

GX6616

HIGH DENSITY SWITCH MATRIX PXI CARD

- Six switching groups allow multiple configurations up to 2 x 96
- Fast switching time with 500 mA current switching capability
- Single-ended or differential switching capability
- Optional built-in test adapter simplifies maintenance and support
- 6U PXI Instrument



DESCRIPTION

The GX6616 is a 6U PXI switch matrix board that provides either differential or single-ended multiplexing capability through software commands, along with six groups of 2 x 16 that may be used in various configurations.

FEATURES

The GX6616 consists of six switching groups, A through F, which provide connections between two rows and 16 channels. Each switching group can be connected either horizontally or vertically to an adjacent group via on-board jumpers. Typical configurations include:

- Six groups of 2 x 16
- Three groups of 4 x 16
- Three groups of 2 x 32
- One group of 2 x 96

An optional self-test adapter is available externally to perform a complete self-test of the GX6616.

PROGRAMMING AND SOFTWARE

The board is supplied with the GXSW library, 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®, 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.

A separate software package - [GtLinux](#) - provides support for Linux 32/64 operating systems.

APPLICATIONS

- Automatic Test Equipment (ATE)
- Data Acquisition
- Process Control
- High density switching systems

GX6616

SPECIFICATIONS

CONTACT SPECIFICATIONS	
Relay Contact Resistance	<0.2 Ω
Contact Life Rating at Low Level at 28 VDC @ 0.5 A	5 x 10 ⁶ (typ)
Switchable Voltage, Maximum	200 VDC
Switchable Current	0.5 A (max)
Contact Carry Current	1.2 A (max)
Operate Time	500 μ s (max)
Release Time	250 μ s (max)
POWER REQUIREMENTS	
Operating Voltage	+5 VDC
Power Consumption	600 mA (typ); 1.1 A (max)
ENVIRONMENTAL	
Operating Temperature	0 °C To +55 °C
Storage Temperature	-20 °C To +85 °C
Vibration	5 G at 500 Hz
Shock ½ Sine	5 G for 6 ms
PHYSICAL	
Size	6U PXI Slot
Weight	18 oz
Connections	78-Pin D Sub-Type Connectors. Includes Mating Connectors.

Note: Specifications are subject to change without notice

ORDERING INFORMATION

GX6616	Switch Matrix 6 x 2:16
ACCESSORY	
GT97104	1' harness, 78 pin male connectors on both ends
GT97103	1' harness, 78 pin male connector on one end, loose wires (numbered) other end
GT97102	3' harness, 78 pin male connector on one end, loose wires (numbered) other end
GT96107	3' harness, 78 pin male connector on Both ends
GT96302	Replacement Relay for GT6416
GX96302	Replacement Relay for GX6616 & GX6338
GT96303	Self-Test Adapter for GT6416 and GX6616
GT96002	Connector, D-Type 78-Pin Male with Crimp Pins
GT96078	78-Pin Connector to Screw Terminal Interface