

**MFR: BEAGLEBOARD** 

MPN: BBBWL-SC-562

# BeagleBone Black Wireless with WiFi and Bluetooth



# **Overview:**

BeagleBone Black Wireless is based on the extremely successful open-source hardware design from the BeagleBone Black, a high-expansion, maker-focused, community-supported open hardware computer created by BeagleBoard.org Foundation.

Focused on connectivity, the BeagleBone Black Wireless replaces the 10/100 Ethernet port from the BeagleBone Black with a high-performance 802.11 b/g/n 2.4GHz WiFi module with Bluetooth. Just like the BeagleBone Black, the wireless retains HDMI output, serial debug port, PC USB interface, USB 2.0 host, reset and power buttons, and adds two more status LEDs for WiFi and Bluetooth. Also retained is the 4GB of onboard eMMC memory with Debian Linux preinstalled, allowing the BeagleBone Wireless to boot in around 10 seconds and have you developing through your web browser in less than 5 minutes using just a single USB cable.

The BeagleBone Wireless also introduces the Octavo OSD3358 SiP (system-in-package) which

integrates BeagleBone functionality into one easy-to-use BGA package. The board is open source and was designed in CadSoft Eagle.

Like the BeagleBone Black, the BeagleBone Black Wireless is compatible with capes for hardware expansion, integration and peripherals.

# **Specifications:**

#### **Processor**

- AM335x 1GHz ARM® Cortex-A8
- SGX530 graphics accelerator
- NEON floating-point accelerator
- 2x PRU 32-bit 200MHzmicrocontrollers

## Connectivity

- WiLink 1835 802.11b/g/n 2.4GHz WiFi, Bluetooth, and Bluetooth Smart Module
- USB client: power, debug and device
- USB host
- Micro HDMI output
- 2x 46 pin headers

## Memory

- 512MB DDR3 800MHZ RAM
- 4GB Embedded eMMC Flash with Debian Distribution
- microSD Card Slot

# **Software Compatibility**

- Debian
- Android
- Ubuntu
- Cloud9 IDE on Node.js w/ BoneScript library