UCD-340

test unit for USB Type-C™ DP™ Alt Mode sinks and sources

4K

Approved for HDCP 2.3 CTS

CAPTURING THE WORLD

First USB-C and DP Alt Mode Tester

UCD-340 is the first integrated test equipment for testing DP over USB Type-C sinks and sources. UCD-340 features a flexible and robust way of testing video, audio and power delivery functions of USB-C. UCD-340 is also an DCP Approved Test Tool for HDCP 2.3 CTS Tests. The provided software enables user access to the vital parameters and controls needed when evaluating the various functions of the interface.

For R&D and Test Automation

UCD-340 software supports both hands-on debugging on a laboratory desktop and automated functionality tests either in R&D or for Production.

UCD Console GUI is a preview and test application for dektop use. Each interface function has a well structured dialog for superior at-a-glance viewability. Unigraf TSI is a test software API that provides the system integrator a fast and reliable way for ensuring the functionality of the tested equipment. The included Test Cases provide a compact and robust way of ensuring the functionality of the interface.

Unique Electrical Tests

The optional Electrical Testing feature of UCD-340 enables testing the continuity of signals in the USB-C interface by verifying current flow in signal lines.

Highlights

- Test DP over USB-C video and audio
- Test USB-C Power Delivery with DP Alt Mode
- DCP Apporved HDCP 2.3 CTS Tests
- Verify interface signal continuity
- 4K@60 support
- HDCP 1.3 and HDCP 2.3 support
- Capture video and audio, monitor and control interface parameters
- USB signal pass-thru
- UCD Console GUI for debugging
- High level API for easy integration

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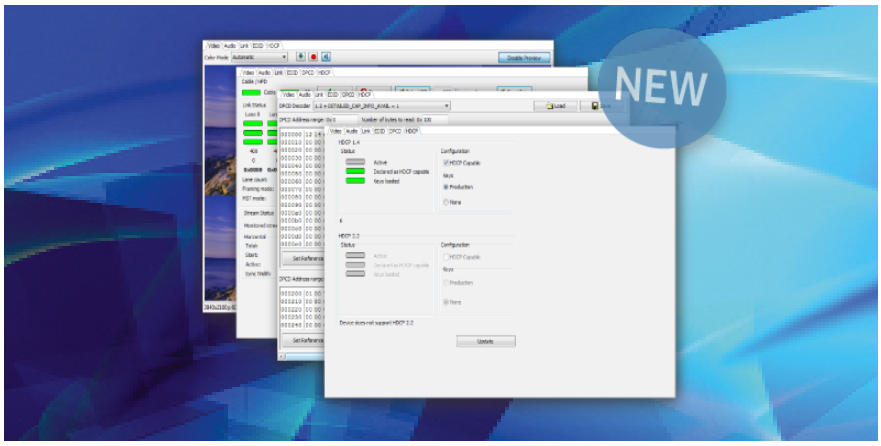

UCD Console GUI

The UCD-340 graphical user inteface for R&D debugging is called UCD Console. It provides the user a flexible way of navigating between the interface based Roles of the device and the functionalities of each Role.

UCD Console features preview windows for the received video and audio, monitoring and controls for the USB-C connection parameters, DP link parameters and an EDID editor. UCD Console also provides the status and contol of HDCP function.

High Level Test Functions

Unigraf high level test software interface TSI (Test System Interface) provides a system integrator a set of reliable and short cycle time interface specific tests. TSI Test Cases readily implement the low level procedures needed for verifying the various functions of the tested interface and the required software integration is minimal.

Verify Interface Signal Continuity

With UCD-340 Electrical Test feature, e.g. an automated test can verify the integrity of the supported interface signals. This will help ensure that components in the DUT are functional and assembly process was successful.

Specifications

Test connections	USB Type-C (Dual role port) USB Type A (Device) pass-thru USB Type B (Host) pass-thru External Power Source / Sink connector
DP over USB-C	Resolution up to 4096×2160p60 Up to HBR2 rate in up to 4 lanes Color depth up to 48 bits Support HDCP 1.3 and 2.2
USB Over USB-C	USB 3.1 Gen1 (5 Gbps) and USB 2.0 pass-thru
USB Power Delivery	Sink and source 5 V up to 3.0 A, up to 20 V / 5 A with external power test unit (Optional)
Electrical Test	Verify functionality of USB Type-C interface signals (VBUS, GROUND, CC1/2, SBU1/2). (Optional)
Computer Interface	USB 3.0
Operating System	Windows 10, 8, 7 and XP
Software	UCD Console GUI TSI API with ready Test Cases
Environment	Operating temperature: 0 ... +40°C Storage temperature: -20 ... +60°C Relative humidity: 10 ... 80%
Power Input	+12 Vdc (AC/DC converter included)
Module Size	281×128×62 mm
Weight	900 g (w/o AC/DC converter)

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www.unigraf.fi, www.unigraf-china.cn

All specifications subject to change without notice.

UNIGRAF OY Piispantilankuja 4, FI-02240 Espoo, Finland
Tel +358 9 859 550; info@unigraf.fi

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