

# Intel® Server System M50CYP Family Frequently Asked Questions

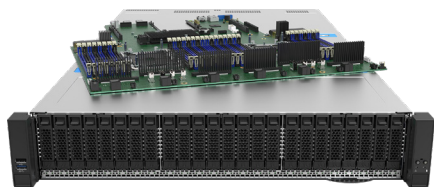


## 1. What makes the Intel® Server System M50CYP Family an ideal choice for mainstream workloads?

Mainstream workloads, such as hyperconverged infrastructure (HCI) deployments, storage, collaboration, database, and business intelligence workloads, likely comprise the bulk of the demand for your data center or cloud infrastructure. So, the ideal mainstream server would include a powerful combination of performance, flexibility, and security to run and protect many workloads and their data.

The Intel® Server System M50CYP Family delivers on all those critical requirements.

On the performance front, these servers feature support for 3rd Gen Intel® Xeon® Scalable processors—providing 1.46x average performance gain than the previous generation<sup>1</sup>—to increase responsiveness and improve user experiences. The processors and server board also feature three Intel® Ultra Path Interconnects (Intel® UPI) to accelerate I/O between processors.



The servers additionally support the Intel® Optane™ persistent memory 200 series, which can extend memory capacity up to 12 TB per server for memory-intensive workloads. This latest generation of persistent memory technology delivers an average of 32% higher memory bandwidth versus the first generation<sup>2</sup> to further accelerate those workloads.

Performance is further improved by more memory channels (8 per processor, compared to 6 per processor in the previous generation products), which deliver more memory bandwidth, support for up to 24 high-speed PCIe NVMe drives per server (16 at full bandwidth) and 100 Gb Ethernet options.

Because the Intel® Server System M50CYP Family can be easily custom-configured, you have the flexibility to optimize it for whatever your workloads demand—faster compute, high memory capacity, faster storage and I/O, or a combination of any or all of these!

Adding even more value, hardware-enhanced security innovation with Intel® Security Guard Extensions (Intel® SGX) and new hardware-level cryptographic algorithm implementations better protect sensitive apps, data, and firmware, to help keep data safe without the typical performance penalty.

## 2. Are there software-certified solutions available with the Intel® Server System M50CYP Family?

In addition to being a compelling choice for a wide variety of workloads, Intel® Server System M50CYP Family members have been validated and certified with leading cloud enterprise software—such as Nutanix Enterprise Cloud, VMware vSAN and Microsoft Azure Stack HCI. These configurations are available and sold through Intel partners as Intel® Data Center Blocks.

Intel® Data Center Blocks greatly simplify and accelerate private and hybrid cloud infrastructure deployment and time to value, reducing required effort and risk.

## 3. What cloud workloads are well-suited for the Intel® Server System M50CYP Family?

Cloud infrastructures need servers that can provide high performance and run many different workloads, while being cost efficient to deploy and operate.



The Intel® Server System M50CYP Family competently provides that flexible, versatile performance. The latest Intel compute and memory innovations make these servers great for supporting virtualized Infrastructure or Platform as a Service (IaaS or PaaS) workloads, while meeting even very stringent SLAs.

In addition to being a great, cost-efficient choice for mainstream cloud workloads—such as e-commerce, web server and others, the Intel® Server System M50CYP Family also includes AI and analytics optimizations, enabling cloud providers to more effectively expand across those market opportunities as well.

## 4. What enterprise workloads are well-suited for the Intel® Server System M50CYP Family?



The Intel® Server System M50CYP Family products are an especially attractive choice for hyperconverged infrastructure (HCI) deployments, storage, collaboration, database, and business intelligence workloads.

The ability to custom scale each server's resources—compute, memory, storage, and networking—provides the flexibility to run a wider array of enterprise workloads and be optimally configured for any of their demands.

## 5. Are there multiple configuration options for Intel® Server System M50CYP Family?



Yes. Available in both 1U and 2U rack form factors, Intel® Server System M50CYP Family servers are customizable for a variety of workload and data center space requirements. These servers may be configured to meet your compute, memory, storage and I/O requirements today, and scale with your future demands.

## 6. Why does Intel offer a portfolio of server solutions?

Intel offers a variety of servers to handle all your data center and workload requirements. Combined, these servers can run everything from entry-level tasks to your most compute-intensive and data-centric workloads.

All Intel® Server Systems provide consistent, enterprise-grade server management to simplify deployment, monitoring, updating, and debugging.

The Intel® Server System M50CYP Family is the perfect fit for mainstream needs, notably improving performance, capacity and TCO for 1U and 2U servers, while delivering extraordinary versatility to run a wide array of scale-up and scale-out workloads.

## 7. Why choose Intel® Server Systems?



Intel® Server Systems provide differentiating, end-to-end innovation across the platform—from the latest generation Intel® processors, to high-value memory, storage, networking, and security features.

Intel's server value is about more than just the hardware. The service and support included with every Intel® Server System purchase can provide peace of mind after purchase as well.



Intel servers all ship with Intel's highly rated, robust services and support package, delivering differentiating value to every stage of the server lifecycle—from pre-purchase and deployment to operations, management and support. Intel® Server Systems include a default 3-year warranty and offer an optional upgrade to a total of 5-year warranty service; all warranty coverage includes access to global technical support.

Intel® Server Systems are easy to deploy and operate, with comprehensive documentation for integration, configuration, and management.



All Intel® Server Systems benefit from Intel's vast ecosystem and partnerships with leading software developers and vendors. Intel's 15,000+ software engineers have optimized or helped to optimize leading software operating environments, virtualization and container frameworks, AI and analytics frameworks, and more, to perform faster on Intel technologies.



1. See claim [125] at [www.intel.com/3gen-xeon-config](http://www.intel.com/3gen-xeon-config). Results may vary.

2. Source: Based on testing by Intel as of April 27, 2020 (Baseline) and March 23, 2021 (New). Baseline configuration: 1-node, 1 x Intel Xeon Platinum 8280L processor (28 cores at 2.7 GHz) on Neon City with a single Intel Optane PMem module configuration (6 x 32 GB DRAM; 1 x {128 GB, 256 GB, 512 GB} Intel Optane PMem module), ucode rev: 04002F00 running Fedora 29 kernel 5.1.18-200.fc29.x86\_64 and Intel Memory Latency Checker (Intel MLC) version 3.8 with App Direct Mode. New Configuration: 1-node, 1 x Intel Xeon pre-production ICX-XCC processor (38 cores at 2.0 GHz) on Wilson City with a single Intel Optane PMem module configuration (8 x 32 GB DRAM; 1 x {128 GB, 256 GB, 512 GB} Intel Optane PMem module), ucode rev: 8d000270 running RHEL 8.1 kernel 4.18.0-147.el8.x86\_64 and Intel MLC version 3.9 with App Direct Mode.

Performance varies by use, configuration and other factors. Learn more at [www.Intel.com/PerformanceIndex](http://www.Intel.com/PerformanceIndex).

Performance results are based on testing as of dates shown in configurations and may not reflect all publicly available updates. See backup for configuration details. No product or component can be absolutely secure.

Your costs and results may vary.

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