

USB CDC/ACM Class Driver for Windows

Thesycon's device driver for CDC/ACM compliant devices provides a serial port emulation on Windows operating systems by implementing a serial link emulation protocol on USB. The driver exposes a Win32-compatible COM port and in addition provides some unique features such as a Plug&Play compliant device instance enumeration method. This avoids confusion about COM port numbers and improves usability.

The driver supports three USB protocol flavours as described in more detail below.

USB Protocol Variants

CDC/ACM Compliant Protocol. The device needs to implement the Abstract Control Model (ACM) subclass defined in the Communication Device Class (CDC) specification. This protocol requires two USB interfaces, a data interface (bulk in and bulk out endpoint) and a control interface (interrupt in endpoint). The device also needs to support class-specific requests.

Reduced CDC/ACM Protocol. This mode uses the CDC data interface (bulk in and bulk out endpoint) only. No control interface (interrupt endpoint) is required. The device needs to implement class-specific requests. This mode is useful if the number of available endpoints is limited.

Bulk-only Protocol. The device implements the data interface (bulk in and bulk out endpoint) only. No control interface and no class-specific requests have to be supported. Because bulk transfer mode provides flow control there is no need to support serial control/status lines. With this mode the efforts needed to implement the device firmware are reduced to a minimum.

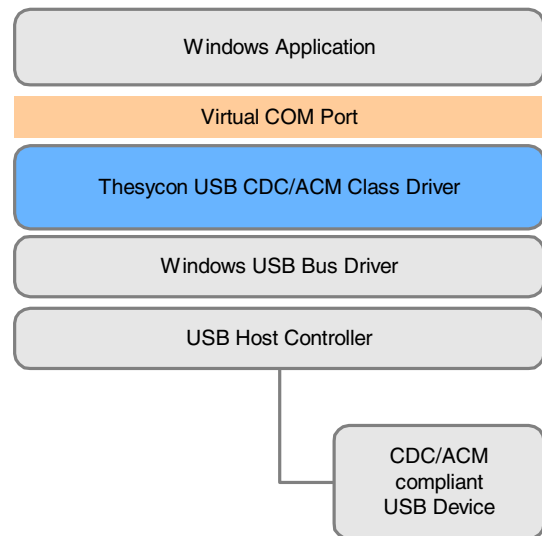
Easy Installation

Using Thesycon's [PnP Driver Installer](#) it is very easy to create a specific setup wizard that handles driver installation, un-installation and update in a comfortable and reliable way. For more information on PnP Driver Installer, check out <http://www.thesycon.de/pnpinstaller>.

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/cdcacm>.



Features

- ❑ Exposes a virtual COM port that is compatible with the Win32 serial port API
- ❑ COM port can be used by standard Windows programs such as HyperTerminal
- ❑ Can be configured either as a serial port or a modem device (uses unimodem driver)
- ❑ COM port name gets assigned automatically
- ❑ Hot add/remove of devices is fully supported
- ❑ Supports add/remove notifications and a Plug&Play compliant port enumeration and identification method that is not based on COM port names
- ❑ Optional static COM port behavior to support legacy applications
- ❑ Implementation is fully WDM-compliant
- ❑ Microsoft WHQL certification is possible

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

A similar driver is also available for Windows CE.

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