

***i*<sup>3</sup>** ...Display, Control, Communicate



## ***i*<sup>3</sup> Tutorial**

### **I/O Setup Guide**

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## 1.0. Scope

This specification is intended to define the *i<sup>3</sup>* I/O board configuration.

## 2.0. *i<sup>3</sup>* I/O definition

The *i<sup>3</sup>* platform is available with five I/O variants, each variant has a unique I/O combination. The following defines the I/O and describes how to configure it:

### 2.1 Model Table

Table 1. below shows a summary of the model features against the model numbers:

Model Number	Digital Inputs	Analogue Inputs	Digital Outputs	Analogue Outputs	HSC	PWM	CAN
i3A12X/10A01-SOO	12	1 x 10 bit	6 Relay		4		No
i3A12X/10D03-SCH	12	4 x 10 bit	6 Relay		4		Yes
i3A12X/10B04-SCH	12	2 x 10 bit	12x.5A		4	2	Yes
i3A12X/20B05-SOH	24	2 x 10 bit	16x.5A		4	2	No
i3A12X/13C14-SOH	12	2 x 14 bit	12x.5A	2 (V or mA)	4	2	No

Table 1. Summary of I/O features.

### 2.2 Model - i3A12X/10A01-SOO

Figure 1 and Table 2. show the I/O board from the rear, the link positions and definitions:

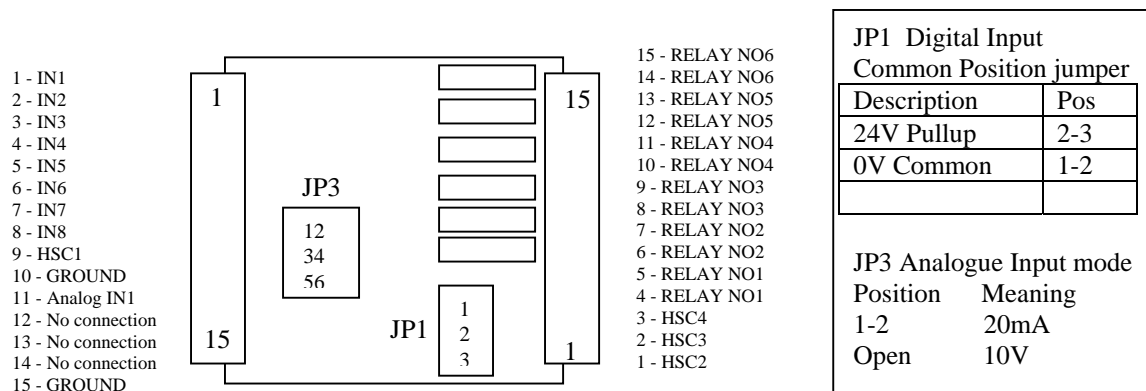


Fig 1. I/O Connections

Table 2. Link Positions

### 2.3 Model - i3A12X/10D03-SCH

Figure 2 and Table 3. show the I/O board from the rear, the link positions and definitions:

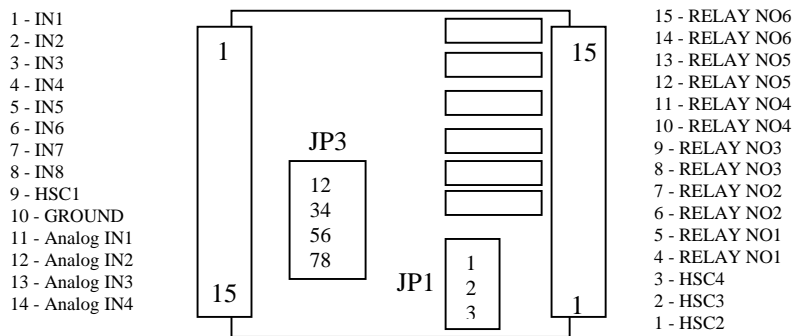


Fig 2. I/O Connections

JP1 Digital Input Common Position jumper	
Description	Pos
24V Pullup	2-3
0V Common	1-2
JP3 Analogue Input mode	
Position	Meaning
1-2	20mA
3-4	20mA
5-6	20mA
7-8	20mA
Open	10V

Table 3. Link Positions

### 2.4 Model - i3A12X/10B04-SCH

Figure 3 and Table 4. show the I/O board from the rear, the link positions and definitions:

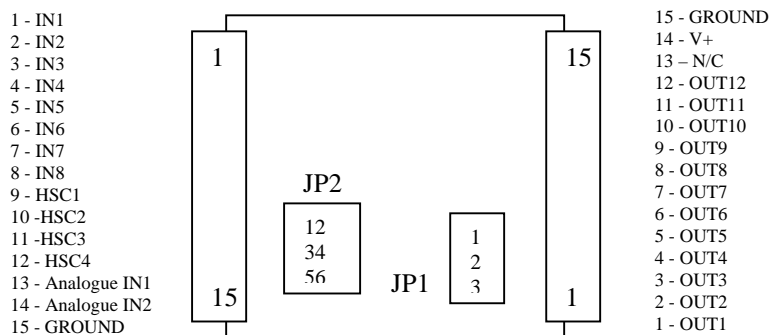


Fig 3. I/O Connections

JP1 Digital Input  
Common Position jumper

Description	Pos
24V Pullup	2-3
0V Common	1-2

JP2 Analogue Input mode

Chan	Position	Meaning
AI1	1-2	20mA
AI2	3-4	20mA
	Open	10V

Table 4. I/O Link Positions

### 2.5 Model - i3A12X/20B05-SOH

Figure 4 and Table 5. show the I/O board from the rear, the link positions and definitions:

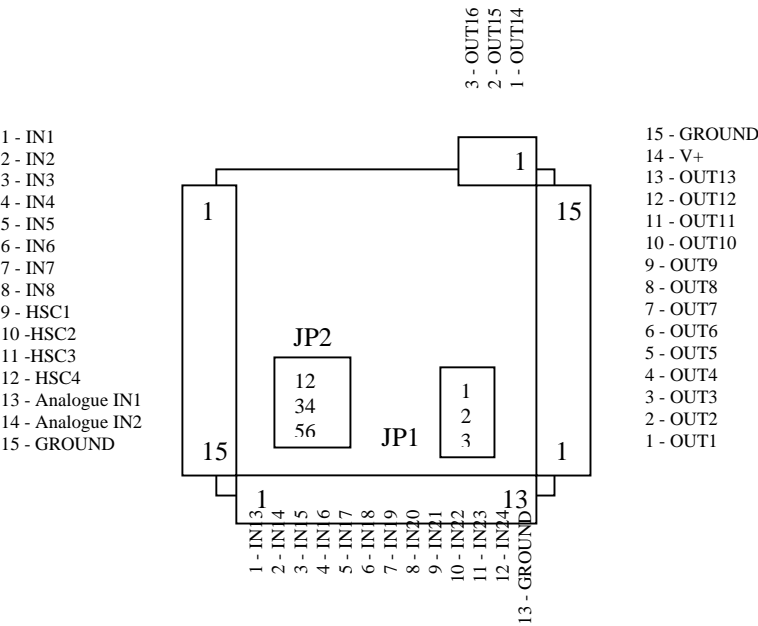


Fig 4. I/O Connections

JP1 Digital Input Common Position jumper		
Description	Pos	
24V Pullup	2-3	
0V Common	1-2	
JP2 Analogue Input mode		
Chan	Position	Meaning
AI1	1-2	20mA
AI2	3-4	20mA
	Open	10V

Table 5. I/O Link Positions

## 2.6 Model - i3A12X/13C14-SOH

Figure 5 and Table 6 and 7. show the I/O board from the rear, the link positions and definitions:

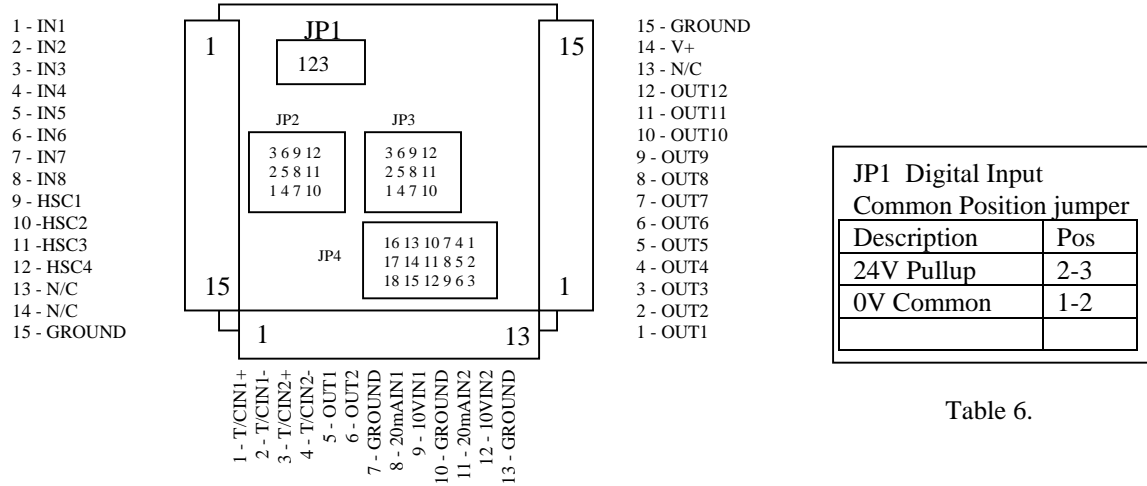


Table 6.

Figure 5. I/O Connections

JP2	20mA	10V	PT100	Thermocouple
AI 1	8-9	8-9	2-3	1-2
	11-12	11-12	5-6	4-5
			7-8	7-8
			10-11	10-11
JP3				
AI 2	8-9	8-9	2-3	1-2
	11-12	11-12	5-6	4-5
			7-8	7-8
			10-11	10-11
JP4				
OUTPUT 1	1-2	2-3		
	4-5	5-6		
	7-8	8-9		
OUTPUT 2	10-11	11-12		
	13-14	14-15		
	16-17	17-18		

Table 7. Analogue I/O Mode Jumper positions