# Technical Showcase

CE Workgroup Linux Foundation / Embedded Linux Conference

## **Warpx.io** - Open Hardware / Open Source for Wearables & IoT

> warpx.io Community

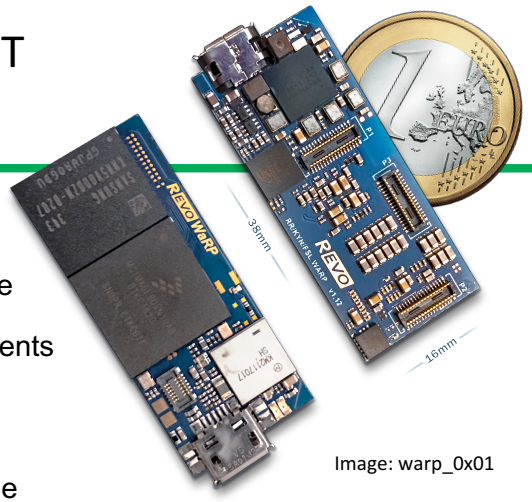



Image: warp_0x01

### What is demonstrated

**Warp** is an completely open-source (both hardware and software), ultra small form-factor, application processor based embedded system running the latest Linux kernel and Yocto OS. Designed for wearables, sensors, and IoT devices.

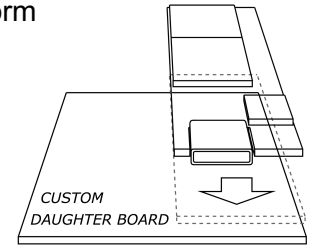
We created our community Warpx.io to support and promote the development of these fully open-source small form-factor devices. Visit our community site for design files and source!

**Hardware Overview for warp_0x01:**

- 1Ghz ARM / 512MB Ram / 4GB Flash / Wi-Fi+BT / more
- Self contained compute platform
- Can be battery powered (on-board charger/monitor)
- Lots of I/O: GPIO, UART, SPI, I2C, EPDC, I2S, more
- Open-hardware and open-source platform

**Hybrid Design Architecture**

HDA is a messaging architecture enabling rapid prototyping and easy expansion with application specific peripherals using traditional MCUs as a sensor hub (Differs from traditional carrier boards as Warp is fully self contained)




### What was improved

**Efficient Battery Usage**

Achieves very low sleep currents
< 13mW in suspend

**Fast to Boot & Resume**

Boots in seconds (< 5s depending on configuration) and resumes near instantly (typ. under 200ms).

**Small Form Factor**

At 16mm x 38mm in size, Warp can easily be integrated into designs and speed up development. One of the smallest SBCs.

**Easy OS Upgrades**

Web interface to install software or OS upgrades via open-source SWUpdate framework.

### Source code & detailed technical information available

Join our community and find sources at:

**> warpx.io**

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