Report: Exercise 2

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Abstract

Contents

1 Introduction

2 Description and methodology

We started out with implementing the previous exercise that was coded in assembly, in C. This was an easy start for implementing an interrupt routine, as well as the basics we needed for this exercise. Next step was to enable and setup the ABDAC. First out we started to generate noise, just to easily hear if it worked.

3 Results

4 Tests

Description

Results Below is a table of the different tests we ran, the preconditions and the results.

Name	**Preconditions**	**Description**	**Expected result**	**Test result**
Steady-state test	Power is on, and the board is connected	Upload program to card, push reset switch	The board is powered and LED 7 should be on	Passed
Move LED right test	Program is active, only LED 7 is on	Push switch 6	LED 7 should be turned off and LED 6 should be turned on	Passed
Move LED left test	Program is active, only LED 6 is on	Push switch 7	LED 6 should be turned off and LED 7 should be turned on	Passed
Left LED wrap-around test	Program is active, only LED 7 is on	Push switch 67	LED 7 should be turned off and LED 0 should be turned on	Passed
Right LED wrap-around test	Program is active, only LED 0 is on	Push switch 6	LED 0 should be turned off and LED 7 should be turned on	Passed
Long push test	Program is active, only LED 7 is on	Push and hold switch 6 for a few seconds	LED 7 should be turned off and LED 6 should be turned on as soon as the switch is pushed	Passed

5 Evaluation of assignment

6 Conclusion

7 Appendix

References

[1] TDT4258 Compendium http://www.idi.ntnu.no/emner/tdt4258/_media/kompendium.pdf

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