Importing Synthesized Files from EDA Tools into the MAX+PLUS II Software for Place & Route

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Introduction

The Altera® MAX+PLUS® II software easily interacts with third-party EDA tools. With the MAX+PLUS II software, you can use a third-party EDA tool as your front-end tool to target a design for Altera programmable logic devices (PLDs).

This technical brief describes how to import an EDIF netlist file, created in a third-party EDA tool, into the MAX+PLUS II software for fitting. For more information on advanced compilation settings and steps, refer to MAX+PLUS II Help.

Compiling an EDA Design with the MAX+PLUS II software

To compile an EDIF netlist file created by a third-party EDA tool using the MAX+PLUS II software, follow these steps:
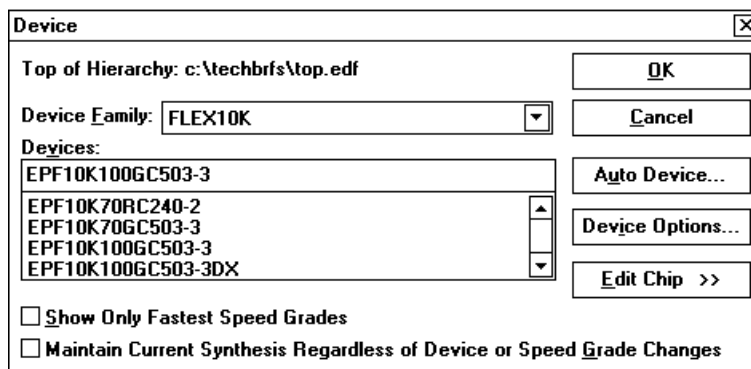
1. Choose **Open** (File menu) and select your design file. The design file should be in EDIF format with the extension **.edf**.

    ☞   Synplicity also provides an option to generate a Text Design File (**.tdf)** in the Altera Hardware Description Language (AHDL). You can also import the TDF into the MAX+PLUS II software.

2. Choose **Set Project to Current File** (File menu) to set your project for compilation.

3. Choose **Device** (Assign menu). First, specify the device family in the *Device Family* drop-down list box, and then select the device in the **Devices** dialog box (see Figure 1). Turn off *Show Only Fastest Speed Grades* to show all available devices in a family.

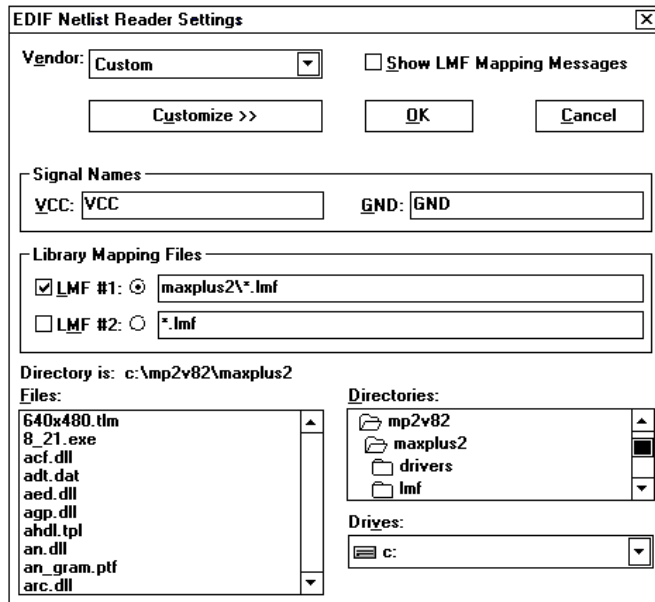*Figure 1. Device Dialog Box*

4. Choose **OK** to save your changes.

5. Choose **Compiler** (MAX+PLUS II menu).

6. Choose **EDIF Netlist Reader Settings** (Interfaces menu) and select the applicable EDA vendor from the *Vendor* drop-down list box. Choose **OK**.

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This step instructs the MAX+PLUS II software to use a Library Mapping File (**.lmf**). During compilation, the LMF will map cells in EDIF Input Files (**.edf**) to equivalent MAX+PLUS II logic functions.

If your EDA vendor provides a separate LMF or the EDA vendor is not listed in the *Vendor* drop-down list box, click on the **Customize** button. Then turn on *LMF#1* or *LMF #2* and type the desired LMF location and filename in the *Library Mapping Files* fields or select it in the *Directories* window. See Figure 2.

Figure 2. EDIF Netlist Reader Settings Dialog Box

7.   (Optional) Before compilation, you can adjust synthesis settings and timing requirements for your design. Refer to MAX+PLUS II Help for details.

8.   (Optional) You can instruct the MAX+PLUS II software to generate output files for third-party simulation tools by choosing **EDIF Netlist Writer**, **Verilog Netlist Writer**, and/or **VHDL Netlist Writer** (Interfaces menu), and adjusting their settings as needed for your design. Refer to MAX+PLUS II Help for details.

9.   Choose **Start** in the MAX+PLUS II Compiler to begin place and route.

For more information on fitting your design, refer to the "Guidelines for First-Time Project Fitting" and "Fitting & Refitting a Project" in MAX+PLUS II Help.

More Information

Altera provides extensive support documentation to help you successfully use the MAX+PLUS II software with third-party EDA design entry tools. For technical support, contact Altera Applications at (800) 800-EPLD or go to the MAX+PLUS II Altera Commitment to Cooperative Engineering Solution (ACCESS[SM]) Key Guidelines on the Altera web site. You can also e-mail your technical questions to Altera at **sos@altera.com**. For answers to common questions regarding the Altera/EDA software tool interface, search Atlas Solutions on the Altera web site.

The following documents provide more detailed information:

■ MAX+PLUS II ACCESS Key Guidelines
■ *MAX+PLUS II Programmable Logic Development System & Software Data Sheet*
■ *EDA Software Support*

These documents are available by contacting Literature Services at (888) 3-ALTERA; you can also download them from the Altera web site at **http://www.altera.com**.

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