

## Product news



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### **FTDI's USB 2.0 ICs, evaluation and legacy serial modules make Hi-Speed USB 2.0 development easy**

December 1, 2009 – Future Technology Devices International Limited (FTDI) announced today that they have sold over 5,000 USB 2.0 Hi-Speed evaluation mini-modules over the past six months since launch. Commenting on this success, Fred Dart, CEO, FTDI said, “Our range of mini-modules has proved to be extremely popular with design engineers, and we have increased production to meet demand. Using our [FT4232H](#) and [FT2232H](#) ICs, the modules are aimed at system developers and provide a quick and easy method of prototyping a USB 2.0 Hi-Speed interface.”

The [mini-modules](#) interface to a number of asynchronous and synchronous serial interfaces such as UART, JTAG, I2C or SPI. The modules also provide the ability to configure customised serial interface or parallel (FIFO) ports. They allow designers to quickly evaluate, model or prototype USB 2.0 Hi-Speed designs. To further ease design, the complete USB 2.0 protocol is embedded within the ICs such that no additional firmware is required. Engineers do not need to become

involved with any low level USB 2.0 protocols. A USB mini-B type connector (socket) on the PCB provides easy USB connectivity.

The mini-modules are part of a comprehensive family of evaluation modules and legacy serial interface modules all based on FT2232H and FT4232 USB to UART/FIFO ICs. These 5<sup>th</sup> generation devices support the 480 Mb/s USB 2.0 Hi-Speed specification and have the capability of being configured in a variety of industry standard serial or parallel interfaces such as UART or FIFO.

The FT4232H offers four configurable interfaces and the FT2232H two configurable interfaces. Two of the FT4232H's interfaces and both of the FT2232H's interfaces can be configured as UART, JTAG, SPI, I2C or bitbang mode serial interfaces with independent baud rate generators. The additional two interfaces of the FT4232H offer UART or bitbang options. In addition, the FT2232H interfaces can be independently configured as a FT245 FIFO, in host bus emulation mode, a CPU interface FIFO mode or a fast opto-isolated serial interface mode.

For applications that need to provide USB 2.0 Hi-Speed host connectivity to legacy serial interfaces such as RS232 (EIA-232), RS422 (EIA-422) or RS485 (EIA-485), FTDI provides a complete range of interface modules. The USB-COM-PLUS family of modules provide single, dual or quad port options. The dual and quad port modules utilise the FT2232H and FT4232H devices. The FTDI USB-COM-PLUS family of modules offers one of the industry's highest data transfer rates with

speeds up to 10 Mb/s on the USB 2.0 Hi-Speed multi-port modules and 3 Mb/s on the USB 2.0 Full Speed single port modules. The multi-port modules feature a USB 2.0 Hi-Speed (480 Mb/s) interface and include Tx/Rx data buffers up to 4k bytes, plus low data latency times. The single port module offers 5V switched USB power over RS232, ideal for POS applications.

The [USB-COM-PLUS](#) modules are powered from the USB port, saving the need for an additional external power adapter and associated costs. PCB mounted LEDs provide an indication of USB enumeration, RxD and TxD signals. The complete USB protocol is also handled by the modules; this means little or no changes are required to existing software applications. Royalty-free WHQL approved drivers are available for all popular windows operating systems at

<http://www.ftdichip.com/FTDrivers.htm>

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**About FTDI**

Future Technology Devices International (FTDI) specialise in the design and supply of silicon and software solutions for the Universal Serial Bus (USB). FTDI offer a simple route to USB migration by combining easy to implement IC devices with proven, ready to use, royalty-free USB firmware and driver software. The company's single and multi-channel USB peripheral devices come with an easy to use UART or FIFO interface. These popular devices can be used in legacy USB to RS232/RS422 converter applications or to quickly interface an MCU, PLD, or FPGA to USB. A wide range of evaluation kits and modules are available to evaluate FTDI's silicon prior to design-in.

Vinculum is FTDI's brand name for a range of USB Host / Slave Controller ICs that provide easy implementation of USB host controller functionality within products, and utilise FTDI's tried and tested embedded firmware to significantly reduce development costs and time to market.

FTDI is a fabless semiconductor company headquartered in Glasgow, UK, and has regional offices in Oregon (USA), Taipei (Taiwan), Shanghai (P.R.China) and Singapore. More information is available at <http://www.ftdichip.com>