



Eight-Channel PC/104 Analog Output Board  
with Arbitrary Waveform Generator (Model 104-DA12-8A)

**\*\* FOR IMMEDIATE RELEASE \*\***

## **Eight-Channel PC/104 Analog Output Board with Arbitrary Waveform Generator**

SAN DIEGO, CA—September 8, 2005—ACCES I/O Products, Inc. announces its latest PC/104 board, Model 104-DA12-8A. Featuring eight independent 12-bit digital-to-analog converters (DACs) and broadly configurable arbitrary waveform generation (ARB) capabilities, the board is an ideal choice for PC/104 embedded system designers. Other convenient features include 4-20mA outputs, counters for precise timing and fused general-purpose +5V and +12V power outputs. The 104-DA12-8A can be used in an assortment of PC/104-based embedded applications including stimulus-response, test, simulation, industrial equipment control and waveform/audio synthesis.

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. Virtually any waveform can be created using the software tools provided by ACCES and also by third-party software packages. The ARB relieves some of the load placed on the CPU by handling the waveform generation at the hardware level using on-board memory and control logic. This is especially useful in time-critical applications as outputs remain unaffected by latencies inherent in popular operating systems. ACCES I/O's ARB architecture allows for flexibility in allocating the onboard RAM across the channels depending on the complexity of the desired waveform. It is even possible to use the ARB for selected channels while operating the remaining channels in the software driven mode.

Key features of the 104-DA12-8A include:

- Independent 12-bit D/A converter per channel
- 32-bit counter for precisely timed outputs
- DACs independently or simultaneously updated
- Output ranges of 0-5, 0-10, +/-5, +/-10V
- 4-20mA current sink output available corresponding to the output voltage
- 128K SRAM for ARB data storage
- Available in 4 and 8 channels, with or without the ARB
- 16-bit counter for interrupt generation
- On-board DC/DC converter allows operation on +5V power
- Optional -40 to +85°C operating temperature

The 104-DA12-8A is supported for use in most operating systems and includes a free DOS, Linux and Windows 95/98/Me/NT/2000/XP/2003 compatible software package. This contains sample programs and source code in "C" for DOS, and Visual Basic, Delphi, C++ Builder, and Visual C++ for Windows. Also incorporated is a graphical setup program and utilities to generate waveforms in Windows. Third-party support includes a Windows standard DLL interface usable from most popular application programs. Embedded OS support includes Windows XPe and CE. Linux support consists of installation files and basic samples for programming from user level via an open-source kernel driver.

ACCES I/O Products, Inc. supplies 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 PC/104, PCI, PCI-X, Low-Profile PCI, EBX, EPIC, USB, Ethernet and ISA, as well as distributed and wireless I/O. 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](http://www.accesio.com).

**Price:** \$595.00—104-DA12-8A (with ARB function);  
\$319.00—104-DA12-8 (without ARB function)

**Availability:** Now

**Delivery:** Stock to two weeks ARO

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