Hardent Launches New DisplayPort 1.4 Forward Error Correction IP Cores

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Montreal, Quebec (PRWEB) July 28, 2016 -- <u>Hardent</u>, a VESA® member and provider of IP products, has today announced the availability of new DisplayPort[™] 1.4 Forward Error Correction (FEC) encoder and decoder IP cores. These IP products will enable semiconductor and IP vendors to quickly create DisplayPort 1.4-compatible transmitter and receiver interfaces for integration in applications transporting High Dynamic Range (HDR) and 8K video across the DisplayPort interface.

By delivering verified and interoperable IP cores, we enable vendors to quickly incorporate DisplayPort 1.4 into their products with significantly less risk and effort.

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With the growing demand for products supporting multiple ultra highdefinition external displays over a unified transport link, there is a need for compression in order to transport more data over existing display interfaces, such as VESA DisplayPort. In March 2016, the Video Electronics Standards Association (VESA) introduced **DisplayPort 1.4**, which takes advantage of VESA DSC 1.2, a visually lossless video compression algorithm that increases the DisplayPort data transfer capacity without changing the link speed.

Equipped with DSC's video bandwidth reduction, DisplayPort 1.4 enables the transport of multiple ultra high-definition video streams across a single DisplayPort interface for computer graphics, external displays, VR headset displays, and hubs. When DisplayPort Alt Mode is used on USB Type-C[™] connections, the freed bandwidth can be used by other peripherals such as storage and networking units.

The DisplayPort 1.4 standard also specifies a new Forward Error Correction algorithm to ensure reliable, error-free video transport. "As the integrity of compressed video images can be affected by transmission errors, Forward Error Correction, when combined with DSC 1.2 transport, is used to correct link errors and ensure a glitch-free visual experience," explains Bill Lempesis, Executive Director of VESA. "We are pleased to see that Hardent is offering IP solutions supporting DisplayPort 1.4's key new features." Hardent's DisplayPort 1.4 FEC IP cores are an extension to the company's existing VESA DSC IP offering. "By delivering verified and interoperable IP cores, we enable vendors to quickly incorporate DisplayPort 1.4 into their products with significantly less risk and effort." states Alain Legault, VP IP Products at Hardent.

For more information about Hardent's DisplayPort 1.4 FEC IP cores, consult Hardent's **IP products page**.

About Hardent Inc.

Hardent is a professional services firm providing IP products, electronic design services, training solutions and management consulting to leading electronics equipment and component manufacturers throughout the world. Hardent works across a wide variety of industries to develop high-complexity electronic products, improve engineering processes, accelerate products' time-to-market and provide expert training solutions.

Gil Gruber, Direct Objective Consulting, http://www.directobjective.ca, +1 (514) 238-7766, **gil@directobjective.ca**

