

Cisco 7200 NSE-1 Services Accelerator

Figure 1 Cisco 7200 NSE-1 Services Accelerator



The Cisco 7200 NSE-1 (Figure 1) is a services accelerator for the Cisco 7200. The Cisco 7200 NSE-1 specializes in accelerating specific features and feature sets in order to maximize feature performance on the Cisco 7200.

Key Benefits

- Acceleration of specific services for maximum feature performance
- Acceleration of feature sets for applications such as leased-line aggregation and broadband aggregation

Cisco 7200 NSE-1 Accelerated Services

The following features are available for acceleration by the Cisco 7200 NSE-1 Services Accelerator:

Leased-Line Aggregation Features

- Turbo access control lists (ACLs)
- Network Address Translation (NAT)
- Cisco Express Forwarding (CEF)
- NetFlow
- Weighted Random Early Detection (WRED)
- Weighted Fair Queuing (WFQ)
- Class-Based WRED (CBWRED)
- Class-Based WFQ (CBWFQ)
- Committed access rate (CAR)
- Low-latency queuing (LLQ)
- Policing
- Marking
- Per-virtual circuit queuing
- 802.1Q
- Generic traffic shaping (GTS)
- Hierarchical policy mapping (available soon)
- VRF (available soon)

Broadband Aggregation Features

- PPP over Ethernet (PPPoE)
- PPP over ATM (PPPoA)
- PPP over Ethernet over 802.1Q (PPPoEo802.1Q)
- Routed bridge encapsulation (RBE)
- Layer 2 Tunneling Protocol (L2TP)
- VRF (available soon)

For information regarding the Cisco 7200 NSE-1 accelerated services, refer to url for PXF datasheet

Compatibility

Chassis

The Cisco 7200 NSE-1 is supported on the Cisco 7200 VXR chassis.

Processor

When using a Cisco 7200 NSE-1 Services Accelerator in a Cisco 7200, a separate network processing engine (NPE) is not required.

I/O Controllers

The Cisco 7200 NSE-1 is supported on the following Cisco 7200 Series input/output (I/O) controllers:

- C7200-I/O
- C7200-I/O-FE
- C7200-I/O-2FE/E
- C7200-I/O-GE+E

Port-Adapter Compatibility

The Cisco 7200 NSE-1 supports the same port adapters that are supported on the Cisco 7200 VXR.

Cisco IOS Software Compatibility

The Cisco 7200 NSE-1 Services Accelerator is supported by Cisco IOS[®] Software Releases 12.1(5)E, 12.1(5)T, and subsequent releases. To see the initial Cisco IOS Software Release version that supports each of the features available for acceleration, refer to url for PXF.

For information regarding the Cisco IOS Software releases for the Cisco 7200 NSE-1 Services Accelerator, refer to: http://www.cisco.com/warp/public/cc/pd/rt/7400rt/prodlit/acser_ds.htm.

Key Features

Hardware and Software Features

- 263-MHz RM7000A RISC processor
- 4 x 4 100-MHz processors; Parallel Express Forwarding (PXF)
- 2-MB Layer 3 cache
- 128-MB SDRAM default memory (expandable to 256 MB)

- Error-Correcting Code (ECC) support

Specifications

Physical

- Weight: 3.25 lb (1.49 kg)
- Dimensions (H x W x D): 15.15 x 11.12 x 1.40 in. (38.481 x 28.245 x 3.556 cm)

Environmental

- Storage temperature: -38 to 150 F (-40 to 70 C)
- Operating temperature, nominal: 41 to 104 F (5 to 40 C)
- Operating temperature, short term: 23 to 131 F(-5 to 55 C)
- Storage relative humidity: 5% to 95% relative humidity
- Operating humidity, nominal: 5% to 85% relative humidity
- Operating humidity, short term: 5% to 90% relative humidity
- Operating altitude: -60m to 4000m

Regulatory Compliance

Safety and Electromagnetic Emissions Certification

- UL (Underwriters Laboratories) certified for use in the United States
- CSA (Canadian Standards Association) certified
- EN (European Norm) certified
- IEC (International Electrotechnical Commission) certified
- AS/NZS (Australia/New Zealand Standard) certified
- FCC Part 15 Class A device for electromagnetic interference limits
- FCC Part 68 for connection to the public telephone network

For additional information, refer to

<http://www.cisco.com/univercd/cc/td/doc/product/core/7206/7206pnc/3419pnc6.htm#xtocid203613>.

Immunity

- Electrostatic Discharge EN61000-4

Ordering Information

Table 1 gives ordering information for the Cisco 7200 NSE-1 Services Accelerator.

Table 1 Ordering Information for Cisco 7200 NSE-1 Services Accelerator

Product Number	Product Description
NSE-1	Cisco 7200 Network Services Engine 1 (128-MB default memory)
NSE-1=	Cisco 7200 Network Services Engine 1 (128-MB default memory)—spare



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