

Source Tests Report

Configuration

Setup Configuration

Oscilloscope Info DPO71604C - 7.6.0 Build 7
 TDSHT3 Version 5.3.1 Build 0

Device Configuration

Device Details HDMI Device
 Clock Frequency(Mhz) 148.351
 Resolution 1080P_60Hz
 Refresh Rate 60Hz

Compliance Summary

Total Tests Supported 9
 Tests Completed 21
 Pass 21
 Fail 0

Test Summary

Index	Test Name	Lanes	Spec Range	Meas Value	Result
1	7-9 : Source Clock Jitter	CK	Clock Jitter < 0.25*Tbit;	0.115*Tbit	Pass
2	7-10 : Source Eye Diagram	CK - D0	Data Jitter < 0.3*Tbit;	0.12*Tbit	Pass
3	7-10 : Source Eye Diagram	CK - D1	Data Jitter < 0.3*Tbit;	0.13*Tbit	Pass
4	7-10 : Source Eye Diagram	CK - D2	Data Jitter < 0.3*Tbit;	0.11*Tbit	Pass
5	7-6 : Source Inter-Pair Skew	D0 - D1	Skew < 0.2*TPixel;	0.002*TPixel	Pass
6	7-6 : Source Inter-Pair Skew	D1 - D2	Skew < 0.2*TPixel;	0.001*TPixel	Pass
7	7-6 : Source Inter-Pair Skew	D2 - D0	Skew < 0.2*TPixel;	0.003*TPixel	Pass
8	7-4 : Source Rise Time	CK	75.00ps < TRISE;	192.11ps	Pass
9	7-4 : Source Rise Time	D0	75.00ps < TRISE;	180.29ps	Pass
10	7-4 : Source Rise Time	D1	75.00ps < TRISE;	179.22ps	Pass
11	7-4 : Source Rise Time	D2	75.00ps < TRISE;	164.80ps	Pass
12	7-4 : Source Fall Time	CK	75.00ps < TFALL;	185.83ps	Pass
13	7-4 : Source Fall Time	D0	75.00ps < TFALL;	173.04ps	Pass
14	7-4 : Source Fall Time	D1	75.00ps < TFALL;	168.95ps	Pass
15	7-4 : Source Fall Time	D2	75.00ps < TFALL;	158.54ps	Pass
16	7-8 : Max Duty Cycle	CK	Max Duty Cycle < 60.0%;	50.74%	Pass
17	7-8 : Min Duty Cycle	CK	40.0% < Min Duty Cycle;	49.85%	Pass
18	7-7 : Source Intra-Pair Skew	CK	Skew < 0.15*Tbit;	0.018*Tbit	Pass
19	7-7 : Source Intra-Pair Skew	D0	Skew < 0.15*Tbit;	0.012*Tbit	Pass
20	7-7 : Source Intra-Pair Skew	D1	Skew < 0.15*Tbit;	0.012*Tbit	Pass
21	7-7 : Source Intra-Pair Skew	D2	Skew < 0.15*Tbit;	0.0*Tbit	Pass

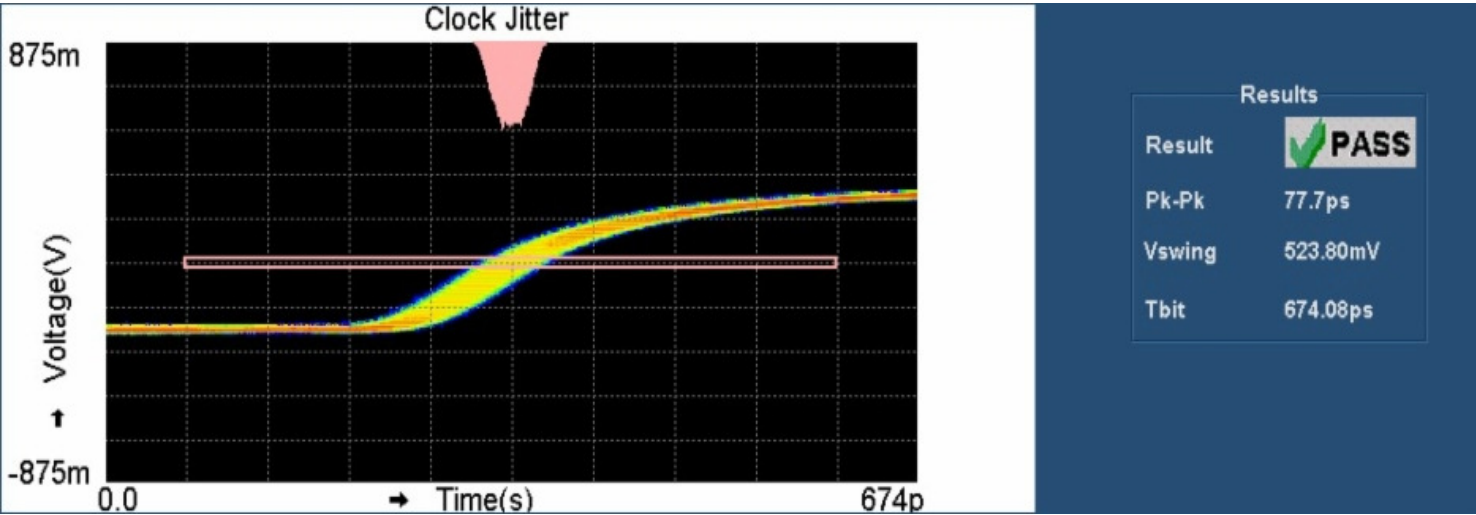
Detailed Results

7-9 : Source Clock Jitter : CK

Results

Spec Range	Meas Value	Tbit	Vs	Margin	Record Length	Result
Clock Jitter < 0.25*Tbit;	0.115*Tbit	674.08ps	523.80mV	0.13*Tbit	50.000M	Pass

Waveform/Plot

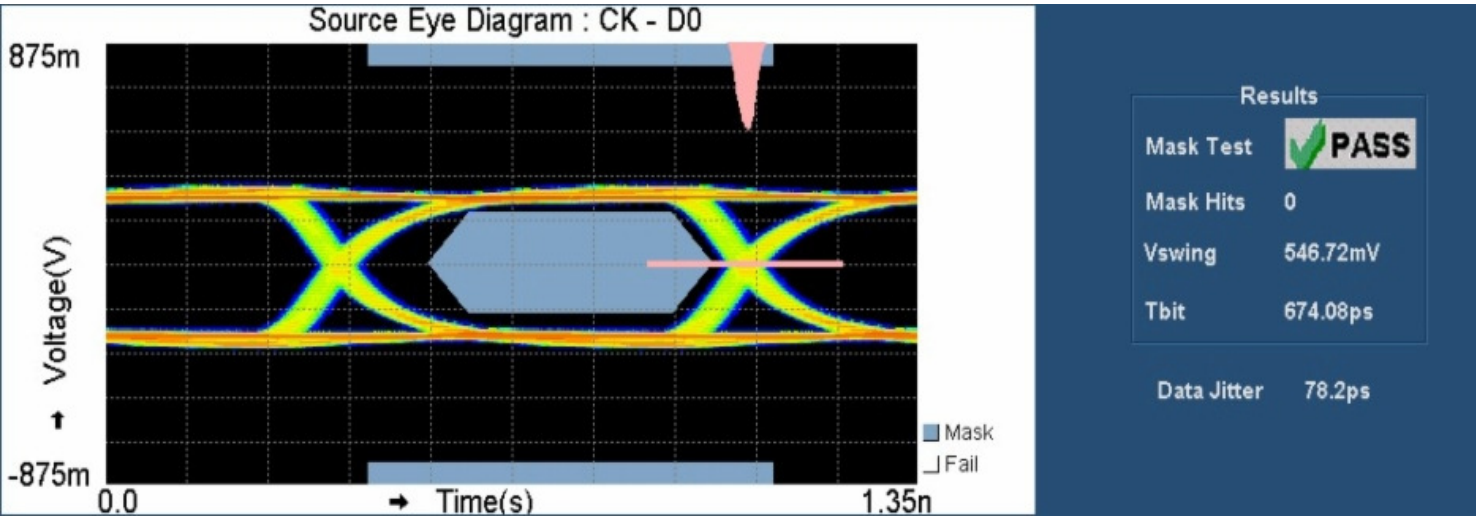


▶ 7-10 : Source Eye Diagram : CK - D0

▶ Results

Spec Range	Meas Value	Tbit	Vs	Margin	Record Length	Mask Hits	Result
Data Jitter < 0.3*Tbit;	0.12*Tbit	674.08ps	546.72mV	184.0m*Tbit	50.000M	0	Pass

▶ Waveform/Plot

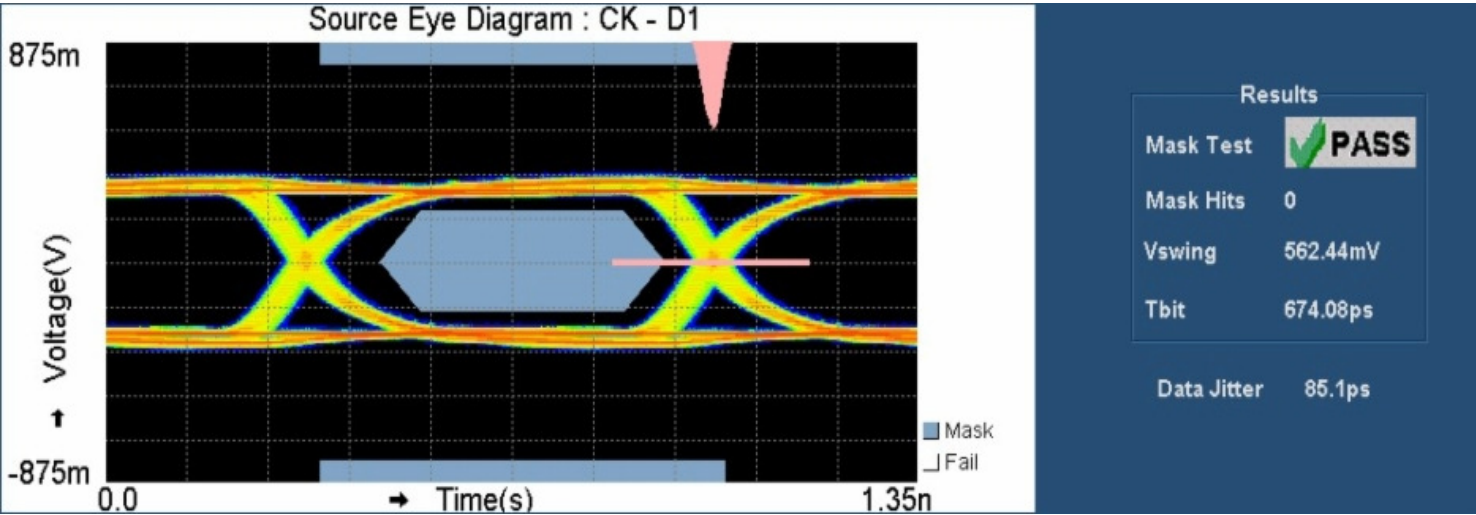


▶ 7-10 : Source Eye Diagram : CK - D1

▶ Results

Spec Range	Meas Value	Tbit	Vs	Margin	Record Length	Mask Hits	Result
Data Jitter < 0.3*Tbit;	0.13*Tbit	674.08ps	562.44mV	173.7m*Tbit	50.000M	0	Pass

▶ Waveform/Plot

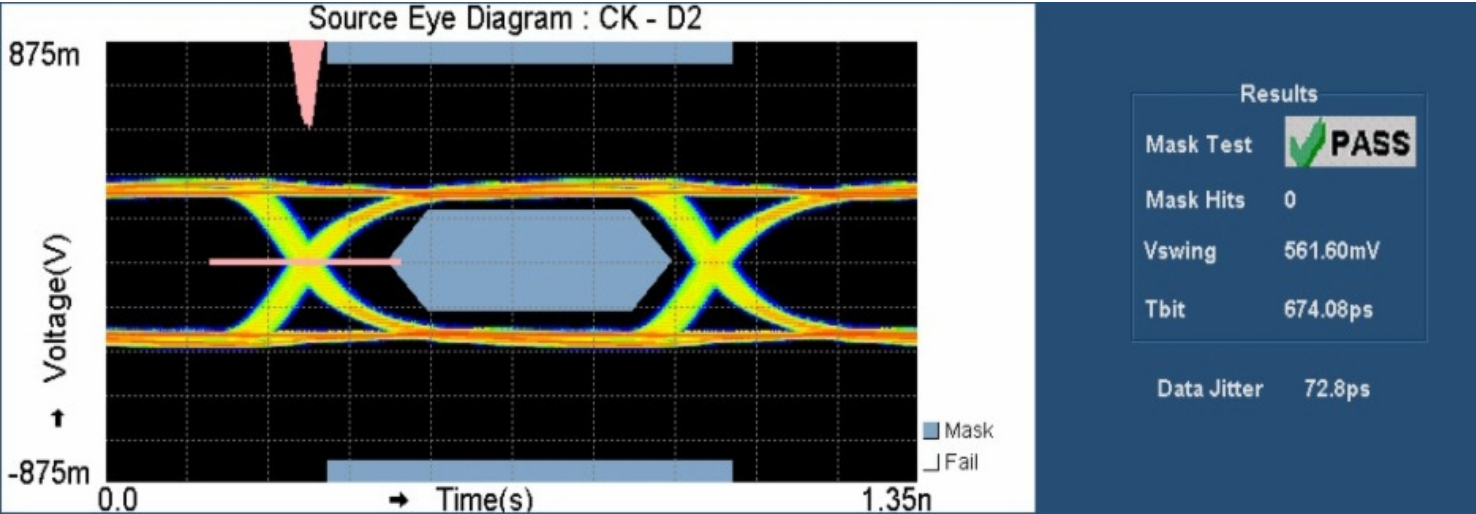


▶ 7-10 : Source Eye Diagram : CK - D2

▶ Results

Spec Range	Meas Value	Tbit	Vs	Margin	Record Length	Mask Hits	Result
Data Jitter < 0.3*Tbit;	0.11*Tbit	674.08ps	561.60mV	192.0m*Tbit	50.000M	0	Pass

▶ Waveform/Plot



▶ 7-6 : Source Inter-Pair Skew : D0 - D1

▶ Results

Spec Range	Meas Value	Tbit	Vs(D0 - D1)	Min	Max	Avg	Result
Skew < 0.2*TPixel;	0.002*TPixel	674.08ps	= 546.72mV, Vs = 562.44mV	10.714p	15.385p	13.372p	Pass

▶ 7-6 : Source Inter-Pair Skew : D1 - D2

▶ Results

Spec Range	Meas Value	Tbit	Vs(D1 - D2)	Min	Max	Avg	Result
Skew < 0.2*TPixel;	0.001*TPixel	674.08ps	= 562.44mV, Vs = 561.60mV	4.6667p	7.9048p	6.1642p	Pass

▶ 7-6 : Source Inter-Pair Skew : D2 - D0

▶ Results

Spec Range	Meas Value	Tbit	Vs(D2 - D0)	Min	Max	Avg	Result
Skew < 0.2*TPixel;	0.003*TPixel	674.08ps	= 561.60mV, Vs = 546.72mV	16.238p	22.051p	19.477p	Pass

▶ 7-4 : Source Rise Time : CK

Results

Spec Range	Meas Value	Tbit	Vs	Margin	Result
75.00ps < TRISE;	192.11ps	674.08ps	519.92mV	117.1ps	Pass

Waveform/Plot

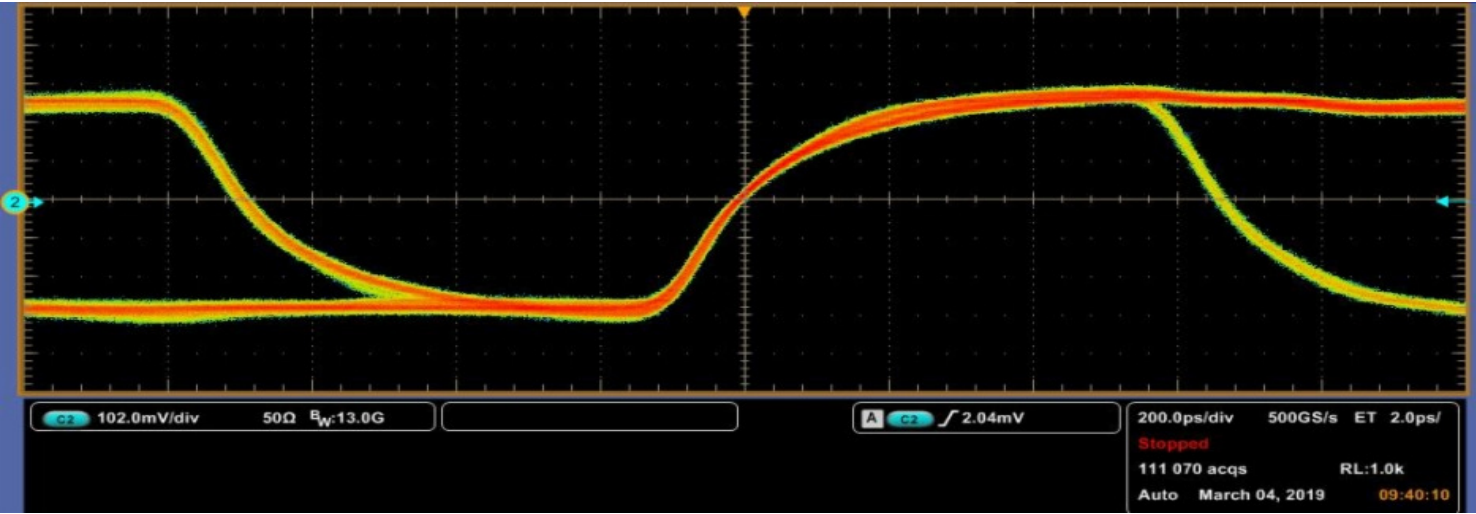


7-4 : Source Rise Time : D0

Results

Spec Range	Meas Value	Tbit	Vs	Margin	Result
75.00ps < TRISE;	180.29ps	674.08ps	542.64mV	105.3ps	Pass

Waveform/Plot

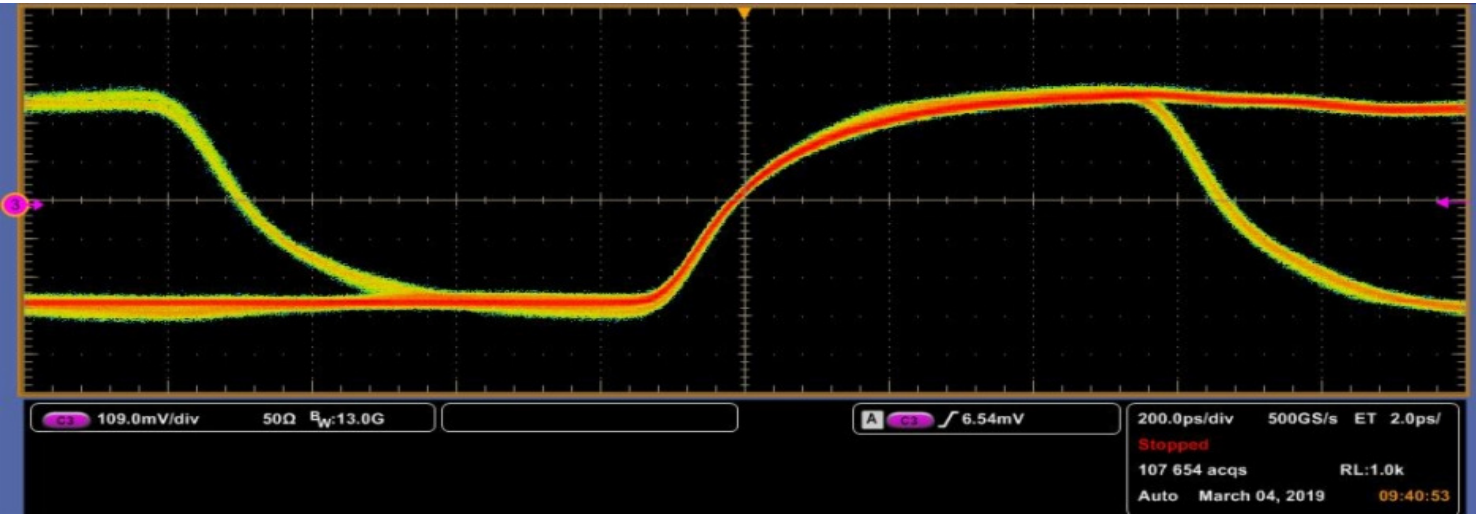


7-4 : Source Rise Time : D1

Results

Spec Range	Meas Value	Tbit	Vs	Margin	Result
75.00ps < TRISE;	179.22ps	674.08ps	562.44mV	104.2ps	Pass

Waveform/Plot

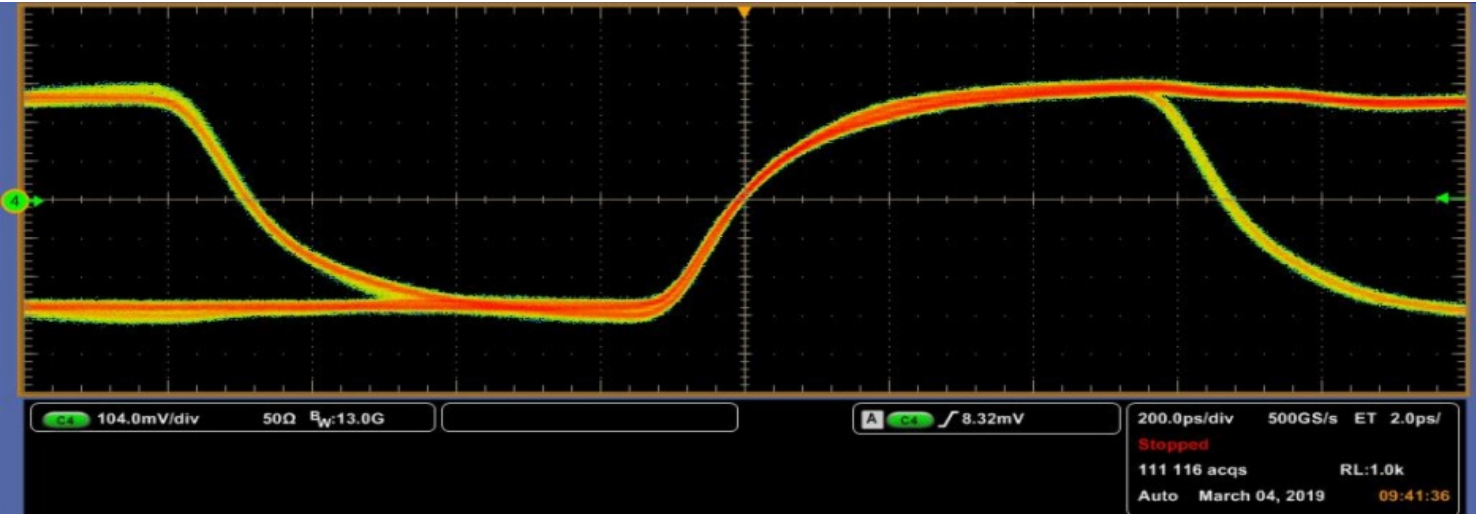


7-4 : Source Rise Time : D2

Results

Spec Range	Meas Value	Tbit	Vs	Margin	Result
75.00ps < TRISE;	164.80ps	674.08ps	553.28mV	89.80ps	Pass

Waveform/Plot

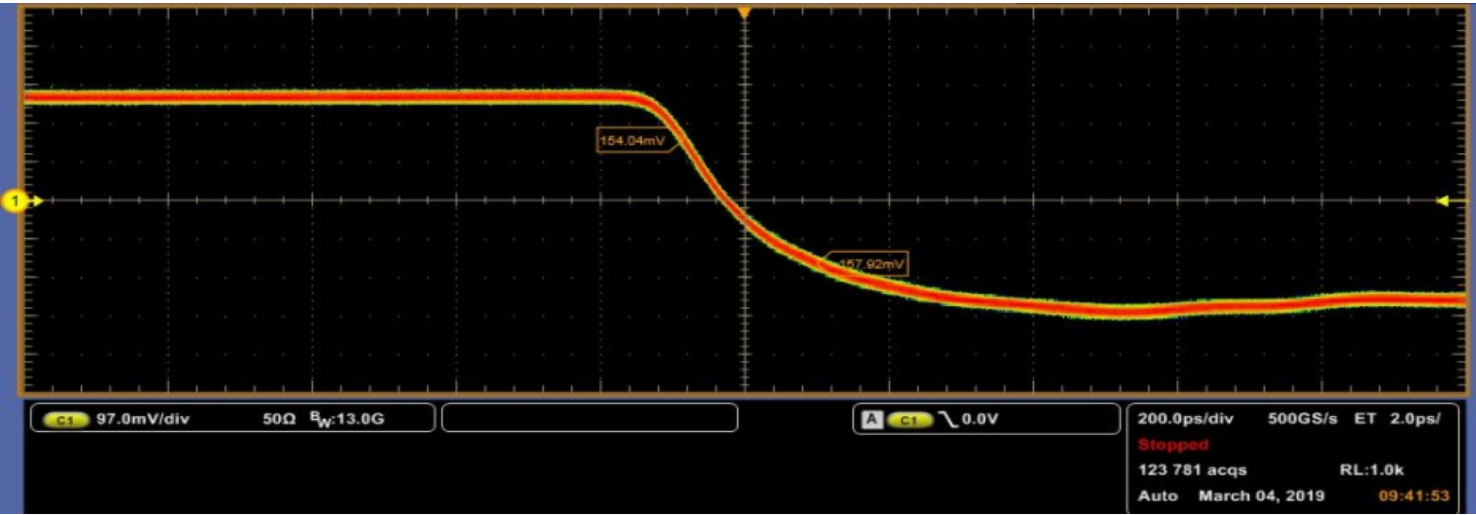


7-4 : Source Fall Time : CK

Results

Spec Range	Meas Value	Tbit	Vs	Margin	Result
75.00ps < TFALL;	185.83ps	674.08ps	519.92mV	110.8ps	Pass

Waveform/Plot

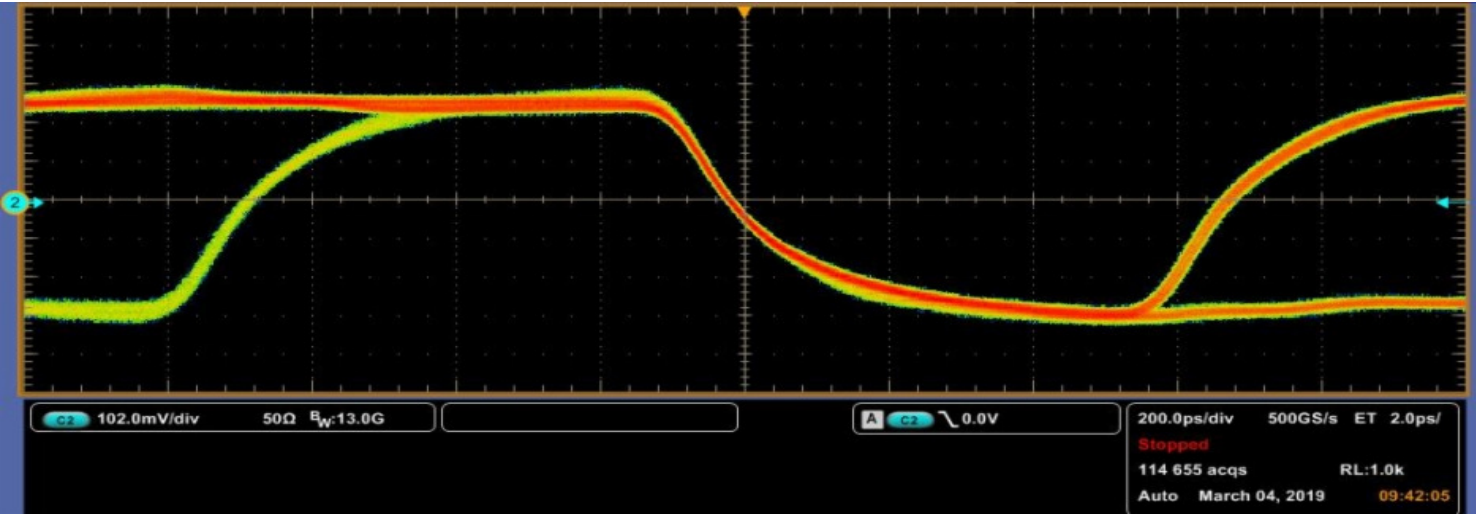


▶ 7-4 : Source Fall Time : D0

▶ Results

Spec Range	Meas Value	Tbit	Vs	Margin	Result
75.00ps < TFALL;	173.04ps	674.08ps	542.64mV	98.04ps	Pass

▶ Waveform/Plot

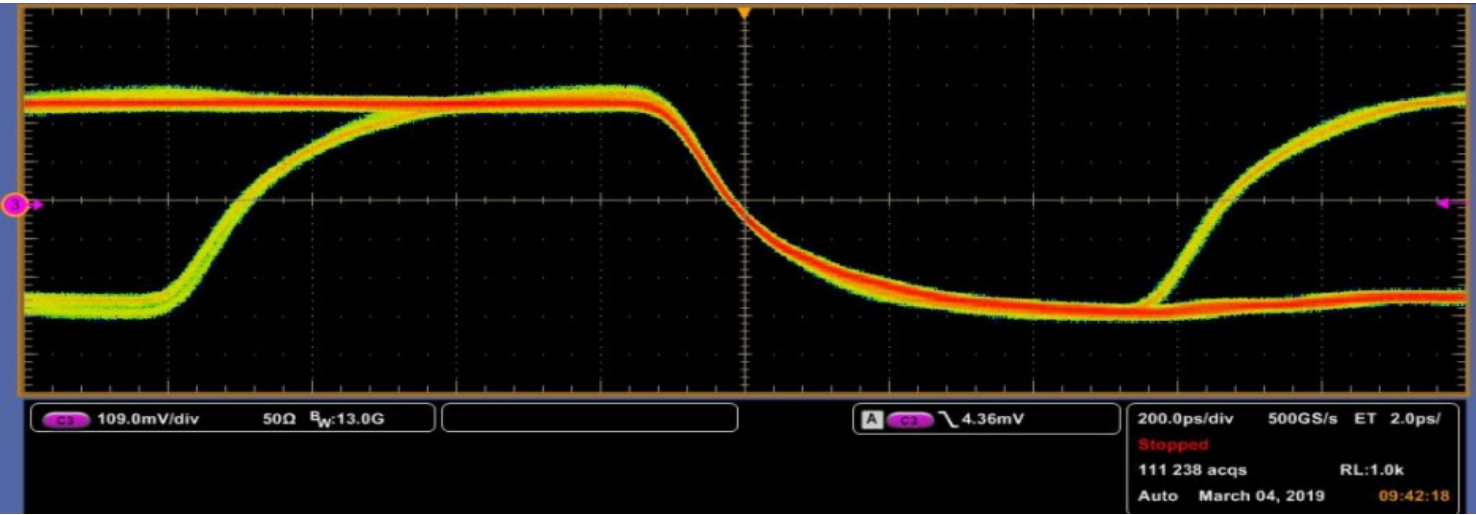


▶ 7-4 : Source Fall Time : D1

▶ Results

Spec Range	Meas Value	Tbit	Vs	Margin	Result
75.00ps < TFALL;	168.95ps	674.08ps	562.44mV	93.95ps	Pass

▶ Waveform/Plot

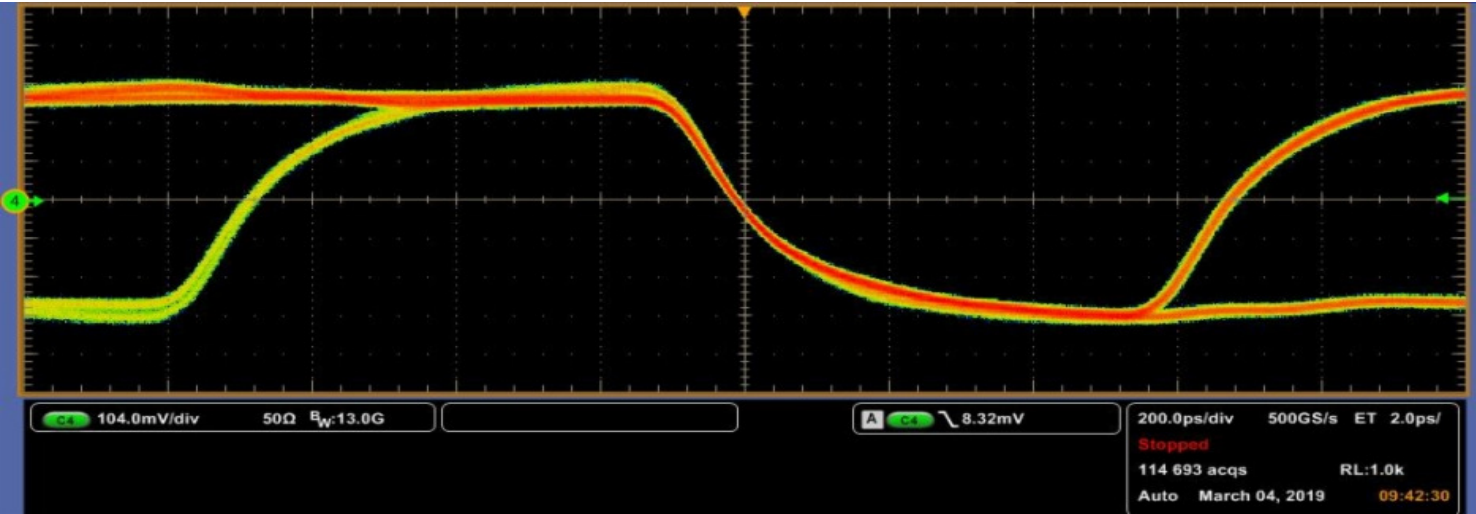


7-4 : Source Fall Time : D2

Results

Spec Range	Meas Value	Tbit	Vs	Margin	Result
75.00ps < TFALL;	158.54ps	674.08ps	553.28mV	83.54ps	Pass

Waveform/Plot

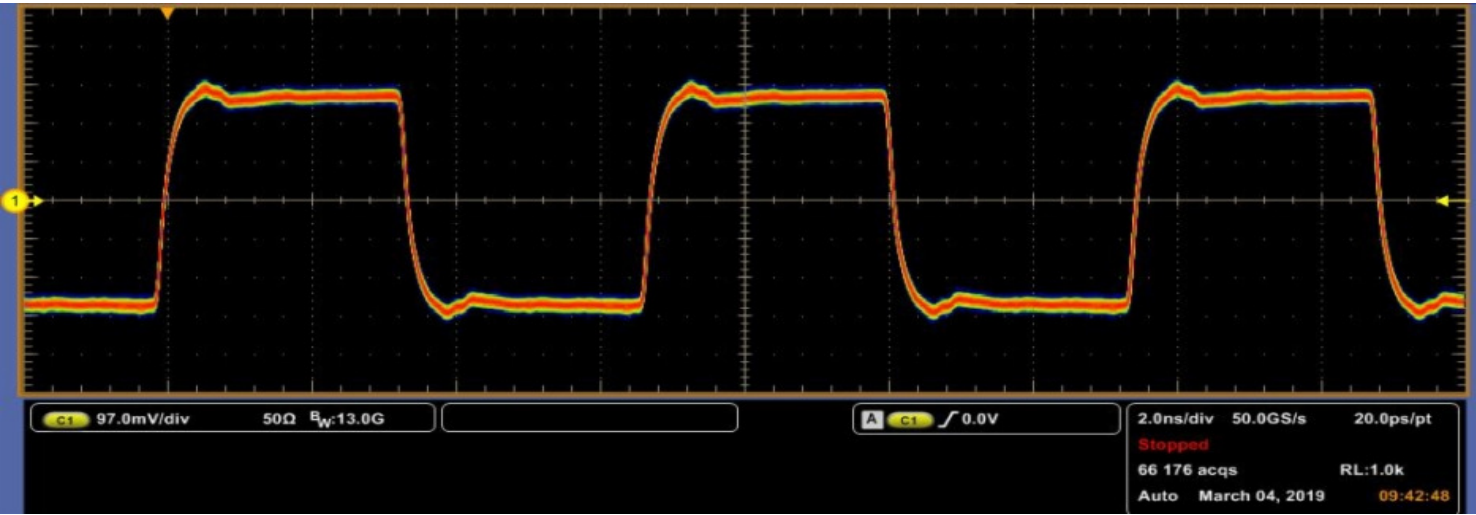


7-8 : Max Duty Cycle : CK

Results

Spec Range	Meas Value	Tbit	Margin	Result
Max Duty Cycle < 60.0%;	50.74%	674.08ps	9.26%	Pass

Waveform/Plot

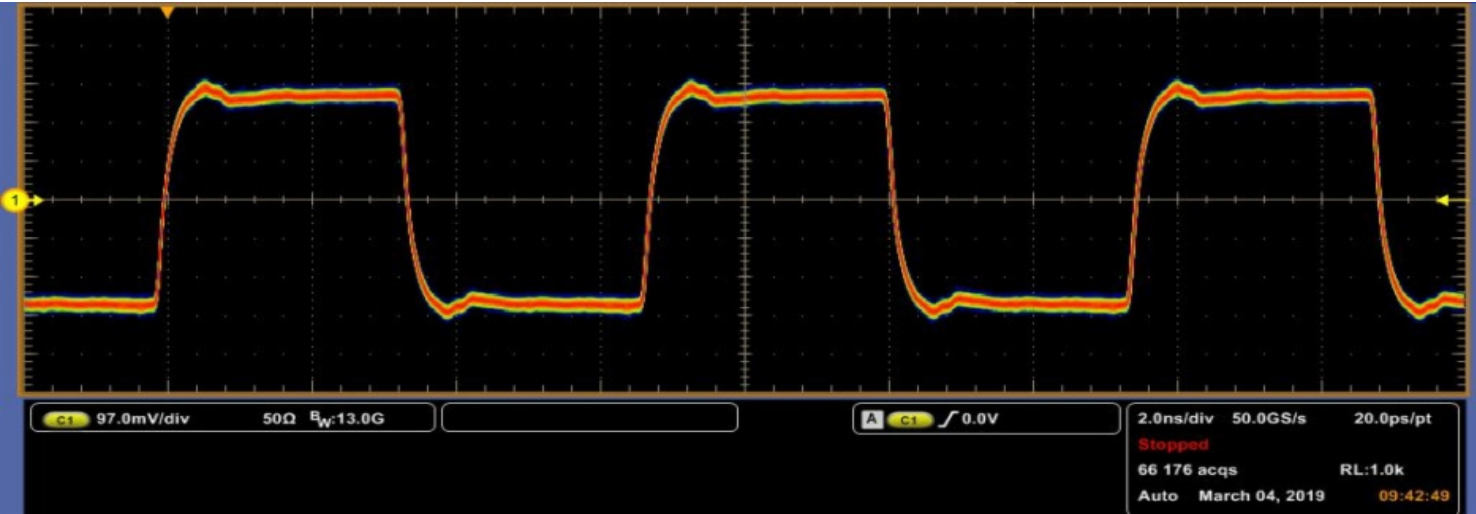


▶ 7-8 : Min Duty Cycle : CK

▶ Results

Spec Range	Meas Value	Tbit	Margin	Result
40.0% < Min Duty Cycle;	49.85%	674.08ps	9.85%	Pass

▶ Waveform/Plot

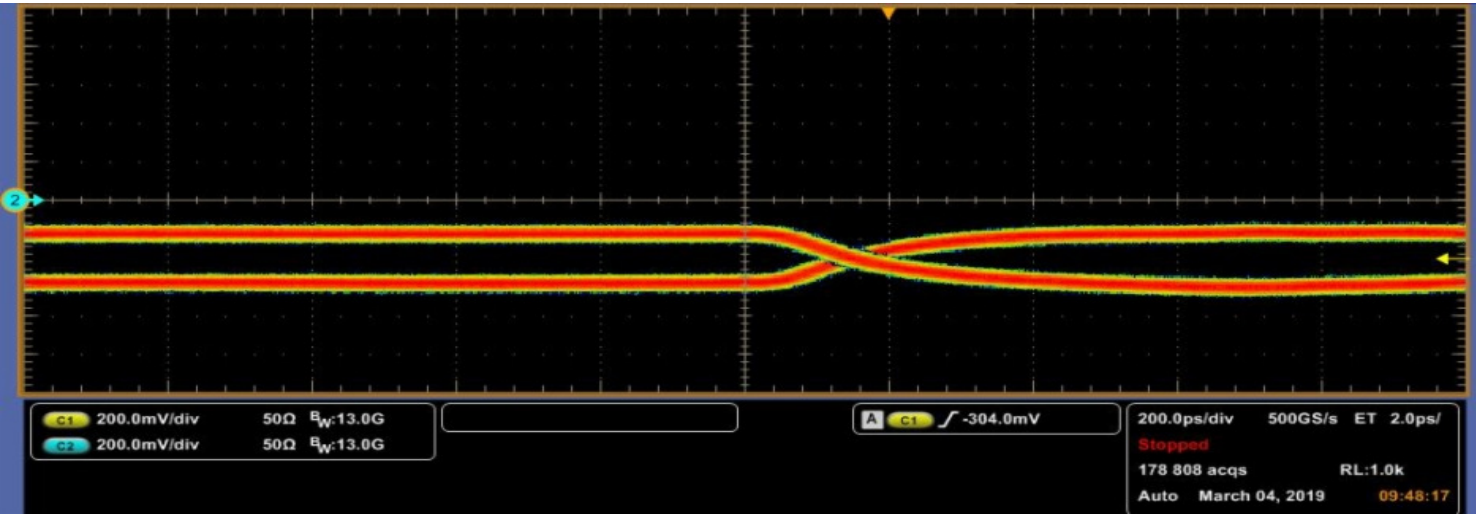


▶ 7-7 : Source Intra-Pair Skew : CK

▶ Results

Spec Range	Meas Value	Tbit	Margin	Result
Skew < 0.15*Tbit;	0.018*Tbit	674.08ps	0.13*Tbit	Pass

▶ Waveform/Plot

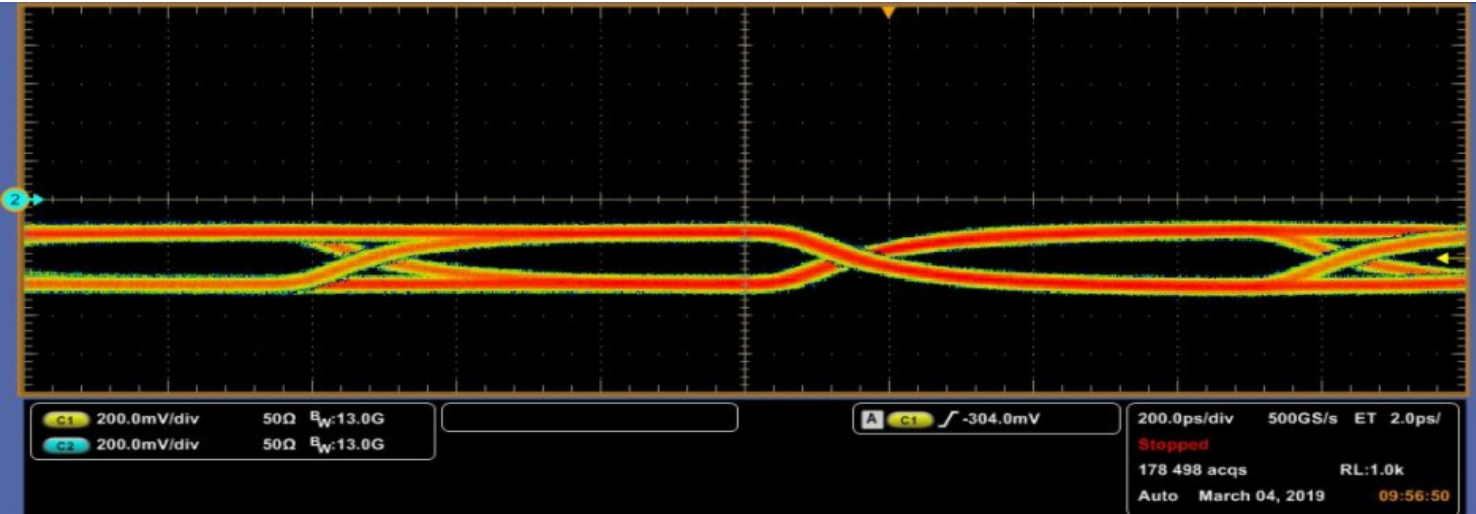


▶ 7-7 : Source Intra-Pair Skew : D0

▶ Results

Spec Range	Meas Value	Tbit	Margin	Result
Skew < 0.15*Tbit;	0.012*Tbit	674.08ps	0.14*Tbit	Pass

▶ Waveform/Plot

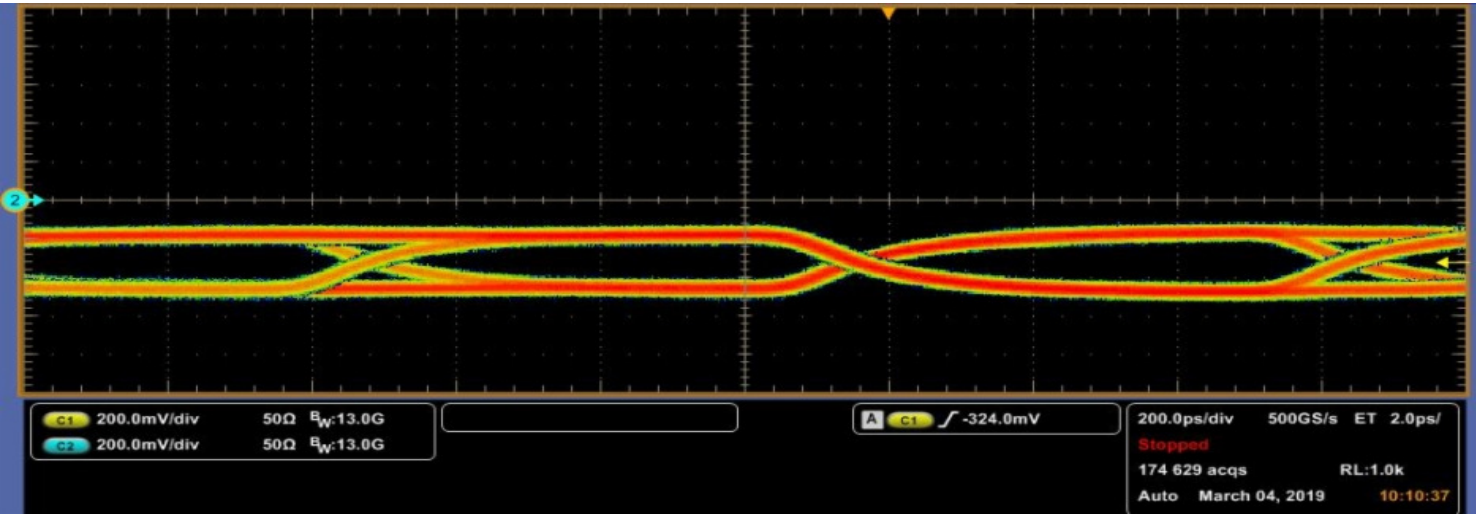


▶ 7-7 : Source Intra-Pair Skew : D1

▶ Results

Spec Range	Meas Value	Tbit	Margin	Result
Skew < 0.15*Tbit;	0.012*Tbit	674.08ps	0.14*Tbit	Pass

▶ Waveform/Plot

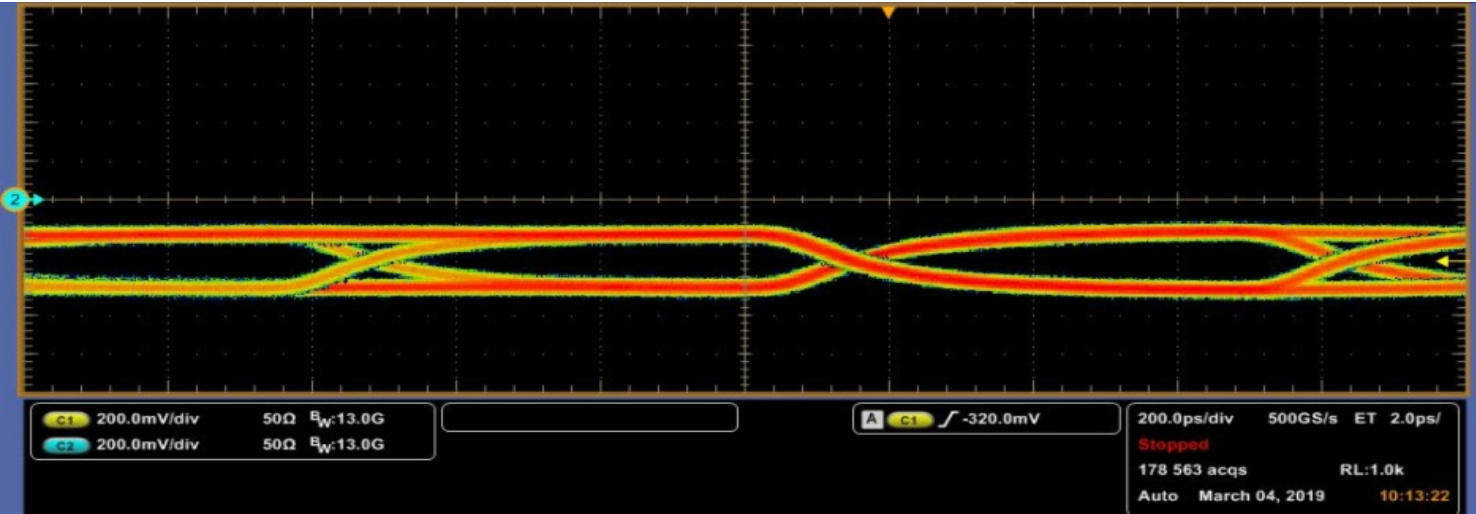


▶ 7-7 : Source Intra-Pair Skew : D2

▶ Results

Spec Range	Meas Value	Tbit	Margin	Result
Skew < 0.15*Tbit;	0.0*Tbit	674.08ps	0.15*Tbit	Pass

▶ Waveform/Plot



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