Test Report for 100Base-TX

Time: 11:49:17

Device ID: Not Available
Device Description: DK-TM4C129X
Port ID: Chan-A

<table>
<thead>
<tr>
<th>Test</th>
<th>Spec. Range</th>
<th>Measured Value</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>AOI Template</td>
<td>Fit the template</td>
<td></td>
<td>Pass</td>
</tr>
<tr>
<td>Output Voltage (+Vout)</td>
<td>950mV to 1050mV</td>
<td>999.7mV</td>
<td>Pass</td>
</tr>
<tr>
<td>Output Voltage (-Vout)</td>
<td>-950mV to -1050mV</td>
<td>-996.4mV</td>
<td>Pass</td>
</tr>
<tr>
<td>Amplitude Symmetry</td>
<td>0.98 to 1.02</td>
<td>1.003</td>
<td>Pass</td>
</tr>
<tr>
<td>Rise Time(+ve)</td>
<td>3ns to 5ns</td>
<td>4.39ns</td>
<td>Pass</td>
</tr>
<tr>
<td>Rise Time(-ve)</td>
<td>3ns to 5ns</td>
<td>4.37ns</td>
<td>Pass</td>
</tr>
<tr>
<td>Fall Time(+ve)</td>
<td>3ns to 5ns</td>
<td>4.21ns</td>
<td>Pass</td>
</tr>
<tr>
<td>Fall Time(-ve)</td>
<td>3ns to 5ns</td>
<td>4.28ns</td>
<td>Pass</td>
</tr>
<tr>
<td>Rise/Fall Symmetry(+ve)</td>
<td>&lt;500ps</td>
<td>174ps</td>
<td>Pass</td>
</tr>
<tr>
<td>Rise/Fall Symmetry(-ve)</td>
<td>&lt;500ps</td>
<td>85.7ps</td>
<td>Pass</td>
</tr>
<tr>
<td>Overshoot(+ve)</td>
<td>&lt;5%</td>
<td>2.25%</td>
<td>Pass</td>
</tr>
<tr>
<td>Overshoot(-ve)</td>
<td>&lt;5%</td>
<td>2.04%</td>
<td>Pass</td>
</tr>
<tr>
<td>Transmit Jitter(+ve)</td>
<td>&lt;1.4ns</td>
<td>360ps</td>
<td>Pass</td>
</tr>
<tr>
<td>Transmit Jitter(-ve)</td>
<td>&lt;1.4ns</td>
<td>430ps</td>
<td>Pass</td>
</tr>
<tr>
<td>Distortion (Duty Cycle)</td>
<td>&lt;500ps(±250ps)</td>
<td>340ps</td>
<td>Pass</td>
</tr>
<tr>
<td>Transmitter Return Loss</td>
<td>Not Available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Receiver Return Loss</td>
<td>Not Available</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

AOI Template Result:
Pass

ANSI X.3.263-1995: 9.1.2.2 Differential Output Voltage

Positive Amplitude(+Vout) : 999.7mV
Baseline(+ve) : -43.0mV
Spec Range : 950mV to 1050mV
Output Voltage(+Vout) Result : Pass

Negative Amplitude(-Vout) : -996.4mV
Baseline(-ve) : -49.8mV
Spec Range : -950mV to -1050mV
Output Voltage(-Vout) Result : Pass

Differential Output Voltage Result : Pass

NOTE: Amplitude values are corrected for Baseline
ANSI X3.263-1995: 9.1.4 Signal Amplitude Symmetry

<table>
<thead>
<tr>
<th>Spec Range: 0.98 to 1.02</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amplitude Symmetry Result: Pass</td>
</tr>
</tbody>
</table>

ANSI X3.263-1995: 9.1.6 Rise Time

<table>
<thead>
<tr>
<th>Spec Range: 3ns to 5ns</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rise Time(+ve) Result: Pass</td>
</tr>
<tr>
<td>Rise Time(-ve) Result: Pass</td>
</tr>
</tbody>
</table>

Rise Time Test Result: Pass
ANSI X3.263-1995: 9.1.6 Fall Time

Fall Time(+ve) : 4.21ns  
Fall Time(-ve) : 4.28ns

Spec Range: 3ns to 5ns

Fall Time(+ve) Result : Pass  
Fall Time(-ve) Result : Pass

Fall Time Test Result : Pass

ANSI X3.263-1995: 9.1.6 Rise Fall Symmetry

Rise/Fall Symmetry(+ve) : 174ps  
Rise/Fall Symmetry(-ve) : 85.7ps

Spec Range: <500ps

Rise/Fall Symmetry(+ve) Result : Pass  
Rise/Fall Symmetry(-ve) Result : Pass

Rise/Fall Symmetry(Max-Min) : 174ps

Rise/Fall Symmetry Result : Pass
ANSI X3.263-1995: 9.1.3 Waveform Overshoot

<table>
<thead>
<tr>
<th>Spec Range: &lt;5%</th>
<th>Spec Range: &lt;5%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overshoot(+ve) : 2.25%</td>
<td>Overshoot(-ve) : 2.04%</td>
</tr>
<tr>
<td>Overshoot(+ve) Result : Pass</td>
<td>Overshoot(-ve) Result : Pass</td>
</tr>
</tbody>
</table>

Waveform Overshoot Test Results : Pass

ANSI X3.263-1995: 9.1.9 Transmit Jitter

<table>
<thead>
<tr>
<th>Spec Range: &lt;1.4ns</th>
<th>Spec Range: &lt;1.4ns</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transmit Jitter(+ve) : 360ps</td>
<td>Transmit Jitter(-ve) : 430ps</td>
</tr>
<tr>
<td>Transmit Jitter(+ve) Result : Pass</td>
<td>Transmit Jitter(-ve) Result : Pass</td>
</tr>
</tbody>
</table>
ANSI X3.263-1995: 9.1.8 Distortion(Duty Cycle)

Distortion(Duty Cycle) : 340ps

Spec Range: <500ps(+/-250ps)

Distortion(Duty Cycle) Result :
Pass
T1 = 250ps T2 = 100ps
T3 = 240ps T4 = 150ps
T5 = 340ps T6 = 90.0ps
**Test Report for 100Base-TX**

Time: 12:00:22

Device ID: Not Available

Device Description: DK-TM4C129X

Port ID: Chan-B

<table>
<thead>
<tr>
<th>Test</th>
<th>Spec. Range</th>
<th>Measured Value</th>
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</tr>
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<tbody>
<tr>
<td>AOI Template</td>
<td>Fit the template</td>
<td></td>
<td>Pass</td>
</tr>
<tr>
<td>Output Voltage (+Vout)</td>
<td>950mV to 1050mV</td>
<td>997.6mV</td>
<td>Pass</td>
</tr>
<tr>
<td>Output Voltage (-Vout)</td>
<td>-950mV to -1050mV</td>
<td>-996.0mV</td>
<td>Pass</td>
</tr>
<tr>
<td>Amplitude Symmetry</td>
<td>0.98 to 1.02</td>
<td>1.002</td>
<td>Pass</td>
</tr>
<tr>
<td>Rise Time(+ve)</td>
<td>3ns to 5ns</td>
<td>3.52ns</td>
<td>Pass</td>
</tr>
<tr>
<td>Rise Time(-ve)</td>
<td>3ns to 5ns</td>
<td>3.46ns</td>
<td>Pass</td>
</tr>
<tr>
<td>Fall Time(+ve)</td>
<td>3ns to 5ns</td>
<td>3.37ns</td>
<td>Pass</td>
</tr>
<tr>
<td>Fall Time(-ve)</td>
<td>3ns to 5ns</td>
<td>3.3ns</td>
<td>Pass</td>
</tr>
<tr>
<td>Rise/Fall Symmetry(+ve)</td>
<td>&lt;500ps</td>
<td>157ps</td>
<td>Pass</td>
</tr>
<tr>
<td>Rise/Fall Symmetry(-ve)</td>
<td>&lt;500ps</td>
<td>157ps</td>
<td>Pass</td>
</tr>
<tr>
<td>Overshoot(+ve)</td>
<td>&lt;5%</td>
<td>2.27%</td>
<td>Pass</td>
</tr>
<tr>
<td>Overshoot(-ve)</td>
<td>&lt;5%</td>
<td>2.72%</td>
<td>Pass</td>
</tr>
<tr>
<td>Transmit Jitter(+ve)</td>
<td>&lt;1.4ns</td>
<td>1.01ns</td>
<td>Pass</td>
</tr>
<tr>
<td>Transmit Jitter(-ve)</td>
<td>&lt;1.4ns</td>
<td>910ps</td>
<td>Pass</td>
</tr>
<tr>
<td>Distortion (Duty Cycle)</td>
<td>&lt;500ps(±250ps)</td>
<td>467ps</td>
<td>Pass</td>
</tr>
<tr>
<td>Transmitter Return Loss</td>
<td></td>
<td></td>
<td>Not Available</td>
</tr>
<tr>
<td>Receiver Return Loss</td>
<td></td>
<td></td>
<td>Not Available</td>
</tr>
</tbody>
</table>

Application Version: 3.2.6 Build 7
AOI Template Result:
Pass

Hits per Segment
Seg1 0  Seg2 0
Seg3 0  Seg4 10
Seg5 0  Seg6 0
Seg7 0  Seg8 0
Seg9 0  Seg10 0

ANSI X.3.263-1995 : 9.1.2.2 Differential Output Voltage

Positive Amplitude(+Vout) : 997.6mV
Baseline(+ve) : -43.8mV
Spec Range : 950mV to 1050mV
Output Voltage(+Vout) Result : Pass

Negative Amplitude(-Vout) : -996.0mV
Baseline(-ve) : -49.1mV
Spec Range : -950mV to -1050mV
Output Voltage(-Vout) Result : Pass

Differential Output Voltage Result : Pass

NOTE: Amplitude values are corrected for Baseline
ANSI X3.263-1995: 9.1.4 Signal Amplitude Symmetry

Amplitude Symmetry : 1.002

Spec Range: 0.98 to 1.02

Amplitude Symmetry Result : Pass

ANSI X3.263-1995: 9.1.6 Rise Time

Rise Time(+ve) : 3.52ns
Rise Time(-ve) : 3.46ns

Spec Range: 3ns to 5ns
Rise Time(+ve) Result : Pass
Rise Time(-ve) Result : Pass

Rise Time Test Result : Pass
ANSI X3.263-1995: 9.1.6 Fall Time

Fall Time(+ve) : 3.37ns
Fall Time(-ve) : 3.3ns
Spec Range: 3ns to 5ns
Fall Time(+ve) Result : Pass
Fall Time(-ve) Result : Pass
Fall Time Test Result : Pass

ANSI X3.263-1995: 9.1.6 Rise Fall Symmetry

Rise/Fall Symmetry(+ve) : 157ps
Rise/Fall Symmetry(-ve) : 157ps
Spec Range: <500ps
Rise/Fall Symmetry(+ve) Result : Pass
Rise/Fall Symmetry(-ve) Result : Pass
Rise/Fall Symmetry(Max-Min) : 223ps
Rise/Fall Symmetry Result : Pass
ANSI X3.263-1995: 9.1.3 Waveform Overshoot

Overshoot(+ve) : 2.27%  
Overshoot(-ve) : 2.72%  
Spec Range: ≤5%  
Overshoot(+ve) Result : Pass  
Overshoot(-ve) Result : Pass  

Waveform Overshoot Test Results : Pass

ANSI X3.263-1995: 9.1.9 Transmit Jitter

Transmit Jitter(+ve) : 1.01ns  
Transmit Jitter(-ve) : 910ps  
Spec Range: <1.4ns  
Transmit Jitter(+ve) Result : Pass  
Transmit Jitter(-ve) Result : Pass  
Spec Range: <1.4ns
ANSI X3.263-1995: 9.1.8 Distortion(Duty Cycle)

Spec Range: \(<500\text{ps}(\pm250\text{ps})\)

Distortion(Duty Cycle) Result:
Pass
T1 = 367ps  T2 = 7.98zs
T3 = 467ps  T4 = 367ps
T5 = 467ps  T6 = 100ps
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