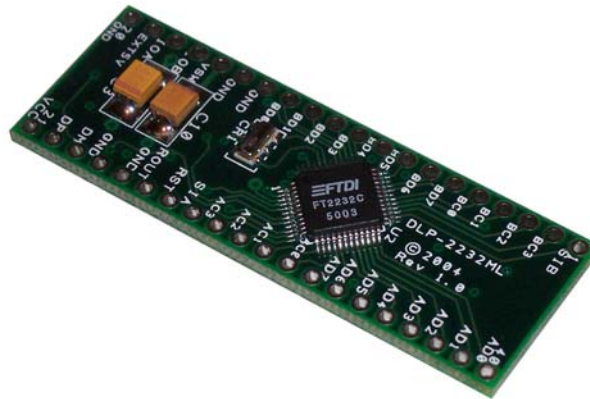




DLP-2232ML-G LOW-PROFILE USB MODULE

* Lead Free *



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

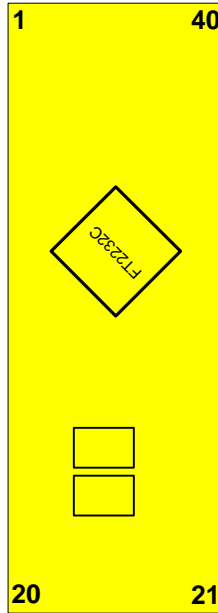
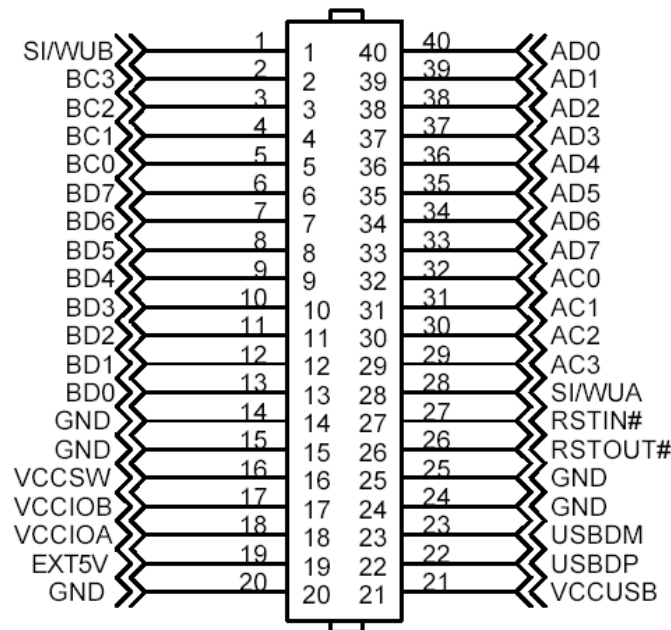


Figure 2. Pin-Out (40 Pin DIP Header)

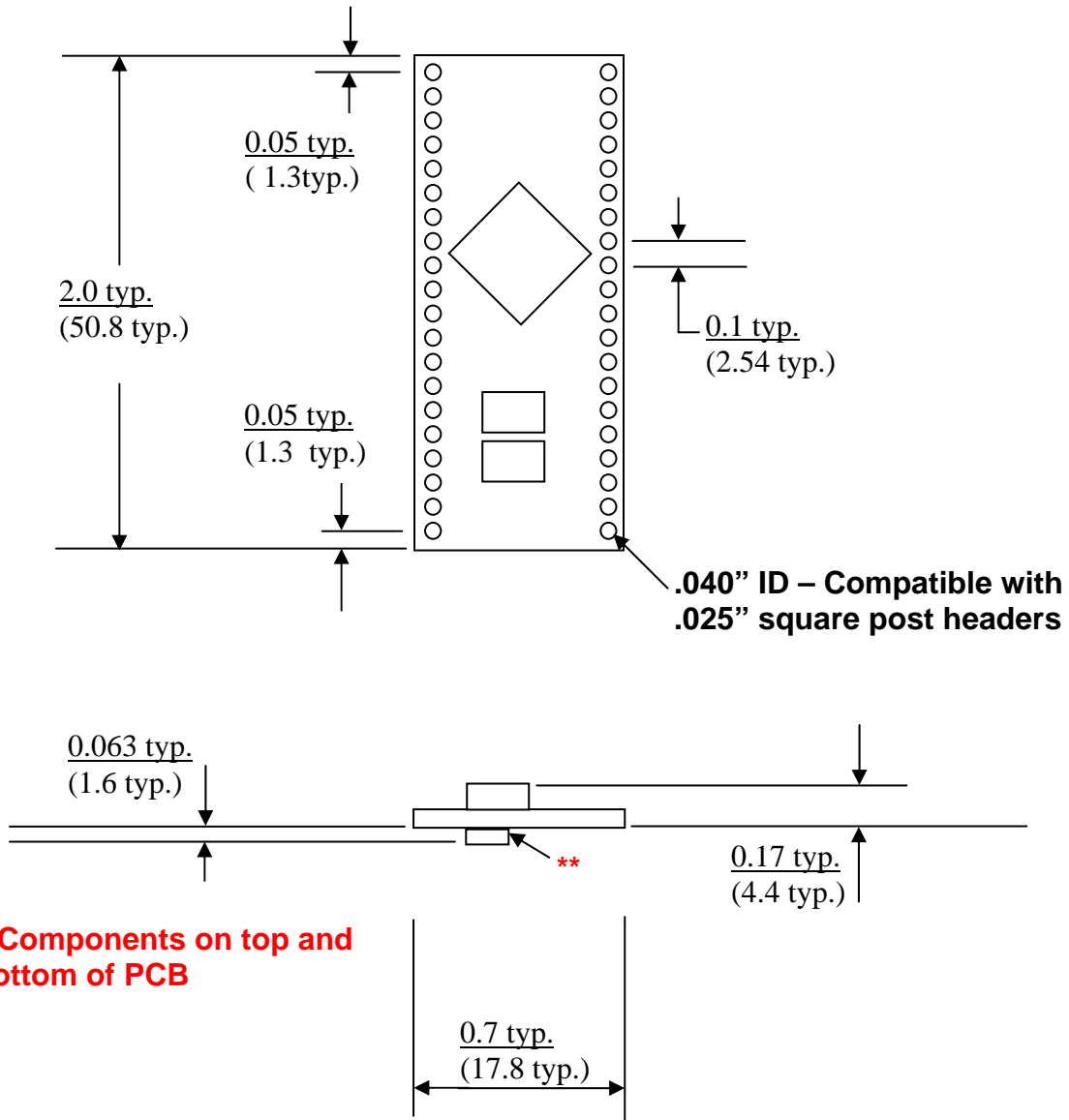
2.1 Pin Definitions

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 (USBDM and USBDP) 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 Inches (mm)



4.0 Disclaimer

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5.0 Contact Information

DLP Design, Inc.

1605 Roma Ln.

Allen, TX 75013

Phone: 469-964-8027

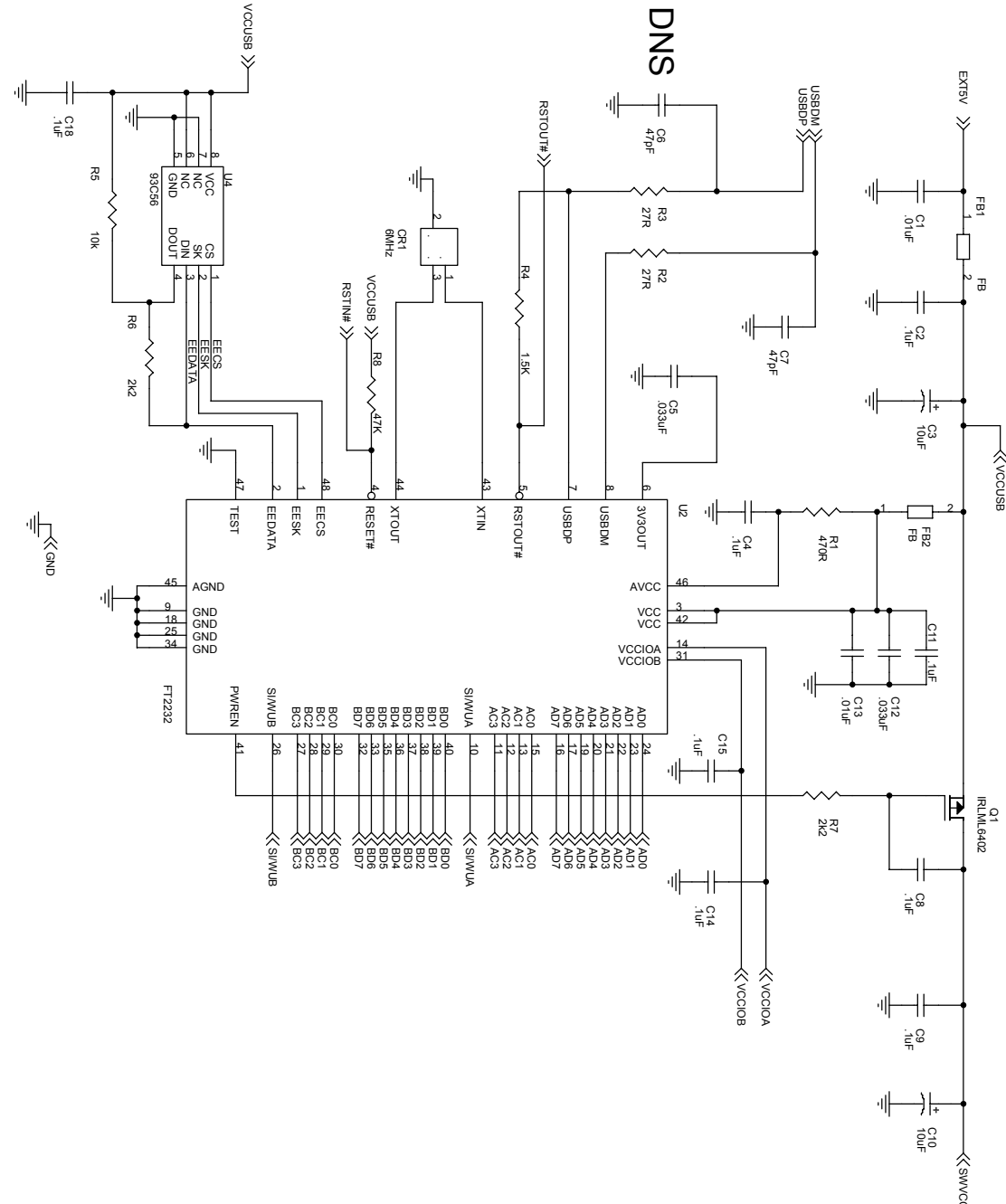
Fax: 415-901-4859

E-Mail (Sales) : sales@dlpdesign.com

E-Mail (Support) : support@dlpdesign.com

Web Site URL : <http://www.dlpdesign.com>

DLP-2232ML MODULE



Pin	Signal	Pin	Signal
1	AD0	40	BD0
2	AD1	41	BD1
3	AD2	42	BD2
4	AD3	43	BD3
5	AD4	44	BD4
6	AD5	45	BD5
7	AD6	46	BD6
8	AD7	47	BD7
9	AC0	48	BC0
10	AC1	49	BC1
11	AC2	50	BC2
12	AC3	51	BC3
13	SIMWUA	52	AC0
14	GND	53	AC1
15	GND	54	AC2
16	GND	55	AC3
17	GND	56	SIMWUB
18	VCCIOA	57	PWREN
19	VCCIOB	58	GND
20	VCCIOB	59	GND
21	VCCIOB	60	GND
22	VCCIOB	61	GND
23	VCCIOB	62	GND
24	VCCIOB	63	GND
25	VCCIOB	64	GND
26	VCCIOB	65	GND
27	VCCIOB	66	GND
28	VCCIOB	67	GND
29	VCCIOB	68	GND
30	VCCIOB	69	GND
31	VCCIOB	70	GND
32	VCCIOB	71	GND
33	VCCIOB	72	GND
34	VCCIOB	73	GND
35	VCCIOB	74	GND
36	VCCIOB	75	GND
37	VCCIOB	76	GND
38	VCCIOB	77	GND
39	VCCIOB	78	GND
40	VCCIOB	79	GND
41	VCCIOB	80	GND
42	VCCIOB	81	GND
43	VCCIOB	82	GND
44	VCCIOB	83	GND
45	VCCIOB	84	GND
46	VCCIOB	85	GND
47	VCCIOB	86	GND
48	VCCIOB	87	GND
49	VCCIOB	88	GND
50	VCCIOB	89	GND
51	VCCIOB	90	GND
52	VCCIOB	91	GND
53	VCCIOB	92	GND
54	VCCIOB	93	GND
55	VCCIOB	94	GND
56	VCCIOB	95	GND
57	VCCIOB	96	GND
58	VCCIOB	97	GND
59	VCCIOB	98	GND
60	VCCIOB	99	GND
61	VCCIOB	100	GND

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