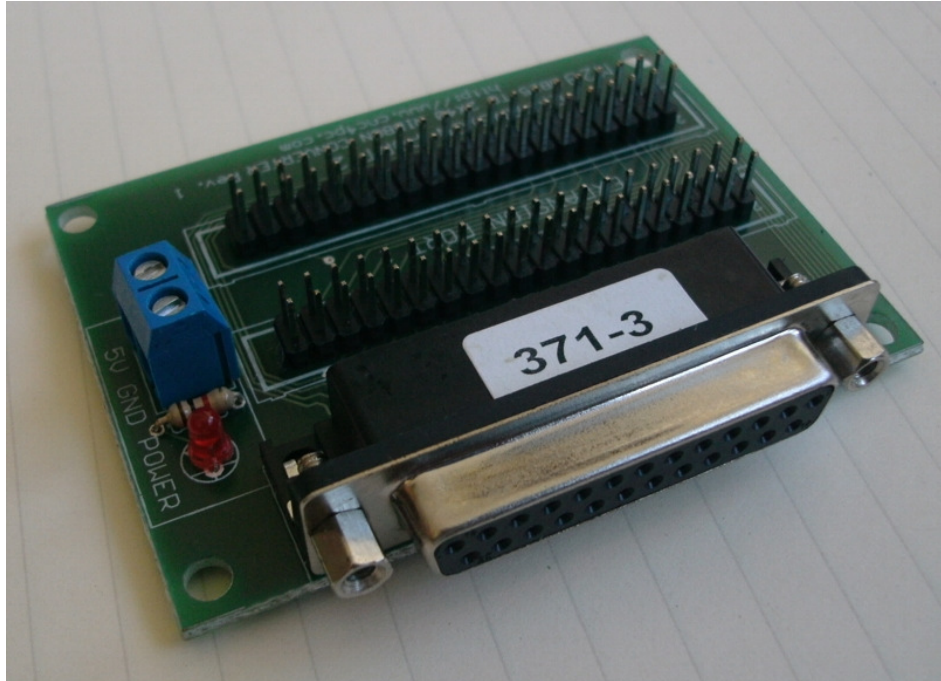


M29- DB25 TO 2 x 40 RIBBON CABLE CONVERTER. Rev. 1

User manual Rev. 2.1



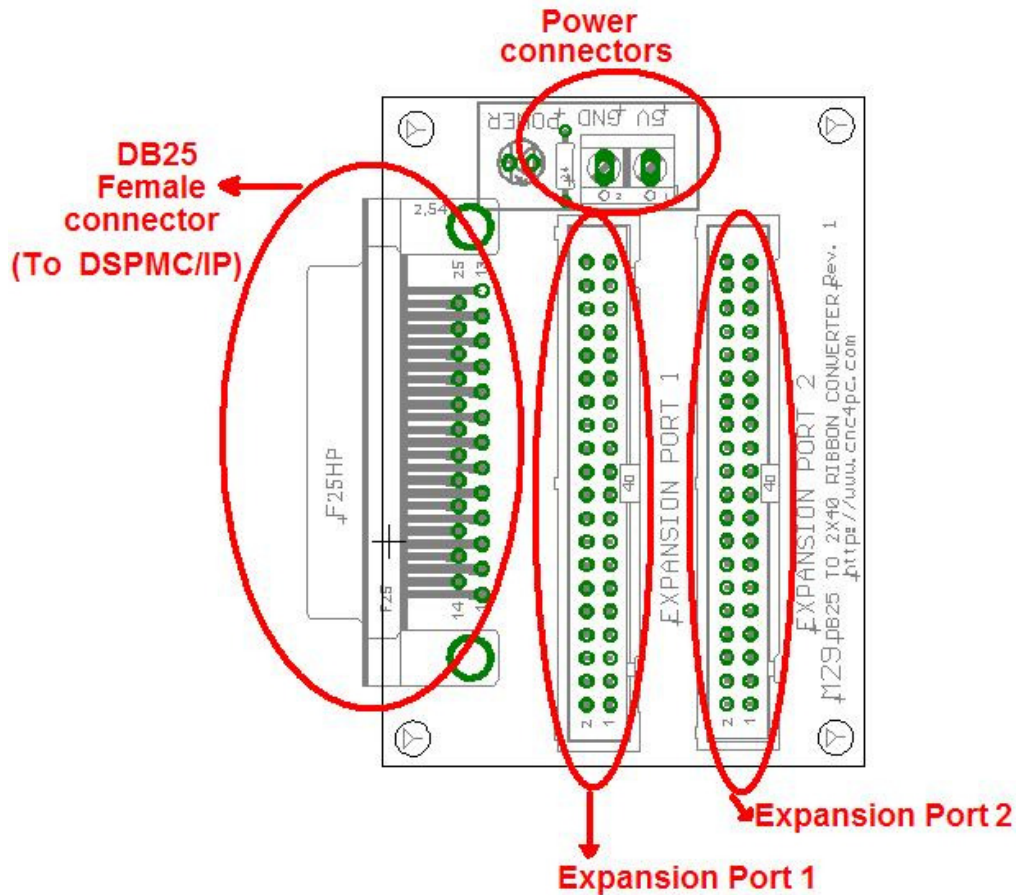
1. Overview

This card interfaces the DSPMC/IP - Ethernet Motion Controller with CNC4PC expansion boards. Different types of expansion boards can be connected to this board providing different types of I/Os and features.

2. Features

- *Designed to be used with a DSPMC/IP - Ethernet Motion Controller.*
- *Allows the use of up to 24 DSPMC/IP digital I/O (16 Inputs & 8 Outputs).*
- *With 2 cards can be used all the DSPMC/IP digital I/O (32 Inputs & 16 Outputs).*
- *Pin headers to connect up to 2 expansion boards, each one with 12 or 24 I/Os.*
- *Allows accommodating different combination of expansion boards.*

3. Board description



3.1 Power Requirements

The board requires an external 5VDC @ 200 milliamps power supply.



WARNING

Check the polarity and voltage of the external power source and connect the 5V and GND. Overvoltage or reverse-polarity power applied to these terminals can cause damage to the board, and/or the power source.

4. CNC4PC Expansion boards supported.

The below table shows the possible combination of CNC4PC supported by the M29- DB25 TO 2 x 40 RIBBON CABLE CONVERTER.

	Expansion Port 1	Expansion Port 2
M21		X
M22	X	
M25	X	X
M26	X	
M27		X
M28	X	

M21 12ODI: 12 optoisolated discrete input.

M22 12ODO: 12 optoisolated discrete output.

M25 12T: 12 Terminals

M26 12R: 12 Electromechanical Relay

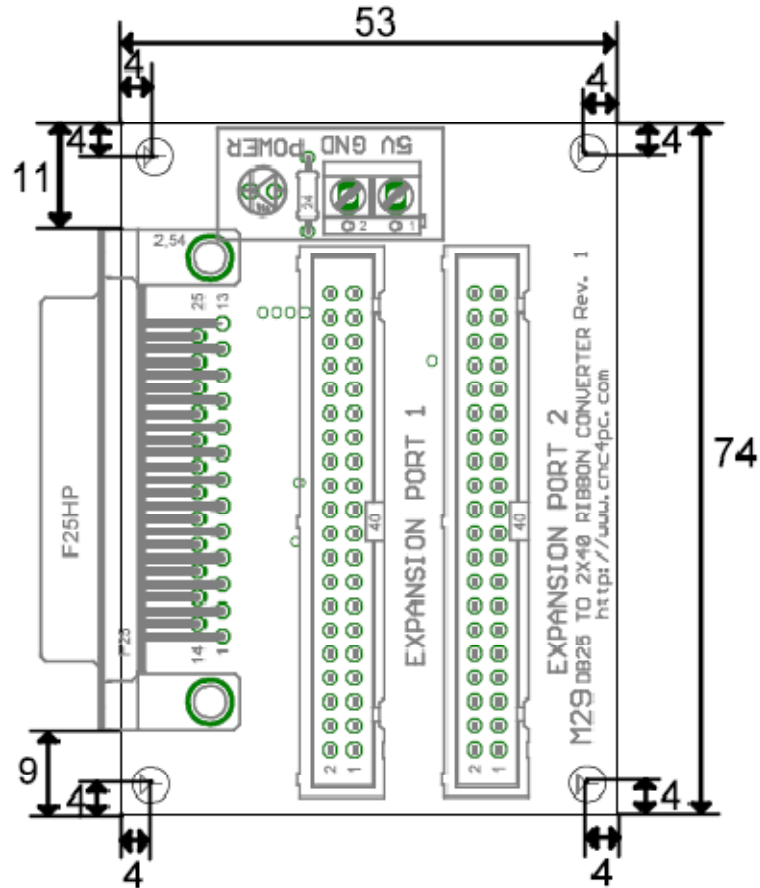
M27 12ODI(24V): 12 optoisolated discrete input 24V

M28 12ODO(24V): 12 optoisolated discrete output 24V

5. Pinout

DB25 Pin	40 pins header	Expansion Port 1	Expansion Port 2
	pin 01	GND	GND
	pin 02	GND	GND
	pin 03	GND	GND
1	pin 04	GND	GND
14	pin 05	OUTPUT 0	INPUT 4
2	pin 06	OUTPUT 1	INPUT 5
15	pin 07	OUTPUT 2	INPUT 6
3	pin 08	OUTPUT 3	INPUT 7
16	pin 09	OUTPUT 4	INPUT 8
4	pin 10	OUTPUT 5	INPUT 9
17	pin 11	OUTPUT 6	INPUT 10
5	pin 12	OUTPUT 7	INPUT 11
18	pin 13	INPUT 0	INPUT 12
6	pin 14	INPUT 1	INPUT 13
19	pin 15	INPUT 2	INPUT 14
7	pin 16	INPUT 3	INPUT 15
	pin 17	5V	5V
	pin 18	5V	5V
	pin 19	5V	5V
	pin 20	5V	5V
	pin 21	GND	NC
	pin 22	GND	NC
	pin 23	GND	NC
	pin 24	GND	NC
20	pin 25	INPUT 4	NC
8	pin 26	INPUT 5	NC
21	pin 27	INPUT 6	NC
9	pin 28	INPUT 7	NC
22	pin 29	INPUT 8	NC
10	pin 30	INPUT 9	NC
23	pin 31	INPUT 10	NC
11	pin 32	INPUT 11	NC
24	pin 33	INPUT 12	NC
12	pin 34	INPUT 13	NC
25	pin 35	INPUT 14	NC
13	pin 36	INPUT 15	NC
	pin 37	5V	NC
	pin 38	5V	NC
	pin 39	5V	NC
	pin 40	5V	NC

6. Dimensions



All dimensions are in Millimeters.

Disclaimer:

Use caution. CNC machines could be dangerous machines. DUNCAN USA, LLC or Arturo Duncan are not liable for any accidents resulting from the improper use of these devices. The M29 is not fail-safe device, and it should not be used in life

support systems or in other devices where its failure or possible erratic operation could cause property damage, bodily injury or loss of life.