1.0 Introduction

The DLP-2232ML-G utilizes FTDI's third-generation USB UART/FIFO I.C., the FT2232D. This low-cost, RoHS compliant 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 FT245BM devices, the FT2232D 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-2232ML-G 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-2232ML-G 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-G and DLP-2232M-G are the same product. The supporting electronics for the USB connector are already on the DLP-2232ML-G 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-G.
2.0 Module Pin-Out

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

2.1 Pin Definitions

Since the DLP-2232ML-G 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 (USBDP and USBDM) and pin 20, the pinout for the DLP-2232ML-G is the same as the DLP-2232M-G module. Please refer to the datasheet for the DLP-2232M-G for a complete description of the pinout.
3.0 Mechanical Dimensions

**Components on top and bottom of PCB**

- 0.05 typ. (1.3 typ.)
- 2.0 typ. (50.8 typ.)
- 0.05 typ. (1.3 typ.)
- 0.063 typ. (1.6 typ.)
- 0.17 typ. (4.4 typ.)
- 0.7 typ. (17.8 typ.)

**0.040” ID – Compatible with 0.025” square post headers**
4.0 Disclaimer

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This document provides preliminary information that may be subject to change without notice.

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