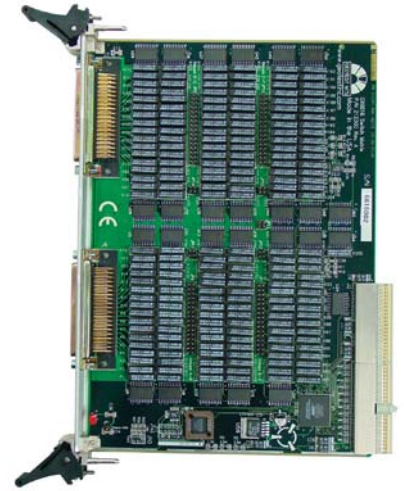


GX6616 SERIES

HIGH DENSITY SWITCH MATRIX

- Six switching groups allow multiple configurations up to 2x96
- 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 board



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 2x16 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 2x16
- Three groups of 4x16
- Three groups of 2x32
- One group of 2x96

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

SOFTWARE

The GX6616 is supplied with a virtual instrument panel, which includes the 32-bit DLL driver libraries and documentation. The virtual panel can be used to interactively adjust and control the instrument from a window that displays the current instrument settings and measurements.

In addition, various interface files provide access to the library for programming tools and languages such as ATEasy, LabVIEW, Microsoft® and Borland® C/C++, Microsoft Visual Basic®, Borland Delphi, and more.

APPLICATIONS

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

GX6616 SERIES

SPECIFICATIONS

CONTACT SPECIFICATIONS	
RELAY CONTACT RESISTANCE	<0.2 Ω
CONTACT LIFE RATING AT LOW LEVEL	5 x10 ⁶ Typ.
AT 28 V _{DC} @ 0.5A	5 x10 ⁶ Typ.
SWITCHABLE VOLTAGE, MAXIMUM	200 V _{DC}
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 V _{DC}
POWER CONSUMPTION	600 mA (Typ.) 1.1 A (Max.)
ENVIRONMENTAL	
TEMPERATURE	
OPERATING	0° to +55° C
STORAGE	-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 two mating connectors with crimp pins.

Note: Specifications are subject to change without notice.

ORDERING INFORMATION

GX6616	6U PXI Switch Matrix
GT96002	78-pin D-type male connector with solder pins
GT97103	1' harness, 78-pin mate connector on one end, loose wires (numbered) other end
GT97104	1' harness, 78-pin mate connector on both ends
GT96107	3' harness, 78-pin mate connector on both ends
GT96078	78-pin connector to screw terminal interface
GT96302	Replacement relay for GX6616
GT96303	Self-test adapter for GX6616

GROUP A-C RELAYS CONNECTOR			
Col A0	1	40	Col C0
Col A1	2	41	Col C1
Col A2	3	42	Col C2
Col A3	4	43	Col C3
Col A4	5	44	Col C4
Col A5	6	45	Col C5
Col A6	7	46	Col C6
Col A7	8	47	Col C7
Col A8	9	48	Col C8
Col A9	10	49	Col C9
Col A10	11	50	Col C10
Col A11	12	51	Col C11
Col A12	13	52	Col C12
Col A13	14	53	Col C13
Col A14	15	54	Col C14
Col A15	16	55	Col C15
Row A0	17	56	Row C0
Row A1	18	57	Row C1
Reserved	19	58	Reserved
NC	20	59	NC
Col B0	21	60	Not Used
Col B1	22	61	Not Used
Col B2	23	62	Not Used
Col B3	24	63	Not Used
Col B4	25	64	Not Used
Col B5	26	65	Not Used
Col B6	27	66	Not Used
Col B7	28	67	Not Used
Col B8	29	68	Not Used
Col B9	30	69	Not Used
Col B10	31	70	Not Used
Col B11	32	71	Not Used
Col B12	33	72	Not Used
Col B13	34	73	Not Used
Col B14	35	74	Not Used
Col B15	36	75	Not Used
Row B0	37	76	Not Used
Row B1	38	77	Not Used
CHASSIS	39	78	GND

GROUP D-F RELAYS CONNECTOR			
Col D0	1	40	Col F0
Col D1	2	41	Col F1
Col D2	3	42	Col F2
Col D3	4	43	Col F3
Col D4	5	44	Col F4
Col D5	6	45	Col F5
Col D6	7	46	Col F6
Col D7	8	47	Col F7
Col D8	9	48	Col F8
Col D9	10	49	Col F9
Col D10	11	50	Col F10
Col D11	12	51	Col F11
Col D12	13	52	Col F12
Col D13	14	53	Col F13
Col D14	15	54	Col F14
Col D15	16	55	Col F15
Row D0	17	56	Row F0
Row D1	18	57	Row F1
Reserved	19	58	Reserved
NC	20	59	Not Used
Col E0	21	60	Not Used
Col E1	22	61	Not Used
Col E2	23	62	Not Used
Col E3	24	63	Not Used
Col E4	25	64	Not Used
Col E5	26	65	Not Used
Col E6	27	66	Not Used
Col E7	28	67	Not Used
Col E8	29	68	Not Used
Col E9	30	69	Not Used
Col E10	31	70	Not Used
Col E11	32	71	Not Used
Col E12	33	72	Not Used
Col E13	34	73	Not Used
Col E14	35	74	Not Used
Col E15	36	75	Not Used
Row E0	37	76	Not Used
Row E1	38	77	Not Used
CHASSIS	39	78	GND