

FTDI Win 2k Drivers - Revision Comments April 20, 2004

C:\WINDOWS\Desktop\Releases\Drivers\Beta Release 905 2154 Apr20,2004\2154 Release Info.doc

FTDI's drivers have been changed to accommodate the support of Windows 98 and Windows 2000 for all three of FTDI's USB controllers from a single INF file.

New drivers will be posted on the support page of FTDI's web page - in ZIP format, following the following naming convention - Rxxyy where xx is the version of the Windows 98 drivers and yy is the version of the Windows 2000 drivers. The first release of the common INF drivers was named R0855.zip - which is version 10208 of the Windows 98 drivers and version 2055 of the Windows 2000 drivers.

There are now six files which are provided as a standard release

FTDIBUS.SYS (two driver files)
FTSER2K.SYS
FTDIUNIN.EXE (uninstaller and associated ini file)
FTDIUN2K.INI
FTDIBUS.INF (two shared INF files for Win98 and Win2k)
FTDIPORT.INF

On making a new release the files will also be posted onto FTDI's web page <http://www.ftdichip.com>. Proceed to the support page to download drivers (select Support tab at top of screen).

Release versions

1.00.2154 (April 20, 2004)

Fixed initialization problem on WinXP SP1.
Fixed IOCTL_SERIAL_GET_DTRRTS.

1.00.2151 (February 4, 2004)

Fixed problem with signalling events on disconnect with open port.

1.00.2150 (January 19, 2004)

Fixed problem with signalling line status errors.
Fixed problem with Location IDs and external hubs.

1.00.2148 (November 11, 2003)

More fixes for WHQL.
Fixed problem that prevented RXCHAR event being signalled when buffers were full.

1.00.2146 (October 28, 2003)

Various fixes for WHQL.
Added option for immediate processing of vendor commands.

1.00.2145 (October 20, 2003)

Fixed power-level problem with VCP serializer DLL interface.

1.00.2143 (September 24, 2003)

Fixed problem with RTS control toggle mode.
Fixed problem with device state after suspend/resume.

1.00.2140 (September 11, 2003)

Fixed problem with uninstall from DeviceManager.
Fixed problem with Sandstorm software.
Improved device request processing.
Fixed problem with modem control signal state on open.
Fixed cancel write request problem.
Added reset pipe retry count.

Added maximum devices option.
Added supported locations option.

1.00.2134 (June 16, 2003)

More changes for BusHound.

1.00.2133 (June 12, 2003)

Fixed BusHound compatibility problem.
Updated properties page with serial enumerator option.

1.00.2132 (June 09, 2003)

Bug fixes for substitution mode.
Fixed problem where laptops could not enter standby mode.
Fixed problem with Lexmark printer.
Added "Set RTS on Close" flag.
Updated properties page.

1.00.2126 (April 10, 2003)

Support substitution mode.
Restore device state on return from suspend or hibernate.
Fixed device naming problem.
Fixed bug in purge when receive buffer full.
Fixed bug in properties page.

1.00.2115 (February 25, 2003)

Beta release includes drivers that have passed Microsoft certification tests.

1.00.2115 (December 20, 2002)

Beta release.
Support force XON/XOFF option.
New properties page.

1.00.2114 (November 1, 2002)

Beta release.
Correctly identifies unserialized FT232BM and FT245BM devices.
Fixed remote wakeup.

1.00.2112 (October 25, 2002)

Beta release.
Support for FT232BM and FT245BM.
Uses location information to enumerate non-serialized devices.

1.00.2104 (July 22, 2002)

Drivers digitally signed.

1.00.2101 (February 1, 2002)

Fixed problem that resulted in some devices not coming out of hibernate.
Fixed divide-by-zero problem zero baud rate.

1.00.2099 (January 7, 2002)

Fixed problem with aliased baud rates.

1.00.2098 (December 20, 2001)

Improved transmit throughput.
Support serial printers through Registry setting.
Support for non-standard baud rates.
Support Transmit Immediate.
Disable modem control signals on port close.

Fixed serial mouse disconnect problem in Standby mode.
Runs under driver verifier.

1.00.2088 (October 30, 2001)

Fixed connect/disconnect problem in Windows XP.
Runs under driver verifier in Windows XP.

1.00.2086 (October 5, 2001)

Fixed write request timeout processing.
Fixed problem with restarting writes after port close.
Fixed no space in read buffer problem.

1.00.2084 (October 2, 2001)

Passes HCT tests (required for Windows XP Logo).
Uses common uninstaller FTDIUNIN.EXE.
Fixed minimum timeout problem.
Fixed write request blue screen.
Fixed write request timeout processing.
Fixed data loss at low baud rates.

1.00.2078 (July 27, 2001)

Fixed support for Logitech mice.
Enhanced write request processing.

1.00.2072 (May 2, 2001)

Runs under Windows XP.
Fixed receive buffer full problem.

1.00.2071 (Apr 26, 2001)

Enhanced BREAK condition processing.

1.00.2069 (Mar 28, 2001)

Fixed hyper-terminal re-boot problem seen when transmitting files at low baud rates.

1.00.2068 (Mar 23, 2001)

Drop modem status signals on disconnect

1.00.2067 (Feb 26, 2001)

Fixed disconnect with open port problems
Support multiple devices attached at the same time
Fixed hyper-terminal re-boot problem seen when typing characters in terminal screen
Enabled for surprise removal (removes unexpected removal dialogue box)

1.00.2060 (Jan 19, 2001)

Change to modem status register set up to improve port initialisation

1.00.2058 (Nov 7, 2000)

Fix to changing buffer size under Windows 2000 for FT8U232AM and FT8U245AM

1.00.2057 (Oct 19, 2000)

Fix to enable speeds greater than 115k baud for FT8U232AM and FT8U245AM

1.00.2055 (Sept 7, 2000)

Support for common INF for Win98 and Win2k drivers
Update of INF to support FT8U232AM and FT8U245AM

1.00.2054 (Aug 10, 2000)

Increased time out delay to make enumerator performance more robust

1.00.2053 (Aug 9, 2000)

Fixed transmit toggle problem

1.00.2052 (July 24, 2000)

Driver stack made consistent to fix device power state failure

INF changes to add serial services

1.00.2051 (June 15, 2000)

Fixed problem with 230k baud select, IN transfer restriction of 64 bytes removed

Fixed X-ON/X-OFF handshaking problem, added support for serial mouse

1.00.2049 (Mar 25, 2000)

Install / uninstall for new naming (ftser2k)

1.00.2046 (Mar 15, 2000)

New naming format: ftserial -> ftser2k

1.00.2044 (Mar 8, 2000)

Update to fix problem with Direct Cable Connect

1.00.2041 (Mar 3, 2000)

Fixed problem with baud rate selection

1.00.2040 (Mar 1, 2000)

Removed FTDI uninstaller

1.00.0 Beta (Feb 21, 2000)

Update to improve flow control

Alpha100 (Feb 18, 2000) - first release

Connects to ISP. Some flow control problems.

FTDI Win 98 Drivers - Revision Comments April 20, 2004

C:\WINDOWS\Desktop\Releases\Drivers\Web Release 905 2154 Apr20,2004\905 Release Info.doc

FTDI's drivers have been changed to accommodate the support of Windows 98 and Windows 2000 for all three of FTDI's USB controllers from a single INF file.

New drivers will be posted on the support page of FTDI's web page - in ZIP format, following the following naming convention - Rxxyy where xx is the version of the Windows 98 drivers and yy is the version of the Windows 2000 drivers. The first release of the common INF drivers was named R0855.zip - which is version 10208 of the Windows 98 drivers and version 2055 of the Windows 2000 drivers.

There are now eleven files which are provided as a standard release

FTSERIAL.SYS (driver files)
FTSENUM.SYS
FTSENUM.VXD
FTCOMMS.VXD
FTSERMOU.INF
FTSERMOU.VXD
FTSERUI.DLL
FTDIUNIN.EXE (uninstaller and associated ini file)
FTDIUNIN.INI
FTDIBUS.INF (two shared INF files for Win98 and Win2k)
FTDIPORT.INF

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Release versions

- R10905 (December 17, 2003)
Fixed Win98 suspend problem.
- R10904 (December 1, 2003)
Fixed problem with XON/XOFF handshake.
- R10903 (October 20, 2003)
Added option to bypass queueing of vendor commands.
- R10902 (October 7, 2003)
Fixed problem with reconnect after disconnect with open port.
- R10901 (June 12, 2003)
Fixed bug in receive timeouts.
- R10900 (June 09, 2003)
Bug fixes for substitution mode.
Improved command processing synchronization.
Update device map with port name.
- R10808 (April 10, 2003)
Support for substitution mode.
Fixed disconnect problem where all open ports were lost if an open port was disconnected..
- R10804 (December 20, 2002)
Beta release.
Support for location ID.
New properties page.

- R10802 (November 1, 2002)
Beta release.
Correctly identifies unserialized FT232BM and FT245BM devices.
- R10801 (October 25, 2002)
Beta release.
Support for baud rates for FT232BM and FT245BM devices.
- R10800 (July 18, 2002)
Enhanced event notification.
Fixed disconnect processing.
Fixed problems with WinFax.
Support for FT232BM.
Fixed serial mouse lockup in WinME.
- R10701 (February 1, 2002)
Fixed divide-by-zero problem for zero baud rate.
Fixed blue screen in DOS FTP.
Fixed performance degradation problem for FTP.
- R10514 (December 20, 2001)
Support non-standard baud rates.
Support Transmit Immediate.
- R10512 (November 13, 2001)
Fixed disconnect problem introduced in R10511.
- R10511 (October 30, 2001)
PortSetState function made compatible with serial driver.
- R10510 (October 2, 2001)
PnP controlled from Registry.
Enumerator enhanced.
Mouse driver fixed to restore mouse function after reconnection.
Uses common uninstaller FTDIUNIN.EXE.
- R10508 (July 27, 2001)
Fixed BREAK event received notification.
Changed receive triggering to fix PalmPilot problems.
Enhanced read and write processing.
- R10502 (April 26, 2001)
Enhanced BREAK condition processing.
Improved support for serial mice.
Fixed HyperTerminal lockup problem when transmitting with USB disconnected.
Fixed enumeration problem with SerialCardReader class.
- R10408 (March 28, 2001)
Fixed performance problems when receiving data.
- R10407 (March 23, 2001)
Added support for EV_TXEMPTY command
removed buffer size depends on baud rate change introduced in R10402
- R10405 (February 26, 2001)
Fixed disconnect with open port problem

R10402 (January 19, 2001)

- Setting of in buffer size changed to be dependent on baud rate
- 64 bytes for rate < 115kbps
- controller by ConfigData entry in INF file for rate > 115k
- Synchronisation of vendor commands for improved driver robustness

R10301 (November 7, 2000)

Update to fix 'access denied' problem under Windows Millennium

R10212 (October 19, 2000)

Updates to fix 'port already open' and 'modem not responding' problems found under Windows Millennium and Windows 98

R10208 (September 7, 2000)

Support for common INF for Win98 and Win2k drivers
Update of INF to support FT8U232AM and FT8U245AM

R10207 (July 21, 2000)

Addition of mouse mini-driver to support serial mouse of FTDI serial port
Addition of properties page to enable changing of allocated COM port - see ComPort.doc

R10206 (Nov 10, 1999)

Update to fix problem with Hyperterminal

Changing the COM Port Number

With the release of V1.02.07, FTDI has introduced a properties sheet which allows the user to change the COM port number of a USB serial port.

From *DeviceManager*, select "*View devices by type*", then "*Ports (COM & LPT)*". Select the USB serial port and click *Properties*. Select the "*Port Settings*" tab, then click *Advanced*. Choose the required COM port number from the list and click *OK*.

Notes

If a modem is attached to the USB serial port when the port number is changed, it will continue to work under the new port number.

If a modem had been attached to the USB serial port but was not attached when the port number was changed, it will not work when re-attached under the new port number. In this case, the modem must be removed from the system and re-installed.

In general, if there are devices in the system which have been attached previously to the USB serial port, they may not work after the port number has been changed. If this is true, remove the device from the system and re-install it.

FTDI

5 July 2000

FTDIBUS Options

Introduction

This document describes configuration options for FTDIBUS.SYS. For most operating environments, the default configuration of FTDIBUS is sufficient for normal operation, and it is very unlikely that any of the parameters described here need to be altered.

ResetPipeRequestRetryCount

ResetPipeRequestRetryCount controls the maximum number of times that FTDIBUS tries to reset a pipe on which an error has occurred. ResetPipeRequestRetryCount defaults to 50. It may be necessary to increase this value in noisy environments where a lot of USB errors occur.

The default can be overridden via RetryResetCount in the FTDIBUS service key

HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\FTDIBUS\Parameters\RetryResetCount

The device can be installed with ResetPipeRequestRetryCount set to any value by changing FTDIBUS.INF as shown in the following fragment.

```
[FtdiBus_AddService.AddReg]
HKR,Parameters,"RetryResetCount",0x10001,100
```

Here, the count is set to 100.

MaxDevices

MaxDevices is used to place a limit on the number of COM ports that can be created in a system by FTDIBUS. MaxDevices defaults to 0, meaning that the feature is disabled and FTDIBUS always attempts to create a COM port.

The default can be overridden via MaxDevs in the FTDIBUS service key.

Note that setting MaxDevs to a value other than zero will radically alter the behaviour of the driver; please contact FTDI if you think you have to change MaxDevs.

HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\FTDIBUS\Parameters\MaxDevs

The device can be installed with MaxDevs set to any value by changing FTDIBUS.INF as shown in the following fragment.

```
[FtdiBus_AddService.AddReg]
HKR,Parameters,"MaxDevs",0x10001,3
```

Here, the maximum number of devices is set to 3.

Location IDs

Location IDs is used to define the set of USB ports supported by FTDIBUS. It can be used in systems that require only certain USB ports to be available, perhaps in conjunction with MaxDevices. The default behaviour is that all USB ports are supported.

The default can be overridden via LocIds in the FTDIBUS service key.

Note that setting LocIds will radically alter the behaviour of the driver; please contact FTDI if you think you have to change LocIds.

HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\FTDIBUS\Parameters\LocIds

LocIds is a binary value that is interpreted as an array of Location IDs. A Location ID is a 32-bit unsigned integer (DWORD) that represents the location of the device in the USB tree. For example, if the driver creates a location string for the device of the form a&b&c, the location ID will be 0x00000abc.

The device can be installed with LocIds set by changing FTDIBUS.INF as shown in the following fragment.

```
[FtdiBus_AddService.AddReg]
HKR,Parameters,"LocIds",1,21,00,00,00,32,00,00,00,11,00,00,00
```

Here, three USB ports are supported. Location ID 0x00000021 represents host controller 1 port 1. Location ID 0x00000032 represents host controller 2 port 2. Location ID 0x00000011 represents host controller 0 port 1.

Location IDs can be obtained using the latest version of the utility USBView available from FTDI support.

FTDI

19 January 2004