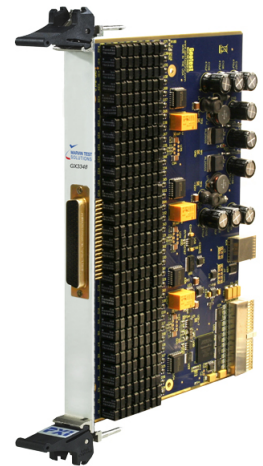


# GX3348 SERIES

## 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, 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)

# GX3348 SERIES

## SPECIFICATIONS

| USER CHANNEL I/O SPECIFICATIONS     |                                                                                                                                      |
|-------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| Number of Channels                  | 48 or 64                                                                                                                             |
| Channel Multiplexer Configuration   | 4 x 48 or 4 x 64                                                                                                                     |
| Maximum Current per Channel         | 500 mA                                                                                                                               |
| Maximum Source Current              | 500 mA total for all three programmable sources<br>3 A for all other sources                                                         |
| Number of Voltage Rails             | 4                                                                                                                                    |
| Voltage Rails                       | -20 to +32 VDC or Ext. Input (with amplifier or bypassed)<br>-20 to +32 VDC or 5 VDC<br>-20 to +32 VDC or Ext. Input<br>Ground (0 V) |
| Number of DACs                      | 3                                                                                                                                    |
| DAC Resolution                      | 16-bit                                                                                                                               |
| Output Accuracy                     | $\pm 1$ LSB $\pm 10$ mV, 1 k $\Omega$ load                                                                                           |
| Slew Rate (DAC or amplifier)        | 6 V/ $\mu$ s (typ); 1 k $\Omega$ , 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 Channels                | 48 or 64<br>Measurement range: $\pm 40$ V<br>Resolution: 16 bits<br>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                                                                                                                                |

Note: Specifications are subject to change without notice

## 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 wires (numbered) other end                                                  |
| GT97103        | 1' harness, 78 pin male connector on one end, loose wires (numbered) other end                                                  |
| CALIBRATION    |                                                                                                                                 |
| 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 |
| CalEasy-GX1110 | CalEasy for the GX1110 (Single User License) with One Year Support and Subscription                                             |
| CalEasy-GX1120 | CalEasy for the GX1120 (Single User License) with One Year Support and Subscription                                             |
| CalEasy-GX1649 | CalEasy for the GX1649 (Single User License) with One Year Support and Subscription                                             |
| CalEasy-GX1838 | CalEasy for the GX1838 (Single User License) with One Year Support and Subscription                                             |
| CalEasy-GX2065 | CalEasy for the GX2065 (Single User License) with One Year Support and Subscription                                             |
| CalEasy-GX3348 | CalEasy for the GX3348 (Single User License) with One Year Support and Subscription                                             |
| CalEasy-GX5055 | CalEasy for the GX5055 (Single User License) with One Year Support and Subscription                                             |
| CalEasy-GX5295 | CalEasy for the GX5295 (Single User License) with One Year Support and Subscription                                             |
| CalEasy-GX5960 | CalEasy for the GX5960 (Single User License) with One Year Support and Subscription                                             |
| CalEasy-UG     | Upgrades a Single Instrument CalEasy License to Include All Supported Marvin Test Solutions Instruments                         |
| CalEasy-S1Y    | Renew CalEasy Subscription and Support 1 Year                                                                                   |
| CalEasy-S2Y    | Renew CalEasy Subscription and Support 2 Years                                                                                  |
| CalEasy-S3Y    | Renew CalEasy Subscription and Support 3 Years                                                                                  |

# GX3348 SERIES

**CalEasy-GX5296**

CalEasy for the GX5296 (Single User License) with  
One Year Support and Subscription

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