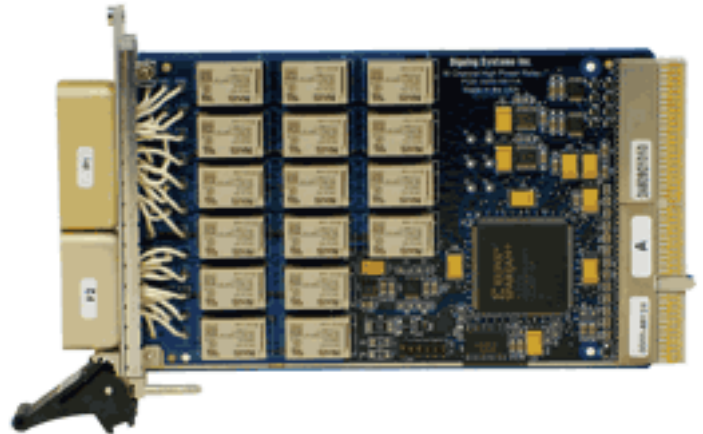




## Features

- 16 High-Current Form A Relays
- 10 Amp Maximum Switching Current
- 30 VDC or 250 VAC Maximum Switching Voltage
- 1024 state scan list
- PXI triggers
- On-board debounce timer
- Programmable scan advance delay
- Drivers Provided for: Windows 2000/XP/NT/ME/9x
- Programming: Visual Basic, Visual C/C++  
LabView, LabWindows/CVI, CVI Function Panels



## Function

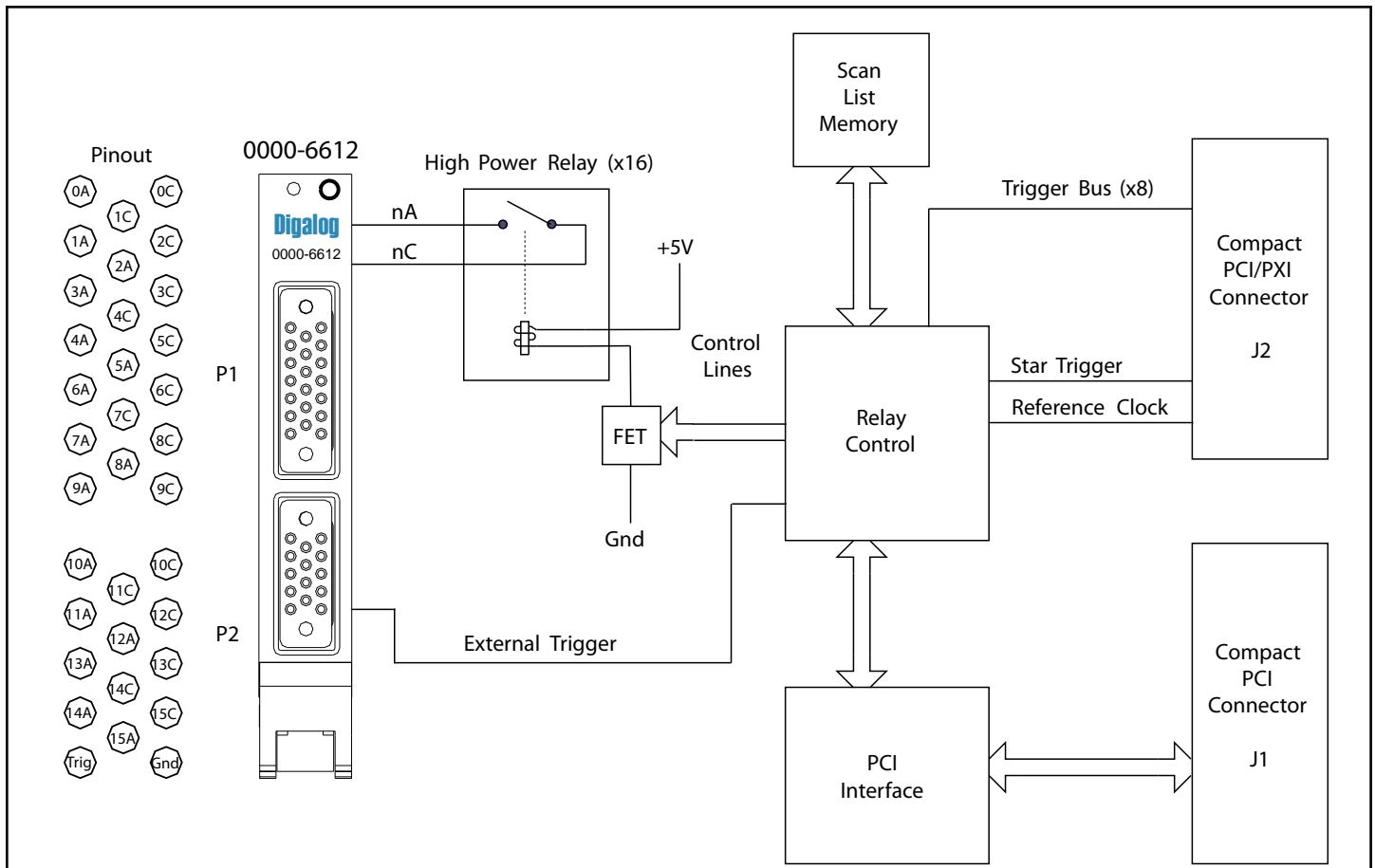
The Digalog Systems 16-Channel High Power Relay card is a valuable single slot solution for many test applications. This board, when combined with high-power sources, is used to switch loads and control the delivery of power to devices under test. This card is also useful in other applications where high-power switching is required.

The resources of a 6612 High Power Relay card consist of sixteen Form A relays, each capable of switching 10 Amps of current at 300WDC or 2500VA. These relays are controlled with simple functions to the card, or they may be controlled with a pre-loaded list of switch states (1024 states). Several trigger sources may be used to advance this state list.

Every time the card's relays change states (either in manual mode or the scan advance mode), and automatic 10ms debounce delay occurs. After that completes, a pre-programmed scan advance delay may occur. In manual mode, the software may be configured to wait before setting the next state. After the completion of these delays, an output trigger may be sent to other cards on the PXI bus.

## PXI Standard

The 6612 Relay card follows the PXI Specification for peripheral cards. This standard, controlled by the PXI Systems Alliance, builds upon the CompactPCI Specification. The PXI specification adds several enhancements to CompactPCI, most notably a trigger bus, a local bus, a Star trigger, and a reference clock. The specification also includes more stringent system mechanical and software requirements.



PXI Details	
PXI Specification	Revision 2.0 (July 28, 2000)
Form Factor	PXI 3U (half-height), single slot (0.8")
PCI Interface	
Bus Width	32-Bit
I/O Voltage	5V
Bus Speed	0-33MHz
Bus Master	No
Interrupts	No
Hot Swap	No
PXI Signals	
PXI Trigger Bus	Source and Destination
PXI Star Trigger	Destination
PXI Local Bus	No
PXI Reference Clock	10MHz Required
Required Power	
+5V	All Relays Open, I = 50mA All Relays Closed, I = 650mA

External Trigger Input	
Voltage	0 to 5.5V
Trigger	Rising edge, TTL levels
Pulse width	30ns minimum
Time between triggers	10ms minimum (relay settling time)

Switching Details		
Number and Type	16 SPST (Form A)	
Contact Material	Gold flash over silver alloy	
Initial Contact Resistance	40 mΩ, maximum	
	DC	AC
Max Switching Voltage	30VDC	250VAC
Max Switching Current	10A	10A
Max Switching Power	300W	2500VA
Mechanical Life Expectancy	5 x 10 <sup>7</sup>	
Maximum Operating Time	10ms	
Replacement Relays	Aromat-NAiS DK1a-5V	

Connector Details		
Switch Connectors	Positronics Industries Standard Density Rectangular Connector	14-Pin Plug GMCT14F0E1P0JR 20-Pin Plug GMCT20F0E1P0JR
Wire	Positronics Industries Standard Pins	Socket Contacts FC114N2
	For 10 Amp usage, 14 gauge shielded wire is required.	

Programming Details	
Scan List Depth	1024 States
Min De-bounce	10ms

System Operating Environment	
Operating Temperature	0 – 35° C, 32 – 95° F
Humidity	20% to 80% Relative Humidity

Specifications are subject to change without notice.

Z-2558 PXI 6612 (Rev. 021609)