GX6021

20 CHANNEL RF MULTIPLEXER/SCANNER PXI CARD

- High density PXI RF multiplexer
- Four groups of 1x4 mulitplexer scanners
- Groups may be daisy-chained
- > 300 MHz bandwidth
- 3U PXI Instrument
- PXI hybrid slot compatible

DESCRIPTION

The GX6021 is a high-density 3U PXI switching card that provides 200 MHz bandwidth and offers four groups of 1x4 multiplexer scanners.

FEATURES

In each multiplexer group of the GX6021, each channel can be connected to any of the other four channels in its group. Additional relays connect adjacent groups. Using these additional relays, larger groups can be formed such as 2 x 1:9, or 1 x 1:19. The GX6021 groups can be software configured to provide switch paths that maintain 300 MHz bandwidth.

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.

SWITCHING

GX6021

SPECIFICATIONS

Matrix Configuration	Four 1 x 4 multiplexers
Number of channels	20
RELAY SPECIFICATION	
Contact Resistance	< 0.2
Switching Voltage	200 V_{DC} (max) resistive load
Switching Current	0.5 A (max) resistive load
Operate Time	6 ms (max)
Release Time	3 ms (max)
RF SPECIFICATION	
Impedance	50
Bandwidth	> 300 MHz (-3 dB)
Insertion Loss	<0.7 dB at 100 MHz
Crosstalk Across Groups (50 ohm Terminator)	10 MHz < -40 dB 100 MHz < -40 dB 200 MHz < -35 dB
Isolation Between Channels (50 ohm Terminator)	10 MHz < -40 dB 100 MHz < -40 dB 200 MHz < -35 dB
VSWR (50 Ohms Terminator)	1.2:1 at 100 MHz
POWER REQUIREMENTS	
Power Consumption +3.3 V +5 V	100 mA (max) 1 A
Operating Voltage	+5 VDC
ENVIRONMENTAL	
Operating Temperature	0 °C to +50 °C
Storage Temperature	-20 °C to +70 °C
Vibration	5 G at 500 Hz
Shock 1/2 Sine	5 G for 6 mS
PHYSICAL	
Size	3U PXI
Weight	1.1 lbs

Note: Specifications are subject to change without notice

ORDERING INFORMATION

GX6021	RF multiplexer, 4 Groups of 1 x 4, 300MHz Bandwidth (500MHz within each group)
ACCESSORY	
GT96402	Replacement Relay for GX6021 and GT6041
GX96403	Mating Coax Connector and 20 Coax Pins
GX96404	Mating Coax Connector and 20 Coax Pins Crimped (One End) to 3 Foot Wires
GX96405	Mating Coax Connector and 20 Coax Pins Crimped (Both Ends) to 3 Foot Wires
GX96404-60	Mating Coax Connector with 20 Coax Pins Crimped (One End) to 5 Foot Wires
GX96405-60	Mating Coax Connector and 20 Coax Pins Crimped (Both Ends) to 5 Foot Wires
GT96406	Mating Coax Connector with 20 Coax Pins Crimped to 3 Foot Wires with BNC Connectors
GX96407	MMS Pin Extraction Tool
GX96408	Burndy Pin Extraction Tool
GX96409	Mating Coax Connector, No Pins
GX96410	Coax Connector Pin for GX96409, package of 20
GX96411	One 3 Foot Coax Wire with a Coax Pin Crimped on One End
GX96412	One 3 Foot Coax Wire with a Coax Pin Crimped on One End and BNC on Other End