



UNIVERSITY OF LEEDS

**ELEC5620M
Mini Project**

DE1-SoC Pong

Alexander Bolton - 200938078

Sam Wilcock - 201285260

John Jakobsen -

May 2019

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

The University of Leeds
School of Electronic and Electrical Engineering

Contents

1	Introduction	3
2	Display and Graphics	4
2.1	VGA Driver	4
2.2	Sprites	5
2.3	Graphics Driver	6
2.4	Game Engine Graphics	7
3	Controls and Menus	8
4	Game Physics	9
5	Conclusion	10
6	Appendix	11
	References	12

1 Introduction

Introduction

2 Display and Graphics

2.1 VGA Driver

2.2 Display Driver

2.3 Sprites and Text

2.4 Game Engine Graphics

3 Controls and Menus

4 Game Physics

5 Conclusion

6 Appendix

References