Adrienne Electronics Corporation

“PCIe-TC STATUS LED BEHAVIOR”

FIELD APPLICATION NOTE

Introduction:
This document describes the green status LED behavior for different versions of PCIe-TC board software.

History:
The original PCIe-TC board software generally turned the green status LED solid ON if the board input(s) were OK, but turned the LED solid OFF otherwise. There was thus no way to distinguish between a good board with no valid input(s), and serious hardware issues like power off or board failure. Our boards do not fail very often, but a crystal failure in early 2015 brought to our attention the fact that we could and should do a better job of board status reporting. The new status LED behavior is much more helpful, and is consistent with the status LED behavior of virtually all newer AEC products.

Green Status LED “New” Behavior: (for revision “A8” and higher boards)

Solid ON	=>	Board is OK, and board input(s) OK.
1 Blink	=>	Board is OK, but no valid input(s) detected.
2 Blinks	=>	Board is OK, and video input is OK, but no VITC detected.
Solid OFF	=>	PC power off, or board hardware failure.

Green Status LED “Old” Behavior: (for revision “A1” through “A7” boards)

Solid ON	=>	Board is OK, and board input(s) OK.
1 Blink	=>	Board is OK, and video input is OK, but no VITC detected.
Solid OFF	=>	PC power off, or board hardware failure, or board is OK but no valid input(s) detected (not helpful).

Miscellaneous Notes:
The status LED will blink OFF once or twice per second, as indicated above, for a very short period of time, if appropriate. The “video input is OK, but no VITC detected” case applies only to PCIe-VLTC boards.

“A8” Board Software Update Policy:
The in-circuit update (ICU) process is somewhat time consuming for both AEC personnel and customer personnel, and there is always a nonzero risk that the ICU process will fail and the board will have to be returned to the factory for reprogramming. As a matter of policy, we will not update existing PCIe-TC boards to software revision “A8” for status LED behavior reasons alone. There has to be some other compelling reason to go through the ICU process (sorry).