

XIO2 Hourglass I/O Module



MFG# G11103-1XX
(See Part Number Matrix on Page 3)

The XIO2 Hourglass I/O Module is a printed circuit board CAN-bus I/O module for applications that require multiple analog and digital inputs, as well as digital outputs.

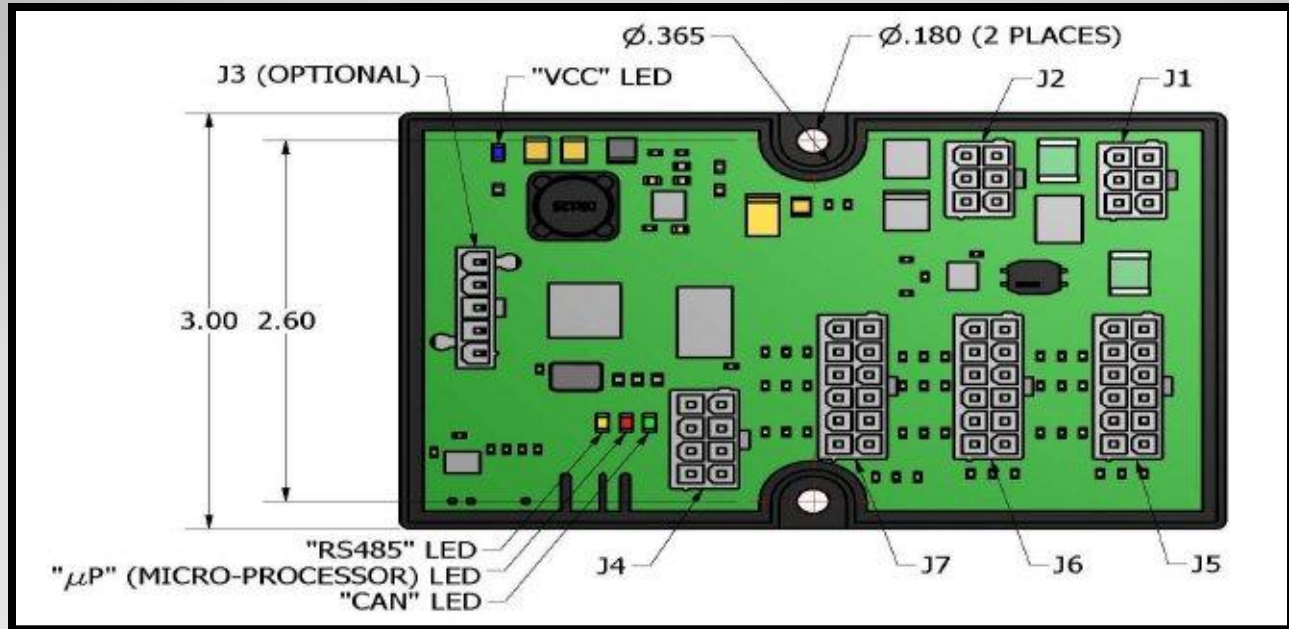
The module is designed to be a node on a CAN-bus, operating at 250 kbps with a 29-bit extended CAN identifier. As such, the module communicates via J1939 and can communicate via RS-485. Quadrature Inputs are available for Encoder control

In addition, this module can be used to accept inputs from existing operator controls (joysticks, switches, speed potentiometers) and encode them for messaging over the CAN-bus. This allows for the use of familiar controls in a CAN environment.

The in cab version of the XIO2 Module is installed in a potted enclosure. The design utilizes cost effective Molex connections to allow for extreme flexibility of the harness solution requirements.

SPECIFICATIONS	
OPERATING TEMPERATURE	-40°C to +80°C
STORAGE TEMPERATURE	-40°C to +80°C
PGN NUMBERS	PGN'S are assigned at time of customers build.
ENVIRONMENTAL RATING	Model Dependent
VIBRATION	10 to 2000 Hz per axis, 69m/s² Based on MIL-STD-202G
EMI	ISO11452-2
RADIATED	ISO13766
ESD	ISO10605
HOUSING	Potted
SUPPLY VOLTAGE	9 to 32 VDC
OUTPUTS	8 Digital Outputs <ul style="list-style-type: none"> • Low Amp Version- 300 mA to 2 Amp total
INPUTS	24 total inputs <ul style="list-style-type: none"> • 12 Digital (5 to 32 VDC) • 12 Configurable as Analog (0 to 5V) or Digital (V)
CAN PROTOCOL	J1939
CAN SOURCE ADDRESS	SA 100-107

XIO2 Hourglass I/O Module – Dimensions



Part Number Matrix GS11103-1XX

Mounting Style	Potted Box	1	X	X
Digital Outputs	Low Current	X	0	X
RS-485 Parts & Quadrature	RS-485 & NO Quadrature	X	X	0
	NO RS-485 & NO Quadrature	X	X	2
	NO RS-485 & Quadrature	X	X	4

Note: Both RS-485 & Quadrature is not available

XIO2 Hourglass I/O Module – Connector Pin out Detail

J1	
MATING CONNECTOR	MOLEX 39-01-2060
TERMINALS	MOLEX 39-00-0429 24-18 AWG MOLEX 39-00-0090 16 AWG
TERMINAL	CONNECTION
1	CAN-H
2	COMMON SUPPLY
3	CONNECTED TO J2-3 ONLY
4	CAN-L
5	CAN SHIELD
6	+SUPPLY

J4	
MATING CONNECTOR	MOLEX 39-01-2080
TERMINALS	MOLEX 39-00-0429 24-18 AWG MOLEX 39-00-0090 16 AWG
TERMINAL	CONNECTION
1	DIGITAL OUT 1
2	DIGITAL OUT 2
3	DIGITAL OUT 3
4	DIGITAL OUT 4
5	DIGITAL OUT 5
6	DIGITAL OUT 6
7	DIGITAL OUT 7
8	DIGITAL OUT 8

J6	
MATING CONNECTOR	MOLEX 39-01-2120
TERMINALS	MOLEX 39-00-0429 24-18 AWG MOLEX 39-00-0090 16 AWG
TERMINAL	CONNECTION
1	ANALOG INPUT 5
2	ANALOG INPUT 6
3	ANALOG INPUT 7
4	ANALOG INPUT 8
5	COMMON
6	COMMON
7	DIGITAL INPUT 5
8	DIGITAL INPUT 6
9	DIGITAL INPUT 7
10	DIGITAL INPUT 8
11	+5VDC OUTPUT
12	+5VDC OUTPUT

J2	
MATING CONNECTOR	MOLEX 39-01-2060
TERMINALS	MOLEX 39-00-0429 24-18 AWG MOLEX 39-00-0090 16 AWG
TERMINAL	CONNECTION
1	CAN-H
2	COMMON SUPPLY
3	CONNECTED TO J1-3 ONLY
4	CAN-L
5	CAN SHIELD
6	+SUPPLY

J5	
MATING CONNECTOR	MOLEX 39-01-2120
TERMINALS	MOLEX 39-00-0429 24-18 AWG MOLEX 39-00-0090 16 AWG
TERMINAL	CONNECTION
1	ANALOG INPUT 1
2	ANALOG INPUT 2
3	ANALOG INPUT 3
4	ANALOG INPUT 4
5	COMMON
6	COMMON
7	DIGITAL INPUT 1
8	DIGITAL INPUT 2
9	DIGITAL INPUT 3
10	DIGITAL INPUT 4
11	+5VDC OUTPUT
12	+5VDC OUTPUT

J7	
MATING CONNECTOR	MOLEX 39-01-2120
TERMINALS	MOLEX 39-00-0429 24-18 AWG MOLEX 39-00-0090 16 AWG
TERMINAL	CONNECTION
1	ANALOG INPUT 9
2	ANALOG INPUT 10
3	ANALOG INPUT 11
4	ANALOG INPUT 12
5	COMMON
6	COMMON
7	DIGITAL INPUT 9
8	DIGITAL INPUT 10
9	DIGITAL INPUT 11
10	DIGITAL INPUT 12
11	+5VDC OUTPUT
12	+5VDC OUTPUT

J3	
MATING CONNECTOR	MOLEX 39-01-4050
TERMINALS	MOLEX 39-00-0429 24-18 AWG MOLEX 39-00-0090 16 AWG
TERMINAL	CONNECTION
1	+5VDC OUTPUT
2	COMMON
3	RS485-A
4	RS485-B
5	RS485 SHIELD

WARNING

FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCT AND/OR SYSTEMS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY, AND PROPERTY DAMAGE.

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