

## IEC6828T WiFi 802.11g/b Single System Module

### DESCRIPTION

With a small form factor of 25×25×2.8mm (max.), the IEC6828T is a full-featured 802.11g/b WiFi single system module that includes support for high linear output power, IEEE 802.11i security, IEEE 802.11e QoS, and hard-wired WiFi-Bluetooth co-existence. By providing SDIO (1-bit, 4-bit, and SPI) host interface combined with support for WinCE and Linux operating systems, the IEC6828T enables rapid integration of WiFi technology into a variety of host devices. The pre-tested module eliminates the need to create custom WLAN designs, resulting in greatly reduced development risk, costs and time-to-market.

### FEATURES

- Small footprint: 25×25×2.8mm (max.) 28pins castellation
- IEEE 802.11g/b compliant
- Frequency band: 2.4 to 2.472GHz (1 to 13 channels )
- 11b data rates: 1, 2, 5.5, 11 Mbps
- 11g data rates: 6, 9, 12, 18, 24, 36, 48, and 54 Mbps
- Modulation: DSSS (CCK, DQPSK, DBPSK) and OFDM (BPSK, QPSK, 16QAM, 64QAM)
- Host interface:
  - SDIO: SDIO 1-bit, SDIO 4-bit, SDIO SPI
- Support for IEEE 802.11e QoS
- Support for IEEE 802.11i advanced security
- Multiple power saving modes to maximize battery life
- Dual 60MIPS RISC processors integrated for host

offload of all 802.11 functions

- Support for advanced WiFi-Bluetooth co-existence, including antenna sharing capability, and VoIP optimizations
- Support for Fixed Mobile Convergence - UMA (Unlicensed Mobile Access) and IMS (IP Multimedia Subsystem)
- GSM/GPRS/DCS/PCS/WCDMA/GPS radio non-interference
- Either on-module PIFA antenna or external passive antenna supported
- LDO regulator, PIFA antenna, crystal, EEPROM, and full RF front end integrated
- Embedded OS supported
- RoHS compliant
- FCC Compliance (TX FCC ID: **XD9-IEC6828T**):

- EMI: FCC Part 15 Subpart B
- RF: FCC Part 15 Subpart C

#### Canada:

- EMI: ICES-003
- RF: IC RSS-210

### APPLICATIONS

- WiFi plug-in modules for non-wireless systems
- Smartphone / PDA / PDA phone / WiFi phone / DSC / DVC with WiFi connectivity
- Printer Server / Multifunctional peripheral with WiFi connectivity

### APPEARANCE

