WLAN 802.11 b/g/n and *Bluetooth*® v2.1 + EDR Module

FEATURES

- **IEEE 802.11 b/g/n Compliant**
- **Typical WLAN Transmit power:**
  - **+20dBm, 11Mbps, CCK (b)**
  - **+14.5dBm, 54Mbps, OFDM (g)**
  - **+12.5dBm, 65Mbps, OFDM (n)**
- **Typical WLAN Receiver sensitivity:**
  - **–89dBm, 8% PER, 11Mbps**
  - **–76dBm, 10% PER, 54Mbps**
  - **–73dBm, 10% PER, 65Mbps**
- ***Bluetooth* v2.1 + Enhanced Data Rate (EDR)**
- **Increased *Bluetooth* Transmit Power: +9.5dBm Typical**
- **-92dBm typical *Bluetooth*® Receiver Sensitivity**
- **Best-In-Class WLAN and *Bluetooth* Coexistence Technology on a Single-Chip**
- **Enhanced Low Power (ELP™) Technology for Extended Battery Life**
- **On Board TCXO, Power Regulation and U.FL Antenna Connector**
- **Hardware and Software Pre-integration With TI's AM/DM37x (ARM Cortex™-A8), AM18xx (ARM9), and OMAP4™ (ARM Cortex™-A9) Platforms**
- **Software Upgradable for ANT and *Bluetooth* Low Energy**
- **Dimensions: 13mm x 18mm x 1.9mm**
- **FCC/IC/CE Certified**
- **Operating Temperature Range: –40°C to 85°C**

APPLICATIONS

- **Consumer Devices**
- **Industrial and Home Automation**
- **Point of Sale and Point of Purchase**
- **Video Conferencing, Video Camera and VoIP**
- **Medical Devices**
- **Security and Surveillance**

DESCRIPTION

The following product brief applies to LS Research's WLAN + *Bluetooth* module, series name: TiWi. The WLAN + *Bluetooth* chip used is the WL1271 from Texas Instruments.

The WL1271-TiWi is a fully-integrated high performance module offered by LS Research using TI's single-chip WL1271 2.4GHz IEEE 802.11 b/g/n and *Bluetooth* v2.1 + Enhanced Data Rate (EDR) Transceiver. Based on TI's 6th generation WLAN technology and 7th generation *Bluetooth* technology, the solution provides best-in-class coexistence capabilities coupled with TI's Enhanced Low Power (ELP) technology. The WL1271-TiWi is provided as a module to help customers reduce development time, lower manufacturing costs, save board space, ease certification, and minimize RF expertise required. For evaluation and development, various platforms are available which integrate the WL1271-TiWi module, Linux WLAN drivers, BlueZ *Bluetooth* stack, and sample source applications running on a TI host processor (AM/DM37x, AM18x, OMAP4).

The full specification and purchasing of the WL1271-TiWi module can be found on LSR's website (www.lsr.com/tiwi). More information on TI's wireless platform solutions can be found on the Wireless Connectivity Wiki (www.ti.com/connectivitywiki).

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