NEWS RELEASE

Penguin Computing™'s TrueHPC Platform Will Enable Innovations in Science and Technology

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Penguin Computing Awarded $68M to Provide High-Performance Computing Capabilities to Department of Defense

Fremont, Calif. – September 14, 2021 – **Penguin Computing, Inc.**, a division of **SMART Global Holdings, Inc.** (NASDAQ: SGH) and leader in high-performance computing (HPC) and artificial intelligence (AI), today announced that it has been awarded two contracts totaling $68M from the Department of Defense High Performance Computing Modernization Program (**DoD HPCMP**) to deliver Penguin Computing's TrueHPC™ supercomputing platform, plus managed services and high-performance storage, to the Navy DSRC and AFRL DSRC sites. **Penguin Computing's TrueHPC** platforms will provide high-performance computing capability for users from all services and agencies of the Department of Defense (DoD). The balanced HPC systems and software significantly enhance the DoD's ability to tackle the most demanding and computationally challenging problems in fluid dynamics, chemistry and materials science, electromagnetics and acoustics, climate/weather/ocean modeling and simulation, among other applications. Penguin Computing's managed services team will bring additional capability to the DoD in emerging technologies, while also enabling DoD teams to focus on their research. Equipped with the latest generation memory and processing technologies, these complete and highly dense HPC resources will be among the most powerful supercomputers in the DoD HPCMP's resources, providing a combined total of over 365,000 cores, more than 775 TB of memory, and a total of 47 PB of high-performance storage including over 5 PB of high-performance Flash storage. Combined, these two systems provide a peak performance of over 17.6 petaFLOPs. "By implementing Penguin's TrueHPC solution, the DoD HPCMP user community will be able to conduct advanced research for the highly complex problems the user community is tasked with solving," said Sid Mair, president of Penguin Computing. "Through our work with NVIDIA and AMD, we're able to provide the Department of Defense with significantly higher density and operational efficiencies, which equates to exceptional value when you're using very large scale systems that have extremely high power requirements." Penguin Computing's TrueHPC platforms will be installed at two out of the four HPCMP's DoD Supercomputing Resource Centers (DSRCs):

- The Navy DSRC at Stennis Space Center in Mississippi will receive a Penguin Computing TrueHPC platform with 176,128 compute cores from **3rd Gen AMD EPYC™ processors** and 144 NVIDIA A100 Graphics Processing Units (GPUs). The system is interconnected by an NVIDIA HDR 200Gb/s InfiniBand network and supported by more than 26 PB of Data Direct Networks storage, including over 4 PB of high-speed NVMe-based solid-state storage and 370 TB of system memory, and will provide 8.5 petaFLOPs of peak performance.
- The Air Force Research Lab's DSRC at Wright-Patterson Air Force Base in Dayton, Ohio will receive a Penguin Computing TrueHPC platform with 189,440 compute cores from **3rd Gen AMD EPYC™ processors** and 152 NVIDIA A100 GPGPUs. This system is interconnected by an NVIDIA HDR 200Gb/s InfiniBand network and supported by more than 20 PB of Data Direct Networks storage, including over a PB of high-speed NVMe-based solid-state storage and 405 TB of system memory, and will provide 9 petaFLOPs of peak performance.

"Increasingly complex problems being tackled by innovative HPC systems, such as Penguin Computing's TrueHPC, demand unprecedented acceleration and smarter networks to drive performance at any scale," said Gilad Shainer, senior vice president of networking at NVIDIA. "NVIDIA's accelerated computing platform supports the broadest range of supercomputing workloads, powered by the innovation of NVIDIA A100 Tensor Core GPUs and the unparalleled throughput of NVIDIA HDR InfiniBand, the world's only fully off-loadable, in-network computing platform." "We are pleased to continue our longstanding technology partnership with Penguin Computing to push the boundaries of HPC and supercomputing," said Forrest Norrod, senior vice president and general manager, Data Center and Embedded Solutions Business Group at AMD. "The combination of our powerful 3rd Gen AMD EPYC processors and Penguin's Tundra platform will help the Modernization Office's user community to solve complex problems to achieve their goal of addressing the Department of Defense's biggest challenges." The Penguin Computing TrueHPC systems are scheduled to enter production service early in 2022. Follow Penguin Computing on Twitter **@PenguinHPC** and use our official hashtags #HPCeverywhere and #AIeverywhere to stay connected.

About Penguin Computing For 20 years, Penguin Computing has reimagined how startups, Fortune 500, government, and academic organizations solve complex technology challenges to achieve their organizational goals. Penguin Computing is focused on open platforms, including Open Compute Project (OCP) systems. We specialize in innovative on-premises high performance computing (HPC), bare metal HPC in the cloud, AI, and storage technologies coupled with leading-edge design, implementation, hosting, and managed services including sys-admin and storage-as-a-service, and highly rated customer support. More information at **www.penguinsolutions.com/computing**.

About the DoD High Performance Computing Modernization Program (HPCMP) The HPCMP provides the Department of Defense supercomputing capabilities, high-speed network communications and computational science expertise that enable DoD scientists and engineers to conduct a wide-range of focused research and development, test and evaluation, and acquisition engineering activities. This partnership puts advanced

technology in the hands of US forces more quickly, less expensively, and with greater certainty of success. Today, the HPCMP provides a comprehensive advanced computing environment for the DoD that includes unique expertise in software development and system design, powerful high-performance computing systems, and a premier wide-area research network. The HPCMP is managed on behalf of the Department of Defense by the US Army Engineer Research and Development Center located in Vicksburg, Mississippi. For more information, visit our website at: **https://www.hpc.mil**. "Penguin Computing" as well as "TrueHPC" are trademarks of Penguin Computing, Inc. All other trademarks and registered trademarks are the properties of their respective owners.

Penguin Computing Media Contact
Karbo Communications **penguin@karbocom.com**