

DESCRIZIONE GENERALE

- Schede con filtri anti-aliasing
- 8 input analogici
- 153,6 KHz/canale
- DAPL multitasking real-time a bordo
- DLL per programmazione Windows
- Support Kylix and GC++ per Linux



Microstar Laboratories, Inc., è un produttore di schede di acquisizione ed elaborazione dati serie DAP (Data Acquisition Processor) con CPU e sistema operativo multitasking Real-Time DAPL 2000 a bordo.

Per applicazioni in cui viene richiesto il filtraggio anti-aliasing, Microstar Laboratories offre due soluzioni di anti-aliasing. La soluzione idonea dipende dall'applicazione.

Per le applicazioni più avanzate di filtro che richiedono frequenze di taglio elevate e variabili, scegliere la iDSC 1816.

La iDSC 1816 offre filtri-anti-aliasing su ciascuno degli 8 canali simultanei di acquisizione dati a 16 bit tutti a bordo con un rendimento di 153.6k campioni al secondo su ognuno degli 8 canali.

Viene fornito con software DSCview e driver per altri programmi Windows.

La iDSC 1.816 supporta applicazioni che richiedono il campionamento simultaneo fino a 8 ingressi simultanei.

Una iDSC 1.816 può lavorare con gli altre schede iDSC in modo sincronizzato.

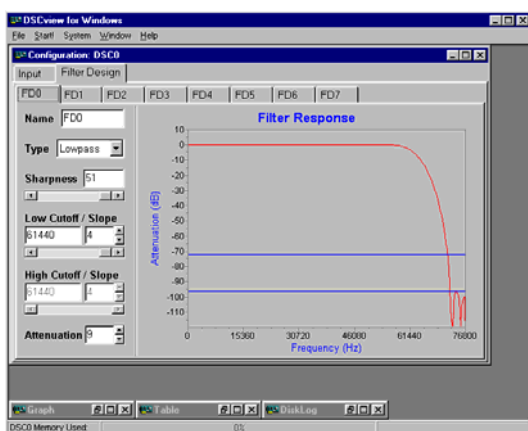
L'implementazione più semplice, utilizza la scheda accessorio MSXB 048 come scheda di espansione per schede DAP.

Ognuno dei sedici canali di ingresso ha il suo proprio filtro analogico con nove opzioni di taglio: 100Hz, 250Hz, 500Hz, 1kHz, 2.5kHz, 5kHz, 10kHz, 25kHz, 50kHz.

Sono disponibili inoltre DLL per linguaggi di sviluppo tipo C++, Delphi, VB, MATLAB, LabView per sistemi operativi MS Windows e Linux.

The iDSC 1816 board combines 16-bit resolution on eight simultaneous channels of data acquisition with brick-wall anti-alias filters on each channel. The iDSC 1816 samples analog inputs at a throughput of 1.2M samples per second, with the sampling rate on each channel ranging from 8 samples per second to 153.6k samples per second. The data stream optionally includes an additional 300k samples per second: information from one or two external timing channels. Software can parse the data stream to correlate the analog data with events on one or both of the timing channels, to a resolution of 51 nanoseconds.

The iDSC 1816 comes with DSCview included, and drivers for DASyLab, Agilent/HP VEE, LabVIEW, LabWindows/CVI, and MATLAB. The iDSC 1816 also includes programming support for Visual Basic, Visual C++, and other Windows (2003/XP/2000/NT, ME/98/95) programming environments through the DSCIO.DLL, a standard Windows DLL interface. It supports development environments like Delphi and C++Builder through a native DSC Component. It also supports Linux development environments like Kylix and GC++. With the DSCview software on your PC, you can customize the filter characteristics for each channel, and download them to the iDSC board. Download DSCview and check it out.



Per la programmazione e configurazione della iDSC è possibile utilizzare il DSCView. E' possibile inoltre utilizzare altri software come DasyLab, HPVEE, LabView o linguaggi di programmazione, attraverso l'utilizzo delle DLL messe a disposizione da Microstar Lab.

Microstar Laboratories includes appropriate software from DSCview in its support for other interfaces that, like DSCview, require no programming -- DASyLab, Agilent VEE, and LabVIEW -- as well as for LabWindows/CVI and MATLAB. We also include the same user functionality for Visual Basic, Visual C++, and other Windows (2003/XP/2000/NT, ME/98/95) programming environments through the DSCIO.DLL. The DSCIO.DLL provides a link between these programming environments and the iDSC board. It lets users easily program custom interfaces in any environment they choose. If you prefer, use the Delphi and C++Builder development environments through a native DSC Component, and program your own user interfaces. All user interfaces share a common look and feel to designing and configuring filters.

iDSC 1816 Specifications

| General Specifications | |
|---|---|
| Dimensions | 13.33 inches x 4.80 inches |
| Power requirements | +5V, 3.0 Amps |
| Operating temperature | 0-50 degrees Celsius |
| Type of A/D converter | Sigma-Delta |
| Number of A/D converters | 8 |
| Input | |
| Number of analog channels | 8 |
| Expandable to | 112 simultaneous analog inputs (w/ multiple iDSC 1816 boards) |
| Input voltage range | +/-5 V, +/-10 V |
| Max. input voltage (fault-protected inputs) | -40 V, +55 V |
| Max. analog sampling rate per channel | 153.6k samples/second |
| Max. aggregate analog sampling rate over 8 channels | 1229k samples/second |
| ADC Resolution (bits) | 16 |
| Number of external timing channels | 2 |
| Microprocessor | |
| CPU type | Intel 80486 DX4 |
| CPU clock speed | 96 MHz |
| Onboard operating system | DAPL (modified version) |
| CPU DRAM | 16 Mbytes |
| DSP | |
| Type of DSPs | Motorola 100 MHz DSP56303 |
| Number of DSPs | 2 |
| PC INTERFACE ¹ | |
| Bus support | PCI |
| Samples transferred per second ² | 1229k samples/second |
| Samples logged per second | 1229k samples/second |

¹ Benchmark rates vary with PC platform.

² Maximum disk logging and data transfer rates vary with PC platform.