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WL1271-TiWi-BLE

SWRS153 – JULY 2013

WLAN 802.11 b/g/n and *Bluetooth*® v4.0

FEATURES

- **IEEE 802.11 b/g/n Wi-Fi**
- **Typical WLAN Transmit Power:**
  - **+12.5 dBm, 65 Mbps, OFDM (n), 2.4 GHz**
  - **+20 dBm, 11 Mbps, CCK (b), 2.4 GHz**
- **Typical WLAN Receiver Sensitivity:**
  - **-73 dBm, 65 Mbps, OFDM (n), 2.4 GHz**
  - **-89 dBm, 11 Mbps, CCK (b), 2.4 GHz**
- ***Bluetooth* v4.0 Including Bluetooth Low Energy**
- ***Bluetooth* Power Class 1.5**
- **Best-In-Class WLAN and *Bluetooth* Coexistence Technology on a Single-Chip**
- **Enhanced Low Power (ELP™) Technology for Extended Battery Life**
- **On Module Reference Oscillator, DC-DC Voltage Regulation, and U.FL Coaxial**
- **Pre-Integration with TI's Sitara Platform Processors and Others with a COM Connector**
- **Software Upgradable for ANT**
- **Dimensions: 18 x 13 x 1.9 mm**
- **Cost Saving Module Level Certification Accepted Worldwide: FCC (USA), IC (Canada), and CE (Europe)**
- **Operating Temperature Range: -40°C to +85°C**

APPLICATIONS

- **Consumer Electronics**
- **Smart Energy**
- **Industrial**
- **Medical**
- **Security**
- **Video and Imaging Among Others**

DESCRIPTION

The following product brief applies to LS Research Wi-Fi + *Bluetooth* module, series name: TiWi-BLE. The Wi-Fi + *Bluetooth* chip used is the WL1271L from Texas Instruments.

The WL1271-BLE is a fully-integrated high performance module offered by LS Research utilizing TI's single-chip WL1271 Dual Band (2.4 GHz) IEEE 802.11 b/g/n and *Bluetooth* v4.0 BLE Transceiver. Based on TI's 6th generation Wi-Fi 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-BLE 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, platforms are available which integrate the WL1271-BLE module, Linux Wi-Fi drivers, *Bluetooth* stack, and sample source applications running on a TI host processor (AM335x, AM37xx, and AM1810).

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

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