SPECIFICATIONS

PCM-DAS08

Analog Input & Digital I/O

Revision 4, October, 2000

Typical for 25°C unless otherwise specified.

Power Consumption

+5V (Normal operation):	30 mA typ, 69 mA max
+5V (During CIS read);	59 mA typ, 98 mA max

Analog Input Section

A/D converter type:	ADS574
Resolution:	12 bits
Number of channels:	8, single-ended
Input Ranges:	±5V (Set at the factory. Other ranges by special order)
Polarity	Bipolar
A/D Pacing:	Programmable: internal 25 kHz divided by 1, 2, 3 or 4, external source (DIn 2 / Ext Trig, falling edge), or software-polled.
A/D Trigger sources:	External polled digital input trigger (DIn 2, active level determined by software)
A/D Triggering Modes:	Digital: Software-polled digital input (software enables acquisition when appropriate TTL level is detected).
Data Transfer:	Interrupt or software-polled
A/D conversion time	25 µs
Throughput	25 kHz, PC-dependent
Relative Accuracy (software calibrated):	±0.5 LSB
Differential Linearity error (A/D):	±1 LSB
Integral Linearity error (A/D):	±1 LSB
No missing codes guaranteed (A/D):	12 bits
Gain drift (A/D specs):	±45 ppm/°C
Zero drift (A/D specs):	±10 ppm/°C
Input leakage current:	±200 nA over temperature
Input impedance	10 MegOhms min
Absolute maximum input voltage:	±15V

Digital Input/Output

Digital type	FPGA
Configuration	Two ports, three bits each; 3 inputs and 3 outputs
Input low voltage	0.8V max
Input high voltage	2.0V min
Output low voltage (OIL = 4 mA)	0.32V max
Output high voltage (IOH = –4 mA)	3.86V min
Absolute maximum input voltage	–0.5V, +5.5V
Interrupts	2 to 15
Interrupt enable	Programmable
Interrupt sources	External (Ext Int, falling-edge triggered) or internal pacer

Environmental

Operating temperature range	0 to 70°C
Storage temperature range	–40 to 100°C
Humidity	0 to 95% non-condensing

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