



## AIRFORCE ONE™ CHIP 802.11 REFERENCE DESIGN

### KEY FEATURES

- Industry's smallest IEEE 802.11b solution makes wireless LAN connectivity practical for pocket-sized electronic devices
- Extreme integration includes radio, baseband, MAC, power amplifier, and all other radio frequency (RF) components found on a typical wireless LAN board—making small mobile devices easier, less expensive and faster to manufacture
- Innovative power management reduces power consumption by up to 97% in standby mode, providing greatly extended battery life for mobile devices
- Cost-effective architecture with single-sided all-CMOS design eliminates over 100 components, providing more affordable wireless connectivity for consumer electronics
- High-performance features standard across the AirForce product line:
  - OneDriver™
  - SmartRadio™
  - WPA
  - CCX
  - AES in hardware
  - Xpress™ technology
- Reference designs include Secure Digital I/O, Secure Digital I/O with a Bluetooth™ option, and Compact Flash.

### POWER MANAGEMENT

- Innovative power management techniques improve battery life by creating deep sleep state when device is in stand-by mode
- Designed for low CPU utilization to ensure CPU resources are available for handheld applications

### AIRFORCE FEATURE SET

- **SmartRadio:** Continuous calibration reduces test time and improves manufacturability
- **Xpress Technology:** Standards-based frame bursting improves overall network efficiency
- **Security:**
  - WPA CERTIFIED for powerful encryption and authentication
  - -AES in hardware future-proofed for 802.11i security standard
  - Cisco Compatible Extensions (CCX) Certified
- **Worldwide Support:** Global products supported with worldwide homologated design
- **OneDriver:** Single driver across all platforms 802.11a, b, and g simplifies driver update process and improves customer satisfaction

### BCM94317 Reference Design

