**Year 2 Project (ELEC222/273) – *Supervisor meeting – Week 1***

Date: 30/01/2020 Supervisor: Mark Bowden

Project Title: System on chip with RISC-V microprocessor and Linux operating system

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| Student Names  /Attendees: | 1. Gan Fang | 2.Qiyang Ding |
| 3.Yufeng Chen | 4. | 5. |

Summary of week’s activities:

1. Install running environment. (including risc32-unknown-elf-gcc, spike, pk and qemu)

Problem, issues and concerns:

1. Not receive the equipment.

Tasks for next week/Actions for next meeting:

1. Configure the Linux source

2. ALU design of RV32I and simple control logic unit

3. Read information about u-boot

Supervisor use only

Progress Assessment: □ Unsatisfactory □ Satisfactory □ Good

Comments/Recommendations:

Need to consider project planning carefully by next week

Supervisor Signature: Mark Bowden

**Year 2 Project (ELEC222/273) – *Supervisor meeting – Week 2***

Date: 06/02/2020 Supervisor: Mark Bowden

Project Title: System on chip with RISC-V microprocessor and Linux operating system

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| Student Names  /Attendees: | 1.Gan Fang | 2.Qiyang Ding |
| 3.Yufeng Chen | 4. | 5. |

Summary of week’s activities:

1. Read *Instructions: Language of the computer*

2. Explore the structure of U-boot

3. ALU design of RV32I and simple control logic unit

4. Design Linux configuration file and Makefile for RISC-V

Problem, issues and concerns:

How is ECALL achieved

Tasks for next week/Actions for next meeting:

1. Build U-boot

2. Cut the unnecessary part and test on QEMU simulating environment

3. Memory controller design and test

Supervisor use only

Progress Assessment: □ Unsatisfactory □ Satisfactory □ Good

Comments/Recommendations:

Supervisor Signature: Mark Bowden

**Year 2 Project (ELEC222/273) – *Supervisor meeting – Week 3***

Date: 13/02/2020 Supervisor: Mark Bowden

Project Title: System on chip with RISC-V microprocessor and Linux operating system

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| Student Names  /Attendees: | 1. Gan Fang | 2. Qiyang Ding |
| 3. Yufeng Chen | 4. | 5. |

Summary of week’s activities:

1. Build U-boot.

2. Memory controller design and test.

3. Achieve *sleep, find, xargs and pipeline* functions, shell simulation in original shell and dynamic memory allocation

Problem, issues and concerns:

1. Long memory access latency.

2. Need faster algorithm for buddy allocation.

Tasks for next week/Actions for next meeting:

1. Test U-boot and integrate with OS

2. Drivers on soc design.

3. Copy-on-write fork, alarm call, file system and memory map

Supervisor use only

Progress Assessment: □ Unsatisfactory □ Satisfactory □ Good

Comments/Recommendations:

*Need to make sure the group has enough time to carry out the integration stage.*

Supervisor Signature: Mark Bowden

**Year 2 Project (ELEC222/273) – *Supervisor meeting – Week 4***

Date: 19/02/2020 Supervisor: Mark Bowden

Project Title: System on chip with RISC-V microprocessor and Linux operating system

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| Student Names  /Attendees: | 1.Gan Fang | 2.Qiyang Ding |
| 3.Yufeng Chen | 4. | 5. |

Summary of week’s activities:

1. Test U-boot and integrate with OS

2. Drivers on soc design.

3. Copy-on-write fork, alarm call, file system and memory map

Problem, issues and concerns:

1. Not finish U-boot on time

Tasks for next week/Actions for next meeting:

1. Continue and test U-boot

2. Drivers design

3. Copy-on-write fork and rewrite file system

Supervisor use only

Progress Assessment: □ Unsatisfactory □ Satisfactory □ Good

Comments/Recommendations:

*Continue working according to the plan this week. Meet early next week to discuss about the probability of fully completing the plan.*

Supervisor Signature: Mark Bowden

**Year 2 Project (ELEC222/273) – *Supervisor meeting – Week 5***

Date: 27/02/2020 Supervisor: Mark Bowden

Project Title: System on chip with RISC-V microprocessor and Linux operating system

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| Student Names  /Attendees: | 1. Gan Fang | 2. Qiyang Ding |
| 3. Yufeng Chen | 4. | 5. |

Summary of week’s activities:

1. U-boot

2. User-level threads and alarm, simple file system

Problem, issues and concerns:

1. Do not have enough time to finish Copy-on-write allocation, but it can be replaced by lazy allocation and buddy allocation, which have been finished before.

2. Perhaps this OS cannot meet the initial goal, such as connecting to internet.

Tasks for next week/Actions for next meeting:

1. Integrate the project

2. Test bootloader, transplant OS on RISC-V

3. Ethernet driver and VGA driver design

Supervisor use only

Progress Assessment: □ Unsatisfactory □ Satisfactory □ Good

Comments/Recommendations:

Need to be very clear about which parts are self-generated and which elements are being used temporarily for the bench inspection.

Supervisor Signature: Mark Bowden 27/2