



# BeagleBone Educator

a complete and affordable kit for electronics education

Ideal for:

- Teachers & educators
- STEM groups & parents
- Computer programmers

## **Problem: Students are unprepared for the future of social machines**

Today's electronic devices are more than just communication tools. Our mobile phones/tablets monitor and perform constant analysis of their environment, recording and reporting on an ever-increasing amount of our daily lives. These tools grab our attention and filter the information we use moment by moment to make critical decisions. Understanding these digital devices is critical.

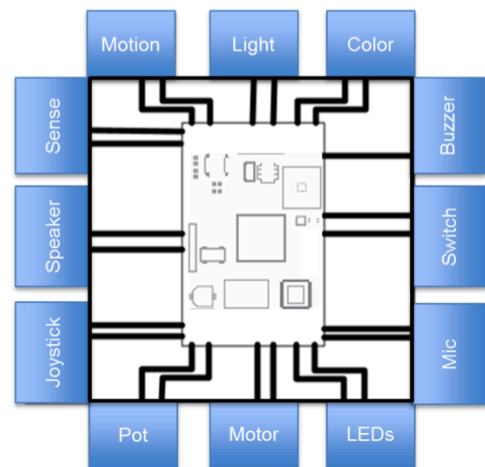
When it comes to educating for this digital now, *it is widely acknowledged that there is a lack of effective training to ensure that faculty are getting the [digital literacy] skills they need to guide students.*<sup>1</sup> A solution is required that easily engages students without them being able to quickly outgrow it. Critically, this solution must still be readily approachable by educators.

## **Answer: BeagleBone Educator**

BeagleBone Educator builds upon the popular and successful BeagleBone Black open-hardware Linux single-board computer platform. BeagleBone Educator reduces costs and simplifies getting started by integrating a number of electronic circuits that can be disassembled and reassembled to build a quick, complete grasp on the basics of programming and electronics.

With BeagleBone Educator, users can:

- Learn how computers work,
- Learn how to program,
- Learn how to share digital information automatically,
- Discover how electronic devices are controlled,
- Experiment with common electronic devices including:<sup>2</sup>
  - Light, temperature and color sensors,
  - Microphone and accelerometer MEMS sensors,
  - Inputs including joystick, switch and potentiometer
  - Outputs including speaker, buzzer and LEDs
  - DC motor control with feedback



BeagleBone Educator comes with basic curriculum and is supported by an online community of like-minded enthusiasts.

To learn more or engage with the development of BeagleBone Educator, please contact Christine Long at [christi@beagleboard.org](mailto:christi@beagleboard.org) or visit us at [beagleboard.org/education](http://beagleboard.org/education).

<sup>1</sup> <http://www.nmc.org/pdf/2014-nmc-horizon-report-he-EN.pdf>

<sup>2</sup> Final list of devices may vary