

Computer Architecture and Design Practical 1 Lab Sheet
October 2019

Name	Matric No.
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Part (a) – Designing and Simulating an ALU module

<ul style="list-style-type: none"><input type="checkbox"/> Logical operations passing tests<input type="checkbox"/> Add, subtract operations passing tests<input type="checkbox"/> Set operations passing tests<input type="checkbox"/> Shift operations passing tests<input type="checkbox"/> At least 10,000 tests run
Demonstrator Signature
Demonstrator Comments

Part (b) – Synthesising the ALU Module

<ul style="list-style-type: none"><input type="checkbox"/> Synthesis completes without error<input type="checkbox"/> No inferred latches<input type="checkbox"/> No combinational loops<input type="checkbox"/> Critical path has been demonstrated, and is less than 20ns<input type="checkbox"/> FPGA resource utilization has been demonstrated
Demonstrator Signature
Demonstrator Comments

Attach this lab sheet as the cover page to your report before handing to ITO before the deadline.
Please ensure you include a listing of the Verilog code for your ALU design.