

USB Multi-Interface Driver for Windows

The USB Multi-Interface driver is a replacement driver for the system provided Multi-Interface driver. This driver was developed to overcome some bugs that are included in the build in driver and to introduce new features. The driver is compatible to the system provided Multi-Interface driver. If the driver is installed on a system, it does not automatically replace the system provided driver. It exists parallel to the system driver and is assigned to a device during the installation process.

USB Multi-Interface Driver

The driver has a private programming interface. This interface can be used to get Plug and Play notifications, to get descriptors from the device, to communicate with the device independent of the installed functional drivers via endpoint 0 and to switch USB configurations of a multi-configuration device. This interface is useful e.g. for DFU devices to send the DFU start command or to perform any additional communication with a device that exports only class compliant interfaces.

Furthermore the concept of supporting different USB configurations overcomes possible problems with a limited number of endpoints.

The switching between the configurations can be performed with standard user rights and allows the usage of different drivers in each configuration.

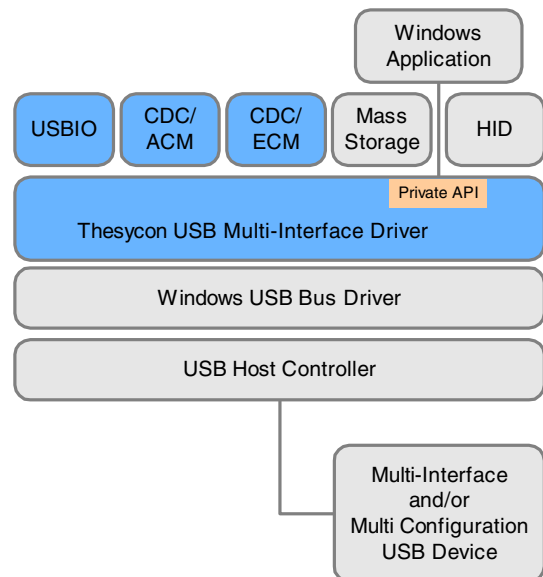
The driver is full compliant to the Interface Association Descriptor and it groups the interfaces of a lot of device classes correctly. If a IAD is provided by the device the IAD is used.

Different as the system provided driver this driver accepts the USB Cycle Port request. This enables a class driver to force a re-enumeration as required by the DFU specification.

Licensing

A runtime license permits royalty-free distribution of the driver together with devices. In addition, a source code license is available. For complete license conditions and prices please contact Thesycon.

A free evaluation package is available for download at <http://www.thesycon.de/usbmultiinterface>.



Features

- ❑ Supports multi-configuration and/or multi-interface devices
- ❑ Supports a lot of classes, CDC/ACM (Virtual COM), Video, HID, Printer, Mass Storage, DFU, and other.
- ❑ Supports low-speed, full-speed, high-speed mode
- ❑ Supports switching between USB configurations
- ❑ Win32 programming interface for use in C and C++ programs
- ❑ Supports Plug&Play and power management
- ❑ Supports Plug&Play notifications for applications
- ❑ Allows vendor- and product-specific adaptations
- ❑ Supports Interface Association Descriptor
- ❑ Compatible to the Microsoft's Multi-Interface driver
- ❑ The driver conforms to Microsoft's Windows Driver Model (WDM) and can be certified by Windows Hardware Quality Labs (WHQL).

Supported platforms	x86	x64
Windows 2000	✓	—
Windows XP	✓	✓
Windows XP Embedded	✓	—
Windows Server 2003	✓	✓
Windows Vista	✓	✓
Windows 7	✓	✓