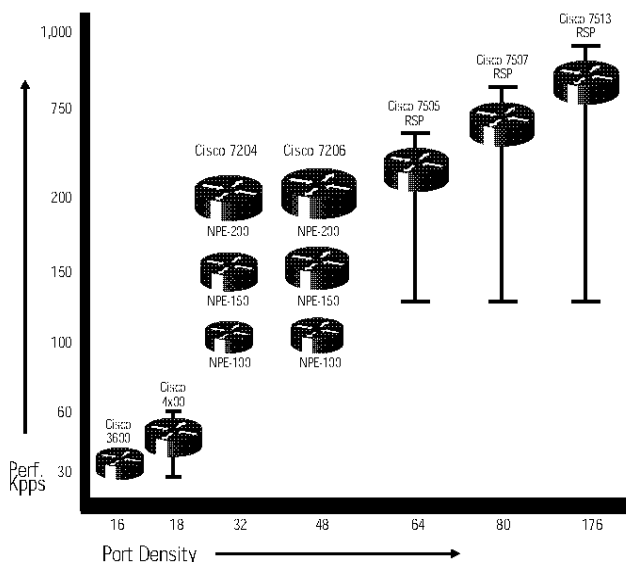# Cisco 7200 Series Family of Processors

Today's global Enterprise and Service-Provider networks require diverse networking solutions to meet both economic and evolving connectivity needs. Corporate intranets are expanding to include more regional-or branch-offices and increased numbers of remote and mobile users. As a result, Service Providers are building infrastructure to support both Enterprise bandwidth-requirements, as well as provide value-added services such as Managed Router Services, Web hosting, and Quality of Service guarantees.

The Cisco 7200 series provides both Enterprise and Service Provider customers with a scalable, multi-service platform that meets the increased demands for high-performance, high-density, and cost-effective solutions spanning voice, video, and data applications. As the foundation for supporting these diverse applications and Network-Layer services, the Cisco 7200 offers a family of processors, each optimized for superior price/performance, providing customers with cost-effective options depending on network requirements.

Network Processing Engines

The Cisco 7200 supports three versions of its Network Processing Engine (NPE): the NPE-100, NPE-150, and the new NPE-200. Coupled with the 4-port 7204 and the 6-slot 7206, customers now have six flexible configurations scaling density, performance, and cost.

The New NPE-200

The NPE-200 is the newest and highest performance processor in the family of Network Processing Engines for the Cisco 7200 series. It performs at approximately 200,000 packets per second (pps) Fast Switching, a 30 percent increase over the NPE-150. In addition, Process Switching is also 50 percent higher than the NPE-150.

The NPE-200 offers superior price/performance for both Enterprise and Service Provider applications applying processor-intensive Network-Layer services such as traffic management, security, and quality of service. Service Providers can more profitably support Layer-3 services across large numbers of subscribers requiring fast WAN connections at remote Points-of-Presence without sacrificing performance or footprint—Its compact size of just three rack units conserves precious rack space. With support for dual power, online insertion and removal, Hot-Standby-Routing, and field-replaceable components, Service Providers can minimize their network downtime and maintain high service availability.

The NPE-200 also strengthens the Cisco 7200 is positioned as the premiere CPE platform for private-Enterprise or Service-Provider Managed Router and Managed Network Services, with multi-service support for voice, video, and data integration. Similarly, private-Enterprise LANs and IBM campuses can also enjoy greater performance for intense VLAN and IBM connectivity.

As part of the NPE Family, the NPE-200 also provides investment protection, allowing existing customers to upgrade the performance of their Cisco 7200 without requiring a forklift upgrade.

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Cisco 7200 Processor	Specifications	Applications

NPE-200	• 200-MHz R5000 RISC processor
	• 200,000 packet-per-second Fast Switching
	• 4 MByte SRAM
	• 32 MByte DRAM (Expandable to 128 MBytes)
		• Heavy-load IBM applications
		• Medium/Large Branch/Regional Office
		• Multi-Service Integration (Voice, Video, Data)
		• Dense/High-Speed VLAN Applications
		• Web-Hosting Connectivity
		• Heavy-load Distributed Services
		   – Compression
		   – Encryption
		• Service Provider Points-of-Presence (PoP)
		   – Layer-3 Services Across Very Dense DS-1/DS-3/OC-3 Serial Aggregation
		   – Web-Hosting Connectivity
		   – Inter-PoP Connectivity

NPE-150	• 150-MHz R4700 RISC processor
	• 150,000 packet-per-second Fast Switching
	• 1 MByte SRAM
	• 32 MByte DRAM (Expandable to 128 MBytes)
		• Medium-load IBM applications
		• Small/Medium Branch Office Connectivity
		• Multi-Service Integration (Voice, Video, Data)
		• Medium-load VLAN applications
		• Medium-load Distributed Services
		• Remote Access Server for High-Density ISDN PRI/BRI and Serial applications
		• Service Provider Points-of-Presence (PoP)
		   – Layer-3 Services Across Very Dense DS-0/DS-1/DS-3 Serial Aggregation
		   – Web-Hosting Connectivity
		   – Inter-PoP Connectivity

NPE-100	• 150-MHz R4700 RISC processor • 100,000 packet-per-second Fast Switching • 32 MByte DRAM (Expandable to 128 MBytes)	• Light IBM applications • Small Branch Office Connectivity • Multi-Service Integration (Voice, Video, Data) • Remote Access Server for High-Density ISDN PRI/BRI and Serial applications

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