

19. COP-IO (Digital IO)

COP-IO

611042400

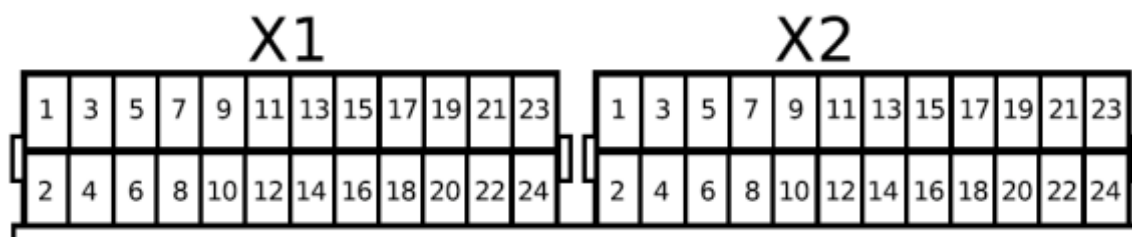
The COP-IO card has 16 digital inputs and 16 digital outputs. The I/Os are not galvanically isolated and the reference potential is at GND of the COP node power supply. The digital high side outputs are supplied from an external power source. The input status is visible in the software.



19.1. Technical Specifications

Digital Inputs		
Number of inputs	16	
Rated voltage	24 ± 30%	V _{DC}
Switching threshold	approx. 11.5	V _{DC}
Input low-pass filter cut-off frequency	1.6	kHz
Input impedance	12	kΩ
Digital Outputs		
Number of outputs	16	
Maximum output current per output	1	A
Maximum output current per output when every second output is loaded	2	A
Protection	Short-circuit proof	
Module		
Maximum power consumption at 24V node power supply	200	mA

19.2. Pin Assignment



X1					
No.	Dir	Id.	Id.	Dir	No.
2	Out	+24V	+24V	Out	1
4	Out	+24V	+24V	Out	3
6		GND	GND		5
8		GND	GND		7
10	In	D 08	D 00	In	9
12	In	D 09	D 01	In	11
14	In	D 10	D 02	In	13
16	In	D 11	D 03	In	15
18	In	D 12	D 04	In	17
20	In	D 13	D 05	In	19
22	In	D 14	D 06	In	21
24	In	D 15	D 07	In	23

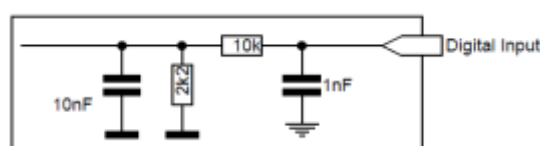
X2					
No.	Dir	Id.	Id.	Dir	No.
2	In	VccIO2 ¹⁾	Vcc IO1 ¹⁾	In	1
4	In	VccIO2 ¹⁾	Vcc IO1 ¹⁾	In	3
6		GND	GND		5
8		GND	GND		7
10	Out	D08	D00	Out	9
12	Out	D09	D01	Out	11
14	Out	D10	D02	Out	13
16	Out	D11	D03	Out	15
18	Out	D12	D04	Out	17
20	Out	D13	D05	Out	19
22	Out	D14	D06	Out	21
24	Out	D015	D07	Out	23

Two separate output power supply sources:

- Vcc IO1 for D 00 to D07
- Vcc IO2 for D 08 to D15

19.3. Hardware Description

Digital inputs

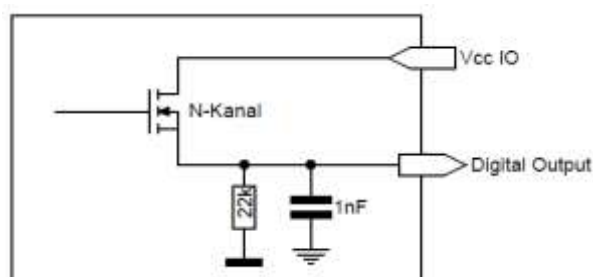


Digital outputs

The digital high side outputs are supplied from an external power source. There are two separate power supply sources.

Vcc IO1 supplies power to D 00 to D 07

Vcc IO2 supplies power to D 08 to D 15



19.4. Available Options

Item Number	Label	Option	Description
611042400	COP-IO		16 digital inputs, 16 digital outputs, 2A max, short-circuit proof