

# Open hardware computing for makers, educators and professionals

**BeagleBoard.org** released the first BeagleBoard, an affordable, open hardware computer in 2008 and updated with the extra performance BeagleBoard-xM in 2010. The more maker-focused, bare-bones credit card sized BeagleBone introduced in 2011 was updated in 2013 to create the most affordable BeagleBone Black. In 2015, the BeagleBoard line is again refreshed with the high-performance multicore and high-speed connectivity enabled BeagleBoard-X15.

The **BeagleBoard.org Foundation** is a US-based 501(c) non-profit corporation existing to:

- Provide education around the design and use of open-source software and hardware
- Foster communication between individuals interested in open-source software and hardware

#### **BeagleBone Black**

Real-time capable credit-card-sized Linux™ computer based on a Sitara™ processor has a low-

> cost design, onboard 4GB flash

### **Specifications**:

- 1-GHz ARM A8 CPU
- 2x200-MHz PRUs
- 512-MB RAM
- 4-GB eMMC w/Debian
- microSD card slot
- microHDMI video out
- USB host and client
- Ethernet
- 2×46-pin headers
- Board size: 3.4" × 2.1"

storage, integrated microcontrollers and the ability to use over USB, making it the most affordable open-source development board around.

See BeagleBoard.org for details and to buy (~\$49)



Built-in web-based tutorial and editor enables simple programming of sensors, lights, motors and more within minutes of opening the box.

Stay informed at <u>beagleboard.org/newsletter</u>. Contact <u>christi@beagleboard.org</u> regarding logo licensing, educational collaboration and donations.

## BeagleBoard-X15

Top performing, mainline Linux enabled, power-users' dream board with a core tailored for every computing task and a high-

highspeed
interface
for every
connectivity need.
Give your algorithms

room to stretch!

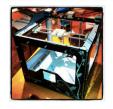
See BeagleBoard.org for details and to buy (~\$199)

### Specifications:

- 2×1.5-GHz ARM A15 CPUs
- 2×750-MHz C66 DSPs
- 4×200-MHz PRUs
- 2-GB RAM
- 4-GB eMMC w/Debian
- microSD card slot
- HDMI video output
- Stereo audio in/out
- 3×USB 3.0 host
- 1×USB 2.0 client
- 2×Gigabit Ethernet
- eSATA (500mA)
- 4×60-pin headers w/PCIe, LCD, mSATA
- Board size: 4" × 4.2"

#### **BeagleBone Capes**

Capes are add-on boards that extend the functionality of BeagleBone Black to simplify the development of many common applications, such as 3D printing, industrial robotics, autonomous robots and flying drones, dedicated tablets, thin clients, home automation, automotive computing, gaming, digital signage and more.



Visit BeagleBoneCapes.com to learn more about available cape add-on boards (these are third-party products that add value)