



# **SAP**<sup>®</sup> Certified Hardware for SAP HANA®

# Huawei SAP HANA Appliance

Driving Faster Time-to-Insights for Enterprises



## Simplified IT

Huawei Teams with SAP to Help Enterprises Tackle IT Challenges with More Ease

Emerging technologies such as Big Data, cloud computing and mobility have redefined the way companies handle information and increased IT complexity accordingly. IT challenges have become a primary pain point to most enterprises. The increasingly complicated IT environments also make data processing amore challenging task. Failing to harness the information properly will prevent enterprises from gaining insights inside and outside the companies, which in turn will leave them unable to react rapidly to the changing business climate. It has become imperative for enterprises to leverage new information technologies to boost productivity based on better-informed decisions.

Inspired by the same mindset to make IT simpler, Huawei and SAP have been working to synergize Huawei's high-performing, reliable ICT infrastructures and SAP's cutting-edge HANA in-memory computing platform to help enterprises reinvent their business operation models. The Huawei-SAP partnership has led to a range of solutions that enable enterprises to manage business data in a flexible, economical, efficient, and real-time manner. These benefits have translated into better real-time business operation capabilities for the companies to grow their business sustainably.



# Huawei and SAP Jointly Launch a Full Series of SAP HANA Appliance Solutions

### Scale-up SAP HANA Appliance

Scale-up solutions powered by Huawei's 2-socket (2S), 4S, 8S, 12S, and 16S servers, and applicable to SAP Business One applications SAP Business Suite, SAP S/4HANA, BW/4HANA, SAP Business Warehouse scenarios.

### Scale-out SAP HANA Appliance

Applicable to scenarios such as BW/4HANA and SAP Business Warehouse.

## SAP HANA Virtualization Solution

Huawei SAP HANA appliances combined with Huawei FusionSphere cloud OS to help enterprises move their SAP applications and SAP HANA to the cloud with ease.

# Huawei SAP HANA appliances will empower you with:

### Real-time smart operation and insightful decision-making

Running on SAP HANA software, the Huawei SAP HANA appliance leverages Huawei's leading-edge software and hardware acceleration technologies to unlock exceptional real-time data processing and analytics power. It enables you to derive insights into your enterprise operation anywhere, anytime, on any device. By analyzing machine data, event stream data, and production data in real time, it presents the freshest analytical results to stakeholders to help them make better-informed decisions.

#### Data warehouse and data market

Consolidating data across multiple systems of an enterprise, the Huawei SAP HANA appliance gives the SAP Business Warehouse software full play and drills down into operation analytics to uncover the valuable potential beneath data. Empowered by the Huawei OceanStor converged storage, and FusionStorage distributed storage products, the Huawei SAP HANA appliance delivers ultra-low latency and leading IOPS performance to optimize the HANA storage data persistence I/O performance. The Huawei BW on SAP HANA solution helps enterprises access value information at the desired speeds and precision to tap into the data assets that matter the most to their business success.



## SAP HANA Scale Up Solution for S/4HANA

The Huawei SAP HANA scale-up appliance is engineered with a leading hardware architecture and delivers exceptional computing power as well as scalability to ensure efficient, stable service running. The solution offers ideal choices for running mission-critical applications on SAP Business Suite and Business Warehouse.

Huawei offers SAP HANA appliance scale-up solutions based on the Huawei Fusion-Server series servers(2S, 4S and 8S), as well as KunLun Mission Critical Servers (8S, 12S, and 16S), for running SAP Business Suite. Huawei SAP HANA appliances have been certified by SAP for providing memory capacities of up to 16 TB on a single nod.

Scale-up solution	2288H V5/S/4HANA(Skylake 8180/8180m/8176/8176m)						2488H V5/S/4HANA(Skylake 8180/8180m/8176/8176m)						
HANA memory	192 GB	384 GB	576 GB	768 GB	1536 GB	3072 GB	192 GB	384 GB	576 GB	768 GB	1536 GB	3072 GB	6144 GB
Number of processors	2	2	2	2	2	2	2	2	2	2	2	2	4
Basic version (high-performance SAS HDD) HANA log/data volume	4 x 1800 GB	4 x 1800 GB	4 x 1800 GB	4 x 1800 GB	6 x 1800 GB	9 x 1800 GB	9 x 1800 GB	9 x 1800 GB	9 x 1800 GB	9 x 1800 GB	9 x 1800 GB	9 x 1800 GB	18 x 1800 GB
Advanced version (all-flash) HANA log/data volume	5 x 800 GB	5 x 800 GB	7 x 800 GB	7 x 800 GB	10 x 800 GB	20 x 800 GB	4 X 3200 GB	4 X 3200 GB	4 X 3200 GB	4 X 3200 GB	4 X 3200 GB	6 x 3200 GB	10 x 3200 GB
Operating systems	SLES for SAP Applications, RHEL for SAP solutions					SLES for SAP Applications, RHEL for SAP solutions							

Scale-up solution	KunLun 9008 V5/8100 V5/S/4HANA(Skylake 8180/8180m/8176/8176m)						Kunlun 9008/9016 S/4HANA(Broadwell-EX E7-8880/8890/8894 V4)									
HANA memory	768 GB	1152 GB	1536 GB	2304 GB	3072 GB	6144 GB	12288 GB	2 T	3 T	4 T	6 T	8 T	9T	12T	12T	16 T
Number of processors	4	4	4	4	4	4	8	4	4	4	8	8	12	12	16	16
Basic version (high-performance SAS HDD) HANA log/data volume	9 x 1800 GB	9 x 1800 GB	9 x 1800 GB	9 x 1800 GB	9 x 1800 GB	18 x 1800 GB	N/A	7 x 1800 GB	18 x 1800 GB	18 x 1800 GB	18 x 1800 GB	N/A	N/A	N/A	N/A	N/A
Advanced version (all-flash) HANA log/data volume	6 x 3200 GB	6 x 3200 GB	6 x 3200 GB	6 x 3200 GB	6 x 3200 GB	10 x 3200 GB	20 x 3200 GB	5 x 3200 GB	8 x 3200 GB	8 x 3200 GB	10 x 3200 GB	13 x 3200 GB	19 x 3200 GB	19 x 3200 GB	19 x 3200 GB	24 x 3200 GB
Operating systems	SLES for SAP Applications, RHEL for SAP solutions				SLES for SAP Applications, RHEL for SAP solutions											





## SAP HANA Scale Up Solution for BW

Huawei offers SAP HANA appliance scale-up solutions based on the Huawei Fusion-Server series servers(2S, 4S and 8S), as well as KunLun Mission Critical Servers (8S and 16S), for running SAP Business Warehouse. Huawei SAP HANA appliances have been certified by SAP for providing memory capacities of up 8TB on a single node.

Scale-up solution	2	288H V5/BWoH(S	kylake 8180/818	30m/8176/8176m	1)	2488H V5/BWoH(Skylake 8180/8180m/8176/8176m)					
HANA memory	192 GB	384 GB	576 GB	768 GB	1536 GB	192 GB	384 GB	576 GB	768 GB	1536 GB	3072 GB
Number of processors	2	2	2	2	2	2	2	2	2	2	4
Basic version (high-performance SAS HDD) HANA log/data volume	4 x 1800 GB	4 x 1800 GB	4 x 1800 GB	4 x 1800 GB	6 x 1800 GB	9 x 1800 GB	9 x 1800 GB	9 x 1800 GB	9 x 1800 GB	9 x 1800 GB	9 x 1800 GB
Advanced version (all-flash) HANA log/data volume	5 x 800 GB	5 x 800 GB	7 x 800 GB	7 x 800 GB	10 x 800 GB	4 x 3200 GB	4 x 3200 GB	4 x 3200 GB	4 x 3200 GB	4 x 3200 GB	6 x 3200 GB
Operating systems	SLES for SAP Applications, RHEL for SAP solutions					SLES for SAP Applications, RHEL for SAP solutions					

Scale-up solution	Kunlun 9008/9016 BWoH(Broadwell-EX E7-8880/8890/8894 v4)									
HANA memory	512 GB	1 TB	1.5 TB	2 TB	3 TB	4 TB	8TB			
Number of processors	4	4	4	4	8	8	16			
Basic version (high-performance SAS HDD) HANA log/data volume	7 x 1800 GB	7 x 1800 GB	7 x 1800 GB	7 x 1800 GB	18 x 1800 GB	18 x 1800 GB	N/A			
Advanced version (all-flash) HANA log/data volume	5 x 3200 GB	5 x 3200 GB	5 x 3200 GB	5 x 3200 GB	8 x 3200 GB	8 x 3200 GB	13 x 3200 GB			
Operating systems	SLES for SAP Applications, RHEL for SAP solutions									





# SAP HANA Scale Out Solution for BW & S/4HANA

Powered by the Huawei FusionServer series servers (4S and 8S), and the KunLun Mission Critical Server (8S), as well as the OceanStor converged storage system, the Huawei SAP HANA appliance scale-out solution is ideal for enterprise data warehouse, data market, and real-time analytics scenarios. The scale-out solution offers up to 96TB HANA memory expansion capabilities for SAP Business Warehouse applications.

### Scale Out Solution for BW

Scale-out solution	2488H V5 / E9000(CH242) V5	KunLun 9008	3 V5/8100 V5			
Single-node memory	3ТВ	3ТВ	6TB			
Processor model	Skylake 8180/8180m/8176/8176m	Skylake 8180/8180m/8176/8176m				
Number of processors	4	4	8			
Number of expansion nodes (including one backup node)	15+1	15+1	15+1			
Available memory	48TB	48TB	96TB			
Storage system	OceanStor con					
HANA log volume storage	High-performance SSDs					
HANA data volume storage	High-performance SAS					
Service switch	High-performance 10GE switches					
Storage switch		mance Fibre C) switches				
Operating systems	SLES for SAF	Applications				

Powered by the Huawei KunLun Mission Critical Server (8S), as well as the OceanStor converged storage system, the Huawei SAP HANA appliance scale-out solution offers up to 60TB HANA memory expansion capabilities for S/4HANA applications with 12 TB on a single node.

### Scale Out Solution for S/4HANA

Scale-out solution	KunLun 9008 V5
Single-node memory	12TB
Processor model	Skylake 8180/8180m/8176/8176m
Number of processors	8
Number of expansion nodes (including one backup node)	4+1
Available memory	60TB
Storage system	OceanStor converged storage
HANA log volume storage	High-performance SSDs
HANA data volume storage	High-performance SAS
Service switch	High-performance 10GE switches
Storage switch	High-performance Fibre Channel (FC) switches
Operating systems	SLES for SAP Applications



## 5 Reasons for Choosing Huawei

# Leading IT Products Based on over 10 Years of Industry Experience

Huawei IT products are engineered with leading architectures and provide excellent computing, storage, and expansion performance. They also demonstrate extraordinary reliability to ensure continuous and stable running for devices, meeting the requirements of various demanding computing environments. The Huawei Fusion-Server series servers and KunLun Mission Critical Servers are among the industry's first certified SAP HANA appliances. The entire series of Huawei OceanStor converged storage has been certified for providing enterprise-grade storage on SAP HANA. Huawei IT products have been recognized by customers across different industries for their outstanding performance and reliability.

## Holistic SAP HANA Infrastructure Solutions

Huawei is the industry's only vendor capable of providing a complete array of SAP HANA solutions covering servers, storage, virtualization, and cloud data centers. Huawei offers the industry's most comprehensive SAP HANA infrastructure solutions, which include end-to-end product portfolios to meet diversified application requirements of enterprises.

# Tireless R&D Innovations for Continuously Optimized SAP HANA Infrastructures

Huawei's SAP application servers and HANA appliances have been thoroughly optimized in hardware and software regarding the SSDs, memory cache, and Node Controller (NC) interconnect chip. The Huawei SAP HANA products and solutions deliver industry-leading B4H and SD2 benchmark performance to help enterprises improve real-time operation capabilities. Meanwhile, the KunLun Mission Critical Servers support the memory hot swap technology. This feature transforms unplanned system outage caused by memory faults into planned online maintenance without system shutdown, thereby drastically improving the reliability of HANA large-scale in-memory databases.

## Extensive Delivery Experience and Dependable Service Assurance

As a leading supplier of SAP HANA hardware solutions with large-scale application around the globe, Huawei has built up a wealth of delivery experience. Pre-installed at the factory, Huawei SAP HANA appliances are delivered in a one-stop fashion, which drives down complexity from procurement through delivery. At the same time, Huawei has a professional service team with global reach, ensuring premium service quality for enterprises.

## (5) An SAP Partner with In-Depth Collaboration

In 2014, the Huawei Innovation Center was launched and Huawei celebrated the Huawei Day at the Partner Port at Walldorf, Germany, the SAP headquarters. In 2015, Huawei and SAP announced the official opening of the Huawei & SAP Co-Innovation Center in Shenzhen, which opened a brand new chapter for their strategic collaboration. In the same year, Huawei received the SAP HANA Innovation Award 2015 from SAP. In 2016, Huawei, as a top-class sponsor, attended the SAPPHIRE NOW global conference held by SAP in Orlando, USA. In 2017, the Huawei KunLun Mission Critical Server was certified for operating SAP HANA of 16 TB. Customers using SAP® ERP applications can now choose KunLun to serve as their SAP HANA in-memory database platform for running mission-critical services.



For more information, visit the Huawei enterprise business website at: http://e.huawei.com/en/solutions/business-needs/data-center/sap-hana

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