Embedded Real Time Systems - Assignment 1

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1 Introduction

This report details the five exercises completed in assignment 1 for the course "Embedded Real Time Systems". All exercises revolve around the modeling language SystemC and uses it to build models at the system level of abstraction using modules, methods, threads etcetera. Each exercise contains a short description of the goal, how we did it with SystemC and code snippets for demonstration purposes.

All code listings are presented in the following manner:

```
1  #include <stdio.h>
2  #define N 10
3  /* Block
4  * comment */
5
6  int main()
7  {
8  int i;
9
10 // Line comment.
11 puts("Hello world!");
12
13 for (i = 0; i < N; i++)
14 {
15 puts("LaTeX is also great for programmers!");
16 }
17
18 return 0;
19 }
```

Listing 1: Example listing.

2 Exercise 3.1 - ModuleSingle

This is the module single 3.1.

3 Exercise 3.2 - ModuleDouble

4 Exercise 3.3 - Consumer and producer with TCP

5 Exercise 3.4 - Master and slave with ST

6 Exercise 3.5 - Master and slave with adapter

References