



Product Specification

W725D0

IEEE 802.11ABGN 2T2R USB Dongle

Selective Dual-Band Mode

Version: 0.1

Date: Jul. 30, 2012

Release History

DATE	REV	Description of Change
2012/07/30	0.1	Preliminary specification release



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IEEE 802.11ABGN 2T2R USB Dongle

Selective Dual-Band Mode

1 Product Features

- Supports 2T2R 2.4/5 GHz selective dual-band mode.
- Maximum PHY data rate up to 144.4 Mbps using 20MHz bandwidth, 300Mbps using 40MHz bandwidth
- Short Guard Interval (400ns)
- Sounding packet
- Host interface complies with USB Specification Revision 2.0
- Supports IEEE 802.11 e/ i/ h/ k
- WAPI (Wireless Authentication Pivacy Infrastructure) certified
- Frame aggregation for increased MAC efficiency (A-MSDU, A-MPDU)
- Low latency immediate High-Throughput Block Acknowledgement (HT-BA)
- Long NAV for media reservation with CF-End for NAV release
- PHY-level spoofing to enhance legacy compatibility
- MIMO power saving mechanism
- Channel management and co-existence
- Multiple BSSID feature allows the RTL8192DU-VC-CG to assume multiple MAC identities when used as a wireless bridge
- Supports Wake-On-WLAN via Magic Packet and Wake-up frame
- Transmit Opportunity (TXOP) Short Inter-Frame Space (SIFS) bursting for higher multimedia bandwidth
- Dual MAC architecture allows dual band or dual network access or behave a station and an AP concurrently.
- WiFi Direct supports wireless peer to peer applications.

2 Block Diagram

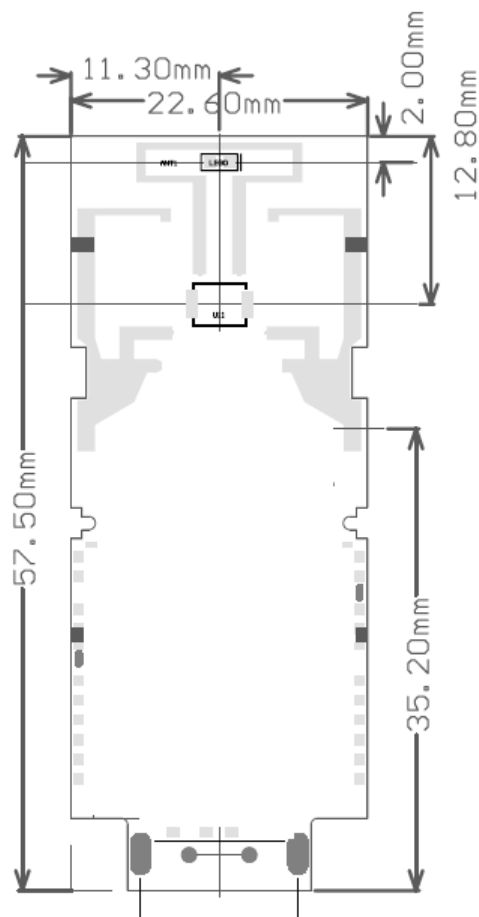
TBD

3 General Specification

■ Module Name					
• W725D0					
■ Product Specification					
• WLAN Standard	IEEE 802.11 a/b/g/n				
• Host Interface	USB 2.0				
• Host Connector Options	USB A type connector				
• Major Chipset	Realtek RTL8192DU-VS-CG				
• Dimensions (board size)					
		Minimum	Typical	Maximum	Unit
	Length		57.5		mm
	Width		22.6		mm
	Height		TBD		mm
	Weight		TBD		g
• Antenna Connector Options	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				
2.4GHz Band					
• Output power					
		Minimum	Typical	Maximum	Unit
802.11b		15	17	19	dBm
802.11g	54Mbps	13	15	17	dBm
802.11n/ HT20	MCS7	11	13	15	dBm
802.11n/ HT40	MCS7	11	13	15	dBm
• Receiver Sensitivity					
		Minimum	Typical	Maximum	Unit
802.11b	11Mbps			-83	dBm
802.11g	54Mbps			-72	dBm
802.11n/ HT20	MCS7			-70	dBm
802.11n/ HT40	MCS7			-66	dBm

5GHz Band					
• Output power					
		Minimum	Typical	Maximum	Unit
802.11a	54Mbps	13	15	17	dBm
802.11n/ HT20	MCS7	9	11	13	dBm
802.11n/ HT40	MCS7	9	11	13	dBm
• Receiver Sensitivity					
		Minimum	Typical	Maximum	Unit
802.11a	54Mbps			-70	dBm
802.11n/ HT20	MCS7			-68	dBm
802.11n/ HT40	MCS7			-64	dBm

4 Mechanical Dimension



5 Power Consumption

TBD