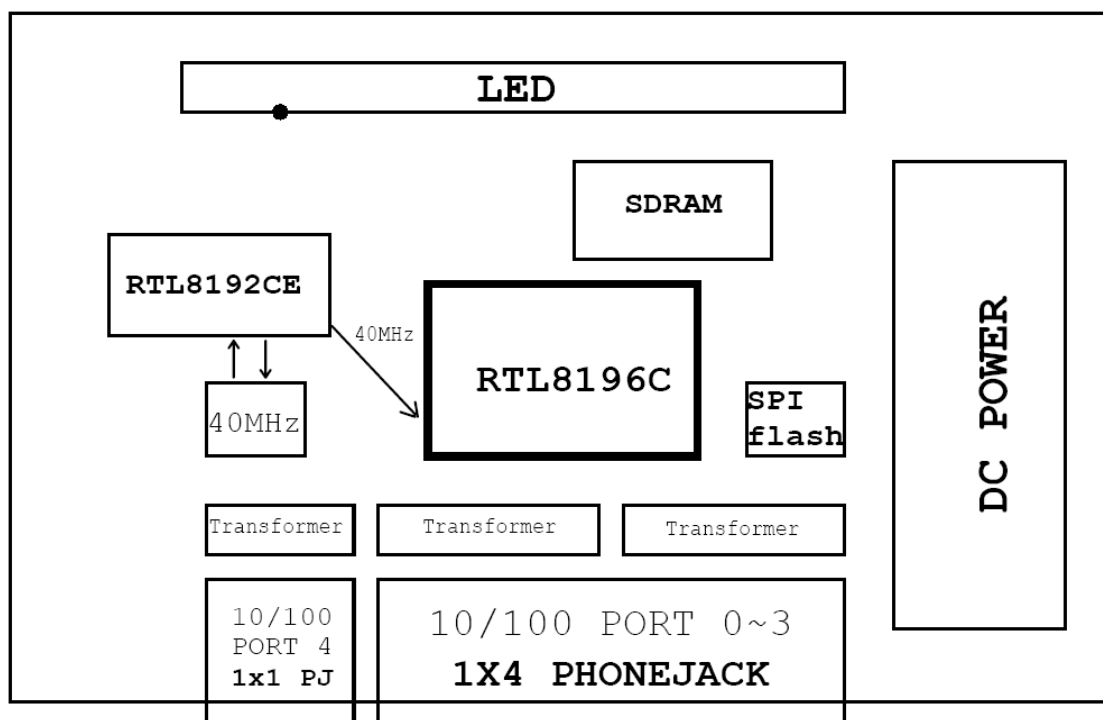


# Product Description

## Overview

This device is a 300Mbps AP Router, which operates in the 2.4GHz ISM band. The system is compliant with IEEE 802.11b/g and IEEE 802.11n draft 2.0. It uses OFDM technique that the maximum data rate could up to 300Mbps. If the signal to noise ratio is too poor which could not support 300Mbps, the 11Mbps data rate with DSSS technique will be applied.

## System Structure



The RTL8196C integrates a media access control (MAC), a baseband processor, analog-to-digital and digital-to-analog converters, USB2.0 client controller and transceiver in one package.

Together with multiple input/ output (MIMO) radio chip RTL8188CE/RTL8192CE for 2.4GHz to enable 802.11b/g/n solution.

The RTL8196C implements multiple inputs, multiple output (MIMO), half-duplex OFDM, CCK, and DSSS baseband processing, supporting 150 Mbps and 300 Mbps for 20 MHz

and 40 MHz channel operations respectively, and all IEEE 802.11b/g data rates.

The RTL8196C supports two simultaneous traffic streams using up to two integrated transmit chains and receive chains for high throughput and range performance. Transmit chains combine baseband in-phase (I) and quadrature (Q) signals, convert them to the desired frequency, and drive the RF signal to multiple antennas. Receiver chains use integrated dual conversion architecture and require no off-chip intermediate frequency (IF) filters. The frequency synthesizer supports one-MHz steps to match frequencies defined by IEEE 802.11b/g/n specification. The 40MHz crystal oscillator feeds to the RTL8196C. The antennas are dipole antenna with reverse SMA connector.

## **Power Supply**

The EUT is powered by 9Vdc from the host equipment.

For more detailed information, please refer to the user's manual.