 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.
- 2. Cet appareil est conforme aux CNR exemptes de licence d'Industrie Canada . Son fonctionnement est soumis aux deux conditions suivantes :
- (1) Ce dispositif ne peut causer d'interférences ; et
- (2) Ce dispositif doit accepter toute interférence , y compris les interférences qui peuvent causer un mauvais fonctionnement de l'appareil.

The devices must be installed and used in strict accordance with the manufacturer's instructions as described in the user documentation that comes with the product