

The Cisco System Processing Engine 310 (SPE 310)

Scaleable and Versatile Application Server



The Cisco Integrated Communications System (ICS) 7750 brings the benefits of converged IP services to midmarket businesses and enterprise branch offices. The ICS 7750 is a versatile IP telephony and services solution that helps businesses harness the power of the Internet through converged applications enabling them to anticipate and respond to customer needs more efficiently. Call processing, voice applications and multiservice IP routing are integrated within the system chassis to deliver true convergence while enhancing system manageability. The modular system architecture enables expansion of call processing, routing capacity, and IP services to deliver system availability and scalability. The ICS 7750 gives customers the flexibility to choose the optimal configuration for their business environment, and allows them to increase profitability through improved customer interactions.

Today, businesses demand Web-based communications solutions that provide the applications and functionality to help them manage, increase productivity, and grow, while servicing their customers. As more businesses take advantage of the Internet to reach their customers, they need a communications solution that can easily adapt to their application needs and grow as their businesses expand. The Cisco SPE 310, a component of the Cisco ICS 7750, gives businesses a versatile and scalable system-processing resource that hosts these critical converged and voice applications, putting customers in control of their business communications.

Figure 1 Cisco SPE 310



Product Description

The Cisco SPE 310 is an application server card that runs call-processing, system-management, and voice applications including voice mail, auto-attendant, unified messaging, interactive voice response, automatic call distribution, and Web-based contact-center applications. The Cisco SPE 310 card offers customers the flexibility to add support for a broad range of Web-based communications applications as their business and communications needs grow.

Each Cisco ICS 7750 contains an SPE 310 card that executes system software, including the Cisco ICS System Manager and embedded fault-management services. Cisco CallManager, running on the SPE 310, delivers intelligent call-processing to support IP telephony services and applications in the ICS 7750. The SPE 310 also distributes the industry-proven Cisco IOS[®] Software to multiservice route processor (MRP) and analog station interface (ASI) cards to offer coordinated IP routing and voice gateway services throughout the system.



Designed to meet different system needs, the Cisco SPE 310 card can be configured within the ICS 7750 chassis to support multiple applications and call-processing cluster configurations. The flexibility in the underlying Cisco AVVID (Architecture for Voice, Video and Integrated Data) technology allows the ICS 7750 to scale a single application like CallManager (with optional redundancy) to service a growing number of IP phone users, or to add new applications without affecting the performance of other existing applications and services in the ICS system.

In addition, applications running on the Cisco SPE 310 can be easily re-imaged, installed, and upgraded using an external USB CD-ROM drive and other software management tools. Upgrading applications is simplified even further using the Cisco image installation software tool. This tool enables users to upgrade and install bundles of software, including the Cisco ICS System Manager, Fault Management Module, Cisco Network Registrar[®] system, and Cisco IOS Software.

Overall, the Cisco SPE 310 card offers ICS 7750 customers a scalable and versatile approach to equip their businesses with the IP telephony, messaging, and Web-based contact center solutions needed to succeed.

Functionality

- Intelligent call-processing
- Integrated system management
- Real-time fault management
- Web-based communications applications

Key Features and Benefits

Versatile Application Support

Designed to support a range of applications including call-processing, system management, messaging, and Web-based contact center solutions.

System Scalability

New applications or additional service capacity can be obtained by adding more SPE 310 cards.

Highly Available Call-Processing Support

The SPE 310 supports CallManager call-processing clustering to deliver a highly available call-processing solution.

Field Manageable and Serviceable

The interchangeable card slot design and USB CD-ROM drive support enable field access to re-image, install, and upgrade applications on the SPE 310 .

Service and Support Solutions

Cisco Service and Support Solutions are designed for one purpose—to ensure customer success by delivering a suite of proactive services. Delivered directly or through an ecosystem of best-of-breed service partners, Cisco Service and Support offerings provide presales network audit planning, design consulting, network implementation, operational support, and network optimization.

- Advanced Services enable you to plan, design, build, implement, and optimize your solution for rapid deployment and increased system stability and availability.
- Technical Support Services provide the maintenance and troubleshooting you need to keep your solution operational.

By purchasing service and support with the Cisco ICS 7750 Integrated Communications System, customers can confidently deploy a converged network architecture using Cisco experience, expertise, and resources.



Technical Specifications for the Cisco SPE 310

Processor:

- Intel Pentium III 700 MHz CPU

Memory:

- 512 MB DRAM included with each card
- Two 168-pin DIMM slots to allow memory expansion up to 1.5 GB
- 256 MB and 512 MB memory upgrade modules available

Operating System:

- Windows 2000 server

Service Ports:

- Two USB 1.1 ports for external USB CD-ROM drive
- One keyboard/mouse port
- One VGA port

Dimensions and Weight:

- Height: 10.5 in. (26.67 cm)
- Width: 1.6 in. (4.06 cm)
- Depth: 8.25 in. (20.96 cm), including ejector handle depth; 7.0 in. (17.78 cm) otherwise
- Weight: 2.06 lb (0.93 kg)

Power Requirements:

All voltages are DC.

- 2.3A at +5V
- 2.1A at +3.3V
- 0.4A at +12V
- Negligible current at -12V

Power Dissipation:

- 20W

Environmental Range:

Operational

- Acoustic noise: 43 dBA (under normal operating conditions)
- Temperature range: 32 to 104 F (0 to 40 C)
- Altitude: 10,000 ft (3000 m)
- Relative humidity: 10 to 85%
- Shock: 0.69 m/s (27 in./sec)
- Vibration: 0.35 Grms from 3 to 500 Hz

Non-operational

- Temperature shock: -4 to 149 F (-20 to 65 C) at 41 F (5 C) per minute
- Temperature range: -4 to 149 F (-20 to 65 C)
- Altitude: 5027 yds (4570 m)
- Relative humidity: 5 to 95%

Safety:

- UL recognized per UL 1950 3rd edition
- C-UL per CSA C22.2 1950
- TUV Bauart per EN 60950

EMC:

- EN 55022: 1998, Class B
- CISPR22: 1997, Class B
- CFR47, Part 15, Subpart B: 1995, Class B
- VCCI V: 3/97.04, Class B
- ICES003, Issue 3: 1998, Class B
- BSMI CNS13438: Class B
- EN 55024: 1998, ITE Immunity Standard
- IEC 1000-4-2: 1995, Immunity to electrostatic discharges
- IEC 1000-4-3: 1995, Immunity to radio frequency electromagnetic fields
- IEC 1000-4-4: 1995, Immunity to electrical fast transients
- IEC 1000-4-5: 1995, Immunity to power line transients (surges)
- IEC 1000-4-6: 1996, Immunity to radio frequency-induced conducted disturbances
- IEC 1000-4-8: 1995, Immunity to power frequency magnetic fields
- IEC 1000-4-11: 1995, Immunity to voltage dips, voltage variations, and short voltage interruptions



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