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Subject: Euro209 Breakout Connection

APPLICATION NOTE

www.triomotion.com

1. Euro209 Breakout Module

The Euro209 Breakout module is for testing and low volume applications. If you are making a higher volume application it may be more cost effective to consider a custom solution.

The connections have been designed to be similar to existing products. The connections are through the 3.81mm pitch connectors and the 9 way D-types.

The Euro209 and its breakout board will be spaced using 8mm spacers. The board is aligned back to back with the Euro209 so that daughter boards can still be used.

2. PCB files

As many projects will require an interface to the Euro209 we are happy to offer the CAD files for the EURO209 breakout module. These are currently available in the following formats:

- Gerber
- GC Prevue
- P-CAD
- Others on request

If you would like these files please contact your nearest Trio office.

Please be aware that although we are offering these files as an example we are not able to support the development of your custom interface board.

3. Board layout

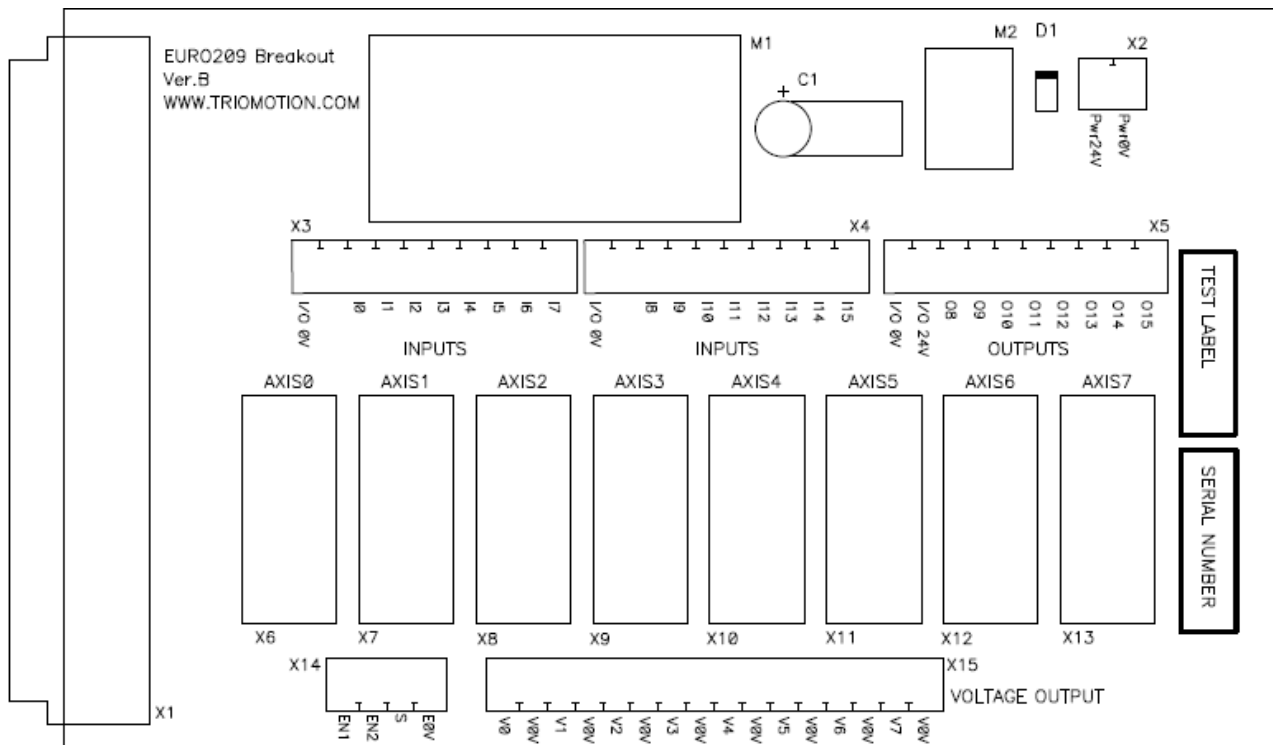


Figure 1 Board Layout

The connections are such that wires can be taken vertically or horizontally from the 3.81mm pitch connectors. Pin numbering is from the left side (nearest X1) of the 3.81mm connectors. Connections are detailed on the silk screen of the board.

4. Connection details

4.1. X2 Power input

24V power supply for the board.

150mA Max

Pin	Description
1	Pwr0V
2	Pwr24V

4.2. X3 Inputs

Inputs 0-7, please see Trio Motion Technology Technical Manual for electrical details.

Pin	Description
1	I/O 0V
2	Not Used
3	Input 0
4	Input 1
5	Input 2
6	Input 3

7	Input 4
8	Input 5
9	Input 6
10	Input 7

4.3. X4 Inputs

Inputs 8-15, please see Trio Motion Technology Technical Manual for electrical details.

Pin	Description
1	I/O 0V
2	Not Used
3	Input 8
4	Input 9
5	Input 10
6	Input 11
7	Input 12
8	Input 13
9	Input 14
10	Input 15

4.4. X4 Outputs

Outputs 0-7, please see Trio Motion Technology Technical Manual for electrical details.

Pin	Description
1	I/O 0V
2	I/O 24V
3	Output 0
4	Output 1
5	Output 2
6	Output 3
7	Output 4
8	Output 5
9	Output 6
10	Output 7

4.5. X6-X13 Stepper Outputs / Encoder Inputs

X6 to X13 corresponds to axis 0 to axis 7 respectively. The connection is the same as on other controllers such as the MC206X. Please see Trio Motion Technology Technical Manual for electrical details.

Pin	Servo Axis	Stepper Axis
1	Encoder A	Step +
2	Encoder /A	Step -
3	Encoder B	Direction +
4	Encoder /B	Direction -
5	Encoder 0V	Encoder 0V
6	Encoder Z	Boost +
7	Encoder /Z	Boost -
8	Encoder 5V	Encoder 5V
9	Not connected	Not Connected
Shell	Earth	Earth

4.6. X14

This connector enables connection to the WDOG, Earth and 0V(Enc), please see Trio Motion Technology Technical Manual for electrical details.

Pin	Description
1	Enable 1
2	Enable 2
3	Shield
4	Encoder 0V

4.7. X15 DAC output

Please see Trio Motion Technology Technical Manual for electrical details.

Pin	Description
1	Vout 0
2	Vout 0V
3	Vout 1
4	Vout 0V
5	Vout 2
6	Vout 0V
7	Vout 3
8	Vout 0V
9	Vout 4
10	Vout 0V
11	Vout 5
12	Vout 0V
13	Vout 6
14	Vout 0V
15	Vout 7
16	Vout 0V