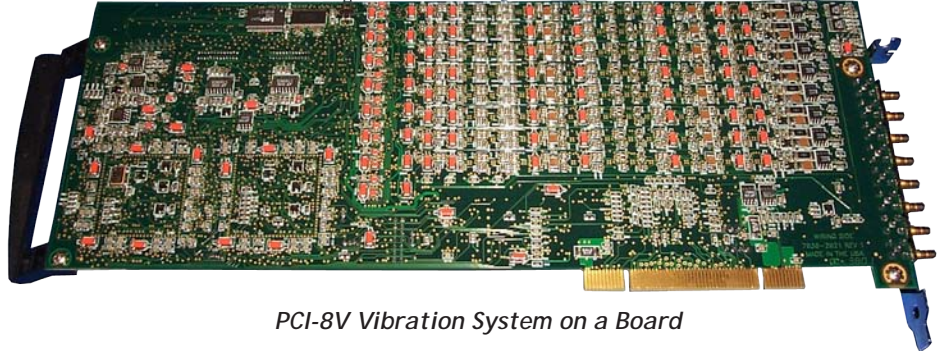




PCI-8V: 8-Channel Vibration System on a Board

MISTRAS Group's Products & Systems Division, **PCI-8V** provides 8 channels of simultaneous waveforms and Vibration features. This new digital data acquisition system resides on a full-size PCI card and is very cost effective. Through the **high performance** PCI bus and Direct Memory Access (DMA) architecture, significant data transfer speeds can be attained (up to 132 Mb/sec.), assuring a wide bandwidth bus for multi-channel data acquisition and waveform transfer. Digital acquisition circuitry virtually eliminates drift, thereby achieving **high accuracy and reliability**.



PCI-8V Vibration System on a Board

Due to advances in surface mount technology and high density ASIC devices, PAC has been able to provide this single Vibration System on a Board with 8 complete high speed, channels of acquisition waveform processing and transfer, 2 analog parametric input channels and 8 digital input and output

Specifications:

Electrical

- Inputs: 8 channels
- Input Impedance: 50 Ohms
- Sensor Testing: AST built-in
- Frequency Response: 2 Hz - 40 kHz

Signal Processing

- AE Signal Gain: 0, 6 dB computer selectable
- Filters: 4 High Pass and 1 Low Pass computer selectable
- ADC Type: 16 bit, 1.0 MSPS per channel max.
- Waveform Sample Rate: Computer selectable, 100 kS/s, 200kS/s, 500kS/s, 1MSamples/sec

Analog Parametrics

- Parametric Channels: 2
- Parametric A/D Res.: 16 bit
- Parametric Sample Rate: 10 kHz sample rate for each
- Time Driven Data Rate: Controlled by software, 10 msec. to 60 seconds
- Time Parametrics: All parametrics are available in time data set

Key Features:

- ◆ Low power consumption.
- ◆ 8 digital (16-bit A/D) complete channels on one fullsize PCI card/
- ◆ 4 High Pass, 1 Low Pass filter selections for each channel, totally under software control.
- ◆ Up to 2 parametrics on each PCI-8 board with update rates up to 10,000 readings/second.
- ◆ Designed with multiple FPGA's and ASIC IC's, to provide extreme high performance and minimize components and cost.
- ◆ Hit LED drivers are built within the PCI-8 board so that activity LED's can be attached directly.
- ◆ Built-in feature extraction provides high speed transient data analysis at high hit rates.
- ◆ Built in waveform processing with DMA & Bus Mastering transfer for high speed transfer of waveforms on all 8 channels.
- ◆ Digital signal processing circuitry virtually eliminates drift, thereby achieving high accuracy and reliability.

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