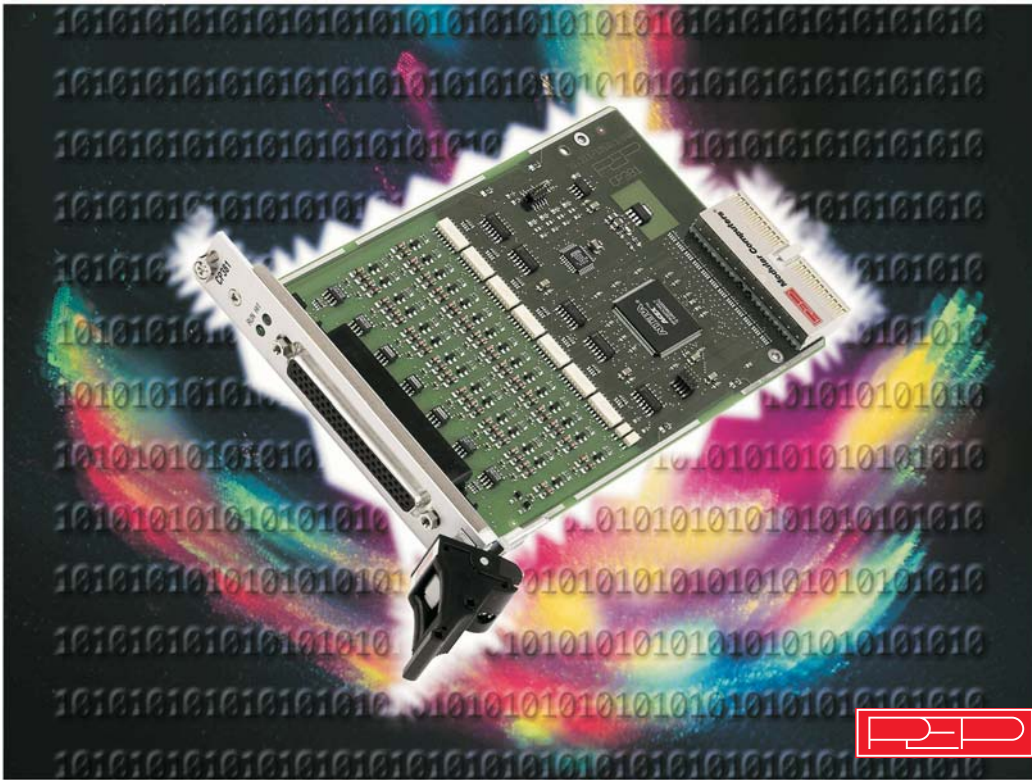# CP381
3U Digital-In Board

Reasonable

Dependable

Comfortable

Compact PCI

➤ **Trust** in your results by designing your application under the use of a module with a wide input voltage range.

➤ **Relieve** your work load by taking advantage of an efficient pre-configuration.

➤ **Secure** your application by benefiting of effective protection features.

Product Overview

Applications demanding digital input nodes, require a reasonable, cost effective solution one can rely on. Even harshest of environments aren't an issue. Having this in mind the perfect solution is Kontron's CP381 digital in.

Reasonable

A wide input voltage range, as well as a high nominal potential, and a superior input current, consequently create a very flexible solution.

Dependable

Many applications in the industrial automation area have to work under the toughest conditions (-40°C up to +85°C), and require nevertheless reliability. A sensible inverse polarity protection, and a high input protecion fulfill this task.

Comfortable

An incomplex product is indispensable nowadays. Therfore the CP381 features an API, relieving the connection to establish visualization tools, such as Lab View, Agilent VEE etc. Programmable debouncing, event detecion, and input capture and compare features allow a sufficient pre-configuration. Simple connectivity is provided by offering accessories like a cable, or an adapterbox. The isolation to the system secures the board. No matter which operating system is used (Windows2000/XP®, VxWorks, or Linux), the CP381 promises satisfaction.

Compact PCI Interface

PCI Target Interface with FPGA, PICMG 2.0 Rev. 2.1 compliant, support of CompactPCIbus on connector P1, 32 Bit address/data/33 MHz, 1 BAR, 64 KB memory space, non-prefetchable, Universal signaling voltage (3.3V), serial EEPROM interface, PCI transfer rate up to 132 MB/sec.

Digital Inputs

Number of Channels:	30	
Input Voltage Range:	Low:	-3V..+5V
	High:	+11V..+30V
High Nominal Potential:	24V	
Input Current:	max. 5mA	
Channel Connection:	2 pins per channel	
Input Protection (ESD):	8 kV	
Input Impedance:	min.:	1,5 KΩ
	max:	6 KΩ @ 30V
Input Filter:	10 kHz	
	(edge frequenzy)	
Isolation:	2kV to system	
Debouncing:	Programmable	
Inverse Polarity Protection		
Event Detection		
Input Capture and Compare		

Software Support

Windows®XP, Windows®2000, Windows®NT, VxWorks®, Linux®

Common

Front Panel Connector.:	Dsub 62-pin
Front Panel LED's:	run and event hit
Dimensions:	100 mm x 160 mm (3U card size)
Temperature Ranges:	0° C to + 70° C (standard)
	-40° C to +85° C (extended)
Operation Humidity Range:	0..90% (non-condensing)
Weight:	145 g
MTBF:	370.180 h (acc. MIL-HDBK-217F)

Product	Description	Order No.
CP381	30 channels digital in	23796
CP381-E2	30 channels digital in, -40° C/+85° C temperature range	23797
CP-ADAP-IO1	Cable and box for CPCI I/O products, 62 pin DSUB on 62 single channels	25736
KIT-CP381	Documentation and WindowsNT® driver kit on CD-R [1]	23858
VXW-DRV-CP381	VxWorks driver CP381 for Tornado V. 2.2	23859
LIN-DRV-CP381	Linux driver CP381	26505
Note:	1) KIT-CP381 free of charge downloadable from the Internet	

Corporate Offices

US/ Canada
6260 Sequence Drive
San Diego, CA 92121-4371
Tel.: +1 (0)888-294-4558
Fax: +1 (0)888-677-0898
sales@us.kontron.com

Europe, Middle East and Africa
Oskar-von-Miller-Stra e 1
85386 Eching/Munich Germany
Tel.: +49 (0)8165-770
Fax: +49 (0)8165-77219
sales@kontron.com

Asia Pacific
6F, No. 9, Lane 235, Pao-Chiao Rd.,
Hsin-Tien, Taipei Hsien, 231 Taiwan
Tel.: +886-2-29103532
Fax: +886-2-29103582
sales@kontron-asia.com

Kontron Modular Computers GmbH
Sudetenstr. 7
D-87600 Kaufbeuren
Tel.: +49 (0) 8341 803 0
Fax: +49 (0) 8341 803 499
www.pep.com / www.kontron.com

Our worldwide sales representatives and partners can be found on our websites.