



## Wi-Fi<sup>®</sup> VIDEO PHONE REFERENCE DESIGN

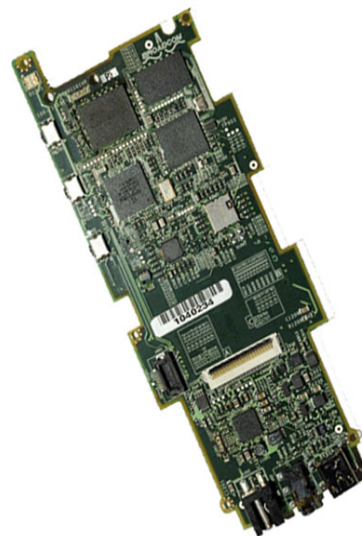
### FEATURES

- **Highly Integrated Wi-Fi<sup>®</sup> Video Phone Reference Design**
  - BCM1161: Mobile VoIP Processor
  - BCM2702/BCM2722: Multimedia Coprocessor
  - BCM4318E: Single-chip 802.11b/g Baseband, MAC, and Radio
- **VoIP Software Suite PhonexChange<sup>™</sup> with Video Extensions**
  - Full-duplex voice/video over WLAN
  - H.263, H.264, MPEG-4 support
  - QCIF and CIF video resolution
  - Up to 30 FPS video calling
  - G.711, G.726, G.729a, AMR, G.723.1, BV16, G.722, BV32
  - Minimized end-to-end delay
  - High quality video/audio synchronization
  - Speakerphone
  - Multimedia music player
  - Video camcorder
  - JPEG support
- **OneDriver 802.11 Networking Software**
  - Standards compliant (WFA Certified)
  - Security (WPA/WPA2)
  - QoS (WMM)
  - 802.1x authentication
  - SecureEasySetup<sup>™</sup>
- **Broadcom Technology Advancements**
  - BroadRange<sup>™</sup>
  - SecureEasySetup
  - BroadVoice<sup>™</sup>
- **Board support package including Linux<sup>®</sup> kernel and drivers**

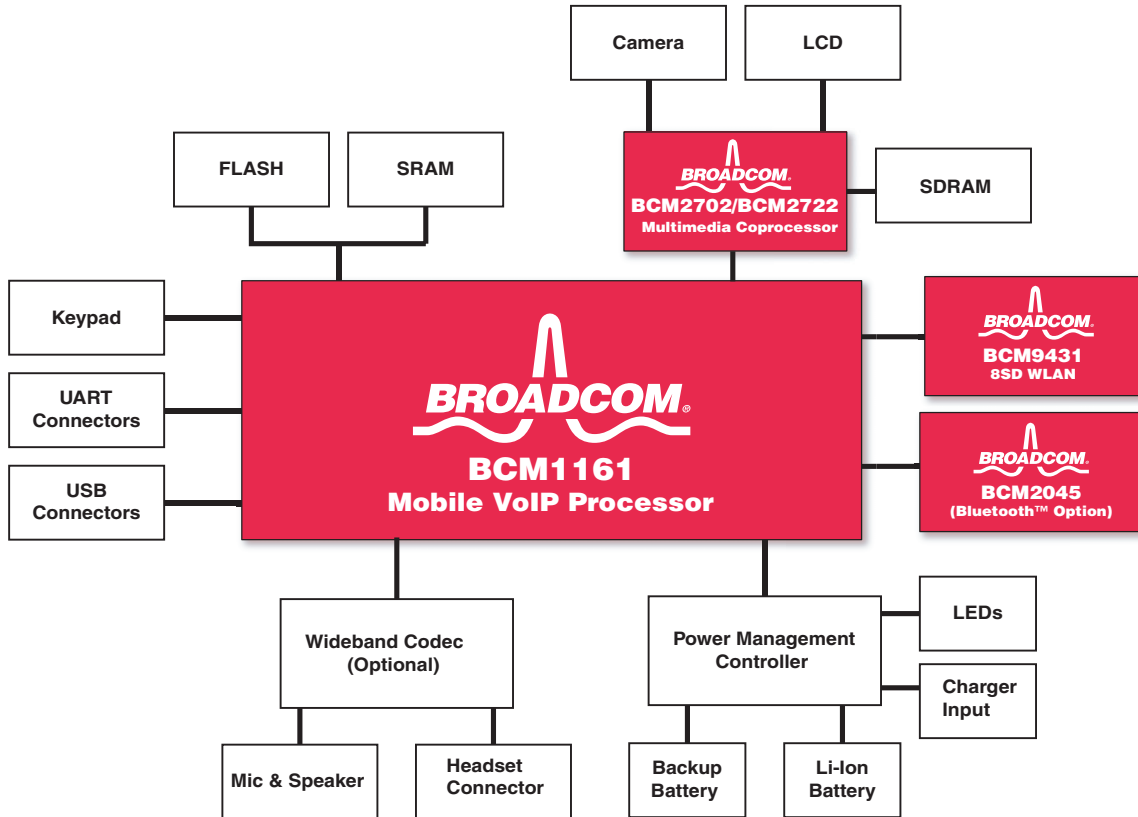
### SUMMARY OF BENEFITS

- Accelerates time to market by providing a fully-functional hardware and software platform for customers to use as basis for their own product designs.
- Video-capable platform with high resolution, 30 frame/second video calling capability, minimized end to end delay, and optimized voice and video synchronization.
- Difficult problems – like RF layout and power management – are already solved.
- SecureEasySetup push-button setup makes joining a Wi-Fi network fast and easy.
- Open ARM9<sup>®</sup> and Linux OS-based platform provides a foundation for OEM/ODM differentiation through unique features.
- Details how to use Broadcom's Wi-Fi video phone solution to minimize BOM cost through reduction in support circuitry.

### Wi-Fi Video Phone Reference Design Kit



## OVERVIEW



The BCM91161VP Wi-Fi Video Phone Reference Design demonstrates how Broadcom's highly-integrated VoIP/WLAN and video chipset can be used to develop a cost-effective phone for consumer applications. This chipset is comprised of the BCM1161 Mobile VoIP Processor, the BCM2702/BCM2722 Multimedia Coprocessor, and the BCM4318E Single-chip 802.11b/g Baseband, MAC and Radio device.

The Wi-Fi Video Phone Reference Design consists of a complete hardware and software package to help accelerate time to market for developers. The hardware package comes complete with schematics, Bill of Material (BOM) and Gerber files.

The BCM91161VP Wi-Fi Video Phone Reference Design also comes bundled with a standards compliant software package.

### The BCM91161VP Software Package

Major software components of the BCM91161VP Wi-Fi Video Phone Reference Design include xChange™ VoIP software, SIP Call Signaling, OneDriver™ 802.11 Networking software, Linux OS-based board support package and software development tools.

### Related Devices

BCM1161	Mobile VoIP Processor
BCM2702/BCM2722	Multimedia Coprocessor
BCM4318E	AirForce™, OneChip™ with integrated 802.11b/g Baseband, MAC, and Radio.
BCM94318ESD	OneChip™ 802.11b/g SDIO Module.
BCM2045	Single-chip Bluetooth™ Baseband, MAC, and Radio.

Broadcom®, the pulse logo, Connecting everything®, and the Connecting everything logo are among the trademarks of Broadcom Corporation and/or its affiliates in the United States, certain other countries and/or the EU. Any other trademarks or trade names mentioned are the property of their respective owners.

Connecting  
everything®



**BROADCOM CORPORATION**  
16215 Alton Parkway, P.O. Box 57013  
Irvine, California 92619-7013

© 2006 by BROADCOM CORPORATION. All rights reserved.

91161VP-PB01-R 3/07/06

Phone: 949-450-8700  
Fax: 949-450-8710  
E-mail: info@broadcom.com  
Web: www.broadcom.com