PCI/PCIe/cPCI-6208/6216 Series

8/16-CH 16-Bit Analog Output Cards

PCI EXPRESS® PCI CompactPCI

PCI-6208V-GL

PCIe-6208V-GL

cPCI-6208V-GL

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/cPCI-6208A)**
- **8-CH voltage outputs (PCI/PCIe/cPCI-6208V-GL)**
- **16-CH voltage outputs (PCI/PCIe/cPCI-6216V-GL)**
- **8-CH current outputs (PCI/cPCI-6208A)**
- **Bipolar analog output range**
- **4-CH TTL digital inputs and 4-CH TTL digital outputs**
- **Rear I/O available on the cPCI-6208V/R-GL, cPCI-6216V/R-GL & cPCI-6208A/R.**

Operating Systems

- Windows 7/Vista/2000/XP/Server 2003
- Linux
- Windows CE (call for availability)

Recommended Software

- AD-Logger
- VB.NET/VC.NET/VB/VC++/BCB/Delphi
- DAQBench

Driver Support

- DAQPilot for Windows
- DAQ-LVIEW PnP for LabVIEW™
- DAQ-MTLB for MATLAB®
- PCIS-DASK for Windows
- PCIS-DASK/X for Linux

Introduction

ADLINK's PCI/PCIe/cPCI-6208 series are 8 or 16-CH, 16-bit, analog output cards. The PCI/PCIe/cPCI-6208V-GL series offers 8 voltage outputs with ±10 V range, featuring 15-bit monotonicity and 10 V/μs slew rate. The onboard analog switches minimize the power-on glitches. The PCI/PCIe/cPCI-6216V-GL series 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/cPCI-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/cPCI-6208A device is capable of delivering 14-bit monotonicity with 1.3 mA/μs slew rate.

ADLINK PCI/PCIe/cPCI-6208 series devices provide high-resolution, high-density analog output functionalities and are suitable for ATE, signal generation, industrial process control, servo control and other industrial control applications.

Specifications

Voltage Output

- Number of channels
  - 8 voltage outputs (PCI/PCIe/cPCI-6208V-GL & PCI/cPCI-6208A)
  - 16 voltage outputs (PCI/PCIe/cPCI-6216V-GL)
- Resolution: 16 bits
- Monotonicity: 15 bits typical
- Output ranges: ±10 V
- Slew rate:10 V/μs typical
- Settling time: 130 μs typical (20 V step)
- Gain Error: ±0.2% maximum
- DNL: ±0.65 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/cPCI-6208A)
- Resolution: 15 bits typical
- Monotonicity: 14 bits 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
- Storage temperature: -20°C to 80°C
- 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/R-GL	500 mA typical	200 mA typical
cPCI-6216V/R-GL	1 A typical	300 mA typical
cPCI-6208A/R	600 mA typical	380 mA typical

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

- Dimensions (not including connectors)
  175 mm x 107 mm (PCI-6208/6216)
  168 mm x 112 mm (PCIe-6208/6216)
  160 mm x 100 mm (cPCI-6208/6216)

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

*** For more information about mating cables, please refer to P2-59/60.**

Note: A rear I/O terminal board (cPCI-R6216DB) has been included with the cPCI-6208V/R-GL, cPCI-6216V/R-GL and cPCI- 6208A/R. This cPCI-R6216DB rear I/O board is responsible for conducting I/O signals from the CompactPCI J2 connector to a 37-pin D-sub connector.

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-6208V/R-GL**
  8-CH 16-Bit Voltage Output Module with Rear I/O
- **cPCI-6208A**
  8-CH 16-Bit Voltage and Current Output Module
- **cPCI-6208AR**
  8-CH 16-Bit Voltage and Current Output Module with Rear I/O
- **cPCI-6216V-GL**
  16-CH 16-Bit Voltage Output Module
- **cPCI-6216V/R-GL**
  16-CH 16-Bit Voltage Output Module with Rear I/O
- **PCIe-6208V-GL**
  8-CH 16-Bit Voltage Output PCI Express® Card
- **PCIe-6216V-GL**
  16-CH 16-Bit Voltage Output PCI Express® Card

Note: Rear I/O versions can not be used in PXI chassis due to signals conflict with PXI bus.

Pin Assignment

PCI/PCIe/cPCI-6208V-GL and PCI/PCIe/cPCI-6216V-GL

DI3	1	20	DO3
DI2	2	21	DO2
DI1	3	22	DO1
DI0	4	23	DO0
GND	5	24	GND
+5Vout	6	25	-15Vout
+15Vout	7	26	AGND
AGND	8	27	NC/V15
NC/V14	9	28	V7
V6	10	29	AGND
AGND	11	30	NC/V13
NC/V12	12	31	V5
V4	13	32	AGND
AGND	14	33	NC/V11
NC/V10	15	34	V3
V2	16	35	AGND
AGND	17	36	NC/V9
NC/V8	18	37	V1
V0	19		

(PCI/cPCI-6208A)

DI3	1	20	DO3
DI2	2	21	DO2
DI1	3	22	DO1
DI0	4	23	DO0
GND	5	24	GND
+5Vout	6	25	-15Vout
+15Vout	7	26	AGND
AGND	8	27	A7
A6	9	28	V7
V6	10	29	AGND
AGND	11	30	A5
A4	12	31	V5
V4	13	32	AGND
AGND	14	33	A3
A2	15	34	V3
V2	16	35	AGND
AGND	17	36	A1
A0	18	37	V1
V0	19		

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- Поставка более 17-ти миллионов наименований электронных компонентов;
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- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits,General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

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- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.

Как с нами связаться

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