



INTEL® VIRTUAL RAID ON CPU (INTEL® VROC)

SUPPORTED CONFIGURATIONS

Intel® VROC6.2

This document covers the solid state drives (SSD), operating systems (OS), and configurations supported by Intel® Virtual RAID on CPU (Intel® VROC). If any of this information conflicts with the support information provided by a platform OEM or ODM, the platform documentation and configurations should take precedent.

The support guidance is dependent on the Intel® VROC version being used. This document is for Intel® VROC6.2. If you are using another Intel® VROC version, please reference the Supported Configurations guide for that version.

NVME* SSD SUPPORT LIST

This section covers the SSDs that are supported on the product Intel® Virtual RAID on CPU. This includes the Intel® SSDs and third-party SSDs from other vendors.

Intel® SSDs	Third Party Vendor SSDs
<p>All Intel® SSDs for Data Center with NVMe* (including but not limited to):</p> <ul style="list-style-type: none"> • Intel® SSD DC P3100 • Intel® SSD DC P3500 • Intel® SSD DC P3520 • Intel® SSD DC P3600 • Intel® SSD DC P3700 • Intel® SSD DC P4101 • Intel® SSD DC P4500 • Intel® SSD DC P4501 • Intel® SSD DC P4510 • Intel® SSD DC P4511 • Intel® SSD DC P4600 • Intel® SSD DC P4601 • Intel® SSD DC P4610 • Intel® SSD D5-P4320 • Intel® SSD D5-P4326 • Intel® SSD D5-P4420 • Intel® Optane™ SSD DC P4800X • Intel® Optane™ SSD DC P4801X <p>All Intel® Professional NVMe SSDs:</p> <ul style="list-style-type: none"> • Intel® SSD Pro 7600p • Intel® SSD Pro 6000p <p>Other select Intel® SSD Series:</p> <ul style="list-style-type: none"> • Intel® Optane™ SSD 900P • Intel® Optane™ SSD 905P <p>X8 Intel® NVMe SSDs (RAID0 Support only)</p> <ul style="list-style-type: none"> • Intel® SSD DC P3608 • Intel® SSD DC P4608 • Intel® SSD DC P4618 	<p>Huawei</p> <ul style="list-style-type: none"> • ES3500P* • ES3600P* <p>Micron</p> <ul style="list-style-type: none"> • 9100 Series* • 9200 Series* <p>Samsung</p> <ul style="list-style-type: none"> • SM951* • SM961* • PM953* • PM961* • PM963* • PM983* <p>Toshiba</p> <ul style="list-style-type: none"> • XG3* • XG5* <p>Lenovo</p> <ul style="list-style-type: none"> • Atsani* <p>Western Digital</p> <ul style="list-style-type: none"> • SN720* • SN200* <p>UNIC</p> <ul style="list-style-type: none"> • P8160 E/M*



OS SUPPORT LIST

This section covers the operating systems that are supported on the product Intel® Virtual RAID on CPU.

Linux	Windows
<p>Intel® VROC for Linux is mostly delivered through open source OS kernel and user space tool, with no additional software download required for specific Linux distribution releases. It is up to specific OSV's to pull-in Intel® VROC features and patches. The distributions below have Intel® VROC support, with newer releases being more complete.</p> <p>RedHat Enterprise* Linux:</p> <ul style="list-style-type: none"> • RHEL 7.3 (Requires additional download. See platform provider for details) • RHEL 7.4 (Requires additional download. See platform provider for details) • RHEL 7.5 • RHEL 7.6 • RHEL 7.7 • RHEL 8.0 <p>SUSE Linux* Enterprise:</p> <ul style="list-style-type: none"> • SLES 12 SP3 • SLES 12 SP4 • SLES 15 	<p>Intel® VROC for Windows is delivered through separate software download (not in OS). Please reference platform provider download resources for access.</p> <ul style="list-style-type: none"> • Windows* 10 (RS3/RS4/RS5/19H1) • Windows* 2012 R2 • Windows* 2016 • Windows* 2019 <p>For Windows* 7, Intel® VROC 5.6 was the last driver that supports this OS. The Intel VROC5.6 package for Windows* 7 will be delivered through the newest Intel VROC6.X installer, but the build is in sustaining mode. In the future with Intel VROC7.0, this Windows* 7 driver will no longer be included.</p>

SUPPORT HW CONFIGURATIONS

This section covers the configurations and platform limitations supported on the product Intel® Virtual RAID on CPU.

Configurations	
<p>Maximum x4 PCIe SSD Totals Supported:</p> <ul style="list-style-type: none"> • 4 Direct Attached SSDs per Intel® VMD domain • 24 SSDs per single Intel® VMD Controller when using switches • 24 SSDs per RAID 0/5 array • 4 SSDs per RAID10 array • 2 SSDs per RAID1 array • 48 SSDs per platform (may require switches) 	<p>Platform Considerations:</p> <ul style="list-style-type: none"> • Up to 2 levels of switches • Up to 2 RAID volumes per array • Data volumes are supported to span across 1 or more Intel® Volume Management Device domain and CPUs <p>Boot volumes may function when spanning Intel® Volume Management Device controllers, but this configuration is not supported</p>



Intel technologies' features and benefits depend on system configuration and may require enabled hardware, software or service activation. Performance varies depending on system configuration. No computer system can be absolutely secure. Check with your system manufacturer or retailer or learn more at intel.com.

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Tests document performance of components on a particular test, in specific systems. Differences in hardware, software, or configuration will affect actual performance. Consult other sources of information to evaluate performance as you consider your purchase.

Cost reduction scenarios described are intended as examples of how a given Intel- based product, in the specified circumstances and configurations, may affect future costs and provide cost savings. Circumstances will vary. Intel does not guarantee any costs or cost reduction.

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