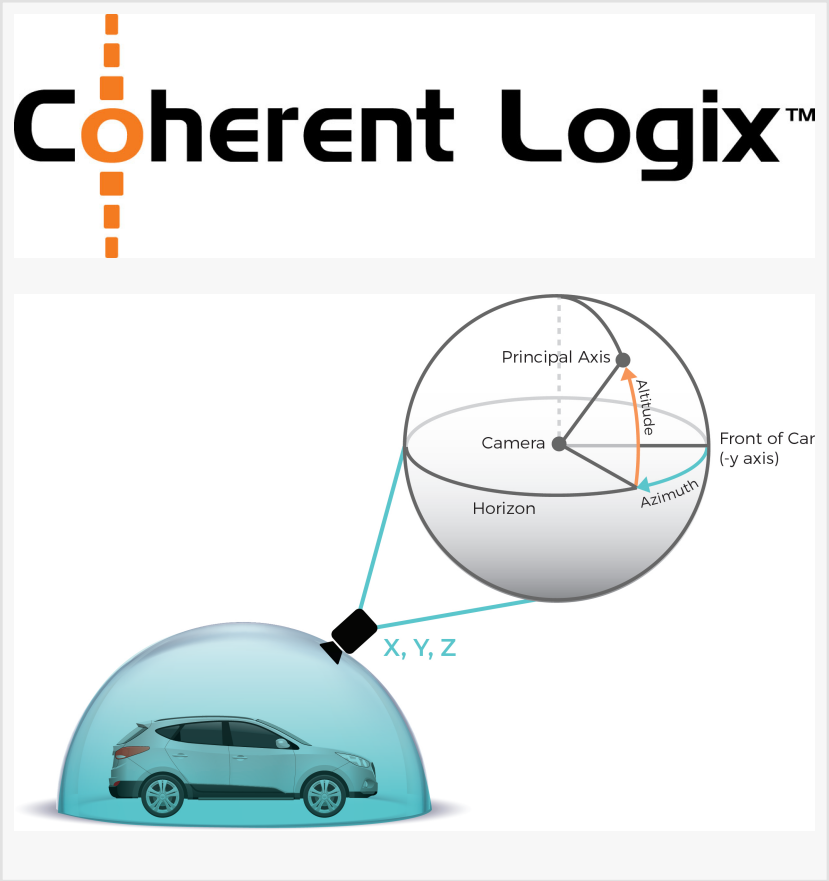
Coherent Logix to attend the 2022 SPIE Defense & Commercial Sensing Conference



AUSTIN, TEXAS, UNITED STATES, April 4, 2022 /EINPresswire.com/ -- Coherent Logix, Inc. provides a leading Software-defined AI Hardware platform that delivers industry-disruptive, multimodal semiconductor solutions and engineering design services. Coherent Logix will attend the 2022 SPIE Defense & Commercial Sensing conference, to be held April 3-7th in Orlando, Florida, and will showcase their neuromorphic processor applications for commercial sensing AI use cases.

During the conference, Coherent Logix will present two demonstrations that illustrate low power, low latency software-defined hardware applications using their 3rd and 4th Gen chips from the HyperX® Processor product portfolio:

Any World View is a virtual view perspective synthesis from multiple fixed cameras running on Coherent Logix's HyperX platform. This application takes four full-color, 30 frames per second video feeds associated with a car (front, back, right & left sides) and translates that into a full, 360-degree view while driving. Each raw camera sensor data streams directly into the HyperX computing fabric via GigeVision video transfer.

A virtual camera may be specified anywhere in the hemisphere where a live view is synthesized as if a real camera was at that location. The virtual Any World View has six degrees of freedom and the HyperX processor computes the blending and transformation dynamically in a continuous, real-time manner, all accomplished using the HyperX 100% software-defined computing fabric.

Industrial Quality Assurance is a 4th Gen HyperX demonstration that uses pass/fail criteria, classified by size, shape, and color, to ensure quality control using computer vision at the edge. The HyperX algorithm identifies objects that fail testing parameters via ultra-low latency computer vision flow and analysis.

The application receives line by line sensor data directly into the HyperX computing fabric to achieve low latency operation. This application is built for solutions requiring ultra-low latency time-to-compute, high frame rates, and as much as 2GHz processing at ultra-low power levels.

What's uniquely differentiating about the HyperX platform and its solutions are that that they derive from a 100% software-defined hardware system and product development process. So, as the system inspects criteria over time, software-based field upgrades and new model releases are C-programmable mechanisms supported by the HyperX platform to deliver new features and functionality for existing devices in the field, instead of the traditional approach that requires replacement of a fixed function solution.

The key to the Coherent Logix advantage is its HyperX Digital Stream Processor (hxDSP) technology which enables a new, disruptive compute paradigm that inherently provides software-defined hardware reconfiguration at runtime, dataflow-driven, ultra-high-speed pipelining, massive parallelization, and increased multi-tasking. HyperX technology enables high-throughput, cost-effective computing applications for real-time image processing, computer vision, video analytics, radar, SAR, linear algebra, GPS, software defined radio, software-defined networking, machine learning/AI, and cyber security use cases. This includes technology applications used in engagements with NASA and military/aerospace customers to date.

HyperX technology is also a natural fit for AI & Computer Vision multimodal applications, from the edge to the datacenter, where a core feature is external image I/O directly interfaced to the HyperX computing fabric for ultra-low latency applications. As a result, it enables real-time virtualization of systems while providing deterministic, massively parallel, fully programmable, many-core processors in application areas requiring ultra-low power.

About Coherent Logix
Coherent Logix, headquartered in Austin, Texas, introduced their unique HyperX Technology to the market in 2007. The Company has proven success with their HyperX Digital Stream Processor in Aerospace and Military markets. Their technology makes processors more configurable based on software while improving cost-efficiency combined with high throughput and low latency.

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