

JA3515 – Transceiver

Wireless Controller IC



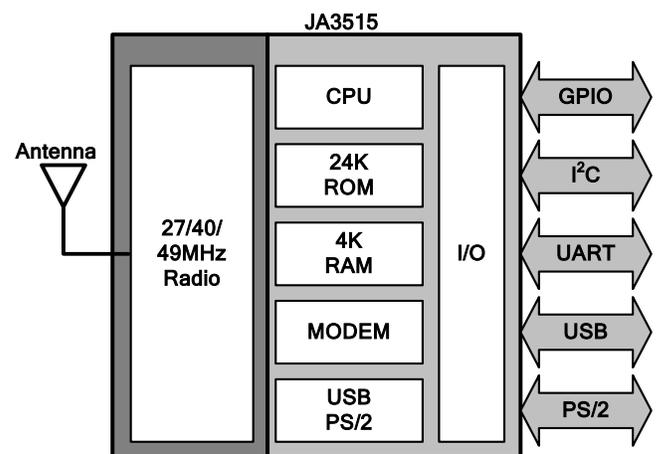
Overview

The JA3515 is a low-cost, highly integrated, tri-band, system-on-chip targeted for wireless keyboard and mouse applications. The JA3515 can be used as a complete, high performance PC transceiver interface for a wireless keyboard and mouse, using minimum external components. All necessary functions, the RF transceiver, baseband, modem, control logic and I/O interfaces;

both USB and PS2 are on-chip. The protocol stack and application software are integrated in the built-in mask ROM. The wireless data link runs with very low latency at data rates up to 64 kbps. The system incorporates a proprietary media access control protocol (MAC) that provides highly reliable wireless data transfers even in an environment with other wireless users.

Features

- Tri-band, 27 MHz, 40 MHz and 49 MHz single-chip radio
- World-wide unlicensed RF bands
- Reliable, bi-directional data link
- GFSK modulation
- 64 kbps max data rate
- Robust Interference Avoidance
- Viterbi decoder
- High tolerant frequency compensation
- 8051 micro-controller
- JTAG interface
- 4-kByte SRAM
- Application integrated in 24-kByte ROM
- 16 programmable GPIO's
- Internal regulators
- I²C, UART serial Interface
- USB & PS/2 interface



JA3515 System Diagram

