University of Southampton

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Mercury Delay Line Emulation: Reconstructing Memory for EDSAC

by

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Abstract

Contents

A۱	bstract	i			
Table Of Contents List of Acronyms List of Figures		ii iii iv			
			Li	ist of Tables	iv
			1	Introduction	1
2	STATE-OF-THE-ART 2.1 EDSAC Delay Line Specification 2.1.1 Electical 2.1.2 Timing 2.2 FPGA Performance 2.3 Microcontroller Performance 2.4 Amplification Methodology 2.5 Phantom Power Methodology	2 2 2 2 2 2 2 2 2			
3	SPECIFICATION	3			
4	SYSTEM DEVELOPMENT 4.1 Delay line	4 4 4 4			
5	TESTING AND VERIFICATION 5.1 Delay line	5 5 5 5			
6	PROJECT PLANNING	6			
7	Conclusion	7			
Bi	Bibliography				
Αį	Appendix A Foo				

List of Acronyms

FPGA field programmable gate array.

List of Figures

List of Tables

Introduction

Foobar [1] field programmable gate array (FPGA).

STATE-OF-THE-ART

- 2.1 EDSAC Delay Line Specification
- 2.1.1 Electical
- **2.1.2** Timing
- 2.2 FPGA Performance
- 2.3 Microcontroller Performance
- 2.4 Amplification Methodology
- 2.5 Phantom Power Methodology

Chapter 3 SPECIFICATION

SYSTEM DEVELOPMENT

- 4.1 Delay line
- 4.2 Testbench
- 4.3 Amplifier

TESTING AND VERIFICATION

- 5.1 Delay line
- 5.2 Testbench
- 5.3 Amplifier

Chapter 6 PROJECT PLANNING

Chapter 7 CONCLUSION

Bibliography

[1] American Physical Society, "Invention of the first transistor," *APS News*, vol. 9, no. 10, p. 2, nov 2000.

Appendix A

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