



Preliminary Product Specification

W625D0

IEEE 802.11ABGN 2T2R USB Dongle/ Module

Version: 0.3

Date: Jun. 21, 2012

Release History

DATE	REV	Description of Change
2012/04/03	0.1	Initial Release
2012/06/18	0.2	Add pin header option for USB connection.
2012/06/21	0.3	Add wafer connector



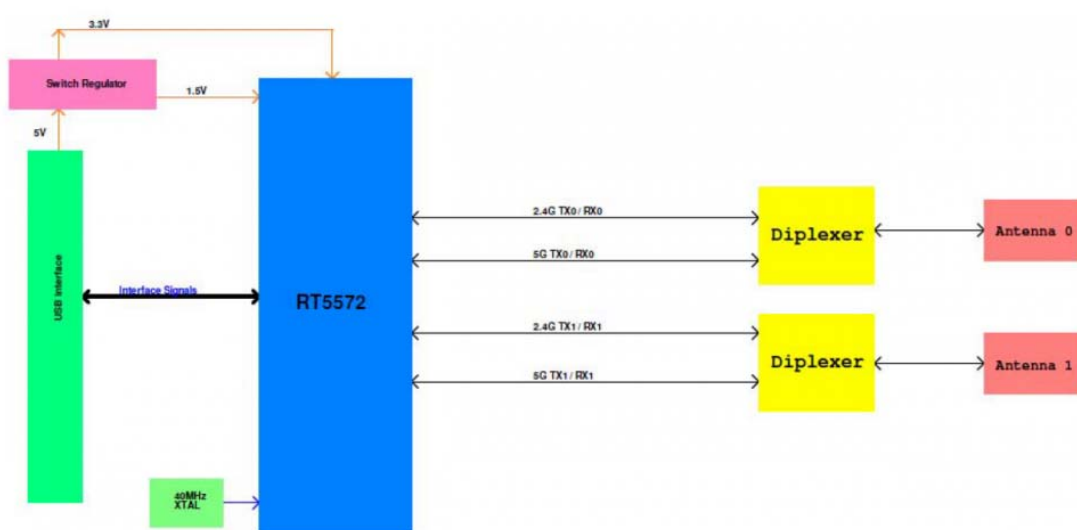
W625D0

IEEE 802.11ABGN 2T2R USB Dongle/ Module

1 Product Features

- 2T2R 2.4/5 GHz with 300 Mbps PHY data rate.
- USB 2.0 interface
- QoS: WMM & WMM-PS support
- Multiple BSSID support
- Reverse Direction Grant Data Flow and Frame Aggregation
- Maximum likelihood Decoding support
- Cisco CCX 5.0 support
- Low Power usage with Advanced Power Management
- Security: WEP/ TKIP/ AES/ WPA/ WPA2/ WAP

2 Block Diagram

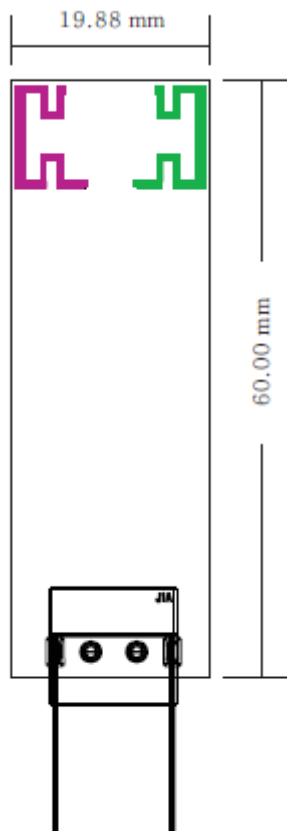


3 General Specification

■ Module Name					
• XW625D					
■ Product Specification					
• WLAN Standard		IEEE 802.11 a/b/g/n			
• Host Interface		USB 2.0			
• Host Connector Options		USB A type connector			
		4 Pin 2.5mm pitch wafer connector			
• Major Chipset		Ralink RT5572			
• Dimensions					
		Minimum	Typical	Maximum	Unit
	Length		TBD		mm
	Width		TBD		mm
	Height		TBD		mm
	Weight		TBD		g
• Antenna Connector Options		2 RF ports with U.FL connector for external dual band antenna			
		2 printed PCB antennas on board			
■ Operating Condition					
		Minimum	Typical	Maximum	Unit
• Voltage		DC	5		V
• Temperature		0		70	°C
• Storage temperature		-20		70	°C
• Humidity Non-Operating		10		80	%
■ Electrical Specification					
• Frequency Range		2400 ~ 2483 MHz; 5150 ~ 5850 MHz			
• Band Width		20MHz/ 40MHz Mixed mode			
• Output power					
2.4GHz					
		Minimum	Typical	Maximum	Unit
802.11b			18		dBm
802.11g		54Mbps	15		dBm
802.11n/ HT20		MCS7/15	14		dBm
802.11n/ HT40		MCS7/15	14		dBm
• Receiver Sensitivity					
		Minimum	Typical	Maximum	Unit
802.11b		11Mbps	-88	-85	dBm
802.11g		54Mbps	-74	-71	dBm

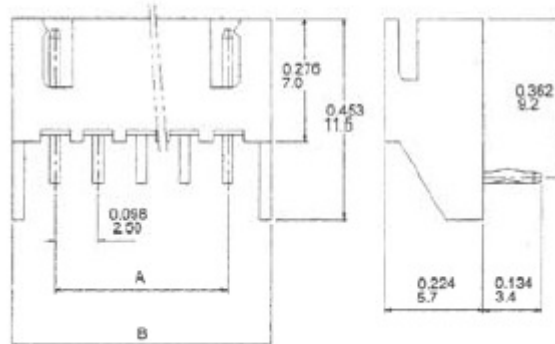
802.11n/ HT20	MCS7		-66	-64	dBm
802.11n/ HT40	MCS7		-63	-61	dBm
5GHz					
		Minimum	Typical	Maximum	Unit
802.11a	54Mbps		12		dBm
802.11n/ HT20	MCS7/15		11		dBm
802.11n/ HT40	MCS7/15		11		dBm
• Receiver Sensitivity					
		Minimum	Typical	Maximum	Unit
802.11a	54Mbps		-72	-69	dBm
802.11n/ HT20	MCS7		-66	-64	dBm
802.11n/ HT40	MCS7		-63	-61	dBm

4 Mechanical Dimension



5 Wafer Connector

WAFER PEC 2503-WR(90°)



Part No.	Poles	Dimension in (mm)		
		A	B	
2503	WR	2	0.098(2.5)	0.295(7.5)
2503		3	0.197(5.0)	0.394(10.0)
2503		4	0.295(7.5)	0.492(12.5)
2503		5	0.394(10.0)	0.591(15.0)
2503		6	0.492(12.5)	0.689(17.5)
2503		7	0.591(15.0)	0.787(20.0)
2503		8	0.689(17.5)	0.886(22.5)
2503	WS	9	0.787(20.0)	0.984(25.0)
2503		10	0.886(22.5)	1.083(27.5)
2503		11	0.984(25.0)	1.181(30.0)
2503		12	1.083(27.5)	1.280(32.5)
2503		13	1.181(30.0)	1.378(35.0)
2503		14	1.280(32.5)	1.476(37.5)
2503		15	1.378(35.0)	1.575(40.0)
2503		20	1.870(47.5)	2.066(52.5)

6 Power Consumption

	5V Current (mA)
Continuous Tx	410
Continuous Rx	250
Power Saving	40
Standby	130