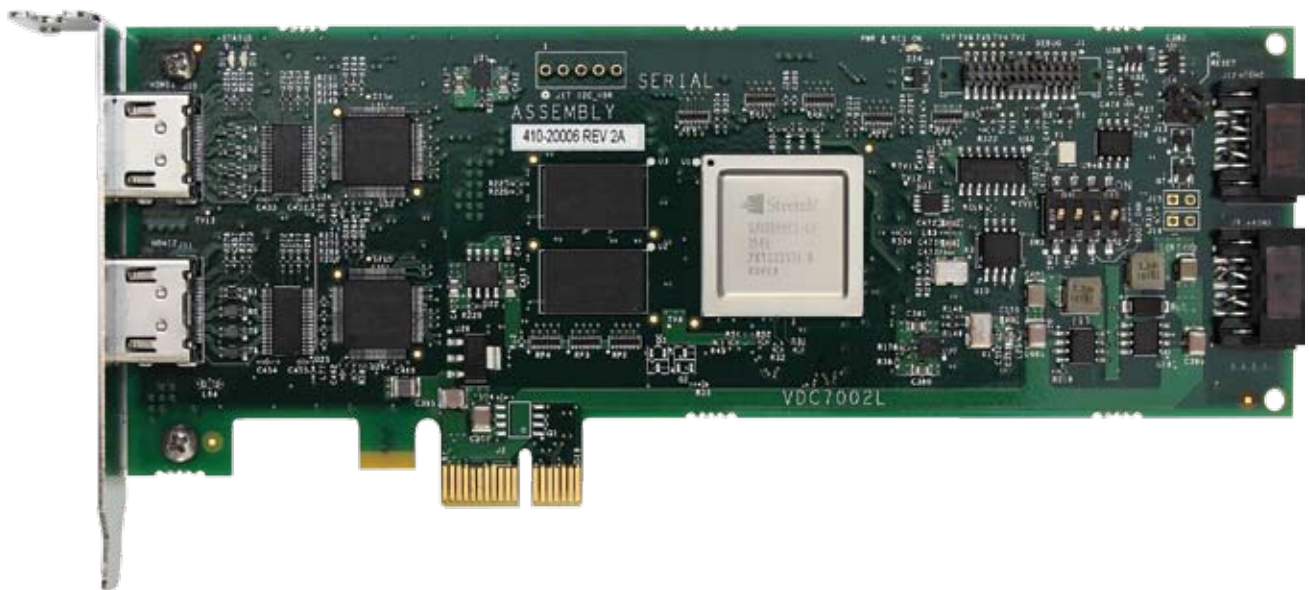# VDC7002LHDMI
PCIe Decode and Display Add-in Card

Stretch VDC7002LHDMI PCIe Add-in Cards

The VDC7002LHDMI is a universal decode and display card with two high definition HDMI outputs. Featuring the powerful S7100 software configurable processor, the card can decode and display encoded video streams from either Stretch or third-party encoders. CODEC support includes H.264 (Main and High Profile), H.264 Scalable Video CODEC, MPEG4, and MJPEG. The S7100 processor's software-defined architecture ensures that the VDC7002LHDMI can be enhanced to decode streams from as yet unreleased encoders with a simple software upgrade.

> **Universal video decode**

The VDC7002LHDMI can simultaneously decode up to 16 channels of H.264 High Profile encoded video and scale the resulting video streams to fit any user-defined video matrix. Two independent high definition HDMI outputs capable of supplying 1080p or 720p video ensure plug-and-play compatibility with a wide variety of consumer and industrial monitors for the best possible image quality.

> **Two independent
> HDMI outputs**

The VDC7002LHDMI features a high bandwidth PCIe interface for communication with host systems. Compressed or raw video data can be transferred over the PCIe bus for decode, scaling, and tiling. The VDC7002LHDMI also features two ports of eAIM. This high bandwidth bus can be used to connect directly to other Stretch add-in cards to route compressed or raw video data directly to the VDC7002LHDMI for decode and display on the dual high definition output. This lowers host system compute requirements and reduces system costs.

> **Dual eAIM ports for
> high speed connectivity**

The VDC7002LHDMI features the same Application Programming Interface (API) as all other Stretch add-in cards, ensuring plug-and-play compatibility with existing Stretch installations and rapid porting of third-party applications. The VDC7002LHDMI is available as a production-ready OEM unit for volume manufacture or as either Evaluation (EVK) or full Reference Design (RDK) Kits. Stretch EVKs are intended for evaluation purposes and produce watermarked streams. Stretch RDKs can be used as the basis for highly differentiated derivative designs and include hardware design files and a distribution license for the supplied software. All kits contain a complete software load for the board, a sample host application, and source code for all included software (the Stretch Intelligent Encoder and CODEC plug-ins are supplied as object code).

EVK and RDK kits ship with both full height and low profile mounting hardware for the VDC7002LHDMI card and can be used in either configuration. OEM units can be ordered in either of the two configurations.

Key Features
- Multi-CODEC support
- User-defined scaling and tiling
- Dual high definition HDMI outputs
- Dual eAIM interface ports

Key Benefits
- Universal video decode of compressed streams
- Clarity of high definition outputs
- Plug-and-play connectivity

Part Numbers

Evaluation Reference Design Kit
- EVK-VDC7002LHDMI

Full Reference Design Kit – Includes non-watermarked version of the Stretch Intelligent Encoder and a distribution license for the supplied CODECs
- RDK-VDC7002LHDMI

OEM Cards – Sold in multiple-unit packaging
- OEM-VDC7002HDMI – Full height
- OEM-VDC7002LHDMI – Low profile

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