

1. General Description

IS-7601MU5C product Accord with FCC CE is a highly integrated Wi-Fi single chip which supports 150 Mbps PHY rate. It fully complies with IEEE802.11n and IEEE802.11b/g stands, offering feature-rich wireless connectivity at high standards, and delivering reliable, cost-effective throughput from an extended distance. Optimized RF architecture and baseband algorithms provide superb performance and lower power consumption. Intelligent MAC design deploys a high efficient DMA engine and hardware data processing accelerators which offloads the host processor. AB-R7601MU5C is designed to support standard based features in the areas of security quality of service and international regulations, giving end users the greatest performance anytime and in any circumstance.

MID, networking camera, STB GPS, E-book, Hard disk player, Network Radios, PSP, etc, the device which need be supported by wireless networking.

2. The range of applying

3. Features

Feature

Power supply	VCC_3.3V +-0.2V		
Clock source	40MHz		
Temperature range	Work temperature: - 20 º C ~ 70 °C		
Temperature range	Storage temperature - 50 °C ~ 120 °C		
Package	SMT 6 pins		
■IEEE 802.11b/g/n client			

- 1T1R mode with support of 150Mbps PHY rate

■ Embedded high-performance 32-bit RISC microprocessor

Implementation

■Integrate high efficiency switching regulator

■ Highly integrated RF with 55nm COMS technology

- Best-in-class power consumption performance
- 1/2/3/4-wire PTA Wi-Fi/Bluetooth coexistence support
- ■IEEE 802.11d/h/k compliant ■ Security support for WFA WPA/WPA2 personal, WPS2.0, WAPI

■ Support 802.11w protected managed frames

- QOS support of WFA,WMM,WMM PS ■ Support Wi-Fi Direct
- Fully compliance with USB v2.0 High-Speed mode
- ■Per packet transmit power control Antenna diversity
- Auto-calibration

Minimum

2.97

1.14

1.425

Maximum

3.63

1.26

1.575

Units

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Typical

3.3

1.2

1.5

4. DC Characteristics

3.3V Supply

1.5V Supply

Voltage

Symbol Parameter

VD33A,

VD15A,

VD15D

VD33D Voltage 1.2V Supply VD12A, VD12D Voltage

Item	Description
The supported protocol and standard	IEEE 802.11n, IEEE 802.11g,EE 802.11b
Interface type	USB2.0
The range of frequency	2.4-2.484GHZ
The amount of working Channel	1-11 (America, Canada);1-13 (China, Europe);1-14 (Japan)
Data Modulation	OFDM/DBPSK/DQPSK/CCK
Working Mode	Infrastructure, Ad-Hoc
The transmitting rate	135/54/48/36/24/18/12/9/6/1M(self-adapting)
Spread spectrum	DSSS
	135M:-68dBm@8%PER,
	54M:-74dBm@8%PER,
Sensitivity @PER	11M:-88dBm@8%PER,
	6M: <u>-90dBm@8%PER</u> ,
	1M: <u>-92dBm@8%PER</u> ,
	135M:14dBM

Connect to the external

20.3MM*14MM*8.5MM

MT7601

90Mbps(external 2dbi antenna, damping 40dbm in Shielding box)

Indoor 100M, Outdoor 300M, according the local environment

RF Power 54M:15dBM 11M:18dBM

6. DC/RF characteristics

Contents

DSSS / CCK

2412 - 2484MHz

1, 2, 5.5, 11Mbps

Throughput

MENS(L*W*H)

The chipset model

Antenna

Terms

Mode

Frequency Data rate

The connect type of

The transmit distance

Specification: IEEE802.11b

DC Characteristics	min	Тур.	max.	unit		
TX mode	239	245	249	mA		
Rx mode	91	92	93	mA		
Sleep mode	47	48	48	mA		
Specification : IEEE802	.11g			,		
Mode	OFDM					
Frequency	2412 - 2484MHz					
Data rate	6, 9, 12, 18, 24, 36, 48,	54Mbps				
DC Characteristics	min	Тур.	max.	unit		
TX mode	149	150	153	mA		
Rx mode	92	93	100	mA		
Sleep mode	46	48	49	mA		
Specification : IEEE802	.11n			,		
Mode	OFDM					
Frequency	2412 - 2484MHz	2412 - 2484MHz				
Data rate	6.5, 13, 19.5, 26, 39, 52,	58.5, 65Mbps				
DC Characteristics	min	Тур.	max.	unit		
TX mode	151	152	153	mA		
Rx mode	91	92	93	mA		
Sleep mode	47	48	49	mA		
7.The block	diagram of	product pr	rinciple	7		
RF_IN re	RF Baset	pand (bu	AAC / Curity	USB USB		

Figure 1 MT7601 block diagram

CPU Framework

X86 Platform

ARM, MIPSII

ARM, MIPSII

3

Driver

Enable

Enable

Enable

Description

DC:3.3V

UDM-

UDP+

2 5 1

TYPE

P

I/O

	4	P	GND)	
	5	NC	NC		
1	I0.The S	Structure and Size	of product		
N		← GND ← UDP+ ← UDM- ← DC:3.3V	Structure and Size:	1.3mm	3.0m

I/O 2

PIN definition

Pin No:

1

3

8. The supported platform

Operating System

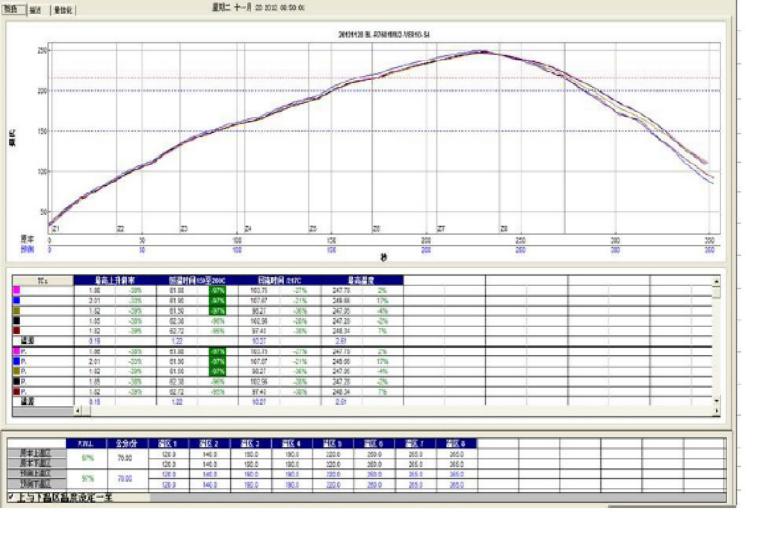
WIN2000/XP/VISTA/WIN7

LINUX2.4/2.6

WINCE5.0/6.0

9. The definition of product Pin

Stru	icture and Size:	1.3mm 	3.0mm
4.7mm 1.6mm		2.0*3mm	8.7mm
2.6mlm	13.8mm 20.3mm		





11. Tpical Solder Reflow Profile