

## 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) 74.1757  
Resolution 720P\_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     | <a href="#">7-9 : Source Clock Jitter</a>    | CK      | Clock Jitter < 0.25*Tbit; | 0.052*Tbit   | Pass   |
| 2     | <a href="#">7-10 : Source Eye Diagram</a>    | CK - D0 | Data Jitter < 0.3*Tbit;   | 0.06*Tbit    | Pass   |
| 3     | <a href="#">7-10 : Source Eye Diagram</a>    | CK - D1 | Data Jitter < 0.3*Tbit;   | 0.07*Tbit    | Pass   |
| 4     | <a href="#">7-10 : Source Eye Diagram</a>    | CK - D2 | Data Jitter < 0.3*Tbit;   | 0.08*Tbit    | Pass   |
| 5     | <a href="#">7-6 : Source Inter-Pair Skew</a> | D0 - D1 | Skew < 0.2*TPixel;        | 0.001*TPixel | Pass   |
| 6     | <a href="#">7-6 : Source Inter-Pair Skew</a> | D1 - D2 | Skew < 0.2*TPixel;        | 0.001*TPixel | Pass   |
| 7     | <a href="#">7-6 : Source Inter-Pair Skew</a> | D2 - D0 | Skew < 0.2*TPixel;        | 0.002*TPixel | Pass   |
| 8     | <a href="#">7-4 : Source Rise Time</a>       | CK      | 75.00ps < TRISE;          | 211.87ps     | Pass   |
| 9     | <a href="#">7-4 : Source Rise Time</a>       | D0      | 75.00ps < TRISE;          | 184.92ps     | Pass   |
| 10    | <a href="#">7-4 : Source Rise Time</a>       | D1      | 75.00ps < TRISE;          | 182.48ps     | Pass   |
| 11    | <a href="#">7-4 : Source Rise Time</a>       | D2      | 75.00ps < TRISE;          | 167.93ps     | Pass   |
| 12    | <a href="#">7-4 : Source Fall Time</a>       | CK      | 75.00ps < TFALL;          | 197.68ps     | Pass   |
| 13    | <a href="#">7-4 : Source Fall Time</a>       | D0      | 75.00ps < TFALL;          | 180.08ps     | Pass   |
| 14    | <a href="#">7-4 : Source Fall Time</a>       | D1      | 75.00ps < TFALL;          | 171.35ps     | Pass   |
| 15    | <a href="#">7-4 : Source Fall Time</a>       | D2      | 75.00ps < TFALL;          | 151.31ps     | Pass   |
| 16    | <a href="#">7-8 : Max Duty Cycle</a>         | CK      | Max Duty Cycle < 60.0%;   | 50.44%       | Pass   |
| 17    | <a href="#">7-8 : Min Duty Cycle</a>         | CK      | 40.0% < Min Duty Cycle;   | 49.55%       | Pass   |
| 18    | <a href="#">7-7 : Source Intra-Pair Skew</a> | CK      | Skew < 0.15*Tbit;         | 0.0*Tbit     | Pass   |
| 19    | <a href="#">7-7 : Source Intra-Pair Skew</a> | D0      | Skew < 0.15*Tbit;         | 0.0*Tbit     | Pass   |
| 20    | <a href="#">7-7 : Source Intra-Pair Skew</a> | D1      | Skew < 0.15*Tbit;         | 0.0*Tbit     | Pass   |
| 21    | <a href="#">7-7 : Source Intra-Pair Skew</a> | D2      | Skew < 0.15*Tbit;         | 0.006*Tbit   | Pass   |

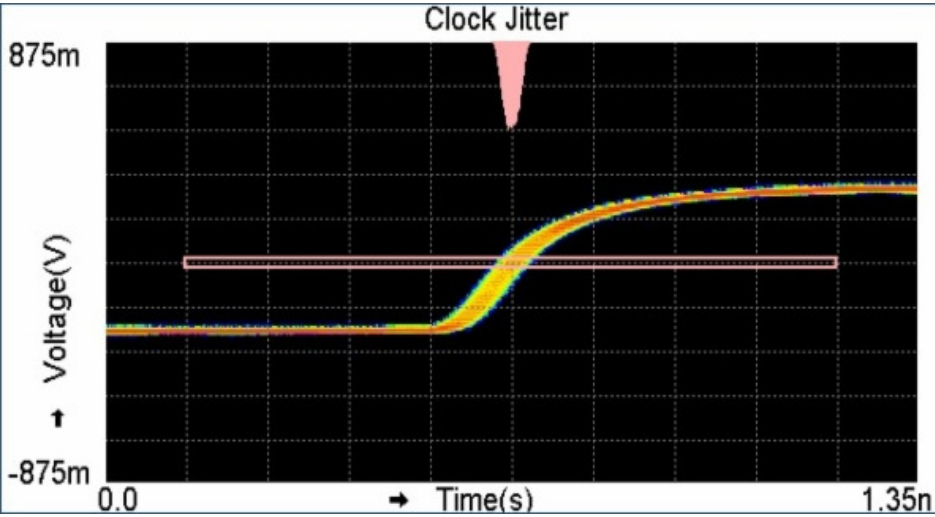
### Detailed Results

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

##### Results

| Spec Range                | Meas Value | Tbit     | Vs       | Margin   | Record Length | Result |
|---------------------------|------------|----------|----------|----------|---------------|--------|
| Clock Jitter < 0.25*Tbit; | 0.052*Tbit | 1.3481ns | 530.40mV | 0.2*Tbit | 50.000M       | Pass   |

##### Waveform/Plot



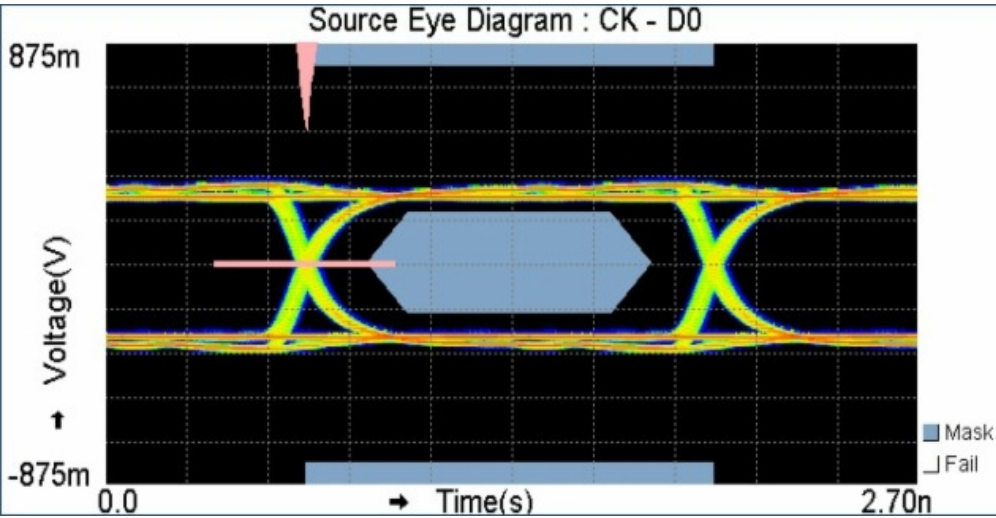
| Results |             |
|---------|-------------|
| Result  | <b>PASS</b> |
| Pk-Pk   | 70.8ps      |
| Vswing  | 530.40mV    |
| Tbit    | 1.3481ns    |

▶ 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; | 0.06*Tbit  | 1.3481ns | 552.12mV | 239.2m*Tbit | 50.000M       | 0         | Pass   |

▶ Waveform/Plot



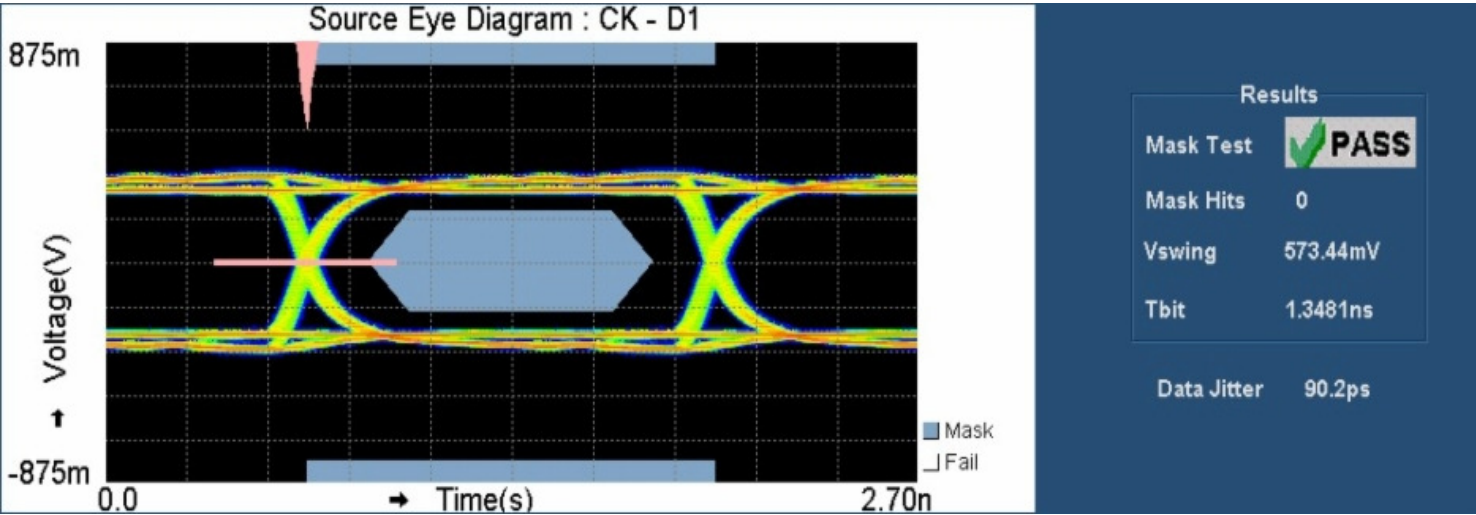
| Results     |             |
|-------------|-------------|
| Mask Test   | <b>PASS</b> |
| Mask Hits   | 0           |
| Vswing      | 552.12mV    |
| Tbit        | 1.3481ns    |
| Data Jitter | 81.9ps      |

▶ 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; | 0.07*Tbit  | 1.3481ns | 573.44mV | 233.1m*Tbit | 50.000M       | 0         | Pass   |

▶ Waveform/Plot

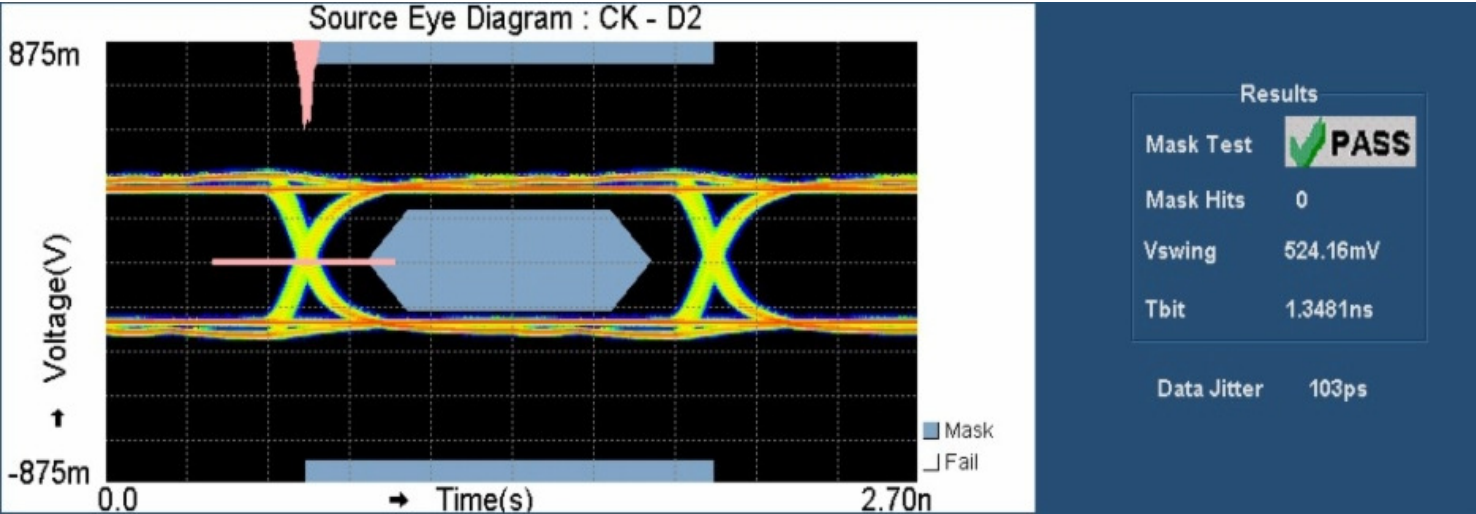


▶ 7-10 : Source Eye Diagram : CK - D2

▶ Results

| Spec Range              | Meas Value | Tbit     | Vs       | Margin      | Record Length | Mask Hits | Result |
|-------------------------|------------|----------|----------|-------------|---------------|-----------|--------|
| Data Jitter < 0.3*Tbit; | 0.08*Tbit  | 1.3481ns | 524.16mV | 223.4m*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; | 0.001*TPixel | 1.3481ns | = 552.12mV, Vs = 573.44mV | 14.451p | 18.297p | 15.980p | 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 | 1.3481ns | = 573.44mV, Vs = 524.16mV | 5.0000p | 10.714p | 8.8504p | Pass   |

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

▶ Results

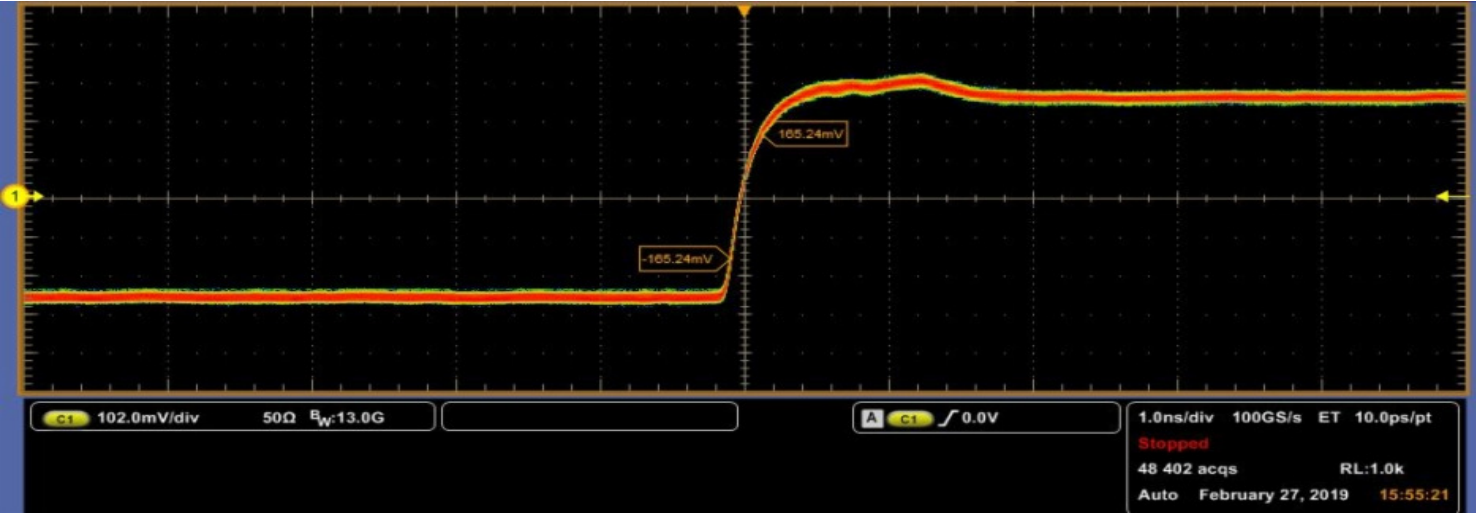
| Spec Range         | Meas Value   | Tbit     | Vs(D2 - D0)               | Min     | Max     | Avg     | Result |
|--------------------|--------------|----------|---------------------------|---------|---------|---------|--------|
| Skew < 0.2*TPixel; | 0.002*TPixel | 1.3481ns | = 524.16mV, Vs = 552.12mV | 21.978p | 28.000p | 25.406p | Pass   |

▶ 7-4 : Source Rise Time : CK

Results

| Spec Range       | Meas Value | Tbit     | Vs       | Margin  | Result |
|------------------|------------|----------|----------|---------|--------|
| 75.00ps < TRISE; | 211.87ps   | 1.3481ns | 550.80mV | 136.9ps | Pass   |

Waveform/Plot

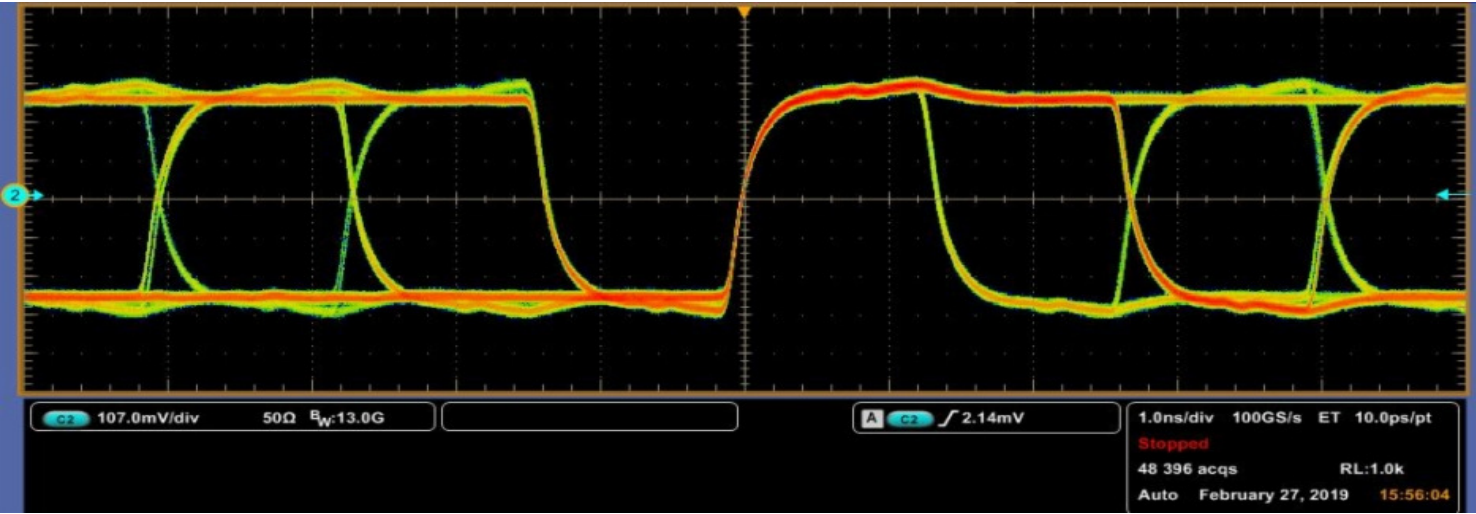


7-4 : Source Rise Time : D0

Results

| Spec Range       | Meas Value | Tbit     | Vs       | Margin  | Result |
|------------------|------------|----------|----------|---------|--------|
| 75.00ps < TRISE; | 184.92ps   | 1.3481ns | 552.12mV | 109.9ps | Pass   |

Waveform/Plot

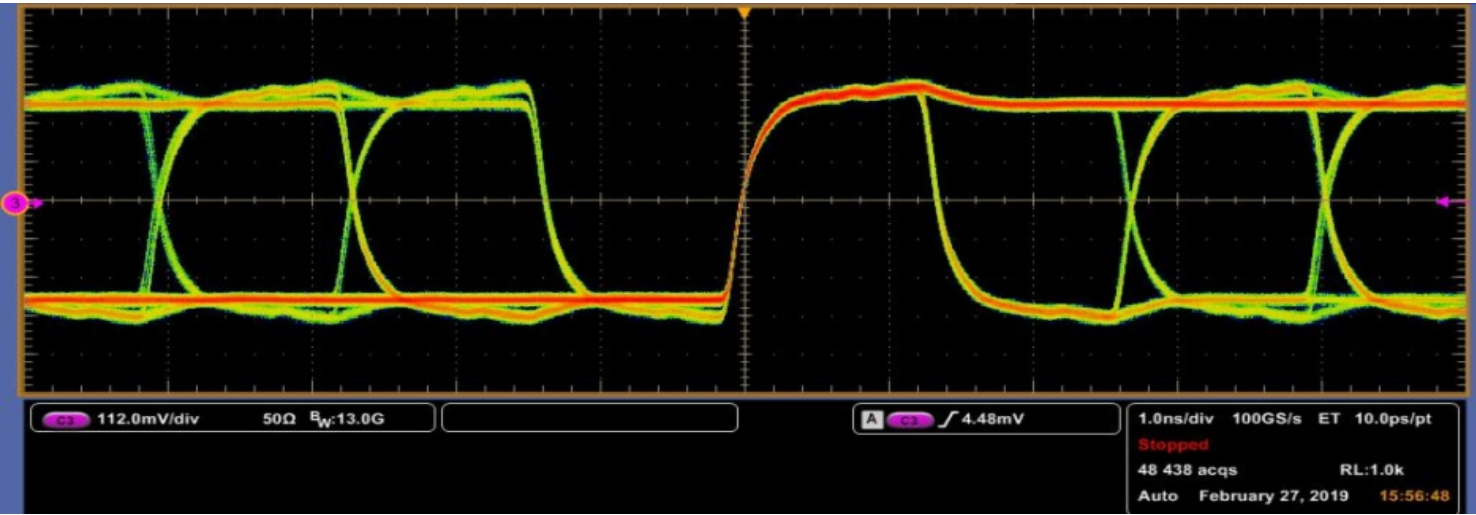


7-4 : Source Rise Time : D1

Results

| Spec Range       | Meas Value | Tbit     | Vs       | Margin  | Result |
|------------------|------------|----------|----------|---------|--------|
| 75.00ps < TRISE; | 182.48ps   | 1.3481ns | 573.44mV | 107.5ps | Pass   |

Waveform/Plot

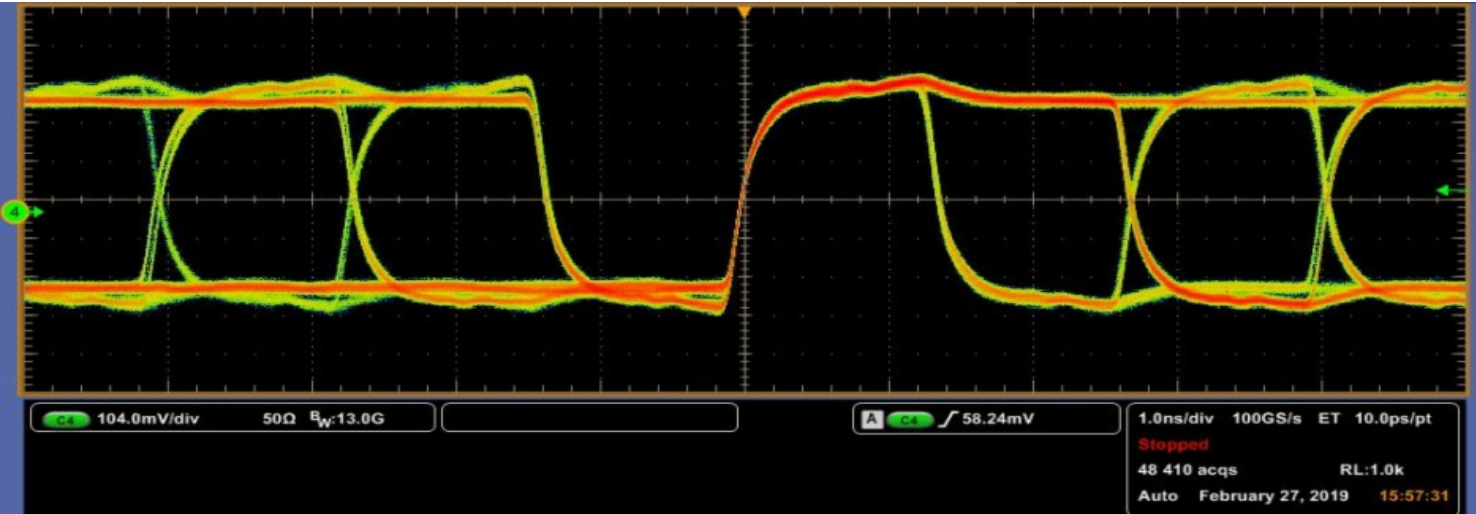


▶ 7-4 : Source Rise Time : D2

▶ Results

| Spec Range       | Meas Value | Tbit     | Vs       | Margin  | Result |
|------------------|------------|----------|----------|---------|--------|
| 75.00ps < TRISE; | 167.93ps   | 1.3481ns | 503.36mV | 92.93ps | Pass   |

▶ Waveform/Plot

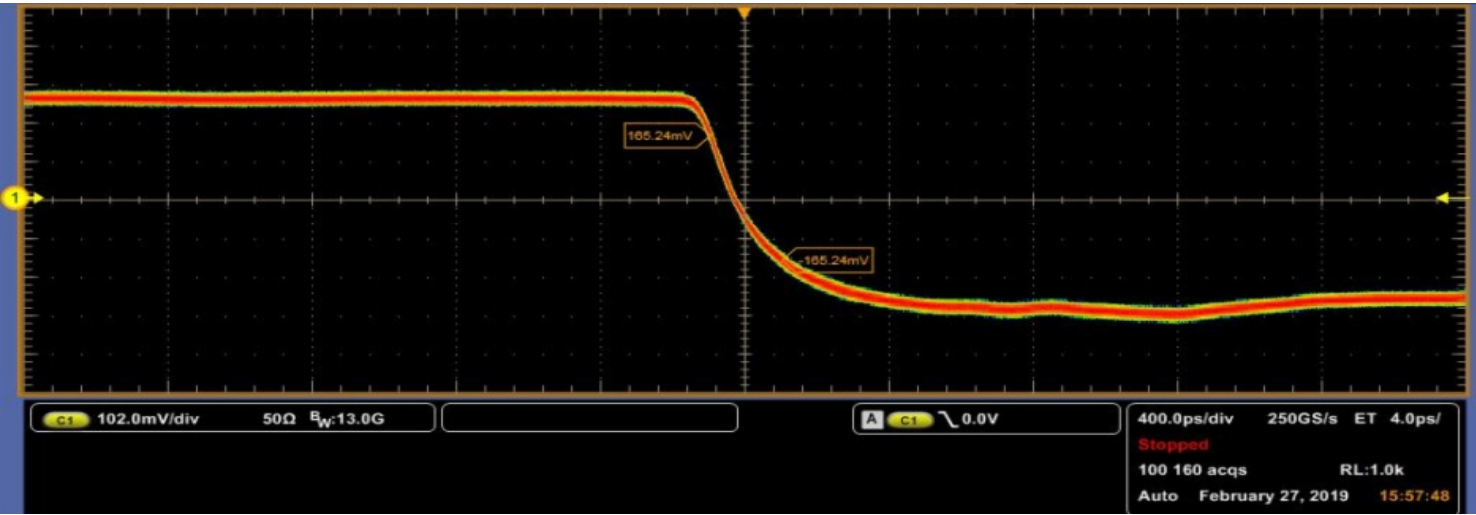


▶ 7-4 : Source Fall Time : CK

▶ Results

| Spec Range       | Meas Value | Tbit     | Vs       | Margin  | Result |
|------------------|------------|----------|----------|---------|--------|
| 75.00ps < TFALL; | 197.68ps   | 1.3481ns | 550.80mV | 122.7ps | Pass   |

▶ Waveform/Plot

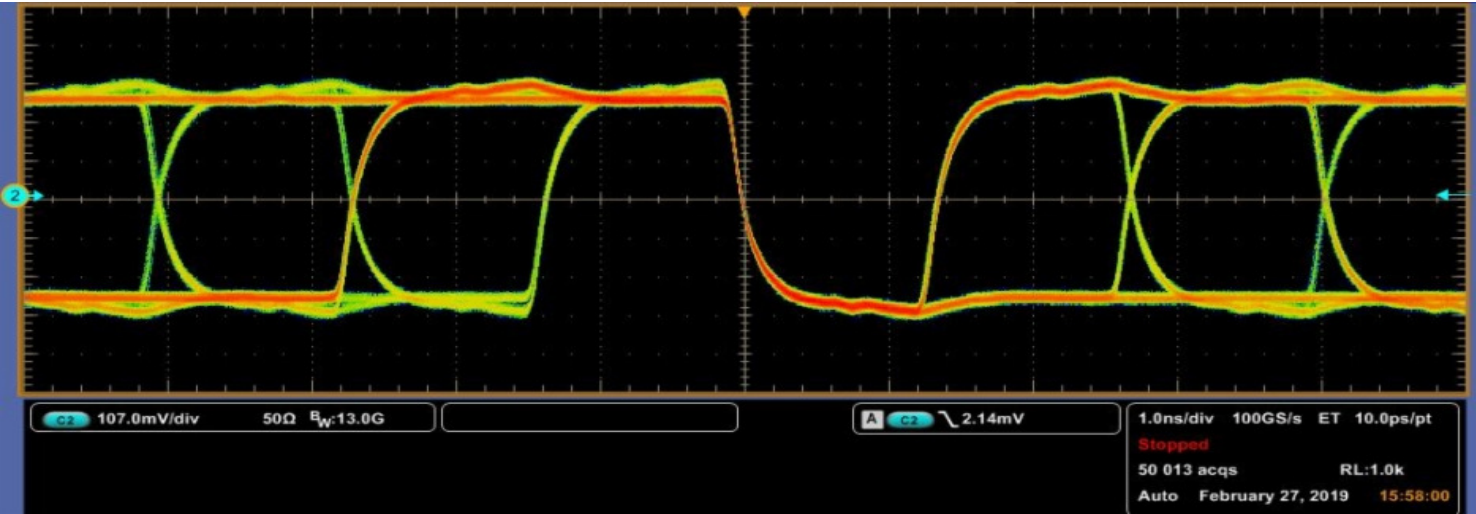


7-4 : Source Fall Time : D0

Results

| Spec Range       | Meas Value | Tbit     | Vs       | Margin  | Result |
|------------------|------------|----------|----------|---------|--------|
| 75.00ps < TFALL; | 180.08ps   | 1.3481ns | 552.12mV | 105.1ps | Pass   |

Waveform/Plot

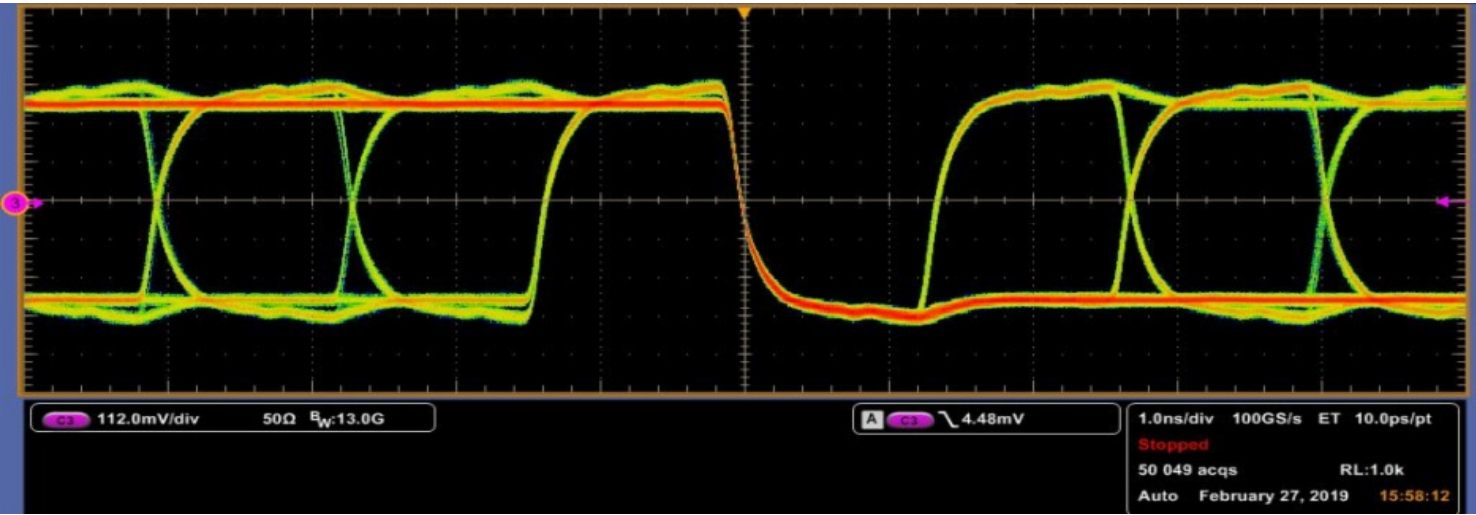


7-4 : Source Fall Time : D1

Results

| Spec Range       | Meas Value | Tbit     | Vs       | Margin  | Result |
|------------------|------------|----------|----------|---------|--------|
| 75.00ps < TFALL; | 171.35ps   | 1.3481ns | 573.44mV | 96.35ps | Pass   |

Waveform/Plot

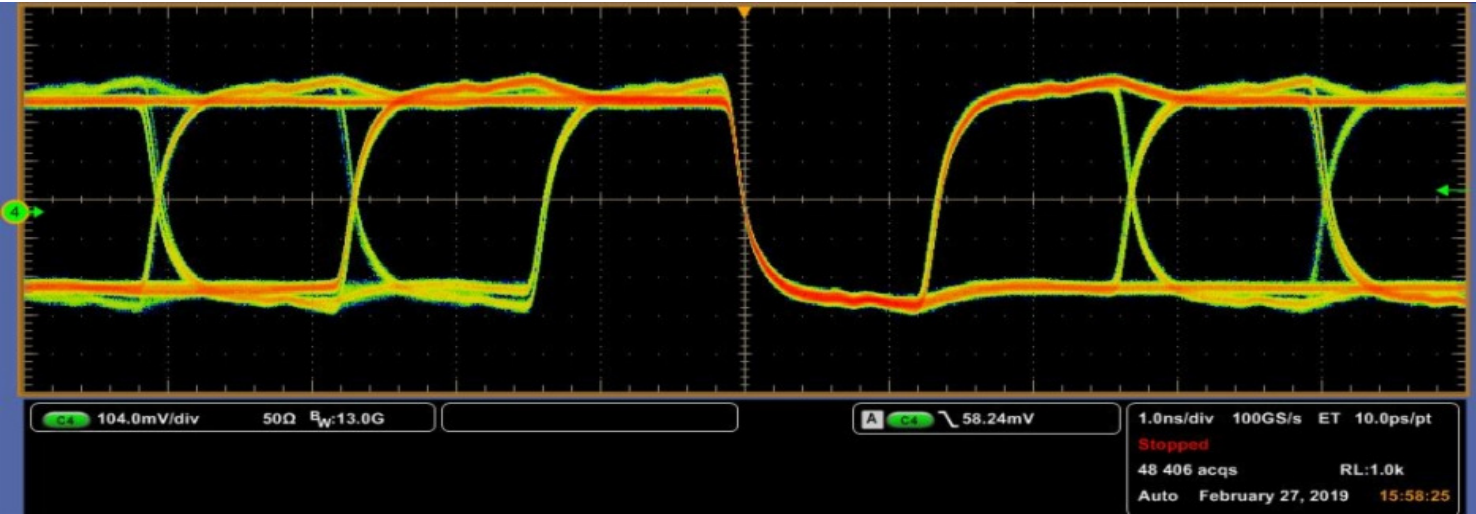


7-4 : Source Fall Time : D2

Results

| Spec Range       | Meas Value | Tbit     | Vs       | Margin  | Result |
|------------------|------------|----------|----------|---------|--------|
| 75.00ps < TFALL; | 151.31ps   | 1.3481ns | 503.36mV | 76.31ps | Pass   |

Waveform/Plot



7-8 : Max Duty Cycle : CK

Results

| Spec Range              | Meas Value | Tbit     | Margin | Result |
|-------------------------|------------|----------|--------|--------|
| Max Duty Cycle < 60.0%; | 50.44%     | 1.3481ns | 9.56%  | Pass   |

Waveform/Plot



7-8 : Min Duty Cycle : CK

Results

| Spec Range              | Meas Value | Tbit     | Margin | Result |
|-------------------------|------------|----------|--------|--------|
| 40.0% < Min Duty Cycle; | 49.55%     | 1.3481ns | 9.55%  | Pass   |

Waveform/Plot

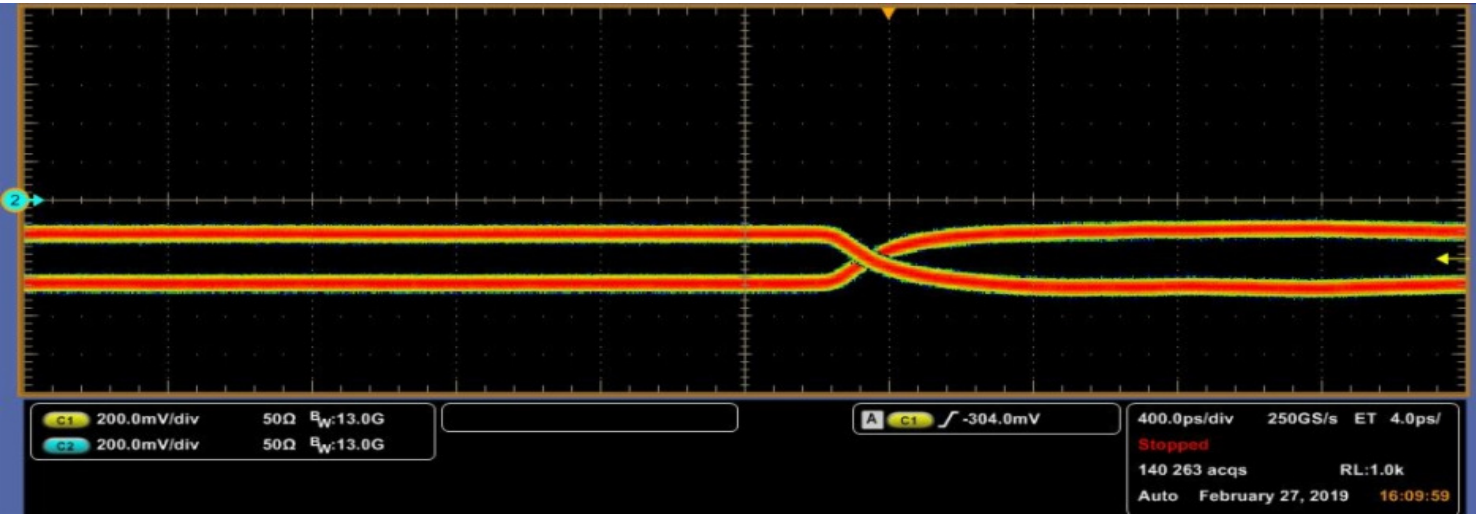


7-7 : Source Intra-Pair Skew : CK

Results

| Spec Range        | Meas Value | Tbit     | Margin    | Result |
|-------------------|------------|----------|-----------|--------|
| Skew < 0.15*Tbit; | 0.0*Tbit   | 1.3481ns | 0.15*Tbit | Pass   |

Waveform/Plot

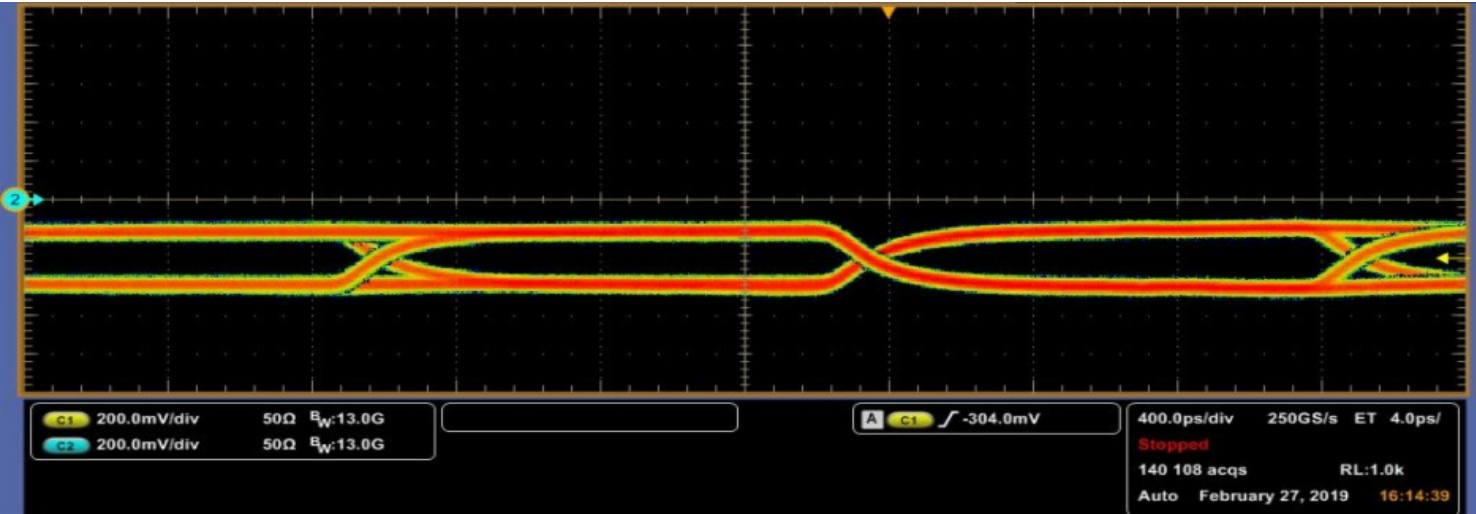


7-7 : Source Intra-Pair Skew : D0

Results

| Spec Range        | Meas Value | Tbit     | Margin    | Result |
|-------------------|------------|----------|-----------|--------|
| Skew < 0.15*Tbit; | 0.0*Tbit   | 1.3481ns | 0.15*Tbit | Pass   |

Waveform/Plot



7-7 : Source Intra-Pair Skew : D1

Results

| Spec Range        | Meas Value | Tbit     | Margin    | Result |
|-------------------|------------|----------|-----------|--------|
| Skew < 0.15*Tbit; | 0.0*Tbit   | 1.3481ns | 0.15*Tbit | Pass   |

Waveform/Plot

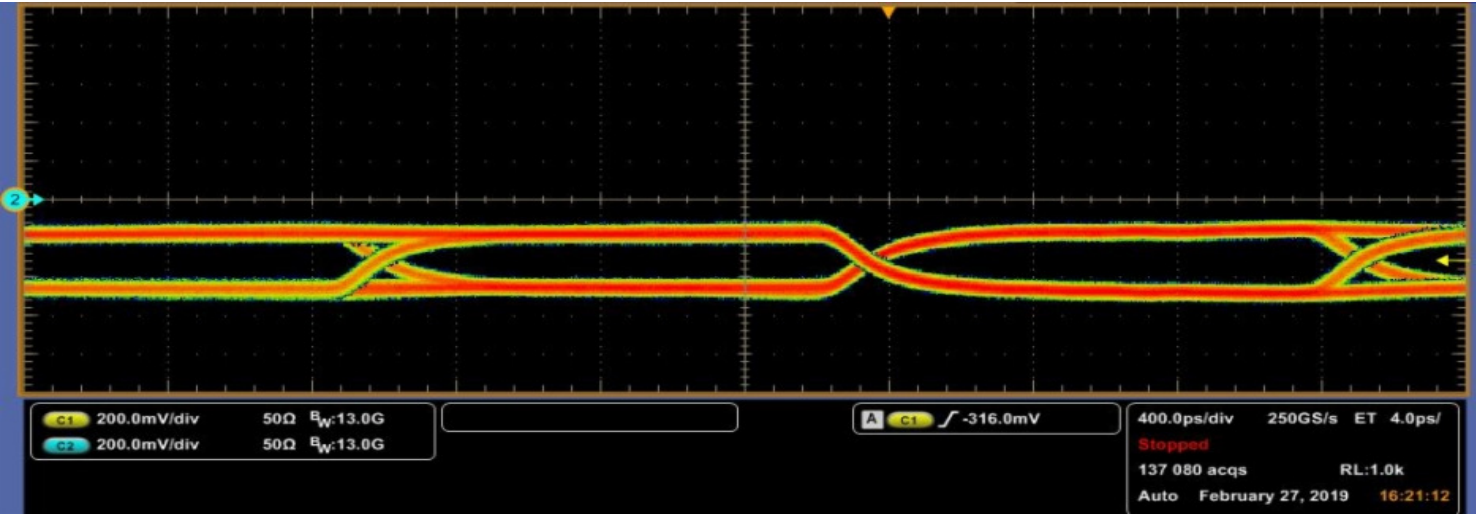


▶ 7-7 : Source Intra-Pair Skew : D2

▶ Results

| Spec Range        | Meas Value | Tbit     | Margin    | Result |
|-------------------|------------|----------|-----------|--------|
| Skew < 0.15*Tbit; | 0.006*Tbit | 1.3481ns | 0.14*Tbit | Pass   |

▶ Waveform/Plot



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