

## ***apm6828 WiFi 802.11g/b Single System Module***

### **DESCRIPTION**

With a small form factor of 10.5×10.5×1.4mm, the apm6828 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 Bluetooth-WiFi co-existence. By providing SDIO (1-bit, 4-bit, and SPI) host interface combined with support for WinCE and Linux operating systems, the apm6828 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**

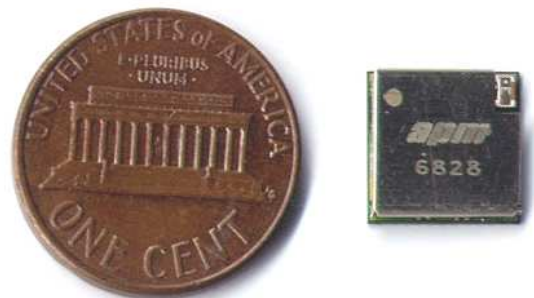
- Small footprint: 10.5×10.5×1.4mm LGA package
- IEEE 802.11g/b compliant
- Frequency band: 2.4 to 2.497GHz (1 to 14 channels)
- 11b data rates: 1, 2, 5.5, 11 Mbps
- 11g data rates: 6, 9, 12, 18, 24, 36, 48, and 54 Mbps
- Modulation: DSSS (CCK, DQPSK, DBPSK) and OFDM (BPSK, QPSK, 16QAM, 64QAM)
- Host 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
  - Hot standby: 2mA
  - Sleep mode: 110uA
- Dual 60MIPS RISC processors integrated for host offload of all 802.11 functions

- Support for 2-wire & 3-wire 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
- Immune from EM interference with metal shielding
- Crystal, EEPROM, LNA, and full RF front end integrated
- Embedded OS supported
- RoHS complaint

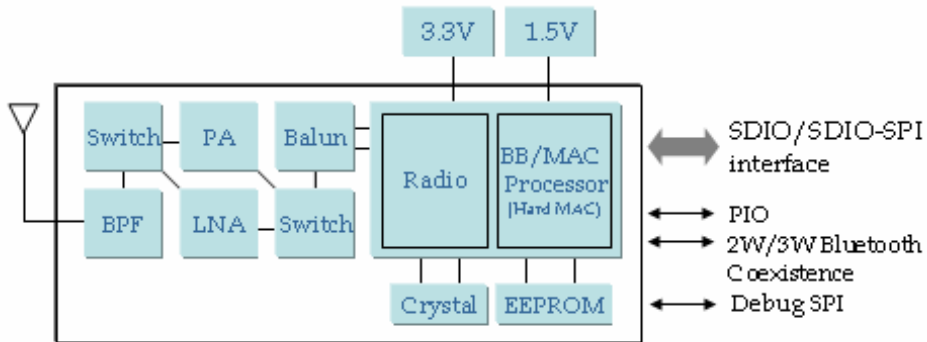
### **APPLICATIONS**

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

### **APPEARANCE**



**BLOCK DIAGRAM**



**PIN ASSIGNMENT (TOP VIEW)**

