

8404129 Hardware Description Languages, Exam 22.1.2005

You can write your answers either in Finnish or English, but use the same language through the exam.

1. Explain shortly the following terms (1 point / term)
 - a) Moore's law
 - b) *std_logic*
 - c) ASIC
 - d) delta delay
 - e) *SC_CTOR*
 - f) *SC_METHOD*
2. Explain a) VHDL process (3 points) b) Verilog's module statement (3 points).
3. Explain shortly the design flow when HDLs are used (6 points)
4. What are the properties of reusable HDL code (6 points)?
5. a) The values of the input signals *A*, *B*, *Clk*, and *Reset* of the VHDL code, shown in next page, are represented below. Copy this waveform drawing into your paper and draw the behaviour of the output ports *C*, *D*, *E*, *F* (4 points)
 b) Explain terms signal driver and resolution function (2 points)

