



ZXCLOUD R5300 G4 NFV Infrastructure (NFVI) on RHEL 7.4

ZTE has worked with Intel to create an Intel® Select Solutions for NFVI using RHEL 7.4 for workload-optimized performance from Intel® Xeon® Scalable processors.

Intel and ZTE Bring NFVI to Market

Communications service providers (CommSPs) are seeking to change the economics and service deployment agility of their networks by embracing network functions virtualization (NFV)-based services. This network revolution provides the agility and flexibility to support new high-bandwidth applications like 5G and new high device-count services such as internet of things (IoT).

NFV replaces fixed-function appliances with virtual network functions (VNFs) that run on general-purpose Intel® architecture-based servers. With an NFV server in place, a CommSP can remotely turn up or turn down services in a very short time. Networks can be lower cost through the general-purpose nature of the server as well as the ability to use the server for multiple services.

ZTE has chosen to partner with Intel to verify its **ZXCLOUD R5300 G4** as an Intel Select Solution for NFVI. This lets users of **ZXCLOUD R5300 G4** benefit from Intel's experience in the NFV market and get workload-optimized performance from the Intel® Xeon® Scalable processors.

Configuration and Specification

The **ZTE ZXCLOUD R5300 G4** is a verified Intel Select Solution for NFVI server that leverages the following components:

Item	Description
Server Name	ZXCLOUD R5300 G4
Processor	2* Intel® Xeon® Scalable Gold processors 6152
Memory	12* 32GB DDR4-2666MHz (384GB)
Network Controller	2 * Intel® Ethernet Server Adapter X520-DA2 SFP+
Storage (NVMe)	2 * Intel® Solid State Drive Data Center P4500 Series
Storage (SATA)	2 * Intel® SSD DC S3510 Series
Intel QAT	1*Intel® QuickAssist Adapter 8970
Operating System	RHEL 7.4
Other Hardware Features	LSI RAID9361-8i Controller card

Product Description

ZXCLOUD R5300 G4 is ZTE's new generation 2U 2-socket Rack Server, including the Intel® Xeon® Scalable processors. ZXCLOUD R5300 G4 uses high-density, modular design, providing high performance, high reliability, high scalability, easy management and other features, widely applicable to Internet, cloud computing, big data, NFV, SDN and other fields.



◆ High Performance and High Density

Uses 2 Intel® Xeon® Scalable processors; one processor can have up to 28 cores.

Supports 24 DDR4 memory slots. The maximum rate of its memory can reach 2666MT/S.

Supports to configure high-performance NVMe SSD to provide high-speed I/O performance.

◆ High Scalability and High Bandwidth

Supports up to 32 2.5" hard disks.

Provides up to 12 NVMe U.2 SSD slots to solve the bottleneck of slow hard disk accessing in the traditional solution.

Provides a variety of hard disk frames and RAID cards to flexibly configure local storage according to service requirements.

Supports up to 9 PCIe3.0 expansion slots, supports two GPU cards, to provide powerful computing capability.

◆ High Availability and High Reliability

Excellent heat dissipation design is adopted to improve the reliability of the system while prolonging the life of components and reducing the cost.

Key components use redundancy design, hard disk, power supply and fan support hot plug, to improve the availability of the system.

Supports RAID, 0, 1, 5, 6, 10, 50, 60, to provide a variety of data protection program.

Power module adopts 1+1 redundancy mode.

◆ Convenient Management and Easy Maintenance

Supports WEB mode with external centralized management, to achieve CPU, memory, hard disk, fan, power, network and other resources management monitoring.

Supports powerful KVM capabilities.

Supports IPMI2.0, Redfish, SNMP, DCMI1.5, and can be integrated with third-party management system.

◆ **Green, Energy Conservation and Environmental Protection**

Platinum power module, the conversion efficiency is as high as 94%, supports power capping.

Intelligent speed regulation and mute design of fan.

Intelligent CPU frequency conversion: according to the service pressure, to intelligently adjust CPU work frequency.

Green, lead free, and environmental protection.

Product Technical Specifications

Specifications	ZXCLOUD R5300 G4
Host Features	
Form	2U Rack Server
Processor	2* Intel® Xeon® Scalable processors
Intel® QAT	Intel® QuickAssist Adapter 8970
Memory	Supports 24 DDR4 memory slots. The maximum rate of its memory can reach 2666MT/S
Hard disk controller	RAID card for optional configuration, supports RAID 0/1/5/6/10/50/60, supports power down protection
Local storage	Front storage configuration: 8*2.5" SAS/SATA HDDs/SSDs, hot-swappable 12*3.5" / 2.5" SAS/SATA HDDs/SSDs or NVMe SSDs, hot-swappable 24*2.5" SAS/SATA HDDs/SSDs, supporting 12 NVMe SSDs, hot-swappable Rear storage configuration: 2* 2.5" SAS/SATA HDDs/SSDs, hot-swappable 4* 3.5"/2.5" SAS/SATA HDDs/SSDs, hot-swappable (optional) Inbuilt memory configuration: 2* 2.5" SATA SSDs (optional) Inbuilt dual-SD cards (optional) Inbuilt 2* M.2 SSDs (optional)
Display	Integrated graphics
IO Module	
Network Resource	2* 10GE optical ports + 2* GE copper ports, supporting NCSI 2* GE copper ports, supporting NCSI

PCIe slot	Up to 9* PCIe3.0 expansion slots, 2* GPU cards
Peripheral interface	6* USB ports (4* rear USB3.0, 2* front USB2.0) 1* serial port 1* front VGA port + 1* rear VGA port 1* independent management Ethernet port
Physical Features	
Power	Platinum power supply of 550W, 800W and 1200W in 1+1 hot-swap redundancy mode Supports 110VAC, 220VAC, -48VDC, 240V HVDC, 336V HVDC
Working Environment (temperature and humidity)	Working temperature: +5°C~+40°C Storage temperature: -40°C~+70°C Relative humidity: working 10%~90%, non-working 5%~95% Altitude: ≤3000M
Dimension	H (88.1 mm) x W (447mm) x D (752mm)
Fan	6* fans (N+1 redundancy mode), supporting the cooling system with dynamic smart fan speed control
Weight	About 30kg (full configuration)
Certificates	CE, CB, UL, FCC, CCC, CEC, CQC, RohS

Key Benefits

Key benefits of investing in Intel Select Solutions for NFVI from ZTE include:

Faster evaluation: Intel Select Solutions for NFVI tight hardware and software specifications eliminate guesswork and speed decision-making. IT managers can focus their search on key value-added elements and select an optimal solution quickly.

Fast and easy deployment: Intel Select Solutions for NFVI feature pre-defined settings and rigorous system-wide tuning for efficient pre-deployment testing. IT staff know what to expect up front, which speeds time to service delivery and increases confidence in solution performance.

Workload-optimized performance: Intel Select Solutions for NFVI configurations are designed by Intel and its partners to deliver to a performance threshold for the workload and are built on the latest Intel architecture technology including Intel Xeon Scalable platforms.

Learn More

To find out more about the **ZTE ZXCLLOUD R5300 G4**, visit

<https://www.zte.com.cn/global/products/201904031549/201707261051/R5300G4>

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