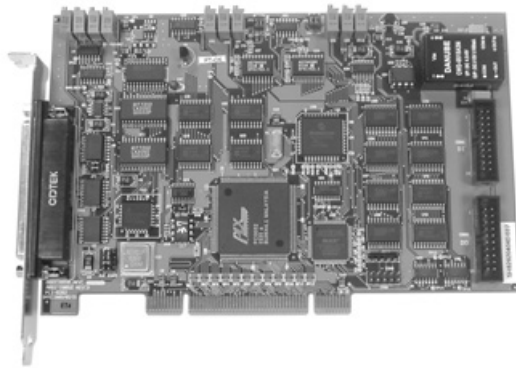# DASP-52282/52282L/52282H/52282HL

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	0.6 ns 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.

* All the specifications and photos are subjected to be changed without notice.