# **SOLUTION BRIEF**

Enterprise Cloud Data Center Modernization



# Intel® Data Center Blocks for Nutanix<sup>™</sup> Enterprise Cloud

# THE RIGHT CHOICE FOR VIRTUALIZED SERVERS AND BUSINESS-CRITICAL APPLICATIONS



- Technology leadership including Optane<sup>™</sup> DC SSD and Optane<sup>™</sup> DC Persistent Memory
- Broad set of components validated by Intel and certified by Nutanix allow for configuring systems to meet your customer's needs
- Designed for the fast growing HCI market which offers private cloud security and affordability with public-cloud like scalability
- Non-branded hardware enables you to add Nutanix solutions into your own brand portfolio
- Standard Intel 3-year Warranty with 5-year warranty options available to ensure customer satisfaction



NUTANIX



As business demands become more dynamic, running workloads on rigid legacy architectures no longer makes sense. Enterprises are shifting from separate storage, storage networks, and servers to software-defined systems (SDS). A single hyperconverged infrastructure (HCI) system enables an agile, scalable data center foundation that delivers more flexibility, easier provisioning, and lower costs. With that in mind, it's no surprise that HCI is a fast-growing market, with a five-year CAGR of 26.6 percent and revenues expected to hit \$7.15 billion in 2021, according to research firm IDC<sup>1</sup>.

# Trusted Intel Hardware Certified by Nutanix™

Together, Nutanix<sup>™</sup> and Intel have developed fully validated and certified Intel<sup>®</sup> Data Center Blocks (DCBs) for the HCI market. The result of this collaboration enables you to speed up your path to market, grow your business with new revenue streams, and deliver peace of mind to your customers with technology and support from industry leaders.

Intel Data Center Blocks for Nutanix<sup>™</sup> Enterprise Cloud are available as configure-to-order systems that include processors, server boards, chassis, power supply, storage, networking, and memory that have been validated to work together. Value-added Resellers (VARs) and system integrators (SIs) add Nutanix<sup>™</sup> Enterprise Cloud OS software to provide a fast route for building on-premise clouds.

# HCI and the Nutanix<sup>™</sup> Enterprise Cloud Advantage

Your customers are modernizing their data centers, and they need help to transition, deploy, and scale them. Intel® Data Center Blocks for Nutanix™ Enterprise Cloud are designed to allow IT teams to build and operate solutions that meld private, public, and distributed cloud operating environments, and provide a single point of control to manage IT infrastructure and applications at any scale.

Hyperconverged infrastructure, separate siloed servers, storage networks, and storage arrays are replaced with a single scale-out solution, giving enterprises newfound agility.

Nutanix Enterprise Cloud delivers the public cloud benefits that customers want with the private cloud control customers need.



# Full Cloud Stack

Complete IT infrastructure integrates all compute, storage and virtualization resources to run nearly any application.



#### One-Click Simplicity

Consumer-grade management streamlines IT lifecycle management and eliminates the need for specialized IT teams.



### Deploy Application in Minutes

Allows delivery of infrastructure in record time; no more waiting weeks or months to run business applications or new workloads.



#### Automate Application Management

Automated common IT tasks give application owners and developers on-demand IT services.



#### Lower TCO

Enables reduced IT costs and quick investment payback.

#### **Hybrid Cloud**

Combines public and private cloud operations with unified management of IT infrastructure and applications.

# Differentiated Systems with Technology Leadership

Intel<sup>®</sup> DCB for Nutanix<sup>™</sup> Enterprise Cloud is configurable, starting with two base server configurations:

• 2U 4-node system based on the Intel® Compute Module HNS2600BP family

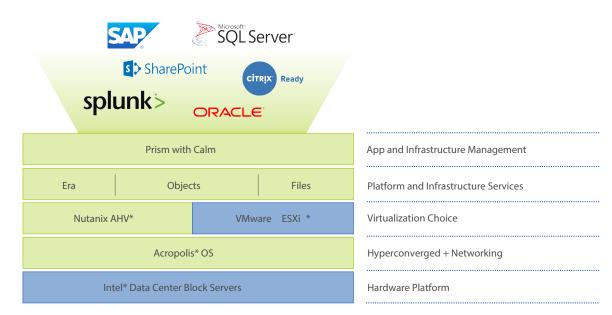
• 2U 1-node system based on the Intel® Server Board S2600WF family

The advanced thermal design of Intel's 2U 4-node DCB allows for high compute density, including options for more powerful CPUs that deliver more performance in a 2U space and at a lower hardware cost compared to four separate 1U or 2U systems. This makes an Intel Data Center Block based on the Intel Compute Module HNS2600BP an excellent choice for virtualized systems.

Intel's 2U 1-node DCB, based on the Intel Server Board S2600WF, is architected for up to 24 high performance flash storage devices, with balanced input and output operations. Greater throughput and lower latency allow for faster access to large datasets, which is desirable for enterprise-class workloads.

Both base systems contain the hardware essential to hosting the Nutanix<sup>™</sup> Enterprise Cloud OS. These fixed features include a chassis with redundant power, four compute modules or one server board, up to 12 x 3.5" or 24 x 2.5" drive bays, SAS controllers as needed per the number of drive bays, redundant cooling, and advanced server management.

Both platforms allow for customization to meet the compute, storage, and networking requirements of specific end users. A Nutanix Channel representative can also help provide accurate infrastructure sizing through the use of the Nutanix Sizer Tool.



Intel<sup>®</sup> Data Center Blocks and Nutanix<sup>™</sup> Enterprise Cloud provide an exceptional foundation for enterprise applications.

Solution Brief | Intel® Data Center Blocks for Nutanix™ Enterprise Cloud

# Suggested Configurations

SOLUTION	ТҮРЕ	INTEL <sup>®</sup> SERVER BOARD (NODE)	2 <sup>ND</sup> GEN INTEL <sup>®</sup> XEON <sup>®</sup> SCALABLE PROCESSOR	FORM FACTOR	OPTANE <sup>™</sup> DC PERSISTENT MEMORY	META DATA TIER	STORAGE TIER
Visualized Servers within Private Clouds	Good	S2600BP	2 x Silver 4200R	3.5" LFF	-	Intel <sup>®</sup> DC S4510	HDD
	Better	S2600BP	2 x Gold 5200R	2.5" SFF	-	Intel® DC P4510	Intel® DC S4510
	Best	S2600BP	2 x Gold 6200R	2.5" SFF	-	Intel® Optane™ DC P4800X	Intel® DC S4510
Business- Critical Database & Analytics	Good	S2600WF	2 x Silver 4200R	3.5" LFF	-	Intel® DC S4510	HDD
	Better	S2600WF	2 x Gold 6200R	2.5" SFF	Workload Dependent	Intel® DC P4510	Intel® DC S4510
	Best	S2600WF	2 x Platinum 8280	2.5" SFF	Workload Dependent	Intel® Optane™ DC P4800X	Intel <sup>®</sup> DC S4510

# Customize Your Solution Using Intel's **Configure-to-Order Tool**

Nutanix-certified Intel Data Center Blocks are available with a range of configurations for a fast, simple, risk-free selection to fit different business use cases—including enterprise applications, server virtualization, Virtualized Desktop Infrastructure (VDI), databases, remote office branch office (ROBO), and more.

Intel's configure-to-order (CTO) system allows for customization and is designed to take the risk out of component selection by allowing only certified and compatible options. Customers are able to configure a solution that starts with either a S2600BP or S2600WF base platform and allows a variety of choices from the following items to meet their requirements:

- 2<sup>nd</sup> Gen Intel<sup>®</sup> Xeon<sup>®</sup> Scalable Processors (Gold, Silver, and Platinum)
- DDR4 Memory (16GB, 32GB and 64GB DIMM) •
- Intel<sup>®</sup> Optane<sup>™</sup> DC Persistent Memory (128GB, 256GB, • and 512GB)
- Meta Data Cache Device including Intel Optane<sup>™</sup> DC SSD options (750GB to 8TB SSD)
- Storage Devices (960GB to 7.68TB SSD or 2TB to 12TB HDD)
- Networking 10GBASE-T and 10/25G SFP+. RoCE RDMA also available.

## Get started with the CTO tool https://orderconfigurator.intel.com/



#### <sup>1</sup>https://www.idc.com/getdoc.jsp?containerId=US43062517

## Peace of Mind with Support from **Industry Leaders**

Intel and Nutanix are collaborating to provide integrated support to help ensure a seamless customer experience. Intel Data Center Blocks hardware is backed by worldclass technical support and Intel's standard three-year warranty from the date of purchase, with optional fiveyear warranty plans available for select components. They are also eligible for Advanced Warranty Replacement, allowing a replacement part to be sent before the defective part is returned, reducing downtime and speeding time to resolution. Nutanix Enterprise Cloud software is backed by award-winning support, industryleading services, and global training. Resellers for this joint solution can capitalize on Intel member programs, via Intel components that help to earn revenue credits and program benefits (points).

#### Additional Resources

- For more information on Nutanix Enterprise Cloud, visit: Nutanix.com/Intel
- For more information on Intel Data Center Blocks for Nutanix Enterprise Cloud, visit: intel.com/Nutanix
- For warranty details, visit https://www.intel.com/ content/dam/support/us/en/documents/services/ DCB\_Warranty\_Brief.pdf

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 www.intel.com.

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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