

MODEL 4524

ASCOR Model 4524 Switches



Features

Bandwidth Performance:

- I/O to Matrix: >70 MHz
- I/O to Resource: >900 MHz



4000 Series Multi-Slot Carrier

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Traditionally ATE systems have been designed using switching components wired together to form a system switch. This is especially true of VXI switch modules that are combined through external wiring components. The instrumentation then requires additional wiring to be integrated into this maze of switches. The biggest drawbacks to this approach are the loss of performance due to mismatched impedance, signal losses due to long cables and higher resistive, capacitive or inductive loads due to poor wiring design. It is always ideal to design a good switch system to minimize cabling and match impedances.

ASCOR has designed a new family of switches that does just that using the existing 4000 series multi-slot carrier. Replacing the traditional VXI card front panel with a standard Virginia Panel TAC connector allows the Device Interface Board (DIB) to mate directly to the 4500 Series switch card. Test engineers no longer need to install a custom cable assembly between the individual switch-card front panels and the DIB interface. The 4500 Series ensures test signal integrity by shielding all signal connections starting from the internal switch assemblies through impedance matched transmission lines to the TAC connector interface. The standardized interfaces allow convenient card removal from the front for rapid maintenance and configuration changes.

Providing high density, high signal integrity connections to the test device has become the principle test system design challenge. The 4500 Series eliminates the custom cabling 'funnels', which were re-engineered for every test system thereby improving the customer's time-to-market and test design cycle-time while simultaneously reducing design risks and test system costs in construction, software development and configuration management.

Signal Guard is a 600MHz analog bus interface connecting all Ascor 4500 Series VXI cards. Shielded transmission lines and relays ensure high signal integrity by preventing noise ingress and crosstalk within the switching system. Impedance matched transmission lines minimize the effects of internal, high frequency signal reflections. No custom cabling is required between the switch cards. Signal Guard also eliminates customized cabling between switches and instrumentation. Signal Guard's high bandwidth, modular interface saves engineering time and avoids the risk of cabling problems degrading effective instrumentation performance.

The Ascor 4000 Series Switching System also simplifies software design, coding and driver interface tasks. The 4000 Series cards assemble into a carrier cage prior to insertion in the VXI chassis. The carrier's backplane interface allows the entire switching system to connect with a single VXI address. Software developers no longer need account for the highly variable effects of multiple switch addresses, multiple driver interfaces, multiple card-to-card switch interconnections, variable path settling times, multiple device interface variations and configuration dependent query/error tracking functions.

All Ascor 4000 Series switch products are register-based devices and are supplied with software drivers for LabVIEW, LabWindowsCVi, C, C++, and Visual Basic. Ascor's VXI cards conform to European standards for CE marking. Ascor is the one switch source for multiple switching solutions.



A Giga-tronics Company

**ASCOR Is The One Switch Source For
Multiple Switching Solutions.**

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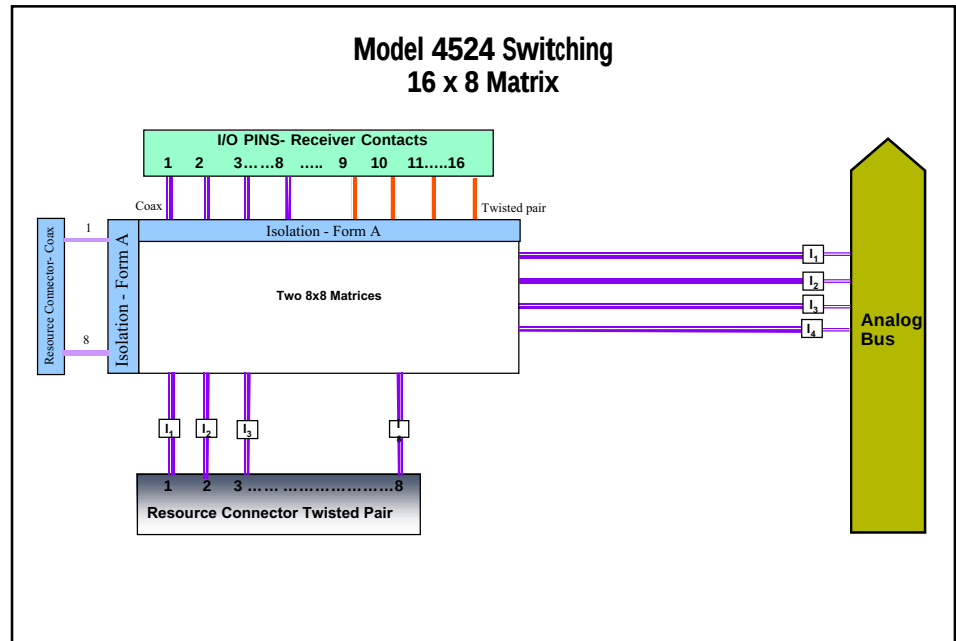
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S P E C I F I C A T I O N S



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The Model 4524 is a coaxial switch matrix that provides very high density matrix for very high frequency signals. It has bandwidths exceeding 70MHz. It has two 8x8 matrices which are switch linked together through isolation relays to provide a 16x8 matrix with maximum performance using 188 coaxially shielded Form A, 10 watt relays. The common eight channels are routed to the analog back plane through isolation relays. This allows individual use of multiple like modules without creating long stub lines and maximizing performance. Additionally, there are dual form A switches on each pin for direct connection to the resource connector or to the matrix. This is very useful for mix signal connections. I/O pin can be connected directly to a digital module or to the matrix for analog signals.

The matrix provides 8 analog bus connections to the Series 4000 Signal Guard analog back plane. This module is intended to switch single wire

signals from the resources to the interface connector or to the analog matrix. Digital or analog instruments can be connected directly to the interface or routed through the matrix in order to reach another switch module. Eight inputs are coaxial connectors and eight are for twisted wire (signal / shield). The resource connectors are the same, 8 coax and 8 twisted wire (signal / shield).

Summary For 4500 Family

- Optimum system configuration switching
- Maximum perform far exceed standard VXI designs
- Coaxial, single wire, dual wire, twisted pair switching
- Integrated with built-in adapter to Virginia Panel Receiver Mechanism
- Controlled Impedance
- Shielded and floating analog ground utilized.
- Dual VXI chassis with mechanism available

Custom Solutions Through Engineering Innovation

ASCOR, founded in 1987 and headquartered in California's Silicon Valley, provides a complete line of VXI Switching and Digital Modules for industrial, medical, scientific and governmental automatic test applications. Ascort VXI products are the quietest, cleanest, highest density VXI modules commercially available.



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