Simplay Labs™

# SL–8800–M2X MHL Adapter for HDCP 1.X Compliance Testing

## User Guide

Simplay-UG-1008-A

September 2014

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# 1. Overview

This document describes the features and operation of the Simplay Labs, LLC™ (SimplayLabs) SL-8800–M2X MHL Adapter when used together with the SL-8800 HDCP 1.X Protocol Analyzer for HDCP compliance testing of devices compliant with the Mobile High-Definition Link (MHL®) Specification.

The SL-8800–M2X MHL Adapter integrates with the SL-8800 HDCP 1.X Protocol Analyzer, and is not designed for standalone operation.

## 1.1. How to Use this Document

This document provides details on testing setup and results verification when using the SL-8800–M2X MHL Adapter. The purpose of the testing is to validate HDCP 1.X conformance for source and sink devices that conform to the MHL Specification.

This document contains:

- SL-8800–M2X MHL Adapter interface features
- Test operation including how to connect the hardware components
- Sample report file of the SL-8800 HDCP 1.X Protocol Analyzer

**Note:** Operation of the SL-8800–M2X MHL Adapter is possible only after you perform the installation and setup procedures that are required for the SL-8800 Test Equipment (TE) and the SL-8800 HDCP 1.X Protocol Analyzer software.

The SL-8800 TE is the hardware of the SL-8800 HDCP 1.X Protocol Analyzer.

## 1.2. System Requirements

For details about the system requirements for testing setup, see the System Requirements section in *SL-8800 HDCP Protocol Analyzer User Guide*.

## 1.3. SL–8800–M2X MHL Adapter

Figure 1.1 shows the SL–8800–M2X MHL Adapter interface.

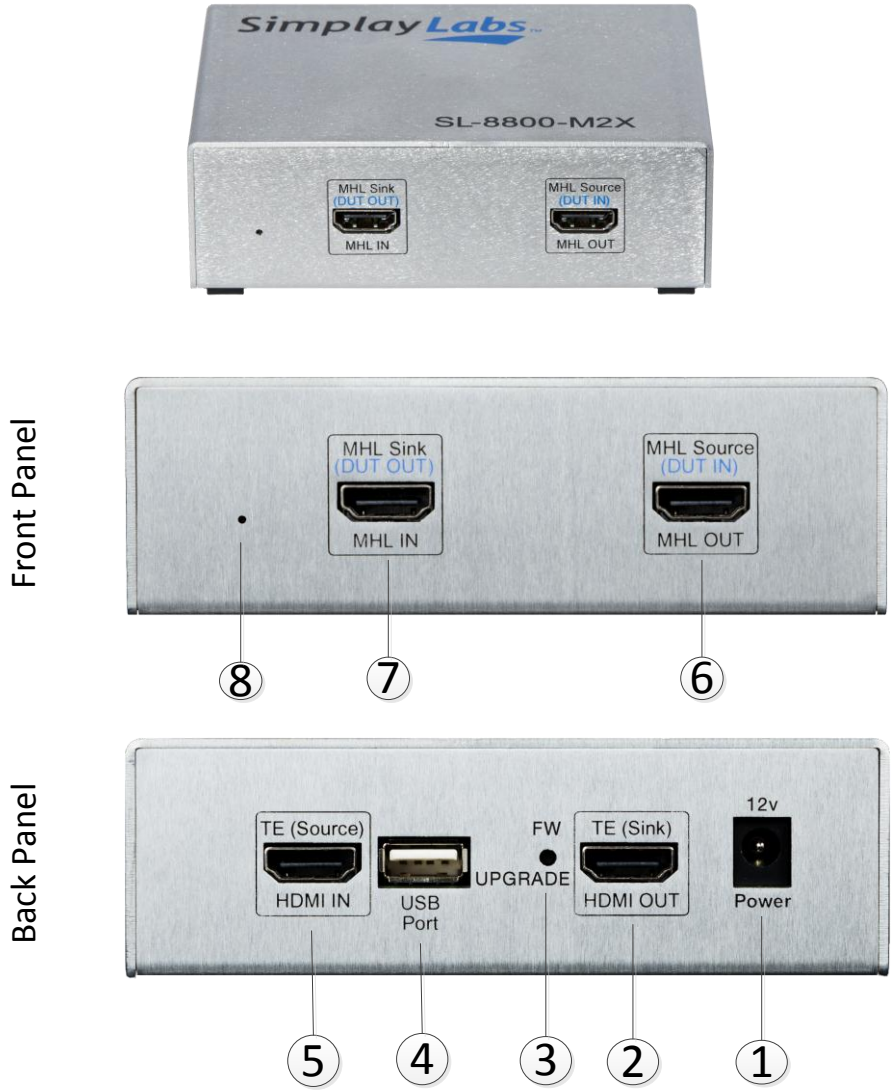



**Figure 1.1. SL–8800–M2X MHL Adapter Interface**

**Table 1.1. SL–8800–M2X MHL Adapter Interface Items**

| Item | Label | Description |
|---|---|---|
| 1 | POWER | 12 V power receptacle.* |
| 2 | HDMI OUT | Connect to HDMI IN (Pseudo-Sink) of the SL–8800 TE. |
| 3 | FW UPDATE | Press and hold the button with power-on to enter firmware update mode. |
| 4 | USB Port | Connect to PC, used to update the firmware of the SL–8800–M2X MHL Adapter. |
| 5 | HDMI IN | Connect to HDMI OUT (Pseudo-Source) of the SL–8800 TE. |
| 6 | MHL OUT | Connect to MHL input of the MHL Sink Device under Testing (DUT). |
| 7 | MHL IN | Connect to MHL output of the MHL Source Device under Testing (DUT). |
| 8 | Power Light | Indication of the power status.<br>When powered ON, the light is green. |

***Note:** Restart the SL–8800–M2X MHL Adapter if the SL–8800 TE power is turned Off and then On.

# 2. Transmitter Test for Source DUT

This section describes the test items, test operation guide, and sample report file.

## 2.1. Test Items

Table 2.1 lists the test items for source DUT testing, when the SL–8800 TE emulates a receiver device.

**Table 2.1. 1A. Downstream Procedure with Receiver**

| Item ID | Test Description | Check Video |
|---|---|---|
| 1A-01 | Regular procedure: With HDMI-capable Receiver | Yes |
| 1A-02a | Regular procedure: HDCP_HPD after writing Aksv<br>Source_CP-EDID_HPD = No, Physical HPD line | Yes |
| 1A-02b | Regular procedure: HDCP_HPD after writing Aksv<br>Source_CP-EDID_HPD = Yes, Physical HPD line | Yes |
| 1A-02c | Regular procedure: HDCP_HPD after writing Aksv<br>Source_CP-EDID_HPD = Yes, CP-EDID HPD signal | Yes |
| 1A-03a | Regular procedure: HDCP_HPD after starting third part of authentication<br>Source_CP-EDID_HPD = No, Physical HPD line | Yes |
| 1A-03b | Regular procedure: HDCP_HPD after starting third part of authentication<br>Source_CP-EDID_HPD = Yes, Physical HPD line | Yes |
| 1A-03c | Regular procedure: HDCP_HPD after starting third part of authentication<br>Source_CP-EDID_HPD = Yes, CP-EDID HPD signal | Yes |
| 1A-04 | Irregular procedure: (First Part of Authentication) HDCP port access | No |
| 1A-05 | Irregular procedure: (First Part of Authentication) Verify Bksv | No |
| 1A-06 | Irregular procedure: (First Part of Authentication) Verify R0' | No |
| 1A-07 | Irregular procedure: (Third Part of Authentication) Return of incorrect Ri' | No |
| 1A-07a | Irregular procedure: (Third Part of Authentication) Verify not return Ri’ | No |
| 1A-08 | Irregular procedure: SRM | No |

Table 2.2 lists the test items for source DUT testing, when the SL–8800 TE emulates a repeater device.

**Table 2.2. 1B. Downstream Procedure with Repeater**

| Item ID | Test Description | Check Video |
|---|---|---|
| 1B-01a | Regular Procedure – With Repeater<br>DEVICE_COUNT!=0 | Yes |
| 1B-01b | Regular Procedure – With Repeater<br>DEVICE_COUNT=0 | No |
| 1B-02a | Regular procedure: HDCP_HPD after reading R0'<br>Source_CP-EDID_HPD = No, Physical HPD line | Yes |
| 1B-02b | Regular procedure: HDCP_HPD after reading R0'<br>Source_CP-EDID_HPD = Yes, Physical HPD line | Yes |
| 1B-02c | Regular procedure: HDCP_HPD after reading R0'<br>Source_CP-EDID_HPD = Yes, CP-EDID HPD signal | Yes |
| 1B-03 | Irregular procedure: (Second Part of Authentication) Timeout of KSV list READY | No |
| 1B-04a | Irregular procedure: (Second Part of Authentication) Verify V'<br>DEVICE_COUNT!=0 | No |
| 1B-04b | Irregular procedure: (Second Part of Authentication) Verify V'<br>DEVICE_COUNT=0 | No |
| 1B-05 | Irregular procedure: (Second Part of Authentication) MAX_DEVS_EXCEEDED | No |
| 1B-06 | Irregular procedure: (Second Part of Authentication)<br>MAX_CASCADE_EXCEEDED | No |

## 2.2. Test Operation

### 2.2.1. Connection Setup for Source DUT Testing

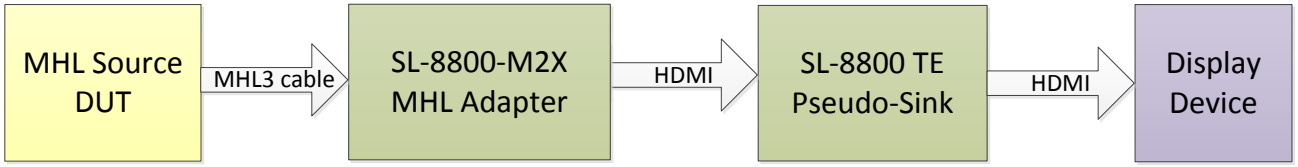



**Figure 2.1. Connection Setup for MHL Source DUT Testing**

Figure 2.1 shows the connection between the MHL Source DUT, SL–8800–M2X MHL Adapter (see Figure 1.1 on page 4), SL–8800 TE Pseudo-Sink, and Display Device. Follow these steps to setup the connection and start testing.

1. Power on the SL–8800 TE Pseudo-Sink and connect it to the PC using the USB cable.
2. Power on the SL–8800–M2X MHL Adapter.
3. Turn on the MHL Source DUT.
4. Connect the MHL output port of the MHL Source DUT to the MHL IN connector of the SL–8800–M2X MHL Adapter.
5. Connect the HDMI OUT connector of the SL–8800–M2X MHL Adapter to the HDMI IN connector of the SL–8800 TE Pseudo-Sink.
6. Connect the HDMI OUT connector of the SL–8800 TE Pseudo-Sink to Display Device.
7. Make sure that the source generates 480P @ 60 Hz video.

   **Note:** The TE only supports 480P @ 60 Hz.

8. Double-click the HDCP icon on PC desktop. The main window of the SL–8800 HDCP 1.X Protocol Analyzer GUI appears. Expand the Transmitter Test field.
9. In the GUI settings, select MHL from the drop-down list as DEVICE item.
10. Click Set LogPath to change the log directory to a desired location if needed.
11. Select test items. Click Start Test button. The verification process begins.

### 2.2.2. Verification Test of the Authentication Procedure

1. Wait for about 30 seconds for each test item to complete.
2. If Check Video is Yes and the authentication process has completed successfully, the Select Output Video Option dialog box pops up to let you select the output video pattern that matches with the one on the Display Device. If Check Video is No, a dialog box pops up to let you decide whether to continue next item by selecting either Continue or Abort.

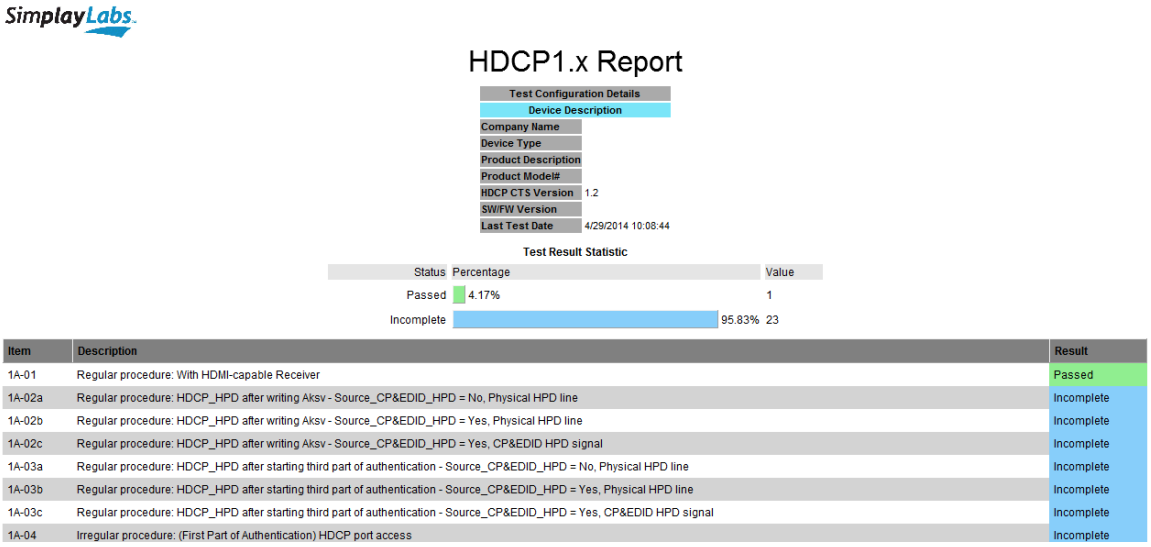
   **Note:** The GUI does not generate a report, rather only txt file for each test item, if Abort is selected.

3. Check the test results according to GUI or the report file.

   **Notes:**
   1. There is no need to unplug and plugin the HDMI cable during the test process. The SL–8800 TE can emulate HPD process.
   2. For the 1A side, the SL–8800 TE Pseudo-Sink emulates the receiver functions.
   3. For the 1B side, the SL–8800 TE Pseudo-Sink emulates the repeater functions.

## 2.3. Report File

Figure 2.2 shows a sample report file for Source DUT testing results .



HDCP1.x Report

| Test Configuration Details | |
|---|---|
| Device Description | |
| Company Name | |
| Device Type | |
| Product Description | |
| Product Model# | |
| HDCP CTS Version | 1.2 |
| SW/FW Version | |
| Last Test Date | 4/29/2014 10:08:44 |

Test Result Statistic

| Status | Percentage | Value |
|---|---|---|
| Passed | 4.17% | 1 |
| Incomplete | 95.83% | 23 |

| Item | Description | Result |
|---|---|---|
| 1A-01 | Regular procedure: With HDMI-capable Receiver | Passed |
| 1A-02a | Regular procedure: HDCP_HPD after writing Aksv - Source_CP&EDID_HPD = No, Physical HPD line | Incomplete |
| 1A-02b | Regular procedure: HDCP_HPD after writing Aksv - Source_CP&EDID_HPD = Yes, Physical HPD line | Incomplete |
| 1A-02c | Regular procedure: HDCP_HPD after writing Aksv - Source_CP&EDID_HPD = Yes, CP&EDID HPD signal | Incomplete |
| 1A-03a | Regular procedure: HDCP_HPD after starting third part of authentication - Source_CP&EDID_HPD = No, Physical HPD line | Incomplete |
| 1A-03b | Regular procedure: HDCP_HPD after starting third part of authentication - Source_CP&EDID_HPD = Yes, Physical HPD line | Incomplete |
| 1A-03c | Regular procedure: HDCP_HPD after starting third part of authentication - Source_CP&EDID_HPD = Yes, CP&EDID HPD signal | Incomplete |
| 1A-04 | Irregular procedure: (First Part of Authentication) HDCP port access | Incomplete |

**Figure 2.2. Sample Report File of Source DUT Testing**

# 3. Receiver Test for Sink DUT

This section describes the test items, test operation guide, and sample report file.

## 3.1. Test Items

Table 3.1 lists the test items for sink DUT testing, when the SL–8800 TE emulates a transmitter device.

**Table 3.1. 2C. Upstream Procedure with Transmitter**

| Item ID | Test Description | Check Video |
|---|---|---|
| 2C_01a | Regular procedure: With HDMI-capable Transmitter<br>Sink 1.1Features_Supported=No, Combined-read | Yes |
| 2C_01b | Regular procedure: With HDMI-capable Transmitter<br>Sink 1.1Features_Supported=No, Short-read | Yes |
| 2C_01c | Regular procedure: With HDMI-capable Transmitter<br>Sink_1.1Features_Supported=Yes, Write Ainfo=No, Combined-read | Yes |
| 2C_01d | Regular procedure: With HDMI-capable Transmitter<br>Sink_1.1Features_Supported=Yes, Write Ainfo=No, Short-read | Yes |
| 2C_01e | Regular procedure: With HDMI-capable Transmitter<br>Sink_1.1Features Supported=Yes, Write Ainfo=Yes, Combined-read | Yes |
| 2C_01f | Regular procedure: With HDMI-capable Transmitter<br>Sink_1.1Features Supported=Yes, Write Ainfo=Yes, Short-read | Yes |
| 2C_02 | Irregular procedure: (First Part of Authentication) New Authentication | Yes |
| 2C_03 | Irregular procedure: (Third Part of Authentication) New Authentication | Yes |

## 3.2. Test Operation

### 3.2.1. Connection Setup for Sink DUT Testing

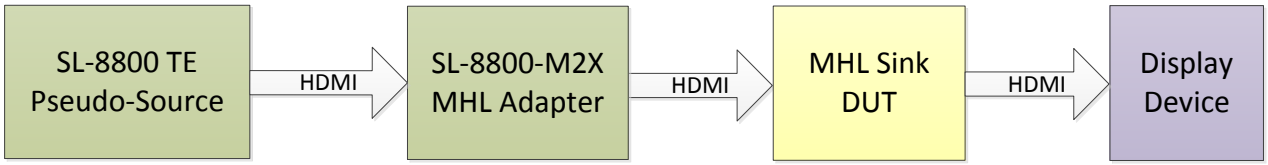



**Figure 3.1. Connection Setup for MHL Sink DUT Testing**

Figure 3.1 shows the connection between the SL–8800 TE Pseudo-Source, SL–8800–M2X MHL Adapter (see Figure 1.1 on page 4), MHL Sink DUT, and Display Device. Follow these steps to setup the connection and start testing.

1. Power on the SL–8800 TE Pseudo-Source and connect it to the PC using the USB cable.
2. Power on the SL–8800–M2X MHL Adapter.
3. Turn on the MHL Sink DUT.
4. Connect the HDMI OUT connector of the SL–8800 TE Pseudo-Source to the HDMI IN connector of the SL–8800–M2X MHL Adapter.
5. Connect the MHL OUT connector of the SL–8800–M2X MHL Adapter to the MHL input port of the MHL Sink DUT.
6. Make sure that MHL Sink DUT can output video to display.
7. Double-click the HDCP icon on the PC desktop. The main window of the SL–8800 HDCP 1.X Protocol Analyzer GUI appears. Expand the Receiver Test field.
8. In GUI settings, select MHL from the drop-down list as DEVICE item.
9. Click Set LogPath to change the log directory to a desired location if needed.
10. Select test items. Click Start Test button. The verification process begins.

### 3.2.2. Verification Test of the Authentication Procedure

1. Wait for about 30 seconds for each test item to complete.
2. If Check Video is Yes and the authentication process has completed successfully, the Select Output Video Option dialog box pops up to let you select the output video pattern that matches the one on the Display Device. If Check Video is No, a dialog box pops up to let you decide whether to continue next item by selecting Continue or Abort.

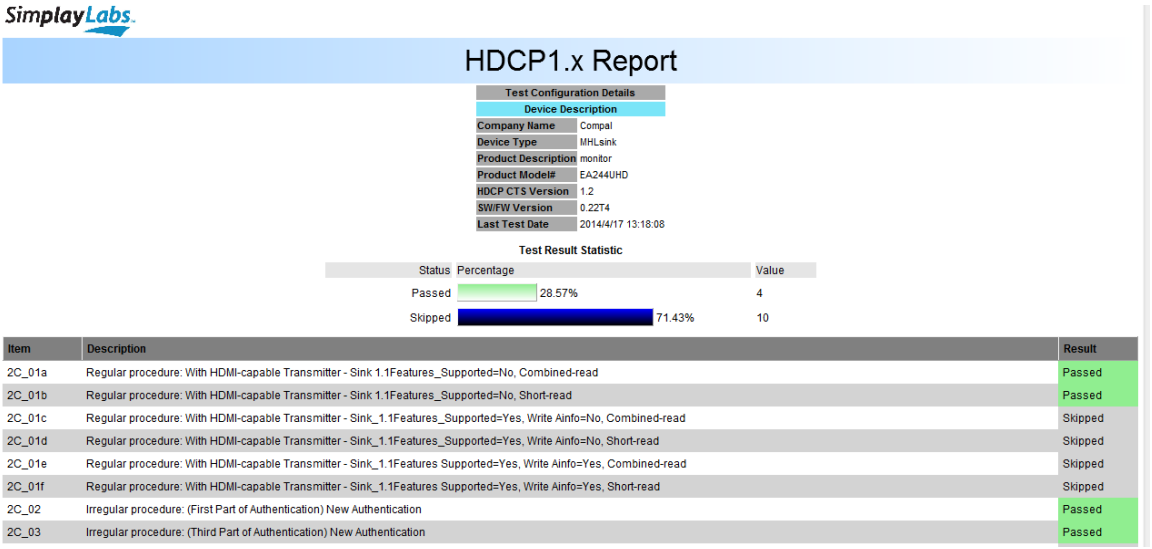
   **Note:** The GUI does not generate a report, rather only a txt file for each test item, if Abort is selected.

3. Check the test results according to GUI or the report file.

   **Notes:**
   1. There is no need to unplug and plugin the HDMI cable during the test process.
   2. For the 2C side, the SL–8800 TE Pseudo-Source emulates the transmitter functions.

## 3.3. Report File

Figure 3.2 shows a sample report file for Sink DUT testing results.



SimplayLabs

HDCP1.x Report

| Test Configuration Details | |
|---|---|
| Device Description | |
| Company Name | Compal |
| Device Type | MHLsink |
| Product Description | monitor |
| Product Model# | EA244UHD |
| HDCP CTS Version | 1.2 |
| SW/FW Version | 0.22T4 |
| Last Test Date | 2014/4/17 13:18:08 |

Test Result Statistic

| Status | Percentage | Value |
|---|---|---|
| Passed | 28.57% | 4 |
| Skipped | 71.43% | 10 |

| Item | Description | Result |
|---|---|---|
| 2C_01a | Regular procedure: With HDMI-capable Transmitter - Sink 1.1Features_Supported=No, Combined-read | Passed |
| 2C_01b | Regular procedure: With HDMI-capable Transmitter - Sink 1.1Features_Supported=No, Short-read | Passed |
| 2C_01c | Regular procedure: With HDMI-capable Transmitter - Sink_1.1Features_Supported=Yes, Write Ainfo=No, Combined-read | Skipped |
| 2C_01d | Regular procedure: With HDMI-capable Transmitter - Sink_1.1Features_Supported=Yes, Write Ainfo=No, Short-read | Skipped |
| 2C_01e | Regular procedure: With HDMI-capable Transmitter - Sink_1.1Features Supported=Yes, Write Ainfo=Yes, Combined-read | Skipped |
| 2C_01f | Regular procedure: With HDMI-capable Transmitter - Sink_1.1Features Supported=Yes, Write Ainfo=Yes, Short-read | Skipped |
| 2C_02 | Irregular procedure: (First Part of Authentication) New Authentication | Passed |
| 2C_03 | Irregular procedure: (Third Part of Authentication) New Authentication | Passed |

**Figure 3.2. Sample Report File of Sink DUT Testing**

# 4. Repeater Test for Dongle DUT

This section describes the test items, test operation guide, and sample report file.

## 4.1. Test Items

Table 4.1 lists the test items for Dongle DUT testing, when the SL–8800 TE emulates a receiver device.

**Table 4.1. 3A. Downstream Procedure with Receiver**

| Item ID | Test Description | Check Video |
|---|---|---|
| 3A-01 | Regular procedure: With HDMI-capable Receiver | Yes |
| 3A-02 | Irregular procedure: (First part of Authentication) HDCP Port Access | No |
| 3A-03 | Irregular procedure: (First part of Authentication) Verify Bksv | No |
| 3A-04 | Irregular procedure: : (First part of Authentication) Verify R0’ | No |

Table 4.2 lists the test items for Dongle DUT testing, when the SL–8800 TE emulates a repeater device.

**Table 4.2. 3B. Downstream Procedure with Repeater**

| Item ID | Test Description | Check Video |
|---|---|---|
| 3B-01a | Regular procedure: With Repeater<br>DEVICE_COUNT != 0 | Yes |
| 3B-01b | Regular procedure: With Repeater DEVICE_COUNT = 0 | No |
| 3B-02 | Irregular procedure: (Second part of Authentication)<br>Timeout of KSV list READY | No |
| 3B-03a | Irregular procedure: : (Second part of Authentication) Verify V’<br>DEVICE_COUNT != 0 | No |
| 3B-03b | Irregular procedure: : (Second part of Authentication) Verify V’<br>DEVICE_COUNT = 0 | No |
| 3B-04 | Irregular procedure: : (Second part of Authentication)<br>MAX_DEVS_EXCEEDED | No |
| 3B-05 | Irregular procedure: : (Second part of Authentication)<br>MAX_CASCADE_EXCEEDED | No |

Table 4.3 lists the test items for Dongle DUT testing, when the SL–8800 TE emulates a transmitter device.

**Table 4.3. 3C-I-xx. DUT Connected to Transmitter (SL–8800 TE Pseudo-Source) and Receiver (SL–8800 TE Pseudo-Sink)**

| Item ID | Test Description | Check Video |
|---|---|---|
| 3C-I-01a | Regular procedure: Transmitter-DUT-Receiver<br>Repeater_1.1Features_Supported=No, Combined-read | Yes |
| 3C-I-01b | Regular procedure: Transmitter-DUT-Receiver<br>Repeater_1.1Features_Supported=No, Short-read | Yes |
| 3C-I-01c | Regular procedure: Transmitter-DUT-Receiver<br>Repeater_1.1Features_Supported=Yes, Write Ainfo=No, Combined-read | Yes |
| 3C-I-01d | Regular procedure: Transmitter-DUT-Receiver<br>Repeater_1.1Features_Supported=Yes, Write Ainfo=No, Short-read | Yes |
| 3C-I-01e | Regular procedure: Transmitter-DUT-Receiver<br>Repeater_1.1Features_Supported=Yes, Write Ainfo=Yes, Combined-read | Yes |
| 3C-I-01f | Regular procedure: Transmitter-DUT-Receiver<br>Repeater_1.1Features_Supported=Yes, Write Ainfo=Yes, Short-read | Yes |
| 3C-I-02 | Regular procedure: HDCP_HPD signal caused by user operation | No |
| 3C-I-03 | Irregular procedure: (First part of Authentication) New authentication | Yes |
| 3C-I-04 | Irregular procedure: (Second part of Authentication) New authentication | Yes |
| 3C-I-05 | Irregular procedure: (Third part of Authentication) New authentication | Yes |
| 3C-I-06 | Irregular procedure: (Second part of Authentication) Verify Bksv | No |
| 3C-I-07 | Irregular procedure: (Second part of Authentication) Verify R0’ | No |

Table 4.4 lists the test items for Dongle DUT testing, when the SL–8800 TE Pseudo-Source emulates a transmitter device and the SL–8800 TE Pseudo-Sink emulates a repeater device.

**Table 4.4. 3C-II-xx. DUT Connected to Transmitter (SL–8800 TE Pseudo-Source) and Repeater (SL–8800 TE Pseudo-Sink)**

| Item ID | Test Description | Check Video |
|---|---|---|
| 3C-II-01a | Regular procedure: Transmitter-DUT-Repeater+Receiver<br>Repeater_1.1Features_Supported=No, Combined-read | Yes |
| 3C-II-01b | Regular procedure: Transmitter-DUT -Repeater+Receiver<br>Repeater_1.1Features_Supported=No, Short-read | Yes |
| 3C-II-01c | Regular procedure: Transmitter-DUT- Repeater+Receiver<br>Repeater_1.1Features_Supported=Yes, Write Ainfo=No, Combined-read | Yes |
| 3C-II-01d | Regular procedure: Transmitter-DUT- Repeater+Receiver<br>Repeater_1.1Features_Supported=Yes, Write Ainfo=No, Short-read | Yes |
| 3C-II-01e | Regular procedure: Transmitter-DUT- Repeater+Receiver<br>Repeater_1.1Features_Supported=Yes, Write Ainfo=Yes, Combined-read | Yes |
| 3C-II-01f | Regular procedure: Transmitter-DUT- Repeater+Receiver<br>Repeater_1.1Features_Supported=Yes, Write Ainfo=Yes, Short-read | Yes |
| 3C-II-02a | Regular procedure: HDCP_HPD after writing Aksv<br>Repeater_CP-EDID_HPD=No, Physical HPD line | No |
| 3C-II-02b | Regular procedure: HDCP_HPD after writing Aksv<br>Repeater_CP-EDID_HPD=Yes, Physical HPD line | No |
| 3C-II-02c | Regular procedure: HDCP_HPD after writing Aksv<br>Repeater_CP-EDID_HPD=Yes, CP-EDID HPD signal | No |
| 3C-II-03a | Regular procedure: HDCP_HPD after reading R0’<br>Repeater_CP-EDID_HPD=No, Physical HPD line | No |
| 3C-II-03b | Regular procedure: HDCP_HPD after reading R0’<br>Repeater_CP-EDID_HPD=Yes, Physical HPD line | No |
| 3C-II-03c | Regular procedure: HDCP_HPD after reading R0’<br>Repeater_CP-EDID_HPD=Yes, CP-EDID HPD signal | No |
| 3C-II-04a | Regular procedure: HDCP_HPD after starting third part of authentication<br>Repeater_CP-EDID_HPD=No, Physical HPD line | No |
| 3C-II-04b | Regular procedure: HDCP_HPD after starting third part of authentication<br>Repeater_CP-EDID_HPD=Yes, Physical HPD line | No |
| 3C-II-04c | Regular procedure: HDCP_HPD after starting third part of authentication<br>Repeater_CP-EDID_HPD=Yes, CP-EDID HPD signal | No |
| 3C-II-05 | Irregular procedure: (Second part of Authentication) Verify V’ | No |
| 3C-II-06 | Irregular procedure: (Second part of Authentication) DEVICE_COUNT | No |
| 3C-II-07 | Irregular procedure: (Second part of Authentication) DEPTH | No |
| 3C-II-08 | Irregular procedure: (Second part of Authentication) MAX_DEVS_EXCEEDED | No |
| 3C-II-09 | Irregular procedure: (Second part of Authentication)<br>MAX_CASCADE_EXCEEDED | No |

## 4.2. Test Operation

### 4.2.1. Connection Setup for Dongle DUT Testing

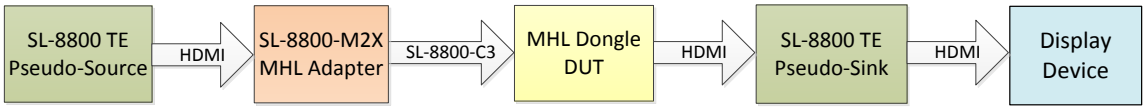



**Figure 4.1. Connection Setup for MHL Dongle DUT Testing**

Figure 4.1 shows the connection between the SL–8800 TE Pseudo-Source, SL–8800–M2X MHL Adapter (see Figure 1.1 on page 4), MHL Dongle DUT, SL–8800 TE Pseudo-Sink, and Display Device. Follow these steps to setup the connection and start testing.

1. Power on the SL–8800 TE Pseudo-Source and SL–8800 TE Pseudo-Sink, and connect the SL–8800 TE Pseudo-Source to the PC using the USB cable.
2. Power on SL–8800–M2X MHL Adapter.
3. Turn on the MHL Dongle DUT.
4. Connect the HDMI OUT connector of the SL–8800 TE Pseudo-Source to the HDMI IN connector of the SL–8800–M2X MHL Adapter.
5. Connect the MHL OUT connector of the SL–8800–M2X MHL Adapter to the MHL input port of the MHL Dongle DUT using SL–8800-C3 cable.

**Note:** The SL–8800-C3 shown in the Figure 4.2 is used to test MHL Dongle DUT.

**Figure 4.2. SL–8800-C3 Cable**

6. Connect the HDMI OUT connector of MHL Dongle DUT to the SL–8800 TE Pseudo-Sink.
7. Make sure that MHL Dongle DUT can output video to display.
8. Double-click the HDCP icon on the PC desktop. The main window of the HDCP 1.X Analyzer GUI appears. Expand the Repeater Test field.
9. In GUI settings, select MHL from the drop-down list as DEVICE item.
10. Click Set LogPath to change the log directory to a desired location if needed.
11. Select test items. Click Start Test button. The verification process begins.

### 4.2.2. Verification Test of the Authentication Procedure

1. Wait for about 30 seconds for each test item to complete.
2. If Check Video is Yes and the authentication process has completed successfully, the Select Output Video Option dialog box pops up to let you select the output video pattern that matches the one on the Display Device. If Check Video is No, a dialog box pops up to let you decide whether to continue next item by selecting Continue or Abort.

   **Note:** The GUI does not generate a report, rather only a txt file for each test item, if Abort is selected.

3. Check the test results according to GUI or the report file.

   **Notes:**
   1. There is no need to unplug and plugin the HDMI cable during the test process.
   2. For the 3A side, the SL–8800 TE Pseudo-Source emulates the transmitter functions and the SL–8800 TE Pseudo-Sink emulates the receiver functions.
   3. For the 3B side, the SL–8800 Pseudo-Source emulates the transmitter functions and the SL–8800 TE Pseudo-Sink emulates repeater functions.
   4. For the 3C-I side, the SL–8800 TE Pseudo-Source emulates the transmitter functions and the SL–8800 TE Pseudo-Sink emulates receiver functions.
   5. For the 3C-II side, the SL–8800 TE Pseudo-Source emulates the transmitter functions and the SL–8800 TE Pseudo-Sink emulates repeater and receiver functions.

## 4.3. Report File

Figure 4.3 shows a sample report file for Dongle DUT testing results.

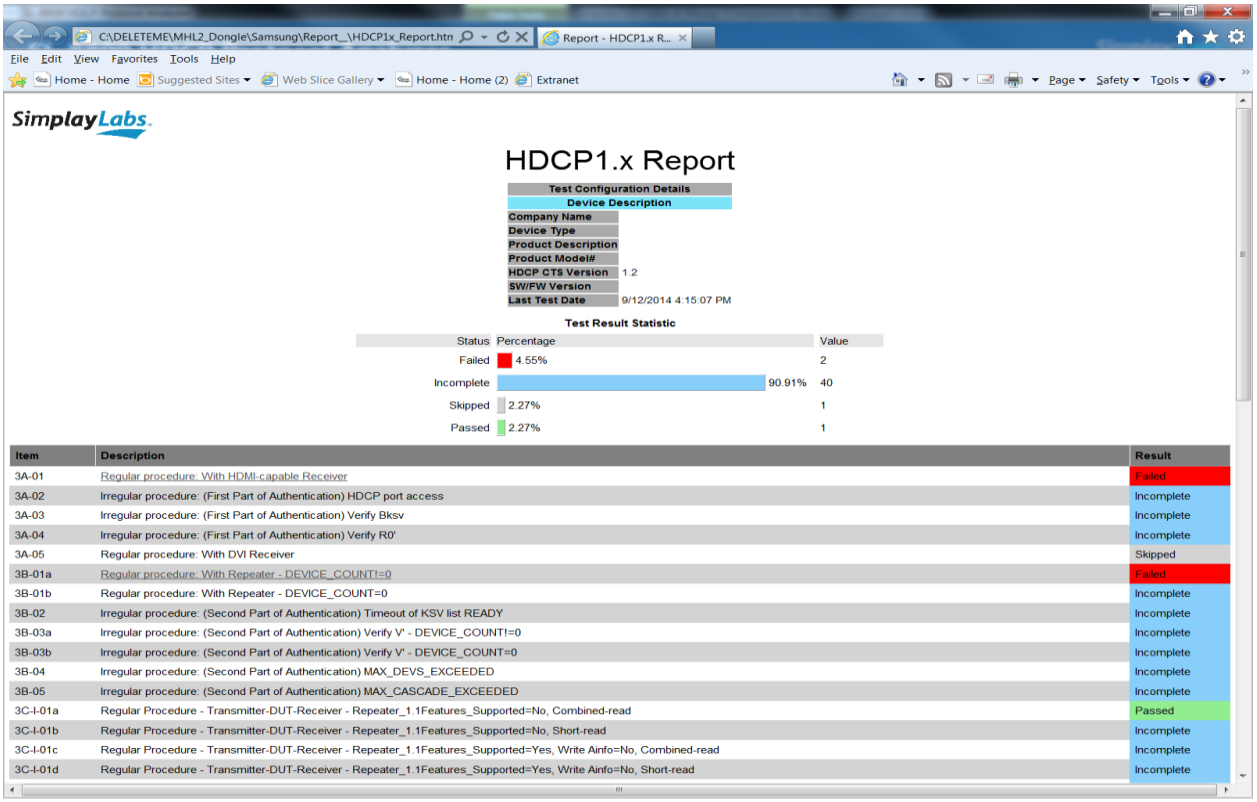



**Figure 4.3. Sample Report File of Dongle DUT Testing**

# References

This is a list of the standards abbreviations appearing in this document.

| Abbreviation | Standards Publication, Organization, and Date |
|---|---|
| MHL | *Mobile High-definition Link Specification,* Version 3, MHL, LLC, August 2013 |
| MHL CTS | *Main required methods, Version 3.0* |
| CTS MOI | *Simplay MOI for CTS 3.2* |

# Revision History

**Revision A, September 2014**

First production release.

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|---|---|---|
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