

Fact Sheet

FUJITSU Integrated System

PRIMEFLEX® for SAP HANA® Solution

The PRIMEFLEX for SAP HANA® Platform is an SAP®-certified infrastructure solution for SAP HANA®.

Introduction to SAP HANA and the Fujitsu Infrastructure Offering

SAP HANA is an innovative data platform optimized for performing real-time analytics and handling real-time transaction workloads. It is based on innovative in-memory technology which allows real-time access to massive amounts of data, by holding live data in the quickly accessible main memory.

The maturation of industry-standard technology is a basic enabler for in-memory technology, as it provides the necessary power and capacity at an affordable price. PRIMEFLEX for SAP HANA fulfills the substantial technical prerequisites and is certified by SAP. The on-site services ensure a fast and non-disruptive implementation and operation at customer site.

New Features Version 5.0

Support of Sapphire Rapids-SP based servers PRIMERGY RX2540 M7.

Single-Node Offering

This offering is based on PRIMERGY RX4770 M6, RX2540 M6/M7 and PRIMEQUEST 3x00B2/E2 servers and comprises the following options for SAP HANA DataMart, BWoH, BW/4H.

PRIMERGY RX4770 M6 2x CPU
192/384/768/1536 GB Memory

PRIMERGY RX4770 M6 4x CPU
192/384/768/1536/3072 GB Memory
PRIMERGY RX2540 M6 2x CPU
128/256/512/1024/2048 GB Memory
PRIMERGY RX2540 M7 2x CPU
128/256/512/1024/2048 GB Memory
PRIMEQUEST 3x00B2/E2 2x CPU
192/384/768/1536 GB Memory
PRIMEQUEST 3x00B2/E2 4x CPU
384/768/1536/3072GB Memory
PRIMEQUEST 3x00B2/E2 8x CPU
768/1536/3072/6144 GB Memory

as well as following options for SAP HANA SoH & S/4H:

PRIMERGY RX4770 M6 2x CPU
192/384/768/1536/3072 GB Memory
PRIMERGY RX4770 M6 4x CPU
192/384/768/1536/3072/6144 GB Memory
PRIMERGY RX2540 M6 2x CPU
128/256/512/1024/2048/4096 GB
PRIMERGY RX2540 M7 2x CPU
256/512/1024/2048/4096 GB Memory
PRIMEQUEST 3x00B2/E2 2x CPU
192/384/768/1536/3072 GB Memory
PRIMEQUEST 3x00B2/E2 4x CPU
384/768/1536/3072/6144 GB Memory
PRIMEQUEST 3x00B2/E2 6x CPU
576/1152/2304/4608/9216GB Memory
PRIMEQUEST 3x00B2/E2 8x CPU
768/1536/3072/6144/12288 GB Memory

Complementary Components for Smart Implementation and Operation

Fujitsu Infrastructure Support

PRIMEFLEX for SAP HANA consists of hardware, software, and network products from different vendors. The Fujitsu Infrastructure Support is designed to provide seamless support for the entire infrastructure solution. Fujitsu acts as the single point of contact and provides support for all solution components and their interoperability. This relieves customers from contacting different organizations in case of a system failure and consequently helps to reduce downtimes. Furthermore, the mix of proactive and reactive services allows detection and correction of malfunctions before they may have any impact on operations. The offering is available as SolutionContract or as SolutionPack combined with Support Packs. SolutionPack is the entry level service product for infrastructure support. SolutionContract provides flexibility with regards to the contract period and the contracted infrastructure, both allows several service level options depending on individual needs. Support Packs provide product related maintenance services to complement Fujitsu's product warranty. They comprise reactive service elements focusing on diagnosis of hardware or software faults and their elimination. The services are delivered remotely, offsite, or onsite.

More Solution Offers for SAP HANA: Single-Node (Scale Up) Versions

The SAP-certified PRIMERGY RX4770 M6, RX2540 M6/M7 and PRIMEQUEST 3x00B2/E2 Single Node Appliance configurations can also be combined with ETERNUS DX/AF Storage, NetApp FAS/AFF Series, and other SAP-certified storage systems according to the SAP HANA Tailored Data Center Integration approach.

SAP HANA SN can also be used in a VMware virtualized environment.

Additional PRIMERGY RX/TX models are supported as entry-level system for SAP HANA, please refer to the SAP HANA Certified and Supported Hardware Directory.

<https://www.sap.com/dmc/exp/2014-09-02-hana-hardware/enEN/appliances.html>

Moreover, we do offer a PRIMEFLEX solution for SAP HANA on VMware vSAN. Details can be found here:

<https://sp.ts.fujitsu.com/dmsp/Publications/public/pf4vv-sh-tec-prod-spec-ww-en.pdf>

Multi-Node (Scale Out) Reference Architectures

SAP-certified multi-node reference architectures enable tailor-made scale-out offers. The reference architectures are based on PRIMERGY RX4770 M6 and PRIMEQUEST 3x00B2/E2 servers and NetApp AFF A300 Series for the Storage Backend. Other SAP-certified storage systems like the ETERNUS DX/AF series can be used according to the SAP HANA Tailored Data Center Integration approach.

SAP HANA MN can also be used in a VMware virtualized environment.

Please discuss the requirements with your local Fujitsu sales contact.

Features and benefits

Main features	Benefits
<p>Single-Node Offering</p> <ul style="list-style-type: none"> • Infrastructure: optimized and SAP certified • Certified, customized delivery • Industrialized, end-to-end services for end-to-end data center implementation and integration • Comprehensive maintenance support services • Scalable size options from 192GB to 12TB (DRAM) - with PMem even up to 24TB for PRIMERGY RX4770 M6 and PRIMEQUEST 3x00B2/E2 • Infrastructure support based on product related maintenance services offered as Fujitsu SolutionContract or hardware and software support packs combined with SolutionPack. 	<ul style="list-style-type: none"> • Reliable, high-performance platforms for efficient use of SAP HANA • Error prevention and stable operation • Non-disruptive, high-quality integration into the existing environment • Reliable and quick support that minimizes downtime • Scalable size options from 192GB to 12TB (DRAM) - with PMem even up to 24TB for PRIMERGY RX4770 M6 and PRIMEQUEST 3x00B2/E2 • Infrastructure support based on product related maintenance services offered as Fujitsu SolutionContract or hardware and software support packs combined with SolutionPack. • Right size for different projects sizes and easy upgrade to meet growing demands • The right support service level with flexible service options to meet individual customer needs

The elaborate PRIMEFLEX for SAP HANA offering is rounded off by a complete set of services which cover all projects phases from a customer specific solution concept to continuous solution support. With the comprehensive infrastructure and service approach Fujitsu aims to ensure mission-critical readiness combined with reduced TCO.

Technical details

	SINGLE-NODE configuration options for PRIMERGY RX2540 M7	SINGLE-NODE configuration options for PRIMERGY RX4770 M6 and PRIMERGY RX2540 M6
HANA Node	<p>SAP HANA configurations:</p> <p>Choice of Intel Xeon CPU SKUs:</p> <p>For RX2540 M7</p> <p>Intel Xeon Platinum 8480+ 56C 2.0 GHz 2 CPU Intel Xeon Platinum 8470 52C 2.0 GHz 2 CPU Intel Xeon Platinum 8490H 60C 1.9 GHz 2 CPU</p> <p>Memory Options:</p> <p>16GB (1x16GB) 1Rx8 DDR5-4800 R ECC 32GB (1x32GB) 2Rx8 DDR5-4800 R ECC 32GB (1x32GB) 1Rx4 DDR5-4800 R ECC 64GB (1x64GB) 2Rx4 DDR5-4800 R ECC 128GB (1x128GB) 4Rx4 DDR5-4800 R 3DS ECC 256GB (1x256GB) 8Rx4 DDR5-4800 R 3DS ECC</p> <p>Please, refer to the Config Guide to determine the right quantity.</p> <p>Mixed Memory:</p> <p>The mix of DRAM memory modules is not supported by SAP on this platform.</p> <p>Non Volatile Memory:</p> <p>Intel PMem is not part of the HANA appliance configuration.</p>	<p>SAP HANA configurations:</p> <p>Choice of Intel Xeon CPU SKUs:</p> <p>For RX4770 M6:</p> <p>Intel Xeon Platinum 8376H 28C 2.6 GHz 2 or 4 CPU For use with up to 1.12 TB memory per processor. Intel Xeon Platinum 8380H 28C 2.9 GHz 2 or 4 CPU For use with up to 1.12 TB memory per processor. Intel Xeon Platinum 8376HL 28C 2.6 GHz 2 or 4 CPU For use with up to 4.5 TB memory per processor. Intel Xeon Platinum 8380HL 28C 2.9 GHz 2 or 4 CPU For use with up to 4.5 TB memory per processor. For RX2540 M6 Intel Xeon Platinum 8368 38C 2.4 GHz 2</p> <p>CPU For RX2540 M6</p> <p>Intel Xeon Platinum 8368 38C 2.4 GHz 2 CPU For RX2540 M6</p> <p>Memory Options:</p> <p>8GB (1x8GB) 1Rx8 DDR4-3200 R ECC 16GB (1x16GB) 2Rx8 DDR4-3200 R ECC 16GB (1x16GB) 1Rx4 DDR4-3200 R ECC 32GB (1x32GB) 2Rx4 DDR4-3200 R ECC 64GB (1x64GB) 2Rx4 DDR4-3200 R ECC 128GB (1x128GB) 4Rx4 DDR4-3200 R 3DS ECC 256GB (1x256GB) 8Rx4 DDR4-3200 R 3DS ECC 64GB (1x64GB) 4Rx4 DDR4-3200 LR ECC 128GB (1x128GB) 4Rx4 DDR4-3200 LR ECC</p> <p>Please, refer to the Config Guide to determine the right quantity.</p> <p>Mixed Memory:</p> <p>The following size combinations are allowed on RX4770 M6:</p> <p>8GB 1Rx8 and 16GB 2Rx8, 16GB 1Rx4 and 32GB 2Rx4 and 32GB 2Rx4, 128GB 4Rx4 and 256GB 8Rx4, 64GB 4Rx4 and 128GB 4Rx4</p> <p>Please, refer to the Config Guide to determine the supported conditions.</p>

		<p>Non-Volatile Memory:</p> <p>The use of Intel Optane™ PMem 200 Series on RX4770 M6 and RX2540 M6 will be supported for TDI projects only. Please, refer to the Config Guide to determine the right quantity and the supported combinations</p>
Network Card	<p>PLAN EP MCX6-DX 2X 100G QSFP28 LP</p> <p>PLAN EP X710-T2L 2X 10GBASE-T LP</p> <p>PLAN CP 4x1Gbit Cu Intel I350-T4 LP</p>	<p>PLAN EP MCX6-DX 2X 100G QSFP28 LP (RX4770 M6), PLAN EP E810-CQDA2 2X 100G QSFP28 LP (RX4770 M6 and RX2540 M6)</p> <p>Recommended 100 Gbps, 2 ports. PLAN CP 4x1Gbit Cu Intel I350-T4 FH Recommended 1 Gbps, 4 ports for RX4770 M6. PLAN CP I350-T4 4X 1000BASE-T OCPv3 for RX2540 M6</p>
Storage System	<p>ETERNUS JX40S2 Storage as external Subsystem is not available on this platform.</p>	<p>1-2 ETERNUS JX40S2 Storage as external Subsystem if needed</p>

SOFTWARE

Operating System	<p>SUSE® Linux Enterprise Server for SAP Applications SLES4SAP15 SP4</p>	<p>SUSE® Linux Enterprise Server for SAP Applications SLES4SAP15 SP4</p>
	<p>RHEL 8.6 for SAP Solutions</p>	<p>RHEL 8.6 for SAP Solutions</p>
SAP Software	<p>SAP HANA Software V1.0 & V2.0</p>	<p>SAP HANA Software V1.0 & V2.0</p>
	<p>The SAP HANA Software must be purchased by the customer from SAP SE</p>	<p>The SAP HANA Software must be purchased by the customer from SAP SE</p>

SINGLE-NODE configuration options for PRIMEQUEST 3X00B2/E2

<p>SAP HANA configurations:</p> <p>Choice of Intel Xeon CPU SKUs:</p> <p>Intel Xeon Platinum 8276 28C 2.20 GHz 2,4,6 or 8 CPU For use with less or equal to 1TB per CPU.</p> <p>Intel Xeon Platinum 8280 28C 2.70 GHz 2,4,6 or 8 CPU For use with less or equal to 1TB per CPU.</p> <p>Intel Xeon Platinum 8276L 28C 2.20 GHz 2,4,6 or 8 CPU Required for more than 4.5TB per CPU. Intel Xeon Platinum 8280L 28C 2.70 GHz 2,4,6 or 8 CPU Required for more than 4.5TB per CPU.</p> <p>Memory Options:</p> <p>32GB (2x16GB) 1Rx4 DDR4-2933 R ECC</p> <p>64GB (2x32GB) 2Rx4 DDR4-2933 R ECC</p> <p>128GB (2x64GB) 2Rx4 DDR4-2933 R ECC</p>	
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	<p>128GB (2x64GB) 4Rx4 DDR4-2933 LR ECC 256GB (2x128GB) 8Rx4 DDR4-2933 3DS LR ECC 512GB (2x256GB) 8Rx4 DDR4-2933 3DS LR ECC</p> <p>Please, refer to the Config Guide to determine the right quantity.</p> <p>Mixed Memory:</p> <p>The following size combinations are allowed: 16 GB and 32 GB, 32 GB and 64 GB, 64 GB and 128 GB, 128 GB and 256 GB</p> <p>Please, refer to the Config Guide to determine the supported conditions.</p> <p>Non-Volatile Memory:</p> <p>The use of Intel Optane™ PMem 100 Series will be supported for TDI projects only.</p> <p>Please, refer to the Config Guide to determine the right quantity and the supported combinations.</p>	
	<p>PLAN EP X710-DA2 2x10Gb SFP+ LP Recommended 2x 10 Gbps network card. Optional SFP+ modules may be required</p> <p>PLAN CP 4x1Gbit Cu Intel I350-T4 Recommended 4x 1 Gbps network card</p>	
SOFTWARE		
Operating System	SUSE® Linux Enterprise Server for SAP Applications SLES4SAP15 SP4	
	RHEL 8.6 for SAP Solutions	
SAP Software	SAP HANA Software V1.0 & V2.0	
	The SAP HANA Software must be purchased by the customer from SAP SE	

DELIVERY, IMPLEMENTATION, DOCUMENTATION & SUPPORT	
User Interface	English
Installation	Installed and configured at customer side
User Requirements	Knowledge of SAP software is a prerequisite
Warranty	Only warranty ensured by components
Maintenance and Support Services	Fujitsu SolutionContract for PRIMEFLEX for SAP HANA or Support Pack combinations: SolutionPack: 9x5 remote response 2 hrs or 24x7 remote response 2 hrs. Support Pack Software: 9x5 remote response 4hrs or 24x7 remote response 4 hrs. Support Pack Hardware: 9x5 on-site response NBD or 24x7 on-site response 4 hrs.
Contact	Fujitsu Technology Solutions GmbH Munich, Germany

More Informations

Fujitsu Optimization Services

In addition to the FUJITSU Integrated System PRIMEFLEX for SAP HANA, Fujitsu provides a range of platform solutions. They combine reliable Fujitsu products with the best in services, know-how and worldwide partnerships.

Dynamic Infrastructures

With the Fujitsu Dynamic Infrastructures approach, Fujitsu offers a full portfolio of IT products, solutions and services, ranging from clients to datacenter solutions, Managed Infrastructure and Infrastructure as a Service. How much you benefit from Fujitsu technologies and services depends on the level of cooperation you choose. This takes IT flexibility and efficiency to the next level.

Computing products

<https://www.fujitsu.com/global/products/>

Software

<https://www.fujitsu.com/emeia/products/software/>

Solutions

<https://www.fujitsu.com/emeia/solutions/>

More information

Learn more about PRIMEFLEX for SAP HANA, please contact your Fujitsu sales representative or visit our website

<http://www.fujitsu.com/global/hana>

Fujitsu green policy innovation

Fujitsu Green Policy Innovation is our worldwide project for reducing burdens on the environment. Using our global know-how, we aim to resolve issues of environmental energy efficiency through IT. Please find further information at:

<http://www.fujitsu.com/global/about/environment/>



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