New USB to Digital Level Interface Cabling Solutions from FTDI

Targeted at home appliance, industrial control, JTAG & healthcare markets

USB solutions specialist Future Technology Devices International Limited (FTDI) has added two new cables to its USB to digital level serial interface portfolio. The new C232HM-DDHSL-0 (3.3 V output power) and C232HM-EDHSL-0 (5V output power) USB 2.0 Hi-Speed to Digital Level Multi-Protocol Synchronous Serial Engine (MPSSE) cables - which form part of its expanding 'Instant USB cable' line - offer a fast, simple way to connect devices with 3.3 V logic level interfaces to USB. Both support the USB 2.0 Hi-Speed (480Mb/s) standard.

These cost effective products consist of the company's FT232H USB interface chip on a compact circuit board encapsulated into the USB connector end of the cable. The FT232H chip takes care of all the USB signalling and protocols, facilitating rapid implementation. The cables can be used to efficiently communicate with devices using a variety of different synchronous serial interfaces, such as JTAG, SPI or I²C. The MPSSE also enables design engineers to implement their own proprietary synchronous serial bus protocols.

Each cable is terminated by ten individual wires which are single pole connectors that can be interfaced to a 0.1" pitch male header. Measuring 0.5 m in length, the cables support data transfer rates of up to 30 Mb/s. The C232HM-DDHSL-0 version has a maximum output of 200 mA at 3.3V, with the C232HM-EDHSL-0 having a maximum output of 200 mA at 5.0 V.

Powered from a USB host port, these cables can be easily configured into various interface options using freely available application software. FTDI also provides the required USB drivers free to download from its website.

Both C232HM cables have an operational temperature range spanning from -40 °C to +85 °C. They are FCC/CE compliant. Typical applications include interfacing with microcontroller or programmable logic devices, USB transfer of audio data, USB-based medical equipment/industrial instrumentation, carrying out of rapid USB integration in existing electronic systems (i.e. upgrading of legacy peripherals), JTAG systems and FPGA interfacing. The Instant USB product line also

includes the recently introduced DB9-USB-RS232 retrofit module, which allows engineers to upgrade legacy RS232 DB9 ports to active USB ports without having to redesign the system.

The C232HM-DDHSL-0 and C232HM-EDHSL-0 cables are each priced at US\$26.00 (for 1-9 pcs).

The C232HM datasheet is available for download: http://www.ftdichip.com/Support/Documents/DataSheets/Cables/DS_C232HM_MPSSE_CABLE.pdf

A newly launched set of I^2C and SPI based DLLs are also available for Windows and Linux to aid the application development using the MPSSE. These DLLs simplify application development for the cables.

http://www.ftdichip.com/Support/SoftwareExamples/MPSSE/LibMPSSE-SPI/libMPsSE-SPI/libMPSSE-SPI/li

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http://www.ftdichip.com/Support/Documents/AppNotes/AN_178_User_Guide_For_LibMPSSE-SPI.pdf

http://www.ftdichip.com/Support/Documents/AppNotes/AN 177 User Guide For LibMPSSE-I2C.pdf

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

For further information and reader enquiries: Future Technology Devices International Limited Unit 1, 2 Seaward Place, Centurion Business Park, Glasgow, G41 1HH, UK Tel: +44 (0) 141 429 2777 Fax: +44 (0) 141 429 2758

Issued by: Mike Green Pinnacle Marketing Communications Ltd Green Park House, 15 Stratton Street, London, W1J 8LQ. Tel: +44 (0)20 84296543 E-mail: <u>m.green@pinnaclemarcom.com</u> Web: <u>www.pinnacle-marketing.com</u>

Ref: FTDIPR5 C232