
Books: (c1993-c2009)

Perry, Douglas L. VHDL. McGraw-Hill, 1998. TK 7885.7/P47 1998

Pick, Joseph. VHDL techniques, experiments, and caveats. McGraw-Hill, 1996. TK 7885.7/P53

Roth, Charles H. Digital systems design using VHDL. Thomson, c2008. TK 7888.4/R68 2008

Sjoholm, Stefan. VHDL for designers. Prentice Hall, 1997. TK 7885.7/S56

Short, Kenneth L. VHDL for engineers. Pearson Prentice Hall, c2009. TK 7885.7 S525 2009

Vahid, Frank. Verilog for digital design. John Wiley, c2007. TK 7885.7/V34 2007

Yalamanchili, Sudhakar. Introductory VHDL : from simulation to synthesis. Prentice Hall, 2001. TK 7885.7/Y33

Yalamanchili, Sudhakar. VHDL starter's guide, 2nd ed. Prentice-Hall, 2005. TK 7885.7 Y35 2005

Zwolinski, Mark. Digital system design with VHDL. Prentice Hall, 2000. TK 7868 D5/Z98

Unpublished Material:

Serafica, Michelangelo A. A VHDL implementation of elliptic curve elgamal encryption. 1999. LG 993.5 1999 E64/S47

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Disclaimer:

This pathfinder contains suggested materials on VHDL that are available at the College of Engineering Library II. However, some references were not included.

We welcome suggestions for new pathfinder topics.

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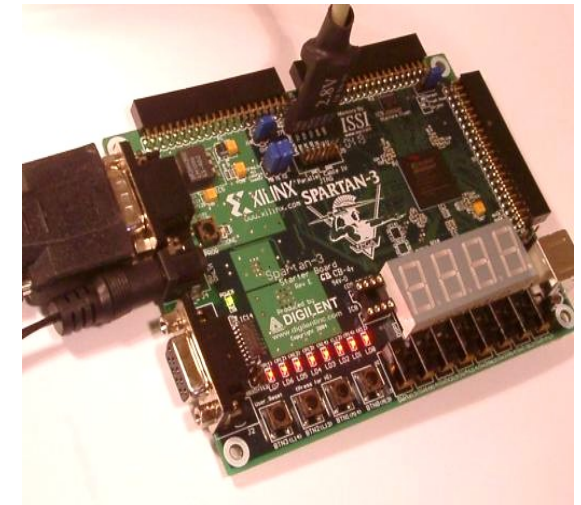


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VHDL

PATHFINDER

What is VHDL?*

- **VHDL** is the **VHSIC Hardware Description Language**.
- **VHSIC** is an abbreviation for *Very High Speed Integrated Circuit*. It can describe the behavior and structure of electronic systems, but is particularly suited as a language to describe the structure and behavior of digital electronic hardware designs, such as ASICs and FPGAs as well as conventional digital circuits.
- VHDL is a notation, and is precisely and completely defined by the Language Reference Manual (LRM). This sets VHDL apart from other hardware description languages, which are to some extent defined in an ad hoc way by the behavior of tools that use them.
- VHDL is an international standard, regulated by the IEEE. The definition of the language is non-proprietary.
- VHDL is not an information model, a database schema, a simulator, a toolset or a methodology! However, a methodology and a toolset are essential for the effective use of VHDL.
- Simulation and synthesis are the two main kinds of tools which operate on the VHDL language. The Language Reference Manual does not define a simulator, but unambiguously defines what each simulator must do with each part of the language.
- VHDL does not constrain the user to one style of description. VHDL allows designs to be described using any methodology - top down, bottom up or middle out!
- VHDL can be used to describe hardware at the gate level or in a more abstract way.
- Successful high level design requires a language, a tool set and a suitable methodology.

Books: (c1993-c2009)

- Armstrong, James R., 1939-. Structured logic design with VHDL. PTR Prentice Hall, 1993. QA 76.9/D5 A76 1993
- Baker, Louis. VHDL programming : with advanced topics. Wiley, 1993. TK 7885.7/B35
- Bhasker, Jayaram. A guide to VHDL syntax : based on the new IEEE Std 1076-1993. AT&T Bell Laboratories, 1995. TK 7885.7/B52
- Bhasker, Jayaram. A VHDL primer. Prentice Hall PTR, 1995. TK 7885.7/B53 1995
- Brown, Stephen D. Fundamentals of digital logic with VHDL design. McGraw-Hill, 2009. TK 7888.4/B76 2009
- Chu, Pong P. FPGA prototyping by VHDL examples : Xilinx Spartan 3 version. Wiley-Interscience, c2008. TK 7895 G36 C485 2008



The VHDL Reference CAN model
<http://www.semiconductors.bosch.de/img/can10.jpg>

*Source:
http://www.doulos.com/knowhow/vhdl_designers_guide/what_is_vhdl/

- Dewey, Allen M. (Allen Mark). Analysis and design of digital systems with VHDL. PWS Pub. Co., 1997. TK 7868/D5 D49
- Dueck, Robert K. Digital design with CPLD applications and VHDL. Thomson / Delmar Learning, c2005. TK 7872 L64/D84 2005
- Hamblen, James O. Rapid prototyping of digital systems. Kluwer, c2000. TK 7895 G36 H36
- Hwang, Enoch O. Digital logic and microprocessor design with VHDL. Thomson, c2006. TK 7888.4/H83 2006
- Formal semantics for VHDL. Kluwer Academic Publishers, 1995. TK 7885.7/F67 1995
- Institute of Electrical and Electronics Engineers. IEEE standard VHDL language reference manual. 1994. TK 7874/I57
- Lee, Sunggu. Advanced digital logic design : using VHDL, state machines, and synthesis for FPGAs. Thomson, c2006. TK 7868 L6/L435 2006
- Navabi, Zainalabedin. VHDL : analysis and modeling of digital systems. McGraw-Hill, 1993. TK 7874/N38
- Navabi, Zainalabedin. VHDL : modular design and synthesis of cores and systems. McGraw-Hill, c2007. TK 7885.7/N383 2007
- Naylor, David. VHDL : a logic synthesis approach. Chapman & Hall, 1997. TK 7885.7/N39