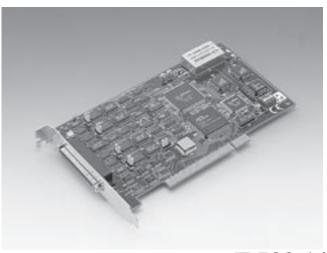
PCI-1721

12-bit, 4-ch Advanced Analog Output Card



Features

- 10 MHz maximum digital update rate
- PCI-bus mastering for data transfer
- Auto calibration function
- Four analog output channels with 1024 samples FIFO buffer
- A 12-bit DAC is equipped for each of analog output channels
- Real-time waveform output function with internal/external pacer
- Synchronized output function
- · Flexible output types and range settings
- · Keeps the output settings and values after system hot reset
- 16-ch DI/O and one 10 MHz 16-bit resolution counter
- BoardID™ switch



Introduction

PCI-1721 is an advanced high-speed analog output card for the PCI bus, and each of analog output channels are equipped with a 12-bit, double-buffered DAC. It features many powerful and unique functions, like a waveform output function with 10 MHz maximum update rate, auto-calibration and a BoardID switch. PCI-1721 is an ideal solution for industrial applications where high-speed continuous analog output or real-time waveform output functions are required.

Specifications

Analog Output

Channels 4
Resolution 12 bits
FIFO Size 1024 samples
Output Rate 10 MHz or static update
Reference Clock Internal: 10 MHz

External Clock Frequency: 10 MHz max. External Voltage Range: 0.8 V max., 2 V min.

Output Range (Software programmable)

	Unipolar	0 ~ 5 V, 0 ~ 10 V,
Internal Reference	Bipolar	±5 V, ±10 V
	Current Loop	0 ~ 20 mA, 4 ~ 20 mA
External Reference		$0 \sim +x \ V \ @ +x \ V \ (-10 \le x \le 10)$ $-x \sim +x \ V \ @ +x \ V \ (-10 \le x \le 10)$

Slew Rate 10 V/µs
 Driving Capability ±10 mA
 Output Impedance 0.1 Ω max.

Operation Modes Single/Continuous/Waveform/Synchronized output

Accuracy
 Relative: ±1 LSB

Differential Non-Linearity: ±1 LSB (monotonic)

• Current Loop Excitation +15 V (external)

Voltage

Digital Input/Output

Channels
 16 (shared by input/output)

■ Compatibility 5 V/TTL

■ Input Voltage Logic 0: 0.8 V max. Logic 1: 2.0 V min.

Output Capability
 Sink: 0.5 V @ 24 mA
 Source: 2.0 V @ -15 mA

Counter/Timer

Channels 1
Resolution 16 bits
Compatibility 5 V/TTL
Max. Input Frequency
Reference Clock Internal: 10 MHz

External Clock Frequency: 10 MHz max. External Voltage Range: 0.8 V max. 2.0 V min.

General

■ Bus Type PCI V2.2

I/O Connectors
 Dimensions
 1 x 68-pin SCSI-II female
 175 x 100 mm (6.9" x 3.9")

■ **Power Consumption** Typical: +5 V @ 850 mA, +12 V @ 600 mA

Max: +5 V @ 1 A, +12 V @ 700 mA

• Operating Temperature $0 \sim 60^{\circ}$ C (32 $\sim 140^{\circ}$ F) (refer to IEC 68-2-1, 2)

• Storing Temperature $-20 \sim 85^{\circ} \text{ C } (-4 \sim 185^{\circ} \text{ F})$

Storing Humidity 5 ~ 95% RH, non-condensing (refer to IEC 68-2-3)

Certifications

Ordering Information

• PCI-1721 4-ch, 12-bit advanced PCI analog output card

PCL-10168-1 SCSI-68 shielded cable, 1 m
 PCL-10168-2 SCSI-68 shielded cable, 2 m

ADAM-3968 SCSI-68 wiring terminal, DIN-rail mount