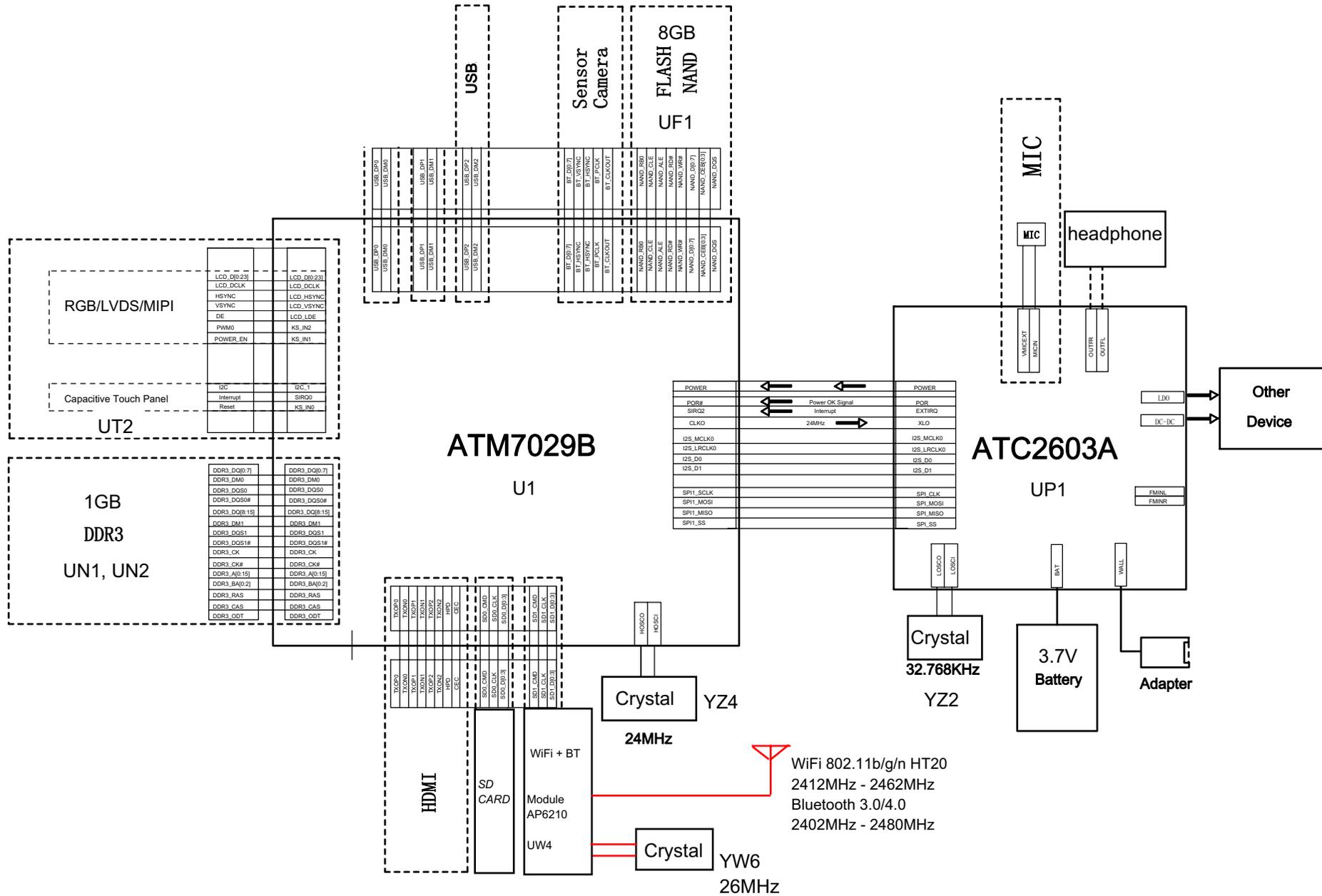


CT9273W26 Block diagram

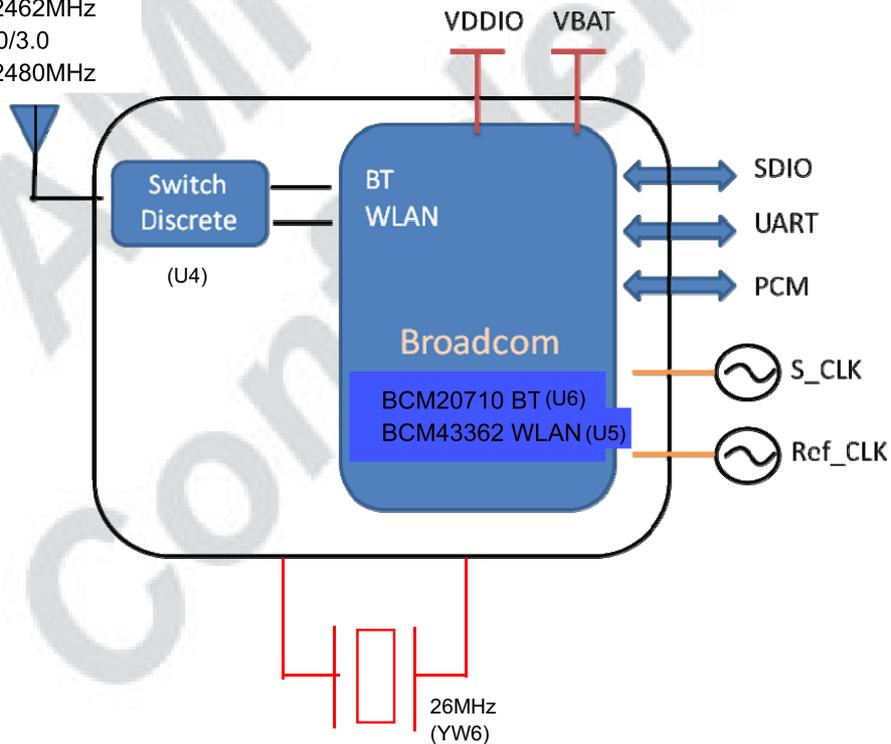


2. Features

- 802.11b/g/n single-band radio
- Bluetooth V4.0 + EDR with integrated Class 1.5 PA Concurrent Bluetooth and WLAN operation
- Simultaneous BT / WLAN receive with single antenna
- WLAN host interface options:
 - SDIO v2.0 — up to 50 MHz clock rate
- BT host digital interface:
 - UART (up to 4 Mbps)
- IEEE Co-existence technologies are integrated die solution

A simplified block diagram of the module is depicted in the figure below.

WiFi 802.11b/g/n(HT20)
 2412MHz - 2462MHz
 Bluetooth 4.0/3.0
 2402MHz - 2480MHz



Single-Chip Bluetooth® Transceiver and Baseband Processor

GENERAL DESCRIPTION

The Broadcom® BCM20710 is a monolithic, single-chip, Bluetooth 4.0 compliant, stand-alone baseband processor with an integrated 2.4 GHz transceiver. Manufactured using the industry's most advanced 65 nm CMOS low-power process, the BCM20710 employs the highest level of integration, eliminating all critical external components, and thereby minimizing the device's footprint and costs associated with the implementation of Bluetooth solutions.

The BCM20710 is the optimal solution for voice and data applications that require a Bluetooth SIG standard Host Controller Interface (HCI) via UART H4 or H5 and PCM audio interface support. The BCM20710 radio transceiver's enhanced radio performance meets the most stringent industrial temperature application requirements for compact integration into mobile handset and portable devices. The BCM20710 is fully compatible with all standard TCXO frequencies and provides full radio compatibility, enabling it to operate simultaneously with GPS and cellular radios.

FEATURES

- Bluetooth 4.0 + EDR compliant
- Class 1 capable with built-in PA
- Programmable output power control meets Class 1, Class 2, or Class 3 requirements
- Use supply voltages up to 5.5V
- Supports Broadcom SmartAudio™, wide-band speech, SBC codec, and packet loss concealment.
- Fractional-N synthesizer supports frequency references from 12 MHz to 52 MHz
- Automatic frequency detection for standard crystal and TCXO values when an external 32.768 kHz reference clock is provided.
- Ultra-low power consumption
- Supports serial flash interfaces
- Available in 42-bump WLPGA and 50-ball FPBGA packages.
- ARM7TDMI-S™-based microprocessor with integrated ROM and RAM
- Supports mobile without external memory

APPLICATIONS

- Mobile handsets and smart phones
- Personal digital assistants
- Automotive telematic systems

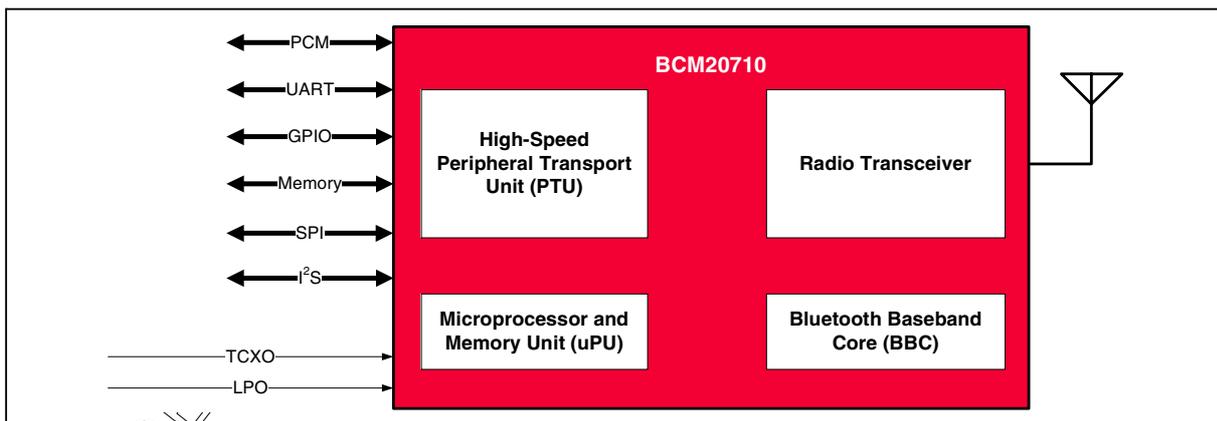


Figure 1: System Block Diagram

Section 1: BCM43362 Overview

Overview

The Broadcom® BCM43362 provides the highest level of integration for a mobile or handheld wireless system, with integrated IEEE 802.11 b/g/n. It provides a small form-factor solution with minimal external components to drive down cost for mass volumes and allows for handheld device flexibility in size, form, and function. The BCM43362 is designed to address the needs of highly mobile devices that require minimal power consumption and reliable operation.

Figure 2 shows the interconnect of all the major physical blocks in the BCM43362 and their associated external interfaces, which are described in greater detail in the following sections.

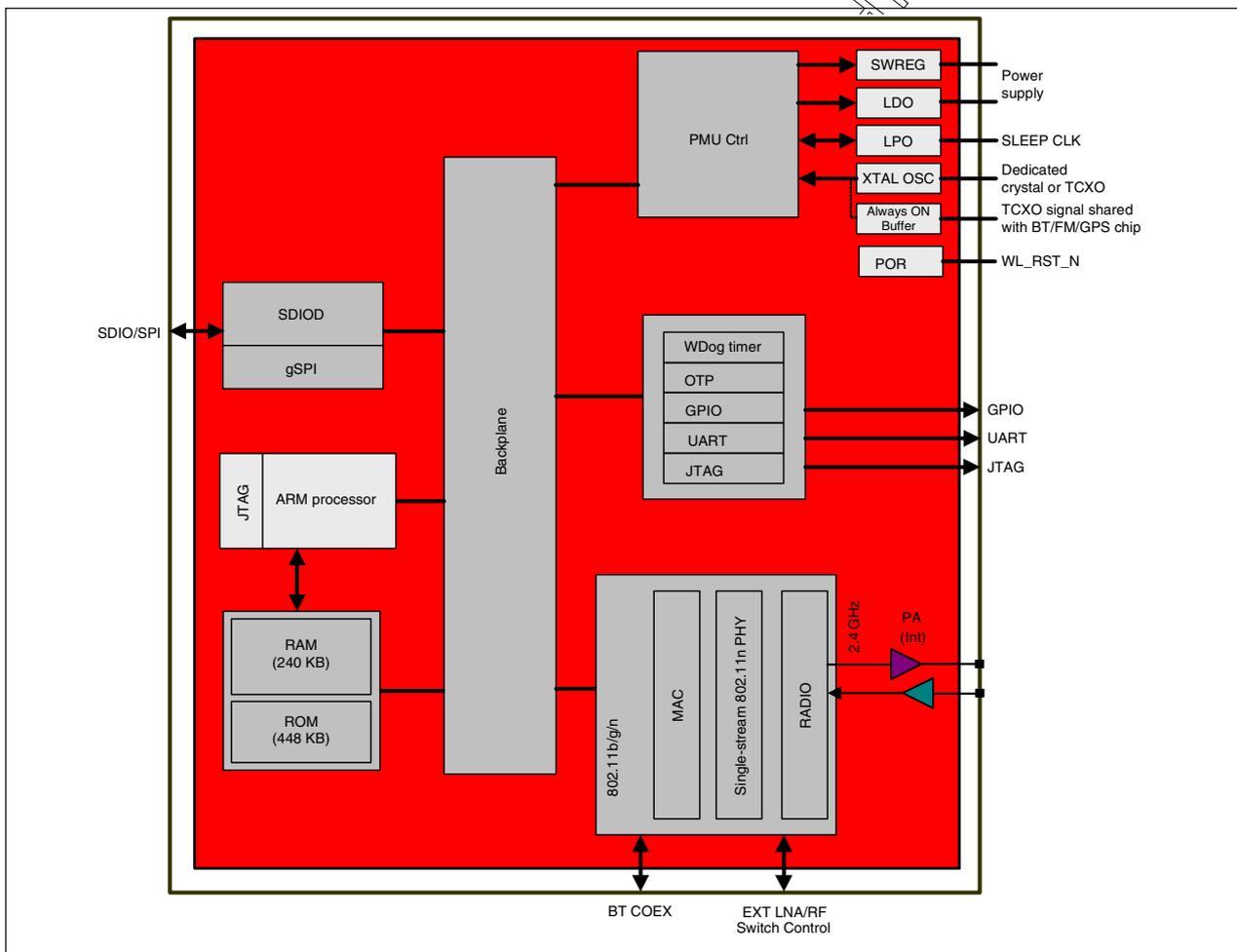


Figure 2: BCM43362 Block Diagram

Section 6: WLAN Radio Subsystem

The BCM43362 includes an integrated WLAN RF transceiver that has been optimized for use in 2.4 GHz Wireless LAN systems. It is designed to provide low power, low cost, and robust communications for applications operating in the globally available 2.4 GHz unlicensed ISM band. The transmit and receive sections include all on-chip filtering, mixing, and gain control functions. Improvements to the radio design include shared Tx/Rx baseband filters and high immunity to supply noise.

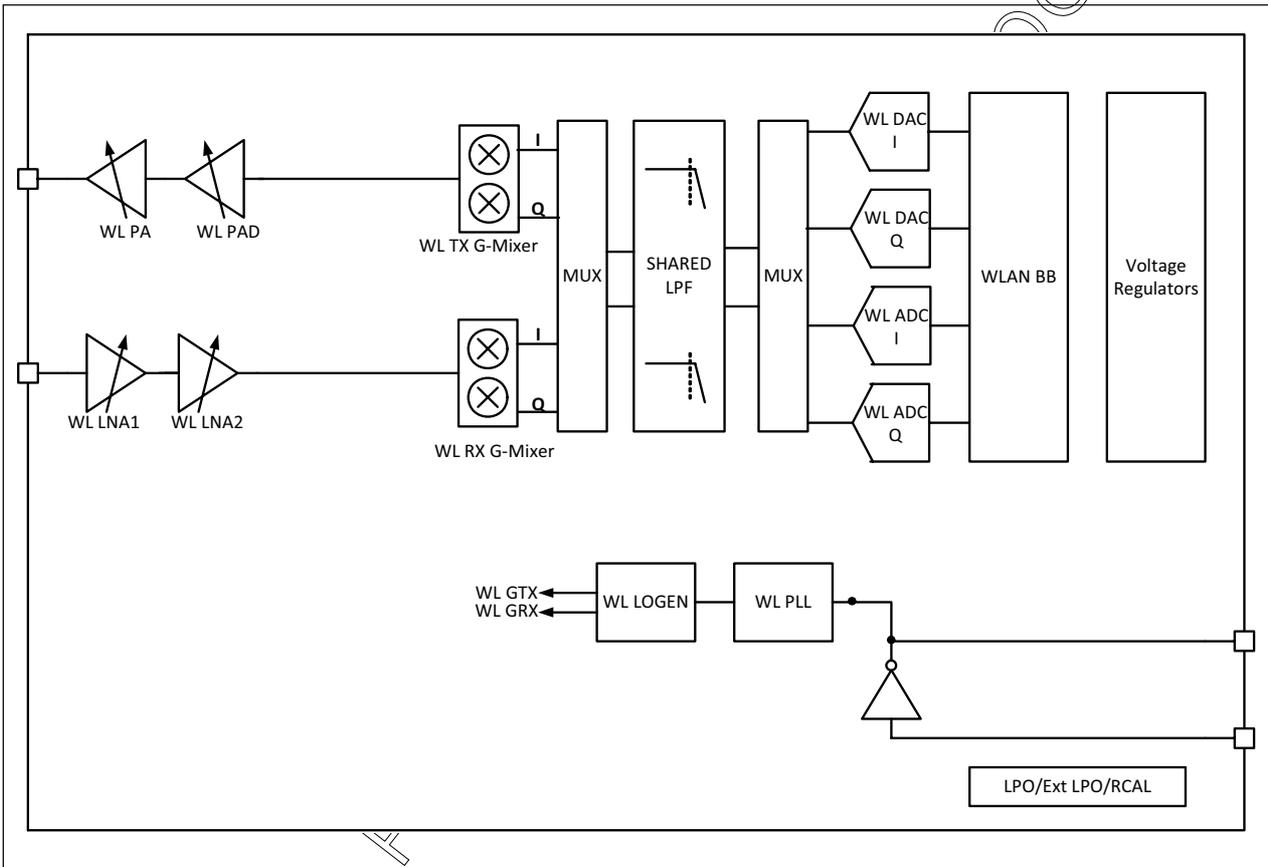


Figure 20: Radio Functional Block Diagram