



Toshiba Memory's Value SAS SSDs Earn VMware vSAN Certification Running on HPE ProLiant Gen10 Servers

New RM5 Series of Value SAS SSDs Approved for vSAN 6.7 Customers

Düsseldorf, Germany, 6th August 2019 – Toshiba Memory Europe GmbH announced that a VMware vSAN™ 6.7 certification has been earned for its <u>RM5 Series</u> of value SAS SSDs running on HPE ProLiant Gen10 servers^[1]. The 12 gigabits per second (Gb/s) RM5 Series with VMware vSAN 6.7 and VMware ESXi™ 6.7 certification is now listed in the VMware Compatibility Guide^[2] and available through the same channels in which HPE ProLiant servers are sold.

VMware vSAN 6.7 is the most current vSAN release supported on HPE ProLiant Gen10 servers, enabling Toshiba Memory's RM5 Series SSDs to be shared across connected hosts in a VMware vSphere® cluster. Users are able to pool RM5 SSDs together in a single, distributed shared data store and provided high confidence that these value SAS SSDs will operate optimally on HPE ProLiant



Gen10 servers running a vSAN solution.

RM5 Series SSDs deliver faster, lower latency storage performance than enterprise SATA SSDs and support up to 64 percent^[3] higher maximum bandwidth. These drives also reduce the query time of a TPC Benchmark™ H-like (or TPC-H) analytical workload by up to 25 percent^[4] as validated through third-party benchmark testing. At similar price points to SATA SSDs, the RM5 Series delivers significantly more performance per dollar and is designed to replace enterprise SATA SSDs in server applications.

"For many applications, enterprise SATA SSDs may become a bottleneck to the server, preventing the CPU from reaching its operational or transactional potential. Given that the top workloads for VMware vSAN are transactional databases, storage performance is critical," said Lee Caswell, vice president of products, Storage and Availability Business Unit, VMware. "We are pleased to collaborate closely with Toshiba Memory, certifying their new class of SSD for the fast-growing hyper-converged infrastructure market, providing customers with greater value and performance."

"The RM5 Series, demonstrates significant performance improvements and in this way delivers up to 22 percent^[5] better data analytics performance per dollar than that of a SATA drive," said Paul Rowan, vice president at Toshiba Memory Europe GmbH. "Achieving VMware vSAN 6.7 certification for our RM5 value SAS SSDs provides customers with the confidence they need when deploying a vSAN solution."

"We continue to introduce the most innovative technology in HPE ProLiant servers, enabling customers to improve application performance across new, demanding workloads in order to accelerate the delivery of new ideas, products and services," said Katherine Toups, director Hybrid IT Shared Server Options at HPE. "Through our latest collaboration with Toshiba Memory, combining HPE ProLiant servers with new, cost-effective SAS SSDs from Toshiba Memory, we are delivering a boost in application and system value for vSAN users while making the upgrade process easier."

For further information about Toshiba Memory's RM5 value SAS SSDs in HPE ProLiant servers or how Toshiba Memory can help you prepare for "life after SATA," visit https://us.toshiba-memory.com/hpe.

Notes:

[1] VMware vSAN 6.7 certification has been earned for Toshiba Memory's RM5 Series of value SAS SSDs running on HPE ProLiant Gen10 servers.

[2] The VMware Compatibility Guide is available at:

https://www.vmware.com/resources/compatibility/vcl/result.php?search=KRM5&searchCategory=all&%26lpos%3Dapps_scodevmw+%3A+0=Search.



Press Release

[3] From the Principled Technologies® Report entitled, "Make business decisions faster with value SAS and data center NVMe™ SSDs from Toshiba Memory," and available at: https://principledtechnologies.com/portfolio-marketing#Toshiba, June 2019, page 3. The 64 percent higher maximum bandwidth was determined as follows:

Time to complete the query set: Enterprise SATA SSDs = 36:53. Value SAS SSDs = 27:37. 36:53 - 27:37 / 36:53 = <math>35.7 - 100 percent = 64.2 percent.

[4] From the Principled Technologies Report entitled, "Make business decisions faster with value SAS and data center NVMe SSDs from Toshiba Memory," and available at: https://principledtechnologies.com/portfolio-marketing#Toshiba, June 2019, page 3. The 25 percent guery time reduction was determined as follows:

Time to complete the query set: Enterprise SATA SSDs = 36:53. Value SAS SSDs = 27:37. 27:37 / 36.53 = 0.75 -100 percent = 25 percent.

^[5] From the Principled Technologies Report entitled, "Make business decisions faster with value SAS and data center NVMe SSDs from Toshiba Memory," and available at: https://principledtechnologies.com/portfolio-marketing#Toshiba, June 2019, page 4. The 22 percent better data analytics performance per dollar was determined as follows:

Cost per iteration: Enterprise SATA SSDs = \$11.51. Value SAS SSDs = \$8.96. \$8.96 / \$11.51 = 0.78 -100 percent = 22 percent.

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About Toshiba Memory Europe GmbH

We, Toshiba Memory Europe GmbH, are the European business of Toshiba Memory Corporation. Our company offers a broad product line of flash memory products, including SD Cards, USB flash drives, and embedded memory components, in addition to solid state drives (SSD). Our company maintains offices in Germany, France, Spain, Sweden and the United Kingdom. President is Masaru Takeuchi.

For more information on the full range of our memory and SSD products please visit: business.toshiba-memory.com





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