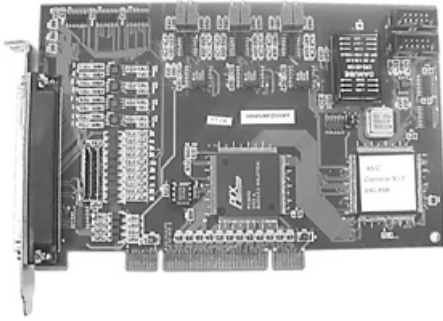


DASP-52506/52506L

6-axis Servo / Stepping Motion Card

1

Industrial Automation



Specifications

Data bus	16 bits
Interrupt source	83
Control axes	6
DDA cycle	25µs - 3.35 ms
D/A resolution	16 bits
Pulse command output	Pulse/Direction, CW/CCW, A/B phase
Encoder feedback signal	Pulse/Direction, CW/CCW, A/B phase
DAC	6 D/A, 16 bits, position loop output
Error counter	16 bits
Absolute position recorder	24 bits
Compensator	P, PI mode
Local I/O channels	26
Local I/O type	general purpose, interrupt I/O
Remote I/O type	Output sink type (open collector) input source type
Interval timer channel	1
Timer interrupt	0.5µs - 33ms
Watchdog timer	16 bits
Power consumption	+5V @ 1.0A max.
Operating temperature	0-60°C
Storage temperature	-20 to 70°C
Humidity	0 to 90%
Connector	SCSI-II 100P Pin-type
Dimensions	185mm x 122 mm

Applications

- Digital I/O control
- Real time clock
- Process event counting
- Pulse generation
- Time-delay generation
- Test automation
- Laboratory automation
- PWM output
- Square wave output
- Pulse width measurement

Ordering Information

DASP-52506	6-axis servo / stepping motion card
DASP-52506L	DASP-52506 w/o analog output card
Daughter Board	
DB-87060	6-axis motion daughter board
Cable	
CB-89200-2	SCSI-II 100P pin type cable 2M
CB-89200-5	SCSI-II 100P pin type cable 5M

Features

- ▶ Six ,configurable, axes position control for servo or stepper
- ▶ Supports real-time RTX driver (option)
- ▶ The Linear DDA law is designed to do fine interpolation
- ▶ Output Interface can be analog or pulse train and direction
- ▶ PI plus feed forward control law
- ▶ 6 encoder channels with a 32-bit counter
- ▶ 6 DAC channels with a 16-bit resolution
- ▶ Encoder resolution can be amplified by x1, x2 or x4 rates
- ▶ 26 local I/O points
- ▶ Watchdog timer and one programmable timer
- ▶ Windows® 98/NT/2000/XP and Labview 6.0/7.0 driver supported
- ▶ Complete sample program- VB, VC, BCB, Delphi

Introduction

The DASP-52506 is a PCI-bus, six axis motion control card. It's designed to control both servo and stepper motor. The most important feature of the DASP-52506 is to support real-time RTX drivers, making it easy to develop and deploy high performance, mission-critical applications that run on Windows operating systems.

The DASP-52506 has two operation modes: The first mode is to work with a velocity mode servo drive. The DASP-52506 compares the segmental movement commands from the Host PC and the encoder feedback from the servo motor, calculates, via P controls, the analog output command, then sends the command to the velocity mode drive to control the servo motor. The second mode is to convert the segmental movement command into well behaved, from a frequency variance standpoint, pulse train and feed to either the use position mode servo drive or a stepper drive to control the motor.

Real-time Data Acquisition and Control: RTX Driver

RTX enhances Windows' universally adopted look and give developers real-time determinism, unmatched dependability, and ability. By offering a fully compliant Win32 API set, RTX application portability is simplified between various Windows operating systems. This portability permits the underlying Windows operating system to be upgraded transparently with no impact to the device drivers or real time applications.

On-board Watchdog Timer

Users can set up time intervals for the timer. While the application programs within the time interval have not connected with DASP/DASA products, the DASP/DASA will be sending out a preset safety value to a devices linked to the DASP/DASA. This helps maintain a stable system.

Pin Assignment

AGND 1	61 AGND
DAC/D1 2	62 DAC/D4
DAC/D2 3	63 DAC/D5
DAC/D3 4	64 DAC/D6
VCC_OUT(+5V) 5	65 COM1
COM4 6	66 COM2
COM 7	67 E STOP
COM 8	68 P-FLY
HOME_I1 9	69 HOME_I2
OT+_I1 10	70 OT+_I2
OT-_I1 11	71 OT-_I2
INH_O1 12	72 INH_O2
HOME_I3 13	73 HOME_I4
OT+_I3 14	74 OT+_I4
OT-_I3 15	75 OT-_I4
INH_O3 16	76 INH_O4
HOME_I5 17	77 HOME_I6
OT+_I5 18	78 OT+_I6
OT-_I5 19	79 OT-_I6
INH_O5 20	80 INH_O6
XENC_INA1 21	81 XENC_INA2
-XENC_INA1 22	82 XENC_INA2
XENC_INB1 23	83 XENC_INB2
-XENC_INB1 24	84 XENC_INB2
XENC_INC1 25	85 XENC_INC2
-XENC_INC1 26	86 XENC_INC2
XENC_INA3 27	87 XENC_INA4
-XENC_INA3 28	88 XENC_INA4
XENC_INB3 29	89 XENC_INB4
-XENC_INB3 30	90 XENC_INB4
XENC_INC3 31	91 XENC_INC4
-XENC_INC3 32	92 XENC_INC4
XENC_INA5 33	93 XENC_INA6
-XENC_INA5 34	94 XENC_INA6
XENC_INB5 35	95 XENC_INB6
-XENC_INB5 36	96 XENC_INB6
XENC_INC5 37	97 XENC_INC6
-XENC_INC5 38	98 XENC_INC6
XDDA_OUTA1 39	99 XDDA_OUTA2
XDDA_OUTA1 40	100 XDDA_OUTA2
XDDA_OUTB1 41	101 XDDA_OUTB2
XDDA_OUTB1 42	102 XDDA_OUTB2
XDDA_OUTA3 43	103 XDDA_OUTA4
XDDA_OUTA3 44	104 XDDA_OUTA4
XDDA_OUTB3 45	105 XDDA_OUTB4
XDDA_OUTB3 46	106 XDDA_OUTB4
XDDA_OUTA5 47	107 XDDA_OUTA6
XDDA_OUTA5 48	108 XDDA_OUTA6
XDDA_OUTB5 49	109 XDDA_OUTB6
XDDA_OUTB5 50	110 XDDA_OUTB6

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