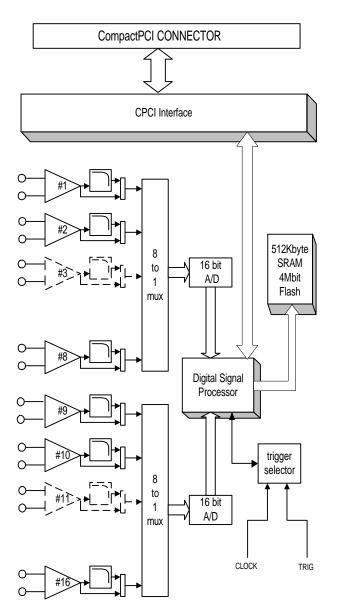


## CompactPCI™ Data Acquisition Module DSP based 16 Channel 16 bit A/D

Compact PCI - AD16
FUNCTIONAL BLOCK DIAGRAM



## **FEATURE SUMMARY**

- Sixteen +-10volt inputs, 16 bit ADC
- TMS320C31 DSP processor
- 512K byte of zero wait state SRAM
- 16 differential or single ended input
- 2 X 16 bit 10 μS Analog to Digital Converters
- External or Internal Scan clock
- External or Internal Trigger clock
- Local processor supervises acquisition
- High speed DMA transfers to and from the CPCI bus
- Application firmware can be downloaded over the bus
- Instrumentation amplifier per channel
- Software programmable gain 1,10,100,1000
- Over-voltage protection to +/- 40 v
- Opt. fourth order analog filters
- Can use external power source for reduced noise

## **OVERVIEW**

The CPCI-AD16 module provides a 3U high performance data acquisition subsystem. The Local DSP can be used to simply move data samples to the CPCI bus or can provide processing functions such as limit checking, FFT's, digital filtering, etc. Application software can be downloaded to the DSP via the CPCI interface. Instrumentation amplifiers provide over-voltage protection, gain and filtering on a per channel basis. Internal scan and trigger clocks are derived from either the CPCI bus clock or the local DSP clock. Dual 32 bit timers can programmed to pace the acquisition process. The CPCI-AD16 can also accept external scan and trigger signals from a front panel connector.

## **ORDERING INFORMATION**

p/n: CPCI-AD16 Intelligent 16 bit data acquisition TB-80 80 pin terminal block w/ cable CBL-SCSI-80 80 pin scsi to scsi cable only

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