# UCD-500

### **Preliminary Data Sheet**

## DisplayPort <sup>™</sup> 2.0 • 16K Video Generator & Analyzer

#### 16K Video Generator & Analyzer

UCD-500 is a video generator and analyzer unit for testing DisplayPort™ 2.0 Sinks and Sources up to 8K@60Hz (16K@60 Hz with DSC) video modes with UHBR 20 Max Bit Rate Capability. UCD-500 support DP 2.0 features like Panel Replay, Adaptive Sync, DSC, FEC and LTTPR.

#### Dolby Vision™, HDR 10 and HDR 10+

The unit is capable of playback functionality on source side to output HDR formats such as Dolby Vision™, HDR 10 and HDR 10+ for resolutions up to 16K@60 Hz. Playback of compressed audio formats including Dolby Atmos™ is supported. Dolby Laboratories provides users with Dolby Vision content.

Capturing video and SDP including audio packets provides the data for validation of HDR and Dolby Vision.

The test device makes for an ideal tool for developers of DisplayPort 2.0 compliant ASICs and devices like PCs, graphics cards, gaming monitors and VR/AR goggles that support HDR formats and want to have their products certified for Dolby Vision.

#### Validation Tool

UCD-500 is a Compliance Test Tool for validating DP 1.4a & DP 2.0 Link Layer on DP Sinks and Sources. DP 2.0 Link Layer CTS will be added when VESA releases compliance test specification. It is also a Compliance Test Tool for HDCP 2.2/2.3 on DP Transmitters, Receivers and Repeaters.

#### **Specifications**

Input/Output USB-C, DP
DisplayPort Version 2.0

Link 1,2 and 4 lanes at 1.62, 2.7, 5.4, 8.1, 10,

13.5 and 20 Gbps link rates

Video 8K60Hz, 16K60Hz (with DSC)

Color Depth 6 to 16bpc

Color Formats RGB, YCbCr 444, 422, 420, Raw HDR Formats Dolby Vision, HDR 10, HDR 10+

DSC 1.2a

Audio 8ch LPCM, Dolby Atmos

Content Protection HDCP 2.2/2.3 and 1.3

Additional features MST, LTTPR

Panel Replay, Adaptive Sync
DP 1.4a LL CTS, HDCP 2.2/2.3 CTS
DP 2.0 LL CTS (after specification release)

Capture Memory 32GB

Compression

Computer Interface USB, Ethernet

Operating System Windows, MacOS, Linux

Software UCD Console GUI

TSI API with interface specific Test Sets

Power Input +12 Vdc (AC/DC converter included)

Module Size/Weight TBD for Weight and Size

All specifications subject to change without notice.



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