Press Release

For Immediate Release

New software library breaks speed barrier – 6.9 GB/s sustained GPU-based OCT imaging

Download ATS-GPU-BASE datasheet

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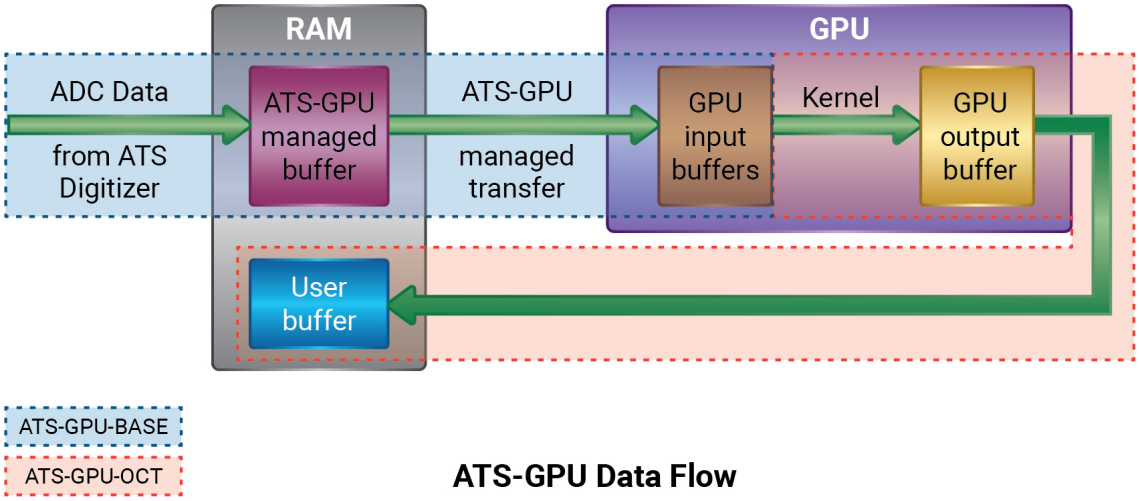
Montreal, Canada (Feb 7, 2019) AlazarTech®, a manufacturer of high-performance, low-cost PC-Based Instruments, today announced the release of version 4.0 of **ATS-GPU-BASE**™ with greatly increased data transfer rates, and **ATS-GPU-OCT**™.

ATS-GPU-BASE is a software library that allows users to transfer data acquired by AlazarTech PCI Express waveform digitizers to a CUDA®-enabled Graphical Processing unit (GPU) at sustained transfer rates as high as 6.9 GB/s for PCIe Gen 3 digitizers. Add-on libraries allow users to perform additional signal processing on data captured into GPU memory by **ATS-GPU-BASE**.



ATS-GPU Data Flow

The **ATS-GPU-OCT** add-on library provides out-of-the-box OCT imaging. It consists of a library of CUDA kernels that operate on the data acquired by **ATS-GPU-BASE**. Up to 950,000 4K FFTs per second can be calculated, which is more than sufficient for existing swept sources on the market. Windowing, Zero Padding, Dispersion Compensation, and Log functions are also included.

Other add-on libraries to **ATS-GPU-BASE** are also in development.

ATS-GPU-BASE and **ATS-GPU-OCT** are compatible with 64-bit Windows® & 64-bit Linux®. **ATS-GPU-BASE** includes an example program in C/C++ source code, which implements very simple GPU kernels that invert data and write it back to a buffer in computer memory. **ATS-GPU-OCT** includes Signal Processing sample programs written in C/C++, Python, MATLAB®, and LabVIEW®.

ATS-GPU™ Features:

ATS-GPU-BASE	**ATS-GPU-OCT**
• Designed to work with AlazarTech PCI Express waveform digitizers • Transfer A/D data to GPU at high speed – Up to 6.9 GB/s transfer rate for PCIe Gen 3 digitizer boards • Write your own CUDA kernels: Includes example program in C/C++ that allows expert-level GPU programmers to create their own kernels to do GPU-based DSP • Supports CUDA compute capability 3.0+	• Out-of-the-box OCT imaging: Includes example programs in C/C++, Python, LabVIEW, and MATLAB that allow users to set-up FFT parameters in the GPU, perform the acquisition, and receive the FFT result buffer • Up to 950,000 4K FFTs per second • Modular API allows you to easily customize signal processing algorithms

Availability and Pricing

U.S. prices are listed below. International prices may be higher. Volume discounts are available.

Product	**Availability**	**U. S. Price**
ATS-GPU-BASE GPU Streaming Library License + 1 Year Subscription	Immediate	US$ 995
ATS-GPU-OCT Signal Processing Library License + 1 Year Subscription	Immediate	US$ 1,995

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About AlazarTech

AlazarTech, headquartered in a suburb of Montreal, Quebec, Canada, provides high performance, low-cost PC-Based Instruments and software for customers involved in building OEM products, manufacturing test systems and research and development.

AlazarTech's design team consists of engineers who pioneered PC-based instrumentation in the 1980s.

While AlazarTech manufactures some of the fastest PCI and PCI Express digitizers on the market, speed alone is not the differentiating factor. AlazarTech concentrates on providing usability features for its PCI and PCI Express digitizers that make them very easy to integrate into real-world OEM applications such as ultrasonic testing, medical imaging and radar signal analysis.

The key differentiation between AlazarTech products and the rest of the industry is AlazarTech's *Dual-Port Memory* technology, which enables OEMs to create systems that can capture, analyze and store data in real time.

Customers can use AlazarTech products not only for R&D, but also deploy them in the field. Competitive products use single-port memory, forcing customers to stop acquisition in order to read data, thereby limiting their usefulness to R&D and algorithm development.

AlazarTech also works with selected OEMs to customize its products based on customer requirements.

The company's line of ATS PCI and PCI Express digitizers have been recognized by leading European, Asian and North American OEMs as being superior in quality to other devices on the market.

The company's products have found applications in industries such as medical imaging, metal inspection, defense, automotive and semiconductor test.

AlazarTech sells its products directly in North America, and internationally through a distribution network.

For more information on AlazarTech, visit www.alazartech.com.