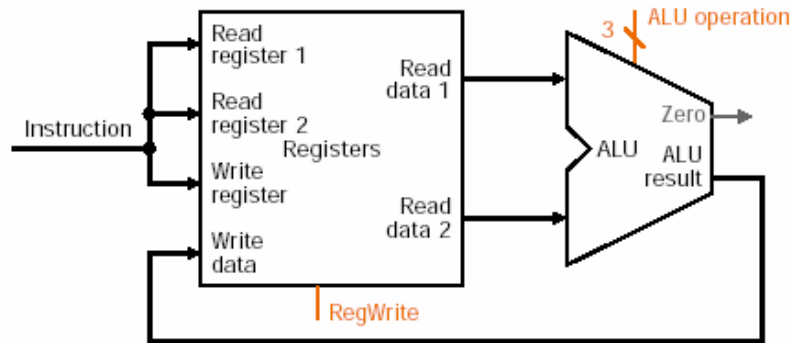# Lab 7, The MIPS Datapath

Today you begin to implement the MIPS subset described in Chapter 5 of Hennesey and Patterson. Implement the following

and test it. It's important that you are confident that your design is working properly because it'll be harder to test when the rest of the datapath and control are added. To test you'll want to use simulation, or if you prefer some data on actual hardware. For the latter you might consider loading a Block RAM with test data, attaching a counter to the address lines, attaching the data lines to your MIPS datapath, and cycling through the contents of memory (either once when you press the button, or repeatedly). This is essentially a simple program.

Conclusion

As a lab report, please send a description of your design, a description of your test strategy, and a Zip file with your ISE project.