

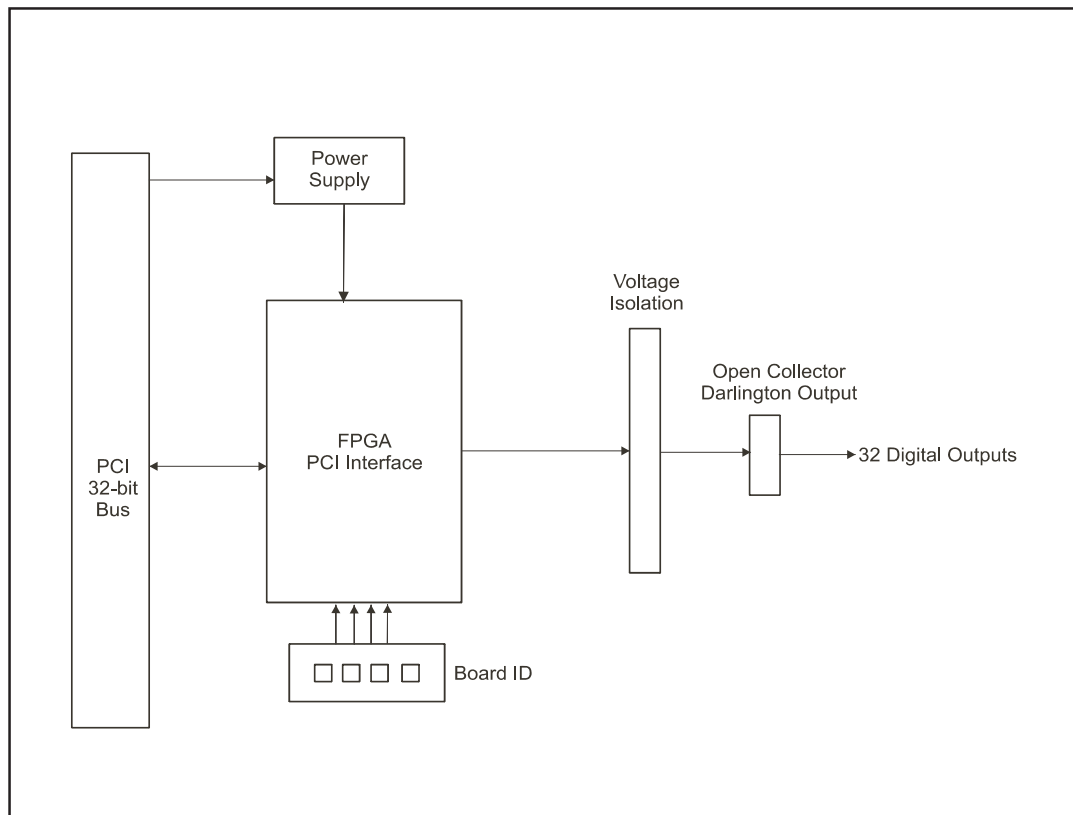
► 32-Channel Isolated Digital Output PMC Adapter

The 32-Channel Isolated Digital Output adapter provides 32 opto-isolated digital output 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.

Output channel to PMC isolation is 2 500 V RMS.

Architecture

A FPGA is used to control the 32 output channels and provide the PCI interface. Isolation is achieved by optocouplers on all channels, and the outputs are driven by high-voltage Darlington arrays.



Block Diagram of the 32-Channel Isolated Digital Output PMC Adapter

Features

- high output sink current (up to 300 mA)
- wide output range (3 V to 35 V)
- Air-Cooled and Conduction-Cooled versions
- Commercial, Industrial and Ruggedised grades
- adapter identification switch
- programmable outputs
- output channel to PMC voltage isolation



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

Formfactor and Bus Interface	IEEE Std 1386.1-2001 32 bit, 33 MHz 3,3 V PCI signalling, 5 V tolerant		
Digital Outputs	32	Open Collector Darlington Transistor	
Voltage Isolation	2 500 V RMS (output channel to PMC) 250 V RMS (frontpanel channel to channel) 100 V RMS (backpanel channel to channel)		
Power	3,3 V DC at 0,3 A (1 Watt); 5 V DC at 0,5 A (2,5 Watt)		
MTBF	Figures according to MIL-HDBK-217F, Parts Stress Method		
	Commercial and Industrial Grades	Ground Benign, Controlled, 25 C	544 000 hours
	Ruggedised Grade	Ground, Mobile, 45 C Naval, Sheltered, 40 C Airborne, Inhabited Cargo, 55 C	105 000 hours 139 000 hours 96 000 hours
Software Drivers	Support for Linux. VxWorks, Windows and others are costed options.		
Physical Characteristics			
Cooling Type	Air-Cooled		Conduction-Cooled
Dimensions	149,0 mm x 79,0 mm		149,0 mm x 79,0 mm
Mass	150 g +/- 30 g		210 g +/- 30 g
Environmental Specifications			
Grade	Commercial	Industrial	Ruggedised
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
Designation	Cooling	Connector	Grade
CCII/DO/PMC/32C/FP/COM	Air	Frontpanel	Commercial
CCII/DO/PMC/32C/FP/IND	Air	Frontpanel	Industrial
CCII/DO/PMC/32C/FP/RGD	Air	Frontpanel	Ruggedised
CCII/DO/PMC/32C/BP/COM	Air	Backpanel	Commercial
CCII/DO/PMC/32C/BP/IND	Air	Backpanel	Industrial
CCII/DO/PMC/32C/BP/RGD	Air	Backpanel	Ruggedised
CCII/DO/PMC/32C/BP/CC	Conduction	Backpanel	Ruggedised

Board-Level 32-Channel Isolated Digital Output PMC Adapter