

# Report: Exercise 2

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## Abstract

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## 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

## 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](http://www.idi.ntnu.no/emner/tdt4258/_media/kompendium.pdf)

