MSB423 Data Sheet

The MSB423 is the motherboard for the MSE422 Quad Axis Bipolar Stepper Motor Translator. It is designed to facilitate connections to the unit.

This board is 3U high and 7E wide. It is to be fitted in the backplane area of a 3U rack. It has a 64 way DIN41612 connector for connection to a MSE422 allowing the card to be a plug in unit. On the rear side there are plug-in screw terminals for all connections.

Due to space restrictions on the board, the terminals have been identified in abbreviated form.

Power Supply connections.

There are two pin connectors for the supply for the unit.

+V	+VMM	Supply. 10 - 30V DC Unregulated.
0V	0V	Supply 0V

Control Inputs and External Current Control connections.

There are four pin connectors for the control inputs and three pin connectors for the external current control. These are found in a column on the left hand side of the motherboard, looking from the rear. At the top there are the connectors for axis one and the connectors for the consecutive axes are below them. If external current control is used, there is a 0V terminal on the connector for easy connection to a pot.

C	CLK	Clock (step) pulse input.
D	DIR	Direction of movement of stepper motor input.
P	PWRDN	Power reduction input.
M	MIOFF	Motor current off input.

1	XC1	External current control terminal 1.
2	XC2	External current control terminal 2.
0	0V	

Motor Output connections.

There are four pin connectors for the stepper motor outputs. These are found in a column on the right hand side of the motherboard, between the power supply connectors, looking from the rear. At the top there is the connector for axis one and the connectors for the consecutive axes are below it.

1	O1	Motor output phase 1
1'	O1'	Motor output phase 1'
2	O2	Motor output phase 2
2'	O2'	Motor output phase 2'

The motors coil winding 1 should be connected between O1 and O1'. The motors coil winding 2 should be connected between O2 and O2'.