

Produktinfo FT245BM

**FT245BM USB FIFO Interface I.C. -
Product Summary**

The FT245BM is the 2nd generation of FTDI's popular USB FIFO i.c. This device not only adds extra functionality to its FT8U245AM predecessor and reduces external component count, but also maintains a high degree of pin compatibility with the original, making it easy to upgrade or cost reduce existing designs as well as increasing the potential for using the device in new application areas.

1.0 Features
Hardware Features

- Single Chip USB ⇔ Parallel FIFO bi-directional Data Transfer
- Transfer Data rate to 1M Byte / Sec - D2XX Drivers
- Transfer Data rate to 300 Kilobyte / Sec - VCP Drivers
- Simple to interface to MCU/ PLD / FPGA logic with a 4 wire handshake interface
- Entire USB protocol handled on-chip ... no USB-specific firmware programming required
- FTDI's royalty-free VCP and D2XX drivers eliminate the requirement for USB driver development in most cases.
- 384 Byte FIFO Tx buffer / 128 Byte FIFO Rx Buffer for high data throughput.
- New Send Immediate support via SI Pin for optimised data throughput.
- Support for USB Suspend / Resume through PWREN# and WAKEUP pins.
- Support for high power USB Bus powered devices through PWREN# pin
- Adjustable RX buffer timeout
- In-built support for event characters
- Integrated level converter on FIFO and control signals for interfacing to 5V and 3.3V logic
- Integrated 3.3V regulator for USB IO
- Integrated Power-On-Reset circuit
- Integrated 6MHz – 48Mhz clock multiplier PLL
- USB Bulk or Isochronous data transfer modes
- New Bit-Bang Mode allows the data bus to be used as an 8 bit general purpose IO Port without the need for MCU or other support logic.
- 4.35V to 5.25V single supply operation
- UHCI / OHCI / EHCI host controller compatible
- USB 1.1 and USB 2.0 compatible
- USB VID, PID, Serial Number and Product Description strings in external EEPROM
- EEPROM programmable on-board via USB
- Compact 32LD LQFP package

Drivers
VIRTUAL COM PORT (VCP) DRIVERS for

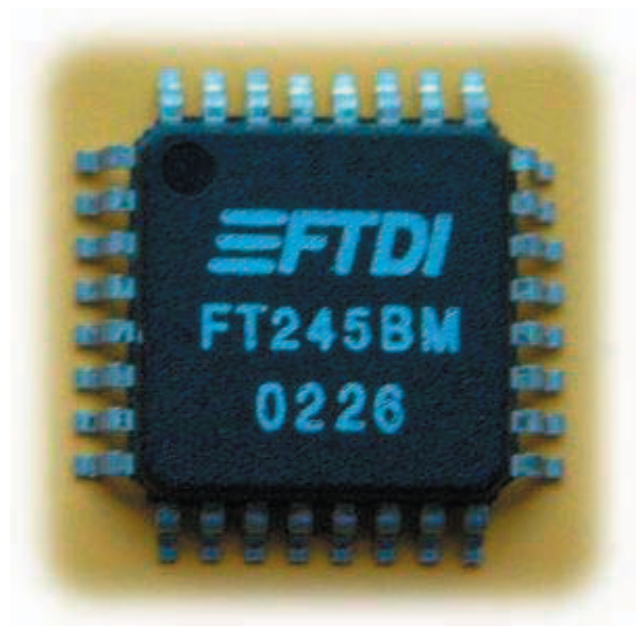
- Windows 98, 98 SE, ME, 2000, XP
- MAC OS-8 OS-9 and OS-X
- Linux 2.40 and greater

D2XX (USB Direct Drivers + DLL S/W Interface)

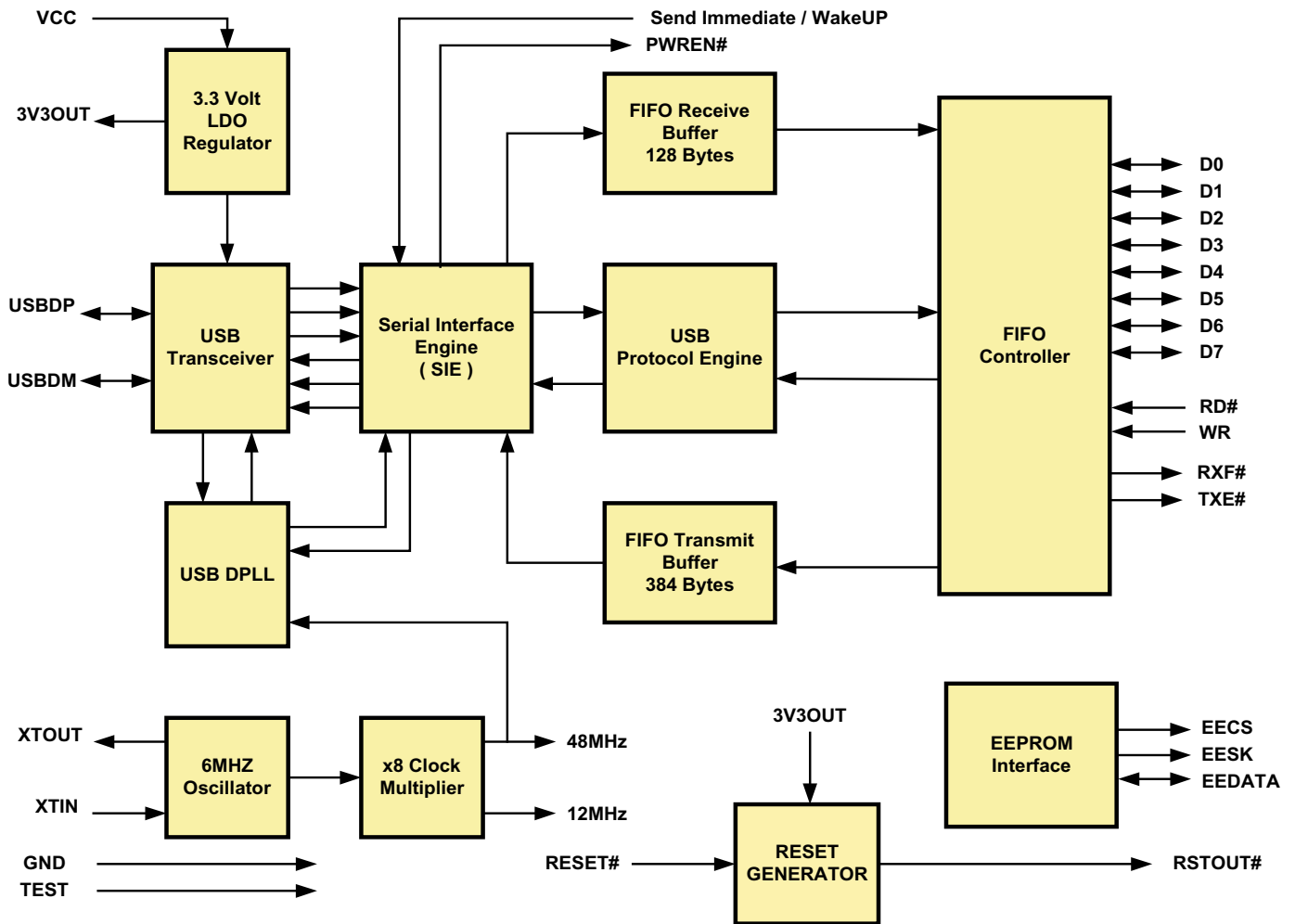
- Windows 98, 98 SE, ME, 2000, and XP

Application Areas

- Easy MCU / PLD / FPGA interface to USB
- Upgrading Legacy Peripheral Designs to USB
- USB Instrumentation
- USB Industrial Control
- USB Audio and Low Bandwidth Video data transfer
- PDA ⇔ USB data transfer
- USB MP3 Player Interface
- USB FLASH Card Reader / Writers
- Set Top Box (S.T.B.) PC - USB interface
- USB Digital Camera Interface
- USB Hardware Modems
- USB Wireless Modems



Block Diagram (Simplified)



Application Example - USB <=> Microcontroller Interface

