New Products

NVIDIA Visual Computing Appliance

NVIDIA has introduced a visual computing appliance that enables businesses to deliver fast GPU performance to any Windows, Linux, or Mac client on their network. The NVIDIA GRID Visual Computing Appliance (VCA) is a GPU-based system that runs complex applications (such as those from Adobe, Autodesk, and Dassault Systèmes) and sends their graphics output over the network to be displayed on a client computer. This remote GPU acceleration provides users with a graphics experience similar to that of a dedicated PC.

Designed for small- and medium-size businesses with limited IT infrastructures, the NVIDIA GRID VCA allows users to create a virtual machine called a workspace, which is essentially a dedicated, high-performance GPU-based system that can be added, deleted, or reallocated as needed.

NVIDIA’s new 4U appliance consists of 16 NVIDIA GPUs and NVIDIA GRID VGX software and supports up to 16 concurrent users, with low latency, high resolution, and maximum interactivity. This flexible deployment also offers security benefits; as a stateless device, datasets are stored on network-attached storage (NAS), not locally.

Available in the United States in May 2013, NVIDIA GRID VCA is offered in eight or 16 GPU configurations, with pricing starting at $24,900, plus an annual software license of $2,400. More information is available at www.nvidia.com/vca.

Dual-Band Wi-Fi Chipset Solution

Quantenna Communications, a fabless semiconductor company that develops standards-based 802.11n and 802.11ac MIMO chipsets, has announced dual-band 4 × 4 (four stream) multiple-input, multiple-output (MIMO) technology optimized for service providers and retail applications.

The goal of Quantenna’s new technology is to deliver reliability and performance over Wi-Fi in both 2.4 and 5 GHz bands. The Quantenna dual-band solution supports legacy Wi-Fi devices while enabling wire-like video distribution over a wireless connection with a range of more than 200 feet, including through concrete walls and across multiple floors. This will enable deployment of Quantenna-based solutions for all applications, including the use of Wi-Fi hotspots for cellular offload. Quantenna’s chipsets also enable the convergence of TV and multimedia to deliver Internet Protocol television (IPTV) services with wire-like quality and reliability.

Quantenna’s dual-band 2.4 and 5 GHz chipset support the IEEE 802.11 standard with advanced features including 4 × 4 MIMO, dynamic digital beamforming, and wireless channel monitoring and optimizing. Quantenna’s chipset can distribute multiple high-definition (HD) video streams to multiple TVs and displays anywhere in the home at full, 1,080p resolution.

For additional information, visit www.quantenna.com.

TruLife Electronics Platform

Christie Digital Systems, a visual technologies company and wholly owned subsidiary of
Ushio, Japan, has announced the TruLife electronics platform, which supports a video-processing pipeline of up to 1.2 gigapixels per second (GPix/s) floating-point architecture. Christie TruLife electronics form the basis of its projectors, which can deliver high-resolution, high-frame-rate video with image fidelity—4K resolution image processing at 60 fps and beyond. The current standard digital interfaces, such as digital visual interface (DVI) technology, have a bandwidth of 165 MHz.

Anchored by a high-performance electronics engine that leverages field-programmable gate array (FPGA) integrated circuits (ICs), Christie projectors based on the new electronics platform will use this high capacity image-processing power to deliver immersive, hyper-realistic video experiences. The company has built a high-performance video pipeline and computational blocks that deliver high-fidelity images. Target applications include theme-park attractions, visualization “power walls,” and flight simulation environments. Christie TruLife electronics will underpin these applications to provide customers with realistic experiences, alleviating the image blurring and motion sickness that can accompany these environments. The Christie platform scales to reach 1.2 GPix/s, which is nearly 10x faster than standard high-definition (HD) projection and 4x faster than typical 3D projection, as well as double the capabilities of other 4K projectors.

Launching throughout 2013, Christie projectors featuring TruLife will enable 4K/2K, ultra-HD/quad-HD resolutions today at 60 fps. The company has designed a floating-point processing engine within the platform that affords an equivalent of 25 bits of fixed-point processing as compared to the 8 to 10 bits of processing found in standard projectors.

Visit www.christiedigital.com for more details.

OptiTrack Prime 17W Motion Capture Camera

The Prime 17W motion capture camera is the latest offering in OptiTrack’s Prime Series line of high-performance motion capture and tracking cameras. With 1.7 megapixels (MP) and a wide-angle field of view (FOV), the Prime 17W is equipped to maximize coverage in a variety of volumes.

The Prime 17W’s 70 × 51 FOV and 50° range offers users flexible system deployment and camera configuration. Although high camera counts are supported, the wide-angle FOV was designed to deliver continuous data with fewer cameras, making it more affordable for engineers, animators, and researchers. Also capable of tracking fast moving objects, the Prime 17W’s global shutter and 360 frames per second (fps) full-resolution, adjustable capture rate make it suitable for unmanned aerial vehicles (UAVs), robotics, sports tracking, and other demanding high-speed applications.

The camera body, which measures 4.96 in. (12.6 cm) × 4.96 in. (12.6 cm) × 4.34 in. (11 cm), weighs 2.9 pounds. The Prime 17W is available for $3,699. For more details, visit www.naturalpoint.com/optitrack/products/prime-17w.