Spartan-3A Evaluation Kit Errata

July 9, 2008

Revision History

Description	Date
Initial release	July 9, 2008

Introduction

Thank you for your interest in the Avnet Spartan-3A Evaluation Kit. Although Avnet has made every effort to ensure the highest possible quality, these kits and associated software are subject to the limitations described in this errata notification.

Kit Identification

These errata apply to Revision B of the kit, as noted in the Assembly part number on the backside of the board (SP3A-EVAL-ASY-**B**).

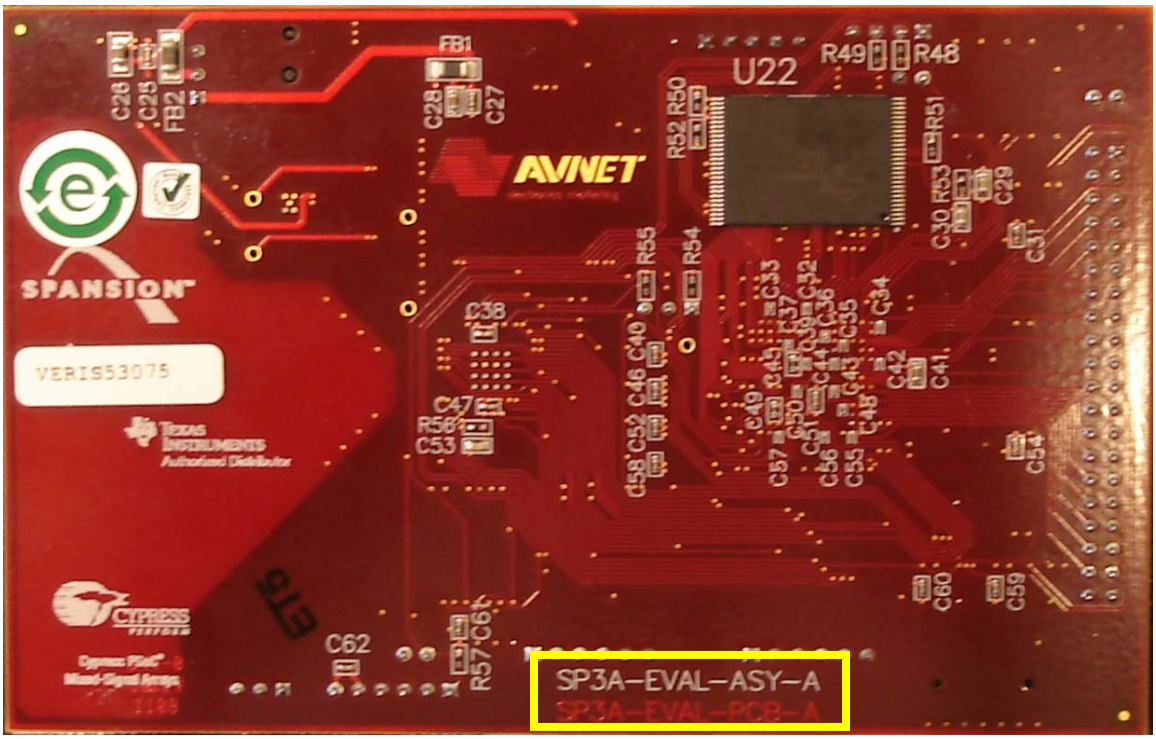

Figure 1 – Location of Assembly Part Number on Rev A board

Errata Summary

Table X summarizes the known hardware issues with the Spartan-3A Evaluation Kit. See the Errata section for a detailed description of each known issue. Table 1 also shows which Revision is affected by a particular erratum.

Table 1 –Errata Summary

Errata Issue	Kit Revision	
	B	
"Avnet Programming Utility Serial Communications Disrupted on non-English Language Computers"	Yes	
"AvProg does not work with Windows XP Service Pack 3 "	Yes	
"Cypress MiniProg Cannot Source Power to the Board"	Yes	

Errata

This section provides a detailed description of each known hardware issue.

Avnet Programming Utility Serial Communications Disrupted on non-English Language Computers

Applications affected

The Avnet Programming Utility (AvProg) for the Spartan-3A Evaluation Kit when used with non-English language computers.

Description

AvProg was designed using Microsoft Visual Basic v6.0. This version of VB creates applications that internally are non-Unicode. Windows XP and Windows Vista are both full Unicode operating systems. When AvProg runs in Windows, the non-Unicode characters are translated to Unicode characters as a function of the O/S. For English language computers, this is not an issue as the Unicode and non-Unicode characters are the same. However, for non-English computers, the non-Unicode characters are not the same as some Unicode characters.

This is an issue since AvProg relies on specific character strings to be sent to the Spartan-3A Evaluation board as commands. When the non-Unicode characters get translated to Unicode, the strings are corrupted, which in turn corrupts the commands and communication between computer and board.

For additional information, see the following websites:

- http://www.microsoft.com/globaldev/handson/user/xpintlsupp.mspx#EVE
- http://msdn.microsoft.com/en-us/library/ms776459.aspx
- http://www.jollans.com/tiki/tiki-index.php?page=vb6unicodesupport

Workaround

The work-around for this is also documented in the *Avnet Programming Utility User Manual*.

To correct this problem, you must change the “Language for non-Unicode programs” on the host system to English. Follow the instructions below to do this on a Windows XP system:

a. Launch the **Control Panel** from the Start Menu.
b. Double-Click **Regional and Language Options**.
c. Select the **Advanced** tab.
d. Select **English** in the list box, as shown below.
e. Click the **OK** button.

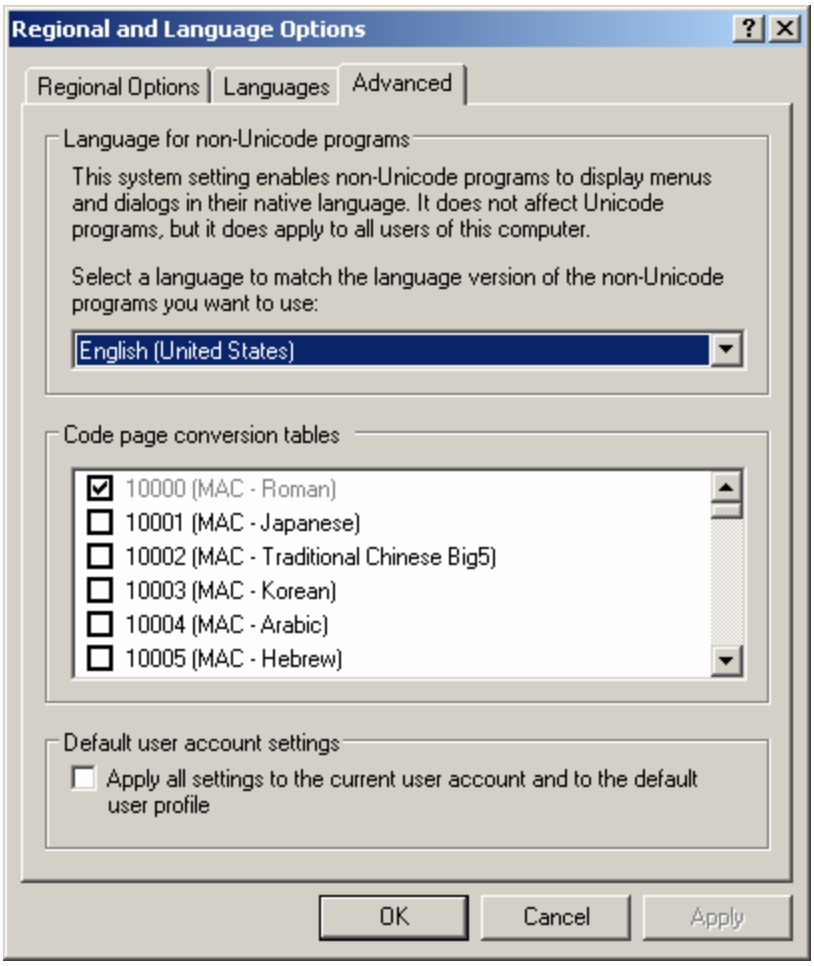

Figure 2 – Setting the Language for non-Unicode programs in Windows

AvProg does not work with Windows XP Service Pack 3

Applications affected

The Avnet Programming Utility (AvProg) for the Spartan-3A Evaluation Kit when used on a machine with Windows XP Service Pack 3.

Description

The COMM port used by AvProg to communicate with the board locks up and none of the board operations work.

Workaround

None. Avnet is investigating a fix or work-around for this situation.

Cypress MiniProg Cannot Source Power to the Board

Applications affected

The board is designed to allow you to source power from the Cypress MiniProg (JP7 in the PROG position). However, the board does not power-up. The 5V LED (D1) may light, but the board does not function.

Description

Due to the large amount of capacitance required by the FPGA (470uF), there is a significant in-rush current that the MiniProg cannot provide. The MiniProg's 5V output droops and trips the on-board voltage supervisor.

Workaround

The MiniProg cannot be used to source power to the board. Board power must be connected separately in addition to the MiniProg being plugged in, and Reset programming must be used in PSoC Programmer. This is documented in the Avnet document *Restoring the Spartan-3A Evaluation Kit to its Original State*.