Application Note #2511

ICS-48100 for DMC-40x0 Series

The ICS-48100 is a breakout module that plugs directly into the D-sub connectors of the DMC-40x0 and converts them into a 100pin Connector. This is especially useful for those that would like to upgrade to the DMC-40x0 series from a controller with a 100pin cable (such as the DMC-22x0 or DMC-18xx series) but do not want to change their wiring. This interconnect board will allow users to keep their existing 100 pin cable & interconnect module the same.

Figure 1: ICS-48100 mounted on top of DMC-40x0

Note1: for proper operation of the amp enable line, the DMC-40x0 controller should be set up as the default 5V HAEN. An acceptable part number is: DMC-4040-C012-I000. One ICS-48100 must be used for each set of 4 axes.

Note2: DMC-40x0 outputs are **high power sourcing outputs** and therefore behave differently than previous Optima/Econo controller digital outputs. The minimum voltage for the outputs (OPWR) is 12V. See Chapter 3 of the DMC-40x0 user manual for more information.
http://www.galilmc.com/support/manuals.php

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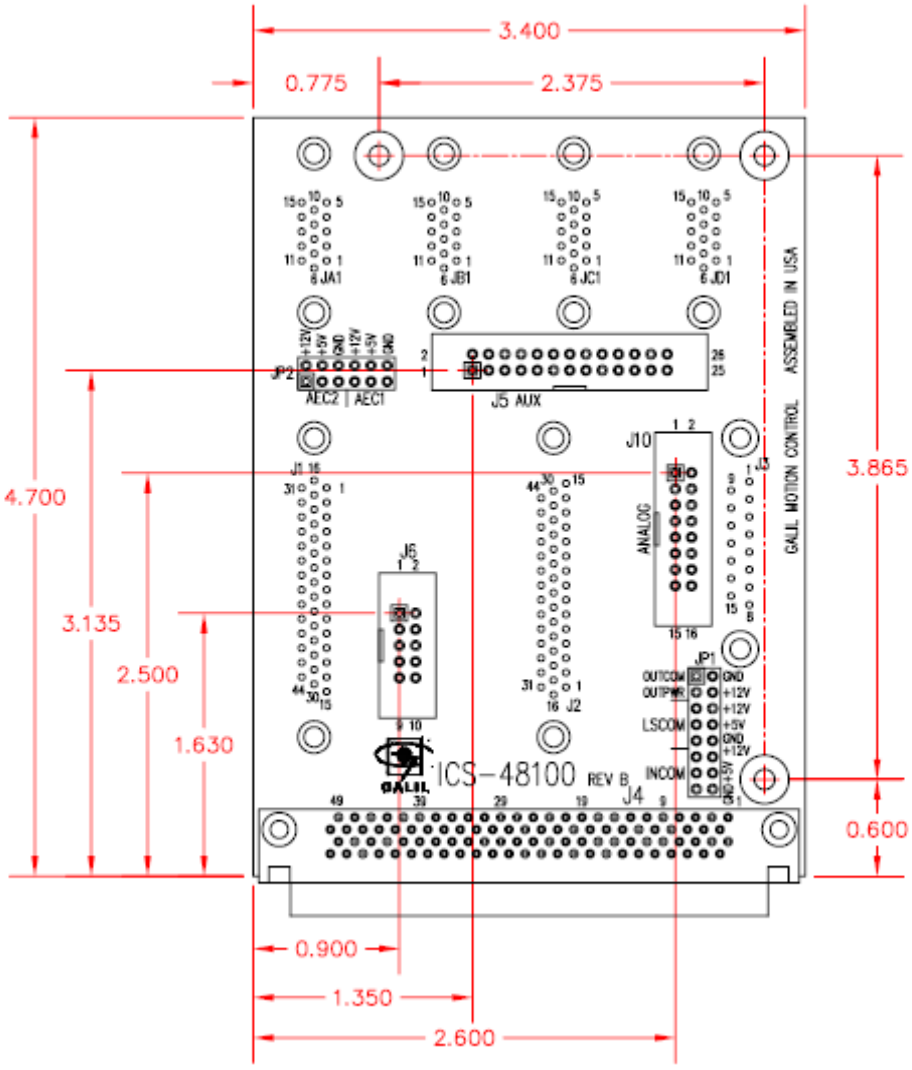

Figure 2 : ICS-48100 Dimensions

For the complete pin-out of the 100pin connector, please see the DMC-18x6 datasheet.
http://www.galilmc.com/catalog/cat18x6.pdf

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J5 –AUX Encoder Pinout:

J5	
1	+5V
2	GND
3	A_AA+
4	A_AA -
5	A_AB+
6	A_AB-
7	B_AA+
8	B_AA -
9	B_AB+
10	B_AB-
11	+5V
12	GND
13	C_AA+
14	C_AA -
15	C_AB+
16	C_AB-
17	D_AA+
18	D_AA -
19	D_AB+
20	D_AB-
21	S_CLK
22	N/A
23	N/A
24	N/A
25	N/A
26	N/A

J6- Differential Motor Cmd Output:

J6	
1	A_MOT +
2	A_MOT -
3	B_MOT +
4	B_MOT -
5	C_MOT +
6	C_MOT -
7	D_MOT +
8	D_MOT -
9	GND
10	GND

J10 – Analog Input Pinout:

J10	
1	AI_0
2	AGND
3	AI_1
4	AGND
5	AI_2
6	AGND
7	AI_3
8	AGND
9	AI_4
10	AGND
11	AI_5
12	AGND
13	AI_6
14	AGND
15	AI_7
16	AGND

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