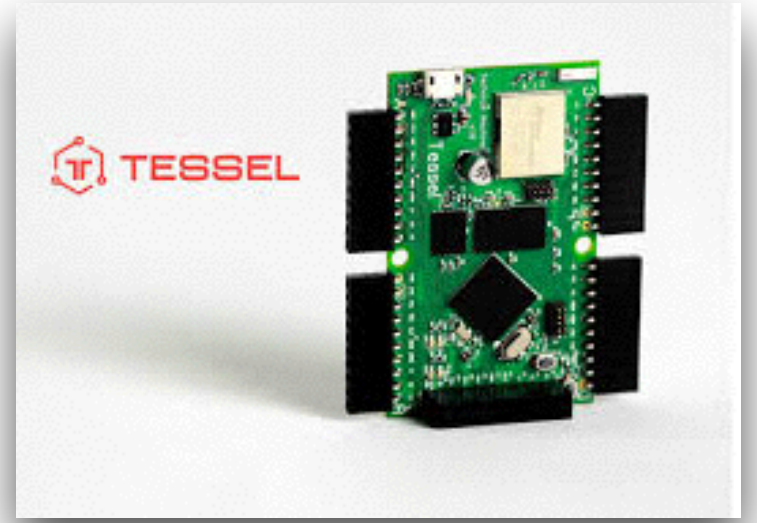
Samsung @ ECMA-TC39 meeting

2014.04.08

Wearables devices

Products from Samsung, Pebble, Google, Qualcomm, Nike and Fitbit

JS in embedded controllers



32 MB RAM

48 KB RAM

Why?

- **We are interested in small footprint JavaScript engine**
  - **For wearables and WoT (web of things) devices**
    - E.g. smartwatches, fitness-oriented wearables, and others
    - compliant with ECMA-262 full specification ?
    - compliant with only *subset profile* of ECMA-262 ?
  - Possibly created as an open-source project
    - reference engine implementation
    - applications using this engine

- **We are here to ask your opinion about our approach**
  - *a (multi-level) subset profile* of ECMAScript,
    - *Multi-level:* to cater to devices of various memory footprints (100kb … 512 Mb)
    - is it reasonable?
    - can be covered in this group?
    - …
  - and other more valuable approach you have?

What?

- **How to define a *subset profile*?**
  - background research for identifying the subset
  - criteria for subset definition
    - cost of implementation
    - frequency of use
    - etc …
  - definition of compatibility with ECMA-262
- **How to balance between size and performance?**
  - is there any common requirement?
- **Handling footprint is possible, but how to handle (bound) runtime resource usage by the application ?**

- **Any other issues?**