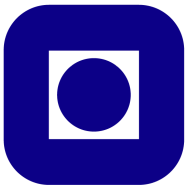

NTNU

TDT4258 - Energy Efficient Computer Systems

Exercise 3

Group 13

Mathias Ose & Øyvind Robertsen

April 18, 2014

Abstract

Contents

1 Introduction **1**

2 Description & Methodology **2**
2.1 Development process 2
2.1.1 Devices 2
2.2 Project setup & toolchain 2

3 Results **3**
3.1 Program 3
3.1.1 Testing the program 3
3.2 Energy efficiency 3
3.3 Discussion 3

4 Evaluation of assigment **4**

5 Conclusion **5**

1 | Introduction

2 | Description & Methodology

This section describes the development process, use of tools, debugging techniques and details of the implementation. As listing entire implementations spread across several files for each development iteration would clutter the report and take away from the subject matter being discussed, we will only list code or formulas relevant to the task/section being described, not complete implementations. For details on the entire implementation, we refer to the source code attached to this report.

2.1 Development process

The development part of this exercise was, as with the previous ones, done at the computer lab in the IT-Vest building at NTNU (room ITV-458). The lab is equipped with workstations connected to the EFM32GG-DK3750 development board made by Energy Micro. The subject staff provided us with a framework on which to base our work, more on this in section 2.2. As per usual, we put the project under version control immediately to ease collaboration. Seeing as this is a multipart exercise, collaboration aided by version control became an important aspect of the process to a larger degree than in the previous exercises.

2.1.1 Devices

2.2 Project setup & toolchain

The framework provided by the subject staff for this exercise has grown in complexity in comparison to the handouts for the previous exercises, but in accordance with the complexity of the exercise requirements.

3 Results

3.1 Program

3.1.1 Testing the program

3.2 Energy efficiency

3.3 Discussion

4 | Evaluation of assigment

5 | Conclusion