

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

Technical Brief 45

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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).

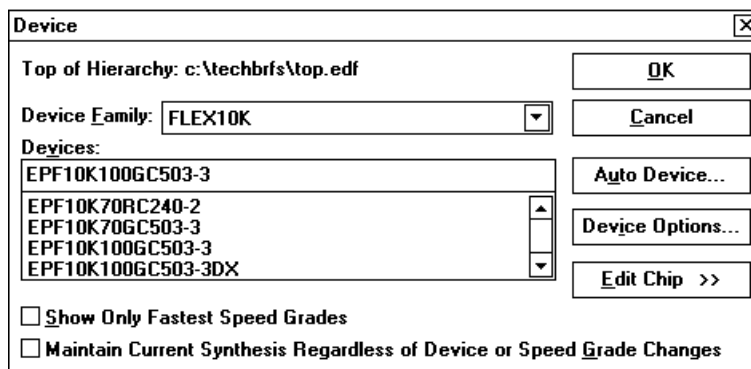
This technical brief describes how to import an EDIF netlist file, created in a third-party EDA tool, into the MAX+PLUS II software for fitting. For more information on advanced compilation settings and steps, refer to MAX+PLUS II Help.

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

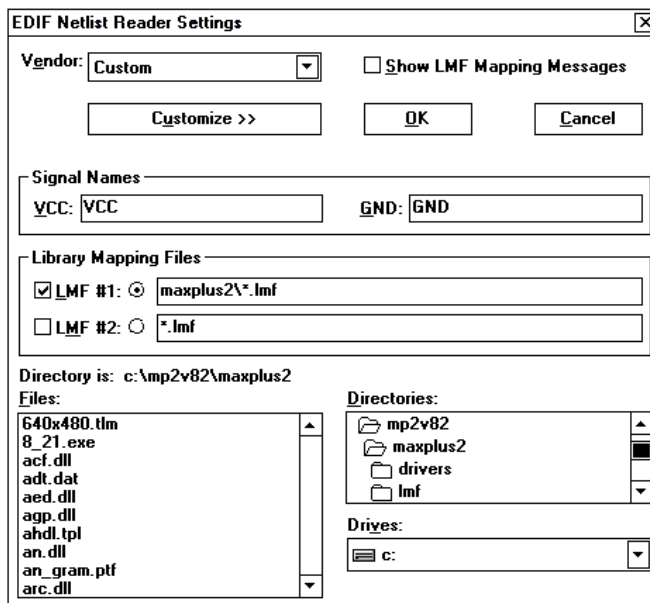


4. Choose **OK** to save your changes.
5. Choose **Compiler** (MAX+PLUS II menu).
6. Choose **EDIF Netlist Reader Settings** (Interfaces menu) and select the applicable EDA vendor from the *Vendor* drop-down list box. Choose **OK**.

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 (ACCESSSM) 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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