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Unified Security and Networking for Distributed Enterprise Environments

About Senao Networks

Senao Networks excels in providing reliable, high-quality network communication solutions and services. They distinguish themselves with market-proven technical design, vertical integration from RF antenna design to manufacturing, and a strong commitment to innovation and customer satisfaction. Their comprehensive offerings and ISO-certified production ensure robust, secure, and efficient networking for global partners.

Wireless Networking Challenges in Enterprise Environments

As organizations increasingly rely on wireless networks for critical operations, the demand for seamless coverage, connectivity, and high data throughput has never been greater. Ensuring comprehensive coverage in large areas with varying layouts and obstacles can be a daunting task. Moreover, as the number of connected devices skyrockets, networks must be able to scale seamlessly without compromising performance. Managing, optimizing, and securing such high-density environments and sensitive business data becomes crucial for avoiding congestion and maintaining a positive user experience.

The SA9820 SASE Gateway from Senao Networks addresses the growing challenge of securely managing and optimizing network traffic across increasingly distributed and complex IT environments. The SA9820 integrates SASE architecture, which combines WAN capabilities with a full suite of security services, including firewall, intrusion prevention, and secure web gateway, all managed from a single platform. This convergence enables seamless and secure connectivity for all users, devices, and applications, regardless of location.

Secure Edge SASE Gateway for High-Performance Connectivity

The SA9820 is a next-generation edge computing solution that integrates Secure Access Service Edge (SASE) principles with robust hardware and software capabilities. Leveraging the Intel Atom ® x7000C processor series processors and LPDDR5 DRAM, it delivers high-performance connectivity, including GbE, 2.5GbE, and SFP ports. The SA9820 simplifies the integration of radio technologies like Wi-Fi 6 and 5G, making it ideal for cutting-edge technologies such as MU-MIMO and beamforming.

With robust security features tailored for enterprise needs, the SA9820 integrates a stateful firewall, advanced routing, WPA3 encryption, secure boot, and regular firmware updates to protect against vulnerabilities. The inclusion of a Trusted Platform Module (TPM) enhances data protection by adhering to FIPS 140-2 standards. These features collectively provide a formidable defense mechanism against cyber threats, ensuring secure and efficient network operations for businesses.

Key Features

- **Elevate network performance** and minimize latency with the Intel Atom® X7000C processor series, enhancing efficiency for edge networking.

- **Boost application efficiency** with AI-computing SASE networking that processes data locally, cutting latency and bandwidth use while enabling autonomous decision-making that lowers costs.

- **Unleash agile scalability for cloud networking** with SD-WAN, enabling your business to grow and adapt in a dynamic environment. Designed for seamless integration and expansion, the SD-WAN ensures your network evolves with your enterprise.

- **Ensure quick startup times** with 32MB of NOR flash and 32GB of eMMC flash storage, providing a balance between performance and cost for storing operating systems, applications, and user data.

- **Achieve flexible, high-speed connectivity** with a variety of networking ports—2 x 1GbE RJ45, 2 x 2.5GbE RJ45, and 2 x 1GbE SFP—to support demanding applications and long-distance fiber connections.

- **Fortify your enterprise network** by establishing a robust defense mechanism from the edge, incorporating firewall, routing, encryption, segmentation, and threat detection.

Intel Atom® x7000C processor series

Leveraging Intel Atom® x7000C processor series, the Senao SA9820 SASE Gateway delivers high-performance connectivity for a streamlined, secure, and network edge solution for enterprise.

Performance

- Intel 7 process node
- Up to eight cores with 2.4 GHz processor base frequency and Intel® Turbo Boost Technology
- 9W–25W processor base power

Security

- Intel® Boot Guard
- Intel® Platform Firmware Resilience
- Intel® AES-NI, Intel® AVX2 cryptographic acceleration

Software

- Intel® Distribution of OpenVINO™ toolkit
- Intel® oneAPI support
- Linux OS
- Upstreamed kernel and user mode changes to respective open-source projects
- DPDK and KVM hypervisor for software-defined network

Memory and I/O

- LPDDR5 4800 MT/s, DDR5 4800 MT/s, or DDR4 3200 MT/s
- Up to 9x PCIe 3.0 lanes

AI Capabilities

- Intel® Deep Learning Boost Technology (Intel® DL Boost)
- Intel® AVX2 with INT8 support

Learn More

- [Foundational Developer Kits](#)
- [Senao Networks | SA9820 Product Page](#)

Foundational Developer Kits allow you to get started on your targeted application development with a superior out-of-the-box experience. Deploy your application at scale by building customized systems via Intel ecosystem partners.

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