

AVT 1394 Bus Driver Package



AVT 1394 BUS DRIVER PACKAGE

Release Information

V1.0.0

14 January 2009

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1 Overview

The AVT 1394BusDriver Package contains an alternative 1394 bus driver that is compliant to the native OHCI 1394 bus driver provided with Microsoft Windows. This means, unlike other proprietary 1394 bus drivers as for instance provided with the AVT FirePackage that are incompatible to the one provide with Microsoft Windows, existing custom 1394 device drivers (e.g. for hard disks) will continue to work. Therefore, 1394 camera drivers provided with 3rd-party solutions like Cognex's Vision Pro, or MATROX's MIL, as well as the CMU (Carnegie Mellon University) 1394 camera driver can still be used with the AVT 1394 bus driver.

Thereby, AVT 1394b cameras can run also at S800 data rate (800Mbps) under Windows Vista and XP (SP2/SP3¹), as the AVT 1394 bus driver eliminates the existing speed limitations of the original Windows driver.

Key features of the AVT 1394 bus driver:

- Optimized for high-throughput, low CPU load and fault-tolerant operation
- Can be used with 32-bit Windows operating systems Vista, XP, and 2000 only
- Supports all AVT 1394 cameras
- Supports all current IEEE 1394 standards (1394a and 1394b)
- Supports OHCI-compliant host controllers
- Implementation conforms to the PCI driver model defined by the Windows Driver Model (WDM)
- No licensing fee when used with AVT 1394 cameras²

2 Package content

The current version (v1.0) of the AVT 1394 Bus Driver Package contains the following components:

- AVT1394bus.sys – 1394 bus driver
- AVT1394BusDriverInstaller.exe – Easy-to-use driver installation tool

Separately to the AVT 1394 Bus Driver Package itself a corresponding User Guide is provided.

¹ No SP1 1394 driver rollback required!

² Regarding 1394 cameras the driver can currently be used only with AVT cameras, but not with any other 3rd-party 1394 camera. Nevertheless, all other 1394 device can be used.

3 Driver architecture

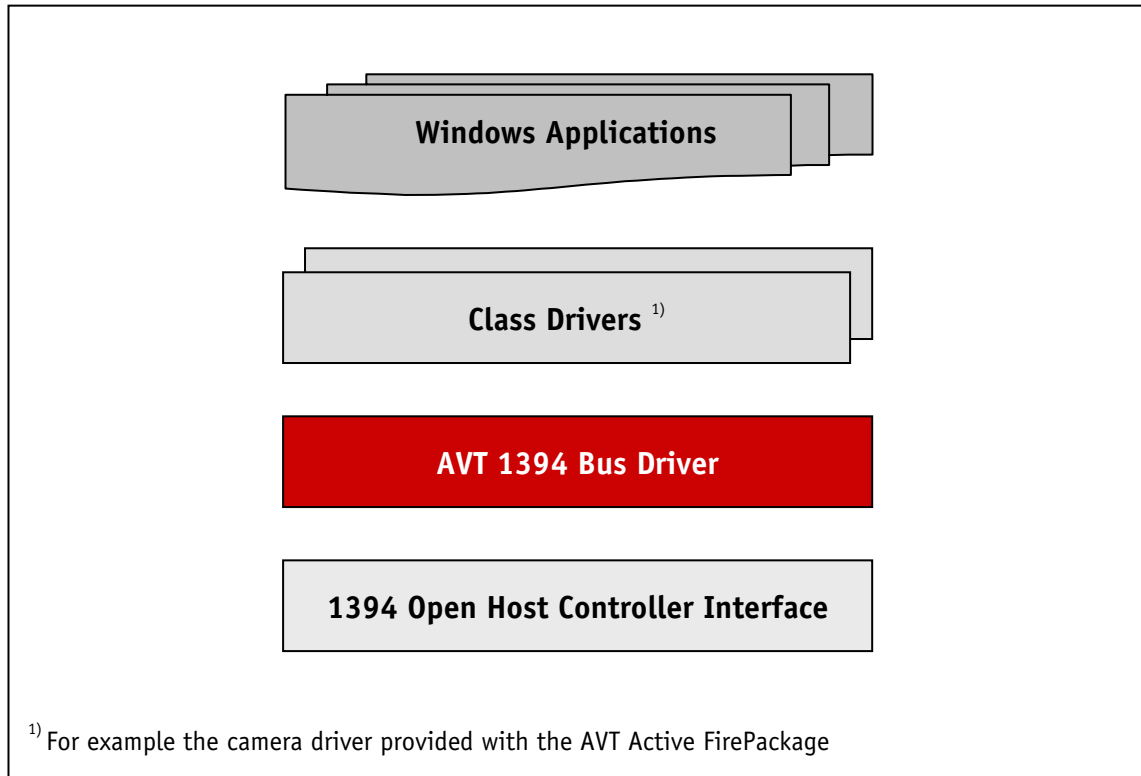


Figure 1: The AVT 1394 Bus Driver inside the PCI driver model

The AVT 1394 bus driver replaces the Microsoft driver and exposes a compatible programming interface to upper layers. In-box class drivers and existing custom device drivers will continue to work.

4 System requirements

Software

The AVT 1394 bus driver provided with the AVT 1394 Bus Driver Package supports the following operating systems:

- Windows Vista SP1 (with service pack 1) on Intel x86 architecture (IA-32)
- Windows XP SP2/SP3 on Intel x86 architecture (IA-32)
- Windows 2000 SP4

Note



The driver should also work on older service pack releases. However, testing has been performed on the service pack versions listed above.

Note



The provided driver installer can not be used on Windows 2000 systems. Please install the driver manually via the device manager.

Hardware

The AVT 1394 bus driver can be used with any 1394 device except 1394 cameras that are not manufactured by Allied Vision Technologies.

The AVT 1394 bus driver supports the following IEEE1394 OHCI host controllers:

- OHCI Version 1.0-compliant host controllers
- OHCI Version 1.1-compliant host controllers (1394a and 1394b)

Testing has been performed on host controllers that are based on OHCI chip sets from Texas Instruments. The driver should run on host controllers that are based on OHCI chip sets from other vendors, too. However, if there are any problems please feel free to contact our Technical Software Support (see below).

5 Quick version overview

The driver components provided with current AVT 1394BusDriver Package v1.0 have the following version numbers:

- | | | |
|-----------------------------|--------------------------|---------------|
| • AVT1394bus | 1394 bus driver | 1.27.0 |
| • AVT1394BusDriverInstaller | Driver installation tool | 1.0.0 |

6 List of changes

Not applicable. This is the initial release.

7 Known issues

The AVT 1394 bus driver does not support the IOver1394 protocol driver that is shipped with the Windows operating system. The 1394 Net Adapter is not available when installing AVT 1394 bus driver.

8 Support

Please do not hesitate to inform us about any problem, error, or bug you may discover. You can reach the **AVT Technical Software Support** as follows:

Email: support@alliedvisiontec.com

Alternatively, please feel free to use our support contact forms.

Germany

Phone: +49-4102-6688-270

Contact Form: <http://www.alliedvisiontec.com/support/support.html>

USA

Phone: +1-978-225-2030

Contact Form: <http://www.goavt.com/supportDesk.asp>