Greybus for IoT

Monday, 9 September 2019 15:00 (30 minutes)

Greybus is an RPC like protocol on top UniPro bus that has been designed for the Project ARA. This goal of that project was to develop a modular smartphone. Greybus gives the ability to the host to control remotely the buses (such as i2c or spi) of the modules.

Although Project ARA has been aborted, Greybus has been merged to Linux kernel, and it is still maintained by the community.

Greybus has been designed for modular smartphones, but there are many others pertinent use cases for it:
- IoT, to let a Linux base station directly control sensors, and avoid writing complex firmware for the modules
- USB, to control peripherals on the board using existing Linux drivers
- To control system-on-chip hardware peripherals managed by a small core, with messages sent from a larger CPU

This approach would be more generic that writing a custom protocol on top of RPMSG.

The intent of this talk is to briefly present Greybus, how we could use it for general purpose, and talk about the work in progress, that would make it possible.

I agree to abide by the anti-harassment policy

Yes

I confirm that I am already registered for LPC 2019

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