

REVISIONS			
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		DWN/CHK	DATE 07/28/2014	<b>TIDA-00293</b>  <b>DLP 3D Printer</b>  <b>RS232 to MSTP Cape Cable</b>		
		SYS ENGR				
	0314CP	MANU				
NHA	USED ON	QA		SIZE <b>A</b>	DRAWING NO 2514181	REV <b>A</b>
APPLICATION		APVD		SCALE NONE	SHEET 1 OF 3	

# **TIDA-00293 RS232 to MSTP Cape Cable Assembly**

## **1. Scope**

The purpose of this document is to establish the assembly requirements for the RS232 to MSTP Cape Cable between the FTDI RS232 cable and the MSTP microcontroller cape.

## **2. Related Documents**

TTL-232R TTL to USB Serial Converter Range of Cables Datasheet

- [http://www.ftdichip.com/Support/Documents/DataSheets/Cables/DS\\_TTL-232R\\_CABLES.pdf](http://www.ftdichip.com/Support/Documents/DataSheets/Cables/DS_TTL-232R_CABLES.pdf)
- Read Section 4.1 “TTL-232R-5V, TTL-232R-3V3 Connector Pin Out and Mechanical details” (page 10)

BeagleBone MSTP Cape Schematic

- ../Design Files/BEAGLEBONE MSTP CAPE/BeagleBone MSTP Cape Schematic.pdf
- J4 RS232 I/O Channel A connector (page 2)

## **3. Connections**

Connect the respective TTL signals from the FTDI adaptor to the MSTP jack.

Connection	FTDI TTL-232R-3V3 header	BBB MSTP Cape J4
TXD -> RX_A	4	3
RXD -> TX_A	5	2
Ground	1	4

## **4. Bill Of Materials**

The following table lists the components necessary to construct the RS232 to MSTP Cape cable.

Description	Manufacturer	Part Number	Qty
TTL-232R-3V3 Header Connector	Sullins Connector Solutions	PREC040SAAN-RC (snap off 6 positions)	1
BBB MSTP Cape RS232 Connector	Molex	0022012047	1
BBB MSTP Cape RS232 Connector Crimps	Molex	0008500159	3

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