

## **Memory Modules**

## Flash Products

**DC-DC Converters** 

Communication Products

# Bluetooth/Wi-Fi Mini PCI Combo Card

## Bluetooth and Wi-Fi Combo Product

Smart Modular Technology Bluetooth\*/Wi-Fi\* Combo Mini PCI product is based on leading technologies from market leaders Cambridge Silicon Radio (CSR) and Intersil. It addresses the coexistence issues in PAN and WLAN markets by offering true simultaneous connectivity while complying with both 802.11b and Bluetooth 1.1 standards. The product has been designed to meet North America, Japan and the European standards. The product is a type III mini PCI card with dimension of 41.27mm x 59.60mm x 4.8mm. The Bluetooth has on-board 8 Mbits flash memory. The product applications include Notebooks, PDAs, other consumer electronics, and industrial markets.

SMART Modular Technologies, Inc. is a wholly owned operating company within Solectron Corporation's (NYSE: SLR) Technology Solutions Business Unit. SMART, a leading independent manufacturer of memory and communication sub-systems offers more than 500 products to premier OEMs in the computer, networking and telecommunications industries. Through its relationship to Solectron, SMART offers customers competitive outsourcing advantages, such as access to advanced manufacturing technologies, shortened product time-to-market, reduced total cost of ownership and more effective asset utilization.



SMART Modular Technologies Communications Products Division (CPD) has extensive experience & focus upon leading-edge, client-side personal communication sub-systems for wireless and wired Personal Area, Local Area and Wide-Area Networks.



### FEATURES

- Based on CSR and Intersil Chipsets
- Size: 41.27 x 59.6 x 4.8 mm
- Simultaneous Bluetooth and WLAN transmissions
- 802.11b and Bluetooth 1.1
   compliant
- Output power up to +20 dBm for 802.11b
- Output power up to +4dBm for Bluetooth operation
- Receiver sensitivity of –82dBm to –91 dBm for FER < 8x10E-2 for Wi-Fi
- Receiver sensitivity of –82dBm for BER of ,0.1% for Bluetooth
- Class 2 Bluetooth device
- USB 1.1 compliant and 2.0 compatible
- Piconet and scatternet functions, including master/slave switch capabilities
- Power Supply: 3.3V +/-10%
- RF antenna connector for either BT or Wi-Fi

 TECHNOLOGY → PRODUCTS → PROFITS

 Get there faster with SMART.

 turning technologies into products

 turning vision into reality

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# **Specifications**

#### General

- Simultaneous Bluetooth and WLAN transmissions
- Bluetooth Specification 1.1 and 802.11b
   compliant
- Bluetooth Class II device
- Power Requirement
   3.3V +/-10%
- Power Consumption at 3.3V
  - 53mA for BT, and 400mA for 802.11b maximum in active mode
  - 7mA at standby for BT, and 65mA for 802.11b

#### Radio

- Frequency Range: 2.402 2.480GHz (USA), 2.471-2.497 GHz (Japan)
- Transmit Power: Up to +4 dBm for BT; up to +20dBm for Wi-Fi for the US and European markets, +15 dBm for Japan
- Receiver Sensitivity (Rx): Better than -82dBm @ 0.1% BER for BT, and 8xE-2 FER for Wi-Fi
- Range: up to 30 meters for BT, and 152 meters for Wi-Fi

#### Antenna

 Separate mini coax antenna ports of 50 Ohms impedance for BT and Wi-Fi

#### Temperature

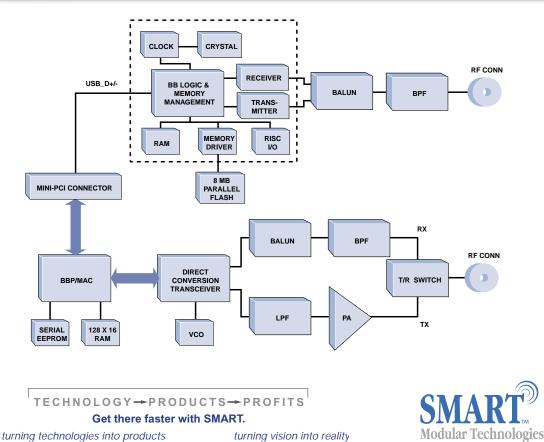
- Operating temperature: -20°C to +70°C
- Storage temperature: -40°C to +85°C

#### Interfaces

- Mini PCI level III
- USB v1.1 compliant, USB2.0 compatible for BT

#### SMART Part number - 90156

# BT/802.11 Mini PC Combo Product



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