

Portwell Launches Leading-Edge 1U Rackmount Network Appliance Featuring Intel® Xeon® 6 SoC

FREMONT, CA, UNITED STATES, February 26, 2025 /EINPresswire.com/ -- American Portwell Technology, Inc. (<https://www.portwell.com>), a wholly owned subsidiary of Portwell, Inc., a world-leading innovator for Industrial PC (IPC) and embedded computing solutions, is thrilled to announce the launch of its latest 1U rackmount network appliance, the [PNSR-5002](#), powered by Intel's highly anticipated Intel® Xeon® 6 SoC (codenamed Granite Rapids-D). This innovative product is set to redefine performance and efficiency in edge computing and network applications.

Revolutionary Performance, Efficiency, and Data Protection

The Portwell PNSR-5002 network appliance leverages the advanced capabilities of the Intel Xeon 6 SoC, enabling single-server footprint with unparalleled performance, efficiency, and data protection capabilities.

Within the Intel Xeon 6 family lineup, this system-on-chip, featuring a high core count and integrated Intel® Ethernet, allows network operators to significantly reduce their server footprint compared to earlier platforms. The inclusion of next-gen Intel® QuickAssist Technology (QAT) enhances cryptographic and compression workloads, delivering greater performance and efficiency than the previous generation, enabling advanced hardware acceleration and substantial capacity growth on a single platform. Additionally, the Intel Xeon 6



SoC includes several enhanced security features, ensuring high levels of data protection and confidentiality: Platform Firmware Resilience (PFR), Intel® Total Memory Encryption (TME), Intel® Software Guard Extensions (SGX), and Intel® Trust Domain Extensions (TDX).

Designed for demanding edge computing environments, the Portwell PNSR-5002 network appliance, featuring the Intel Xeon 6 SoC up to 42 cores at 235W TDP, is equipped to handle complex AI workloads, virtual radio access networks (vRAN), and high-performance computing (HPC) tasks with ease. It excels in applications such as Edge Inference Servers, Secure Access Service Edge (SASE), routers, media production, security appliances, storage, and content delivery networks.

Key Features of PNSR-5002:

- **Built-in AI and vRAN Acceleration:** The Intel Xeon 6 SoC offers robust AI and vRAN acceleration, including Intel® Advanced Vector Extensions (AVX) and Intel® Advanced Matrix Extensions (AMX), making the PNSR-5002 ideal for applications in 5G infrastructure and diverse network settings.
- **High-Speed Connectivity:** Supports 2x 100GbE QSFP28 ports, providing high-speed network connectivity for data-intensive applications.
- **Scalability and Serviceability:** Designed with 2x front-accessible Open Compute Project (OCP) NIC 3.0 slots allowing for flexible network interface card (NIC) expansion to meet diverse networking needs.
- **Enhanced Storage and Wireless Integration:** Includes 2x M.2 key M for high-speed storage and 1x M.2 key B for 4G/5G/LTE modules.
- **Robust Memory and Storage:** Supports up to 8x DDR5 5200MHz ECC RDIMMs for high-bandwidth, low-latency memory performance to facilitate demanding workloads.
- **Advanced Manageability:** Features IPMI with AST2600 BMC, offering reliable remote management capabilities for enhanced system monitoring and control.
- **Real-Time Edge Computing:** With low latency and high performance, the PNSR-5002 is perfect for real-time data processing.
- **All-around Security:** The PNSR-5002 network appliance offers optional TPM and a bypass function, with the latter available through our PNC series of OCP NIC 3.0 network interface cards.

Innovation Empowers Future-Proofing Designs

At Portwell, we are committed to pushing the boundaries of technology to deliver innovative solutions with optimized performance, reliability, scalability, and security. The PNSR-5002, powered by the Intel Xeon 6 SoC, represents a transformative step in network appliance technology, providing our customers with the tools they need to succeed in an increasingly connected world.

Product Details:

PNSR-5002 1U Network Appliance with Intel Xeon 6 SoC Featuring 2x 100GbE QSFP28, 2x OCP NIC 3.0 Slots, BMC and PFR

<https://portwell.com/products/detail.php?CUSTCHAR1=PNSR-5002>

Selection of the Portwell PNC Series OCP NIC 3.0 Network Interface Cards:

<https://portwell.com/products/network-card.php?PCIe+Gold+Finger+Interface+Type=OCP> 3p0

Intel and Xeon are trademarks of Intel Corporation. OCP is a trademark of Open Compute Project Foundation. All other products and company names referred to herein may be trademarks or registered trademarks of their respective companies or mark holder.

Media Contact

Vicky Lo

American Portwell Technology

+1 510-403-3354

[email us here](#)

Visit us on social media:

[Facebook](#)

[X](#)

[LinkedIn](#)

[YouTube](#)

This press release can be viewed online at: <https://www.einpresswire.com/article/788167070>

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information.

© 1995-2025 Newsmatics Inc. All Right Reserved.