## STATEMENT OF LETTER OF VOLATILITY

The following statement applies to the USB Data Acquisition product line, as follows:

PCIe-WDG-CSM	USB-AI16-32E	USB-AIO16-16A	USB-CTR-15	USB-IDIO-8
PCIe-WDG-CSMA	USB-AI16-64A	USB-AIO16-16E	USB-DA12-4A	USB-IDIO-8L
PICO-DIO16RO8	USB-AI16-64E	USB-AIO16-32A	USB-DA12-4E	USB-IDO-16
USB-AI12-128	USB-AI16-64MA	USB-AIO16-32E	USB-DA12-8A	USB-IDO-16L
USB-AI12-128A	USB-AI16-96A	USB-AIO16-64A	USB-DA12-8E	USB-II-16
USB-AI12-128E	USB-AI16-96E	USB-AIO16-64E	USB-DI16A	USB-II16-OEM
USB-AI12-16	USB-AIO-PI	USB-AIO16-64MA	USB-DI16H	USB-II-4
USB-AI12-16A	USB-AIO12-128	USB-AIO16-64MA-OEM	USB-DIO16-16A	USB-II4-OEM
USB-AI12-16E	USB-AIO12-128A	USB-AIO16-96A	USB-DIO-16A	USB-II-8
USB-AI12-32	USB-AIO12-128E	USB-AIO16-96E	USB-DIO-16H	USB-II8-OEM
USB-AI12-32A	USB-AIO12-16	USB-AO12-12A*	USB-DIO-24	USB-IIRO-16
USB-AI12-32E	USB-AIO12-16A	USB-AO12-12E*	USB-DIO24-CTR6	USB-IIRO-4
USB-AI12-64	USB-AIO12-16E	USB-AO12-16A*	USB-DIO24DO12	USB-IIRO4-2SM
USB-AI12-64A	USB-AIO12-32	USB-AO12-16E*	USB-DIO-32	USB-IIRO4-COM
USB-AI12-64E	USB-AIO12-32A	USB-AO12-8A*	USB-DIO-32F	USB-IIRO-4DB
USB-AI12-64MA	USB-AIO12-32E	USB-AO12-8E*	USB-DIO-32I	USB-IIRO-8
USB-AI12-96	USB-AIO12-64	USB-AO16-12A*	USB-DIO-48	USB-IIRO-ADAP
USB-AI12-96A	USB-AIO12-64A	USB-AO16-12E*	USB-DIO48DO24	USBP-DIO16
USB-AI12-96E	USB-AIO12-64E	USB-AO16-16A*	USB-DIO-96	USBP-DIO16RO8
USB-AI16-128A	USB-AIO12-64MA	USB-AO16-16E*	USB-DO16A	USBP-II2IDO2
USB-AI16-128E	USB-AIO12-96	USB-AO16-4A*	USB-DO16A-ARB1	USBP-II8IDO4
USB-AI16-16A	USB-AIO12-96A	USB-AO16-4E*	USB-IDIO-16	USBP-II8IDO4A
USB-AI16-16E	USB-AIO12-96E	USB-AO16-8A*	USB-IDIO-16L	USB-RO-16
USB-AI16-2A	USB-AIO16-128A	USB-AO16-8E*	USB-IDIO-4	USB-RO-4
USB-AI16-2H	USB-AIO16-128A-OEM	USB-AO-ARB1	USB-IDIO-4L	USB-RO-8
USB-AI16-32A	USB-AIO16-128E			

## Questions and Answers

1. Are all memory components within the hardware device volatile, meaning that any data stored on these components is lost when power to the unit is removed?

No.

2. If non-volatile components exist, are any of them designed to be modified by the user or by the devices during normal operations? Please briefly describe the type of data stored in these components.

Yes.

These devices contain a plug-and-play (PnP) configuration EEPROM 64-kbits in length. The last 512 bytes are designated for customer use, with the remaining bytes reserved for factory use including the required PnP data, as well as serial number and model number verification codes. Models designated "-S25" have had the firmware burned into the onboard EEPROM, in the "factory reserved" space.

The user-designated 512 bytes can be used for any data the customer desires through our AIOUSB.DLL's "CustomEEPROMWrite()" and "CustomEEPROMRead()" APIs. The remaining factory reserved bytes are accessible only through IOCTL calls, or use of the undocumented "GenericVendorWrite()" "GenericVendorRead()" functions; however, these devices are based on Cypress' EzUSB (FX2) chips, which are commonplace in the industry, and procedures to access them are well known.

3. Are any RAM components battery-backed? If so, please briefly describe the nature being retained and the location of the memory.

No.

4. Where is the BIOS located? Can it be locked out with a password? If yes, please provide the sequence to do so.

N/A. In general the devices run "firmware" loaded by drivers from the host computer into onboard volatile RAM at each device reset; no firmware is located in non-volatile memory. None of these devices have "BIOS" as such. The firmware loaded by the drivers is part of the software driver package (AIOUSB).

5. Does this equipment contain any devices, such as RF transmitters and dial out capabilities via either telephone landline or cellular transmission?

No.

**Clearing Procedures** 

There are many procedures available to clear the contents of the onboard nonvolatile (EEPROM) memory. The simplest is available from our website.

- 1. Download http://accesio.com/files/forever/USB104LoVClear.exe and run it
  - a. Caution: Do not check the "Plug & Play (CAUTION)" check box. Erasing the 8-bytes of PnP data will, effectively, brick your unit. If this happens, please download <u>http://accesio.com/files/KeyMaster/USB%20Change%20ID.zip</u> and contact the factory for support.
  - b. Caution: Erasing the Serial Number by checking the "Serial Number (Not Recommended)" checkbox will void your warranty. The Serial number is stored as an 8-byte IEEE double precision floating point value.
- 2. Click the "Erase Checked Regions" button.
- 3. The user-modifiable nonvolatile memory regions are erased by writing a random value to every byte, then 0s, then 1s, then 0s.

Note: Models marked with \* contain an additional flash memory used to hold calibration data. Versions of the USB104LoVClear utility produced before April 3<sup>rd</sup> 2017 do not erase this nonvolatile memory.