

## Source Tests Report

### Configuration

#### Setup Configuration

Oscilloscope Info DPO73304S - 10.8.5 Build 4  
 TDSHT3 Version 5.3.6 Build 54

#### Device Configuration

Device Details HDMI Device  
 Clock Frequency(Mhz) 27.0000  
 Resolution 720x576p  
 Refresh Rate 60Hz

#### Compliance Summary

Total Tests Supported 9  
 Tests Completed 29  
 Pass 29  
 Fail 0

### Test Summary

| Index | Test Name   | Lanes   | Spec Range                | Meas Value | Result |
|-------|---|---------|---------------------------|------------|--------|
| 1     | <a href="#">7-9 : Source Clock Jitter</a>                                 | CK      | Clock Jitter < 0.25*Tbit; | 0.009*Tbit | Pass   |
| 2     | <a href="#">7-10 : Source Eye Diagram</a>                                 | CK - D0 | Data Jitter < 0.3*Tbit;   | 0.01*Tbit  | Pass   |
| 3     | <a href="#">7-10 : Source Eye Diagram</a>                                 | CK - D1 | Data Jitter < 0.3*Tbit;   | 0.01*Tbit  | Pass   |
| 4     | <a href="#">7-10 : Source Eye Diagram</a>                                 | CK - D2 | Data Jitter < 0.3*Tbit;   | 0.01*Tbit  | Pass   |
| 5     | <a href="#">7-6 : Source Inter-Pair Skew</a>                              | D0 - D1 | Skew < 0.2*TPixel;        | 0*TPixel   | Pass   |
| 6     | <a href="#">7-6 : Source Inter-Pair Skew</a>                              | D1 - D2 | Skew < 0.2*TPixel;        | 0*TPixel   | Pass   |
| 7     | <a href="#">7-6 : Source Inter-Pair Skew</a>                              | D2 - D0 | Skew < 0.2*TPixel;        | 0*TPixel   | Pass   |
| 8     | <a href="#">7-4 : Source Rise Time</a>                                    | CK      | 75.00ps < TRISE;          | 162.56ps   | Pass   |
| 9     | <a href="#">7-4 : Source Rise Time</a>                                    | D0      | 75.00ps < TRISE;          | 122.56ps   | Pass   |
| 10    | <a href="#">7-4 : Source Rise Time</a>                                    | D1      | 75.00ps < TRISE;          | 130.27ps   | Pass   |
| 11    | <a href="#">7-4 : Source Rise Time</a>                                    | D2      | 75.00ps < TRISE;          | 127.34ps   | Pass   |
| 12    | <a href="#">7-4 : Source Fall Time</a>                                    | CK      | 75.00ps < TFALL;          | 163.20ps   | Pass   |
| 13    | <a href="#">7-4 : Source Fall Time</a>                                    | D0      | 75.00ps < TFALL;          | 125.17ps   | Pass   |
| 14    | <a href="#">7-4 : Source Fall Time</a>                                    | D1      | 75.00ps < TFALL;          | 125.84ps   | Pass   |
| 15    | <a href="#">7-4 : Source Fall Time</a>                                    | D2      | 75.00ps < TFALL;          | 121.71ps   | Pass   |
| 16    | <a href="#">7-8 : Max Duty Cycle</a>                                      | CK      | Max Duty Cycle < 60.0%;   | 50.49%     | Pass   |
| 17    | <a href="#">7-8 : Min Duty Cycle</a>                                      | CK      | 40.0% < Min Duty Cycle;   | 49.95%     | Pass   |
| 18    | <a href="#">7-2 : Source Low Amplitude +(Supported Sink &lt;= 165MHz)</a> | CK+     | 2.700V < VL < 2.900V;     | 2.8380V    | Pass   |
| 19    | <a href="#">7-2 : Source Low Amplitude +(Supported Sink &lt;= 165MHz)</a> | D0+     | 2.700V < VL < 2.900V;     | 2.8319V    | Pass   |
| 20    | <a href="#">7-2 : Source Low Amplitude -(Supported Sink &lt;= 165MHz)</a> | CK-     | 2.700V < VL < 2.900V;     | 2.8433V    | Pass   |
| 21    | <a href="#">7-2 : Source Low Amplitude -(Supported Sink &lt;= 165MHz)</a> | D0-     | 2.700V < VL < 2.900V;     | 2.8332V    | Pass   |
| 22    | <a href="#">7-2 : Source Low Amplitude +(Supported Sink &lt;= 165MHz)</a> | D1+     | 2.700V < VL < 2.900V;     | 2.8181V    | Pass   |
| 23    | <a href="#">7-2 : Source Low Amplitude +(Supported Sink &lt;= 165MHz)</a> | D2+     | 2.700V < VL < 2.900V;     | 2.8626V    | Pass   |
| 24    | <a href="#">7-2 : Source Low Amplitude -(Supported Sink &lt;= 165MHz)</a> | D1-     | 2.700V < VL < 2.900V;     | 2.8220V    | Pass   |
| 25    | <a href="#">7-2 : Source Low Amplitude -(Supported Sink &lt;= 165MHz)</a> | D2-     | 2.700V < VL < 2.900V;     | 2.8622V    | Pass   |
| 26    | <a href="#">7-7 : Source Intra-Pair Skew</a>                              | CK      | Skew < 0.15*Tbit;         | 0.008*Tbit | Pass   |
| 27    | <a href="#">7-7 : Source Intra-Pair Skew</a>                              | D0      | Skew < 0.15*Tbit;         | 0.005*Tbit | Pass   |
| 28    | <a href="#">7-7 : Source Intra-Pair Skew</a>                              | D1      | Skew < 0.15*Tbit;         | 0.005*Tbit | Pass   |
| 29    | <a href="#">7-7 : Source Intra-Pair Skew</a>                              | D2      | Skew < 0.15*Tbit;         | 0.003*Tbit | Pass   |

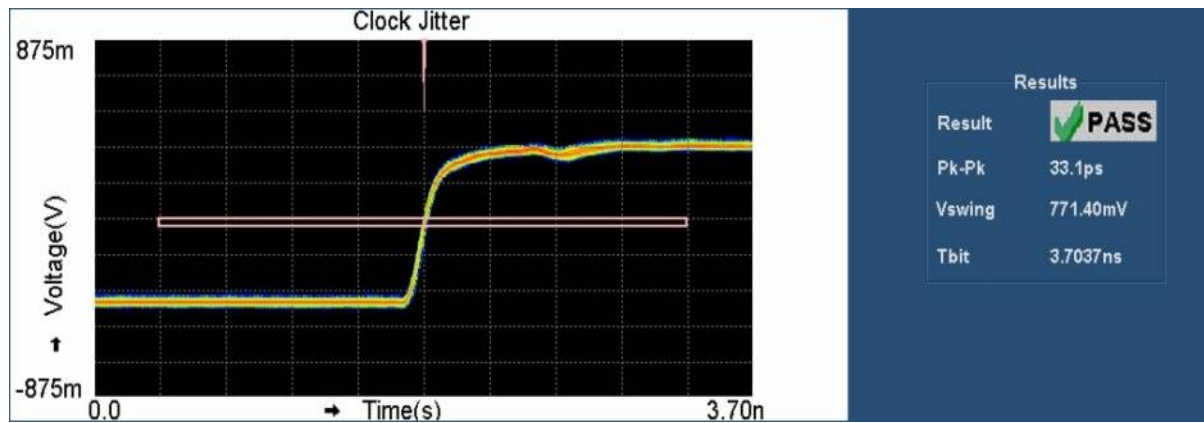
### Detailed Results

#### 7-9 : Source Clock Jitter : CK

##### Results

| Spec Range                | Meas Value | Tbit     | Vs       | Margin    | Record Length | Result |
|---------------------------|------------|----------|----------|-----------|---------------|--------|
| Clock Jitter < 0.25*Tbit; | 0.009*Tbit | 3.7037ns | 771.40mV | 0.24*Tbit | 50.000M       | Pass   |

##### Waveform/Plot

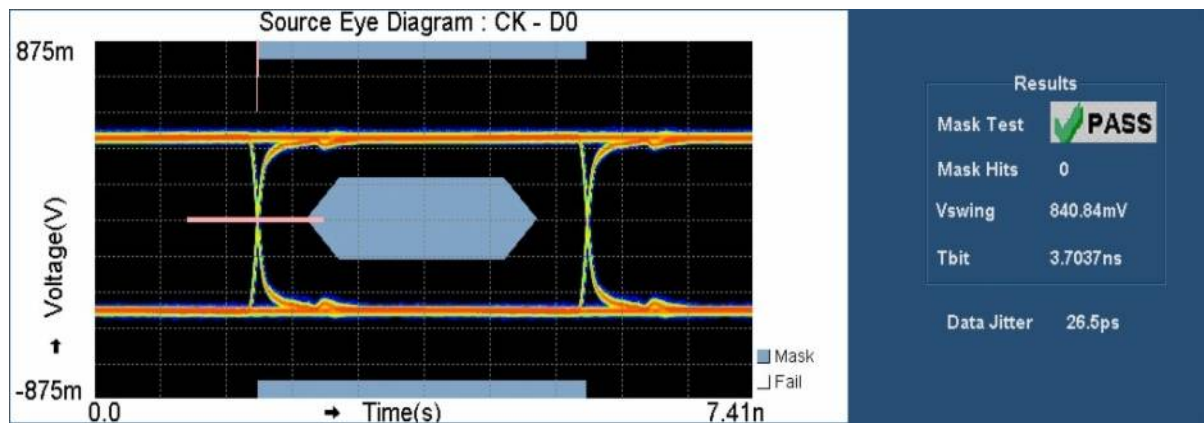


► 7-10 : Source Eye Diagram : CK - D0

► Results

| Spec Range              | Meas Value | Tbit     | Vs       | Margin    | Record Length | Mask Hits | Result |
|-------------------------|------------|----------|----------|-----------|---------------|-----------|--------|
| Data Jitter < 0.3*Tbit; | 0.01*Tbit  | 3.7037ns | 840.84mV | 0.29*Tbit | 50.000M       | 0         | Pass   |

► Waveform/Plot

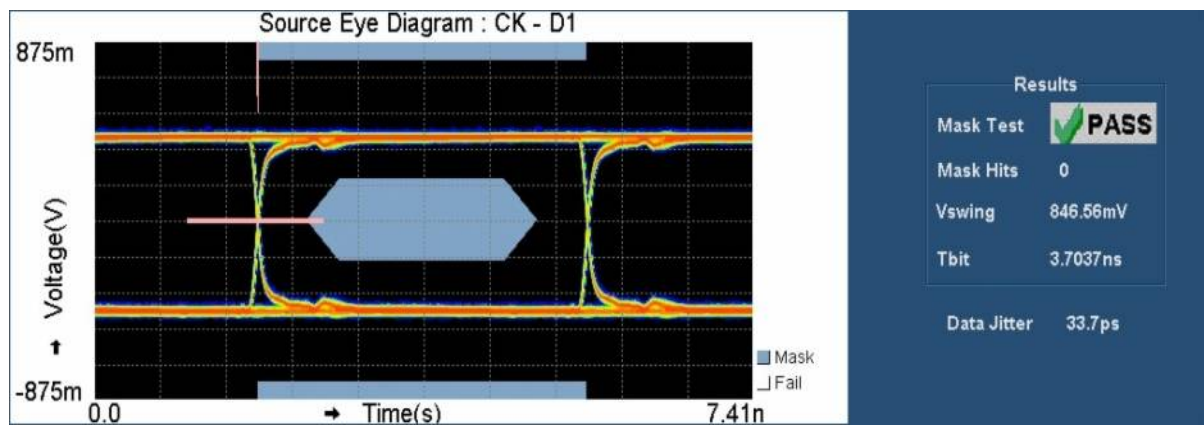


► 7-10 : Source Eye Diagram : CK - D1

► Results

| Spec Range              | Meas Value | Tbit     | Vs       | Margin    | Record Length | Mask Hits | Result |
|-------------------------|------------|----------|----------|-----------|---------------|-----------|--------|
| Data Jitter < 0.3*Tbit; | 0.01*Tbit  | 3.7037ns | 846.56mV | 0.29*Tbit | 50.000M       | 0         | Pass   |

► Waveform/Plot

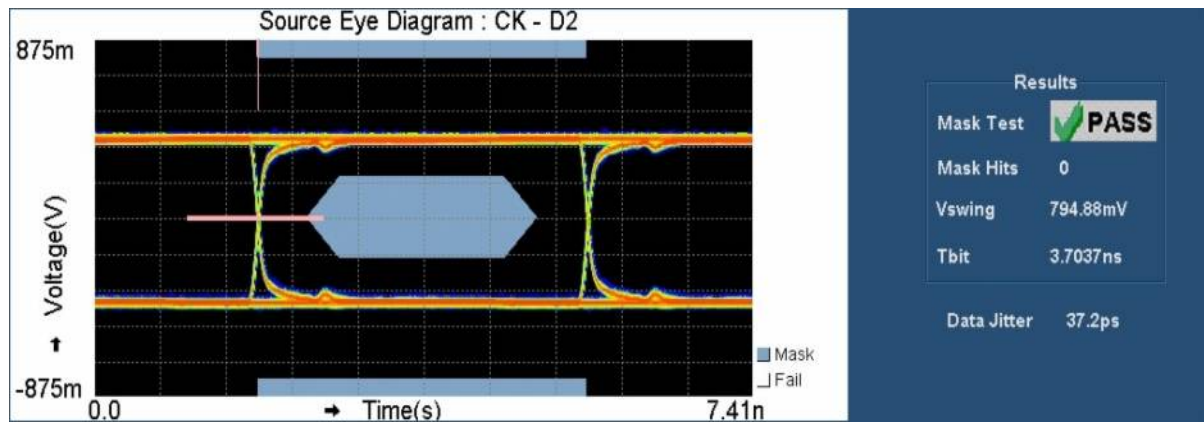


► 7-10 : Source Eye Diagram : CK - D2

► Results

| Spec Range              | Meas Value | Tbit     | Vs       | Margin    | Record Length | Mask Hits | Result |
|-------------------------|------------|----------|----------|-----------|---------------|-----------|--------|
| Data Jitter < 0.3*Tbit; | 0.01*Tbit  | 3.7037ns | 794.88mV | 0.29*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*TPixel   | 3.7037ns | = 840.84mV, Vs = 846.56mV | 143.54f | 6.5317p | 2.2820p | 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*TPixel   | 3.7037ns | = 846.56mV, Vs = 794.88mV | 261.90f | 4.8120p | 2.3752p | Pass   |

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

Results

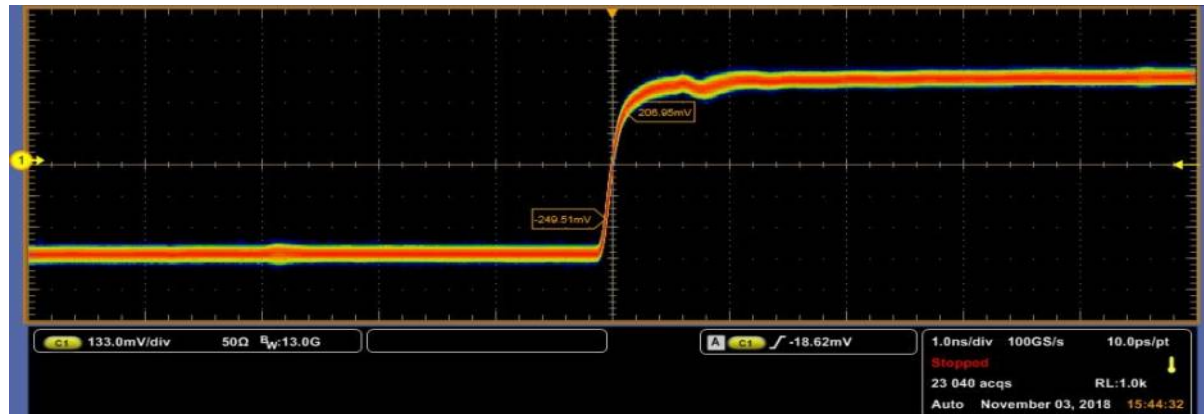
| Spec Range         | Meas Value | Tbit     | Vs(D2 - D0)               | Min     | Max     | Avg     | Result |
|--------------------|------------|----------|---------------------------|---------|---------|---------|--------|
| Skew < 0.2*TPixel; | 0*TPixel   | 3.7037ns | = 794.88mV, Vs = 840.84mV | 170.88f | 6.1421p | 2.2048p | Pass   |

7-4 : Source Rise Time : CK

Results

| Spec Range       | Meas Value | Tbit     | Vs       | Margin  | Result |
|------------------|------------|----------|----------|---------|--------|
| 75.00ps < TRISE; | 162.56ps   | 3.7037ns | 760.76mV | 87.56ps | Pass   |

Waveform/Plot

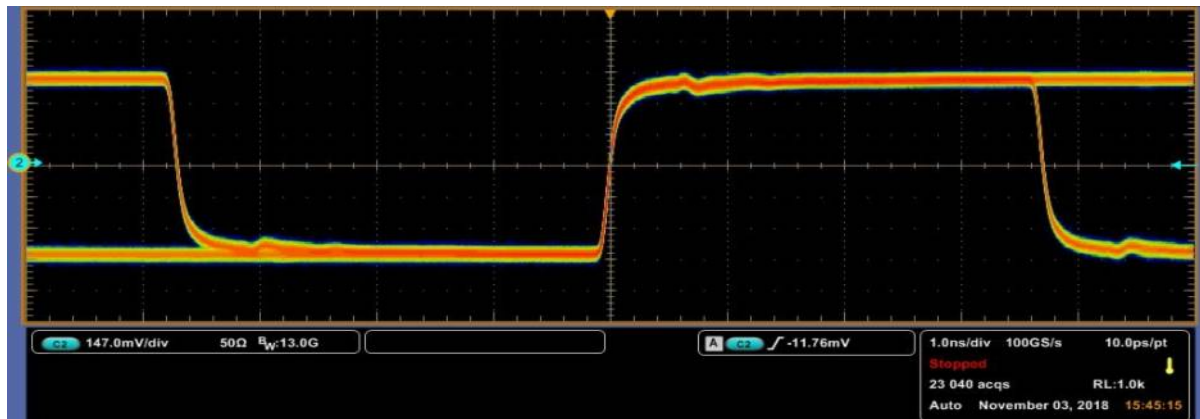


7-4 : Source Rise Time : D0

Results

| Spec Range       | Meas Value | Tbit     | Vs       | Margin  | Result |
|------------------|------------|----------|----------|---------|--------|
| 75.00ps < TRISE; | 122.56ps   | 3.7037ns | 829.08mV | 47.56ps | Pass   |

Waveform/Plot

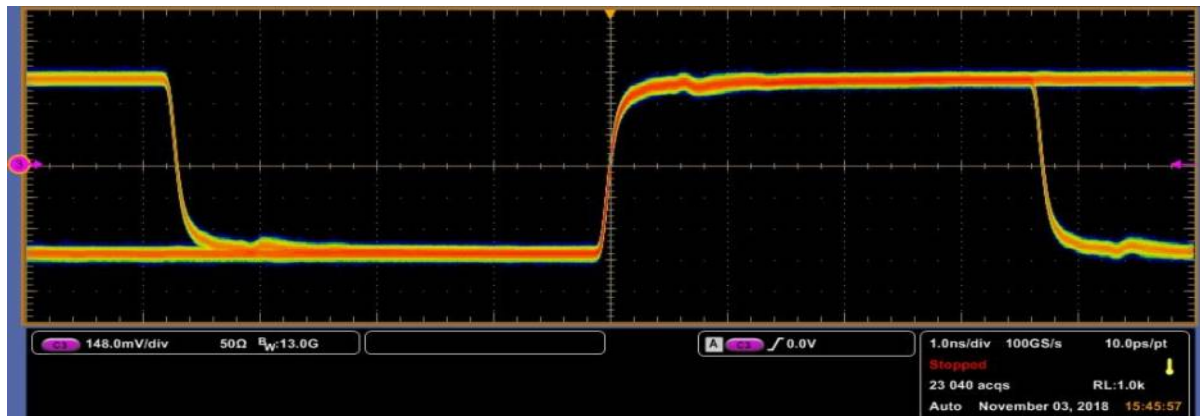


#### 7-4 : Source Rise Time : D1

##### Results

| Spec Range       | Meas Value | Tbit     | Vs       | Margin  | Result |
|------------------|------------|----------|----------|---------|--------|
| 75.00ps < TRISE; | 130.27ps   | 3.7037ns | 834.72mV | 55.27ps | Pass   |

##### Waveform/Plot

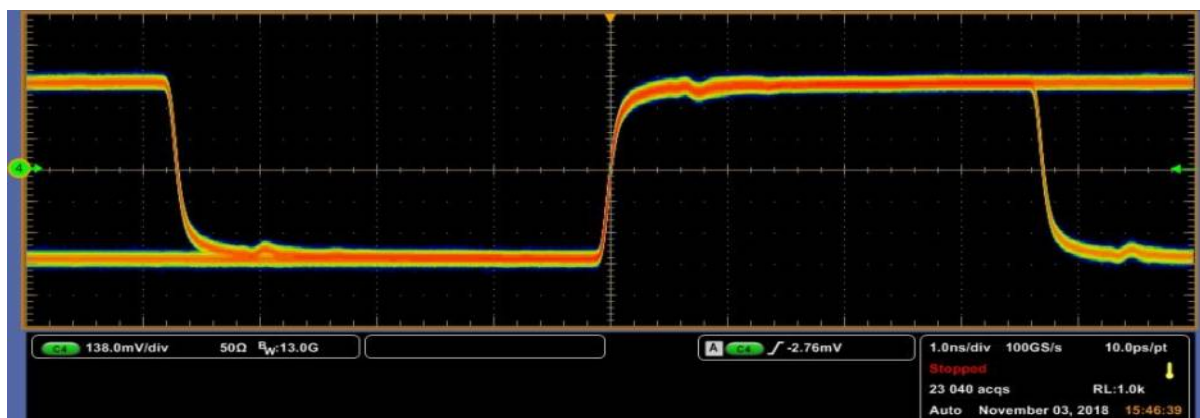


#### 7-4 : Source Rise Time : D2

##### Results

| Spec Range       | Meas Value | Tbit     | Vs       | Margin  | Result |
|------------------|------------|----------|----------|---------|--------|
| 75.00ps < TRISE; | 127.34ps   | 3.7037ns | 778.32mV | 52.34ps | Pass   |

##### Waveform/Plot



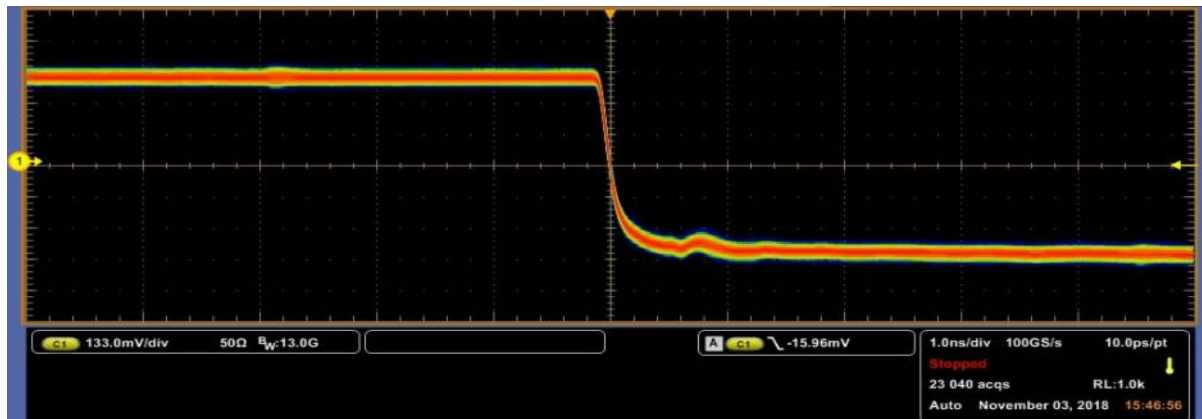
#### 7-4 : Source Fall Time : CK

##### Results

| Spec Range       | Meas Value | Tbit     | Vs       | Margin  | Result |
|------------------|------------|----------|----------|---------|--------|
| 75.00ps < TFALL; | 163.20ps   | 3.7037ns | 760.76mV | 88.20ps | Pass   |

##### Waveform/Plot



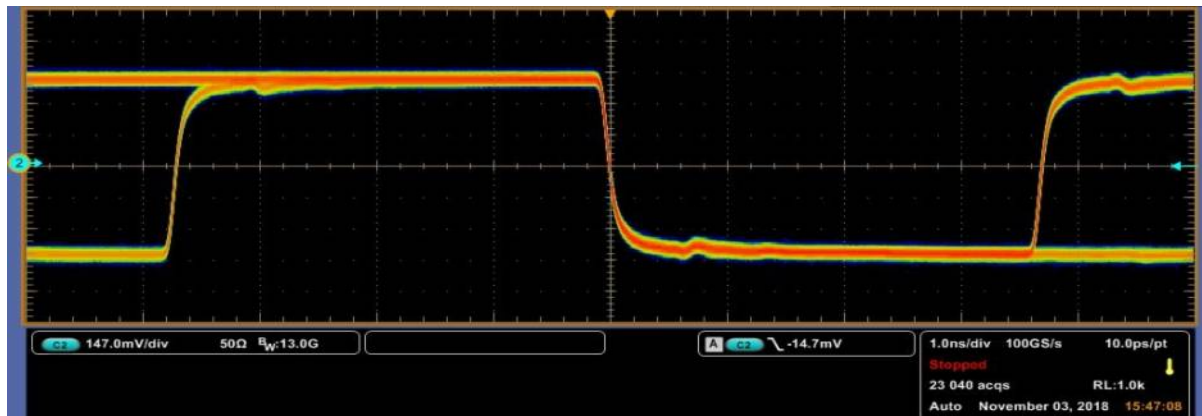


#### 7-4 : Source Fall Time : D0

##### Results

| Spec Range       | Meas Value | Tbit     | Vs       | Margin  | Result |
|------------------|------------|----------|----------|---------|--------|
| 75.00ps < TFALL; | 125.17ps   | 3.7037ns | 829.08mV | 50.17ps | Pass   |

##### Waveform/Plot

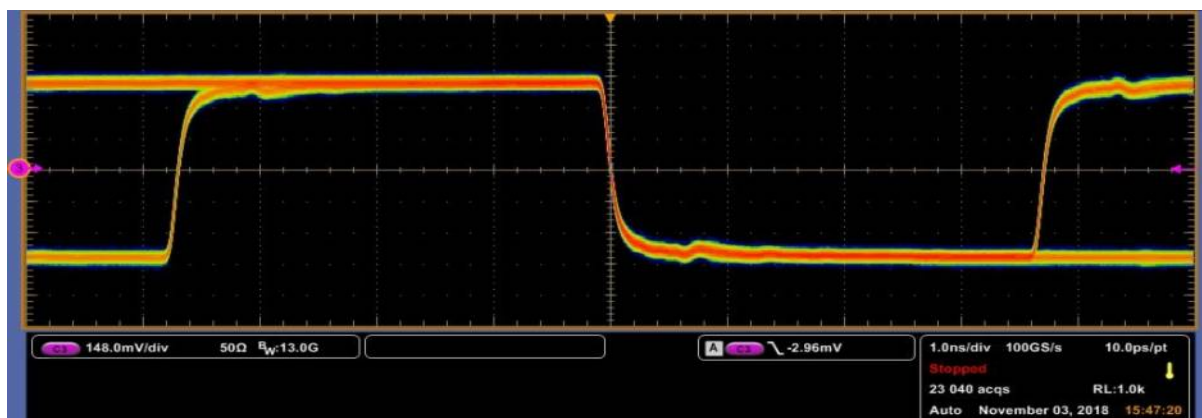


#### 7-4 : Source Fall Time : D1

##### Results

| Spec Range       | Meas Value | Tbit     | Vs       | Margin  | Result |
|------------------|------------|----------|----------|---------|--------|
| 75.00ps < TFALL; | 125.84ps   | 3.7037ns | 834.72mV | 50.84ps | Pass   |

##### Waveform/Plot

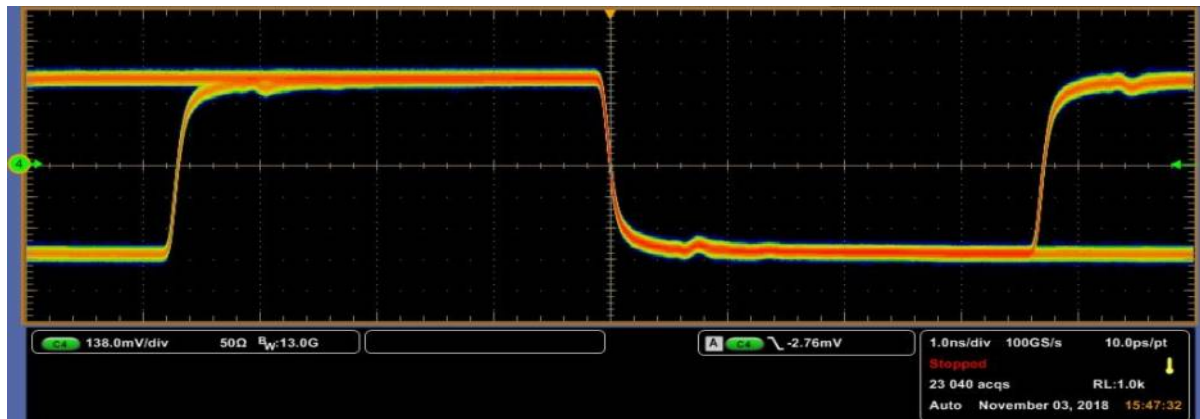


#### 7-4 : Source Fall Time : D2

##### Results

| Spec Range       | Meas Value | Tbit     | Vs       | Margin  | Result |
|------------------|------------|----------|----------|---------|--------|
| 75.00ps < TFALL; | 121.71ps   | 3.7037ns | 778.32mV | 46.71ps | Pass   |

##### Waveform/Plot

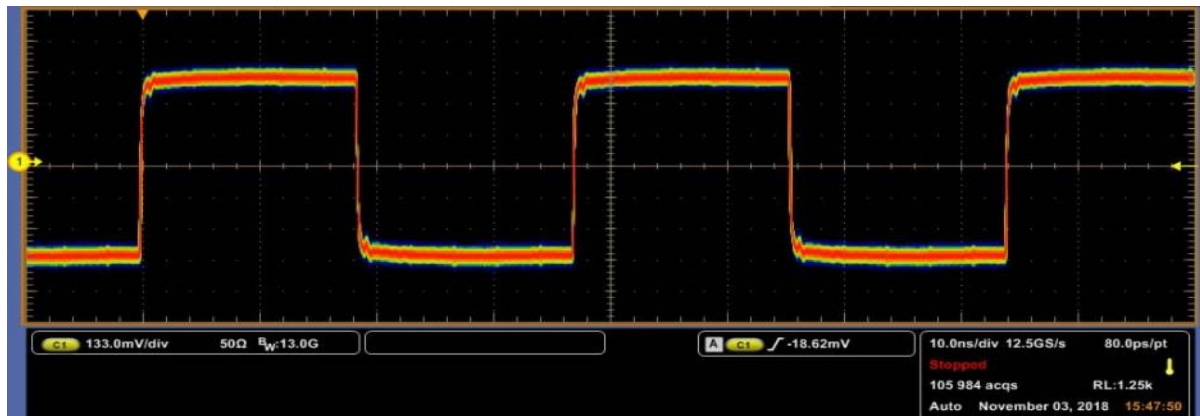


#### 7-8 : Max Duty Cycle : CK

##### Results

| Spec Range              | Meas Value | Tbit     | Margin | Result |
|-------------------------|------------|----------|--------|--------|
| Max Duty Cycle < 60.0%; | 50.49%     | 3.7037ns | 9.51%  | Pass   |

##### Waveform/Plot

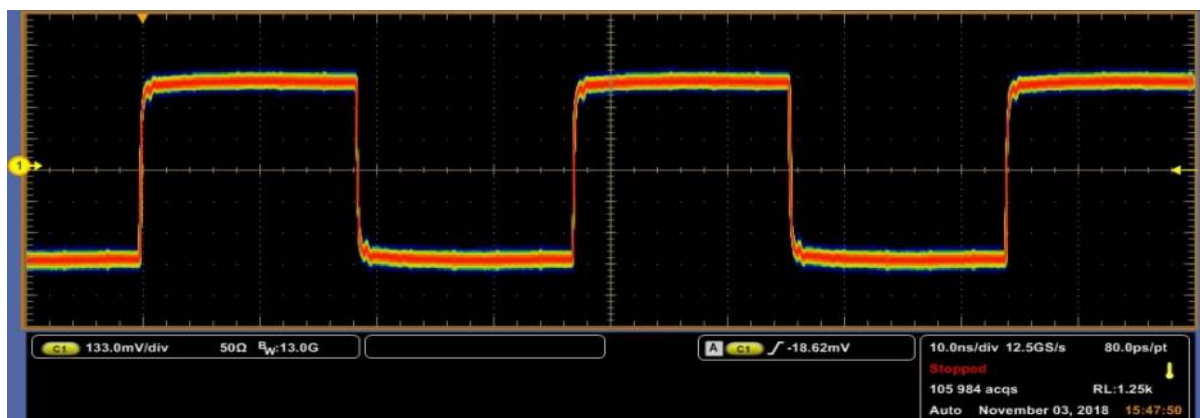


#### 7-8 : Min Duty Cycle : CK

##### Results

| Spec Range              | Meas Value | Tbit     | Margin | Result |
|-------------------------|------------|----------|--------|--------|
| 40.0% < Min Duty Cycle; | 49.95%     | 3.7037ns | 9.95%  | Pass   |

##### Waveform/Plot

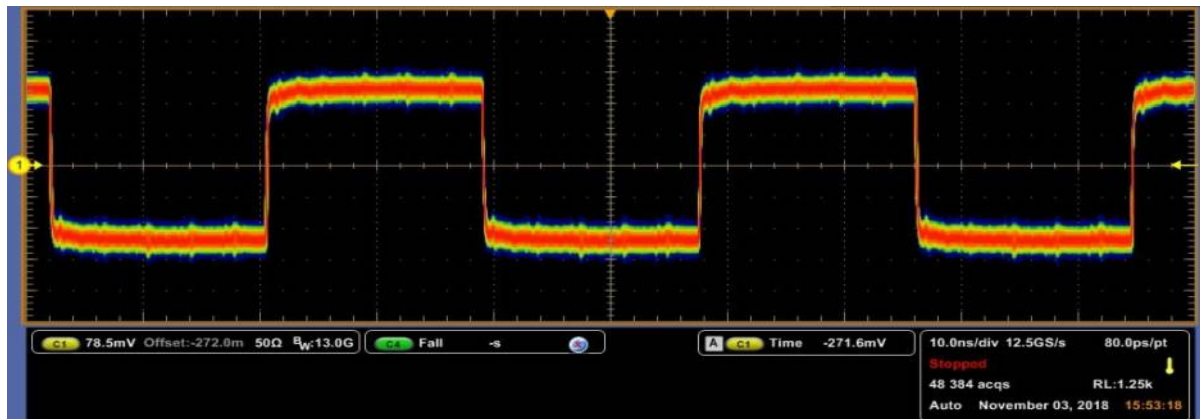


#### 7-2 : Source Low Amplitude +(Supported Sink <= 165MHz) : CK+

##### Results

| Spec Range            | Meas Value | Upper Margin | Lower Margin | Result |
|-----------------------|------------|--------------|--------------|--------|
| 2.700V < VL < 2.900V; | 2.8380V    | 61.97mV      | 138.0mV      | Pass   |

##### Waveform/Plot

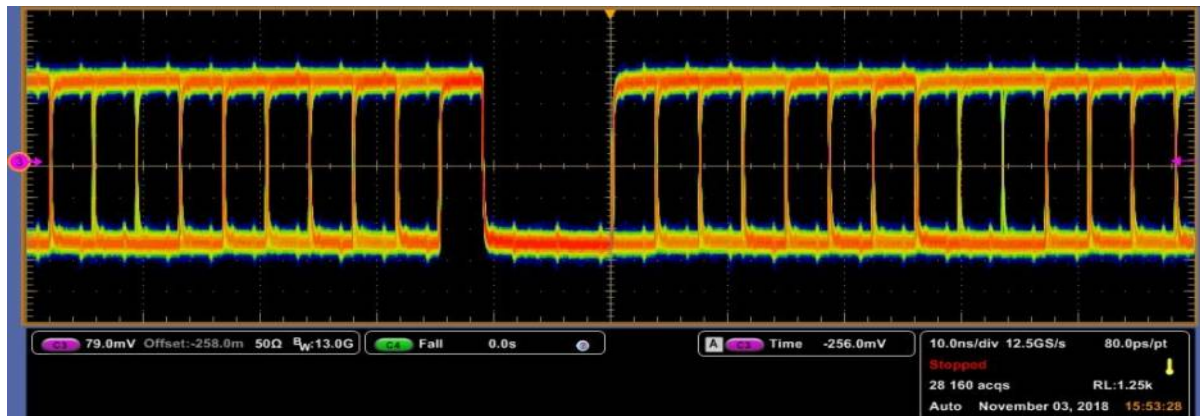


7-2 : Source Low Amplitude +(Supported Sink <= 165MHz) : D0+

Results

| Spec Range            | Meas Value | Upper Margin | Lower Margin | Result |
|-----------------------|------------|--------------|--------------|--------|
| 2.700V < VL < 2.900V; | 2.8319V    | 68.14mV      | 131.9mV      | Pass   |

Waveform/Plot

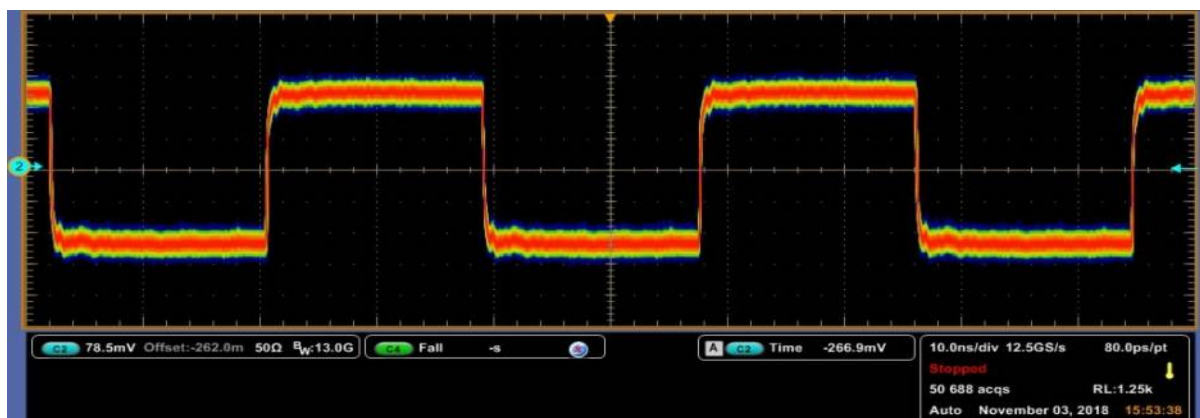


7-2 : Source Low Amplitude -(Supported Sink <= 165MHz) : CK-

Results

| Spec Range            | Meas Value | Upper Margin | Lower Margin | Result |
|-----------------------|------------|--------------|--------------|--------|
| 2.700V < VL < 2.900V; | 2.8433V    | 56.68mV      | 143.3mV      | Pass   |

Waveform/Plot



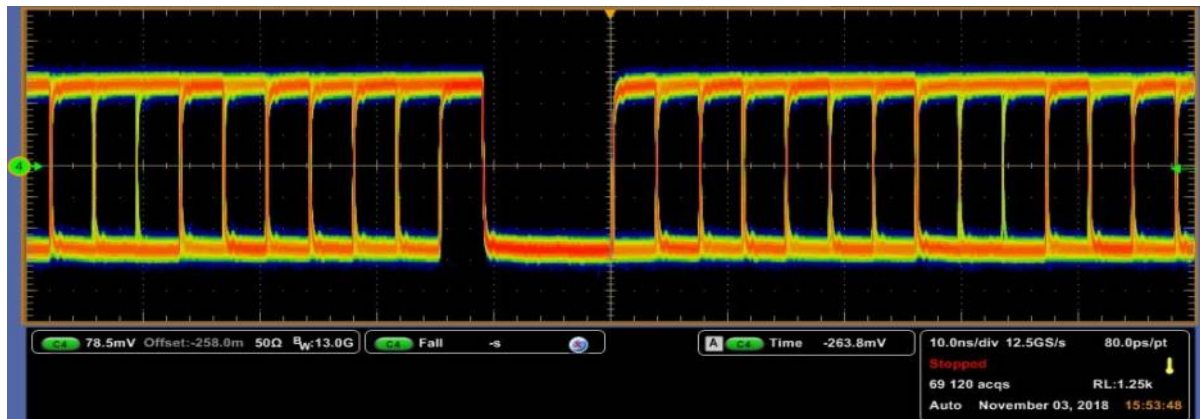
7-2 : Source Low Amplitude -(Supported Sink <= 165MHz) : D0-

Results

| Spec Range            | Meas Value | Upper Margin | Lower Margin | Result |
|-----------------------|------------|--------------|--------------|--------|
| 2.700V < VL < 2.900V; | 2.8332V    | 66.81mV      | 133.2mV      | Pass   |

Waveform/Plot



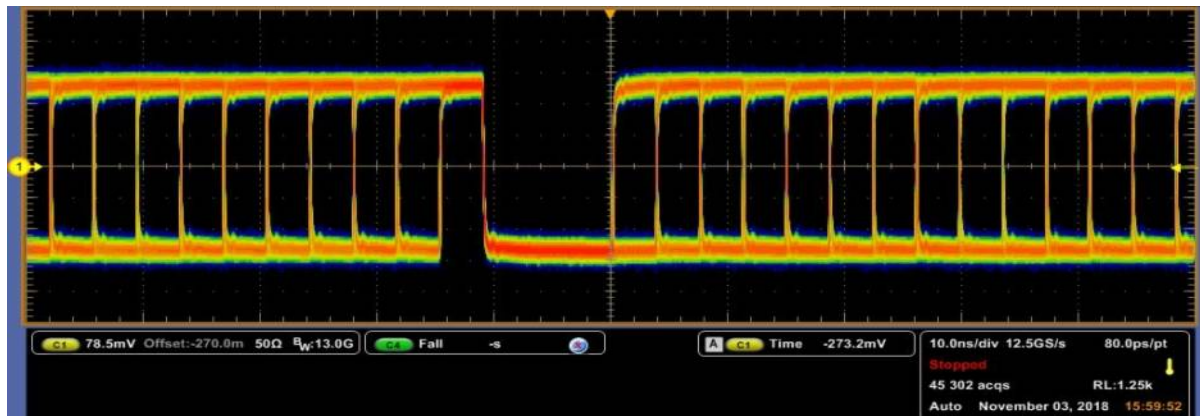


▶ 7-2 : Source Low Amplitude +(Supported Sink <= 165MHz) : D1+

▶ Results

| Spec Range            | Meas Value | Upper Margin | Lower Margin | Result |
|-----------------------|------------|--------------|--------------|--------|
| 2.700V < VL < 2.900V; | 2.8181V    | 81.95mV      | 118.1mV      | Pass   |

▶ Waveform/Plot

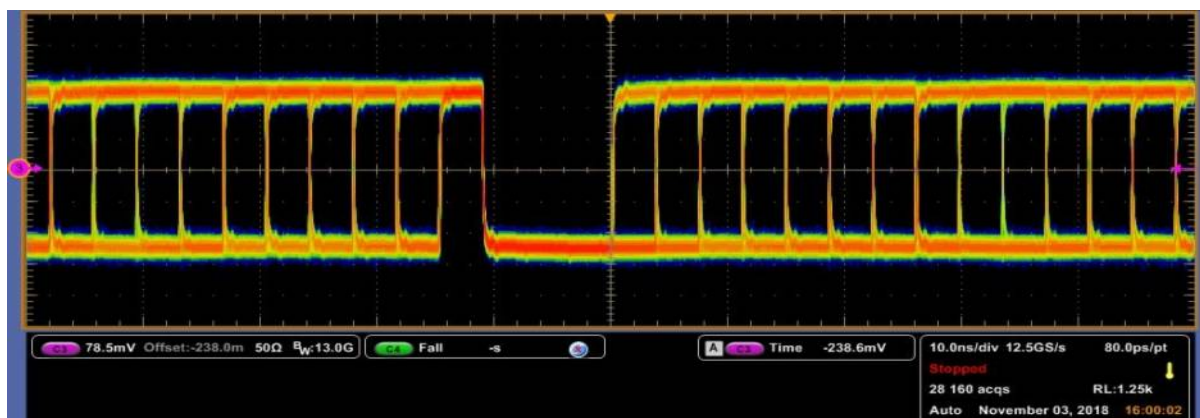


▶ 7-2 : Source Low Amplitude +(Supported Sink <= 165MHz) : D2+

▶ Results

| Spec Range            | Meas Value | Upper Margin | Lower Margin | Result |
|-----------------------|------------|--------------|--------------|--------|
| 2.700V < VL < 2.900V; | 2.8626V    | 37.39mV      | 162.6mV      | Pass   |

▶ Waveform/Plot



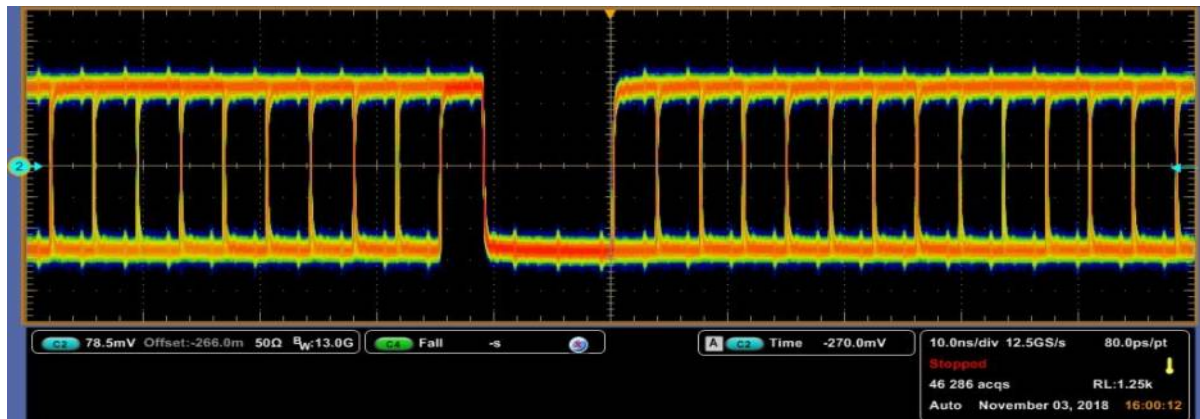
▶ 7-2 : Source Low Amplitude -(Supported Sink <= 165MHz) : D1-

▶ Results

| Spec Range            | Meas Value | Upper Margin | Lower Margin | Result |
|-----------------------|------------|--------------|--------------|--------|
| 2.700V < VL < 2.900V; | 2.8220V    | 77.95mV      | 122.0mV      | Pass   |

▶ Waveform/Plot



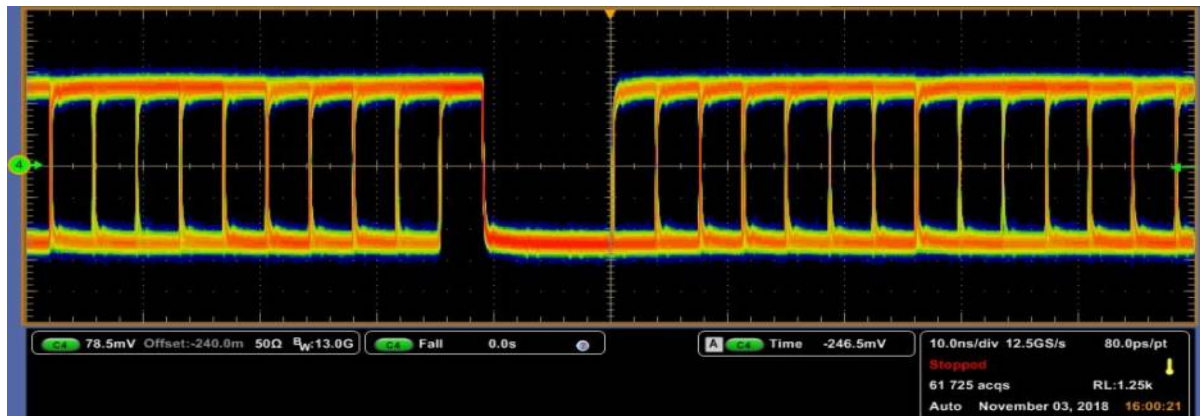


► 7-2 : Source Low Amplitude -(Supported Sink <= 165MHz) : D2-

► Results

| Spec Range            | Meas Value | Upper Margin | Lower Margin | Result |
|-----------------------|------------|--------------|--------------|--------|
| 2.700V < VL < 2.900V; | 2.8622V    | 37.82mV      | 162.2mV      | Pass   |

► Waveform/Plot

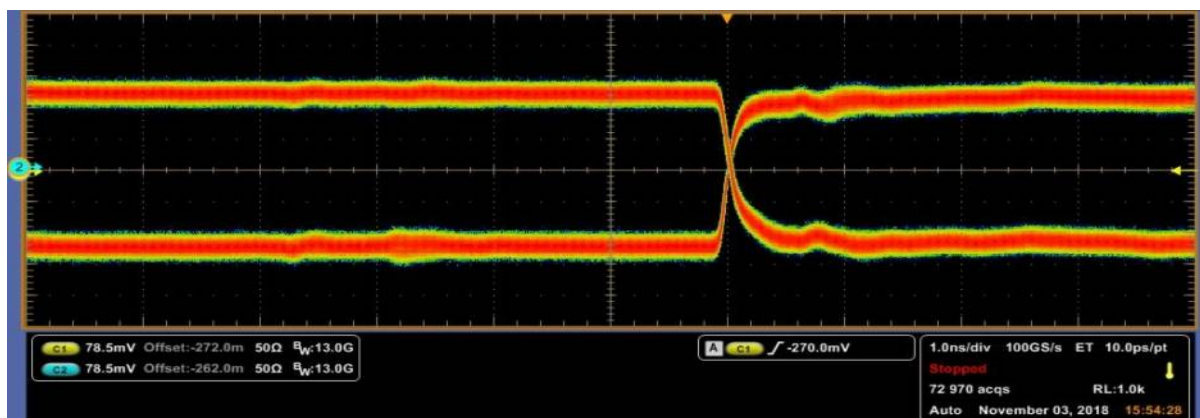


► 7-7 : Source Intra-Pair Skew : CK

► Results

| Spec Range        | Meas Value | Tbit     | Margin    | Result |
|-------------------|------------|----------|-----------|--------|
| Skew < 0.15*Tbit; | 0.008*Tbit | 3.7037ns | 0.14*Tbit | Pass   |

► Waveform/Plot

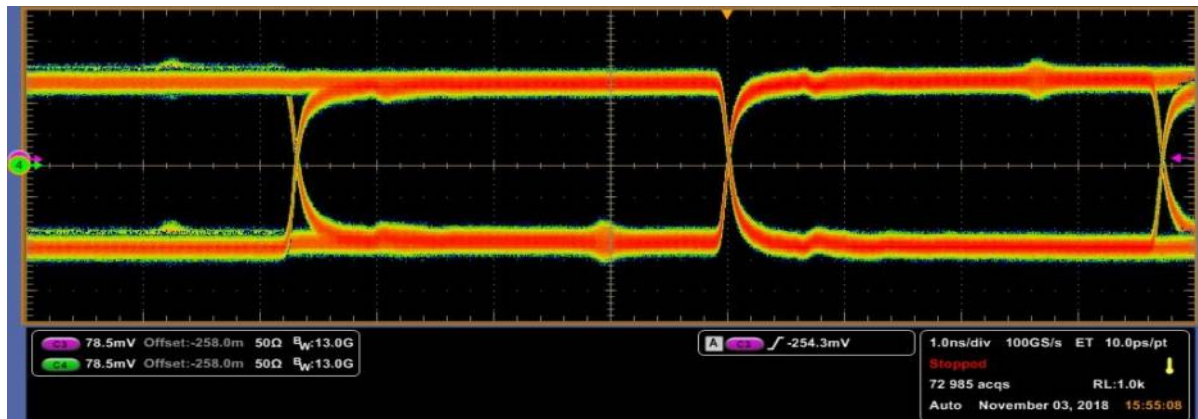


► 7-7 : Source Intra-Pair Skew : D0

► Results

| Spec Range        | Meas Value | Tbit     | Margin    | Result |
|-------------------|------------|----------|-----------|--------|
| Skew < 0.15*Tbit; | 0.005*Tbit | 3.7037ns | 0.14*Tbit | Pass   |

► Waveform/Plot

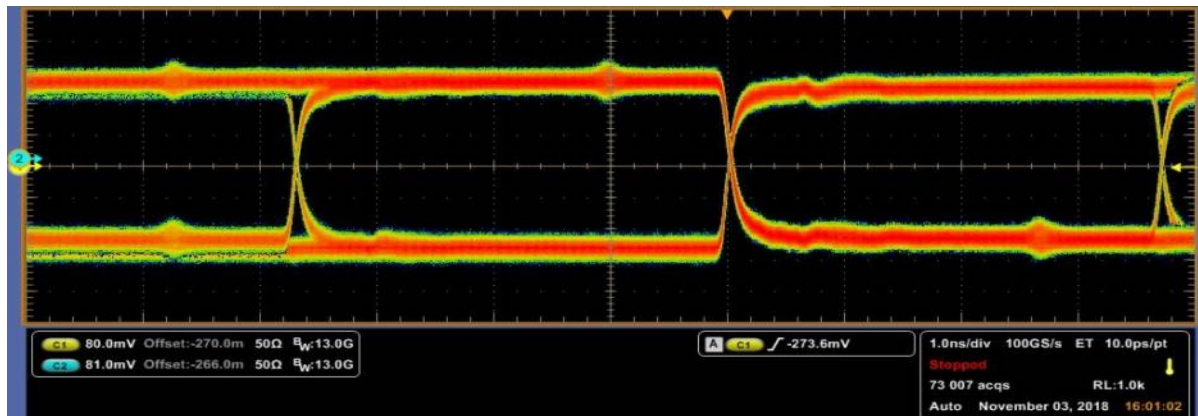


#### 7-7 : Source Intra-Pair Skew : D1

##### Results

| Spec Range        | Meas Value | Tbit     | Margin    | Result |
|-------------------|------------|----------|-----------|--------|
| Skew < 0.15*Tbit; | 0.005*Tbit | 3.7037ns | 0.14*Tbit | Pass   |

##### Waveform/Plot

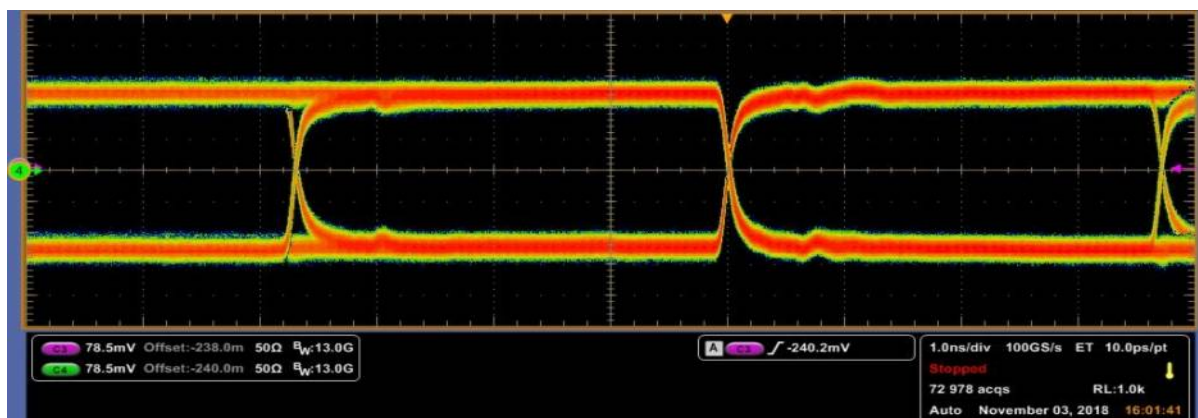


#### 7-7 : Source Intra-Pair Skew : D2

##### Results

| Spec Range        | Meas Value | Tbit     | Margin    | Result |
|-------------------|------------|----------|-----------|--------|
| Skew < 0.15*Tbit; | 0.003*Tbit | 3.7037ns | 0.15*Tbit | Pass   |

##### Waveform/Plot



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