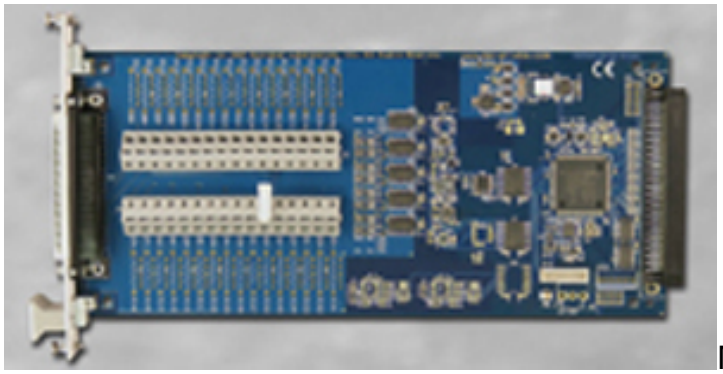
# Analog Input Board Eliminates Ground Loops



Microstar Laboratories added the MSXB to its family of isolated analog and digital signal-conditioning expansion boards. The part includes 16 differential analog inputs, with isolation from PC ground. Analog-to-digital conversion to 16-bit resolution takes place on the board itself, to minimize exposure to noise from other circuits in the system. Each board can acquire data at 333k samples per second. Only digital values are passed to other system components. Eight boards in a 19-inch rack-mountable industrial enclosure can connect to a single DAP board. A PC or DAPserver can control multiple local DAP boards and many more across a network — as a fully synchronized system. These boards are asserted to offer high signal density, enable high channel counts, and they include FPGAs for flexible control. Every DAP board includes an onboard processor running a real-time operating system that Windows applications which support DLL calls can communicate with — and control. Users can communicate with and control a DAP board from DAPstudio — a Windows application from Microstar Laboratories — as well as from third-party software. DAP boards also communicate among themselves independently of Windows to synchronize their clocks with one another. They then all work synchronously as a networked data acquisition system. The MSXB 084 board starts at $595.

**Microstar Laboratories**
888 678-2752, www.mstarlabs.com [1]

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