

## ***APM6658 : WiFi 802.11n/g/b & BT v2.1 + EDR Combo Module***

### **DESCRIPTION**

With a small form factor of 9x11x1.3mm (max.), the apm6658 is a full-featured WiFi 802.11n/g/b & Bluetooth v2.1+EDR dual radio module that simultaneously provides WiFi and Bluetooth connections.

By providing flexible host interfaces combined with support for embedded operating systems, the apm6658 enables rapid integration of WiFi and Bluetooth technology into a variety of host devices. The pre-tested and pre-certified module eliminates the need to create custom designs, resulting in greatly reduced development risk, costs, and time-to-market.

### **GENERAL FEATURES**

- CSR WiFi and BT solution
- Small footprint: 9x11x1.3mm (max.)
- Support for state-of-the-art 3-wire WiFi-Bluetooth co-existence and VoIP optimizations
- Support for dual antenna and single antenna configurations for WiFi and Bluetooth
- EEPROM, LNA, and full RF front ends integrated for WiFi and full RF front ends integrated for Bluetooth
- External clock sharing for WiFi and Bluetooth
- GSM/GPRS/DCS/PCS/WCDMA/GPS radio non-interference

- Embedded OS supported
- RoHS compliant

### **WIFI FEATURES**

- IEEE 802.11n/g/b compliant
- Host interface: SDIO: SDIO 1-bit, SDIO 4-bit, SDIO SPI
- Support for IEEE 802.11e QoS
- Support for IEEE 802.11i advanced security
- Support for WAPI security (apm6658 only)
- Dual 60MIPS RISC processors integrated for host offload of all 802.11 functions
- Support for Fixed Mobile Convergence - UMA (Unlicensed Mobile Access) and IMS (IP Multimedia Subsystem)

### **BLUETOOTH FEATURES**

- Bluetooth Specification v2.1+EDR Class 2 compliant (all mandatory and optional features)
- UART to 4MBaud
- SDIO/CSPI Interface

### **APPLICATIONS**

- Smartphone / PDA / PDA phone / DSC / DVC with both WiFi and Bluetooth connectivity

