

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	ECO 2143804: Initial Release	07/28/2014	

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		DWN/CHK	DATE 07/28/2014	TIDA-00293 DLP 3D Printer LCD to Translator Cable	
		SYS ENGR			
	0314CP	MANU			
NHA	USED ON	QA		SIZE A	DRAWING NO 2514182
APPLICATION		APVD		SCALE NONE	REV A
				SHEET 1 OF 3	

TIDA-00293 LCD to Translator Cable Assembly

1. Scope

The purpose of this document is to establish the assembly requirements for the cable between the HD44780 LCD controller and the logic level translator board used in TIDA-00293 DLP 3D Printer reference design.

2. Related Documents

3D Printer Level Translator Schematic

- ../Design Files/3D PRINTER LEVEL TRANSLATOR/3D Printer level translator schematic.pdf
- J3 (page 1)

Pololu – Dimensions (in mm) and pinout for the 20x4 white-on-blue character LCD with backlight

- <http://www.pololu.com/picture/view/0J3039>
- <http://www.pololu.com/product/1219>
- Read “Pinout” section

3. Connections

Connect the following signals described below to connect the LCD Controller to the 3D Printer Logic Level Translator board.

Connection	LCD Controller	3D Printer Level Translator Board Connector
Vss	1	J2-1
Vdd	2	J2-2
Vo	3	J4-8
LCD_RS	4	J4-5
LCD_RW	5	J4-6
LCD_EN	6	J4-7
LCD_BIT3	11	J4-4
LCD_BIT2	12	J4-3
LCD_BIT1	13	J4-2
LCD_BIT0	14	J4-1

4. Bill Of Materials

The following table lists the components necessary to construct the LCD Controller to Translator cable.

Description	Manufacturer	Part Number	Qty
3D Printer Level Translator Board Connector J2	JST	EHR-2	1
3D Printer Level Translator Board Crimps J2	JST	SEH-001T-P0.6L	2
3D Printer Level Translator Board Connector J4	JST	EHR-8	1
3D Printer Level Translator Board Crimps J4	JST	SEH-001T-P0.6L	8
LCD Controller Pins 1-6	JST	EHR-6	1
LCD Controller Pins 1-6	JST	SEH-001T-P0.6L	6
LCD Controller Pins 11-14	JST	EHR-4	1
LCD Controller Pins 11-14	JST	SEH-001T-P0.6L	4

TIDA-00293 LCD to Translator Cable Assembly

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