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Internet of Things & Embedded MC

CFP closes on July 5th.

The IoT and Embedded Micro-conference is a forum for developers to discuss all things IoT and Embedded. Topics include tools, telemetry, device drivers, protocols and standards in not only the Linux kernel but also Real-Time Operating Systems such as Zephyr.

Current Problems that require attention (stakeholders):

- IEEE 802.15.4 SubGHz improvement areas in Zephyr and Linux (Florian Grandel, Stefan Schmidt, BeagleBoard.org)
- WpanUSB driver upstreaming in the Linux kernel, companion firmware implementations (BeagleBoard.org)
- IEEE 802.15.4 Linux subsystem UWB phy support and link-layer security (Miquel Raynal, Alexander Aring, Stefan Schmidt)
- Sync device tree description of hardware between U-Boot, Linux and Zephyr (Nishanth Menon)
- Zephyr LTSv2 to LTSv3 transitions (Chris Friedt)
- CAN subsystem (Marc Kleine-Budde, Oleksij Rempel)

Since last year, there has been a number of significant updates on the topics discussed at IoT MC:

- Linux-wpan gained support for associations between devices, including PAN coordinator and disassociation handling in kernel and userspace
- For device tree sync OF_UPSTREAM has been enabled in U-Boot, this also sets the path for Zephyr sync
- TI dts code re-licensing triggered by last year IoT MC discussion
- From the Arduino Core on Zephyr project an API license discussion between LF and Arduino has been started to move forward.

One topic we'd like to cover in detail is technology or standards to help improve boot time. If there is work in this area, on Linux or Zephyr, we'd like to hear about it. Examples of boot time reduction, or of fast unhibernate from low-power state would be welcome. Also, we're interested in discussing ideas for standards for passing pre-initialized hardware to Linux at kernel boot time.

We hope you will join us either in-person or remote for what is shaping up to be another great event full of collaboration, discussion, and interesting perspectives.

Primary authors: LÜBBE, Jan (Pengutronix);   Mr SCHMIDT, Stefan;   BIRD, Tim (Sony)

Presenters: LÜBBE, Jan (Pengutronix);   Mr SCHMIDT, Stefan;   BIRD, Tim (Sony)

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