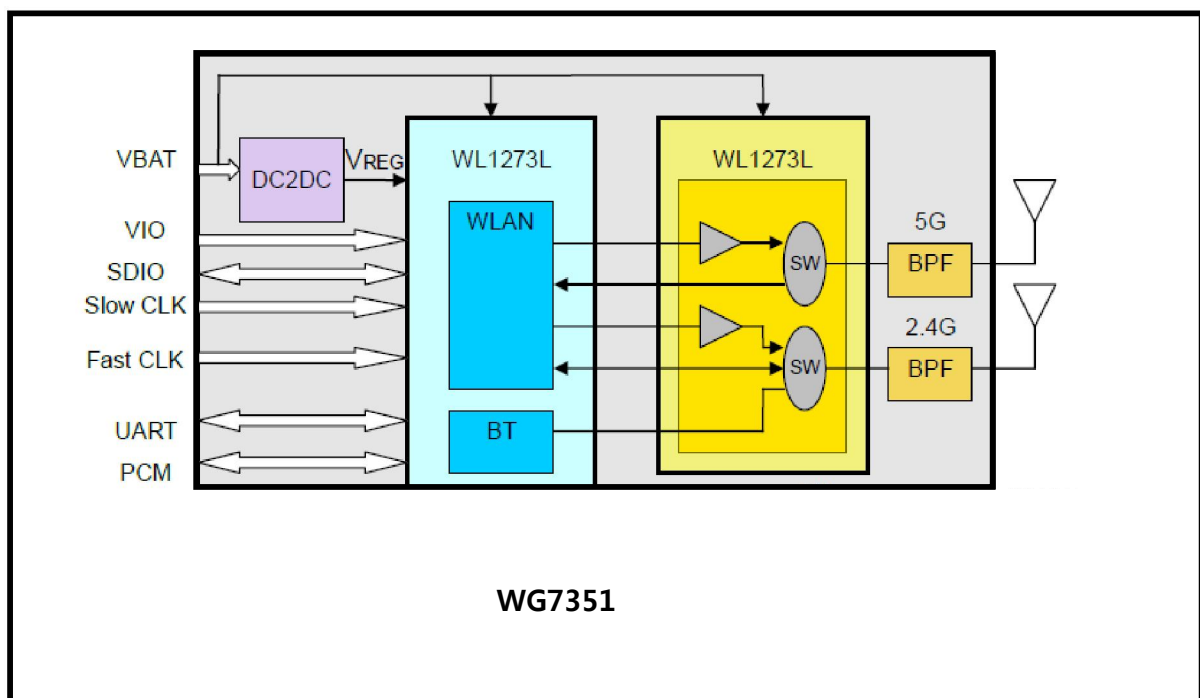


WG7351 Operational Description

WG7351, a WiFi and Bluetooth (system in package) module, is the most demanded design for all handset and portable devices with TI WL1273L IEEE 802.11a/b/g/n solutions to provide the best WiFi and BT coexistence interoperability and power saving technologies from TI.

1. Module Block Diagram



2. WLAN Features

- Support 802.11 2.4GHz b/g/n mode
- Support 802.11 5GHz a/n mode
- Optimized for ultra-low current consumption in all operating modes including extremely low power modes
- IEEE Std 802.11d, e, h, I, k, r, s PICS compliant
- Supports Cisco Client extensions (CCX) standard
- Support Secure Digital Input/Output (SDIO) Interfaces
- Medium-Access Controller (MAC)
 - Embedded ARM Central Processing Unit (CPU)

- 292kByte (Used for Program code, data and packet data)
Embedded Random-Access Memory (RAM)
 - Hardware-Based Encryption/Decryption Using 64-, 128-, and 256-Bit WEP, TKIP or AES Keys
 - Supports Wi-Fi Protected Access (WPA and WPA2.0) and IEEE Std 802.11i [Includes Hardware-Accelerated Advanced-Encryption Standard (AES)]
 - Designed to Work with IEEE Std 802.1x for Virtual Private Network (VPN) Solutions
 - Internal support for WLAN and Bluetooth Co-existence (bandwidth sharing, antenna sharing) in 2.4GHz
 - WIFI/BT 2.4GHz and 5GHz cannot operate at simultaneously (Connect AP, transfer data...).
- Baseband Processor
 - All IEEE Std 802.11a/b/g and 802.11n Data Rates up to 72.2Mbps

3. Bluetooth Features

- Bluetooth 1.1, 1.2, 2.0+EDR and 2.1+EDR specification compliant – up to HCI level
- BT Enhanced Data Rate (2 and 3 Mbps)
- Enhanced host Interfaces (UART)
- Very low power consumption
- On-chip Embedded radio
- Embedded ARM Microprocessor System
- Temperature detection and compensation mechanism ensure minimal variation in the RF performance over the entire temperature range
- A2DP support
- Wide-Band Speech support