SOLUTION BRIEF

Intel® Data Center Blocks for Cloud VMware* (vSAN ReadyNodes)



Simplifying Access to Software-Defined Storage (SDS) Solutions and Private Cloud

Intel® Data Center Blocks for Cloud—VMware* (vSAN ReadyNodes)



Intel® Data Center Blocks for Cloud

- Certified Data Center Blocks save time and money¹, freeing up resources to focus on value-add and competitive differentiation
- Simplify SDI Market Access with systems designed for Software-Defined Storage solutions
- Unbranded Systems allow resellers to incorporate products into their branded portfolios
- Intel Quality & Reliability with world-class integration, validation, certification and support
- Standard Intel 3-year Warranty with 5-year warranty options available to ensure customers' satisfaction
- Intel® Select Solutions-ready designs, workload-optimized and verified reference architectures, provide resellers a simplified path to marketing program participation



Accelerating the Path to Private Cloud with SDS and VMware* (vSAN ReadyNodes) from Intel® Data Center Blocks

Intel® Data Center Blocks for Cloud (Intel® DCB for Cloud) - VMWare* vSAN ReadyNodes offer a validated and supported solution tailored for high performance computing, hyper-converged architecture, and storage scenarios requiring outstanding performance. Supporting the new 2nd generation Intel® Xeon® Scalable processor family, available in All-Flash and hybrid configurations, these systems offer partners the flexibility to build innovative, cost-effective, software-defined storage solutions quickly and efficiently.

Research demonstrates that outdated infrastructures result in a six-times slower rate for product innovation and time to market². For modern businesses wishing to remain competitive in a fast-moving global economy, adopting an IT modernization strategy is critical. To successfully navigate the transition to the private cloud, customers need a software-defined infrastructure (SDI) that is automated, resilient, and programmatically extensible. Modernizing storage resources is an essential element to SDI, driving up customer demand for SDS solutions.

To increase reseller access to the SDI market and enable them to help customers modernize storage resources, Intel offers a new server product optimized for SDS. The Intel® Data Center Blocks for Cloud – vSAN ReadyNodes are fully-validated, pre-configured server systems that include VMware certifications for vSAN. With these vSAN ReadyNodes from Intel, resellers have access to the software-defined storage market, making it easier to deliver SDS solutions to customers.

Cost-Effective, Scalable Storage with Intel and VMware vSAN

Traditional storage is fixed, siloed and hard to scale. Addressing these challenges remains one of the barriers customers face as they move to a cloud-based infrastructure. VMware* vSAN offers simplified storage provisioning, granular scalability, and advanced management. Fueled by 2nd Gen Intel Xeon Scalable processors, the solution features increased performance required for enterprise-class SDS solutions with improved per-core performance, higher CPU frequency, up to 48 PCIe lanes, and capabilities like Intel® Mesh Architecture.

Reduce Complexity, Improve ROI & Speed Time-to-Market

Designing, testing and validating SDS solutions is a costly and resource-intensive process. By starting with a higher level of integration and certification, partners can reduce costs and speed time-to-market. This approach gives partners more flexibility and choice about where to invest R&D spend to ensure they remain competitive and drive differentiation in the market. There is also increased

acquisition value to the partner, since they source a validated bundle of products with a single order code, rather than acquiring each component individually.

Integrated System with Intel Quality, Reliability and Value

Breakthrough Performance

Available in both All-Flash and Hybrid configurations, these server systems are optimized for high-performance computing, hyper-converged infrastructure, and outstanding storage performance. The 2nd Gen Intel® Xeon® Scalable processor accelerates virtualized storage, while Intel SSDs provide high throughput and low latency, which maximizes power while reducing cost and space requirements. All-Flash configurations (AF-8, AF-6, and AF-4) deploy Intel's high-endurance NVMe SSDs for the caching tier, delivering excellent performance, high IOPS and low latency.

Smart Boards Ensure System Stability and Increased Uptime

Intel® Server Boards have more than 100 sensors built in that monitor all critical functions and use management capabilities to automatically flag problems before they impact business operations. Event logs and light-guided diagnostics also assist in rapid identification and issue remediation.

Enhanced Benefits

To further help partners succeed, Intel® Technology Providers have an opportunity to qualify for Intel® Technology Provider Cloud Data Center Specialist designation. Cloud Specialists have access to exclusive resources specifically designed to help streamline the delivery of cloud-optimized solutions. Benefits include special access to Intel experts and engineering resources to assist Cloud Specialists as they identify exact customer requirements. Other benefits include access to valuable solutions guides and marketing content to help build customer value.



Intel Warranty Delivers Value and Confidence Intel Data Center Blocks for Cloud are backed by Intel's standard 3-year warranty from the date of purchase, with optional 5-year warranty plans available for select components.

Intel Data Center Blocks are also eligible for Advanced Warranty Replacement whereby Intel will send a replacement part before the defective part is returned, reducing downtime and speeding time to resolution.

Warranty details are available online at https://www.intel. com/content/dam/support/us/en/documents/services/DCB_ Warranty_Brief.pdf

Engage with Intel Today

Intel continuously delivers leading-edge-technologies to help resellers innovate and differentiate themselves in the market. Intel® Data Center Blocks for Cloud are designed to help partners realize a more accessible path to reliable SDI solutions.

Contact your Intel sales representative or Intel authorized distributor for any inquiries.

Additional Resources:

Detailed SKU configurations can be found at: https://www.intel.com/content/www/us/en/products/servers/data-center-blocks/dcb-cloud.html

For more information on Intel® Server Products and Solutions visit: intel.com/serverproducts

For more information on Intel® Data Center Blocks visit: intel. com/dcb

For more information on Intel® Select Solutions visit: https://www.intel.com/content/www/us/en/architecture-and-technology/intel-select-solutions-overview.html



Intel® Data Center Blocks for Cloud - VMware*





ALL-FLASH CONFIGURATIONS ⁴			
ORDER CODE	FEATURES		
VRN2208WFAF83R ^{6,7} 2U 1 node Intel® Server System R2208WF0ZSR with Intel® Server Board S2600WF0R	Board	Intel® Server Board S2600WF0R	
	Processor	Intel® Xeon® Gold processor 6230	
	Chassis	2U 1 node Intel® Server System R2208WF0ZSR	
intel select :	Storage Capacity	24 TB raw storage capacity	
solution	Storage Type	All-Flash: P4800x (NVMe) cache, P4510 (NVMe) capacity	
	Memory	512 GB memory	
	Networking	4x 10GbE SFP + Intel Connectivity ⁵	
	Intel® RMM	Intel® Remote Management Module Lite 2	
	vSAN Profile	AF-8	
ORDER CODE	FEATURES		
VRN2208WFAF82R ⁶	Board	Intel® Server Board S2600WF0R	
2U 1 node Intel® Server System R2208WF0ZSR with Intel® Server Board S2600WF0R	Processor	Intel® Xeon® Gold processor 5218	
	Chassis	2U 1 node Intel® Server System R2208WF0ZSR	
	Storage Capacity	12 TB raw storage capacity	
	Storage Type	All-Flash: P4800x (NVMe) cache, P4510 (NVMe) capacity	
	Memory	384 GB memory	
	Networking	4x 10GbE SFP+ Intel Connectivity ⁵	
	Intel® RMM	Intel® Remote Management Module Lite 2	
	vSAN Profile	AF-8	



ALL-FLASH CONFIGURATIONS (CONTD.) ²		
ORDER CODE	FEATURES	
VRN2208WFAF81R ⁶ 2U 1 node Intel® Server System R2208WF0ZSR with Intel® Server Board S2600WF0R	Board	Intel® Server Board S2600WF0R
	Processor	Intel® Xeon® Gold processor 5218
	Chassis	2U 1 node Intel® Server System R2208WF0ZSR
	Storage Capacity	11.5 TB raw storage capacity
	Storage Type	All-Flash: P4800x (NVMe) cache, S4510 (SATA) capacity
	Memory	384 GB memory
	Networking	2x 10GbE SFP+ Intel Connectivity ⁵
	Intel® RMM	Intel® Remote Management Module Lite 2
	vSAN Profile	AF-8
ORDER CODE	FEATURES	
VRN2208WFAF61R ⁶	Board	Intel® Server Board S2600WF0R
2U 1 node Intel® Server System R2208WF0ZSR	Processor	Intel® Xeon® Gold processor 5218
with Intel® Server Board S2600WF0R	Chassis	2U 1 node Intel® Server System R2208WF0ZSR
	Storage Capacity	11.5 TB raw storage capacity
	Storage Type	All-Flash: P4800x (NVMe) cache, S4510 (SATA) capacity
	Memory	256 GB memory
	Networking	2x 10GbE SFP+ Intel Connectivity 5
	Intel® RMM	Intel® Remote Management Module Lite 2
	vSAN Profile	AF-6
ORDER CODE	FEATURES	
VRN2208WFAF41R ⁶	Board	Intel® Server Board S2600WFTR
2U 1 node Intel® Server System R2208WFTYSR with Intel® Server Board S2600WFTR	Processor	Intel® Xeon® Gold processor 5215
	Chassis	2U 1 node Intel® Server System R2208WFTYSR
	Storage Capacity	3.84 TB raw storage capacity
	Storage Type	All-Flash: P4800x (NVMe) cache, S4510 (SATA) capacity
	Memory	128 GB memory
	Networking	2x 10GbE SFP+ Intel Connectivity ⁵
	Intel® RMM	Intel® Remote Management Module Lite 2
	vSAN Profile	AF-4



ALL-FLASH CONFIGURATIONS (CONTD.) 4			
ORDER CODE	FEATURES		
VRN2224BPAF6R ⁶ 2U 4 nodes Intel® Server System H2224XXLR3 with Intel® Server Board S2600BPSR	Board	Intel® Server Board S2600BPSR	
	Processor	Intel® Xeon® Gold processor 5218	
	Chassis	2U 4 nodes Intel® Server System H2224XXLR3	
	Storage Capacity	9.6 TB raw storage capacity	
	Storage Type	All-Flash: P4800x (NVMe) cache, S4510 (SATA) capacity	
	Memory	256 GB memory	
	Networking	2x 10GbE SFP+ Intel Connectivity 5	
	Intel® RMM	Intel® Remote Management Module Lite 2	
	vSAN Profile	AF-6	

HYBRID CONFIGURATIONS ³			
ORDER CODE	FEATURES		
VRN2208WFHY6R ⁶ 2U 1 node Intel® Server System R2208WF0ZS with Intel® Server Board S2600WF0R	Board	Intel® Server Board S2600WF0R	
	Processor	Intel® Xeon® Gold processor 5215	
	Chassis	2U 1 node Intel® Server System R2208WF0ZS	
	Storage Capacity	12 TB raw storage capacity	
	Storage Type	Hybrid: S4610 (SATA) cache, HDD capacity	
	Memory	256 GB memory	
	Networking	2x 10GbE SFP+ Intel Connectivity ⁵	
	Intel® RMM	Intel® Remote Management Module Lite 2	
	vSAN Profile	HY-6	
ORDER CODE	FEATURES		
VRN2224BPHY6R ⁶	Board	Intel® Server Board S2600BPSR	
2U 4 nodes Intel® Server System H2224XXLR3 with Intel® Server Board S2600BPSR	Processor	Intel® Xeon® Gold processor 5215	
	Chassis	2U 4 nodes Intel® Server System H2224XXLR3	
	Storage Capacity	8 TB raw storage capacity	
	Storage Type	Hybrid: S4610 (SATA) cache, HDD capacity	
	Memory	256 GB memory	
	Networking	2x 10GbE SFP+ Intel Connectivity ⁵	
	Intel® RMM	Intel® Remote Management Module Lite 2	
	vSAN Profile	HY-6	



HYBRID CONFIGURATIONS (CONTD.) ³			
ORDER CODE	FEATURES		
VRN2224BPHY4R ⁶ 2U 4 nodes Intel® Server System H2224XXLR3 with Intel® Server Board S2600BPSR	Board	Intel® Server Board S2600BPSR	
	Processor	Intel® Xeon® Gold processor 5215	
	Chassis	2U 4 nodes Intel® Server System H2224XXLR3	
	Storage Capacity	4 TB raw storage capacity	
	Storage Type	Hybrid: S4610 (SATA) cache, HDD capacity	
	Memory	128 GB memory	
	Networking	2x 10GbE SFP+ Intel Connectivity 5	
	Intel® RMM	Intel® Remote Management Module Lite 2	
	vSAN Profile	HY-4	



- 1. 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.
- 2. IDC whitepaper: Why Upgrade Your Server Now, July 2016
- 3. Third-party software stack and hard drive NOT included.
- 4. Third-party software stack NOT included.
- 5. Targeting NIC bandwidth enhancements late 2H'19.
- 6. Contact VMware for official policy/support of DCPMM with vSAN. As of March'19, DCPMM App Direct mode is not supported and Memory Mode is supported under limited customer preview (not officially GA'd).
- 7. VRN2208WFAF83R is hardware compliant with Intel® Select Solutions VMWare vSAN* Base

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. Software and workloads used in performance tests may have been optimized for performance only on Intel® microprocessors. Performance tests, such as SYSmark and MobileMark, are measured using specific computer systems, components, software, operations and functions. Any change to any of those factors may cause the results to vary. You should consult other information and performance tests to assist you in fully evaluating your contemplated purchases, including the performance of that product when combined with other products. For more complete information visit intel.com/performance.Intel, the Intel logo, and Xeon are trademarks of Intel Corporation in the U.S. and/or other countries.