

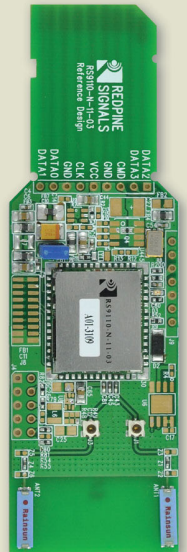


RS9110-N-11-03 EVALUATION BOARD

The RS9110-N-11-03 evaluation board (EVB) is a complete IEEE 802.11abgn Wireless LAN evaluation platform for the RS9110-N-03 802.11abgn dual-band WLAN module. The RS9110-N-11-03 module is mounted on the EVB along with other supporting components including a 40 MHz reference oscillator, antenna and other passive components. The RS9110-N-11-03 is a high-performance, ultra low-power WLAN module providing IEEE 802.11n functionality in the single stream mode both in the 2.4 GHz and 5GHz band. The board connects to a host processor through SDIO or SPI interfaces. It also provides the connectivity for the WLAN module to the Vector Signal Generator (VSG) and Vector Signal Analyzer (VSA) through a microwave coaxial connector switch mounted on the EVB. The RS9110-N-11-03 evaluation board facilitates the integration of the module into a host platform and its performance measurement.

Features

- Supports IEEE 802.11abgn operation
- Frequency Bands - 2.4GHz and 5GHz
- Operating channels in 2.4GHz:
 - USA – Channels 1 to 11
 - Japan – Channels 1 to 14
 - Europe – Channels 1 to 13
- Operating channels in 5GHz:
 - Lower Band – 36, 40, 44, and 48
 - Mid Band – 52, 56, 60 and 64
 - High Band – 100 to 140
 - Upper Band – 149, 153, and 157
- Integrated omni directional chip antenna
- 40 MHz, 20-ppm reference oscillator
- Connectors for power measurement
- Microwave coaxial connector switch
- Support for SDIO and SPI host interfaces
- Supply voltage of 3.0V to 3.6V
- It can be powered through SDIO or SPI interface, or through external power supply
- 802.11n drivers and configuration tools for Windows XP, Linux and Windows CE platforms



Purpose

- Integration of RS9110-N-11-03 into various host platforms
- IEEE 802.11abgn PHY performance measurement
- Interoperability verification with any Access Point

Specifications

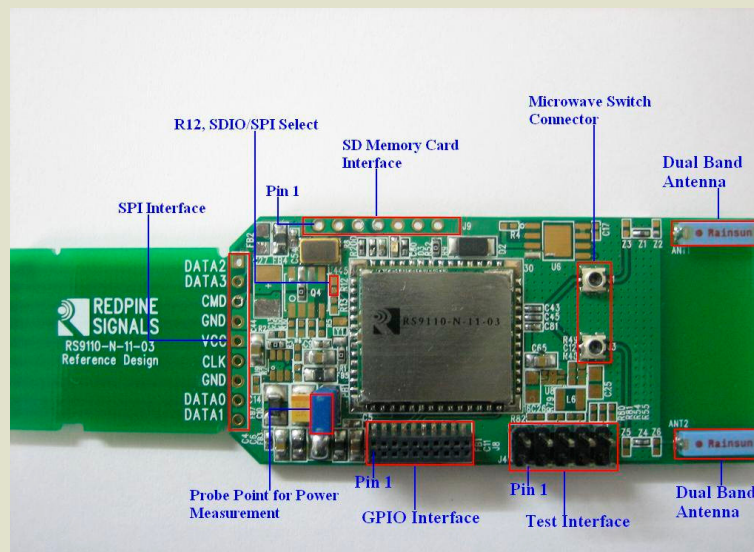
Network Standard Support	IEEE 802.11a/b/g/d/e/h/i/j and draft 802.11 n/k
Data Rates	802.11n: 6.5, 13, 19.5, 26, 39, 52, 58.5, 65 Mbps 802.11ag: 6, 9, 12, 18, 24, 36, 48, 54 Mbps 802.11b: 1, 2, 5.5, 11 Mbps
Frequency Band	2.412 - 2.484 GHz 5.18-5.24GHz, and 5.26 – 5.32GHz 5.50 – 5.70GHz, and 5.745 – 5.785GHz
Modulation Techniques	OFDM with BPSK, QPSK, 16-QAM, and 64-QAM 802.11b with CCK and DSSS
QoS	WMM and WMM Power Save Support
Wireless Security	802.11i: AES, TKIP, WEP, WPA, and WPA2 WPS – PIN and Push button
802.11n Features	MCS 0-7, STBC, RIFS, Greenfield Protection, A-MPDU, A-MSDU Aggregation with Block-ack, PSMP, MTBA
Host Interfaces	SDIO v1.2/2.0, SPI
Other Interfaces	I2C, SPI, GPIO, UART
Clocks	Reference Input: 9.6, 13, 19.2, 26, 38.4, 40, 52MHz Optional RTC: 32KHz crystal or direct 32KHz clock input
Package Size	20 mm x 17.5 mm x 1.9 mm
Supply Voltage	3 – 3.6 V
Operating Temperature	-40°C to +85°C
Certification	802.11n Draft 2.0, WPA, WPA2, WMM, WMM Power-save, WPS, Voice-Personal

Software Package

The evaluation kit for RS9110-N-11-03 comes with everything needed for verification of IEEE 802.11n functionality on any of SDIO or SPI based Linux, Windows XP and Windows CE platforms. A CD is provided along with the evaluation kit, containing the following items.

- 802.11n WLAN driver for Windows XP, Linux, Windows CE and Windows Mobile.
- 802.11 configuration utility
- Driver installation guide
- Wi-Fi™ evaluation procedure manual
- RS9110-N-11-03 Product Brochure
- RS9110-N-11-03 Datasheet

RS9110-N-11-03 EVB PICTURE



For additional information, please contact Sales at Redpine Signals, Inc.:

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