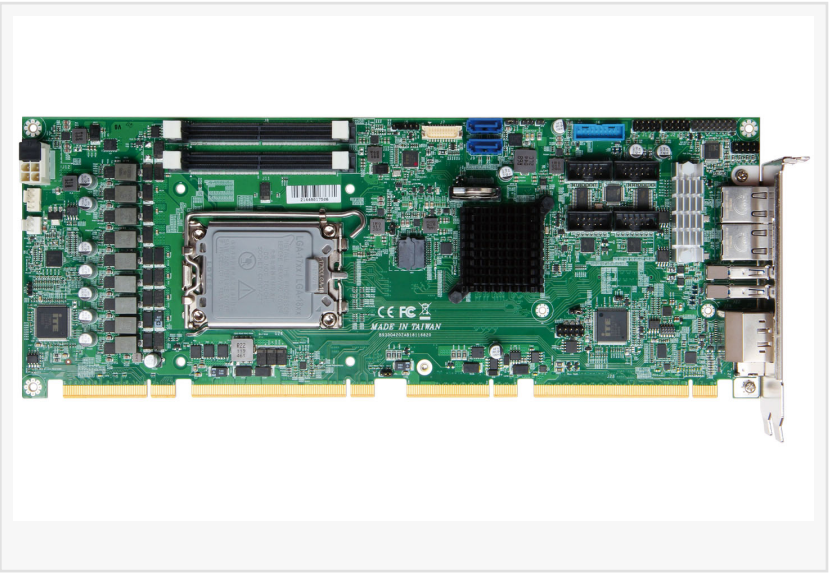
Portwell Launches First Full-Size PICMG 1.3 Single Board Computer with 12th Gen Intel® Core™ Desktop Processors

New ROBO-8116VG2AR Features PCIe 5.0/4.0 and DDR5 memory



FREMONT, CA, UNITED STATES, April 6, 2022 /EINPresswire.com/ -- American Portwell Technology, Inc., (https://www.portwell.com) a wholly owned subsidiary of Portwell, Inc., a world-leading innovator in the Industrial PC (IPC) market, a Titanium Partner of Intel Partner Alliance, and an Elite level of Solution Integration Partner in the NVIDIA Partner Network (NPN), has launched its first full-size PICMG 1.3 single-board computer powered by the latest 12th gen Intel Core desktop processors (formerly Alder Lake S platform). According to Maria Yang, product marketing manager at American Portwell Technology, the new ROBO-8116VG2AR features up to 16C/24T superior computing power to handle more complex workloads, as well as improved graphics performance and high expansion flexibility with various backplane selections. Yang recommends the new ROBO-8116VG2AR as the ideal choice for applications in industrial automation and control systems, medical/healthcare imaging systems, automated test equipment, digital signage, digital security surveillance, broadcasting systems, transportation, video walls and AI.

> “The new ROBO-8116VG2AR offers optimized power consumption and performance for new application needs or a quick upgrade for the legacy application installed with the old SHB.”
>
> *Jack Lam, senior director of product marketing at American Portwell*

PCIe 5.0/4.0-ready for higher speed expansion needs, and DDR5 for greater data bandwidth and processing capability

ROBO-8116VG2AR is Portwell’s PICMG 1.3 full-size Single Host Board (SHB) computer featuring

the latest 12th Gen Intel Core desktop processors in LGA 1700 socket with Intel R680E/Q670E chipset delivering up to 16 cores and 24 threads with a power range from 35W through 65W. The new SHB supports Intel Turbo Boost, Hyper-Threading, Virtualization, Thermal Monitoring, Trusted Execution (TXT), and Speed Step Technology (depending upon processor SKU); delivers up to 64GB dual-channel ECC DDR5 4800 MHz on two SO-DIMM sockets—the higher bandwidth helps boost the throughput of memory-dependent AI models and enables faster and more simultaneous applications; 16x PCIe Gen 5 lanes (up to 32 GT/s), 4x PCIe Gen 4 lanes and 4x PCIe Gen 3 lanes ready to support flexible high-speed expansion cards, and 4x PCI for legacy connection.

The new ROBO-8116VG2AR also features 1x USB 3.2 Gen 2x2 Type C (20Gb/s), 2x USB 3.2 Gen 2 (10Gb/s), 2x USB 3.2 Gen 1 (5Gb/s), 4x USB 2.0, 4x SATA 3.0 (dual ports via backplane), 1x M.2 Type M 2280 for SSD and supports software RAID 0, 1, 5, 10; Dual 2.5Gb Ethernet with integrated Time-Sensitive Networking (TSN) real-time capability (on selected SKUs), 2x RS-232, 2x RS-232/422/485 selectable by BIOS adjustment; integrated Intel UHD Graphics 770 driven by Xe architecture with up to 32 execution units (EUs) to provide superior 3D multimedia performance; triple independent displays, including HDMI, DVI-D and DisplayPort up to 4K resolution. Available in both clone and extended modes; and supports on-board TPM 2.0 for application security.

Paired backplane for PCIe Gen 5 and Gen 4

PBPE-10P2, the new PICMG 1.3 Backplane, is designed for use with ROBO-8116VG2AR to perform PCIe Gen 5/Gen 4 expansions, featuring multiple expansion interfaces, such as 1x PCIe Gen 5 x16 slot, 3x PCIe x4 slots (2x Gen 4 and 1 Gen 3), and 2x PCI slots on board. In addition, Portwell can also provide customization services on the backplanes design and development to enable drop-and-replacement transformation.

Outstanding computing and graphics performance with longevity support

“From our customers’ standpoint,” says Jack Lam, senior product marketing director at American Portwell, “the new ROBO-8116VG2AR offers optimized power consumption and performance for

new application needs or a quick upgrade for the legacy application installed with the old SHB. What's more," he adds, "as the first Intel Core processor to feature the new performance hybrid architecture that integrates up to 8 Performance-cores (P-cores) with Intel Hyper-Threading Technology and 8 Efficient-cores (E-cores) into a single die, it drives up to 1.36x faster single-thread performance, 1.35x faster multithread performance and 1.94x faster graphics performance compared to its predecessor. Not only that," Lam continues, "our customers also benefit from the peace of mind they get from the long life cycle support of 10+ years inherent with this product."

About American Portwell Technology

American Portwell Technology, Inc., is a world-leading innovator in the embedded computing market, a Titanium Partner of the Intel Partner Alliance, and an Elite level of Solution Integration Partner in the NVIDIA Partner Network (NPN). American Portwell Technology designs, manufactures, and markets a complete range of PICMG computer boards, embedded computer boards and systems, rackmount systems, and network communication appliances for both OEMs and ODMs. American Portwell is an ISO 9001, ISO 13485, ISO 14001, and TL 9000 certified company. The company is located in Fremont, California. For more information about American Portwell's extensive turnkey solutions and private-label branding service, call 1-877-APT-8899, email info@portwell.com or visit us at https://www.portwell.com.

Product Contact:
Maria Yang
Product Marketing Manager
American Portwell Technology, Inc
510-403-3375
mariay@portwell.com

Media Contact:
Sophie Wang
Marketing Specialist
American Portwell Technology, Inc
510-403-3354
sophie.wang@portwell.com

Maria Yang
American Portwell Technology
+1 510-403-3375
mariay@portwell.com
Visit us on social media:
Facebook
Twitter
LinkedIn