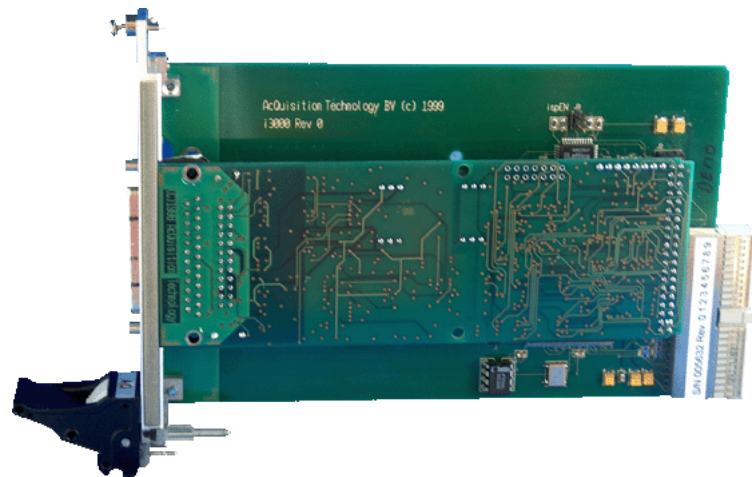


# 8 Channel ADC for CompactPCI

By AcQ Inducom



The CPCI393 8-Channel Differential Input ADC card is very well suited to be used in applications in which autonomous signal conversion is an issue, as well as in standard mid-range applications. Enabled channels are scanned at maximum rate and conversion results are stored in shared memory. A local DSP performs the data acquisition and calibration transparent for the host.

This CompactPCI card is available in a 3U and a 6U form factor.

**Features:**

- > 100kSPS ADC with 16-bit or 12-bit resolution
- > Channels can be enabled/disabled individually
- > No potentiometers
- > 8 differential input channels
- > On-board filtering with 1kHz cut-off frequency
- > Analog front-end is optically isolated
- > On-board DC/DC converter for isolated power supply
- > Data acquisition handled by TMS320C203 DSP, transparent for user
- > Calibration data stored in EEPROM
- > Update rate up to 50kHz

## Input Characteristics

- \* The CPC1393 has 8 differential inputs.
- \* These inputs are optical isolated and have a second order input filter with 1kHz cut-off frequency.
- \* The input ranges are software programmable.
- \* Uni-polar input range: 0V to +5V / 0V to +10V
- \* Bi-polar input range: -5V to +5V / -10V to +10V
- \* The CPC1393 is available with current inputs with a range of 0 to 20 mA.

## Conversion Characteristics

- \* The CPC1393 8 channel ADC card has an accuracy of 12- or 16-bit.
- \* Typically the acquisition time is 20 microseconds per channel.
- \* All enabled channels are converted continuously.
- \* The measured data can be read from shared memory by the host. Local DSP (TMS320C203) performs acquisition sequences.

## PCI Interface

- \* The CPC1393 has a PCI Specification 2.1 compliant target interface and uses a PCI9050 PCI Bus Target Interface Chip by PLX Technology Inc.

## Ordering Information

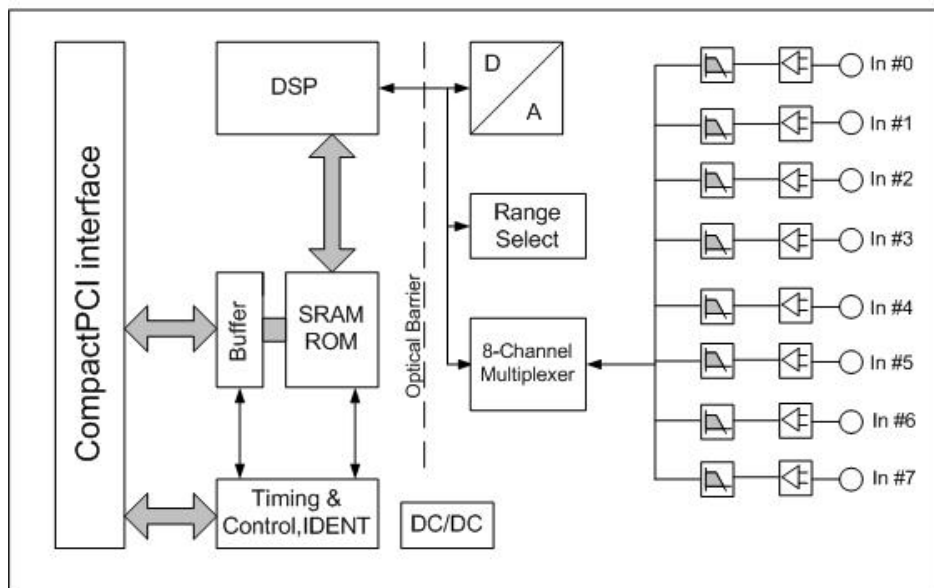
- \* **CPC1393/T04** (3U) 8-ch analog input, diff. voltage inputs, 12-bit res, no DCDC
- \* **CPC1393/T02** (3U) 8-ch analog input, diff. voltage inputs, 12-bit res, DCDC
- \* **CPC1393/T08** (3U) 8-ch analog input, diff. current inputs, 12-bit res, no DCDC
- \* **CPC1393/T06** (3U) 8-ch analog input, diff. current inputs, 12-bit res, DCDC
- \* **CPC1393/T05** (3U) 8-ch analog input, diff. voltage inputs, 16-bit res, no DCDC
- \* **CPC1393/T03** (3U) 8-ch analog input, diff. voltage inputs, 16-bit res, DCDC

## Ordering Information

- \* **CPC1393/T09** (3U) 8-ch analog input, diff. current inputs, 16-bit res, no DCDC
- \* **CPC1393/T07** (3U) 8-ch analog input, diff. current inputs, 16-bit res, DCDC
- \* **CPC14393/T04** (6U) 32-ch analog input, diff. voltage inputs, 12-bit res, no DCDC
- \* **CPC14393/T02** (6U) 32-ch analog input, diff. voltage inputs, 12-bit res, DCDC
- \* **CPC14393/T08** (6U) 32-ch analog input, diff. current inputs, 12-bit res, no DCDC
- \* **CPC14393/T06** (6U) 32-ch analog input, diff. current inputs, 12-bit res, DCDC

## Ordering Information

- \* **CPC14393/T05** (6U) 32-ch analog input, diff. voltage inputs, 16-bit res, no DCDC
- \* **CPC14393/T03** (6U) 32-ch analog input, diff. voltage inputs, 16-bit res, DCDC
- \* **CPC14393/T09** (6U) 32-ch analog input, diff. current inputs, 16-bit res, no DCDC
- \* **CPC14393/T07** (6U) 32-ch analog input, diff. current inputs, 16-bit res, DCDC
- \* **CPCI(4)393/SW APIS based software**
- \* **CPCI(4)393/MAN manual on paper**



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