



Press Release
For Immediate Release

New 12-bit, 500 MS/s waveform digitizer uses PCI Express bus to enable novel bio-medical imaging applications

Montreal, Canada (December 8, 2009)

AlazarTech, a manufacturer of high performance, low cost PC Based Instruments, today announced the release of **ATS9350**[®], a 12-bit, 500 MS/s, dual channel waveform digitizer based on the 8-lane PCI Express bus.



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One of the major differentiating features of the RoHS compliant **ATS9350**[®] is its dual-port on-board acquisition memory buffer, which enables very fast, sustained data throughput to computer memory. Benchmarks run by the manufacturer show rates as high as 1.4 GigaBytes/s (not GigaBit/s) for sustained throughput over many hours.

Another unique feature of the **ATS9350**[®] is its ability to be externally clocked at frequencies as high as 500 MHz and as low as 1 MHz. This is very important for applications such as Optical Coherence Tomography (OCT) that require sampling to be synchronous with a non-uniform clock generated by a swept source laser. The latest generation of swept-source lasers output clocks that can be as fast as 400 MHz and as slow as a few MegaHertz.

“Listening to our customers has worked very well for our company”, stated Muneeb Khalid, President of AlazarTech. “Our customers applications, such as OCT and perimeter security, have been guiding our product architecture and roadmap and the result is that we continue to release the right product at the right time”.

ATS9350[®] contains a large, Stratix[®] II GX FPGA from Altera. Approximately 30% of the FPGA is available for customization, such as FFT, averaging etc.

ATS9350[®] offers two simultaneous analog inputs that can each be sampled at rates up to 500 MS/s (one 12 bit, 500 MSPS ADC per channel), providing Signal to Noise Ratio in excess of 60 dB. Each channel can have up to 2 Gigasamples of on-board, dual port acquisition memory buffer. The unit occupies only one half-length PCI Express x8 or x16 slot.

Applications for **ATS9350**[®] are:

- OCT and other bio-medical imaging applications that require high dynamic range, external clocking and fast, sustained throughput to computer memory for real-time signal processing
- Other scanning applications that involve Acquisition of data with a rapidly occurring trigger (radar, ultrasonics, spectrometry, tomography ...)
- Acquisition of data with a randomly occurring trigger (lightning test, acoustic emissions, ...)
- RF signal recording applications that require continuous streaming of data across the bus

OEMs can integrate the **ATS9350**[®] PCI Express digitizers into their own systems very easily using the Windows 7/Vista/XP compatible ATS-SDK Software Development Kit. This SDK includes sample programs written in C/C++ and Visual BASIC. A high performance LabVIEW[®] VI, called ATS-VI, is also available. A source code Linux driver, ATS-Linux, can also be made available to qualified customers, who will have to execute a Non-Disclosure Agreement.

Availability

Product	Availability
ATS9350-128M	Immediate
ATS9350-1G	Immediate
ATS9350-2G	Immediate
ATS-SDK	Immediate
ATS-VI	Immediate
ATS-Linux	Immediate

For Further Technical or Editorial Information

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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 was founded in 2003 by Muneeb Khalid, who was the original founder of Gage Applied Sciences Inc., a pioneer in PC Based Instrumentation. That company was sold to Tektronix Inc. in 2000.

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.