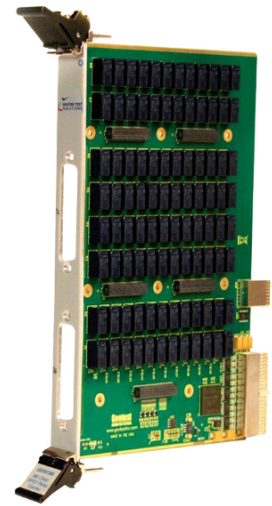


# GX6196

## 96 CHANNEL DPST RELAY AND CONTROL PXI CARRIER CARD

- PXI relay and control card for user defined applications
- 96, 2 pole, form A relays
- Parallel and serial digital control interfaces
- All resources interface to a user defined mezzanine board
- 6U, single slot, PXI Instrument



## DESCRIPTION

The GX6196 is a 6U PXI switch and control board that can be used to create custom switching, signal conditioning, or specific UUT control interfaces. The board provides 96, 2 pole, form A relays, 8 digital I/O lines, and a serial digital interface. All of these resources are available via (5) inter-board connectors which interface to the user defined daughter / mezzanine board. The mezzanine board provides all connections to the unit under test (UUT) via two 78 pin D-sub connectors. The GX6196 is supplied with a front panel which accepts (2) 78 pin D-sub connectors.

## FEATURES

The GX6196 features 96 DPST relays which can be individually controlled via the PXI bus and interface via four interboard connectors to a mezzanine board assembly (user supplied). In addition, there are eight digital LVTTTL I/O control lines and a serial bus interface which are accessed via an additional board to board connector. Control for all of these digital interfaces is also supported via the PXI bus, providing control for circuitry located on the user defined mezzanine board.

## 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's relays and digital control interfaces 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

- Custom load board
- Custom interfaces
- Data acquisition
- Process control
- Custom switching configurations

# GX6196

## SPECIFICATIONS

| RELAY SPECIFICATIONS                                     |  |
|--|--|
| Number of Relays   | 96, DPST   |
| Relay Contact Resistance                                 | <0.1 $\Omega$  |
| Contact Life Rating at 30 VDC, 2 A                       | 1 x 10 <sup>5</sup> (min)  |
| Switchable Voltage                                       | 220 VDC (max)  |
| Switchable Current                                       | 2 A (max)  |
| Contact Carry Current                                    | 2 A (max)  |
| Operate Time   | 4 ms (max)   |
| Release Time   | 4 ms (max)   |
| MEZZANINE BOARD INTERFACE                                |  |
| Interface Connectors                                     | 5, 100 pin, Samtec SOLC-125-02-L-Q-A-P                                     |
| ID Lines   | 4  |
| Digital I/O lines  | 8, LVTTTL, individually programmable with read status                      |
| Serial Communication Interface                           | SDOut, SDIn, SCIk, (4) Chip Enables; 1 MHz data rate                       |
| Power Interface  | + 5 V, 5 A; +3.3 V, 5 A; +12 V, 1 A; -12 V, 1 A; +1.2 V, 1 A (max current) |
| MODULE POWER REQUIREMENTS (NOT INCLUDING MEZZANIE BOARD) |  |
| Operating Voltage  | +3.3 VDC   |
| Power Consumption  | 330 mA (max)   |
| Relay Power  | +5 V, 29 mA per relay  |
| 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 | (2) 78-Pin D Sub-Type Connectors.(Part of mezzanine board assembly) |

Note: Specifications are subject to change without notice

## ORDERING INFORMATION

| GX6196    | 96 Channel DPST Relay Carrier Card   |
|-----------|--|
| 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                                   |