Open Compute Project Collaboration Opens Doors to New Data Center Modular Hardware Systems

27% reduction in the carbon footprint for a reference system compared to a non-modular approach.[1]

The Open Compute Project (OCP) centers on a cross-industry initiative to help standardize the server hardware "blocks" used for workloads like artificial intelligence and edge deployments. Enterprises adopting more complex and resource-intensive workloads, like machine learning and edge computing, must maximize their system hardware and software for hyperscale efficiency. Toward that goal, Intel and other major technology companies, including OEMs, cloud vendors, and hardware manufacturers, created new specifications and standards for the Data Center Modular Hardware System (DC-MHS) and the Data Center Secure Control Module (DC-SCM). The modular computing approach can simplify systems management, improve data center energy efficiency, reduce hardware costs, and minimize waste. From 2010 to 2018, Intel helped reduce the energy required for data centers worldwide by 20 percent yearly while increasing compute instances by 550 percent and growing electricity consumption by only six percent.[2] The cross-industry DC-MHS standard will extend that trend into the future through solutions that deliver greater compute density in an environmentally responsible way.

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