Elliptic Technologies Premiers New Standards-Compliant HDCP 2.2 Solutions with Synopsys HDMI 2.0 IP

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Elliptic Technologies [1] (Ottawa, Canada) and Synopsys [2] has announced standards compliant HDCP (High-bandwidth Digital Content Protection) solutions to protect UHD (Ultra-High Definition) content over uncompressed streaming interfaces.
Connected and mobile devices are revolutionizing premium video distribution and consumption. These powerful devices are UHD capable with impressive high-resolution screens that provide an immersive, intuitive, and compelling video experience to their users. At the same time, content and service providers are driving the need to secure premium content such as digital motion pictures, television programs, and audio against unauthorized interception and copying between connected devices including HDTVs, set top boxes, smart phones, and tablets. HDCP 2.2 is a security technology that has broad industry support from the major players in the digital entertainment value chain, including motion picture studios, semiconductor companies, and consumer electronics manufacturers.

Elliptic’s standalone Embedded Security Modules (ESMs) for HDCP2 on HDMI features:

- All the necessary processing elements to be integrated directly within or beside an HDMI controller module.
- Transmitter (Tx), Receiver (Rx), and Repeater configurations.
- Highly secure compact ESMs, with the entire control plane processing (including authentication and key exchange protocols) embedded inside the module.
- ESMs with a flexible design that supports functional upgrades to allow chipset manufactures to stay up-to-date with standards and premium content protection requirements.
- Flow-through video processing data plane, providing minimum latency and internal buffering to accommodate the bandwidth required for 4 x 2 K UHD resolution at 60 Hz frame rate.

Synopsys’ DesignWare HDMI 2.0 TX/RX IP solutions:

- Include controller, PHY, and example Linux drivers.
- Reduce designers' integration risk and time-to-market.
- Offer aggregate bandwidth of up to 18 Gbps, enabling 4 x 2 K (4400 vertical

pixels x 2250 horizontal pixels) resolution at a 60 Hz frame rate in deep color mode to provide a flickerless, ultra high-definition (UHD) viewing experience.
- Have the ability to scramble transition-minimized differential signalling (TMDS) data above 3.4 Gbps, minimizing the electromagnetic interference (EMI) that occurs in 8/10b coded data streams.
- Feature a robust analog front end, supportting pre-emphasis and adaptive equalization for excellent signal integrity across cable lengths greater than 100 feet.

For more information please visit www.elliptictech.com [1].

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http://www.wirelessdesignmag.com/product-releases/2013/09/elliptic-technologies-premiers-new-standards-compliant-hdcp-22-solutions-synopsys-hdmi-20-ip

Links:
[1] http://www.elliptictech.com
[2] http://www.synopsys.com