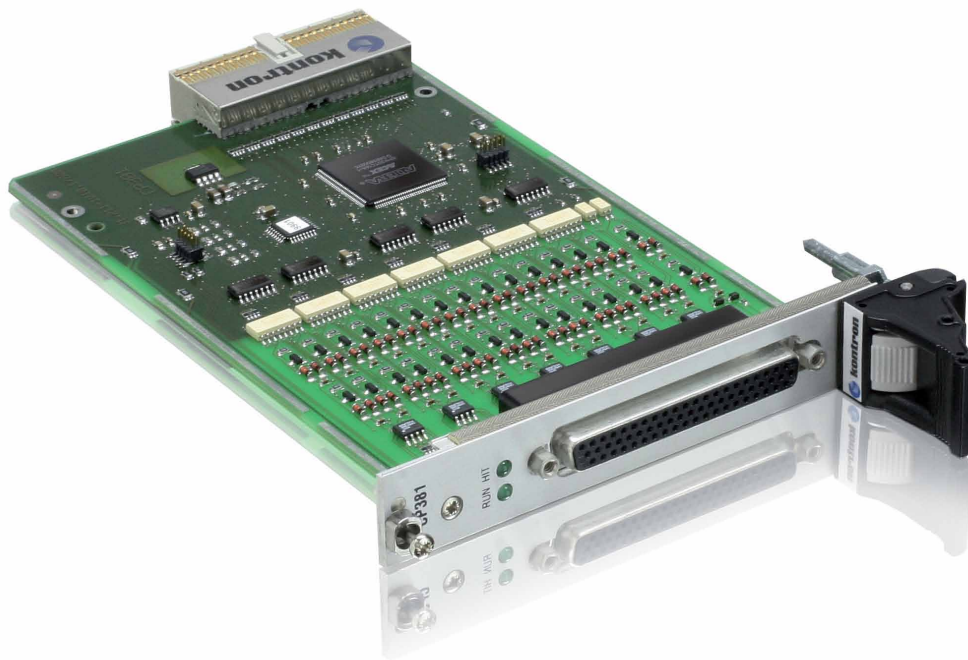# » CP381 «

3U Digital-In Board

» **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.

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

An incomplex product is indispensable nowadays. Therefore 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 (Windows® 2000/XP, Windows® XP embedded, VxWorks, or Linux), the CP381 promises satisfaction.

Technical Information

CompactPCI Interface	PCI Target Interface with FPGA, PICMG 2.0 Rev. 3.0 compliant, 32 Bit address/data/33 MHz, 1 BAR, 64 KB memory space, non-prefetchable, Universal signalling 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
Miscellaneous	Inverse Polarity Protection, Event Detection, Input Capture and Compare
Software Support	Windows® XP, Windows® 2000, Windows® XP embedded, VxWorks®, Linux®
Common	
Front Panel Connector	D-Sub 62-pin
Front Panel LED´s	2x green status LED´s
Dimensions	100 mm x 160 mm (3U card size)
Temperature Ranges	0° C to + 70° C (standard) / -40° C to +85° C (extended)
Operating Humidity Range	0..95% (non-condensing)
Weight	145 g
MTBF	370,180 h (acc. MIL-HDBK-217F)

Ordering Information

Article	Order-No.	Description
CP381	23796	30 channels digital in
CP381-E2	23797	30 channels digital in, -40°C/+85°C temperature range
CP-ADAP-IO1	25736	Cable and box for CPCI I/O products, 62 pin DSUB on 62 single channels
KIT-CP381 [1]	23858	Windows® 2000, Windows® XP Board Support Package, CP381 User´s Manual
LIN-DRV-CP381 [1]	26505	Linux driver for CP381, CP381 User´s Manual
WXPE-BSP-CP381 [1]	1022-9856	Windows® XP embedded Board Support Package, CP381 User´s Manual
VXW-DRV-CP381-V6.7	23859	VxWorks® 6.7 driver for CP381, CP381 User´s Manual
VXW-DRV-CP381-V6.8	1045-3426	VxWorks® 6.8 driver for CP381, CP381 User´s Manual

[1] Free of charge downloadable from the Internet

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