Bringing RIoT-OS to the RIoTboard

Leon Martin George
Freie Universität Berlin

Softwareproject - Telematics, 2014

The Board

- Designed for developing
- Cortex-A9-based
- Freescale i.MX6-architecture
- Co-processing power
- Many different interfaces

Why Do We Want This?

- Automotive
- Industrial
- Handheld consoles
- Easy developement

Initial Work-Model

- Assess the situation
- Try running anything on the board
- Run our own code
- Get a framework to run
- Split to work on different components individually

The Original Plan:

- UART I/O for debugging and shell communication
- Timer(s) so the kernel can run
- Interrupts
- Set up a stack
- Build it successfully (probably the hardest part :-))

Unfinished Work

- The UART
- Timers
- Interrupts

Interference

- Going from u-boot to SDK
- The UART initialisation process

Plans

- Try altering IOMux-configurations for other boards
- JTAG-debugging