SD-WB61S/SD-WF60/SD-WF61 Datasheet

Amp'ed RF Technology, Inc.

Product Specification

Description

Amp'ed RF Technology offers Wi-Fi development platforms supporting Linux and Android systems. The SD-WB61S/SD-WF60/SD-WF61 board communicates with the host CPU through the MiniSD interface. These platforms are intended for in-depth evaluation and development on Linux or Android systems, to help customers shorten product development time. Amp'ed RF Technology's ACC1340 Wi-Fi offers drivers for many platforms and kernel versions and are available upon request.

Features

WLAN

- 802.11a/b/g/n, 802.11d, 802.11r
- Dual band: 2.5GHz and 5GHz
- Output Power, +21.5dBm
- Interface, SDIO 2.0
- Wi-Fi Direct
- Concurrent mode
- Wi-Fi Protected Setup
- Soft Access Point
- Hotspot 2.0
- Security: WPAI/WPA2, AES, WEP

Bluetooth

- Bluetooth BLE 4.1 (SD-WB61S)

Hardware

- Serial interfaces: SDIO
- RoHS conformance

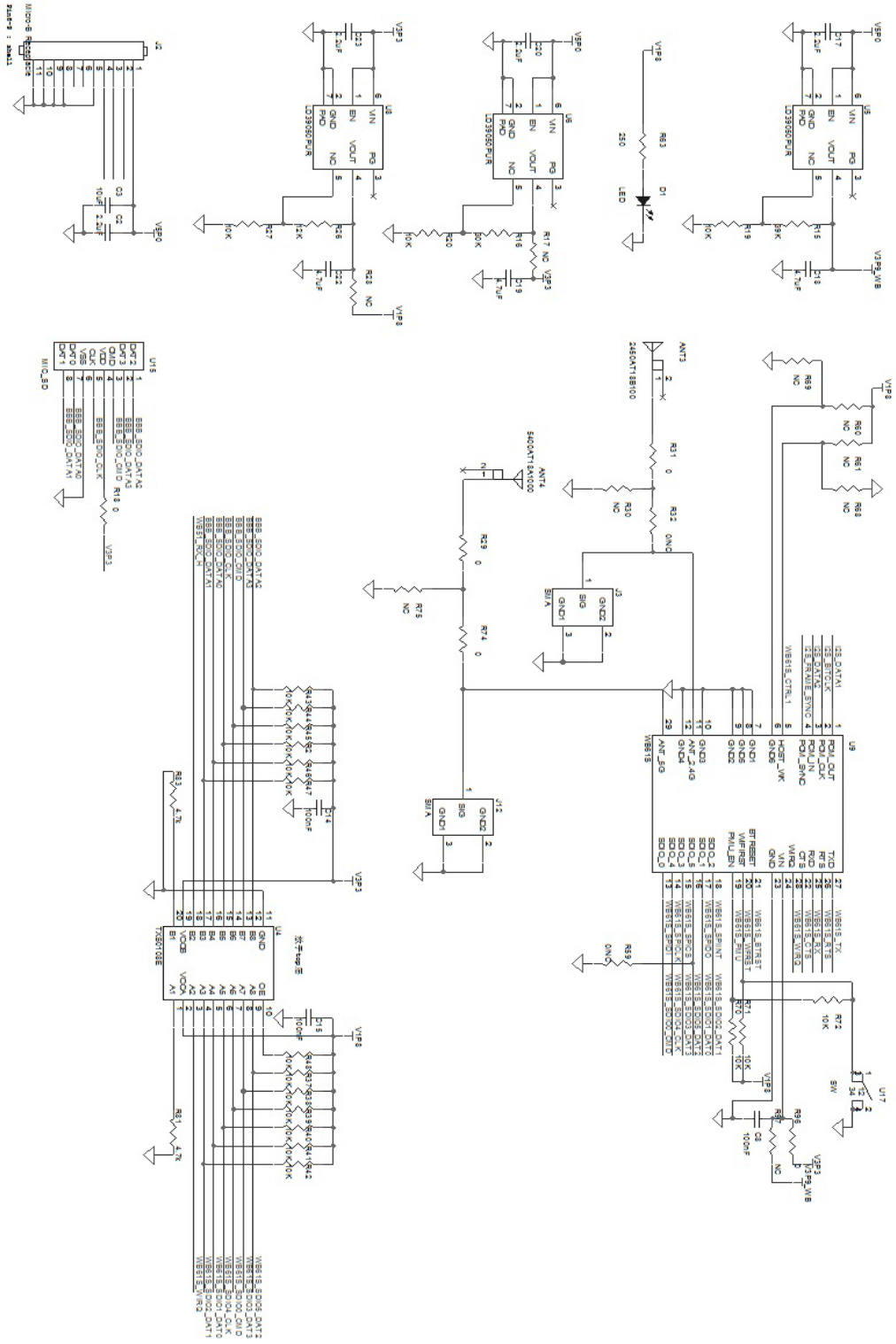
1. RF Specifications

Parameters	Conditions	Typical	Unit
Antenna load		50	ohm
Wi-Fi Receiver			
Sensitivity	DSSS 1Mbps@FER<8%	-98	dBm
Sensitivity	DSSS 2Mbps@FER<8%	-95	dBm
Sensitivity	CCK 5.5Mbps@FER<8%	-93	dBm
Sensitivity	CCK 11Mbps@FER<8%	-91	dBm
Sensitivity	BPSK 6Mbps@PER<10%	-93.5	dBm
Sensitivity	BPSK 9Mbps@PER<10%	-91.5	dBm
Sensitivity	QPSK 12Mbps@PER<10%	-90.5	dBm
Sensitivity	QPSK 18Mbps@PER<10%	-88	dBm
Sensitivity	16QAM 24Mbps@PER<10%	-85	dBm
Sensitivity	16QAM 36Mbps@PER<10%	-82	dBm
Sensitivity	64QAM 48Mbps@PER<10%	-78	dBm
Sensitivity	64QAM 54Mbps@PER<10%	-76.5	dBm
Sensitivity	BPSK 6.5Mbps@PER<10%	-92	dBm
Sensitivity	QPSK 13Mbps@PER<10%	-89	dBm
Sensitivity	QPSK 19.5Mbps@PER<10%	-86.5	dBm
Sensitivity	16QAM 26Mbps@PER<10%	-84	dBm
Sensitivity	16 QAM 39Mbps@PER<10%	-80.5	dBm
Sensitivity	64QAM 52Mbps@PER<10%	-76.5	dBm
Sensitivity	64QAM 58.5Mbps@PER<10%	-74.5	dBm
Sensitivity	64QAM 65Mbps@PER<10%	-73	dBm
Wi-Fi Receiver 5GHz 11n			
Sensitivity	BPSK 6.5Mbps@PER<10%,Nss=1	-91	dBm
Sensitivity	QPSK 13Mbps@PER<10%, Nss=1	-88	dBm
Sensitivity	16QAM 26MbpsPER<10%,Nss=1	-83	dBm
Sensitivity	64QAM 65MbpsPER<10%,Nss=1	-72.5	dBm
Wi-Fi Transmitter			
Output Power	802.11b/g DSSS/CCK	21.25	dBm
Output Power	802.11b/g BPSK 1/2	21.25	dBm
Output Power	802.11b/g BPSK 3/4	21.25	dBm
Output Power	802.11b/g QPSK 1/2	21.25	dBm

Output Power	802.11b/g QPSK 3/4	21.25	dBm

Output Power	802.11b/g 16QAM 1/2	21.25	dBm
Output Power	802.11b/g 16QAM 3/4	20.25	dBm
Output Power	802.11b/g 64QAM 2/3	19.25	dBm
Output Power	802.11b/g 64QAM 3/4	18.25	dBm
Output Power	802.11n MCS-0	21.25	dBm
Output Power	802.11n MCS-1	21.25	dBm
Output Power	802.11n MCS-2	21.25	dBm
Output Power	802.11n MCS-3	21.25	dBm
Output Power	802.11n MCS-4	20.25	dBm
Output Power	802.11n MCS-5	19.25	dBm
Output Power	802.11n MCS-6	18.25	dBm
Output Power	802.11n MCS-7	17.00	dBm
Wi-Fi Transmitter 5GHz, 11n			
Output Power	802.11n MCS-0	19.5	dBm
Output Power	802.11n MCS-7	14.5	dBm

2. Reference Design Example (WB61S)



3. Ordering Information

Part Name	Description
SD-WB61S	Dual band 2.4GHz and 5GHz WiFi development platform using WB61S WiFi combo module
SD-WF60	Dual band 2.4GHz and 5GHz WiFi development platform using WF60 WiFi module
SD-WF61	Dual band 2.4GHz and 5GHz WiFi development platform using WF61 WiFi module

4. Revision History

Date	Revision	Description
26 Dec 2016	1.0	Initial version
20 April 2017	2.0	Added SD-WF60 P/N
9 July 2017	3.0	Added SD-WF61 P/N