ELE 373: Advanced Digital Architecture and Design

March 17, 2009

Due date: March 31, 2009

Project 2.

Design, test (using Abel test vectors) and simulate a Moore and a Mealy sequence detector in VHDL. Use a GAL 16V8 as your target device. Your circuit is supposed detect a specific 4-bit code (assigned in class) chosen from among the 16 available 4-bit codes. As a review of basic logic design, complete a paper-and-pencil design of the Mealy realization of this circuit and compare with the VHDL compiled design. Discuss differences, if any, of the two circuit realizations.