

REVISIONS			
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		DWN/CHK	DATE 07/28/2014	<b>TIDA-00293</b>  <b>DLP 3D Printer</b>  <b>Limit Switch Cable</b>		
		SYS ENGR				
	0314CP	MANU				
NHA	USED ON	QA		SIZE <b>A</b>	DRAWING NO 2514185	REV <b>A</b>
APPLICATION		APVD		SCALE NONE	SHEET 1 OF 3	

# **TIDA-00293 Limit Switch Cable Assembly**

## **1. Scope**

The purpose of this document is to establish the assembly requirements for the cable between the BBB MSTP Cape and the limit switch connector from the Velmex XSlide assembly used in TIDA-00293 DLP 3D Printer reference design.

## **2. Related Documents**

Velmex XSlide Assemblies Owner's Manual

- [http://www.velmex.com/pdf/other/xslide\\_owners\\_manual.pdf](http://www.velmex.com/pdf/other/xslide_owners_manual.pdf)
- Read Section 6 "Limit Switches" (page 3)

BeagleBone MSTP Cape Schematic

- ../Design Files/BEAGLEBONE MSTP CAPE/BeagleBone MSTP Cape Schematic.pdf
- J6 Channel A Home Sensor & J7 Channel B Home Sensor Connector (page 3)

## **3. Connections**

Connect the limit switch leads to the BBB MSTP Cape optically isolated inputs. The BBB MSTP Cape utilizes Phoenix terminals that require no connectors. Tin the leads on the cape side, then screw the leads into J6 & J7 connector.

Connection	Velmex XSlide Limit Switch Connector	BBB MSTP Cape J6 (Tin Leads, No connector)
Home Switch A	1	4
GND	2	3
		BBB MSTP Cape J7 (Tin Leads, No connector)
Home Switch B	3	4
GND	4	3

## **4. Bill Of Materials**

The following table lists the components necessary to construct the stepper motor cable.

Description	Manufacturer	Part Number	Qty
Velmex XSlide Limit Switch Connector	TE Connectivity	1-480702-0	1
Velmex XSlide Limit Switch Crimps	TE Connectivity	350690-3	4
BBB MSTP Cape Connections	N/A	Tin Leads	4

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