

# GX1642



## ANALOG OUTPUT PXI CARD

- 64 individual analog outputs
- 12-bit Resolution
- Output Range: -20 V to +20 V
- Output Current :  $\pm 10$  mA per channel
- Simultaneous updating on all channels
- 3U PXI Instrument
- PXI hybrid slot compatible



## DESCRIPTION

The GX1642 is a 3U PXI digital to analog output board is designed specifically for applications where multiple analog outputs are required. The GX1642 offers precision signal sourcing performance and quality at an economical price.

## FEATURES

The GX1642 is organized into four groups of sixteen channels. Each group is programmed and triggered independently. All groups can also be updated simultaneously. All channels provide single-ended voltage and are automatically at 0 V DC after reset to prevent inadvertent damage to external equipment.

## PROGRAMMING AND SOFTWARE

The board is supplied with the GXAO software package that includes a virtual instrument panel, 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 settings and status. In addition, interface files are provided to support programming tools and languages such as ATEasy, LabView, LabView/Real-Time, C/C++, Microsoft Visual Basic®, Delphi, and Pascal. Help file and PDF User's Guide provides documentation that includes instructions for installing, using and programming the board. A separate software package - [GtLinux](#) - provides support for Linux 32/64 operating systems.

## APPLICATIONS

- Discrete avionics testing
- Automatic Test Equipment (ATE)
- Multiple DC source

# GX1642



## SPECIFICATIONS

Number of Output Channels	64, configured as 4 groups of 16 channels
Number of Ranges	4 (each group)
Selectable Output Voltage Ranges	0 V to +10 V, 0 V to +20 V, $\pm 10$ V, $\pm 20$ V
Output Current per Channel	$\pm 10$ mA (max)
Resolution	12-bit
Accuracy	3 mV $\pm$ 1 LSB
Slew Rate	0.5 V/ $\mu$ s
Settling Time	50 $\mu$ s to 0.1%
<b>POWER</b>	
3.3 VDC	100 mA (max)
5 VDC	2 A (typ); 6 A (max)
12 VDC	10 mA (max)
<b>ENVIRONMENTAL</b>	
Operating Temperature	0 °C to +55 °C
Storage Temperature	-20 °C to +70 °C
Size	3U PXI
Weight	12 oz
Connector	78-pin D-Type
Calibration	One time factory calibration, periodic calibration not required

Note: Specifications are subject to change without notice

## ORDERING INFORMATION

<b>GX1642</b>	64 Channel 12-bit D/A, +/- 20V
<b>ACCESSORY</b>	
<b>GT96002</b>	Connector, D-Type 78-Pin Male with Crimp Pins
<b>GT97102</b>	3 ft Harness, 78-Pin Male Connector on One End, Loose Wired (Numbered) Other End
<b>GT97103</b>	1 ft Harness, 78-Pin Male Connector on One End, Loose Wired (Numbered) Other End
<b>GT97104</b>	1 foot Harness, 78-Pin Male Connector on Both Ends
<b>GT96107</b>	3 Feet Harness, 78-Pin Male Connector on Both Ends
<b>GT96078</b>	78-Pin Connector to Screw Terminal Interface
<b>GX96105</b>	6 ft harness, 78 pin male connector on one end, loose wires (numbered) on other end
<b>GX96106</b>	6 ft. Harness, 78 Pin Male Connector on Both Ends
<b>GX98302</b>	3U "Wireless" Scout Adapter for GX6138/GX6125/GX6377/GX6384/GX1648 (200-Pin Connector)
<b>GT96110</b>	5 ft Cable, 78-Pin Male Connector on Both Ends
<b>GT97112</b>	15' Cable, 78-Pin Male Connector on One End, Loose Wired (Numbered) Other End
<b>GT97113</b>	15 ft Cable, 78-Pin Female Connector on One End, Loose Wired (Numbered) Other End