CD to accompany FUNDAMENTALS of DIGITAL LOGIC with VHDL DESIGN 2/e By: Stephen Brown, Zvonko Vranesic Copyright 2005 ISBN: 0072460873

This CD-ROM contains two main items:

- 1. Altera Quartus II version 4.0 Web Edition industry-leading CAD software
- 2. Complete VHDL code for all design examples presented in the book.

The design examples are provided in the folder named VHDLcode. Please read the text file <CD-ROM drive>:\VHLDcode\Readme.txt for more information on the included design examples.

Installing and Running the Quartus II Software

-----

Please read carefully the following instructions for installing the Quartus II software.

Quartus II can be installed on computers running Microsoft Windows XP, Windows 2000, and Windows NT 4.0

Installation & Operating Requirements

\_\_\_\_\_

Altera recommends the following system configuration:

- Pentium II 400 with 512-MB system memory (faster systems give better performance)
- SVGA monitor
- CD-ROM drive
- One or more of the following I/O ports:
  - USB port (if using Windows XP or Windows 2000) for USB-Blaster(TM) or MasterBlaster(TM) communications cables, or APU programming unit
  - Parallel port for ByteBlasterMV(TM) or ByteBlaster(TM) II download cables
  - Serial port for MasterBlaster communications cable
- TCP/IP networking protocol installed
- Windows 2000, Windows NT 4.0 with Service Pack 3 or later, or Windows XP
- Internet Explorer 5.0 or later

Memory & Disk Space Requirements

file:///DI/Mis%20Documentos/procesos%20tecnicos%20directrices%20y%20documentos%20aplicados/O405.txt

A full installation of the Quartus II version 4.0 Web Edition software requires approximately 400 MB of available disk space on the drive or partition where you are installing the software. Additionally, approximately 100 MB of available disk space is required on the drive where the directory listed in the %TMP% environment variable is located. This is usually the C: drive.

Installation from the CD-ROM

-----

The Quartus II CAD software can be installed by running the command

<CD-ROM drive>:\CDROM\quartus\quartusii\_40\_sp1\_web\_edition\_single.exe

The setup program will guide you through the installation process. After the setup program has copied all needed files from the CD-ROM to your computer's hard disk, the program will exit.

You must now obtain from www.altera.com a license file to use the Quartus II software. If you run the software without obtaining a license file, Quartus II will give you the option of running for 30 days with a trial license; at the end of the 30-day period you will need a valid license file to continue using the software.

Obtaining a License file for Quartus II from www.altera.com

The Quartus II software has many optional features which are individually enabled or disabled by using the concept of a "License File."

By following the procedure described below you will receive a License File that enables all of the features of Quartus II that are used in "Fundamentals of Digital Logic with VHDL Design, second edition."

To obtain your Quartus II License File, go to the following URL on the World Wide Web:

http://www.altera.com

At the top of this page, there is a button labeled Licensing, which takes you to the web page

http://www.altera.com/support/licensing/lic-index.html

Scroll down in this web page until you see the selection

"Free Quartus II Web Edition Software"

file://D|/Mis% 20 Documentos/procesos% 20 tecnicos% 20 directrices% 20 y% 20 documentos% 20 aplicados/O405.txt

Click on this link and follow the instructions provided. You will need to enter your personal contact information, including an email address. As part of the procedure you will be asked to provide your network interface card number.

The Network Interface Card (NIC) number is a 12-digit hexadecimal number that identifies the Windows workstation that serves the Quartus II Web Edition license. You can find the NIC number for your network card by typing ipconfig /all at a command prompt. Your NIC number is the number on the physical address line, minus the dashes, for example, 00C04FA392EF

So, to obtain this number, type the following command in a Windows Command Prompt window: ipconfig /all.

Look for the line of the form

Physical Address. .....: 00-C0-4F-A3-92-EF

The last part of this line is the network interface card number. So, in this example, we would type 00C04FA392EF (without the - dashes) into the box that says "Enter your network interface card (NIC) number:" on the web page.

You should click the answer "No" to the question

"Will this software be used to create any design which will have commercial usage?"

Then, click the Continue button on the web page. A brief survey is presented. After completing this survey, click Finish.

Once you have provided to Altera the required information to obtain your License file, the file will be emailed to you along with instructions on using the License file. The email is normally returned to you from Altera in less than one hour.

Once Quartus II knows the location of the License file, the software is ready to use. Enjoy!

Specifying the location of the License File to Quartus II

\_\_\_\_\_

Once your license file has been emailed to you, you should save it using the filename license.dat, in the same directory where you installed the Quartus II Web Edition software.

You can start the Quartus II software and specify the location of your license file by using the command Tools | License setup. Browse on the box labeled License file and select your license.dat file.

Alternative procedures for specifying to Quartus II the location of the license file are described below.

file:///D|/Mis% 20 Documentos/procesos% 20 tecnicos% 20 directrices% 20 y% 20 documentos% 20 aplicados/O405.txt file:///D|/Mis% 20 documentos% 20 aplicados/O405.txt file:///D|/Mis% 20 documentos% 20 aplicados/O405.txt file://D|/Mis% 2

To specify the license file in the Windows NT Control Panel, follow these steps:

- 1. Choose Settings > Control Panel (Windows Start menu).
- 2. Double-click the System icon in the Control Panel window.
- 3. In the System Properties dialog box, click the Environment tab.
- 4. Click the System Variable list to highlight it, and then in the Variable box, type LM\_LICENSE\_FILE.
- 5. In the Value box, type <path to license file>\license.dat
- 6. Click OK

To specify the license file in the Windows 2000 Control Panel, follow these steps:

- 1. Choose Settings > Control Panel (Windows Start menu).
- 2. Double-click the System icon in the Control Panel window.
- 3. In the System Properties dialog box, click the Advanced tab.
- 4. Click the Environment Variables button.
- 5. Click the System Variable list to highlight it, and then click New.
- 6. In the Variable Name box, type LM\_LICENSE\_FILE.
- 7. In the Variable Value box, type
- <path to license file>\license.dat
- 8. Click OK

-----

**TECHNICAL SUPPORT:** 

For software support, please visit the

McGraw-Hill Higher Education Helpdesk

(http://www.mhhe.com/catalogs/cust\_serv/product\_support.mhtml) or call 1-800-331-5094, option 3 between the hours of 8:00am to 4:30pm CST,

Monday-Friday. For additional support you may contact our technical support staff at techsup@mcgraw-hill.com.