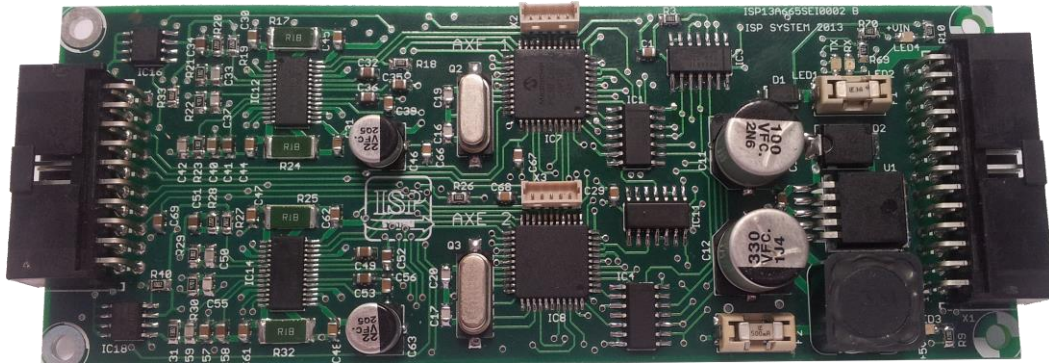




TWO AXIS CONTROLLER WITHOUT ENCODER

DATASHEET ISP13A665FPI0011 A

Update : 26/07/2013



Non-contractual photo

Two-axis controller for bipolar stepper motor

1 - Software features

- Absolute and relative move
- Motor move by full step, 1/2 step, 1/4 step or 1/16 step
- Velocity profile : start/stop or acceleration ramp
- Homing on home sensor or stop block
- Winding current adjustable by software (1A max)
- Positive and negative software limits configurable by user
- Home position offset configurable by user
- Axis address configurable by user
- Operation with configurable actuator profiles (up to 8 recorded profiles)

2 - Hardware features for each axis

- Bipolar motor
- Limit switches (positive and negative) can be reversed or inhibited by software configuration
- Home sensor can be reversed or inhibited by software configuration
- Home sensor and limit switches can be configured to closing or opening
- Each axis have one command input with pulse width measure

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3 - Applications

- Driving of Positioning actuator based on stepper motor
- Multi-axis command systems possible by plug-in several boards by means of communication bus
- Driving of laboratory system with Windows GUI application
- Demonstration software (Windows) supplied

4 - Technical features

CHARACTERISTICS	SPECIFICATIONS
Power supply	+12-24VDC \pm 5% 3A
Overcurrent protection	SMD fuse on holder
Overvoltage protection	Transil diode
Axis number	2
Motor type	Bipolar stepper with 4 wires
Motor current	1A RMS, 2A peak
Dimensions (L x W x h)	130x50x20mm
Fixing	4 holes for M3 screw
Grounding	2 metalized holes for M3 screw
Airing	Natural convection
Weight	55g

COMMUNICATION	
Communication means	USB gateway and RS485 bus
Communication mode	ASCII frame
Error control	Checksum on the frame (XOR)
Axis address	Configurable by user

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INDICATORS

Voltage presence	+12VDC et +5VDC (green)
USB communication	Transmission/TX (green) et reception/RX (orange)

INPUTS

Digital unisolated	6 limit switches (LIMIT+, LIMIT- et HOME for each axis) +5VDC/1mA uninsulated
PWM counting	2 inputs dedicated to the pulse width measure 0-5V±5% ($\Delta t_{\min}=320\text{ns}$)

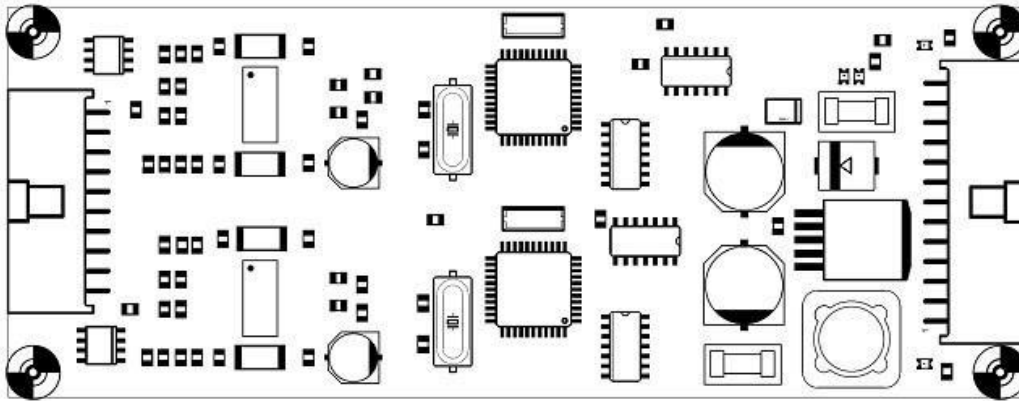
OUTPUTS

Digital insulated	5 signals (MVT, DEFAULT for each axis and STATUS of the board) +12-24VDC ±5%/10mA opto-insulated
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5 - Dimensions

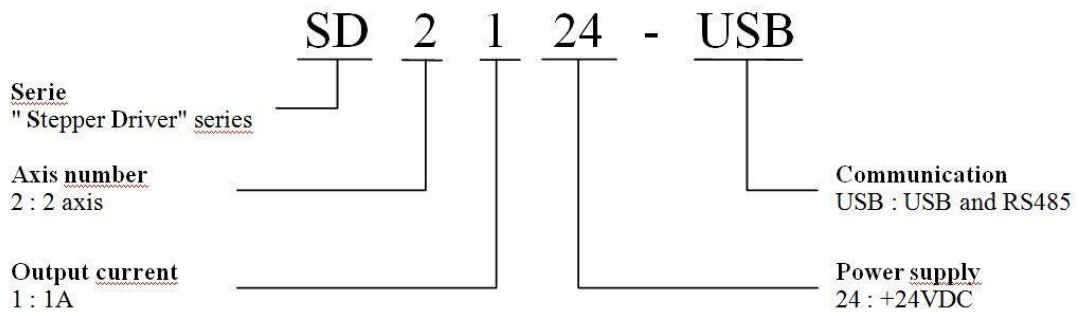
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6 - Ordering

Ordering



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