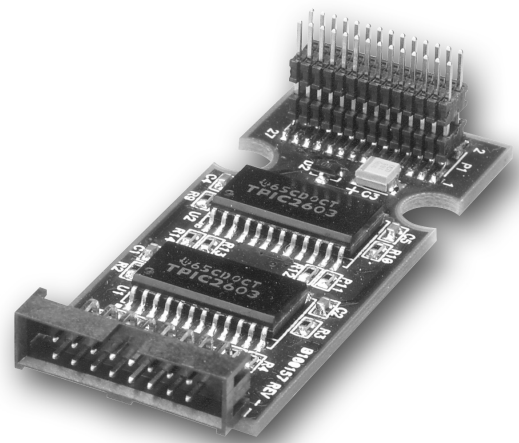


12 CHANNEL I/O

FEATURES

- Low Cost
- Twelve +5 to +24 VDC Isolated I/O Channels
- I/O Lines Software Configurable as Input or Output
- I/O User Definable as Dedicated or General Purpose
- Programmable Digital Filtering for Inputs
- 350 mA Current Sink Capability per Channel
- Over Temperature and Short Circuit Protected
- Inductive Current Clamp
- Switch Selectable Pull-up to +5 VDC or External Voltage
- Plugs Directly into MicroLYNX Controller
- Pin Header or Pin and Receptacle Connectors



DESCRIPTION

The 12 Channel Isolated Digital I/O Module adds twelve +5 to 24 VDC isolated I/O channels to the MicroLYNX. All I/O channels can be individually programmed as either inputs or outputs, or as dedicated (limit, home, etc.) or general purpose.

When used as inputs, these I/O channels have seven programmable digital filter settings ranging from 215 Hz to 27.5 kHz. As outputs, each channel can sink up to 350 mA. The I/O is isolated from the power supply ground.

A 7.5kohm switch selectable pull-up resistor is provided for each I/O channel. The twelve I/O channels may be pulled up to either the internal +5 VDC supply or an external voltage provided by the user. Protection circuitry includes over temperature, short circuit and inductive current clamp.

PIN & SWITCH ASSIGNMENTS

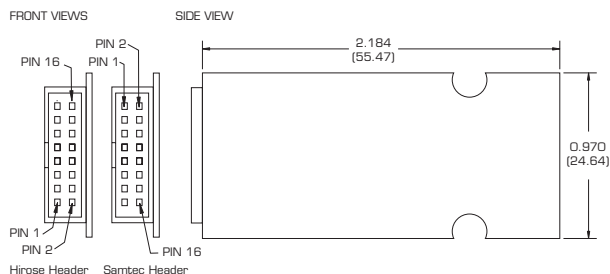
16 PIN CONNECTORS Samtec (S) / Hirose (H)					
PIN	FUNCTION	PIN	FUNCTION		
1 (S)	15 (H)	V PULL-UP A	9 (S)	7 (H)	V PULL-UP B
2 (S)	16 (H)	I/O CH 1A	10 (S)	8 (H)	I/O CH 1B
3 (S)	13 (H)	I/O CH 2A	11 (S)	5 (H)	I/O CH 2B
4 (S)	14 (H)	I/O CH 3A	12 (S)	6 (H)	I/O CH 3B
5 (S)	11 (H)	I/O CH 4A	13 (S)	3 (H)	I/O CH 4B
6 (S)	12 (H)	I/O CH 5A	14 (S)	4 (H)	I/O CH 5B
7 (S)	9 (H)	I/O CH 6A	15 (S)	1 (H)	I/O CH 6B
8 (S)	10 (H)	I/O GND A	16 (S)	2 (H)	I/O GND B

PIN	SWITCH NAME	FUNCTION
2-7	I/O 1A - 6A	Pull-up On/Off Switches I/O Lines 1A-6A
10-15	I/O 1B - 6B	Pull-up On/Off Switches I/O Lines 1B-6B

ELECTRICAL SPECIFICATIONS

Input Voltage Range	0 to +24 VDC
Input Low Level.....	< 1.5 volts
Input High Level.....	> 3.5 volts
Open Circuit Input/Output Voltage	
Pull-up Switch On (internal supply).....	4.5 volts
Pull-up Switch Off.....	0 volts
Load Supply Voltage	28 VDC max (transient protected at 60 volts)
FET on Resistance	2 ohm max (T _j =125°C)
Continuous Sink Current	350 mA max each output (T _a =25°C)
Maximum Group Sink	1.5 Amp (thermally limited)
Filter Cutoff Frequencies	27.5, 13.7, 6.89, 3.44, 1.72 kHz
	860, 430, 215 Hz

MECHANICAL SPECIFICATIONS



NOTE:

Mating Connectors
Not Supplied.
Order Information at
www.imshome.com/quick.html

ENVIRONMENTAL

Storage Temperature	-20 to +70° C
Operating Temperature.....	0 to +50° C
Humidity.....	0 to 90% non-condensing

ORDER INFORMATION

	PIN & RECEPTACLE (Hirose)	PIN HEADER (Samtec)
PART NUMBER	MX-DI401-000	MX-DI400-000

Standard product shown in bold italics. Lead times may apply to other versions.