Lawrence Livermore National Laboratory Readies Deployment of Largest CTS-1 Cluster

Lawrence Livermore National Laboratory (LLNL) is one of the Tri-Labs of the National Nuclear Security Administration (NNSA), where High Performance Computing clusters in the Commodity Technology Systems (CTS) program provide over 25 petaFLOPS of computing capacity across the three labs\(^2\). CTS-1 systems are used as the everyday workhorses for Tri-Lab scientists and engineers researching a range of problems in hydrodynamics, materials science, molecular dynamics and particle transport. For help with building its new system Magma, LLNL turned to Penguin Computing and Intel® Xeon® Platinum 9242 processors, Intel® Xeon® Platinum 8200 processors, Intel® Omni-Path Architecture fabric and a unique liquid cooling system designed by CoolIT Systems.

\(^1\)1.2X higher Rmax with 35\% fewer cores than Jade system.\(^1\)