

Project 3

Jacob Abel

November 27, 2017

Contents

Purpose	3
Problem Specification	3
Disassembly and Initial Analysis	3
Design Process	3
Implementation	3
Validation	3
Conclusion	3
Appendix A: Simulation Waveforms	4

List of Tables

1 Step 1: Initial Instruction Disassembly	3
---	---

List of Figures

Purpose

Problem Specification

Disassembly and Initial Analysis

Memory Address	Machine Code	Instruction (Values in decimal)
0	1400	XOR R0, R0, R0
1	2100	LD R0, R0, M[A]
2	8443	ADI R0, 3
3	0480	ADD R0, R0, R2
4	00E0	MOV R4, R3
5	0290	INC R2, R2
6	0ADA	SUB R3, R2, R3
7	0C48	DEC R1, R1
8	C00A	BRZ R1, R0
9	C1C4	BRZ R0, R7
A	02D8	INC R3, R3
B	0C48	DEC R1, R1
C	1A41	SR R1, R1
D	C20A	BRN R1, R0
E	E000	JMP R0

Table 1: Step 1: Initial Instruction Disassembly

Design Process

Implementation

Validation

Conclusion

Appendix A: Simulation Waveforms

Design Project 2: Implementing the Simple Component Validation Sheet (Page 2), Instructions

The Validation Sheet is provided as an example of an implementation.
You do not have to go the CEL way of doing it.

