



## **FTDI Adds Low Pin-Count, UART-to-USB Bridge to X-Chip Series**

*Highly integrated design delivers strong performance & breadth of functionality while taking up only limited board space*

USB solutions specialist Future Technology Devices International Limited (FTDI) has further expanded its X-Chip series of feature-rich USB-to-serial interface chips with the introduction of the ultra-compact FT234XD. Contained in a 3mm x 3mm 12-pin DFN package that is optimised for smaller PCB designs, this highly integrated UART interface IC allows asynchronous serial data transfer - supporting data transfer rates from 300 bits/s to 3 Mbits/s.

The device boasts low power operation, typically drawing only 8 mA when active and 70µm in suspend mode. Its built-in clock generation capability means that an external crystal is not required. Furthermore, optional clock output selection enables glue-less interfacing with the system microcontroller or FPGA. The 512 byte receive/transmit buffers, utilising buffer smoothing technology, markedly enhance data throughput. An integrated 2048 byte multi-time-programmable (MTP) memory has also been included for storing device descriptors and carrying out CBUS I/O configuration.

The FT234XD's sophisticated USB battery charger detection (BCD) mechanism enables USB peripheral devices to perceive connection to a higher rated power source, thereby facilitating more efficient charging. An operational

temperature range of -40 °C to +85 °C allows the device to be specified for harsh working environments.

As all the USB protocol and IO bridging is handled on the chip there is no need for USB specific firmware programming. When FTDI's drivers are not supported in the native operating system, royalty-free Virtual Com Port (VCP) and D2XX drivers (which can be downloaded from the company website) are available, Driver updates and maintenance are provided for the life of the product at no charge.

“The X-Chip series has been well received by our customers and seen strong market uptake thanks to its wide range of features, its lower power operation and attractive ASPs,” states Fred Dart, CEO and founder of FTDI. “The very small footprint of the FT234XD addresses requests from our customer base, for a high performance USB-to-UART bridge with an ultra-small footprint. This will open up new possibilities for quick and easy USB implementation into space-constrained system designs.”

Pricing for the FT234XD starts at US \$1.97 (for 10-49 pcs). A product datasheets can be found at:

<http://www.ftdichip.com/Products/ICs/FT234XD.html>

#### **About FTDI**

Future Technology Devices International (FTDI) specialises in the design and supply of silicon and software solutions for the Universal Serial Bus (USB). FTDI offers 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 use FTDI's tried and tested firmware to significantly reduce development costs and time to market. FTDI is a fab-less

semiconductor company headquartered in Glasgow, UK with R&D centres in Glasgow and Singapore and has regional sales offices in Oregon, USA, Shanghai, China and Taipei, Taiwan.

More information is available at <http://www.ftdichip.com>

Regional sales offices and distributor lists are available  
<http://www.ftdichip.com/FTSalesNetwork.htm>

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