

17 May 2016

TO: WHOM IT MAY CONCERN

RE: Volatile and Non Volatile Memory on ALL Alta Interface Products

There is a flash part on the **Alta interface cards and ENET** products that could allow the user to store data on the device through power cycle (non-volatile). This part is:

1. FPGA Flash Boot RAM Part: 64K-2Mbytes. This part stores the FPGA boot-up image. The user can access this part through a standard API function call ADT\_L1\_ProgramBoardFlash(). The customer has the source to the API and can remove this function from the API image build. This would prevent the user from accessing the memory using standard conventions.

This part could be accessible for data storage by an engineer knowledgeable with the system configuration and memory backplane experience, but the person would have to be intentionally trying to manipulate memory for non-standard purposes. Normal application development or driver testing would not need to access this memory. There is not a memory sanitation process for this Flash part.

Alta provides a standard hardware option that can <u>inhibit the Flash write capability</u> of this part, thus, **making all user accessible memory volatile**. This inhibit option ("N" in part number suffix) must be designated at order time, or the cards may be sent back to the factory for upgrade/rework for a fee. This option would also prevent in-field updates, which means, product would need to be sent back to the factory for updates.

There is also a 4-8 Mbyte SRAM part on the product that is volatile with power loss/cycle.

An Alta product with the **-N** option (example: PCI-1553-2F-NT or ENET-A429-8-N) is completely memory sanitized/cleared by cycling power. Alta also provides a Window's tool (AltaView – Open Device Function) that scans the Alta product and shows if this -N setting is implemented on the card (shown as a "WP" write protect acronym). Contact the factory for more information about AltaView operations.

If there are any questions, please contact the undersigned.

Richard Schuh

CEO

Alta Data Technologies 805-964-5390 rick.schuh@altadt.com

www.altadt.com