

How to Import Pin Assignments

Last Updated August 25, 2016

Table of Contents

Overview	3
Importing Pin Assignments	3
Viewing Pin Assignments with the Pin Planner	4



Overview

The Out of the Box MAX V Development Board contains a CPLD, flash memory, and a USB to FIFO IC. Unless the intent is to interface with these devices it is critical to only utilize free user pins i.e. pins that are not already connected to another device.

Failure to do so could result in a hardware failure!

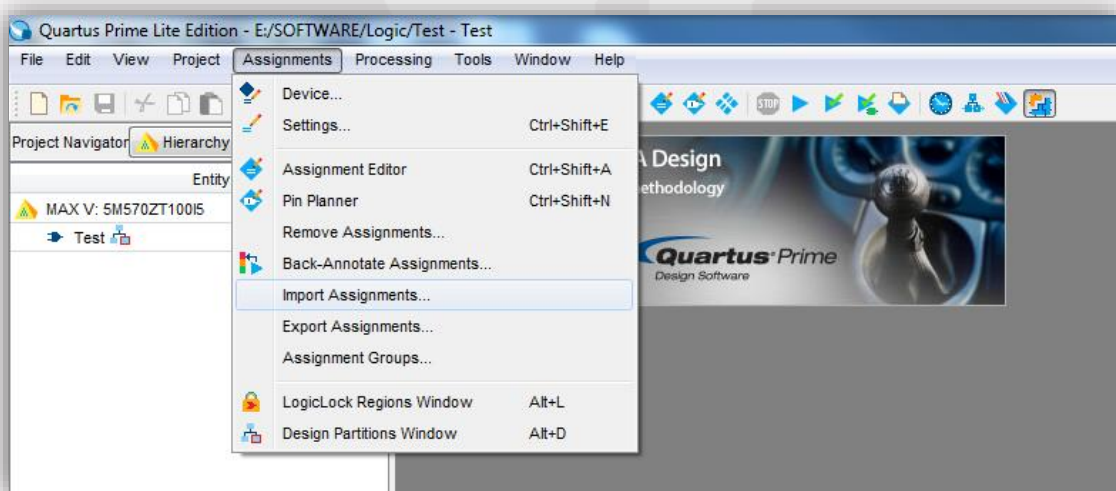
An easy way to avoid pin assignment conflicts is to import reserved pin assignments at the start of a new project. This tutorial will demonstrate how to do this using a pin assignment file provided by Out of the Box.

“defaultPinAssignments.qsf” reserves all I/O pins of the MAX V other than those that interface with the breadboard or onboard LEDs. The intent of the “defaultPinAssignments.qsf” pin assignment file is simply to create a safe sandbox for the Out of the Box MAX V Development Board without the worry of accidentally assigning pins already allocated to the onboard devices such as the flash and USB peripherals.

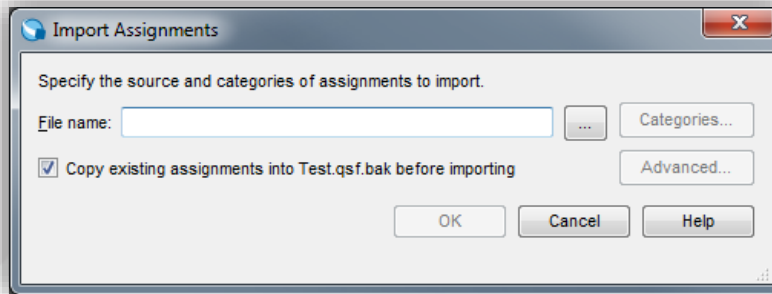
Note this tutorial uses the file “defaultPinAssignments.qsf”. Download it from the Digital Logic and Computer Systems course website.

Importing Pin Assignments

With a project opened in Quartus importing pin assignments is very simple. Navigate to the toolbar of the Quartus software and locate the “Assignments” menu. Then Select “import Assignments” as shown below.




In the “Import Assignments” window shown below click on the  button.



Locate the file “defaultPinAssignments.qsf”. Then click OK in the “Import Assignments” window.

Viewing Pin Assignments with the Pin Planner

To Access the pin Planner either click on the Pin Planner Icon , use the shortcut CTRL+SHIFT+N, or select the pin planner from the Assignments menu of the Quartus toolbar. The Pin Planner Window is shown below.

