PRODUCT BRIEF

Intel® Data Center Blocks for Networking – NFVI Server Block

Simplifying Network Transformation with Pre-validated Server Systems

Intel® Data Center Block for Networking — NFVI Server Block

- Optimized for the unique needs of network functions virtualization infrastructure (NFVI) workloads to deliver exceptional performance
- Pre-configured, fully validated Data Center Block saves time and money[2], freeing up resources to focus on value-add and competitive differentiation
- Intel quality and reliability with world-class integration, validation, certification, and support
- Standard Intel three-year warranty ensures customer satisfaction with a five-year warranty option available for select components
- Single order code simplifies procurement and reduces complexity associated with system design and validation

Network Functions Virtualization Addresses Growing Data Challenges

As the amount of data crossing networks grows and the systems used to transport and house content become larger and increasingly complex, Communications Service Providers (CommSPs) need to evolve from costly, inflexible, fixed-function systems to fully-virtualized sets of network functions on scalable, agile, cost-effective servers. With the global network functions virtualization (NFV) market projected to grow at a compound annual growth rate (CAGR) of 42%, reaching $15.5 billion by 2020[1], a massive market opportunity exists. However, many system builders do not have deep experience in designing for the unique requirements of multi-function systems and are looking for a way to address the complexity they face in selecting and validating optimal configurations.

Simplifying and Accelerating Network Functions Virtualization Infrastructure (NFVI) Deployment

The Intel® Select Solution for NFVI reference designs build upon Intel's technology expertise and rigorous testing to identify optimized hardware and software configurations for NFVI workloads. To make it easier for partners to design and qualify systems based on the Intel Select Solution standards and to deliver proven, NFVI optimized systems, Intel has developed the NFVI Server Block. This hardware platform has been designed to meet the Intel Select Solution requirements and tested by Intel to deliver exceptional performance for NFVI workloads. Rather than procuring hardware as components and building the system from scratch, this Data Center Block comes as a pre-configured system to help partners accelerate time to market with workload optimized solutions.

Optimized for NFVI Workloads

The NFVI Server Block has been designed to enhance performance of NFVI workloads. Key features include:

- Intel® QuickAssist Technology (Intel® QAT) built into the chipset of the new Intel® Xeon® Scalable processor enables cryptography and compression workload acceleration, freeing up processor cores for other critical tasks.
- Symmetrical Intel® QAT, networking and NVMe* storage configuration across the two processors in the system creates an end-to-end NUMA balanced server that enables improved performance for I/O-intensive memory access throughout the system.
- Advanced per core performance and increases in memory and I/O bandwidth deliver notable efficiencies in deep packet inspection workloads and packet processing for virtual network functions.
- NVMe* enablement alleviates the I/O bottleneck with high performance and capacity.

Intel Warranty and Support Deliver Added Value and Confidence

The NFVI Server Block is backed by Intel's networking technology expertise and rigorous testing to deliver a workload optimized system that customers can deploy with confidence. The product comes with a standard three-year warranty, with the option to extend parts of coverage to five years. Intel Data Center Blocks are also eligible for Advanced Warranty Replacement (AWR) whereby Intel will ship a replacement part before receipt of the defective part, reducing downtime and speeding time to resolution. Warranty and support details are available here.

Engage with Intel Today

Engage with your Intel sales rep to learn how the NFVI Server Block can simplify, accelerate and streamline NFVI system deployment.

More information is available at intel.com/content/www/us/en/data-center-blocks/nfvi-server-block.html.

Intel Offers Multiple NFVI Enablement Options to Meet Diverse Needs

NFVI SERVER BLOCK	INTEL® SELECT SOLUTIONS FOR NFVI REFERENCE ARCHITECTURE	INTEL® SELECT FAST TRACK KIT FOR NFVI
• Pre-configured Intel® Xeon® Scalable processor-based system with balanced Intel QAT, Networking, and NVMe* Storage, designed to accelerate time to market • Ensures efficient data flows, with consistent, repeatable performance • Designed to meet the Intel® Select Solution for NFVI hardware specification	• Reference Architecture of Hardware and Software ingredients hardened and tested for specific workloads • Delivered as branded Intel Select Solution systems through Intel partners • NFVI Server Block hardware is used for reference architecture validation	• Combines the NFVI Server Block with pre-installed Select Solution for NFVI software (Ubuntu or RedHat) • Provides faster access to a fully funcitonal NFVI optimized development platform

Intel® Data Center Blocks for Networking – NFVI Server Block Specifications

ORDER CODE	NB2208WFQNFVI
Processor	2x Intel® Xeon® Gold 6152, 22 Cores, 2.1 GHz, Base non-AVX Core frequency, 30.25 LLC (MB), 140 W TDP
Board + Chassis	Intel® Server System R2208WFQZS (including Intel® Server Board S2600WFQ with symmetric Intel® QAT and 2U Intel® Server Chassis with 8 x 2.5" backplane
Dimensions	16.93" x 27.95" x 3.44"
Power Supply	2x Redundant 1300W AC (Titanium) Common Redundant Power Supply
Memory	24x RDIMM 16 GB – DDR4 288-pin, 2666 MHz (384 GB total)
Storage-Capacity	4x Intel® SSD DC P4500 (1.0 TB)
Boot Drives (R1)	2x Intel® SSD DC S4500 (240 GB)
NVMe* Switch	1x 4 Port Switch adapter (CPU1 riser)
Cables - Storage	4x OCuLink* Cables for 4 drives— AXXCBL470CVCR (1), AXXCBL530CVCR (1), AXXCBL800CVCR (2)
Connectivity - NICs	4x Intel® Ethernet Network Adapter XXV710-DA2 (25 GbE, 2 adapters per riser)
Management NIC	1x Intel® Ethernet Network Connection OCP I357-T4
Rear Hot Swap Backplane (HSBP)	Rear Hot-swap Dual Drive Cage Upgrade Kit

[1]Source: IHS Markit, NFV Hardware, Software, and Services Annual Market Report, 2016

[2]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.

1117/RJMJ/RJ/PDF
Please Recycle 336728-001US