FTDI CDM Drivers 2.08.28 - Revision Comments

FTDI's CDM drivers provide both D2XX and VCP functionality through a single driver package on PCs running the following Windows operating systems:

- Windows 8
- Windows 8 x64
- Windows Server 2008 R2
- Windows 7
- Windows 7 x64
- Windows Server 2008
- Windows Server 2008 x64
- Windows Vista
- Windows Vista x64
- Windows Server 2003
- Windows Server 2003 x64
- Windows XP
- Windows XP x64

The files included in a standard CDM release are:

- Installation files
  - FTDIBUS.INF
  - FTDIPORT.INF
- Driver files
  - FTDIBUS.SYS (32-bit)
  - FTDIBUS.SYS (64-bit)
  - FTSER2K.SYS (32-bit)
  - FTSER2K.SYS (64-bit)
- D2XX Interface
  - FTD2XX.H
  - Dynamic library
    - FTD2XX.DLL (32-bit)
    - FTD2XX.DLL (64-bit)
    - FTD2XX.LIB (32-bit)
    - FTD2XX.LIB (64-bit)
  - Static library
    - FTD2XX.LIB (32-bit)
    - FTD2XX.LIB (64-bit)
- Supporting files
  - FTLang.DLL (32-bit)
  - FTLang.DLL (64-bit)
  - FTCSERCO.DLL (32-bit)
  - FTCSERCO.DLL (64-bit)

On making a new release the files will be posted on FTDI's web site http://www.ftdichip.com/FTDrivers.htm in ZIP file format.

Release version

2.08.28 (February 13, 2013)
WHQL certified release.

Release Fixes

- Fixed bug on close port for .NET Framework applications.
- Fixed problem on close port that caused some hubs to fail.

Release version

2.08.26 (November 30, 2012)
WHQL certified release.

Release Fixes

- Support for Windows 8.
- Performance improvements on open and close port.
- Fixed problem where COM port became unavailable after D2XX port access.
- Fixed synchronisation issue that could lead to data loss.

Release version

2.08.24 (April 25, 2012)
WHQL certified release.

Release Fixes

- EEPROM fix for FT-X.
- Includes fixes from v2.08.14 onwards.

Release version

2.08.23 (February 7, 2012)
Interim version with bug fix.

Release Fixes

- Fix for spurious data problem with BM devices.

2.08.21 (January 25, 2012)
Interim version with bug fix.

Release Fixes

- Fix for data loss problem when writing after open port.

Release version

2.08.19 (December 14, 2011)
Interim version with bug fixes.

Release Fixes

- New EEPROM functions (FT_EEPROM_Read, FT_EEPROM_Program) with simplified structures – 1 per device type.
- Fix for potential data integrity issue relating to read timeouts.
- Synchronise cancelling wait wake IRP to avoid potential BSOD on surprise removal, particularly via hubs.
- Fix for potential BSOD on surprise removal when using Ethernet USB hosts.
- Improvements to remote wakeup and power management functionality.
- Resolved issue which could cause opening port to be slow.
- Improved reliability when plugging/unplugging other USB devices.

Release version

2.08.17 (August 25, 2011)
Interim version with bug fixes.

Release Fixes

- Resolved VCP timeout issue.
- Corrected definitions of TXLED and RXLED for FT232H.
- Fixed issue with static D2XX library.
- Resolved issue with FT_ListDevices when a port is open in another process.
- Fix for potentially purging valid data after calling FT_Purge.
- Improved speed of FT_Close and FT_CreateDeviceInfoList.
- Fixed potential issue regarding repeated remote wakeup requests.
- Fix for VCP requesting high baud rates for FT232H devices.
- Fix for possible BSOD when application closed after surprise removal.

Release version

2.08.14 (March 16, 2011)
WHQL certified release.

Release Fixes

- Resolved potential lock-up or BSOD when buffers are full.

Release version

2.08.12 (February 28, 2011)
Interim version with bug fixes.

Release Fixes

- Added support for FT232H devices.
- Resolved memory leak when D2XX only.
- Fixed thread synchronisation issue which could cause application deadlock.
- Fix to enable automatic hardware flow control if flow control is set after manually toggling RTS or DTR.
- Resolved potential lock-up issue on surprise removal.
- Resolved VCP open port hang on resume issue.
- Resolved potential BSOD on surprise removal.
- Fixed increasing COM port assignment issue when upgrading driver.
- COM port now accessible without unplug/replug after changing COM port number in advanced property page.

Release version

2.08.08 (November 16, 2010)

Interim version with bug fixes.

Release Fixes

- Fix power hang on COM port write timeout.
- Fix D2XX write timeout always returning 0 bytes written.
- Added new function FT_GetQueueStatusEx – returns unclipped number of bytes available to read.
- Corrected use of extended sub-integer baud rate divisors for some devices.
- Resolved issue where reads could fail to timeout resulting in FT_IO_ERROR.
- Fixed issue when resuming an open D2XX port with data transferring.
- Removed detection of error when application requests RTS_CONTROL_TOGGLE handshaking.

Release version

2.08.02 (August 11, 2010)

WHQL version with various bug fixes and enhancements.

Release Fixes

- Improved read performance, particularly for faster interface modes such as the FT2232H single channel synchronous FIFO mode.
- Updated co-installer now allows specifying the index that COM port allocation should begin at.
- Detect error when application requests RTS_CONTROL_TOGGLE handshaking since this is not supported in hardware.
- Corrected error when setting baud rates for hi-speed devices.
- Fixed bug which caused FT_GetCOMPortNumber to fail.
- Added more languages to FTLang:
    - Portuguese

- Fixed issue where Rx character events could stop being signalled.
- Resolved issue where location IDs were not returned for hosts above index 10.

Release version

2.06.02 (March 31, 2010)
Interim version with bug fixes.

Release Fixes

- Fix power management issues on Vista and Windows 7.
- Resolved issue with resuming an open COM port when returning from suspend.
- Resolved data loss issue when resizing buffers with hi-speed devices.

Release version

2.06.00 (October 22, 2009)
WHQL certified version with various bug fixes and enhancements.

Release Fixes

- Corrected buffer optimisation for hi-speed devices.
- Fix BSOD when terminating application with full buffers after disconnect.
- Prevent data being written to hi-speed chips until baud rate has stabilised.
- Fix XOn/XOff issue.
- Fix BSOD when connecting an FT232R/FT245R with endpoint size of 0.
- Fix possible BSOD when opening hi-speed device with full buffers.
- Added ability to alias hi-speed baud rates up to 12Mbaud.
- Added more languages to FTLang:
    - Dutch
- Corrected positioning of controls on property page for some display settings.
- FTLang will now detect current user interface language rather than Windows system language.

Release version

2.04.16 (February 17, 2009)
WHQL certified version with various bug fixes and enhancements.

Release Fixes

- Fix power management issue.
- Additional protection in serial driver.

Release version

2.04.14 (October 27, 2008)

WHQL candidate version with various bug fixes and enhancements.

Release Fixes

- Added more languages to FTLang:
  - Finnish
- Added support for FT2232H and FT4232H.
- Prevent users from programming EEPROMs with VID or PID of 0x0000.
- Fixed rare installation problem on Windows Server 2003 x64.
- Fixed problem with USB 2.0 hub enumeration.
- Fix for DTM rebalance test.
- Force endpoint size in FT232R/FT245R EEPROM structure to always be 64.
- Added FT_EVENT_LINE_STATUS for use with FT_SetEventNotification.
- Fixed LocIds bugs.

Release version

2.04.06 (March 13, 2008)

WHQL certified version with various bug fixes and enhancements.

Release Fixes

- Added multilingual support to property page via FTLang.DLL. Supported languages are:
  - English (Default)
  - Chinese (Traditional)
  - French
  - German
  - Hungarian
  - Italian
  - Japanese
  - Korean
  - Polish
  - Russian
  - Spanish
- Added FT_GetComPortNumber function.
- Added Line Status to IOCTL_FT_GET_MODEM_STATUS.
- Changes to write request processing to fix blue screen.
- Fixed FT_ResetDevice for FT2232.
- Fixes for Windows error report crashes.
- Fixed synchronisation issue.
- Fixed deadlock issues for multi-processor systems.
- Fixed error condition state in suspend.
- Revised co-installer.
- Support for COM port disabled in device manager (as opposed to disabled though property page).
- Fixed synchronization issue if COM port installation was incomplete.
- Fixed device info list issues: list not populated when using Win32 functions
- Now return default info for devices open in other processes.
- Fixed lock-up problem in Vista and XP.
- Fixed USB 2.0 location ID problem on Windows 2000.

Release version

2.02.04 (July 3, 2007)

WHQL certified version. New driver architecture combining 32-bit OS driver and 64-bit OS driver.

Release Fixes

- Code fixes for PreFast and SDV.
- Fix write timeouts.
- Changed write request processing for DVDO box.
- Use LocIds for creating com ports if using IgnoreHWSerNum.
- Various fixes for PreFast.
- Remove references to 5-6 data bits and 1.5 stop bits.
- Fix blue screen in checked build serial driver.
- Power management fast resume for Vista.
- Fixed LocID problem with usb2.0 hubs on Win2K.
- Synchronize D2XX open and serial port startup.
- Fixed object name collision problem in VCP.
- Fixed WER 0xD1_W_ftdibus!FT_WriteTimeoutProc+2c.

Release Version

2.00.00r (May 18, 2006)

WHQL certified version. New driver architecture combining functionality of D2XX and VCP drivers.

Release Fixes

- Removed unused fields from device extension.
- Fixed write timeout bytes returned problem.
- Changes for power management
- Fix for buffer full handshake problem.
- Combined driver model.

- Added workaround for R-chip bad serial number problem.
- Fixed bug in device startup.
- Fixed vendor request queuing lockup problem.
- Changed device ID creation to fix problem seen in 64-bit OS.
- Fixed lockup problem with hardware handshake (3-write problem) by restoring timeouts for OUT requests.
- Fixed disconnect after hibernate problem.
- Fixed disconnect during open session with active communications problem.

Previous Release Revisions

1.00.2176 (December 12, 2005)

WHQL certified version. Fixed installation problem.

1.00.2172 (October 31, 2005)

Support for FT2232C devices.

1.00.2170 (October 27, 2005)
Fixed write request synchronization issue.

1.00.2169 (September 1, 2005)
Fixed flow control issues.
Changed cancel processing to fix blue screen.

1.00.2168 (June 8, 2005)
Fixed lockup condition on port close.

1.00.2166 (May 23, 2005)
Fixed bug in software flow control.

1.00.2163 (February 7, 2005)
Support for buffered writes.
Fixed property page.

1.00.2162 (November 25, 2004)
Tested with HCT 12.0.

1.00.2160 (October 26, 2004)
Added option to prevent modem control signals following legacy port behaviour at startup.

1.00.2159 (October 15, 2004)
Fixed delay on disconnect under WinXP.

1.00.2157 (September 28, 2004)
Fixed bug that could cause computer to hang during closedown.

1.00.2156 (September 9, 2004)
Fixed bug in baud rate divisor calculation for AM devices.
Location Ids supported is no longer restricted to 10 or less.
Fixed bug that could cause computer to hang on surprise removal.
Fixed bug that caused device handle notification to fail.

1.00.2154 (April 20, 2004)
WHQL certified version.
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 then 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.