



Install Avnet Board Definition Files in Vivado 2015.3 or 2015.4

4 April 2016

Version 1.2

Overview

The Vivado® Design Suite allows you to create projects based on specific development boards. When you select a specific board, Vivado design tools enable additional designer assistance as part of its IP customization for IP integrator designs. For more information about this capability, please refer to the following Quick Take video.

<http://www.xilinx.com/training/vivado/using-vivado-with-xilinx-evaluation-boards.htm>

Objectives

This document describes how to install Avnet Board Definition files so that the Avnet boards become visible in Vivado Design Suite 2015.3 or 2015.4.

Software Requirements

The software used to test the procedures outlined in this document is:

- Windows-7 64-bit
- Xilinx Vivado 2015.3 or 2015.4

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Install Board Definitions into the Vivado installation

1. Extract the archive to the following location.

For 2015.3:

`installdir\Vivado\2015.3\data\boards\board_files`

For 2015.4:

`installdir\Vivado\2015.4\data\boards\board_files`

2. Now browse to the `board_files` location. The screenshot below shows the contents of this directory after the installation of the MicroZed 7010 and 7020 as standalone boards, PicoZed 7010, 7015, 7020, and 7030 boards with either the V1 or V2 FMC Carrier, and the PicoZed 7015 with the Smart Vision Development Kit.

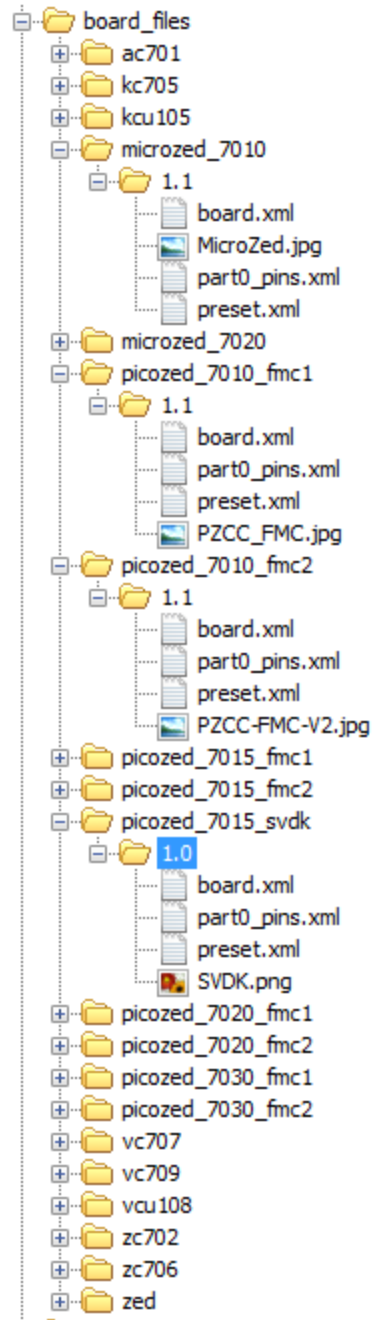


Figure 1 – Xilinx Install After Extraction of Definitions

Test in Vivado

Regardless of which method you choose, the new boards should now be visible in Vivado 2015.x for vendor **em.avnet.com**. To test this out, do the following.

1. Launch Vivado 2015.3 or 2015.4
2. Select **Create New Project**.

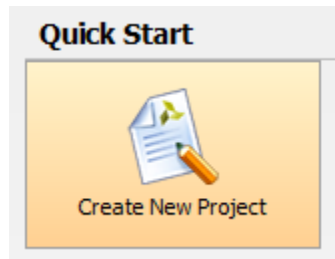


Figure 2 – Create New Project

3. Click **Next >** to get started.



Figure 3 – Create a New Vivado Project

4. Set the project name and location. Press **Next >**.

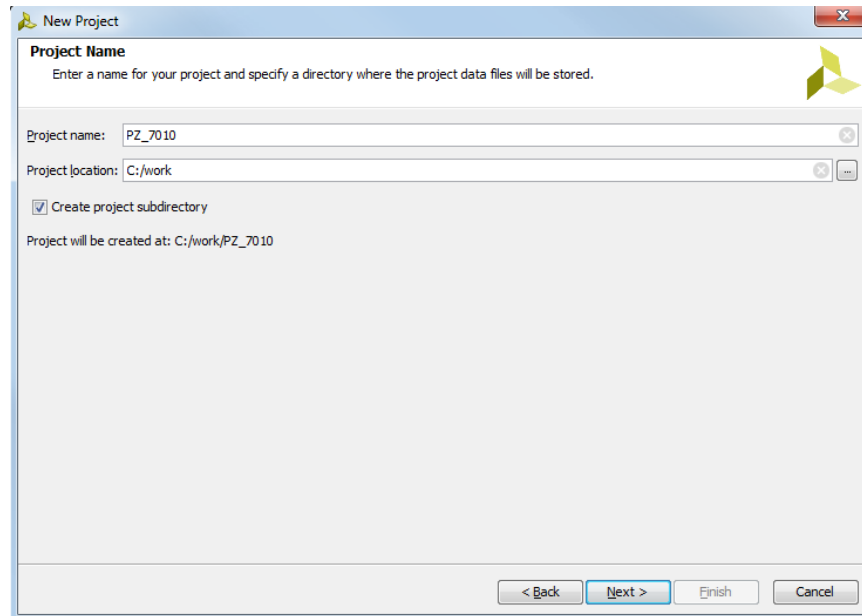


Figure 4 – Set Project Name and Location

5. Select the check box for ***Do not specify sources at this time***. Click **Next >**.

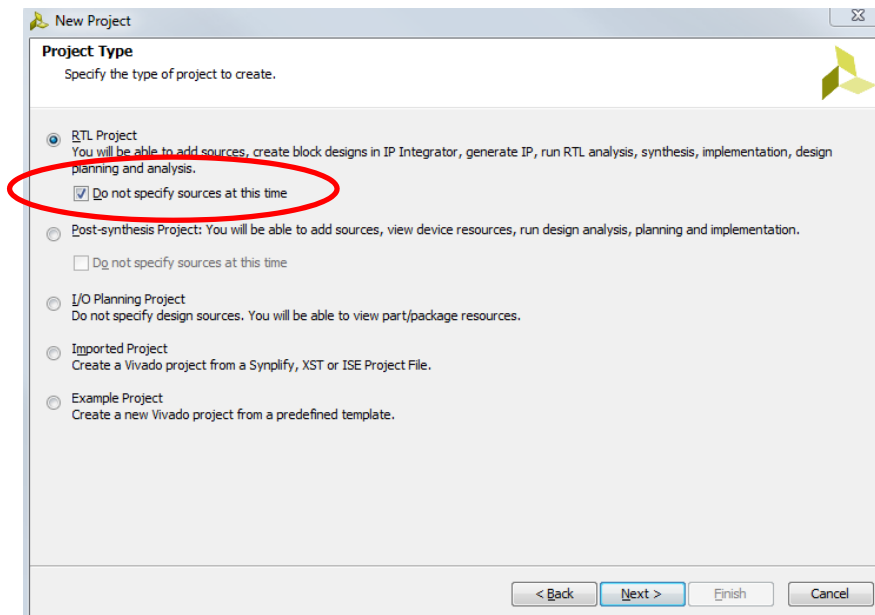


Figure 5 – Project Type

6. At the **Default Part** screen,
 - a. Click **Boards** next to *Select*.
 - b. Select **em.avnet.com** in the pull-down for *Vendor*.

The options should appear as shown. Note that the *ZedBoard Rev D* is included with the Vivado 2015.3 default installation. The *MicroZed* and *PicoZed* entries were added with this procedure, assuming both archives were extracted. MicroZed Revisions B, C, F-01, F-06, or G as well as both Commercial and Industrial temperature grade MicroZed boards are compatible with the Rev F entries. PicoZed Revision C is compatible with Revision B.

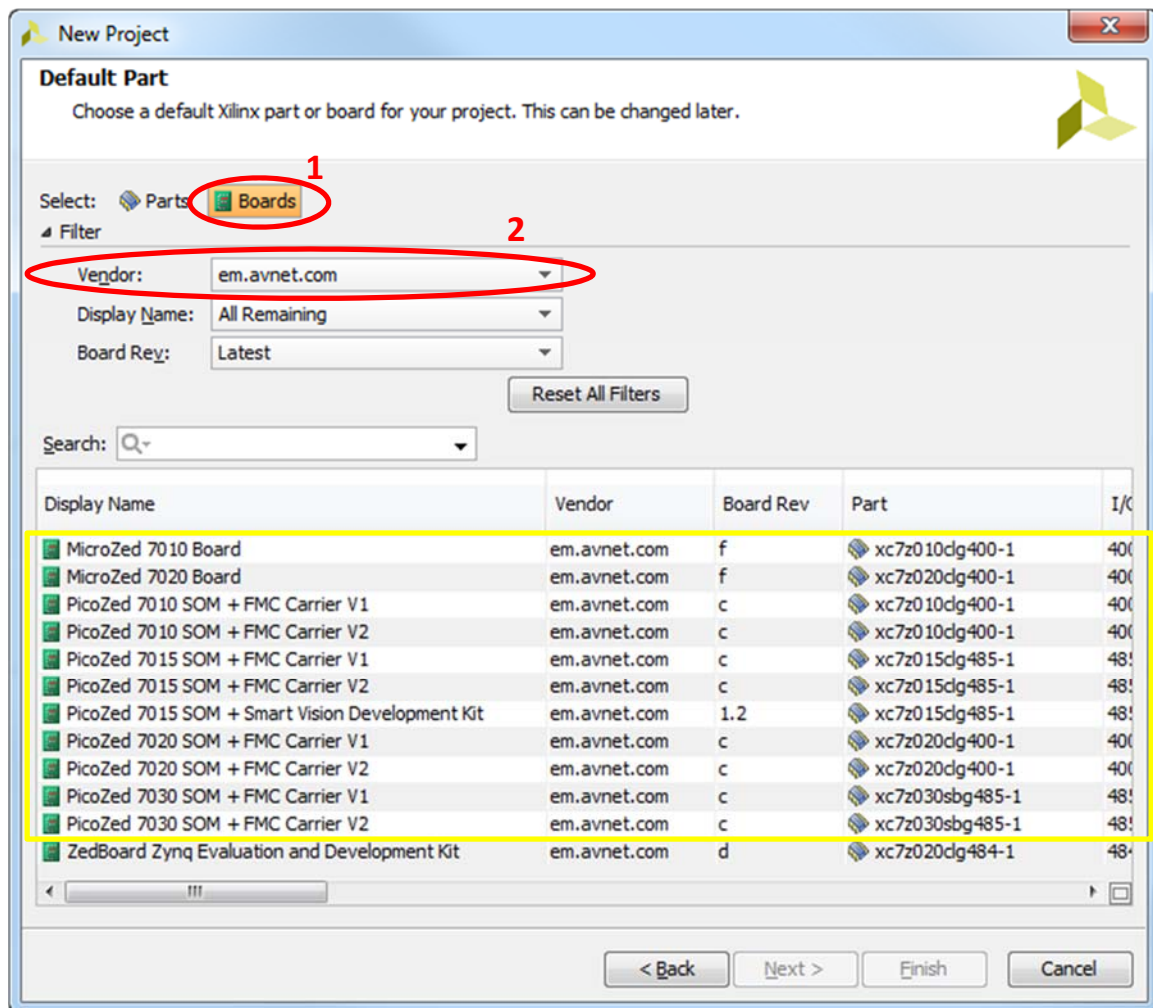


Figure 6 – MicroZed and PicoZed Boards Visible in Vivado 2015.1

Revision History

| Date | Version | Revision |
|-------------|---------|--|
| 29 Feb 2016 | 1.0 | Initial Avnet release |
| 31 Mar 2016 | 1.1 | Fixed package errors in the PZ7015-FMC1 and PZ7030-FMC1 preset.xml attributes; Added PicoZed SVDK; Set the PicoZed SD1 CD Enable to 0 since this is no longer necessary in 2015.2 or later for eMMC; Changed the PicoZed and MicroZed SDIO clock to 25 MHz for more reliable SD Card boot. |
| 04 Apr 2016 | 1.2 | Changed MicroZed definitions to DDR3; Unchecked Internal Vref box for all |