#### Multi-core RISC Processor Design and Implementation (Rev. 1.00)

ELEC5881M - Interim Report

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Submitted in accordance with the requirements for the degree of Master of Science (MSc) in Embedded Systems Engineering

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#### **Revision History**

Date	Version	Changes
20/05/2018	3.14	Add background research to appendix.
19/05/2018	3.13	Update abstract to align with guidelines.
19/05/2018	3.12	Fix ISA pseudo-codes.
11/03/2018	1.00	Initial section outline.

Table 1: Document revisions.

#### **Abstract**

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Date: April 11, 2019

## **Table of Contents**

1 Abstract (not in toc)						
2	Declaration of Academic Integrity (not in toc)  Acknowledgements (not in toc)					
3						
4	Introduction					
	4.1 Why Multi-core?	. 11				
	4.2 Why RISC?	. 11				
	4.3 Why FPGA?	. 11				
5	Background					
	5.1 Single core vs. Multi-core vs. Many-core	. 12				
	5.2 Network-on-chip	. 12				
	5.2.1 OpenPiton	. 12				
	5.3 Summary	. 12				
6	Project Management	13				
	6.1 Resources	. 13				
	6.1.1 Terasic DE1-SoC Development Board	. 13				
	6.1.2 Minispartan 6+ FPGA Development Board	13				
7	RISC Core Design					
	7.1 Design Goals	. 14				
	7.2 Instruction Set Architecture	. 14				
	7.2.1 Data Sizes	. 14				
	7.2.2 Registers	. 14				
	7.2.3 Endianness	. 14				
	7.3 High Level Design	. 14				
	7.4 Memory-mapped peripherals	. 14				
	7.4.1 Wishbone Master Bus	. 14				
	7.5 Optimisations	. 14				
	7.5.1 Pipelining	. 14				
	7.5.2 Stall Avoidance	. 14				
	7.6 Core Verification	. 14				
	7.7 Conclusion	14				

REFERENCES 7

8	Mult	Multi-core Communication Design					
	8.1	Interconnect Goals	15				
	8.2	Interconnect Layout	15				
		8.2.1 Bus Design					
		8.2.2 Core Pin Assignments					
	8.3	Core-to-core Communication	15				
	8.4	Shared-Resource Control	15				
		8.4.1 Resource Scheduling					
	8.5	Verification					
	8.6	Conclusion					
			16				
9 Core Analysis							
	9.1	FPGA Implementation Analysis	16				
		9.1.1 Space/Resource Usage	16				
		9.1.2 Static Timing Analysis	16				
	9.2	Speed Analysis	16				
		9.2.1 Parallel Reduction Algorithms	16				
		9.2.2 Parallel DFT Algorithm	16				
10	Conclusion						
	10.1	RISC Core Review	17				
	10.2	Multi-core Review	17				
	10.3	Verification Review	17				
		Goal Review					

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#### Introduction

- 4.1 Why Multi-core?
- 4.2 Why RISC?
- 4.3 Why FPGA?

## **Background**

- 5.1 Single core vs. Multi-core vs. Many-core
- 5.2 Network-on-chip
- 5.2.1 OpenPiton
- 5.3 Summary

#### **Project Management**

- 6.1 Project Goals
- 6.1.1 Core Deliverables (CD)
- 6.1.2 Extended Deliverables (ED)
- 6.2 Project Timeline
- 6.2.1 Project Stages
- 6.2.2 Timeline
- 6.3 Resources
- 6.3.1 Terasic DE1-SoC Development Board
- 6.3.2 Minispartan 6+ FPGA Development Board

#### **RISC Core Design**

- 7.1 Design Goals
- 7.2 Instruction Set Architecture
- 7.2.1 Data Sizes
- 7.2.2 Registers
- 7.2.3 Endianness
- 7.3 High Level Design
- 7.4 Memory-mapped peripherals
- 7.4.1 Wishbone Master Bus
- 7.5 Optimisations
- 7.5.1 Pipelining
- 7.5.2 Stall Avoidance
- 7.6 Core Verification
- 7.7 Conclusion

#### **Multi-core Communication Design**

- 8.1 Interconnect Goals
- 8.2 Interconnect Layout
- 8.2.1 Bus Design
- 8.2.2 Core Pin Assignments
- 8.3 Core-to-core Communication
- 8.4 Shared-Resource Control
- 8.4.1 Resource Scheduling
- 8.5 Verification
- 8.6 Conclusion

#### **Core Analysis**

- 9.1 FPGA Implementation Analysis
- 9.1.1 Space/Resource Usage
- 9.1.2 Static Timing Analysis
- 9.2 Speed Analysis
- 9.2.1 Parallel Reduction Algorithms
- 9.2.2 Parallel DFT Algorithm

#### **Conclusion**

- 10.1 RISC Core Review
- 10.2 Multi-core Review
- 10.3 Verification Review
- 10.4 Goal Review