

## Technical Showcase

CE Workgroup Linux Foundation / Embedded Linux Conference Europe

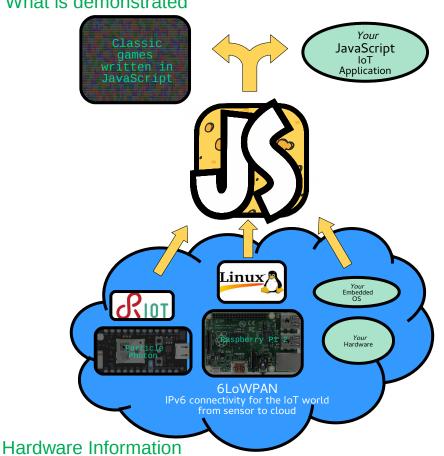
# JerryScript 6LoWPAN Demo

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**Open Source Group** 

#### What is demonstrated



#### Particle Photon

120 MHz ARM Cortex-M3, 128 KB RAM, 1 MB Flash, AT86RF233 Raspberry Pi 2 900 MHz ARM Cortex-A7, 1 GB RAM, MRF24J40MA

### What was improved

JerryScript - Brings JavaScript to low-end microcontrollers!

Minimum requirements:

32KB of RAM (base footprint ~3-4KB of RAM) 200KB of Flash (160KB binary size on ARM Thumb-2 devices)

- Heavily optimized for low memory consumption
  Implements the full ECMAScript 5.1 standard
- Extremely portable
- Mature C API, easy to embed in applications
  Liberal license: Apache License 2.0

- OS Support: NuttX, RIOT, Zephyr and mbed OS
  Supported boards: Photon, STM32F4, Arduino 101, FRDM-K64F

#### 6LoWPAN - Low-power wireless connectivity!

- Adaptation layer for various low-power wireless link layers (encapsulation, fragmentation and compression)
- Known IPv6 end-to-end semantics from sensor to cloud
- Supported by Linux mainlineDrivers for various transceivers: at86rf2xx, mrf24j40, cc2520, atusb and adf7242

**Application** UDP | ICMPv6 IPv6 **6LoWPAN** IEEE 802.15.4 MAC

IEEE 802.15.4 PHY

## Source code or detail technical information availability

www.jerryscript.net / wpan.cakelab.org

qithub.com/Samsung/jerryscript