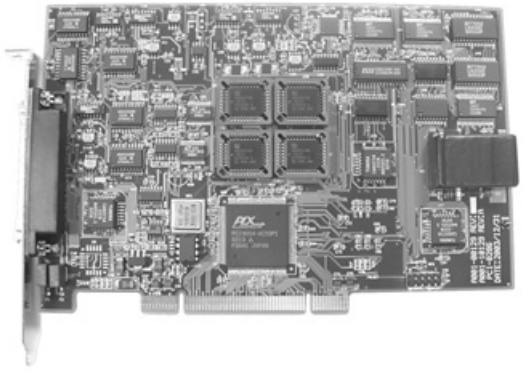
DASP-52286/52286L

16-bit 1MHz Multifunction Card



Specifications

Analog Input					
Channels	16 single-ended/8 differentials				
Type	ADS8401 on Chip Sample and Hold ADC.				
Resolution	16 bits				
Sampling rate	1MS/s max.				
Input impedance	10,000 MΩ				
Over voltage	70Vpp				
ADC input range	±5V				
Programmable Gain					
	Gain=0.5	Gain=1	Gain=2	Gain=4	Gain=8
Unipolar	-	0~10V	0~5V	0~2.5V	0~1.25V
Bipolar	±10V	±5V	±2.5V	±1.25V	±0.625V
Analog Outputs (DASP-52286 only)					
Channels	2 independent				
Type	16 bits multiplying				
Linearity	±1/2 bit				
Output range	±10V, 0-10V jumper selected				
Output driving	±5mA				
Settling time	0.6μs to 0.01% for Full Scale Step				
Max. transfer rate	1MS/s for single channel 500 KS/s for dual channel				
Digital I/O					
Channels	16 inputs and 16 outputs, TTL level				
Input low	VIL = 0.8V max. IIL = -0.4mA max.				
Input high	VIH = 2.0V min. IIH = 20μA max.				
Output low	VOL = 0.5V max. @IOL = 8mA max.				
Output high	VOH = 2.7V min. @IOH = -400μA max.				
Programmable Timer/Counter					
Type	8254 programmable timer/counter, Counter 0-2				
Clock input frequency	0~10MHz.				
Internal clock	8MHz.				
General Environment					
Power	+5V @750mA max.				
Operating temperature	0 to 60˚C				
Storage temperature	-20 to 70˚C				
Humility	0 to 90% non-condensing				
Dimensions	185mm x 122mm				

Ordering Information

DASP-52286	16-bit 1MHz multifunction card
DASP-52286L	DASP-52286 w/o analog output card
Terminal Board	
TB-88268	68-pin SCSI-II pin type female terminal board
Cable	
CB-89268-2	68-pin SCSI-II pin type male/2M cable
CB-89268-5	68-pin SCSI-II pin type male/5M cable

Features

- **PCI Bus Mastering DMA Interface**
- **16-bit A/D converter**
- **Maximum sampling rate up to 1MHz**
- **Automatic channel scanning**
- **On-board FIFO buffer storing up to 1K samples for A/D and 32K samples for D/A**
- **A/D trigger mode: software trigger, pacer trigger, external trigger**
- **A/D transfer mode: polling, interrupt, FIFO**
- **Software programmable gain of 0.5, 1, 2, 4, 8 for AD converting**
- **16 single-ended or 8 differential analog inputs**
- **Software selectable input ranges**
- **Bipolar and unipolar operation**
- **2-channel 16-bit D/A voltage outputs (DASP-52286)**
- **16 digital inputs and 16 digital outputs (TTL compatible)**

Introduction

The DASP-52286 is a PCI-Bus mastering DMA for high performance, multi- function card. It contains a 16-bit ADC with up to 16 single-ended or 8 differential analog inputs. The DASP-52286 has a 1K FIFO for A/D conversion and 32K FIFO for D/A conversion on board, programmable timer/counters, two 16-bit DAC output, and 16/16 TTL level digital input and digital output. The maximum sampling rate of the A/D converter is about 1MHz with an automatic channel scan capability.

Applications

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

Pin Assignment

J1, SCSI-II 68-pin Connector for Single-Ended Signal

+5V Out	1	35	+12V Out
No Connector	2	36	No Connector
AI_CLK_OUT	3	37	AI_TRG_OUT
DGND	4	38	DGND
DIO15	5	39	DIO14
DIO13	6	40	DIO12
DIO11	7	41	DIO10
DIO09	8	42	DIO08
DGND	9	43	DGND
DIO06	10	44	DIO06
DIO05	11	45	DIO04
DIO03	12	46	DIO02
DIO01	13	47	DIO00
DGND	14	48	CNT2_OUT
CNT2_GATE	15	49	CNT2_CLK
DGND	16	50	CNT1_OUT
CNT1_GATE	17	51	CNT1_CLK
DGND	18	52	CNT0_OUT
CNT0_GATE	19	53	CNT0_CLK
AO_TRG	20	54	AO_CLK
DGND	21	55	DGND
AI_TRG	22	56	AI_CLK
AOGND	23	57	AOGND
AO1_OUT	24	58	AO0_OUT
AO1_REF	25	59	AO0_REF
ANA_TRG	26	60	AGND
Analog Input 15	27	61	Analog Input 14
Analog Input 13	28	62	Analog Input 12
Analog Input 11	29	63	Analog Input 10
Analog Input 9	30	64	Analog Input 8
Analog Input 7	31	65	Analog Input 6
Analog Input 5	32	66	Analog Input 4
Analog Input 3	33	67	Analog Input 2
Analog Input 1	34	68	Analog Input 0

J1, SCSI-II 68-pin Connector for Differential Signal

+5V Out	1	35	+12V Out
No Connector	2	36	No Connector
AI_CLK_OUT	3	37	AI_TRG_OUT
DGND	4	38	DGND
DIO15	5	39	DIO14
DIO13	6	40	DIO12
DIO11	7	41	DIO10
DIO09	8	42	DIO08
DGND	9	43	DGND
DIO06	10	44	DIO06
DIO05	11	45	DIO04
DIO03	12	46	DIO02
DIO01	13	47	DIO00
DGND	14	48	CNT2_OUT
CNT2_GATE	15	49	CNT2_CLK
DGND	16	50	CNT1_OUT
CNT1_GATE	17	51	CNT1_CLK
DGND	18	52	CNT0_OUT
CNT0_GATE	19	53	CNT0_CLK
AO_TRG	20	54	AO_CLK
DGND	21	55	DGND
AI_TRG	22	56	AI_CLK
AOGND	23	57	AOGND
AO1_OUT	24	58	AO0_OUT
AO1_REF	25	59	AO0_REF
ANA_TRG	26	60	AGND
Analog Input 7/-	27	61	Analog Input 7/+
Analog Input 6/-	28	62	Analog Input 6/+
Analog Input 5/-	29	63	Analog Input 5/+
Analog Input 4/-	30	64	Analog Input 4/+
Analog Input 3/-	31	65	Analog Input 3/+
Analog Input 2/-	32	66	Analog Input 2/+
Analog Input 1/-	33	67	Analog Input 1/+
Analog Input 0/-	34	68	Analog Input 0/+

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