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MotionDSP Taps AMD and OpenCL(TM) Industry Standard for Fast Processing of Ikena ISR Video Software

AMD Heterogeneous Computing Technology Enables Real-Time "CSI-Style" Video Reconstruction to Support Public Safety

SUNNYVALE, CA -- (MARKET WIRE) -- 10/20/11 -- AMD (NYSE: AMD) today announced that MotionDSP has optimized the industry-leading Ikena ISR real-time video reconstruction software for OpenCL™ and AMD technology. Ikena ISR is a ground-breaking tool for real-time video processing and image enhancement, significantly improving video from Intelligence, Surveillance and Reconnaissance (ISR) sensors to help intelligence and defense analysts make accurate, immediate decisions in dynamic situations.

The latest version of the Ikena ISR software is optimized to fully leverage OpenCL standards and AMD technology, such as servers and workstations powered by AMD Opteron™ processors and AMD FirePro™ professional graphics cards. Porting and optimization is enabled by the AMD APP software development kit (SDK) for OpenCL. The performance of AMD-based hardware enables MotionDSP to harness the latest accelerated processing and achieve real-time reconstruction of 1080p resolution video, making dark, shaky or indistinct video sharp enough for court proceedings and detailed enough for criminal investigation.

"Working with AMD, we have been able to extract a level of performance that we couldn't attain with other vendors," said Sean Varah, founder and chief executive officer, MotionDSP. "Real-time processing is critical to ISR analysts who need better video to make decisions as events happen. With the latest AMD graphics technology, on a single GPU we're able to do 1080p video in real-time, two streams of 720p, and up to five streams of standard-definition video -- that's more than 60 percent improvement over our results with competing graphics technology."

MotionDSP partner Avwatch is bringing these capabilities to the theater of public safety and homeland security with their fleet of piloted aircraft equipped with off-the-shelf gimbaled cameras. MotionDSP's software runs on a compact PC server with AMD FirePro professional graphics, and "plugs in" directly to the camera feed, instantly enabling nearly three times better video resolution than an alternative solution, vastly improved image quality, and instant "mosaics" -- area maps constructed by stitching together panning video. And, with AMD FirePro graphics, this high-quality video comes with only a minimal increase in power consumption. Power efficiency is a crucial requirement for deployment in an aerial ISR platform, which has strict restrictions on heat, weight and power consumption.

"The powerful combination of Ikena ISR software and AMD-based hardware allows ISR analysts to get better video and advanced analytics -- instant notification when there's ground movement in a real-time ISR video feed. That's crucial for quickly assessing a developing situation," said Manju Hegde, corporate vice president, AMD Fusion Experience

Program. "By working with industry standards like OpenCL, MotionDSP can enable greater choice and interoperability in hardware, bringing real-time intelligence to a broad group of defense and public safety officials."

OpenCL is the first truly open and royalty-free programming standard for general-purpose computations on heterogeneous systems. OpenCL helps programmers to preserve their expensive source code investment and easily target multi-core CPUs, Accelerated Processing Units (APUs) and the latest discrete graphics, all of which are offered by AMD.

MotionDSP will be demonstrating Ikena ISR at the Coast Guard Innovation Expo in Tampa, Florida on October 25 in Booth #529. A case study on the value AMD and MotionDSP are delivering to the ISR community is also available.

Resources

- View AMD and MotionDSP case study here
- View MotionDSP video here
- Check out more on MotionDSP
- Follow AMD updates on Twitter at @AMDSoftware
- Learn more about AMD FirePro professional graphics

About AMD
AMD (NYSE: AMD) is a semiconductor design innovator leading the next era of vivid digital experiences with its groundbreaking AMD Fusion Accelerated Processing Units (APUs) that power a wide range of computing devices. AMD's server computing products are focused on driving industry-leading cloud computing and virtualization environments. AMD's superior graphics technologies are found in a variety of solutions ranging from game consoles, PCs to supercomputers. For more information, visit http://www.amd.com.

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