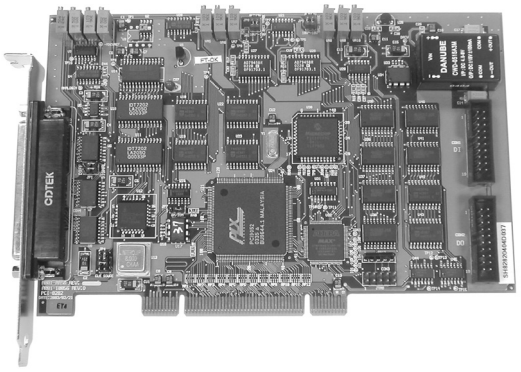
DASP-52282/52282L/52282H/52282HL

12-bit 330KHz Multifunction w/ Free-running Card



Features

- 2 channel 12-bit D/A voltage output
- 16 D/I and 16 D/O (TTL compatible)
- Maximum sampling rate up to 330KHz
- Supports free-running mechanism with 1K FIFO
- A/D trigger mode: software trigger, pacer trigger, external trigger
- Supports software programmable gain
- Supports Windows® 98/NT/2000/XP, Labview 6.0/7.0 driver
- Supports VB, VC, BCB, Delphi sample program

Specifications

Analog Input					
Channels	16 Single-ended or 8 differentials				
Resolution	12-bit				
FIFO size	1K samples				
Sampling rate	330KS/s max.				
Conversion time	3μs				
ADC input range	±10V				
Input protect	30 Vp-p				
Programmable Gain					
Low Gain (DASP-52282/ DASP-52282L only)					
Gain	0.5	1	2	4	8
Unipolar	N/A	0~10V	0~5V	0~2.5V	0~1.25V
Bipolar	±10V	±5V	±2.5V	±1.25V	±0.625V
High Gain (DASP-52282H/ DASP-52282HL)					
Gain	0.5	1	10	100	1000
Unipolar	N/A	0~10V	0~1V	0~0.1V	0~0.01V
Bipolar	±10V	±5V	±0.5V	±0.05V	±0.005V
Small Signal Bandwidth for PGA					
Low Gain (DASP-52282/ DASP-52282L only)					
Gain	0.5	1	2	4	8
Bandwidth	5MHz	5 MHz	4 MHz	1.3 MHz	600 KHz
High Gain (DASP-52282H/ DASP-52282HL only)					
Gain	0.5	1	10	100	1000
Bandwidth	1MHz	1 MHz	80 KHz	10 KHz	1 KHz
Drift	0.1 LSB @ gain 0.5				
Max. input voltage	±20V				
Input impedance	10000 MΩ				
AD trigger method	Software, Pacer, External (Pre-trigger, Post trigger, Middle trigger)				
Analog input data transfer method	Polling, Interrupt, FIFO				
Operation mode	Polling mode, Pacer mode, Interrupt mode, External pre-trigger mode, External post trigger mode, External middle trigger mode				
DC Accuracy	INL: +/- 1 LSB @ gain 0.5 DNL: +/- 1LSB @ gain 0.5				
AC Accuracy	SNR: 71dB @ gain 0.5				
Automatic scan mechanism	Yes				

Specifications

Analog Output		
Channels	2 independent	
Resolution	12-bit analog device AD7945BR	
Output range	Bipolar: -9.9998V ~ 10.0003V @ -10~+10V Unipolor: 0.0003V ~ 10.0002V @ 0 ~ 10V	
Accuracy	+/- 0.5 LSB	
Offset	1%	
Slew rate	13V/μs	
Drift	+/- 0.5 LSB	
Output driver	±5mA	
Max. transfer rate	20μs/S	
Output Impendence	15Ω	
Settling Time	0.6μs to 0.01% for Full Scale Step	
Linearity	±1/2 bit	
Digital I/O		
	Digital Input	Digital Output
Channel	16	16
Type	TTL level	TTL level
Voltage low	VIL = 0.8V max. IIL =-0.4mA max.	VOL = 0.5V max. @IOL =8mA max.
Voltage high	VIH = 2.0V min. IIH = 20μA max.	VOH = 2.7V min. @IOH = -400μA max.
General Environment		
Power	+5V @350mA max.	
Operating temp	0-60˚C	
Storage temp	-20 to 70˚C	
Humility	0 to 90 non-condensing	
Dimensions	185mm x 122 mm	

Introduction

The DASP-52282 is a high performance, PCI bus multi- function card. It supports a 330KHz sampling rate, 16 single-ended or 8 differential AI, 16DI, and 16 DO. The DASP-52282 also features an all new free-running mechanism to reduce the S/W development efforts, and provides high/low gain options for user's applications.

Introduction

Advanced S/W Mechanism: Free-running
Free-running is a brand new data-retrieving mechanism to mainly save software SW RD 30% -- 50% of the time and effort in developing application programs. It helps software RD by using several rows of simple programs to read data, instead of countless numbers in the past.

Board identification- Serial Number on EEPROM
The DASP stores the serial number of each DASP in the EEPROM before shipping. The PCI scan utility can scan all the DASP and show users the serial number of each DASP, helping the user to easily identify and access each card.

Easily Developing Application Programs-Various Sample Programs
The DASP-52282 series provides many user-friendly sample programs to help users developing various application programs in different units, such as VB, VC, BCB, and Delphi. And it also supports the most popular Labview 6.0/7.0 drivers. The API of the DASP-52282 has passed strict assembling tests that helps users not necessarily writer such complicated and wordy programs while using it.

Easy to Troubleshoot Hardware Resource- PCI Scan Utility
The PCI scan utility can scan all the DASP products within the system, and can show users all system resources, such as serial numbers, IRQ, and I/O addresses. This lets users clearly see through and immediately know whether all DASPs are working normally, decreasing the time of searching confirmation.

Applications

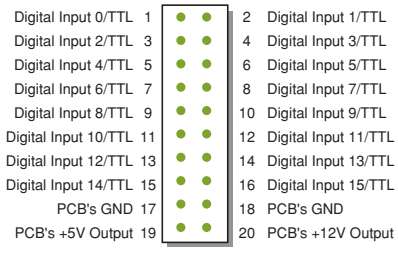
- Fast data acquisition system
- Process status monitoring
- Test automation
- Voltage waveform generation
- Laboratory automation

Ordering Information

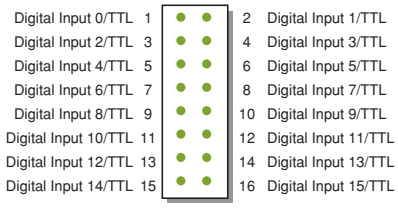
DASP-52282	12-bit 330KHz multifunction w/free-running card
DASP-52282L	DASP-52282 w/o Analog Output Card
DASP-52282H	12-BIT 330KHz high-gain multifunction w/free-running card
DASP-52282HL	DASP-52282H w/o Analog Output Card
Daughter Board	
DB-87822	16-channel isolated D/I board
DB-87825	16-channel relay output board
Terminal Board	
TB-88037	37-pin D-sub female wiring terminal board for DIN-rail mounting
TB-88320	20-pin header box male wiring terminal board for DIN-rail mounting
Cable	
CB-89037-2	37-pin D-sub male type 2M cable
CB-89320-2	20-pin flat 2M cable

Pin Assignment

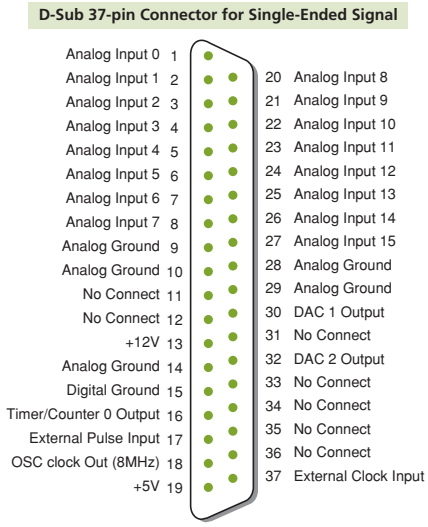
CON1 (DI)



CON2 (DO)



D-Sub 37-pin Connector for Single-Ended Signal



D-Sub 37-pin Connector for Differential Signal