

# InfinIO™ 7000 Shared I/O System

## DATA SHEET



The InfinIO™ 7000 Shared I/O System is a multi-protocol networking system designed to simplify data center infrastructures and provide IT with an enhanced model for server deployment that leverages the throughput and scalability advantages of the InfiniBand® architecture.

Today's data centers contain hundreds, even thousands, of PCI-based servers – each with a discrete I/O system: a collection of networking cards plugged into the server bus that allow it to talk to Ethernet networks (LAN, WAN, Internet), Fibre Channel SANs, and other servers. This complex paradigm is inefficient – creating a bottleneck that slows network performance.

### Infrastructure For Scalable, More Powerful Server Networks

The InfinIO 7000 provides a pool of “virtual” I/O resources that servers – attached to the InfinIO platform with a high-speed, 10 Gb InfiniBand connection – can share for seamless access and higher levels of connectivity to Fibre Channel SANs, Ethernet SAN/NAS islands, and native InfiniBand fabrics. This evolutionary I/O model slashes operational and capital costs for infrastructure (eliminating NICs, HBAs, and cabling) by up to 70%, and makes it possible to add server capacity and rollout applications in hours, rather than multiple business days. Equally important, InfinIO deployment is non-disruptive, requiring no changes to existing infrastructure or software.

### Configuration Flexibility

One InfinIO chassis supports dual 4X InfiniBand Switch Modules, and up to 8 plug-and-play I/O “personality modules”: a 3-port, 1 Gb Virtual

Ethernet Exchange (VEx) card; a 2-port, 2 Gb Fibre Channel Exchange (VFX) card; and a 6-port InfiniBand Expansion card (IBx).

Chassis slots can be populated with any mix of personality modules, which can be hot-swapped quickly to accommodate changing business requirements. InfinIO is engineered to match the high-availability requirements of enterprise data centers, providing fully redundant logic, power, power cords, and cooling.

### Versatile By Design: Switch-Only Implementations

Because the standard InfinIO platform includes InfiniBand switch modules, it offers the dual value of supporting shared I/O along with server-to-server communications required for high-performance, computer clustering. InfinIO, in fact, can be utilized in a pure switching configuration, supporting up to sixty 4X (10 Gb) InfiniBand switch ports in a single 3U chassis; switching capacity can be increased incrementally, without adding cabling. Multiple InfinIO chassis can be linked to create larger fabrics, with all resources available to all servers.

### Integrated Device and Fabric Management

The InfinIO chassis, its components, and advanced system functions like port sharing and LUN management are centrally configured and managed by a comprehensive GUI manager called InfiniView™. InfiniView provides full support for industry standard SNMP MIBs and management frameworks, and is compatible with subnet managers from leading developers.

## InfinIO™ 7000

### Strategic Benefits

- Provides a central platform for Shared I/O and InfiniBand switching
- Creates the industry's simplest way to build server fabrics
- Integrates InfiniBand servers seamlessly into existing networks
- Simplifies data center infrastructures
  - Enables easier/more rapid deployment of server farms
  - Reduces external connections for a high-availability server configuration by up to 77%
- Lowers Total Cost of Ownership
  - Slashes capital and operational expenditures on I/O infrastructures by up to 70%

### Key Design Features

- Eliminates need to wire servers to multiple networks
- Plug and play personality modules support any mixture of Ethernet, Fibre Channel, and InfiniBand
- Provides high RAS Design for enterprise data center deployment
- Permits non-disruptive growth

# InfiniO™ 7000 Shared I/O System

Configuration		InfiniNic™ Software Features
InfiniFabric™ Switch Module (6 4x IB Port)	1-2	Ethernet upper level host protocol and driver Port sharing Ethernet IB Switching
Aggregate Bandwidth (Maximum)	1.2Tb/sec	
Line Cards	Max 8	<b>InfiniFibre™ Software Features</b> Fibre Channel upper level host protocol and driver Port sharing LUN management
Virtual Ethernet Exchange (VEx) (3 port) (3 physical ports – up to 59 virtual NICs)	0-8	
Virtual Fibre Channel Exchange (VFX) (2 physical ports – up to 60 virtual HBAs)	0-8	
InfiniBand™ Expansion (IBx) (6 external 4x ports)	0-8	
High Availability		
<b>Chassis</b> 4x Dual-path InfiniBand passive backplane Logical and LED error notification Multi-Chassis support		<b>Power and Cooling</b> Redundant power supplies and fans Hot swappable power supplies and fans Dual power cords
<b>Switches and Line Cards</b> Active/Active Switches                      Hot swappable                      Dynamic port recovery		
InfiniView™ Management		Operating Environments
Out of band LAN Management Chassis Management Support		Windows 2000 (1Q03) Linux
		Configuration Management Error detection HTTP SNMP

	Chassis	InfiniFabric Switch Module	VEx	VFX	IBx
<b>Physical Specifications</b>					
<b>Size</b>					
Height	130mm (5.12"/3U)	112 mm (4.41")	112 mm (4.41")	112 mm (4.41")	112 mm (4.41")
Width	440mm (17.32") (Rack mountable)	46 mm (1.81")	30 mm (1.18")	30 mm (1.18")	41 mm (1.61")
Depth	609.6mm (24")	254 mm (10")	254 mm (10")	254 mm (10")	254 mm (10")
Weight	18.55Kg (40.9lb)	.988Kg (2.18lb)	.739Kg (1.63lb)	.739Kg (1.63lb)	.907Kg (2lb)
<b>Environmentals</b>					
<b>Temperature</b>	Operating: 10 to 45C at sea level Altitude 0-3km (10,000ft) Non-operating: -30 to 60C				
<b>Humidity</b>	Operating: 20% to 80% non-condensing Non-operating: 5% to 90%				
<b>Acoustic Noise</b>	60db				
<b>Heat Dissipation</b>	400w max (280w Normal operation fully configured)				
<b>Power</b>					
<b>Power range</b>	90-264V AC/47-63Hz single phase 5A max current at 100VAC				
<b>Inrush</b>	30A @115VAC (25c cold start)				
<b>Power factor</b>	0.95				
<b>A/C power feed</b>	Two independent IEC 320 connectors				

<b>Regulatory Compliance</b>	<b>Safety</b>	<b>EMC</b>
United States	UL 60950 (Pending)	FCC Part 15 Class A (Pending)
European Community	EN 60950 (Pending)	EN55022 level A (Pending)
		EN55024 (Pending)

**InfiniCon Systems, Inc.**  
680 American Avenue, Suite 100  
King of Prussia, PA 19406  
Phone: 610-233-4747  
Fax: 610-233-4777  
[www.infinicon.com](http://www.infinicon.com)