<u>Texas Instruments</u> <u>Analog Reference Design Test Procedure</u>

USB2USB3 Redriver Dongle Test Procedure

Rev. 1

1.0 GENERAL

1.1 PURPOSE

1.1.1 This document describes the steps required to perform general USB2USB3 Redriver Dongle functional tests.

1.2 **SCOPE**

1.2.1 Covers complete instructions for testing USB2USB3 Redriver Dongle.

1.3 REFERENCE DOCUMENTATION

- 1.3.1 Schematic USB2 USB3 Redriver Dongle.dsn
- 1.3.2 Assembly DWG USB2_USB3_Redriver_Dongle.brd

1.4 MATERIALS

- 1.4.1 USB 2.0 or USB 3.0 cable (Type A connector to Type B connector).
- 1.4.2 USB 2.0 or USB 3.0 thumb drive device.

1.5 **DEFINITIONS**

- 1.5.1 PC Personal Computer
- 1.5.2 USB Universal Serial Bus
- 1.5.3 USB thumb drive Also known as a flash drive or keychain drive -- is a plug-and-play portable storage device that uses flash memory and is lightweight enough to attach to a keychain.

2.0 SAFETY

- 2.1 This test must be performed by qualified personnel trained in electronics theory and understand the risks and hazards of the assembly to be tested.
- 2.2 ESD precautions must be followed while handling electronic assemblies while performing this test.
- 2.4 Precautions should be observed to avoid touching areas of the assembly that may get hot or present a shock hazard during testing.

3.0 QUALITY

3.1 Test data or reports shall be made available upon request by Texas Instruments.

4.0 APPAREL

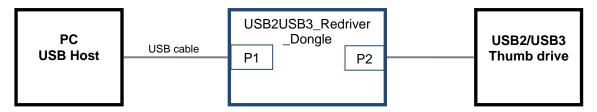
- 4.1 Electrostatic smock
- 4.2 Electrostatic Gloves or finger cots
- 4.3 Ground ESD wrist strap.

5.0 EQUIPMENT

- 5.1 USB2USB3 Redriver Dongle.
- 5.2 PC with USB Host running Windows XP™ or above (32-bits or 64-bits OS).

6.0 EQUIPMENT SETUP

- 6.1 Connect the USB2USB3 Redriver Dongle to a PC which has a USB2/USB3 Host through a Type-A connector to the Type-B connector (P1) of the Reference design.
- 6.2 Attach a USB2/USB3 thumb drive via cable or directly plugged into the Type A receptacle connector (P2) on the USB2USB3 Redriver Dongle.



6.3 The USB2USB3 Redriver Dongle Switches doesn't requires any extra configuration.

7.0 PROCEDURE

- 7.1 Ensure the Thumb Drive is listed as an active drive under Computer settings (In Windows, click Start -> Computer).
- 7.2 Make sure that the thumb drive works correctly. Copy some files from the PC to the thumb drive and from the thumb drive to the PC.

8.0 EQUIPMENT SHUTDOWN

8.1 Disconnect the USB device (thumb drive) from the USB2USB3 Redriver Dongle and disconnect the USB cable (USB2 OR USB 3) from the USB2USB3 Redriver Dongle Type-B connector (P1).

9.0 MATERIAL DISPOSITION & TRANSFER

9.1 CONFORMING MATERIAL

Units that have passed this test procedure shall be packaged into anti-static ESD approved bags, labeled with two labels according to the table below, and shipped per the P.O.

Label 1 Assembly Number+Dash Number if	Label 2 IC Number
Applicable	
USB2USB3 Redriver Dongle	TUSB211RWBR, TUSB501DRF

9.2 NON-CONFORMING MATERIAL

If yield loss is 2% or less, scrap non-conforming units and adjust P.O. to reflect total amount shipped. If yield loss approaches or exceeds 5%, contact EVM coordinator for assistance.

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