GX3348 SERIES

6U PXI MULTI-CHANNEL ANALOG I/O PXI CARD

- Three programmable DC outputs, -20 to +32 VDC
- Available with a 4 x 48 or 4 x 64 relay matrix configuration
- DC measurement capability on each channel
- 500 mA maximum current output
- · External source input with switchable amplifier



DESCRIPTION

The GX3348 is a multi-channel analog I/O 6U PXI card which provides (3) programmable sources, a ground source connection, and a 4 x 48 or 4 x 64 matrix - allowing the user to route the 3 sources, or ground to any of the 48 or 64 I/O channels. In addition, each I/O channel can be connected to a 16-bit A to D converter, providing DC voltage measurement capability for each channel.

FEATURES

The 4 inputs to the switch matrix can be connected to the following sources:

- Programmable -20 to +32 VDC source or external source (with amplifier or bypassed)
- Ground (0 V)

Each I/O channel also includes DC measurement capability; allowing each input channel to be monitored and facilitating module self-test. Combined maximum output current for all programmable sources is 500 mA. If using the external source inputs, 5 VDC or ground connection, maximum current is limited to 3 A. An onboard EEPROM contains the DAC's and ADC's calibration parameters.

SOFTWARE

The board is supplied with the GXPDO driver, a software package that includes a virtual instrument panel, and a Windows 32/64-bit DLL driver library and documentation. The virtual panel can be used to interactively program and control the instrument from a window that displays the instrument's current settings and status. In addition, interface files are provided to support access to programming tools and languages such as ATEasy, LabView, LabView/Real-Time, C/C++, Microsoft Visual Basic®, C#, Delphi, and Pascal. An On-Line help file and PDF User's Guide provides documentation that includes instructions for installing, using and programming the board.

APPLICATIONS

- LRU/SRU avionics testing
- Automotive ECU testing
- Process control systems
- Precision data acquisition
- Automatic Test Equipment (ATE)



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SPECIFICATIONS

USER CHANNEL I/O SPECIFICATIONS		
Number of Channels	48 or 64	
Channel Multiplexer	4 x 48 or 4 x 64	
Configuration		
Maximum Current per Channel	500 mA	
Maximum Source Current	500 mA total for all three programmable sources 3 A for all other sources	
Number of Voltage Rails	4	
Voltage Rails	-20 to +32 VDC or Ext. Input (with amplifier or bypassed)	
	-20 to +32 VDC or 5 VDC	
	-20 to +32 VDC or Ext. Input	
	Ground (0 V)	
Number of DACs	3	
DAC Resolution	16-bit	
Output Accuracy	$\pm 1 \text{ LSB } \pm 10 \text{ mV}$, 1 k Ω load	
Slew Rate (DAC or amplifier)	6 V/μs (typ); 1 kΩ, 50 pF load	
Amplifier Gain	6.6, nominal	
Amplifier Bandwidth	DC to 10 KHz	
Amplifier Output Swing	-20 to +32 V max.	
DAC and Amplifier Output Protection	Short circuit (ground)	
Measurement	48 or 64	
Channels	Measurement range: ±40 V	
	Resolution: 16 bits Accuracy: 5 mV	
Power ON State	All channels / rails open	
PHYSICAL AND ENVIRONMENTAL		
Operating Temperature	0 °C to +55 °C	
Storage Temperature	-20 °C to +70 °C	
Connector	78 pin, D-sub, female	
Mechanical	6U PXI, single slot	
Weight	14 oz	

ORDERING INFORMATION

GX3348	48 Channel Analog I/O Card	
GX3364	64 Channel Analog I/O Card	
GX3364-M	64 Channel Analog I/O Card (Ruggedized & Conformally Coated)	
ACCESSORY		
GT97102	3' Harness, 78-Pin Male Connector on One End, Loose Wired (Numbered) Other End	
GT97103	1' Harness, 78-Pin Male Connector on One End, Loose Wired (Numbered) Other End	
GX3348-CAL	GX3348 Calibration/Verification Service. Includes pre-verification data (post calibration data provided if applicable)	
GX3348-CAL-3	GX3348 Calibration/Verification Service - 3 years. Includes pre-verification data (post calibration data provided if applicable)	
GX3348-CAL-5	GX3348 Calibration/Verification Service - 5 years. Includes pre-verification data (post calibration data provided if applicable)	
CALIBRATION		
CalEasy-GX3348	CalEasy for the GX3348 (Single User License) with One Year Support and Subscription	
CalEasy	CalEasy License for all Supported Marvin Test Solutions Products (Single User License) with One Year Support and Subscription	
CalEasy-2Y	CalEasy License for all Supported Marvin Test Solutions Products (Single User License) with Two Year Support and Subscription	
CalEasy-3Y	CalEasy License for all Supported Marvin Test Solutions Products (Single User License) with Three Year Support and Subscription	
GX3348-CAL	GX3348 Calibration/Verification Service. Includes pre-verification data (post calibration data provided if applicable)	
GX3348-CAL-3	GX3348 Calibration/Verification Service - 3 years. Includes pre-verification data (post calibration data provided if applicable)	
GX3348-CAL-5	GX3348 Calibration/Verification Service - 5 years. Includes pre-verification data (post calibration data provided if applicable)	

Note: Specifications are subject to change without notice

