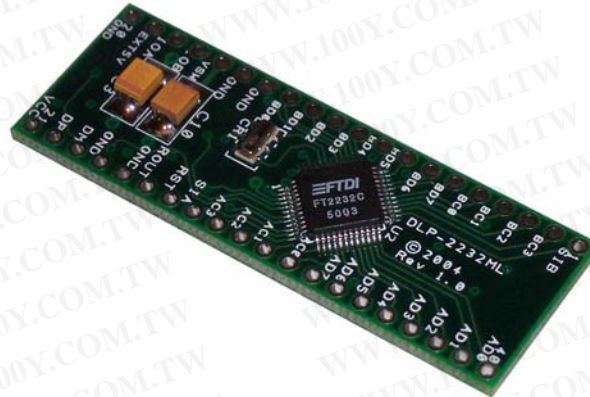




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DLP-2232ML LOW-PROFILE USB MODULE



1.0 Introduction

The DLP-2232ML utilizes FTDI's third-generation USB UART/FIFO I.C., the FT2232C. This low-cost development tool features two Multi-Purpose UART/FIFO controllers that can be configured individually in several different modes. In addition to the UART interface, FIFO interface, and Bit-Bang IO modes of the second-generation FT232BM and FT45BM devices, the FT2232C offers a variety of additional modes of operation including a Multi-Protocol Synchronous Serial Engine interface designed specifically for synchronous serial protocols such as JTAG and SPI bus.

The DLP-2232M features a quality four-layer printed circuit board with a solid ground plane, an integral 93C56 EEPROM on board for easy OEM customization and a standard 40-pin, 0.6in wide footprint. Integral power control and on-board MOSFET power switch make the DLP-2232M a perfect choice for USB bus-powered, high-power designs as well as self- and low-powered products.

NOTE: With the exception of the mechanical connectors, mechanical dimensions and the host connection interface signals, the DLP-2232ML and DLP-2232M are the same product. The supporting electronics for the USB connector are already on the DLP-2232ML board, just add a type B connector to your design and you're ready to go.

For a complete list of features and specifications please refer to the datasheet for the DLP-2232M.

2.0 Module Pin-Out

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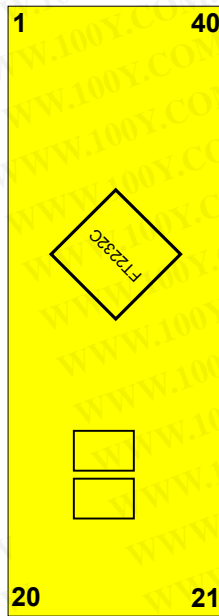
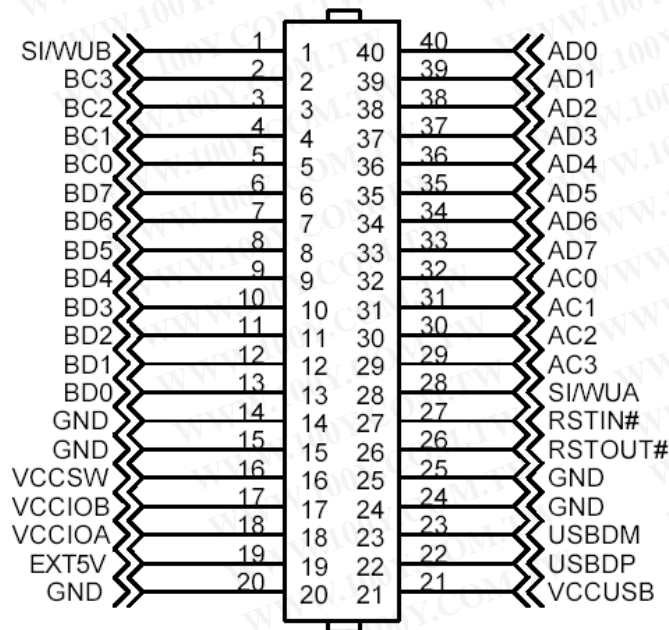


Figure 2. Pin-Out (40 Pin DIP Header)

2.1 Pin Definitions

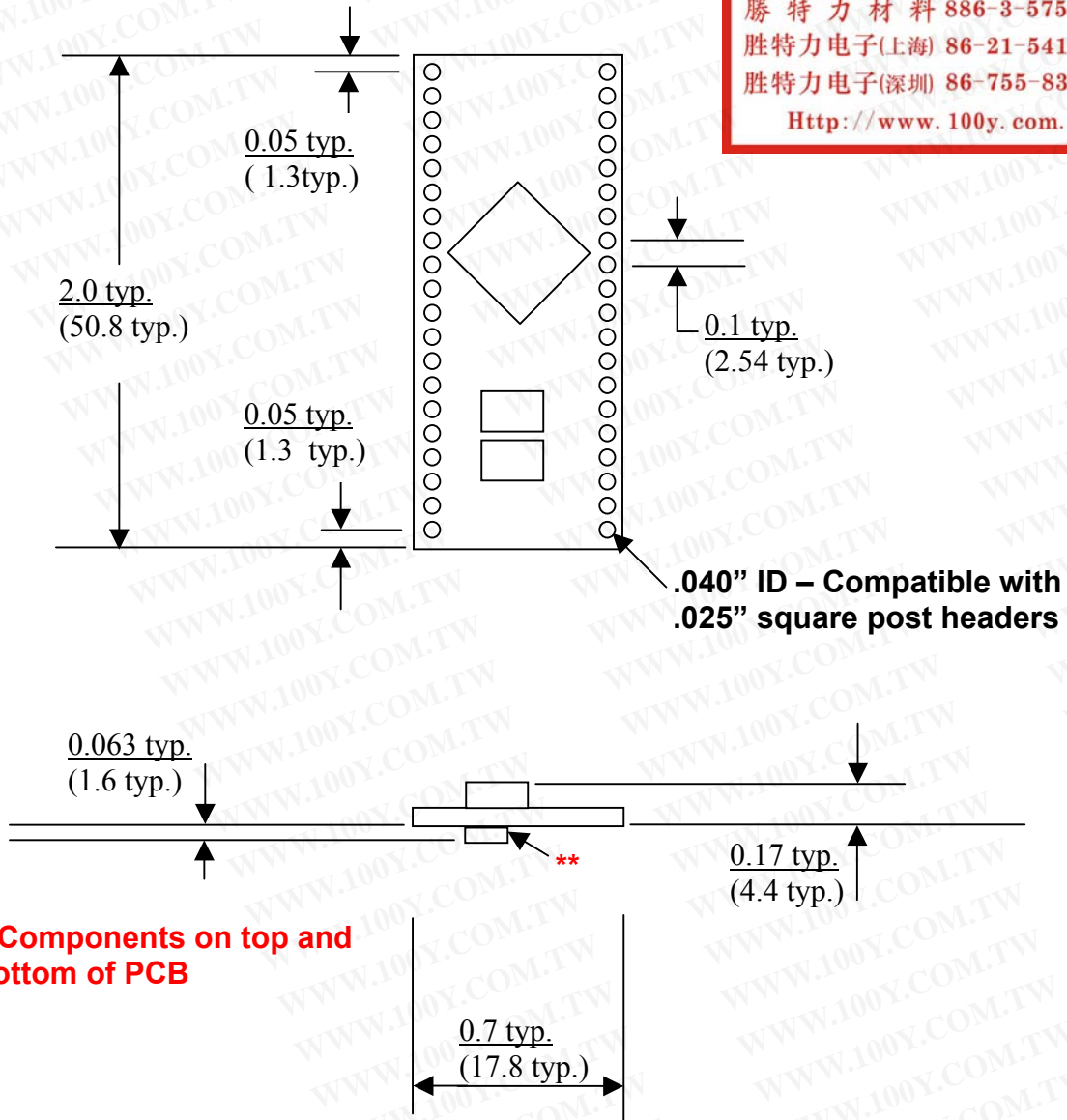
Since the DLP-2232ML does not have a USB connector, the USBDM and USBDP signal lines are brought out on pins 23 and 22 as shown here.



With the exception of the 2 USB communications lines (USBDM and USBDP) the pinout for the DLP-2232ML is the same as the DLP-2232M module. Please refer to the datasheet for the DLP-2232M for a complete description of the pinout.

3.0 Mechanical Dimensions >>> Preliminary <<<
Inches (mm)

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4.0 Document Revision History

DLP-2232ML Version 1.0 – Initial document created 7-28-2004.

5.0 Disclaimer

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