PCI/PCIe/cPCI-6208/6216 Series
8/16-CH 16-Bit Analog Output Cards

Features

- Supports a 32-Bit 3.3 V or 5 V PCI bus (PCI-6208/6216-GL)
- x1 lane PCI Express® Interface (PCIe-6208/6216-GL)
- 3U Eurocard form factor, CompactPCI compliant PICMG 2.0 R2.1 (cPCI-6208/6216 series)
- 16-Bit D/A resolution
- Effective 15-Bit resolution current transducers (PCI-6208A)
- 8-CH voltage outputs (PCI/PCIe/cPCI-6208V-GL)
- 16-CH voltage outputs (PCI/PCIe/cPCI-6216V-GL)
- 8-CH current outputs (PCI-6208A)
- Bipolar analog output range
- 4-CH TTL digital inputs and 4-CH TTL digital outputs

PCI-6208V-GL

PCIe-6208V-GL

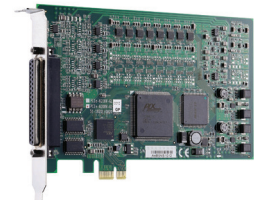**cPCI-6208V-GL**

Introduction

ADLINK PCI-6208 series are 8 or 16-CH, 16-bit, analog output cards. The PCI-6208V-GL offers 8 voltage outputs with ¡Ó10 V range, featuring 15-bit monotonicity and 10 V/£gs slew rate. The on-board analog switches minimize the power-on glitches. PCI-6216V expands the voltage output channels to a total of 16 for higher analog output density requirements. In addition to the voltage output functions, the PCI-6208A features 8 current outputs with ranges of 0-20 mA, 4-20 mA, and 5-25 mA. The daughter board EXP-8A provides high-quality voltage to current transducers. The PCI-6208A device is capable of delivering 14-bit monotonicity with 1.3 mA/£gs slew rate. ADLINK PCI-6208 series devices provide highresolution, high-density analog output functionalities and are suitable for ATE, signal generation, industrial process control, servo control and other industrial control applications.

Ordering Information

- **PCI-6208V-GL**
  8-CH 16-Bit Voltage Output Card
- **PCI-6216V-GL**
  16-CH 16-Bit Voltage Output Card
- **PCI-6208A**
  8-CH 16-Bit Voltage and Current Output Card
- **cPCI-6208V-GL**
  8-CH 16-Bit Voltage Output Module
- **cPCI-6216V-GL**
  16-CH 16-Bit Voltage Output Module
- **PCIe-6208V-GL**
  8-CH 16-Bit Voltage Output PCI Express® Card
- **PCIe-6216V-GL**
  16-CH 16-Bit Voltage Output PCI Express® Card

OS Information

- Windows XP, Windows 7/8 x64/x86, Linux

Software Compatibility

- LabVIEW, MATLAB, Visual Studio.NET

Software Recommendations

- AD-Logger, DAQBench, DAQMaster

Terminal Boards & Cables

- **DIN-37D-01**
  Terminal Board with One 37-pin D-sub Connector and DIN-Rail Mounting (Cables are not included.)
- **ACLD-9137-01**
  General-Purpose Terminal Board with One 37-pin D-sub Male Connector
- **ACLD-9137F-01**
  General-Purpose Terminal Board with One 37-pin D-sub female Connector.
- **ACL-10137-1MM**
  37-pin D-sub male/male cable, 1 M
- **ACL-10137-1MF**
  37-pin D-sub male/female cable, 1 M

Specifications

Voltage Output

- Number of channels
  - 8 voltage outputs (PCI/PCIe/cPCI-6208V-GL & PCI-6208A)
  - 16 voltage outputs (PCI/PCIe/cPCI-6216V-GL)
- Resolution: 16 Bit
- Monotonicity: 15 Bit typical
- Output ranges: ±10 V
- Slew rate:26 V/μs typical
- Settling time: 130 μs typical (20 V step)
- Gain Error: ±0.2% maximum
- DNL: ±1 LSB typical
- Output driving capacity: ±5 mA maximum
- Output initial status: 0 V
- Data transfer: programmed I/O

Current Output

- Number of channels: 8 current outputs (PCI-6208A)
- Resolution: 15 Bit typical
- Monotonicity: 14 Bit typical
- Output ranges: (Software programmable)
  0-20 mA, 4-20 mA, 5-25 mA
- Slew rate: 1.3 mA/μs typical
- Settling time: 17 μs typical (20 mA step)
- Span Error: ±0.3% typical
- Output Initial Status: 4 mA (after RESET or POWER-ON)
- Data transfer: programmed I/O

Digital I/O

- Number of channels: 4 inputs and 4 outputs
- Compatibility: 5 V/TTL
- Data transfers: programmed I/O

General Specifications

- I/O connector: One 37-pin D-sub female
- Operating temperature: 0˚C to 50˚C (32˚F to 122˚F)
- Storage temperature: -20˚C to 80˚C (-4˚F to 176˚F)
- Relative humidity: 5% to 95%, non-condensing
- Power requirements

Device	+5 V	+12 V
PCI-6208V-GL	650 mA typical	170 mA typical
PCI-6216V-GL	1.2 A typical	280 mA typical
PCI-6208A	670 mA typical	380 mA typical
cPCI-6208V	500 mA typical	200 mA typical
cPCI-6216V	1 A typical	300 mA typical

Device	+3.3 V	+12 V
PCIe-6208V-GL	310 mA typical	380 mA typical
PCIe-6216V-G	315 mA typical	660 mA typical

- Dimensions (not including connectors)
  175 mm x 107 mm (6.82" x 4.17") (PCI-6208/6216)
  168 mm x 112 mm (6.55" x 4.36") (PCIe-6208/6216)
  160 mm x 100 mm (6.24" x 3.9") (cPCI-6208/6216)