

## Wi-Fi® PHONE REFERENCE DESIGN

### FEATURES

- **Highly integrated Wi-Fi® Phone Reference Design**
  - BCM1161: Mobile VoIP Processor
  - BCM4318E: Single-chip 802.11b/g baseband, MAC, and Radio
- **VoIP Software Suite PhonexChange™**
  - G.711, G.726, G.729A/AB, AMR, G.723.1, BV16, G.722, and BV32
  - SIP call signaling
  - Adaptive jitter buffer; BVC advanced PLC; ECAN
- **OneDriver™ 802.11 Networking Software**
  - Standards Compliant (WFA Certified)
  - Security (WPA/WPA2)
  - QoS (WMM)
  - 802.1x Authentication
- **Advanced Telephony and Multimedia**
  - 3-way conference
  - Speakerphone
  - MPEG-4 video clips
  - JPEG/Motion JPEG
  - Large 18-bbp, 64K-color LCD display
  - VGA Camera
- **Broadcom Technology Advancements**
  - BroadRange™
  - SecureEasySetup™
  - BroadVoice™
- **Board support package including Linux (R) kernel and drivers**

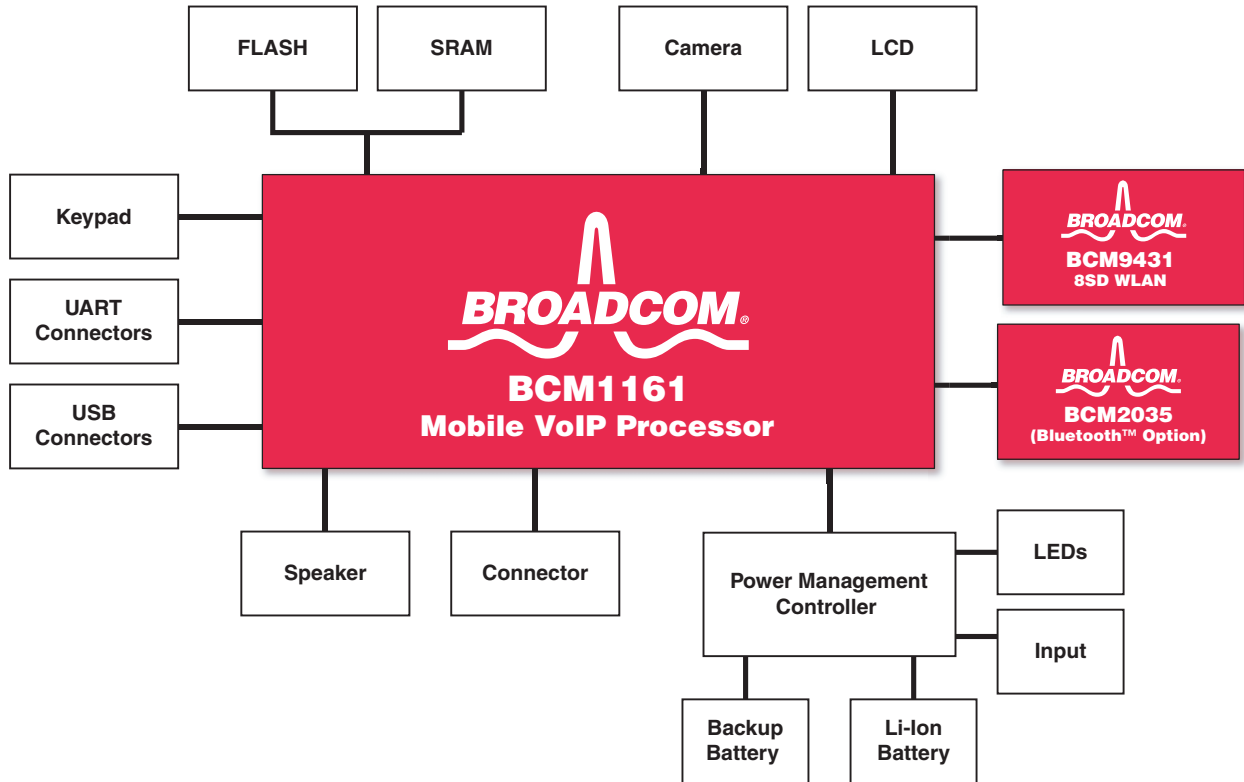
### SUMMARY OF BENEFITS

- **Best in class battery life: 4 hour talk-time and 5 days standby time based on 900 mA/hr battery.**
- **Accelerates time to market by providing a fully-functional hardware and software platform for customers to use as basis for their own product designs.**
- **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® and Linux OS-based platform provides a foundation for OEM/ODM differentiation through unique features.**
- **Details how to use Broadcom's Wi-Fi phone solution to minimize BOM cost through reduction in support circuitry.**

### Wi-Fi Phone Kit



## OVERVIEW



The BCM91161 Wi-Fi Phone Reference Design demonstrates how Broadcom's highly-integrated VoIP/WLAN chipset can be used to develop a cost-effective phone for residential and enterprise applications. This chipset is comprised of the BCM1161 Mobile VoIP Processor and the BCM4318E single-chip 802.11b/g baseband, MAC and Radio device.

The Wi-Fi 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 schematic, bill of material (BOM) and Gerber files.

The BCM91161 Wi-Fi Phone Reference Design also comes bundled with a standards compliant software package.

### The BCM91161 Software Package

Major software components of the BCM1161 Wi-Fi 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
BCM4318E	AirForce™, OneChip™ with integrated 802.11b/g Baseband, MAC, and Radio.
BCM94318ESD	OneChip™ 802.11b/g SDIO Module.
BCM2035	Single-chip Bluetooth™ Baseband, MAC, and Radio.

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