

Each ZIP file includes all VHDL source codes from the book for DE1, DE1-SoC and DE2-115 boards, respectively. All VHDL codes from a chapter are collected inside one Quartus II project named after that chapter. Use the latest Quartus II from Altera for DE1-SoC and DE2-115 boards, but use Quartus II version 13.0 for DE1 board. Each archived project can be restored by using the Quartus II. All VHDL files can be directly retrieved from the restored project folder or can be viewed and edited using Quartus II.

By default, the "top-level entity" of each restored project is the first VHDL example of that chapter. In Quartus II, use "Project --> Set as Top-Level Entity" to change the top-level entity to different VHDL example. Alternatively, highlight the VHDL file name in the "Project Navigator" and right click to select "Set as Top-Level Entity". When running the compilation from Quartus II, the current top-level entity is at the top of the design hierarchy.

Most VHDL examples came as a complete VHDL files. For instance, the first example in chapter 2 is in a file called "example\_basic.vhd" in the restore project of CH2\_DE1, CH2\_DE1\_SoC or CH2\_DE2\_115. This "example\_basic.vhd" is also the default top-level entity as it is the first example of the chapter. Some VHDL examples in the book show only fragments of the complete VHDL codes. In this case, these examples are grouped together in a VHDL file. For instance, in the restored project for chapter 2, the file called "demo1.vhd" actually consists of several smaller examples from chapter 2. All these examples are different versions of the same multiplexer circuit design, and thus are grouped together in one file. There are four different versions in "demo1.vhd". All but the VHDL codes for the first version have been commented out. To use a different version, one must comment out the current design and uncomment the desired one. Similar arrangements have been used for putting together different versions of the same design in one VHDL file.

The folder "Modern" is the proprietary library and package example discussed in Chapter 10.