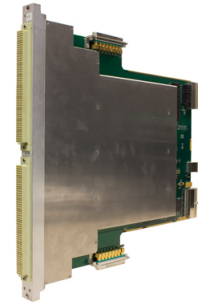


# GX6164

## GENASYS 16 X 64 HF MATRIX SWITCH CARD

- High frequency 16 x 64 matrix switch card, compatible with GENASYS switching subsystem (GX7016/GX7017)
- Extended 6U design offers a "cable-less" test system interface



## OVERVIEW

A component of the GENASYS switching subsystem, the GX6164 switch card is one of several different switch cards which can be installed in the GX7016 or GX7017 chassis. The GENASYS switching subsystem offers a new level of high performance, high density switching for board and system level functional test. Based on the 6U PXI architecture, the GENASSYS architecture incorporates a modular switch matrix and multiplexer architecture which supports up to 4608 multiplexed, hybrid I/O pins. Up to 128 external resources can be connected to any of the test system's receiver I/O pins via a high performance, internal 16 wire matrix bus. For high frequency switching applications, the GX6164 offers 64 matrixed connections to the receiver interface. The GENASYS chassis incorporates the MAC Panel 6U SCOUT receiver with each switch card providing a "cable-less" connection to the receiver connectors, - eliminating the need for cable harnesses and the associated reliability issues that come with cabled solutions. The result is a system interconnect design that is cost effective, reliable, and maintainable.

## DESCRIPTION

The GX6164 provides signal routing from the GENASYS' internal backplane to the receiver interface as well as providing an alternate, high bandwidth connection to 16 external instrumentation resources. The GX6164 matrix switch card is an extended 6U PXI module with direct connection to the receiver interface. The module features a 16 x 64 full matrix, providing a total of 64 high performance I/O pins at the receiver interface. HF resources are connected directly to the GX6164 via an external connector. In addition signals can be routed to / from the HF switch card to other switch cards in the system via the system's internal 16 wire bus.

## SOFTWARE

See GX7016 or GX7017 for more information regarding GXCHASSIS and GXSW software provided with this card. For end to end to signal routing, Marvin Test Solutions' SwitchEasy is used to control and manage overall signal switching. SwitchEasy provides end to end signal routing by having the user simply define the resource and receiver pin or UUT connections, simplifying overall application development and deployment time.

## APPLICATIONS

- GENASYS switching subsystem
- Automated system test applications
- High I/O count, mixed-signal test applications

# GX6164

## SPECIFICATIONS

| GX6164 SPECIFICATIONS  |  |
|--|--|
| Configuration  | 16 x 64 matrix   |
| Max number of cards in system                                | 18   |
| Inputs   | 16 internal analog bus and 16 external connections   |
| Outputs  | 64   |
| Relay Specifications   | Max AC pk or DC voltage 170 V<br>Max DC or AC pk carry current: 1A<br>Max DC or AC pk switching current: 0.5A<br>Max. contact rating: 10 W |
| Signal Bandwidth   |  |
| Input to Output (input switch card to HF switch card output) | > 100 MHz  |
| I/O Connections  |  |
| Receiver   | 200 pin connector  |
| External I/O   | 16 coaxial connections (Positronics BD8W8F85R70T0/AA)  |
| Form Factor  | Extended 6U, single slot   |
| ENVIRONMENTAL AND COMPLIANCE                                 |  |
| Operating  | 0 °C to +50 °C   |
| Storage  | -20 °C to +60 °C   |
| Relative Humidity (operating)                                | 5% to 80% RH, non-condensing   |
| Relative Humidity (non-operating)                            | 5% to 95% RH, non-condensing   |
| Altitude (operating)   | Up to 2000 M   |
| CE Compliance  | EN61010-1 (pending)<br>EN61326 (pending)   |

Note: Specifications are subject to change without notice

## ORDERING INFORMATION

| GX6164    | GENASYS 16 x 64 HF Matrix Switch Card  |
|-----------|--|
| CHASSIS   |  |
| GX7016    | GENASYS Switching Subsystem with SCOUT 6U Receiver   |
| GX7017    | GENASYS Switching / Digital Subsystem with SCOUT 6U Receiver                               |
| GX7017-01 | GENASYS Switching / Digital Subsystem with SCOUT 6U Receiver, HV Input Power Configuration |