

PCI33 DSP CARD FOR PCI BUS SYSTEMS

The PCI33 DSP card is suited for high-speed analog signal sampling and data processing. TTL IO ports are provided for control applications. The PCI bus interface provides for plug-and-play installation, while the Windows Driver and DLL provide interface functions for the application developer.



Technical Data

PC bus interface	PCI bus (specification 2.2), 32 bit, 5V
PCI memory range, interrupt	128KB memory area, INT A
Microprocessor and memory	TMS320VC33 with 128K x 32 off-chip memory
Microprocessor to PC interface	Dual Port RAM, 4K x 32, interrupts and semaphores
Analog interface	2 channels, each $\pm 10V$, with 400KHz LPF and 16-bit ADC, 100KHz
Analog inputs	8 single ended inputs per channel, switched by analog multiplexer
Digital interface	7 byte-wide TTL IO ports, individually controllable (8255 compatible)
Connectors	DB37 female, 26-way box header, 40-way box header
Power supply	5V DC, 500mA typically, provided by PC
Size	167mm x 107mm

Software

Windows Drivers	Windows NT, 2000, XP with standard WIN32 DeviceIoControl functions as interface
Source Code example*	-TMS320C3x code implementing two-channel sampling -VisualC++ code implementing upload and visualization of sampled signals
Boot-load Manager	Embedded code to download application code and program into Flash memory
Boot-load Programmer	Windows application to access embedded boot-load manager
Calibration Utility	Windows application to calibrate the card

*custom software development is available on request

Performance (0 to +55°C)

Spurious-free Dynamic Range	< -65dB
Input crosstalk	< -70dB
Noise figure with inputs grounded	< 2 bits
Gain and linearity	$1 \pm 0.5\%$
Offset	$0V \pm 2mV$ at 25°C, derated at $\pm 100\mu V/^\circ C$

Ordering Information

Description: PCI33 DSP card	Part number: DPCI1-11000/2
-----------------------------	----------------------------

KREON TECHNOLOGY (PTY) LTD
P.O. Box 72489
Lynnwood Ridge, 0040
Tel (012) 349-2646
Fax (012) 349-2335
Email kreoninfo@kreon.co.za
Url www.kreon.co.za

