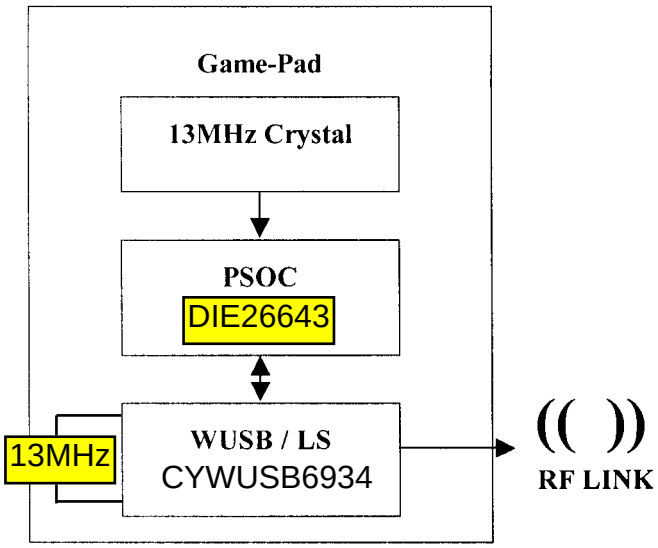
System Block diagram



WirelessUSB™ LS 2.4-GHz DSSS Radio SoC

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 micro-controller 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

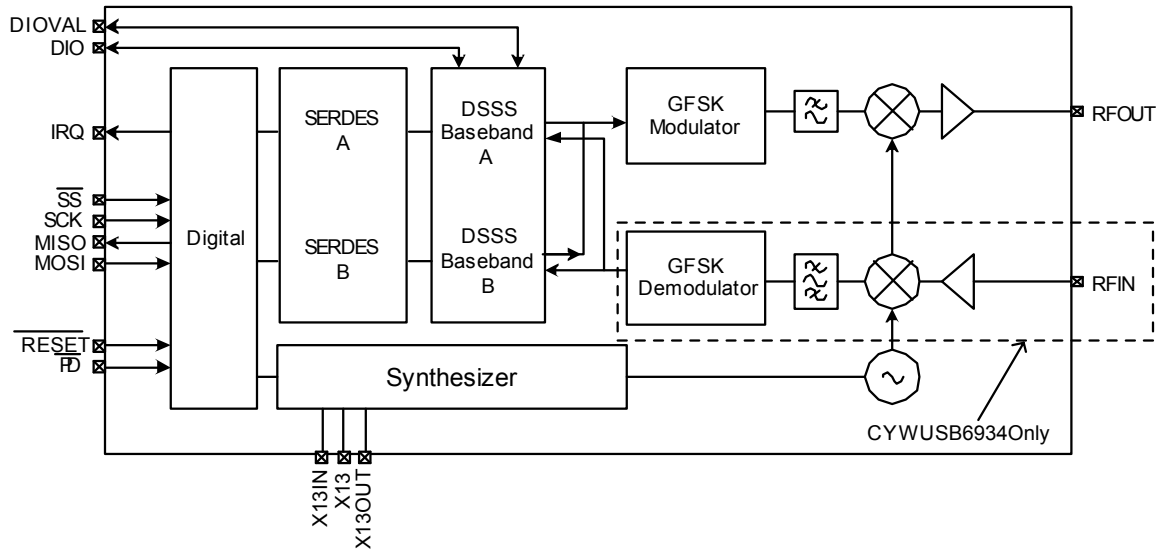


Figure 3-1. CYWUSB6932/CYWUSB6934 Simplified Block Diagram