

**PRODUCT BULLETIN NO. 2597** 

# ENHANCED CHASSIS FOR THE CISCO CATALYST 6500 SERIES AND THE SUPERVISOR ENGINE 720-3B

Cisco Systems<sup>®</sup> is introducing enhanced 3-, 6-, and 9-slot chassis for the Cisco<sup>®</sup> Catalyst<sup>®</sup> 6500 Series and the Supervisor Engine 720-3B.

The new 3-slot chassis (part number 6503-E) offers enhancements to support the Cisco Catalyst 67xx series line cards. The new 6- and 9-slot chassis (part numbers 6506-E and 6509-E) offer enhancements that increase the overall system power capacity for industry-leading power over Ethernet (PoE) port-density scalability. Continuing with the Cisco Catalyst 6500 tradition of unmatched investment protection, all existing supervisors, line cards, switch fabrics, and even software releases are supported in the new E-series chassis.

The Cisco Supervisor Engine 720-3B is a new member of the Cisco Supervisor Engine 720 Family with a modular policy feature card 3B (PFC3B) forwarding-engine daughter card as a default option. Highlights of this new supervisor engine include support for hardware-based Multiprotocol Label Switching (MPLS) and access-control-list (ACL) hit counters with 256,000 and 128,000 IPv4 and IPv6 route-table scalability.

# ANNOUNCEMENT SUMMARY

- Introduction of enhanced 3-, 6-, and 9-slot chassis (part numbers 6503-E, 6506-E, and 6509-E)
- Introduction of Cisco Supervisor Engine 720-3B
- Introduction of increased default memory for the Cisco Supervisor Engine 2

# **NEW HARDWARE**

- Cisco Catalyst 6503-E Chassis
- Cisco Catalyst 6503-E Fan Tray
- Cisco Catalyst 6506-E Chassis
- Cisco Catalyst 6506-E Fan Tray
- Cisco Catalyst 6509-E Chassis
- Cisco Catalyst 6509-E Fan Tray
- Cisco Supervisor Engine 720-3B

#### SPECIFICATIONS OF NEW CHASSIS

- The new chassis are similar to existing 3-, 6-, and 9- chassis, with full support for all existing supervisors, line cards, switch fabrics, and even software releases.
- The new chassis are backward-compatible with all existing software versions (details in the software requirements table). Future software releases will be available to enable new features, such as new power supplies.
- The 3-slot chassis supports CEF720 line cards such as the WS-6704-10GE, WS-6724-SFP, and WS-6748-SFP.

- The 6- and 9-slot chassis are designed to scale beyond 4000W power supply configurations. In the future they will support 6000W power supplies.
- The minimum power supply required is 2500W or higher (AC or DC) for the 6- and 9-slot chassis.

Table 1 gives the specifications of the new chassis.

Name	Cisco Catalyst 6503 Chassis	Cisco Catalyst 6503-E Chassis	Cisco Catalyst 6506 Chassis	Cisco Catalyst 6506-E Chassis	Cisco Catalyst 6509 Chassis	Cisco Catalyst 6509-E Chassis
Dimensions (H x W x D)	7.0 x 17.5 x 21.7 in. (17.9 x 44.5 x 55.1 cm)	7.0 x 17.5 x 21.7 in. (17.9 x 44.5 x 55.1 cm)	20.1 x 17.2 x 18.2 in. (51 x 43.7 x 46.2 cm)	19.2 x 17.5 x 18.2 in. (48.8 x 44.5 x 46.2 cm)	25.3 x 17.2 x 18.2 in. (64.3 x 43.7 x 46.2 cm)	24.5 x 17.5 x 18.2 in. (62.2 x 44.5 x 46.2 cm)
Weight (fully loaded)	75 lb (34 kg)	80 lb (36.4 kg)	153 lb (69.6 kg)	159 lb (72.3 kg)	184 lb (83.7 kg)	190 lb (86.4 kg)
Fan Trays	FAN-MOD-3 FAN-MOD-3HS	WS-C6503-E-FAN	WS-C6K-6SLOT- FAN WS-C6K-6SLOT- FAN2	WS-C6506-E-FAN	WS-C6K-9SLOT- FAN WS-C6K-9SLOT- FAN2	WS-C6509-E-FAN

# Table 1. Chassis Specifications

The enhancement to the chassis helps enable increased power capacity and thereby scales the powered device density.

Table 2 compares the maximum number of PoE devices scaled between existing chassis and enhanced chassis (assumes one Cisco Supervisor Engine with PFC2, best-case module, and redundant power supply).

# Table 2. Comparison of PoE Devices on Existing Chassis and Enhanced Chassis

Power Supply	Cisco Catalyst 6506	Cisco Catalyst 6506-E	Cisco Catalyst 6509	Cisco Catalyst 6509-E
4000W power supply	184	184	184	184
6000W power supply*	184	282**	184	279
9000W power supply*	184	310**	184	434**

\* Product roadmap

\*\* 96-port module

Check the power calculator to determine the maximum device support for different configurations.

# SUPERVISOR ENGINE 720-3B HIGHLIGHTS

The Cisco Supervisor Engine 720-3B is a new member of the Cisco Supervisor Engine 720 Family that ships with PFC3B as the default daughter card. This new supervisor engine offers MPLS capabilities in hardware with route-table scalability up to 256,000 routes.

The Cisco Supervisor Engine 720-3B offers enhancements such as MPLS, including Ethernet over MPLS (EoMPLS), MAC-layer quality-ofservice (QoS) enhancements, and ACL hit counters among other features.

# PFC DAUGHTER CARD SPECIFICATIONS

Table 3 gives specifications of the daughter card.

Feature	Cisco Supervisor Engine 720 (PFC3A)	Cisco Supervisor Engine 720-3B (PFC3B)	Cisco Supervisor Engine 720-3BXL (PFC3BXL)
Price	\$28,000	\$28,000	\$40,000
Memory	512 MB (on SP and RP)	512 MB (on SP and RP)	1 GB (on SP and RP)
MPLS Support	No	Yes	Yes
ACE (Access Control Entries) Counters	No	Yes	Yes
IP Routes	256,000 entries	256,000 entries	1 million entries
NetFlow Entries	128,000 entries	128,000 entries	256,000 entries

**MSFC2 Memory Starting** 

8/1/04 \_

256 MB

512 MB

# Table 3. Specifications of Daughter Card

## MEMORY DEFAULTS FOR CISCO SUPERVISOR ENGINES 2 AND 1A

The default memory on the Cisco Supervisor Engine 2 has changed as of August 1, 2004. Table 4 gives information about the changes.

able 4. Default Memory	for Cisco Supervisor E	ingine 2	
Product Number	Supervisor Memory Before	Supervisor Memory Starting 8/1/04	Multilayer Switch Feature Card 2 (MSFC2) Memory Before
WS-X6K-S2-PFC2 WS-X6K-S2-PFC2=	128 MB	256 MB	-

256 MB

256 MB

Та

128 MB

256 MB

WS-X6K-S2-MSFC2

WS-X6K-S2-MSFC2= WS-X6K-S2U-MSFC2

WS-X6K-S2U-MSFC2=

The default memory on the Cisco Supervisor Engine 1A has changed as of June 15, 2004. Table 5 gives information about the changes.

# Table 5. Default Memory for Cisco Supervisor Engine 1A

Product Number	Supervisor Memory Before	Supervisor Memory Starting 6/15/04	Multilayer Switch Feature Card 2 (MSFC2) Memory Before	MSFC2 Memory Starting 6/15/04
WS-X6K-SUP1A-2GE WS-X6K-SUP1A-2GE=	64 MB	128 MB	-	-
WS-X6K-SUP1A-PFC WS-X6K-SUP1A-PFC=	64 MB	128 MB	-	-
WS-X6K-S1A-MSFC2 WS-X6K-S1A-MSFC2/2 WS-X6K-S1A-MSFC2=	64 MB	128 MB	64 MB	128 MB

128 MB

256 MB

# **PRODUCT NUMBERS AND PRICING**

Table 6 gives product numbers and pricing information for the new chassis.

Product Number	Price	Description	
WS-C6509-E	\$ 9,500	Enhanced 9-slot chassis	
WS-C6509-E-FAN	\$ 495	Fan tray for Cisco Catalyst 6509-E chassis	
WS-C6506-E	\$ 5,500	Enhanced 6-slot chassis	
WS-C6506-E-FAN	\$ 495	Fan tray for Cisco Catalyst 6506-E chassis	
WS-C6503-E	\$ 2,500	Enhanced 3-slot chassis	
WS-C6503-E-FAN	\$ 495	Fan tray for Cisco Catalyst 6503-E chassis	
WS-SUP720-3B	\$ 28,000	Cisco Supervisor Engine 720-3B	

# Table 6. Product Numbers and Pricing for New Chassis

# FCS SCHEDULES AND LEADTIMES

- Orderability: August 16, 2004 for 6- and 9-slot enhanced chassis and Cisco Supervisor Engine 720-3B; September 4, 2004 for 3-slot enhanced chassis.
- Leadtimes: Three weeks for 3-, 6- and 9-slot enhanced chassis and 4 weeks for Cisco Supervisor Engine 720-3B.
- FCS for 3-slot enhanced chassis: First week of September 2004.

# MINIMUM SOFTWARE REQUIREMENTS

Minimum software requirements for the new chassis are listed in Table 7.

#### Table 7. Minimum Software Requirements for New Chassis

Product Number	Software Release
WS-C6503-E	Cisco IOS <sup>®</sup> Software Release 7.4.2 and later
	Cisco IOS Software Release 12.1(13)E and later
	Cisco IOS Software Release 12.2(14)SX and later
WS-C6503-E-FAN	Cisco IOS Software Release 7.4.2 and later
	Cisco IOS Software Release 12.1(13)E and later
	Cisco IOS Software Release 12.2(14)SX and later
WS-C6506-E	Cisco IOS Software Release 6.3.6 and later
	Cisco IOS Software Release 12.1(08)E and later
	Cisco IOS Software Release 12.2(14)SX and later
WS-C6506-E-FAN	Cisco IOS Software Release 6.3.6 and later
	Cisco IOS Software Release 12.1(08)E and later
	Cisco IOS Software Release 12.2(14)SX and later
WS-C6509-E	Cisco IOS Software Release 6.3.6 and later
	Cisco IOS Software Release 12.1(08)E and later
	Cisco IOS Software Release 12.2(14)SX and later

Product Number	Software Release
WS-C6509-E-FAN	Cisco IOS Software Release 6.3.6 and later
	Cisco IOS Software Release 12.1(08)E and later
	Cisco IOS Software Release 12.2(14)SX and later
WS-SUP720-3B	Cisco IOS Software Release 12.2(17d)SXB and later
	Cisco Catalyst Operating System Release 8.3(2)

#### FOR MORE INFORMATION

For more information about the Cisco Catalyst 6500 Series Switch, visit http://www.cisco.com/en/US/products/hw/switches/ps708/index.html.



#### **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 © 2005 Cisco Systems, Inc. All rights reserved. CCIP, CCSP, the Cisco *Powered* Network mark, Cisco Unity, Follow Me Browsing, FormShare, 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 Aironet, ASIST, BPX, Catalyst, CCDA, CCDP, CCIE, CCNA, CCNP, Cisco, the Cisco Certified Internetwork Expert logo, Cisco IOS, the Cisco IOS logo, Cisco Press, Cisco Systems, Cisco Systems Capital, the Cisco Systems logo, Empowering the Internet Generation, Enterprise/Solver, EtherChannel, EtherSwitch, Fast Step, GigaStack, Internet Quotient, IOS, IP/TV, iQ Expertise, the iQ logo, iQ Net Readiness Scorecard, LightStream, Linksys, MeetingPlace, MGX, MICA, the Networkers logo, Networking Academy, Network Registrar, *Packet*, PIX, Post-Routing, Pre-Routing, RateMUX, Registrar, ScriptShare, SlideCast, SMARTnet, StrataView Plus, Stratm, SwitchProbe, TeleRouter, The Fastes Way to Increase Your Internet Quotient, TransPath, and VCO 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. (0501R) 204189.y\_ETMG\_JR\_2.05