Department of Energy (DOE) Roadmap to Exascale Systems

An impressive, productive lineup of accelerated node systems supporting DOE's mission

IBM/NVIDIA

IBM BG/Q

Cray/Intel Xeon/KNL

Pre-Exascale Systems [Aggregate Linpack (Rmax) = 323 PF] First U.S. Exascale Systems 2012 2016 2018 2020 2021-2023 \$1.8 B. Just for 3 Hardware systems at Exascale ORNL Cray/AMD/NVIDIA IBM/NVIDIA FRONTIER ORNL AMD/Cray ANL ANL Cray/Intel KNL IBM BG/Q Aurora erlmutter LLNL ANL LBNL **LBNL** Cray/? Intel/Crav Cray/Intel Xeon/KNL Cray/AMD/NVIDIA Sequoia (10) Sierra (2) CROSS ROADS LLNL LLNL LANL/SNL

LANL/SNL

TBD