

Adrienne Electronics Corporation

“BOARD FIRMWARE UPDATE INTRODUCTION”

For All PCIe-TC Family Boards

Introduction:

If it becomes necessary to update the firmware on your PCIe-TC board for any reason, please proceed as indicated here. Every board being updated will require its very own update data file (obtained from AEC), and the update process will install both new microcomputer firmware and new FPGA firmware. This is an in-circuit update, so there is no need to remove the board from the PC. At present the in-circuit update software works only on Windows PC's.

Board Update Overview:

Details may vary slightly, depending upon the software contained within the “.exe” in-circuit update program which is in the same directory as this document file. However, in general, you will need to proceed as follows:

- 1) Install the PCIe-TC board in a known good Windows XP or newer PC, using precautions, procedures, and drivers documented elsewhere on this CDROM.
- 2) Obtain and send to <support@adrielec.com> the 16-character “Board ID Code” which is unique to each board. This board ID code has the general format “0123.4567.89AB.CDEF” (16x hex digits). This code can be obtained either via the “.exe” update program, or by booting directly to the test/demo CDROM, then navigating to the “Get Software ID” menu option.
- 3) We will send you an update data file having a name something like “AEC_xxxx.ETA”, where the “xxxx” field matches the last 4 digits of the current Board ID Code. This helps you associate update files with boards.
- 4) Run the “.exe” update program and follow the instructions there. The actual board reprogramming process takes less than 1 minute.
- 5) Delete the “AEC_xxxx.ETA” file (it can be used only once for one board).

CAUTION

- 1) Do not turn off power to the PC, or allow the PC to reset itself, while the PCIe-TC board update procedure is active. Doing so will not physically damage the board, but the board will have to be returned to the factory for reprogramming from scratch.
- 2) Do not attempt to use the update data file more than once. Each file is designed for one-time use on a single board. After a board has been updated, its Board ID Code will change to something completely different, and thus the update file will no longer work for that board (or any other).