ATTO Technology, Inc.

Product Release Notes

Celerity 16Gb Fibre Channel Release v1.35 – Windows Microsoft Certified Drivers

1. General Release Information

These product release notes define the new features, changes, known issues and release details that apply to the Celerity 16Gb Fibre Channel adapter product v1.35 that was released on 06/30/2016. This information pertains to the Windows Operating System.

2. Changes

- ***Version 1.35 (Released 06/26/2016)***
  - **Note:** It is recommended that the latest firmware available on ATTO website be utilized with this driver release.
    - Added support for Celerity Gen 6 16Gb/32Gb FC adapters
    - Added support to display connector info in atinfo
  - **New Features & Enhancements**
    - Microsoft Certified package for Windows 10

- ***Version 1.30 (Released 01/21/2016)***
  - **Note:** It is recommended that the latest firmware available on ATTO website be utilized with this driver release.
    - Updates to events that are logged
    - Resolved an error that could result in an exchange used for a nameserver request completing for a port logged out
  - **New Features & Enhancements**
    - Microsoft Certified package for Windows 10

- ***Version 1.26 (Released 10/15/2015)***
  - **Note:** It is recommended that the latest firmware available on ATTO website be utilized with this driver release.
  - **New Features & Enhancements**
    - Microsoft Certified package for Windows 10
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- ***Version 1.25 (Released 8/06/2015)***
  - **Note:** It is recommended that the latest firmware available on ATTO website be utilized with this driver release.
  - **New Features & Enhancements**
    - Added support for Windows 10
    - Implemented T10-PI management improvements
    - Integrated miscellaneous bug fixes

- ***Version 1.20 (Released 3/16/2015)***
  - **Note:** It is recommended that the latest firmware be utilized with this driver release.
  - The following apply to driver v1.20
  - **New Features & Enhancements**
    - Fixed a timing issue when mounting a volume.
    - Addressed an issue with seeing LUNs in a direct attached environment.

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- ***Version 1.16 (Released 1/27/2015)***
  - **Note:** It is recommended that the latest firmware be utilized with this driver release.
  - The following apply to driver v1.16
  - **New Features & Enhancements**
    - Corrected an exchange leak issue.

- ***Version 1.15 (Released 10/30/2014)***
  - **Note:** It is recommended that the latest firmware be utilized with this driver release.
  - The following apply to driver v1.15
  - **New Features & Enhancements**
    - Corrected a resource and performance issue concerning the number of logins being generated by NPIV ports.
    - Addressed a firmware issue causing an error when querying a switch
    - Addressed an issue where HBAs failed to properly recover from a controller reset.
    - Increased the number of Registry parameter NumRequests to 3000

- ***Version 1.11 (Released 10/30/2014)***
  - **Note:** It is recommended that the latest firmware be utilized with this driver release.
  - The following apply to driver v1.11
  - **New Features & Enhancements**
    - Microsoft Certified Drivers for Windows 8, 8.1 (x86, x64) & 2012, 2012 R2 (x64)

- ***Version 1.10 (Released 07/08/2014)***
  - **Note:** It is recommended that the latest firmware be utilized with this driver release.
  - The following apply to driver v1.10
  - **New Features & Enhancements**
    - Improved IOPS performance
    - Enhanced the device display in atinfo
    - Added support for atreset
    - Addressed an issues where Windows drivers cannot interpret older Windows driver eventlogs

- ***Version 1.07 (Released 03/27/2014)***
  - **Note:** It is recommended that the latest firmware be utilized with this driver release.
  - The following apply to driver v1.07
  - **New Features & Enhancements**
    - Corrected issue with Execution Throttle that could prevent I/O from being started
    - Added support for Windows 8.1 (x86, x64) and Server 2012 R2 (x64)

- ***Version 1.06 (Released 02/06/2014)***
  - **Note:** It is recommended that the latest firmware be utilized with this driver release.
  - The following apply to driver v1.06
  - **New Features**
    - Improved LinkDown timeout resolution.
    - Added SCSI Write 12 to T10-DIF capable commands.
    - Register service parameters in FLOGI along with PLOGI.
    - Increased the retry timer to 150ms from 100ms.
    - Improved how a port database entry is initialized.

- ***Version 1.05 (Released 11/25/2013)***
  - **Note:** It is recommended that firmware dated 4/10/2013 be utilized with this driver release.
  - The following apply to driver v1.05
  - **New Features**
    - Increased the maximum supported targets from 256 to 512.
    - Added uninstall functionality to the driver installer.
    - Modified driver to handle read commands with missing or corrupted data frames that complete with a GOOD SCSI status.
    - Updated driver when NPIV is disabled to always attempt to log into ports on a fabric.
  - **Supported OS**

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        - Windows 8 (x86, x64)
        - Windows 7 (x86, x64)
        - Windows Server 2012 (x86, x64)
        - Windows Server 2008 R2 (x86, x64)
        - Windows Server 2008 (x86, x64)

- ***Version 1.03 (Released 4/17/2013)***
    - **Note:** It is recommended that firmware dated 4/10/2013 be utilized with this driver release.
    - The following apply to driver v1.03
    - **New Features**
        - This driver release has passed Microsoft's HCK compatibility tests and is listed on the Windows Certified Products List for Windows 7, 8, Server 2008 R2 and 2012
        - Support was added for Windows 2012 Hyper-V
        - Corrected a timing issue with Task Management commands
        - Fixed a blue screen that occurred when coming out of hibernation
        - Updated HBA API Get Port Statistics to return accurate time value
    - **Supported OS**
        - Windows 8 (x86, x64)
        - Windows 7 (x86, x64)
        - Windows Server 2012 (x86, x64)
        - Windows Server 2008 R2 (x86, x64)
        - Windows Server 2008 (x86, x64)

- ***Version 1.02 (Released 1/15/2013)***
    - **Note:** It is recommended that firmware dated 11/08/2012 be utilized with this driver release.
    - The following apply to driver v1.02
    - **New Features**
        - Added support for the quad port Celerity 16Gb Fibre Channel Host Adapter (164E)
        - Changed the default Execution Throttle to 255 (disabled)
        - Implemented interrupt coalescing
        - Implemented NPIV for Windows 2008 and later
        - Data transfer errors no longer cause the command to be aborted without allowing the upper layer to send a response in Target Mode
        - Fixed event Log messages so lost frames report with the correct error code
        - Code that set the Disable Laser GPIO pin to a known state was removed because it seemed to be causing a laser TX_FAULT to occur when coming out of sleep

- ***Version 1.01 (Released 11/8/2012)***
    - **Note:** It is recommended that firmware dated 11/08/2012 be utilized with this driver release.
    - The following apply to driver v1.01
    - **New Features**
        - SAN Boot is now supported
        - T10 DIF now can be enabled in Windows
        - Fibre Channel Link Down Timeout is now operational
        - The Port Database is now sorted so devices show up in the same order across reboots
        - Enhanced the PCIe speed capability back up to Gen 3 if it had been lowered by placing the card in another platform
        - Addressed an unexpected driver removal when in loop mode
        - Fixed an issue where the HBA API Get Port Stats would hang
    - **Supported OS**
        - Windows 8 (x86, x64)
        - Windows 7 (x86, x64)
        - Windows Vista (x86, x64)
        - Windows XP (x86, x64)
        - Windows Server 2012 (x86, x64)
        - Windows Server 2008 R2 (x86, x64)
        - Windows Server 2008 (x86, x64)
        - Windows Server 2003 (x86, x64)

- ***Version 1.00 (Released 9/28/2012)***

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- **Note:** It is recommended that firmware dated 9/24/2012 be utilized with this driver release.
- The following apply to driver v1.00
- **New Features**
  - Initial release of Windows drivers for the Celerity 16Gb FC adapters
- **Supported OS**
  - Windows 8 (x86, x64)
  - Windows 7 (x86, x64)
  - Windows Vista (x86, x64)
  - Windows XP (x86, x64)
  - Windows Server 2012 (x86, x64)
  - Windows Server 2008 R2 (x86, x64)
  - Windows Server 2008 (x86, x64)
  - Windows Server 2003 (x86, x64)

3. Known Issues/Advisements

- When connecting directly to a disk drive while the topology is set to P2P Preferred (or AL preferred) the device may not be found with auto-topology. If this happens adjust topology setting.
- Arbitrated Loop is not support by the 16Gb Fibre Channel - the industry specification has not been finalized.
- The minimum requirement for StorPort drivers is Windows XP or 2003 SP2.
- An Unsigned Driver warning will appear when installing on Vista and 2008. This is expected behavior as Microsoft has not issued a Windows Update with their latest Root Certificate. Subsequent installs should not produce the warning.
- Multiple direct connections to a Xyratex drive array do not work.
- If the system will not boot in a MSI 277A-GD80 motherboard and the System BIOS PCI ROM Priority is set for EFI Compatible ROM, set the System BIOS PCI ROM Priority setting to Legacy ROM.
- System will not boot when card is installed in an Intel Grosse Point machine.

4. Affected Products

Product Name	SKU
Celerity FC 161E	CTFC-161E-000
Celerity FC 162E	CTFC-162E-000
Celerity FC 164E	CTFC-164E-000

5. Contacting ATTO Support

ATTO Technology, Inc. is renowned for its technical support services. ATTO's goal is to provide you the quickest response possible for your technical support needs. Please visit https://www.attotech.com/support/ for hours of operation.

ATTO Technical Support can be contacted via phone or email:

- Phone: 716.691.1999 ext. 242
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