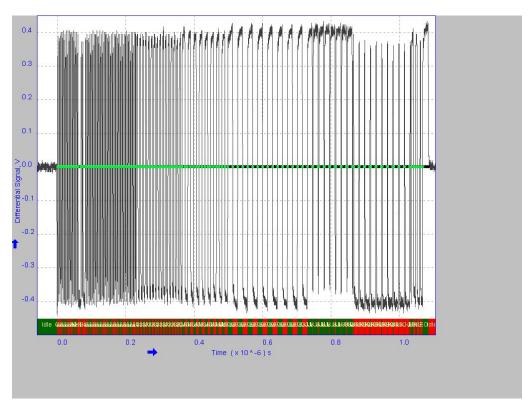
Signal Quality Test Results in Tek format

Device ID: hs_001

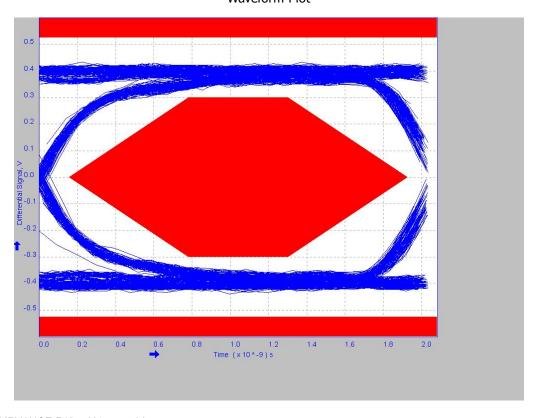
Device Description: High Speed, Near End Device, Up Stream Testing, Tier 1, Dummy Device.

Date: Fri Apr 04 14:03:38 CST 2014

Overall Result: Pass*



Waveform Plot



Eye Diagram

Results based on USB-IF / Waiver Limits:

| Measurement Name | Minimum | Maximum | Mean | pk-pk | Standard Deviation | RMS | Population | Status |
|-----------------------|---------------|---------------|---------------|------------------|-----------------------|---------------|------------|--------|
| Monotonic Property | - | - | - | - | - | - | 0 | Pass |
| Eye Diagram Test | - | - | - | - | - | - | - | Pass |
| Signal Rate | 470.2690Mbps | 487.1768Mbps | 480.0278Mbps | 0.0000bps | 2.253044Mbps | 479.777Mbps | 512 | Pass |
| EOP Width | - | - | 16.57870ns | - | - | - | 1 | Pass |
| EOP Width (Bits) | - | - | 7.958238 | - | - | - | 1 | Pass |
| Falling Edge Rate | 1.138013kV/us | 1.538662kV/us | 1.325134kV/us | 400.6486 V/us | 75.52521 V/us | 1.327265kV/us | 107 | Pass |
| Rising Edge Rate | 1.157605kV/us | 1.415730kV/us | 1.293416kV/us | 258.1257 V/us | 71.48793 V/us | 1.295372kV/us | 108 | Pass |

Monotonicity test is performed on the test limits of 15.0% and 85.0%.

Additional Information:

Consecutive Jitter range : -52.83ps to 59.21ps RMS Jitter 21.30ps

KJ Paired Jitter range: -42.46ps to 49.83ps RMS Jitter 14.65ps

JK Paired Jitter range: -45.11ps to 64.10ps RMS Jitter 15.39ps

- Rising Edge Rate:1.293416kV/us (Equivalent Rise Time = 494.81 ps)
- Falling Edge Rate:1.325134kV/us (Equivalent Fall Time = 482.97 ps)

^{*}The Overall Result for this test is **Pass**, because one or more individual status of the measurements is **Pass**. For this test, the recommended configuration for USB2 testing (as per USB-IF) is on Tier 1.



TDSUSB2 software version: 3.1.1 Build 2

IMPORTANT NOTICE AND DISCLAIMER

TI PROVIDES TECHNICAL AND RELIABILITY DATA (INCLUDING DATA SHEETS), DESIGN RESOURCES (INCLUDING REFERENCE DESIGNS), APPLICATION OR OTHER DESIGN ADVICE, WEB TOOLS, SAFETY INFORMATION, AND OTHER RESOURCES "AS IS" AND WITH ALL FAULTS, AND DISCLAIMS ALL WARRANTIES, EXPRESS AND IMPLIED, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT OF THIRD PARTY INTELLECTUAL PROPERTY RIGHTS.

These resources are intended for skilled developers designing with TI products. You are solely responsible for (1) selecting the appropriate TI products for your application, (2) designing, validating and testing your application, and (3) ensuring your application meets applicable standards, and any other safety, security, regulatory or other requirements.

These resources are subject to change without notice. TI grants you permission to use these resources only for development of an application that uses the TI products described in the resource. Other reproduction and display of these resources is prohibited. No license is granted to any other TI intellectual property right or to any third party intellectual property right. TI disclaims responsibility for, and you will fully indemnify TI and its representatives against, any claims, damages, costs, losses, and liabilities arising out of your use of these resources.

TI's products are provided subject to TI's Terms of Sale or other applicable terms available either on ti.com or provided in conjunction with such TI products. TI's provision of these resources does not expand or otherwise alter TI's applicable warranties or warranty disclaimers for TI products.

TI objects to and rejects any additional or different terms you may have proposed.

Mailing Address: Texas Instruments, Post Office Box 655303, Dallas, Texas 75265 Copyright © 2021, Texas Instruments Incorporated