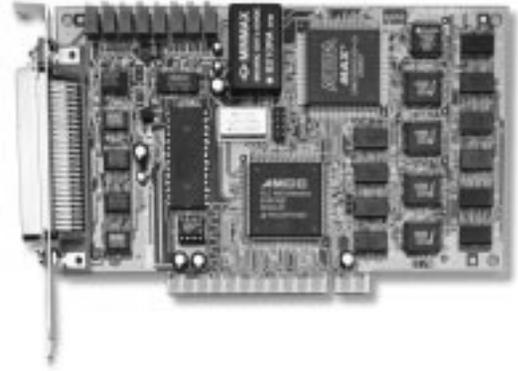


PCI-9118 Series



	Analog Input 333K S/s at 12/16-bit (16 SE, 8 Diff.)
	Analog Output two 12-bit channels
	Digital I/O 4-bit TTL
	Timer/Counter 16-bit

333K A/D Multifunction Card Analog I/O, Digital I/O and Programmable Counter

Selection Table

PCI-9118	DG	HR	HG
Analog Input	16 single ended, 8 differential		
Resolution	12	16	12
Sampling Rate	333 K S/sec	100 K S/sec	333 K S/sec
Gain/Channel	256	256	256
Input bipolar	±5V, ±2.5V, ±1.25V, ±0.625V	±5V, ±0.5V, ±0.05V ±0.005V	
Input unipolar	0~10V, 0~5V, 2.5V, 0~1.25V	0-10V, 0-0.1V, 0-0.01V, 0-10mV	
D/A Channel	2 channel, 12-bit		
Digital Input	4	4	4
Digital Output	4	4	4
Comments	Normal Gain	High Gain	High Resolution

Analog Input (A/D)

Channels

16 singled-ended or 8 differential (software configurable)

A/D FIFO Buffer Size

1024 locations

Channel/Gain Queue Length

256 locations

Accuracy

±0.01% of reading ±1 LSB

±0.02% of reading ±1 LSB for high gain

Input Gain

x1, x2, x4, x8 (DG / HR)

x1, x10, x100 (HG)

Input Range

Bipolar

±5 V, ±2.5 V, ±1.25 V, ±0.625 V (DG / HR)

±5 V, ±0.5 V, ±0.05 V, ±0.005 V (HG)

Unipolar

0~10 V, 0~5 V, 0~2.5 V, 0~1.25 V (DG / HR)

0~10 V, 0~1 V, 0~0.1 V, 0~0.01 V (HG)

Input Impedance

10,000 MΩ || 6 pF

Input Selection

software programmable

Overvoltage Protection

Continuous +35 V maximum

On chip sample-and-hold

Resolution

12-bit, 16-bit

Sampling Rate

330 KS/s - DG/HG version

100 KS/s - HR version

Trigger Mode

Software-, pacer- and external trigger

Analog Output (D/A)

Channels / Resolution

2x 12-bit analog outputs

Output Range

bipolar -10 ~ +10 V, unipolar 0 ~ +10 V

Converter

B.B. 2813 or equivalent, monolith multipl.

Control Mode

double buffered or transparency mode

Data Format

binary format or two's complement

Settling Time

4.5 µsec typical, 6 µsec max.

Linearity

±1/2 bit LSB max.

Output Driving

±5 mA min.

Output Impedance

0.2 Ω

Digital I/O (DIO)

Input Bits

4 TTL compatible

Output Bits

4 TTL compatible

Programmable Counter

Device

8254 or equivalent

A/D Pacer

32-bit timer (two 16-bit counter cascaded together) with a 4 MHz time-base

Max Pacer Rate

333 KHz

Physical / Environmental

Connector

50-pin SCSI-II connector

Operating Temperature

0 ~ 55°C

Storage Temperature

-20 ~ 80°C

Humidity

5~95%, non-cond.

Power Consumption

PCI-9118DG/HG
+ 5 V @ 450 mA

+ 12 V @ 200 mA

PCI-9118HR

+ 5 V @ 485 mA

+ 12 V @ 180 mA

Dimensions

173 (L) x 102 (W) mm

U_CMMO	1	26	AIO/AIHO
A18/AILO	2	27	A11/AIH1
A19/AIL1	3	28	A12/AIH2
A110/AIL2	4	29	A13/AIH3
A111/AIL3	5	30	A14/AIH4
A112/AIL4	6	31	A15/AIH5
A113/AIL5	7	32	A16/AIH6
A114/AIL6	8	33	A17/AIH7
A115/AIL7	9	34	AGND
NC	10	35	DAC0
NC	11	36	DAC1
NC	12	37	NC
+ 15 V	13	38	-15 V
DGND	14	39	ADGAIN2
D11	15	40	D10
D13	16	41	D12
D01	17	42	D00
D03	18	43	D02
D05TB	19	44	EXTTRG
TGOUT	20	45	SSHO
ADCHN3	21	46	TGIN
ADCHN5	22	47	ADCHN4
ADCHN7	23	48	ADCHN6
Vcc	24	49	Vcc
DGND	25	50	DGND

