



CYPRESS

# WirelessUSB™ LS 2.4-GHz DSSS Radio SoC

CYWUSB6932  
CYWUSB6934

## 1.0 Features

- 2.4-GHz radio transceiver
- Operates in the unlicensed Industrial, Scientific, and Medical (ISM) band (2.4 GHz–2.483 GHz)
- -90-dBm receive sensitivity
- Up to 0 dBm output power
- Range of up to 10 meters or more
- Data throughput of up to 62.5 kbits/sec
- Highly integrated low cost, minimal number of external components required
- Dual DSSS reconfigurable baseband correlators
- SPI microcontroller interface (up to 2-MHz data rate)
- 13-MHz ± 50-ppm input clock operation
- Low standby current < 1 μA
- Integrated 30-bit Manufacturing ID
- Operating voltage from 2.7V to 3.6V
- Operating temperature from 0° to 70°C
- Offered in a small footprint 48 Quad Flat Pack No Leads (QFN)

## 2.0 Functional Description

The CYWUSB6932/CYWUSB6934 Integrated Circuits (ICs) are highly integrated 2.4-GHz Direct Sequence Spread Spectrum (DSSS) Radio System-on-Chip (SoC) ICs. From the Serial Peripheral Interface (SPI) to the antenna, these ICs are single-chip 2.4-GHz DSSS Gaussian Frequency Shift Keying (GFSK) baseband modems that connect directly to a microcontroller via simple serial interface.

The CYWUSB6932 transmit-only IC and the CYWUSB6934 transceiver IC are available in a small footprint 48-pin QFN package.

## 3.0 Applications

- PC Human Interface Devices (HIDs)
  - Mice
  - Keyboards
  - Joysticks
- Peripheral Gaming Devices
  - Game Controllers
  - Console Keyboards
- General
  - Presenter Tools
  - Remote Controls
  - Consumer Electronics
  - Barcode Scanners
  - POS Peripherals
  - Toys

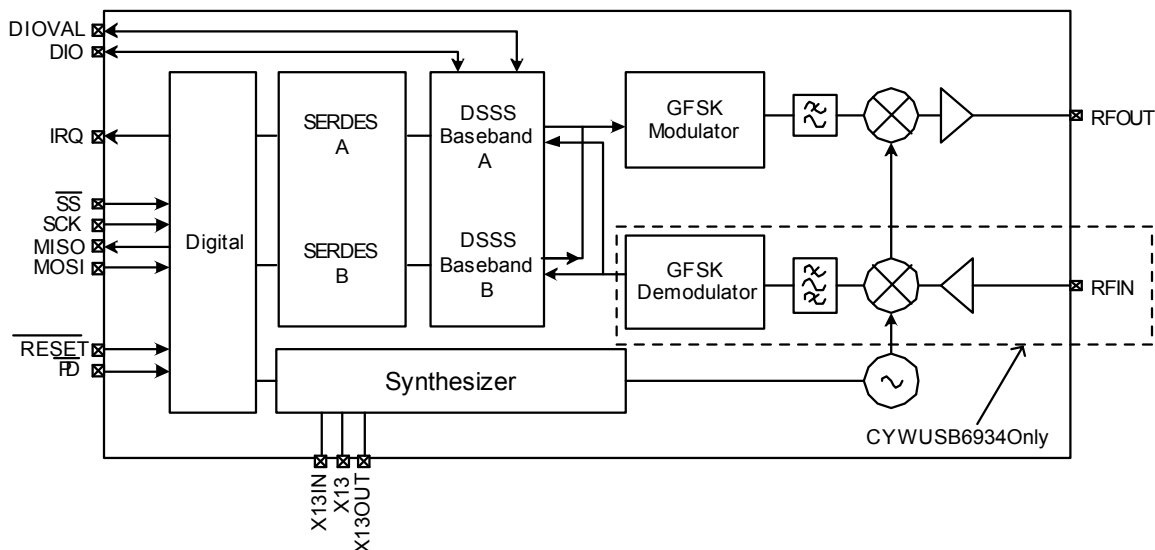


Figure 3-1. CYWUSB6932/CYWUSB6934 Simplified Block Diagram