Supermicro vSAN ReadyNodes

Hyperconverged Storage Systems Simplify Enterprise Scale-out Deployment

vSAN Readynodes Benefits

- Simple to order – Single bundles to procure
- Radically Simple Storage for VMs and Containers – seamless integration with vSphere
- Lower TCO – granular scale-out and scale-up
- High Performance – integrated read/write caching and all flash storage
- Fault Tolerance – data protection with cache mirroring
- Peace of Mind – jointly certified by Supermicro and VMWare

VMware vSAN is a enterprise-class, storage virtualization software that allows you to manage compute and storage with a single HCI solution, through unique vSphere integration.

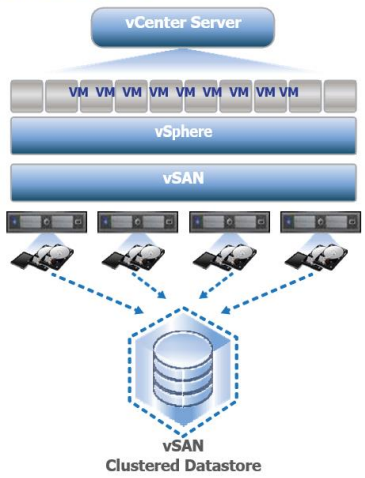
A Simplified HCI Solution for Enterprises and SMBs

Supermicro's vSAN ReadyNode™ focuses on deploying VMware® vSAN™, a hyperconverged solution, as quickly as possible. VMware uniquely provides consistent, centralized management of all your HCI deployments from edge to core data center to public cloud with the same tools, the VMware vSphere® Client and VMware vCenter®. Working with VMware, Supermicro delivers an alternative to traditional Fiber Channel SAN based virtualization infrastructure, which is known for its complexity and interoperability challenges. Targeted at a multitude of use cases in tier 1/2 production workloads and Virtualized Desktop Infrastructure (VDI), especially with all-flash, Supermicro's vSAN ReadyNodes™ introduce a new high performance storage tier optimized for enterprise-class virtual environments that is simple, resilient and efficient. It is a simplified HCI solution for Enterprise Remote Office/Branch Offices (ROBOs) and Small and Medium-Sized Businesses (SMBs) to efficiently grow and manage virtualized infrastructure for maximum ROI.

Ready to Deploy Configurations*

A vSAN ReadyNode is a multi-node server hardware configuration for use with vSAN. A ReadyNode configuration includes specific types and amounts of CPU, Memory, Flash, HDD, and I/O Controller devices within each server. Each vSAN ReadyNode is classified by a ReadyNode configuration profile.

vSAN Architecture:



Each Ready Node profile provides a differentiated capacity/performance focus, targeting multiple use case requirements. Each profile assumes a target number of Virtual Machines per node, utilizing an average Virtual Machine profile size (as indicated alongside the configuration, refer to VMware's vSAN sizer tool online).

Figure 1: VMware VMotion moves live, running virtual machines from one host to another while maintaining continuous service availability.

vmware®

**vSAN implementation requires a minimum of 3 nodes, or for ROBO configurations 2 nodes with an external witness appliance*



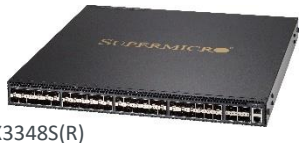

CONFIGURATIONS	AF-8	AF-8	AF-8	AF-6
Product Series	Ultra	BigTwin™	Ultra	BigTwin™
Model	SYS-2029U-E1CRT	SYS-2029BT-HNR	AS-1123US-TR4	SYS-2029BT-HNR
Number of Nodes	1 node in 2U	4 nodes in 2U	1 node in 1U	4 nodes in 2U
Raw Capacity per Node	38TB (20x 1.92TB SATA SSD)	15TB (4x 3.8TB NVMe SSD)	22TB (6x 3.8TB SATA SSD)	8TB (4x 2TB NVMe SSD)
Caching Tier per Node	1.8TB (4x 480GB SATA SSD)	1.6TB (1x 1.6TB NVMe SSD)	960GB (2x 480GB SATA SSD)	375GB (1x 375GB NVMe SSD)
CPU per Node	48 cores (2x Intel® Xeon® Scalable)	40 cores (2x Intel® Xeon® Scalable)	32 cores (2x AMD EPYC™)	40 cores (2x Intel® Xeon® Scalable)
Memory Per Node	384GB	512GB	384GB	384GB
vSAN NIC Per Node	2x 10GbE	2x 10GbE or 25GbE	2x 10GbE	2x 10GbE or 25GbE




CONFIGURATIONS	AF-6	AF-6	AF-4	AF-4
Product Series	BigTwin™	Ultra	Ultra	Ultra
Model	SYS-2029BT-HNC0R	SYS-1029U-TRT	SYS-1029U-TN10RT	SYS-1029U-TRT
Number of Nodes	4 nodes in 2U	1 node in 1U	1 node in 1U	1 node in 1U
Raw Capacity per Node	9.6TB (5x 1.92TB SATA SSD)	11.5TB (6x 1.92TB SATA SSD)	12TB (4x 2TB NVMe SSD)	5.7TB (3x 1.92TB SATA SSD)
Caching Tier per Node	480GB (1x 480GB SATA SSD)	960GB (2x 480GB SATA SSD)	1.6TB (2x 800GB NVMe SSD)	480GB (1x 480GB SATA SSD)
CPU per Node	40 cores (2x Intel® Xeon® Scalable)	36 cores (2x Intel® Xeon® Scalable)	36 cores (2x Intel® Xeon® Scalable)	36 cores (2x Intel® Xeon® Scalable)
Memory Per Node	256GB	256GB	256GB	128GB
vSAN NIC	2x 10 GbE	2x 10 GbE	2x 10 GbE	2x 10 GbE

**All SKUs include VMware vSphere 7 Standard and vSAN 7Advanced,. All SKUs include vSphere & vSAN support and subscription for 3 years. Supermicro Global Services 3 Years 4-hour on-site hardware service (OS4HR3) also included. 10 GbE vSAN NICs are 10GBase-T but options for 10G SFP+ are also available.*

Other vSAN Service and Components from Supermicro



SSE-X3348S(R)

SYS-1019P-WTR

	MODEL / PART NUMBER	DESCRIPTION
Network Switch	SSE-X3348S(R) SFP+ SSE-X3348T(R) RJ45 SSE-X24SR	10 GbE for inter-node switch fabric GbE for IPMI network
Management Servers	SYS-1019P-WTR	Supermicro Server for all inclusive HW Management
Management Software	SFT-VM-VCS7STDC3Y	VMware vCenter Server 7.0 is required to manage vSAN Cluster, vSphere is required to run vCenter
	SFT-DCMS-Single	Supermicro Data Center Management Software

Supermicro Out-of-Band Server Management

Our solutions are designed for easy automation with existing management infrastructure. In data centers, Supermicro Server Management Utilities provides you all the necessary functions to manage your servers. For more information about Supermicro Out-of-Band Server Management, visit *http://www.supermicro.com/products/nfo/SMS_SUM.cfm*