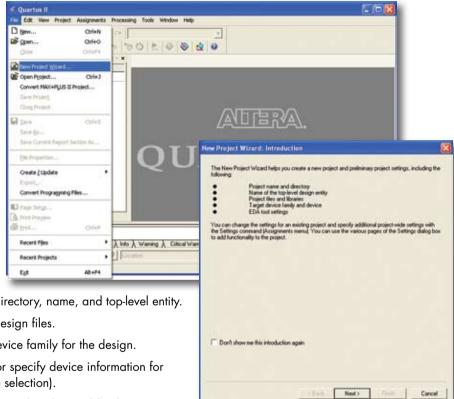# Quick Start Guide
For Quartus II Software

This *Quick Start Guide* will show you how to set up a Quartus® II project, enter timing requirements, and compile the design into an Altera® device.
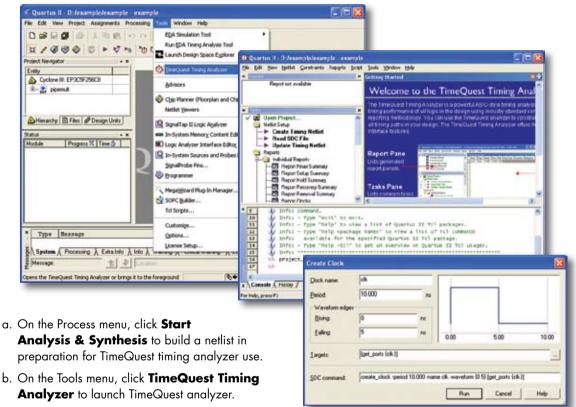
QUARTUS® II

Three-Step Design Compilation in Quartus II Software

1 Run the New Project Wizard

a. Specify project directory, name, and top-level entity.

b. Specify project design files.

c. Specify Altera device family for the design.

d. Specify device (or specify device information for automatic device selection).

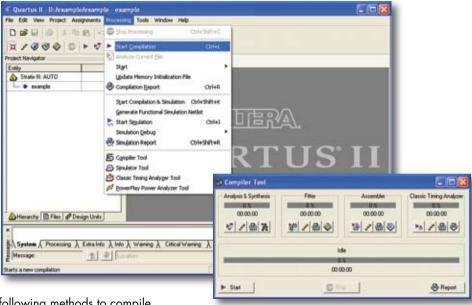e. Specify other EDA tools to be used for this project.

f. Review project settings.

2 Run the TimeQuest Timing Analyzer

a. On the Process menu, click **Start Analysis & Synthesis** to build a netlist in preparation for TimeQuest timing analyzer use.

b. On the Tools menu, click **TimeQuest Timing Analyzer** to launch TimeQuest analyzer.

  i. On the Netlist menu, click **Create Timing Netlist** and select **Post-map** to create the timing netlist with timing delay information.

  ii. Specify your design timing constraints using the analyzer's graphical user interface (GUI) or by using the Synopsys Design Constraint (SDC) text editor.

c. On the Assignment menu, click **Timing Analysis Settings** to specify TimeQuest analyzer as the timing analysis tool and to add your SDC file to the project.

Quartus II **Assignment** menu provides all settings and assignments for the project.

3 Compile the Design

a. Select one of the following methods to compile the design:

   i. On the Processing menu, click **Start Compilation**.

   ii. On the menu toolbar, click ▶.

   iii. On the Processing menu, click **Compiler Tool** and click **Start**.

b. When compilation is complete, refer to the Compilation Report window to view information on compiler settings, resource usage, and compilation equations.
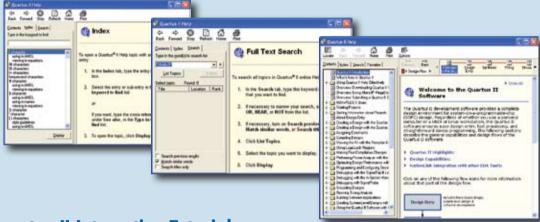
Timing analysis is also performed during compilation on the current design, and the Compilation Report window includes the timing information.

Get Quartus II Help and Information

Refer to the Quartus II Help

- Press F1 from a highlighted menu command or active dialog box for context-sensitive help

- Choose **Index** (Help menu) to view the index

- Choose **Search** (Help menu) to perform a search

- Choose **Contents** (Help menu) to view the contents

Quartus II Interactive Tutorial

The Quartus II software includes a Flash-based Interactive Tutorial. The modules of this tutorial teach you how to use the basic features of the Quartus II design software, including design entry, compilation, timing analysis, simulation, and programming.

This tutorial includes audio and Flash animation components, and is best experienced with a sound card and speakers and at least 1024x768 display resolution.

Once you start the tutorial, you can jump immediately to any tutorial module by clicking the Contents button. Once you select a tutorial module, you can click the ShowMe, GuideMe, or TestMe buttons at any time to jump directly to the tutorial mode that best suits your learning style.

For More Information

Introduction to the Quartus II Software
www.altera.com/literature/manual/intro_to_quartus2.pdf

Quartus II Online Demos
www.altera.com/quartusdemos

Quartus II Development Software Handbook
www.altera.com/literature/hb/qts/quartusii_handbook.pdf

Altera Design Software
www.altera.com/products/software/sfw-index.html

Technical Support
www.altera.com/mysupport

Altera Technical Literature
www.altera.com/literature/lit-index.html

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