What is the Open Compute Project?
The Open Compute Project (OCP), a 501(c)(6) organization, is a collaborative global community of technology leaders working together on redesigning hardware technology to efficiently support the growing demands on compute infrastructure. OCP is reimagining hardware, making it more efficient, flexible, and scalable to achieve greater choice, customization and cost savings.

OCP today is hundreds of active member companies, and thousands of design engineers collaborating to improve infrastructure design.

We believe that openly sharing ideas, specifications, and other intellectual property is the key to maximizing innovation and reducing complexity in tech components.

The Open Compute Project Foundation provides a structure in which individuals and organizations can share their intellectual property with others and encourage the IT industry to evolve.

In designing commodity hardware that is more efficient, flexible, and scalable, we’re redefining tech infrastructure. Together, we’re throwing off the shackles of proprietary, one-size-fits-all gear.

As technologists across industries participate in this community, we are creating and refining more designs, making it possible for more companies to transition from their old, proprietary solutions to OCP gear.

In response, hardware manufacturers are changing their offerings to keep up with our innovations and meet the market’s changing needs and expectations.

We know that as we move more services to the cloud, handle more data, and bring connectivity to the world, we must do it in the most efficient, economical, and sustainable way. Hardware must become a commoditized and evolving set of products optimized for these challenges. We believe open collaboration is the best way to get there.

A brief History
In 2009, Facebook was growing exponentially, offering new services and giving millions of people a platform to share photos and videos. Looking ahead, the company realized that it had to rethink its infrastructure to accommodate the huge influx of new people and data, and also control costs and energy consumption.
That’s when Facebook started a project to design the world’s most energy efficient data center, one that could handle unprecedented scale at the lowest possible cost. A small team of engineers spent the next two years designing and building one from the ground up: software, servers, racks, power supplies, and cooling. The result now stands in Prineville, Oregon. It was 38% more energy efficient to build and 24% less expensive to run than the company’s previous facilities—and has led to even greater innovation.

In 2011, Facebook shared its designs with the public and—along with Intel and Rackspace, Goldman Sachs and Andy Bechtolsheim—launched the Open Compute Project and incorporated the Open Compute Project Foundation. The five members hoped to create a movement in the hardware space that would bring about the same kind of creativity and collaboration we see in open source software. And that’s exactly what’s happening.

Our tenets:

To insure a level of consistency in our contributions, OCP requires that all contributions meet three out of the four core OCP tenets below:
- Efficiency
- Scalability
- Openness
- Impact


The OCP Marketplace is where you can research products, review specifications and collateral, as well as find out how to purchase OCP products, so you can realize the many benefits of our open community.

How to get involved:
- Join a project
- Contribute to a project
- Suggest a new project
- Attend events
- Become a member
- Become a Solution Provider

The OCP Networking Project
The Open Compute Networking Project is creating a set of technologies that are disaggregated and fully open, allowing for rapid innovation in the network space. We aim to facilitate the development of network hardware and software – together with trusted project validation and testing – in a truly open and collaborative community environment.

We’re bringing to networking the guiding principles that OCP has brought to servers & storage, so that we can give end users the ability to forgo traditional closed and proprietary network switches - in favor of a fully open network technology stack. Our initial goal is to develop a top-of-rack (leaf) switch, while future plans target spine switches and other hardware and software solutions in the space.

Project Scope:
- Fully disaggregated and open networking HW & SW
- Operating System - Linux based operating systems & developer tools, and ReST API’s
- Fully automated configuration management & bare metal provisioning
- Universal & Multi-Form Factor Switch motherboard hardware
- Fully open integration & connectivity
- Energy efficient power & cooling designs
- Software Defined Networking (SDN)

Out of Scope
- Protocol stacks & virtualization
- network architectures & topologies.
- hardware abstraction layer, deep packet inspection, hardware based security, firewall feature sets and load balancing

Project Subgroups:
- Campus Branch Wireless (CBW)
- Open Network Install Environment (ONIE)
- Open Network Linux (ONL)
- Switch Abstraction Interface (SAI)

www.opencompute.org