

Software Engineering of Internet of Things

Handin 2: Sample-Transmit Cycle

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Task

Summary: Write a program that implements a sample-transmit cycle of 10Hz. The sampling should be done from an ADC pin, and the transmit should be over a serial link.

Details:

- Configure the UART to operate at 9600b/s.
- Either raw ADC values or temperature conversions of these will do.
- Analyse the problem.
- Design, implement and describe the code that controls the device.
- Design and define an experimental setup for evaluating to which degree the device does what it is supposed to.
- Hypothesize about the results and argue why your design will hit the exact frequency.

Deadline

May 14th, 2021.