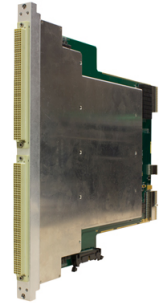


# GX6256

## GENASYS LF MULTIPLEXER / MATRIX SWITCH CARD, 256 X 16 X 16

- General purpose matrix / multiplexer GENASYS switch card, compatible with GENASYS switching subsystem (GX7016/GX7017)
- Extended 6U design offers a "cable-less" test system interface
- High performance, hybrid pin architecture for digital and analog test
- 2-wire bus supports source / measure functionality within a mux group



## OVERVIEW

A component of the GENASYS switching subsystem, the GX6256 switch card is one of several different switch cards which can be installed in the GX7016 chassis. The GX7016 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 GX7016 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 digital test capability, the GX7016's switching subsystem can be connected to a digital subsystem such as Marvin Test Solutions' GX5960 digital subsystem, providing hybrid pin capability for each multiplexed I/O pin. Up to 288 digital channels are supported by the switching subsystem. The GX7016 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 GX6256 provides signal routing from the GX7016's internal backplane to the receiver interface as well as providing an alternate, high bandwidth connection for digital resources. The GX6256 MultiMatrix™ switch card is an extended 6U PXI module with direct connection to the receiver interface. The module combines a 16x16 matrix with (16) 2:16 multiplexers. The result is a switch card that can support up to 256 multiplexed signals from the 16 wire bus. Additionally, a secondary bus is included, providing the ability to route (2) resources to each group of 16 I/O pins within a mux group. The GX6256 also supports the ability to select an analog or digital resource (GX5960 digital subsystem) for each of the 16 inputs / outputs.

## 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

# GX6256

## SPECIFICATIONS

GX6256 SPECIFICATIONS	
Configuration	16 x16 matrix with 2 to 1 selector, (16) 2:16 multiplexers
Max number of cards in system	18
Inputs	16 internal analog bus and 16 digital
Outputs	256
Relay Specifications	Max AC pk or DC voltage 170 V Max DC or AC pk carry current: 1A Max DC or AC pk switching current: 0.5A Max. contact rating: 10 W
Signal Bandwidth	
Input to Output (input switch card to LF switch card output)	> 20 MHz
I/O Connections	
Receiver	Dual 200 pin connector
Digital I/O	34 pin, dual row latched header
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) EN61326 (pending)

Note: Specifications are subject to change without notice

## ORDERING INFORMATION

GX6256	GENASYS LF 256 x 16 x 16 MultiMatrix Switch Card
CHASSIS	
GX7016	GENASYS Switching Subsystem