ACCES I/O PRODUCTS, INC.

** FOR IMMEDIATE RELEASE ** New Products

ACCES I/O Products Releases 8MHz, 16-Bit, USB Arbitrary Waveform Generator

SAN DIEGO, CA—January 21, 2015—ACCES I/O Products, Inc., has announced the release of a new USB high speed arbitrary waveform output board with flexible ranges and configurable digital I/O lines. Industry standard BNC connectors are used for the analog waveform output and the gate control input, while the utility digital I/O lines are accessed via a 16-pin shrouded connector. The USB-AO-ARB1 can be used in an assortment of embedded applications including stimulus-response, test, simulation, industrial equipment control, waveform/audio synthesis, advanced substance scanning and detection, medical imaging systems, military/mission-critical, cyber security systems, manufacturing test, and process monitoring.

Arbitrary waveform generation capability becomes increasingly necessary as CPUs are burdened with a greater abundance of complex tasks. An arbitrary waveform is a user-defined set of digital values specified point by point over time. These values are then clocked through a DAC to provide the analog output signal or generate the waveform. Virtually any waveform can easily be created using the software tools provided by ACCES and also by third-party software packages such as LabVIEW. The ARB relieves some of the load placed on the CPU by handling the waveform timing at the hardware level, using an on-board FIFO and control logic. This is especially useful in time-critical applications as outputs remain unaffected by latencies inherent in popular operating systems.

High quality analog waveforms provide for robust self-test functionality, and flexible stimulation or simulation of scientific or industrial test equipment.

Key features of the USB-AO-ARB1 module include:

- **16-bit analog output for precisely timed waveforms up to 8MHz**
- **High-speed USB 2.0 device, USB 3.0 compatible**
- **Three unipolar and three bipolar output ranges**
- **Start/stop hardware control via 2nd BNC connector or via software command**
- **8 lines of digital, configurable as inputs or outputs in groups of 4**
- **Digital lines buffered with 32mA sink/32mA source current**
- **Jumper selectable 10K Ohm pull-up/pull-down resistors on DIO lines**
- **USB/104 form-factor for OEM embedded applications**
- **OEM version (board only) features PC/104 module size and mounting compatibility**
- **Alternate micro-fit embedded USB header connector**
- **Type B USB connector features industrial strength and high-retention design**
- **Small (4” x 4” x 1”), rugged, steel industrial enclosure**
- **3.3V voltage logic levels and -40°C to +85°C industrial operating temperature available as factory options**

The USB-AO-ARB1 was designed to be used in rugged industrial environments but is small enough to fit nicely onto any desk or testing station. The board measures just 3.550 by 3.775 inches and ships inside a steel powder-coated enclosure with an anti-skid bottom. A DIN rail mounting provision is available for installation in industrial environments. What makes the OEM USB/104 option unique is that its PCB size and pre-drilled mounting holes match the PC/104 form factor (without the bus connections). This ensures

easy installation using standard standoffs inside most enclosures or systems. The board can be added to the top or bottom of any PC/104, PCI-104, or PCI/104-Express stack by connecting it to a USB port usually included on-board with embedded CPU form factors.

The USB-AO-ARB1 utilizes a high-speed custom function driver optimized for a maximum data throughput that is thousands of times faster than the USB human interface device (HID) driver used by many competing products. This approach maximizes the full functionality of the hardware along with capitalizing the advantage of high-speed USB. The USB-AO-ARB1 is supported for use in most operating systems and includes a free Windows and Linux (including Mac OS X) compatible software package. This package contains sample programs and source code in Visual Basic, Delphi, and Visual C++ for Windows. Also provided is a graphical setup program in Windows. Linux support includes installation files and basic samples for programming from user level via an open source kernel driver. Third party support includes a Windows standard DLL interface usable from the most popular application programs, and includes LabVIEW 8.5+ VIs. Embedded OS support includes Windows Xpe, WES7, etc.

For additional information, readers can view a data sheet and manual for the new USB-AO-ARB1 by visiting the product webpage at www.accesio.com/USB-AO-ARB1.

About ACCES I/O Products, Inc.
For over 25 years, ACCES I/O Products, Inc. has supplied an extensive range of analog, digital, serial communication, and isolated I/O boards and solutions. ACCES also offers complete systems, integration services and enclosures with a quick turn-around on custom projects including software. ACCES products are designed for use with Ethernet, PCI Express, Mini PCI Express, USB, USB/104, USB/PICO, PC/104, PCI, Ethernet and ISA, as well as distributed, wireless I/O, and computer-on-module (COM) form factors. All hardware comes with a 30-day, no-risk return policy and a three-year warranty. For further information, visit the company's web site at www.accesio.com.

Price:	Model USB-AO-ARB1 (USB Arbitrary Waveform Generator) Please inquire for OEM and volume pricing	$395.00
Availability:	Now	
Delivery:	Stock to two weeks ARO	

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