

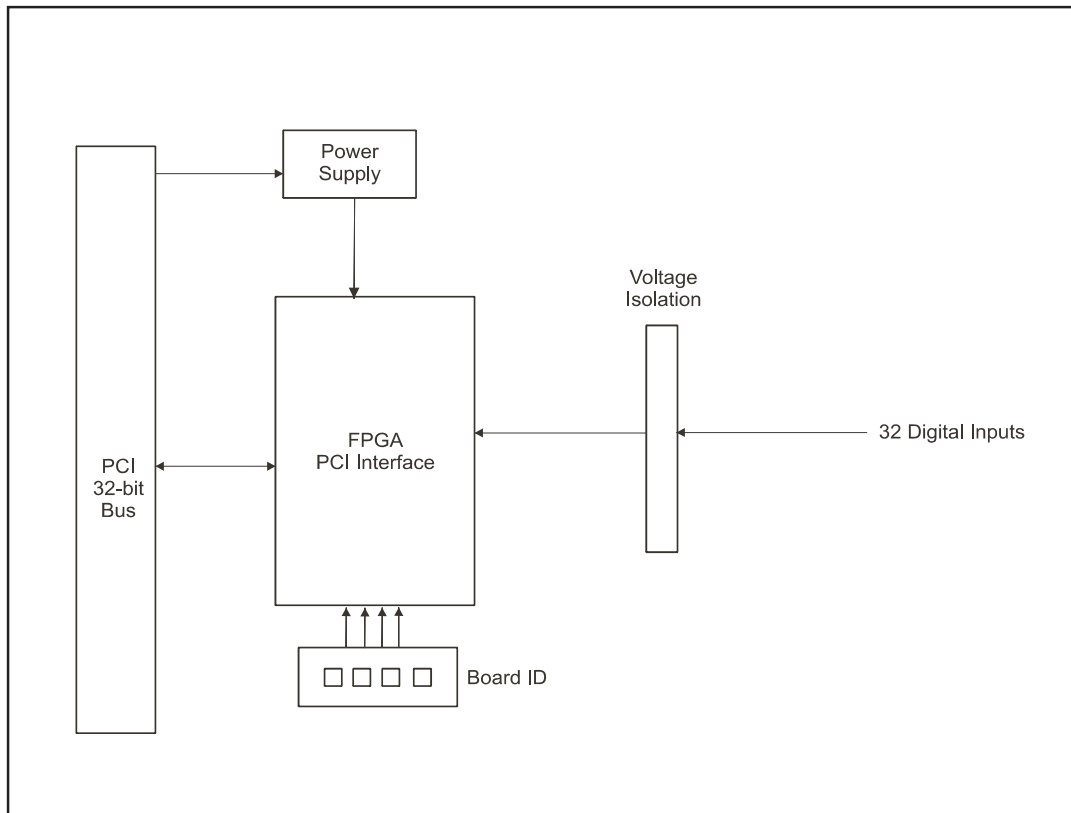
## ► 32-Channel Isolated Digital Input PMC Adapter

The 32-Channel Digital Input adapter provides 32 opto-isolated digital input channels on a single PMC adapter. A Field-Programmable Gate Array (FPGA) is used to provide access to the digital data over the PCI bus.

Input channel to PMC isolation is 2 500 V RMS.

### Architecture

A FPGA is used to read the 32 input channels and provide the PCI interface. Isolation is achieved by optocouplers on all inputs.



**Block Diagram of the 32-Channel Isolated Digital Input PMC Adapter**

### Features

- wide input range (3 V to 35 V)
- DC or AC inputs
- Air-Cooled and Conduction-Cooled versions
- Commercial, Industrial and Ruggedised grades
- adapter identification switch
- programmable inputs
- input channel to PMC voltage isolation



► **32-Channel Isolated Digital Input PMC Adapter**

<b>Formfactor and Bus Interface</b>	IEEE Std 1386.1-2001 32 bit, 33 MHz 3,3 V PCI signalling, 5 V tolerant		
<b>Digital Inputs</b>	32	DC (optional AC)	
<b>Voltage Isolation</b>	2 500 V RMS (Input channel to PMC) 250 V RMS (frontpanel channel to channel) 100 V RMS (backpanel channel to channel)		
<b>Power</b>	3,3 V DC at 0,3 A (1 Watt); 5 V DC at 0,5 A (2,5 Watt)		
<b>Input Resistance</b>	5 600 Ohm +/- 5%		
<b>MTBF</b>	Figures according to MIL-HDBK-217F, Parts Stress Method		
	Commercial and Industrial Grades	Ground Benign, Controlled, 25 C	555 000 hours
	Ruggedised Grade	Ground, Mobile, 45 C Naval, Sheltered, 40 C Airborne, Inhabited Cargo, 55 C	107 000 hours 144 000 hours 99 000 hours
<b>Software Drivers</b>	Support for Linux. VxWorks, Windows and others are costed options.		
<b>Physical Characteristics</b>			
<b>Cooling Type</b>	<b>Air-Cooled</b>		<b>Conduction-Cooled</b>
<b>Dimensions</b>	149,0 mm x 79,0 mm		149,0 mm x 79,0 mm
<b>Mass</b>	150 g +/- 30 g		210 g +/- 30 g
<b>Environmental Specifications</b>			
<b>Grade</b>	<b>Commercial</b>	<b>Industrial</b>	<b>Ruggedised</b>
Temperature - Operating - Storage	0 C to +55 C -40 C to +85 C	-15 C to +75 C -40 C to +85 C	-40 C to + 85 C -55 C to +125 C
Humidity	0% - 90%	0% - 95%	0% - 95%
Shock	10 g peak for 11 ms	20 g peak for 11 ms	40 g peak for 11 ms
Vibration - Sine - Random	2 g (peak) at 10 Hz to 100 Hz 0,04 g²/Hz at 15 Hz to 2 kHz	5 g (peak) at 5 Hz to 2 kHz 0,06 g²/Hz at 15 Hz to 2 kHz	10 g (peak) at 5 Hz to 2 kHz 0,1 g²/Hz at 15 Hz to 2 kHz
<b>Designation</b>	<b>Cooling</b>	<b>Connector</b>	<b>Grade</b>
CCII/DI/PMC/32C/FP/COM	Air	Frontpanel	Commercial
CCII/DI/PMC/32C/FP/IND	Air	Frontpanel	Industrial
CCII/DI/PMC/32C/FP/RGD	Air	Frontpanel	Ruggedised
CCII/DI/PMC/32C/BP/COM	Air	Backpanel	Commercial
CCII/DI/PMC/32C/BP/IND	Air	Backpanel	Industrial
CCII/DI/PMC/32C/BP/RGD	Air	Backpanel	Ruggedised
CCII/DI/PMC/32C/BP/CC	Conduction	Backpanel	Ruggedised

Board-Level 32-Channel Isolated Digital Input PMC Adapter