

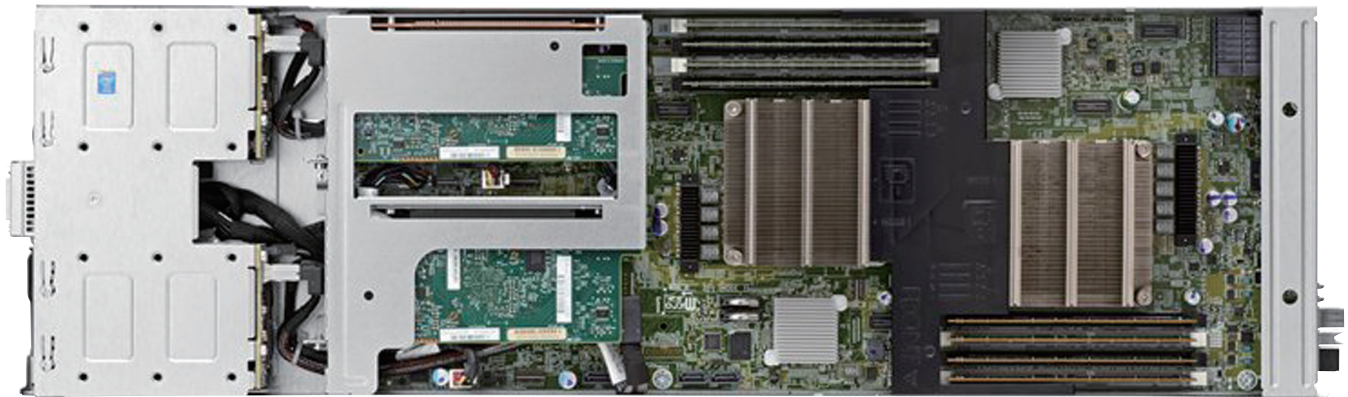
Brief

Get to market with new innovations—faster



HP Apollo 6000 System for electronic design automation

Rack-scale solutions for better performance, efficiency, and cost of ownership for single-threaded workloads.



Get better electronic design automation performance per core, per watt, and per square foot, with low total cost of ownership, delivered by an industry leader in high-performance computing.

Faster, better, smarter

Increasing demand for smaller, more complex electronics, combined with the pressure to bring new designs to market faster, have lead the semiconductor industry on a tireless pursuit of faster simulation solutions. But increasing performance means adding more racks—and there's nowhere to put them, let alone the resources to power them.

To help you improve performance with better efficiency and cost-effectiveness, HP has taken a new approach: designing a rack-level solution with the flexibility to tailor the system for specific high-performance computing (HPC) workloads. This has resulted in a family of solutions that are purpose-designed to solve engineering, scientific, and data analysis problems—regardless of scale—faster, better, and smarter than ever before.

The right compute at the right economics for single-threaded electronic design automation (EDA) environments

The first of many innovations built for the unique requirements of the HPC market, the HP Apollo 6000 System is designed to excel in single-threaded, dense scale-out environments by improving performance, efficiency, and redundancy across racks. For EDA workloads, it delivers more performance per core using less energy in less space than competing servers.

Right-sized for single-threaded applications, the HP ProLiant XL220a Server trays in the HP Apollo 6000 System hold up to 160 1P servers per standard 48U rack. HP's unique external power shelf, with Advanced Power Manager, dynamically allocates power to help maximize rack-level energy efficiency to reduce costs. Flexibility in networking allows you to further improve performance and costs by selecting the connect option that is just right for your workload.



“We are seeing up to 35 percent performance increase in our EDA workloads; we have deployed more than 5,000 of these servers, achieving better rack density and power efficiency, while delivering higher application performance to Intel silicon design engineers.”

— Kim Stevenson, Intel CIO

Position yourself for success

Moore’s law has certainly held true for the semiconductor industry; and while the number of transistors on integrated circuits continues to double or more every couple of years, you can grow your business and cut costs by selecting the right server for your EDA workload.

Better performance per core, watt, and square foot

HP Apollo 6000 System for EDA workloads delivers more performance:

- Per core—Two 1P servers per HP ProLiant XL220a Server tray with Intel® Xeon® E3-1200 v3 series processor, with up to four cores each, increase performance per core for single threaded applications over a 2P blade.
- Per watt—The external power shelf supplies up to six chassis, while Advanced Power Manager dynamically allocates power to save on energy.
- Per square foot—With 10 server, storage, or accelerator trays per 5U chassis, you can fit up to 160 ProLiant XL220a 1P Servers in one 48U rack, using 60% less space than a competing blade.

With flexibility that leads to savings

HP innovations give you the flexibility to fit 20 servers in the space of five traditional servers,

and power up to six chassis, 120 servers with a single power shelf. The HP Innovation Zone also allows for NIC and Flexible LOM/aLOM options to fit your workload needs while increasing cost savings.

Complete your solution

HP has a global team of award-winning HPC services experts available to help design, deploy, manage, and support your HPC environment and processes, including consulting, integration, outsourcing, and support. HP Datacenter Care is ideal for HPC environments, giving large scale IT environments the flexibility and economies of scale to manage HP and non-HP environments effectively.

HP Financing for HP Apollo 6000 and 8000 Systems

Having access to technology on terms that align to your business needs is critical, and HP Financial Services is uniquely positioned to help accelerate your move to the data center of the future with a broad portfolio of flexible investment and transition solutions.

There’s no need to wait

Spend less time waiting to see your simulation. Visit the link below or contact your authorized HP reseller to find out how the HP Apollo 6000 System can maximize price/performance for your EDA workloads.

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