

ACCES I/O Announces a New Line of Software Selectable USB Multifunction Analog I/O Modules (12 Models) with Speeds up to 1MHz

SAN DIEGO, CA—February 06, 2018— ACCES I/O Products announces the immediate release of a new family of low cost USB analog I/O modules – the USB-AIO Family. This innovative line of 12 and 16-bit USB modules starts with its flagship model, the USB-AIO16-16F. This high-speed, 16-bit multifunction analog input/output board is ideal for precision measurement, analysis, monitoring, and control in countless embedded applications. The USB-AIO16-16F can sample inputs at speeds up to 1MHz for the board's 16 single-ended or 8 differential analog input channels. Standard features in the USB-AIO Family include up to four 16-bit analog outputs and 16 high-current digital I/O lines—all packaged in a small, rugged, industrial enclosure. With an excellent price/performance value, this family of boards also includes models with slower A/D speeds and a group of 12-bit modules for less demanding applications. The OEM USB/104 version provides just the board without the enclosure and is ideal for a variety of embedded OEM applications—simply connect to any available USB port.

The USB-AIO Family includes a dozen models with list prices ranging from only \$374 to \$879, an unprecedented value. The boards feature eight standard analog voltage input ranges, two factory current input ranges (4-20mA or 10-50mA), 16 factory pseudo-differential inputs and include a data sample buffer and hardware real-time calibration capability. A unique channel-by-channel programmable gain feature enables measurement of an assortment of large and small signals in one scan—all under software control at up to 1MHz. The board's data buffer and ability to trigger the A/D in real time assures synchronized sampling that is unaffected by other computer operations—an essential requirement for signal, vibration and transient analysis where high data rates must be sustained for short periods of time. For embedded OEM type applications, an additional miniature USB input header is provided in parallel with the type B connector.

Available accessories include a wide variety of cables and screw terminal boards for quick and easy connectivity. Customization options include conformal coating, custom software / product-labeling, and more.

Key features of the USB-AIO Family include:

- High-speed USB device with up to 1MHz sampling rate
- All functions fully software configurable
- 16-bit and 12-bit models with 16 single-ended or 8 differential inputs
- Eight input ranges, unipolar or bipolar
- Autocalibration and real-time hardware calibration and oversampling for accurate data
- Unique channel-by-channel programmable gain feature
- Data buffer for A/D
- Synchronous, asynchronous, and timed trigger modes
- Up to four 16-bit analog outputs
- 16 high-current digital I/O lines
- Factory options include 4-20mA, 10-50mA, and pseudo-differential inputs
- Small, (4" x 4" x 1.25") rugged industrial enclosure
- OEM (board only) option features PC/104 module size and mounting compatibility
- Extended temperature and DIN rail mounting provisions
- All required power drawn from USB port, no external power adapter required

The USB-AIO Family is 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 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 embedded enclosures or systems. The product can be integrated into any PC/104-based stack by simply connecting it to a USB port included on-board with embedded CPU form factors.

The USB-AIO Family utilizes a high-speed custom function driver optimized for maximum continuous data throughput of 4 MB/s that is hundreds to thousands of times faster than the USB human interface device (HID) driver used by some competing products. This approach maximizes the full functionality of the hardware along with capitalizing on the advantage of high-speed USB 2.0. The module is supported for use in most USB supported operating systems and includes a free Linux and Windows compatible software package. This package contains sample programs and source code in C#, Delphi and Visual C++ for 32-bit and 64-bit Windows. Also incorporated is a graphical setup program in Windows. Third party support includes a Windows standard DLL interface usable from the most popular application programs, and includes LabVIEW VIs. Embedded OS support includes the family of Windows Operating Systems including IoT.

For additional information, readers can view a data sheet and manual for the new USB-AIO Family by visiting the product webpage at <u>www.accesio.com/USB-AIO16-16F</u>.

About ACCES I/O Products, Inc.

For over 27 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, PCI Express Mini Card, USB, USB/104, USB/PICO, PC/104, PCI, 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:	Prices range from \$374 to \$879 Please inquire for OEM and volume pricing
Availability:	Now

Delivery: Stock to two weeks ARO

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