# README file for BBONE-GATEWAY-CAPE

(Firmware image support for use with Wireless Connectivity Cape)



### BeagleBone Black firmware compatibility

This cape product is intended to be used with a BeagleBone Black host board. Support for use with other compatible BeagleBoard variants will be provided at a later time.

Please ensure your BeagleBone Black is using the latest supported firmware image – available at: <a href="https://beagleboard.org/latest-images">https://beagleboard.org/latest-images</a>. Instructions for imaging your BeagleBone Black are provide at the end of this document – section BeagleBone Black firmware imaging instructions

Follow the Instruction Steps detailed below to fully enable use of your Wireless Connectivity Cape.

#### Instruction Steps to configure & use Wireless Connectivity Cape with BeagleBone Black:

- 1. Boot the BeagleBone Black without the Wireless Connectivity Cape attached.
- 2. Launch a terminal window connection.
  - Run an SSH Client (e.g., PuTTY) over USB. Connect using IP address: 192.168.7.2 (Port 22). (Username of **root** with no password.)
  - 3-wire Serial Port (J5) connection with terminal settings 115200, 8, 1.

- 3. Edit /boot/uEnv.txt
  - \$> sudo nano /boot/uEnv.txt
  - # Enable the overlay dtb (eMMC/hdmi/etc are disabled)

```
dtb=am335x-boneblack-overlay.dtb
```

• # Enable the gateway/connectivity cape overlay:

```
cape_enable=bone_capemgr.enable_partno=BB-BONE-WL183
```

- Write out & save edits.
- 4. Shutdown. Attach the Wireless Connectivity Cape to the BeagleBone Black and re-boot.
- 5. Again, launch and open up a terminal window session (as described above).
- 6. Issue the following commands to establish WiFi connection:

```
$> sudo connmanctl

#connmanctl  #connmanctl> tether wifi disable
#connmanctl> enable wifi
#connmanctl> scan wifi
#connmanctl> services
#connmanctl> agent on
#connmanctl> connect wifi_*_managed_psk
#connmanctl> quit
```

#### **Release Notes:**

The directive of this README document may be *temporary only*. The intention is to provision and release an official beagleboard.org supported firmware image that will more fully and more automatically configure and support the Wireless Connectivity Cape. At a future date, the contents of this README may become obsolete.

## BeagleBone Black firmware imaging instructions

Firmware imaging instructions are provided by beagleboard.org at the following link:

## https://beagleboard.org/getting-started

- Scroll down to the section that begins, "Update board with latest software"
- Complete steps #1 thru #8.

PN: **BBONE-GATEWAY-CAPE** 



The element14 Wireless Connectivity Cape is manufactured in PRC by Premier Farnell UK Limited, 150 Armley Road, Leeds, LS12 2QQ, United Kingdom <a href="https://www.premierfarnell.com">www.premierfarnell.com</a>