

# It's Not Just a Cluster. It's a Cray Cluster.

## Cray® CS400™ series cluster supercomputer

Understanding that time is critical and all HPC problems are not created equal, we developed the Cray® CS400™ cluster supercomputer series. These systems are industry standards-based, highly customizable, easy to manage and designed to handle the broadest range of medium- to large-scale simulations and data-intensive workloads. This powerful, reliable high performance compute environment can scale to over 11,000 compute nodes and 40 peak PF.



### CS400 CLUSTER SUPERCOMPUTER

**Air-cooled and designed for your workload.**

This modular, highly scalable platform is based on the latest Intel® Xeon® and Intel® Xeon Phi™ processing and accelerator technologies from NVIDIA. Industry standards-based server nodes and components have been optimized for HPC workloads and paired with a comprehensive HPC software stack, creating a unified system that excels at capacity- and data-intensive workloads.



### CS400-LC™ CLUSTER SUPERCOMPUTER

**Liquid-cooled for significant energy savings.**

Our direct-to-chip warm water-cooled cluster supercomputer is designed for significant energy savings. It features liquid-cooling technology that uses heat exchangers instead of chillers to cool system components. Compared to traditional air-cooled clusters, the CS400-LC system can deliver three times more energy efficiency, with typical payback cycles ranging from immediate to one year.



### CUSTOMIZABLE SOFTWARE STACK

**Key productivity-boosting tools on all CS400 systems.**

Cray's HPC cluster software stack consists of validated and tested software tools including systems management, operating systems, middleware applications and HPC programming tools.

## A Look Inside

#### Cray CS400-AC Specifications

<b>Architecture</b>	Air cooled, up to 80 nodes per rack cabinet
<b>Processor and Accelerators</b>	Support for up to 12-core, 64-bit, Intel® Xeon® processor E5-2600 v4 Optional support for Intel® Xeon Phi™ 7210, 7230 and 7250 processors and NVIDIA® Tesla® K40 and K80 GPU accelerators
<b>Interconnect</b>	FDR InfiniBand with Connect-IB®, QDR True Scale Host Channel Adapters or Intel® Omni-Path Host Fabric Interface

#### Cray CS400-LC Specifications

<b>Architecture</b>	Liquid cooled, up to 60 nodes per 42U rack
<b>Processor</b>	Support for up to 12-core, 64-bit, Intel® Xeon® processor E5-2600 v4 product family
<b>Memory</b>	Up to 1,024 GB registered ECC DDR4 RAM per compute node using 16 x 64 GB DDR4 DIMMS



Intel® Xeon® and Intel® Xeon Phi™ processors