

EM Photonics Releases a Free GPU-Based FDTD Accelerator for Electromagnetic Simulations

Graphics Card Solution Enables Performance Comparable to PC Clusters

NEWARK, DELAWARE, USA. August 15, 2006. EM Photonics, Inc., a leading provider of accelerated hardware technologies, today announced the release of *FastFDTD*[™], a *free* 2D and 3D accelerated FDTD solver based on GPU (graphics card) technology. *FastFDTD*[™] is the latest in a line of FDTD acceleration products offered by EM Photonics and their OEM partners, including EMPLab Accelerator[™], EMPremier Workstation[™], OptiFDTD MAX[™], and the Celerity[™] platform.

The *FastFDTD*[™] toolkit contains all files and documentation necessary to accelerate your FDTD computations using a simple input file format. *No proprietary hardware is required to utilize the FastFDTD[™] toolkit.* Rather, individuals are free to use any supported graphics card of their choosing. The 2D and 3D solvers include a variety of sources and materials, and more are being added.

When asked why EM Photonics was providing this toolkit for free, Eric Kelmelis, Vice President, said "We decided to release our GPU-based FDTD accelerator free of charge to demonstrate the power of application acceleration with alternative computational platforms. This solver shows a single graphics card running 20-30 times faster than an optimized software implementation. Our focus will remain on pushing the boundaries of this technology and accelerating other applications with commodity hardware devices such as graphics cards and FPGAs."

The EM Photonics booth (#433) will feature live demonstrations of *FastFDTD*[™] at SPIE's Optics and Photonics conference in San Diego, California, August 15-17.

For more information, including specific feature sets, compatible graphics cards, and detailed license information, please visit the *FastFDTD*[™] webpage at <http://www.emphotonics.com/fastfDTD.html> or email info@emphotonics.com.

About EM Photonics

EM Photonics, Inc. is a recognized leader in accelerating computationally intense algorithms with commodity hardware platforms. Using off-the-shelf graphics processing units (GPUs) and custom-designed FPGA coprocessing boards, EM Photonics' tools are revolutionizing the field of scientific computing. Building off initial success in accelerated electromagnetic wave simulations with the FDTD method, EM Photonics has more recently applied their technologies to other fields, including linear algebra and image processing. Founded in 2001, EM Photonics is a privately held organization headquartered in Newark, Delaware. For additional information, visit www.EMPhotonics.com.