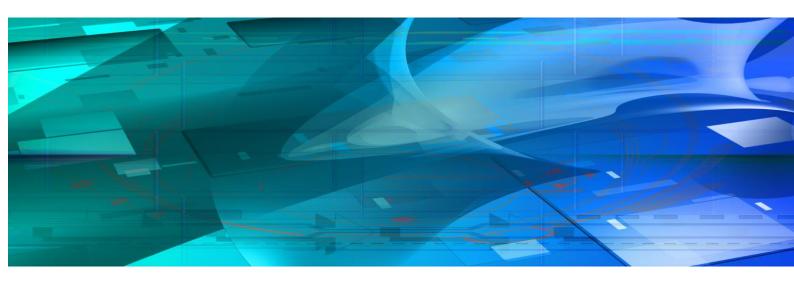


DisplayPort™ CTS Tools for UCD-3XX



Guide to Product Options



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Edition

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UNIGRAF Guide to DP CTS Tool Options for UCD-3XX

Table of Contents

General	4
HDCP 2.3 CTS for DisplayPort Sink, Source and Repeater DUT	
DP HDCP 2.2 CTS Compliant Hardware Products	
CTS Test Software Product Options	
Description of HDCP 2.3 CTS Transmitter Tests	
A. Downstream procedure with Receiver	
1B. Downstream procedure with Repeater	6
Description of HDCP 2.3 CTS Receiver Tests	7
2C. Upstream procedure with Transmitter	

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GENERAL

Reference Standards

High-bandwidth Digital Content Protection, Revision 2.3 on DisplayPort, Compliance Test Specification, Revision 1.1, 4 March 2019.

Released Versions

This document explains features found in the following versions of the software:

Tool	Version
HDCP 2.2 CTS: UCD Console	1.8

HDCP 2.3 CTS FOR DISPLAYPORT SINK, SOURCE AND REPEATER DUT

DP HDCP 2.3 CTS Compliant Hardware Products

Product	P/N	Description
UCD-301 Digital **	066510	4K capable test unit for digital video outputs. USB 3.0 Interface to Host PC.
UCD-323 HDDP, 2GB onboard memory *	066512	4K capable test unit for digital video inputs and outputs. USB 3.0 Interface to Host PC.
UCD-340 USB-C DP Alt Mode Tester with Electrical Test *	066515	4K capable test unit for USB-C DP Alt Mode Sinks or Sources. USB 3.0 Interface to Host PC. TSI SDK Basic Test Set included
(UCD-400 DP 1.4 Test Device)	066600	Not covered in this document. Please refer to DP CTS Tool Options for Unigraf UCD-400

^{*)} Approved as Authorized Test Tool for DP Sinks and Sources

CTS Test Software Product Options

Product	P/N	Tests included
HDCP 2.3 CTS for testing Source on DUT	MT6634	HDCP 2.3 on DisplayPort compliance tests for testing Source DUT. (Sets 1A + 1B)
HDCP 2.3 CTS for testing Sink on DUT	MT6636	HDCP 2.3 on DisplayPort compliance tests for testing Sink DUT. (Set 2C)

^{**)} Approved as Authorized Test Tool for DP Sources

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Description of HDCP 2.3 CTS Transmitter Tests

1A. Downstream procedure with Receiver

HDCP2.2 CTS 1A-01	Regular Procedure – With previously connected Receiver (With stored km)
HDCP2.2 CTS 1A-02	Regular Procedure – With newly connected Receiver (Without stored km)
HDCP2.2 CTS 1A-03	Regular Procedure – Receiver disconnect after AKE_Init
HDCP2.2 CTS 1A-04	Regular Procedure – Receiver disconnect after km
HDCP2.2 CTS 1A-05	Regular Procedure – Receiver disconnect after locality check
HDCP2.2 CTS 1A-06	Regular Procedure – Receiver disconnect after ks
HDCP2.2 CTS 1A-07	Regular Procedure – Receiver sends REAUTH_REQ after ks
HDCP2.2 CTS 1A-08	Irregular Procedure – Verify Receiver Certificate
HDCP2.2 CTS 1A-09	Irregular Procedure – SRM
HDCP2.2 CTS 1A-10	Irregular Procedure – Invalid H'
HDCP2.2 CTS 1A-11	Irregular Procedure – Pairing Failure
HDCP2.2 CTS 1A-12	Irregular Procedure – Locality Failure

1B. Downstream procedure with Repeater

HDCP2.2 CTS 1B-01	Regular Procedure – With Repeater
HDCP2.2 CTS 1B-02	Irregular Procedure – Timeout of Receiver ID list
HDCP2.2 CTS 1B-03	Irregular Procedure – Verify V'
HDCP2.2 CTS 1B-04	Irregular Procedure – MAX_DEVS_EXCEEDED
HDCP2.2 CTS 1B-05	Irregular Procedure – MAX CASCADE_EXCEEDED
HDCP2.2 CTS 1B-06	Irregular Procedure – Incorrect seq_num_V
HDCP2.2 CTS 1B-07	Regular Procedure – Re-authentication on HPD
HDCP2.2 CTS 1B-08	Regular Procedure – Re-authentication on REAUTH_REQ
HDCP2.2 CTS 1B-09	Irregular Procedure – Rollover of seq_num_V
HDCP2.2 CTS 1B-10	Irregular Procedure – Failure of Content Stream Management

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Description of HDCP 2.3 CTS Receiver Tests

2C. Upstream procedure with Transmitter

HDCP2.2 CTS 2C-01	Regular Procedure – With transmitter
HDCP2.2 CTS 2C-02	Irregular Procedure – New Authentication after AKE_Init
HDCP2.2 CTS 2C-03	Irregular Procedure – New Authentication during Locality Check
HDCP2.2 CTS 2C-04	Irregular Procedure – New Authentication after SKE_Send_Eks
HDCP2.2 CTS 2C-05	Irregular Procedure – New Authentication during Link Synchronization
HDCP2.2 CTS 2C-06	Regular Procedure – Encryption Disable Bootstrapping