



Cisco SFS 7012P and 7024P InfiniBand Server Switches

The Cisco® SFS 7000 Series InfiniBand server switches provide a new class of data center infrastructure that interconnects discreet server resources into a high-performance, 10-Gbps, low-latency fabric. The switches include many mainframe backplane technologies such as server processing and Remote Direct Memory Access (RDMA) for transmitting large amounts of data with little CPU overhead. The new Cisco SFS 7012P and 7024P InfiniBand server switches provide some of the industry's highest-density fabrics for interconnecting servers into effective, high-performance clusters and grids, creating the kind of collective performance enabled by the ever-lowering cost and increasing performance of compute power.

PRODUCT OVERVIEW

The Cisco SFS 7012P and 7024P InfiniBand server switches are designed for very large and dense high-performance computing environments. The Cisco SFS 7012P provides full, bisectional bandwidth across 144 10-Gbps Infiniband ports in a 7 rack-unit (7-RU) chassis. The Cisco SFS 7024P provides full bisectional bandwidth across 288 10-Gbps or up to 96 30-Gbps ports in a 14-rack-unit (14-RU) chassis. Both of these systems are optimized for dense cluster computing environments of 256 nodes and more. These systems can provide non-blocking, low-latency compute environments in a cost-effective manner. When used in conjunction with the Cisco SFS 3000 Series multifabric server switches, the entire Cisco SFS 7000 Series can consolidate I/O and link to the local-area and storage-area networks.

The Cisco SFS 7012P and 7024P offer the following customer benefits:

- Comprehensive performance and fabric diagnostics tools in a fully managed switch
- High-performance, industry standards-based InfiniBand interconnect technology
- Ideal interconnect for high-performance computing, science, and enterprise applications
- Integration with other Cisco SFS 7000 Series InfiniBand server switches and Cisco SFS 3000 Series multifabric server switches for a wide range of IP Communications, storage, and WAN and LAN connectivity options

Table 1 lists the primary features of the Cisco SFS 7012P and 7024P.

Table 1. Key Features

Feature	Description
High-Performance Server Fabric	144 and 288 ports of 20-Gbps, full-duplex, ultra low-latency server fabric interconnect
Non-Blocking Architecture	Full bisectional bandwidth for all ports, providing 2.8 Tbps (Cisco SFS 7012P) and 5.4 Tbps (Cisco SFS 7024P) of bandwidth
Remote Direct Memory Access	Move data directly from one server's memory to another, bypassing the CPU(s) and kernel
High Availability	Fully redundant power and cooling, with hot-swappable, field-replaceable units (FRU)
Rich System and Fabric Management	Command-line interface (CLI), Web, and Java-based systems and server fabric management options

AVAILABILITY

The Cisco SFS 7012P and 7024P are generally available now. Table 2 lists the ordering information.

ORDERING INFORMATION

Table 2. Ordering Information

Part Number	Description
SFS-7012P	Cisco SFS 7012P InfiniBand Server Switch, 144-port chassis
SFS-7012P-X	Cisco SFS 7012P InfiniBand Server Switch, 144-port upgradeable chassis, ships with 108 ports, 67% blocking fabric
SFS-7024P	Cisco SFS 7024P InfiniBand Server Switch, 288-port chassis
SFS-7024P-X	Cisco SFS 7024P InfiniBand Server Switch, 288-port upgradeable chassis, ships with 156 ports, 67% blocking fabric
SFSX7012/24-4X12	Cisco SFS 7012P/7024P InfiniBand 4X 12-Port Line Card
SFS-7012/24-FM	Cisco SFS 7012P/7024P Switch Fabric Module—no management
SFS-7012/24-MM-K9	Cisco SFS 7012P/7024P Switch Fabric Module—with management
PWR-SFS7012/24	Cisco SFS 7012P/7024P Power Supply

FOR MORE INFORMATION

For more information about the Cisco SFS 7012P and 7024P, visit <http://www.cisco.com/go/serverswitching> or contact your local account representative at Cisco Systems®.

**Corporate Headquarters**

Cisco Systems, Inc.
170 West Tasman Drive
San Jose, CA 95134-1706
USA
www.cisco.com
Tel: 408 526-4000
800 553-NETS (6387)
Fax: 408 526-4100

European Headquarters

Cisco Systems International BV
Haarlerbergpark
Haarlerbergweg 13-19
1101 CH Amsterdam
The Netherlands
www-europe.cisco.com
Tel: 31 0 20 357 1000
Fax: 31 0 20 357 1100

Americas Headquarters

Cisco Systems, Inc.
170 West Tasman Drive
San Jose, CA 95134-1706
USA
www.cisco.com
Tel: 408 526-7660
Fax: 408 527-0883

Asia Pacific Headquarters

Cisco Systems, Inc.
168 Robinson Road
#28-01 Capital Tower
Singapore 068912
www.cisco.com
Tel: +65 6317 7777
Fax: +65 6317 7799

Cisco Systems has more than 200 offices in the following countries and regions. Addresses, phone numbers, and fax numbers are listed on **the Cisco Website at www.cisco.com/go/offices.**

Argentina • Australia • Austria • Belgium • Brazil • Bulgaria • Canada • Chile • China PRC • Colombia • Costa Rica • Croatia • Cyprus
Czech Republic • Denmark • Dubai, UAE • Finland • France • Germany • Greece • Hong Kong SAR • Hungary • India • Indonesia • Ireland • Israel
Italy • Japan • Korea • Luxembourg • Malaysia • Mexico • The Netherlands • New Zealand • Norway • Peru • Philippines • Poland • Portugal
Puerto Rico • Romania • Russia • Saudi Arabia • Scotland • Singapore • Slovakia • Slovenia • South Africa • Spain • Sweden • Switzerland • Taiwan
Thailand • Turkey • Ukraine • United Kingdom • United States • Venezuela • Vietnam • Zimbabwe

Copyright © 2006 Cisco Systems, Inc. All rights reserved. CCSP, CCVP, the Cisco Square Bridge logo, Follow Me Browsing, and StackWise are trademarks of Cisco Systems, Inc.; Changing the Way We Work, Live, Play, and Learn, and iQuick Study are service marks of Cisco Systems, Inc.; and Access Registrar, Aironet, BPX, Catalyst, CCDA, CCDP, CCIE, CCIP, CCNA, CCNP, Cisco, the Cisco Certified Internetwork Expert logo, Cisco IOS, Cisco Press, Cisco Systems, Cisco Systems Capital, the Cisco Systems logo, Cisco Unity, Enterprise/Solver, EtherChannel, EtherFast, EtherSwitch, Fast Step, FormShare, GigaDrive, GigaStack, HomeLink, Internet Quotient, IOS, IP/TV, iQ Expertise, the iQ logo, iQ Net Readiness Scorecard, LightStream, Linksys, MeetingPlace, MGX, the Networkers logo, Networking Academy, Network Registrar, Packet, PIX, Post-Routing, Pre-Routing, ProConnect, RateMUX, ScriptShare, SlideCast, SMARTnet, The Fastest Way to Increase Your Internet Quotient, and TransPath are registered trademarks of Cisco Systems, Inc. and/or its affiliates in the United States and certain other countries.

All other trademarks mentioned in this document or Website are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (0601R)