

Bringing RIoT-OS to the RIoTboard

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Softwareproject - Telematics, 2014





► Designed for developing



- ► Designed for developing
- ► Cortex-A9-based



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- ► Freescale i.MX6-architecture



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- ► Co-processing power



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- ► Cortex-A9-based
- ► Freescale i.MX6-architecture
- ► Co-processing power
- ► Many different interfaces





Automotive



- Automotive
- ► Industrial



- Automotive
- ► Industrial
- ► Handheld consoles



- Automotive
- ► Industrial
- ► Handheld consoles
- ► Easy developement



► Assess the situation



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- ▶ Try running anything on the board



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- ► Run our own code



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- ► Get a framework to run



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





▶ UART I/O for debugging and shell communication



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- ▶ Timer(s) so the kernel can run



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- ► Timer(s) so the kernel can run
- Interrupts
- ► Set up a stack
- ▶ Build it successfully (probably the hardest part :-))

Unfinished Work





► The UART



- ► The UART
- ► Timers



- ► The UART
- ▶ Timers
- Interrupts



► Going from u-boot to SDK



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



▶ Try altering IOMux-configurations for other boards



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