Adrienne Electronics Corporation

"PC WILL NOT BOOT"

FIELD APPLICATION NOTE

Introduction:

We have discovered that if our PCI-TC and/or PCIe-TC boards are installed in some PC's, the PC will fail to boot properly.

Symptoms:

When you turn on your PC with a PCI-TC or PCIe-TC board installed, the PC does not boot properly. To the end user, the obvious (but incorrect) assumption is that there is something wrong with our board, because the PC booted up just fine without the board being installed.

<u>Solution #1 - Install Driver Software Via Windows Safe Mode:</u>

- 1) Press the "F8" ("fate") key repeatedly while the PC is booting. Select the Windows "Safe Mode" (without networking or command prompt) boot option.
- 2) Install the driver software for your PCI-TC or PCIe-TC board as described elsewhere. The process for locating and starting Device Manager may be a bit different in Safe Mode from what is described in those instructions.
- 3) Restart your Windows PC normally.

This works because evidently in some cases Windows automatically installs a default driver for our board which causes Windows to freeze up. This problem goes away as soon as the proper driver software is installed (via Safe Mode).

Solution #2 - Update PC BIOS:

- 1) Determine the current BIOS version of your PC, either by carefully looking at the display when the PC is first turned on, or (better) by entering the BIOS setup menu by pressing the "DEL"(?) key during the BIOS power-on self test sequence.
- 2) Determine the model number of your PC and/or motherboard.
- 3) Go to the website for your PC and/or motherboard vendor.
- 4) Determine the current BIOS version available.
- 5) If the BIOS in your PC is old, update it using the data file and procedure which must be obtained from your PC and/or motherboard vendor(s).
- 6) If the above steps fail to work, boot up the PCI-TC or PCIe-TC board in an older or newer PC, just to assure yourself that our (your) board is good.
- 7) Contact your PC and/or motherboard vendor to ask for new BIOS which boots up properly when a known good PCI or PCI Express board is installed.

Additional Information:

If your PC cannot boot when a known good PCI or PCI Express board is installed, then there is definitely something wrong with the PC's BIOS or OS. For example, we purchased four "new" Acer 64-bit PC's in November 2013, and discovered that they contained UEFI BIOS dated December 2012. These PC's failed to boot properly with known good PCI-TC and PCIe-TC boards installed. We updated the UEFI BIOS, and the boot problems went away immediately.