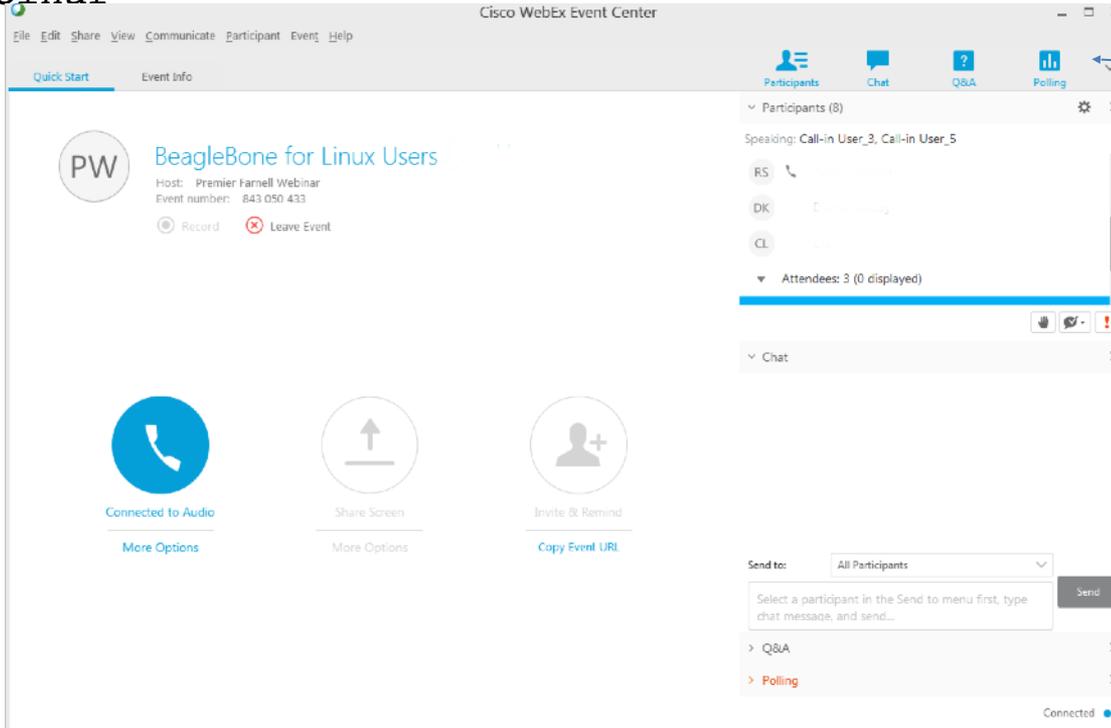


Welcome to "BeagleBone for Web Developers"
This webinar will begin on the hour.

- We invite you to join in the Chat, Q&A and Polls during this live webinar -



Join the Chat, Q&A and
Polls Here



Training BeagleBoards with Jason Kridner

Webinar 04 -
BeagleBone for Web Developers



Jason Kridner
Co-founder and board member at
BeagleBoard.org Foundation

BeagleBone Webinar Series

Date	Time (UTC)	Topic
10th May	11:00 (CT) / 17:00 (UK)	Introduction to BeagleBoard.org and BeagleBone
24th May	11:00 (CT) / 17:00 (UK)	BeagleBone for Linux Users
6th June	11:00 (CT) / 17:00 (UK)	BeagleBone for Embedded Developers
21 th June	11:00 (CT) / 17:00 (UK)	BeagleBone for Web Developers
12 th July	11:00 (CT) / 17:00 (UK)	BeagleBone Blue for Robotics
26 th July	11:00 (CT) / 17:00 (UK)	BeagleBone in the Classroom

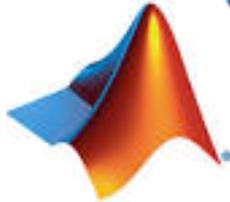
Today's Topics

- Topics
 - Which web languages/packages have extensive libraries for BeagleBone?
 - How can I display a sensor reading on a webpage?
 - How can I control GPIO pins from a webpage?
 - Which IoT Platforms are recommended for BeagleBone?
 - How can I host a webpage on BeagleBone?
 - Considerations for internet security
 - Examples of use
- Q&A
 - Posted Questions
 - Questions from chat

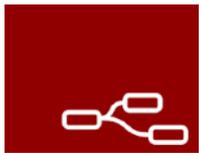
Available programming languages



JavaScript



Dart



Node-RED



ERLANG



Which web languages/packages have extensive libraries for BeagleBone?



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onoff
beaglebone-io
i2c-bus
spi-device



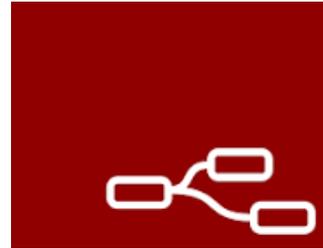
socket.io



BoneScript

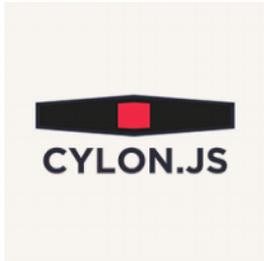


Johnny-Five



Node-RED

IBM Bluemix



CYLON.JS



Google Cloud Platform

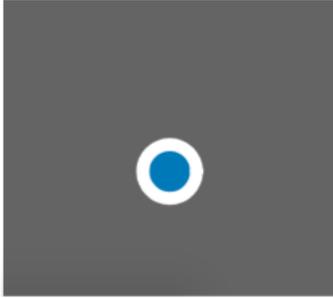
How can I display a sensor reading on a webpage?



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BoneScript Processing.JS Demo

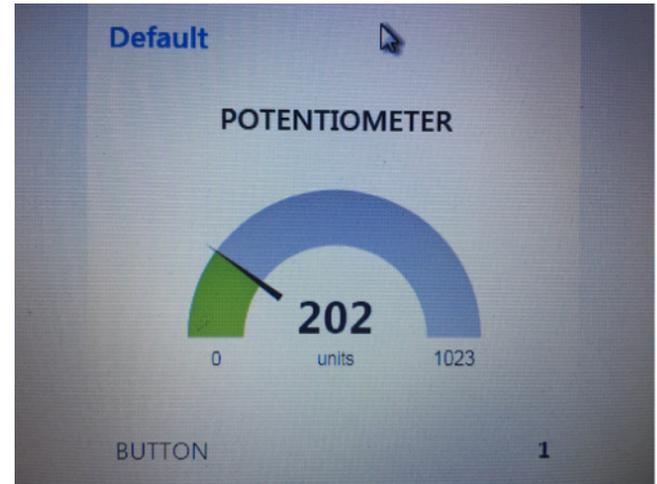
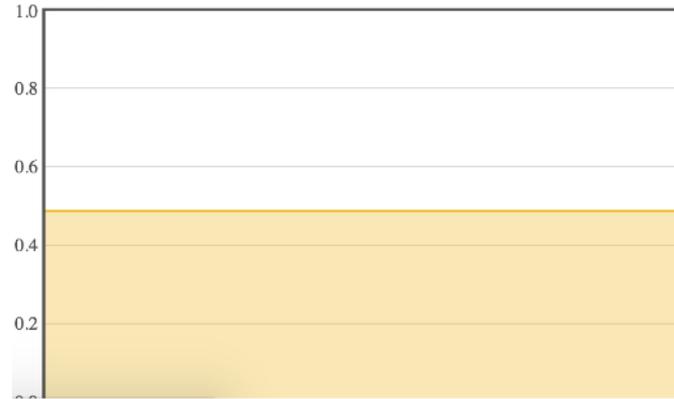


BoneScript jQuery Demo

`sliderStatus = 0.488`

`buttonStatus = 1`

BoneScript Flot Demo



bbb.io/+08f392

How can I control GPIO pins from a webpage?



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```
▼ setTargetAddress('192.168.7.2', {initialized: run});
▼ function run() {
    var b = require('bonescript');
    var LED = 'P2_3';
    var BUTTON = 'P2_33';
    b.pinMode(LED, b.OUTPUT);
    b.pinMode(BUTTON, b.INPUT);

    ▼ function getButtonStatus() {
        b.digitalRead(BUTTON, onButtonRead);
    }
    ▼ function setLEDStatus(x) {
        b.digitalWrite(LED, x);
    }
}
```

Which IoT platforms are recommended for BeagleBone?



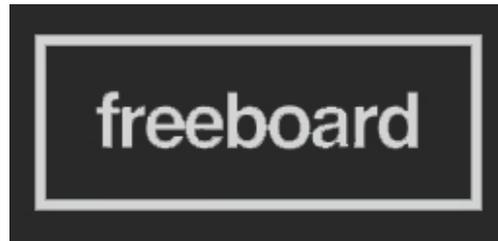
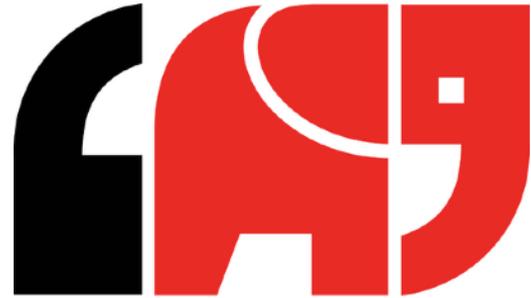
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zetta

Can I host a webpage on a Beaglebone?

NGINX



Considerations for internet security

- Disable unused servers
 - BoneScript
 - Apache
 - Node-RED
 - ssh
- Secure used servers end-to-end
- Add firewalls and restricted users
- Don't rely on obscurity



Questions from the Webinar Chat.

Next Webinar Dates



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Other Resources



www.beagleboard.org



www.element14.com/beagleboard