

# PRIMERGY RX4770 M7 Achieves World Record on SAP BW Edition for SAP HANA Benchmark



On June 13, 2023, the brand-new PRIMERGY RX4770 M7 sets a new overall world record on the SAP BW Edition for SAP HANA Standard Application Benchmark Version 3 on scale-up configurations with 7.8 billion initial records (as of 2023-06-13).

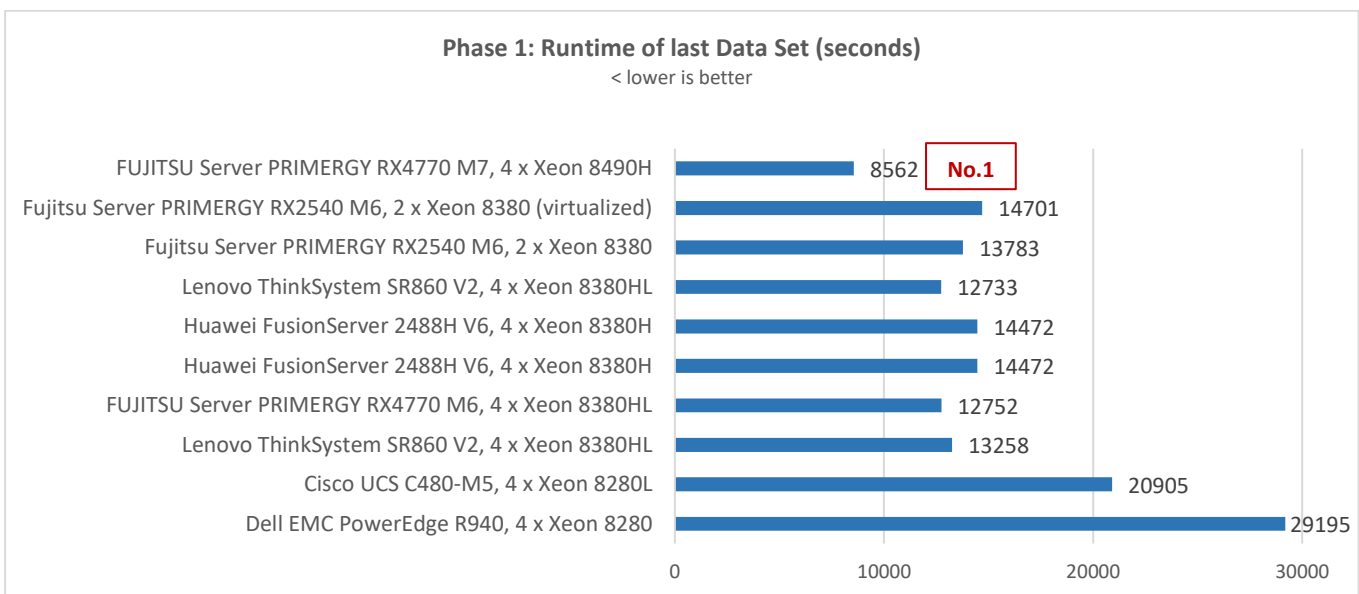
The PRIMERGY RX4770 M7 was equipped with Intel's Xeon Platinum 8480H processor (4 processors, 240 cores, 480 threads, 4th Generation Intel Xeon Scalable Processor aka Sapphire Rapids) and 4096 GB of DRAM, running the SAP BW edition for SAP HANA Standard Application Benchmark Version 3 with 7.8 billion initial records on SAP NetWeaver 7.50, SAP HANA 2.0 and SUSE Linux Enterprise Server 15.

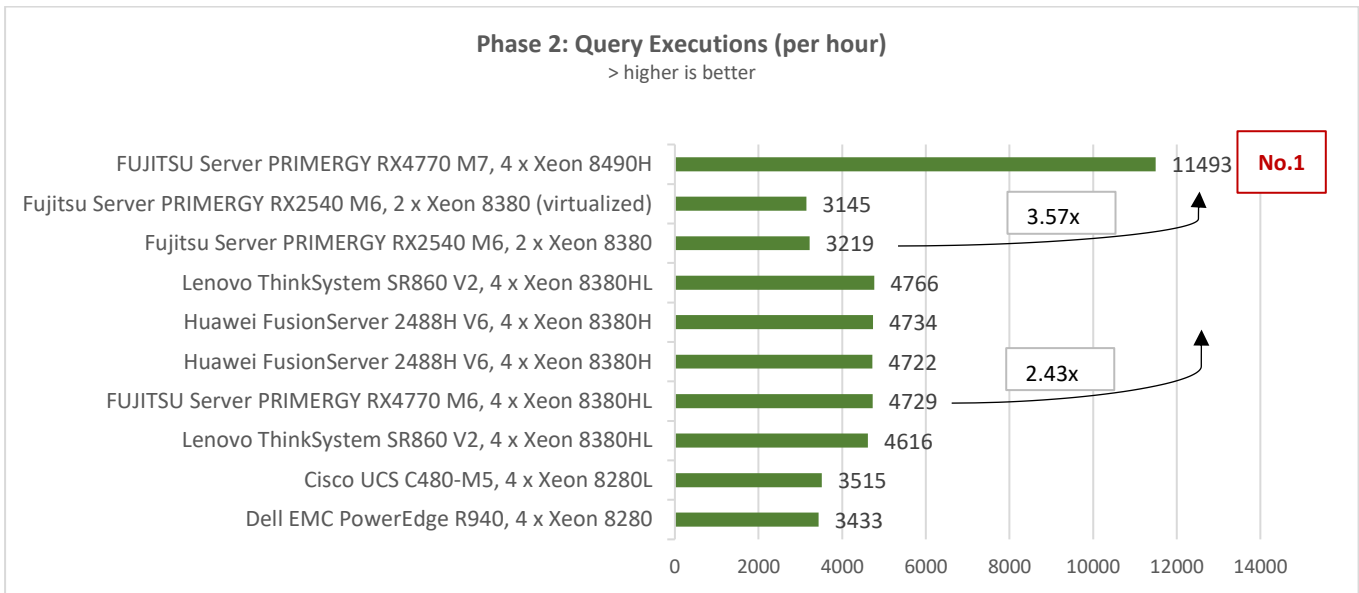
Compared to its predecessor RX4770 M6 with Intel Xeon Platinum 8380HL processor (4 processors, 112 cores, 224 threads, 3rd Generation Xeon Scalable Processor aka Cooper Lake), RX4770 M7 increases the query throughput in benchmark phase 2 by an impressive factor of 2.4.

Compared to the 2 socket RX2540 M6 with Intel Xeon Platinum 8380 processor (2 processors, 80 cores, 160 threads, 3rd Generation Xeon Scalable Processor aka Ice Lake), RX4770 M7 achieves factor 3.6 more query throughput in phase 2.

Find a detailed comparison of the benchmark results in the following.

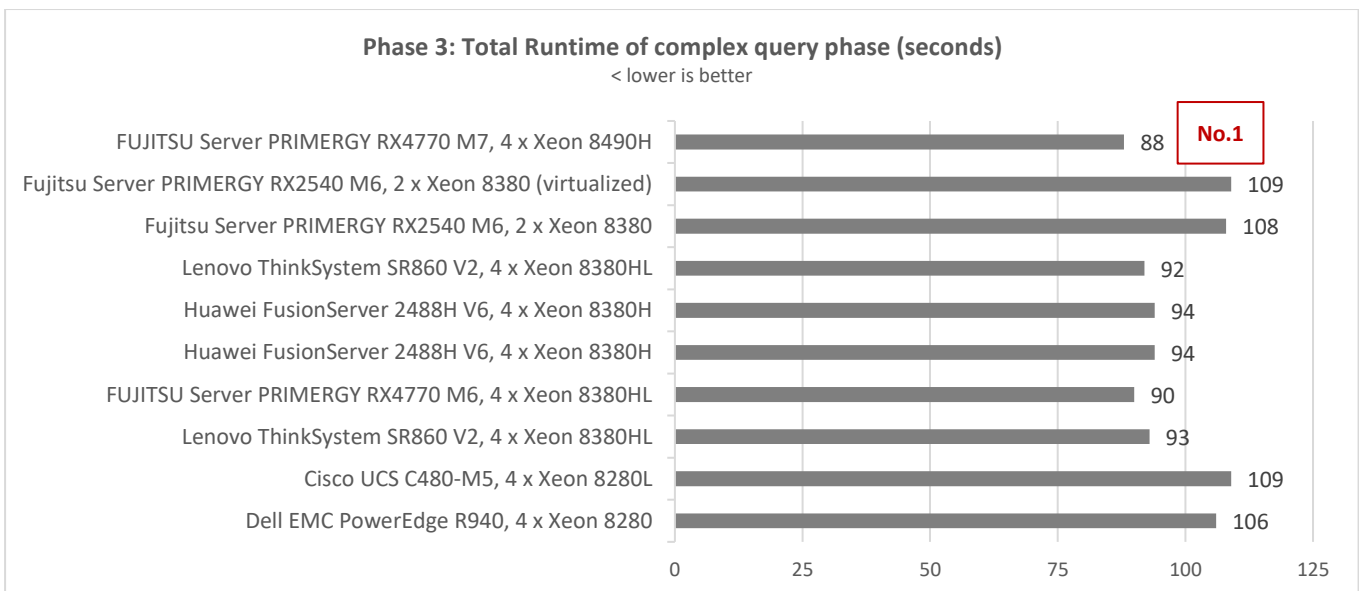
## SAP BW Edition for SAP HANA Benchmark Version 3 Result Comparison of 7.8 Billion Initial Records Category, Scale-Up Configurations





Compared to its predecessor RX4770 M6 with Intel Xeon 8380HL (Cooper Lake), RX4770 M7 achieves factor 2.43 more query executions per hour.

Compared to the 2 socket RX2540 M6 with Intel Xeon 8380 (aka Ice Lake), RX4770 M7 delivers factor 3.57 more query executions per hour.



## SAP BW Edition for SAP HANA Benchmark Version 3

### Result Details of 7.8 Billion Initial Records Category, Scale-Up Configurations

- Certification [2023025](#): FUJITSU Server PRIMERGY RX4770 M7, 4 processors / 240 cores / 480 threads Intel Xeon Platinum 8490H processor, 4096 GB DRAM, SAP BW edition for SAP HANA Standard Application Benchmark Version 3, 3-tier scale-up configuration, Bare-Metal environment, SAP HANA 2.0, SAP NetWeaver 7.50, SUSE Linux Enterprise Server 15, 7.8 billion initial records, 8562 seconds runtime of last data set, 11493 query executions/h, 88 seconds total runtime of complex query phase.
- Certification [2022024](#): Fujitsu Server PRIMERGY RX2540 M6, 2 processors / 80 cores / 160 threads Intel Xeon Platinum 8380 processor, 4096 GB DRAM, SAP BW edition for SAP HANA Standard Application Benchmark Version 3, 3-tier scale-up configuration, Virtualized environment, SAP HANA 2.0, SAP NetWeaver 7.50, SUSE Linux Enterprise Server 15 on VMware vSphere 7.0 Update 3, 7.8 billion initial records, 14701 seconds runtime of last data set, 3145 query executions/h, 109 seconds total runtime of complex query phase.
- Certification [2022023](#): Fujitsu Server PRIMERGY RX2540 M6, 2 processors / 80 cores / 160 threads Intel Xeon Platinum 8380 processor, 4096 GB DRAM, SAP BW edition for SAP HANA Standard Application Benchmark Version 3, 3-tier scale-up configuration, Bare-Metal environment, SAP HANA 2.0, SAP NetWeaver 7.50, SUSE Linux Enterprise Server 15, 7.8 billion initial records, 13783 seconds runtime of last data set, 3219 query executions/h, 108 seconds total runtime of complex query phase.
- Certification [2021049](#): Lenovo ThinkSystem SR860 V2, 4 processors / 112 cores / 224 threads Intel Xeon Platinum 8380HL processor, 1536 GB DRAM, 3072 GB Persistent Memory, SAP BW edition for SAP HANA Standard Application Benchmark Version 3, 3-tier scale-up configuration, Bare-Metal environment, SAP HANA 2.0, SAP NetWeaver 7.50, SUSE Linux Enterprise Server 15, 7.8 billion initial records, 12733 seconds runtime of last data set, 4766 query executions/h, 92 seconds total runtime of complex query phase.
- Certification [2021007](#): Huawei FusionServer 2488H V6, 4 processors / 112 cores / 224 threads Intel Xeon Platinum 8380H processor, 1536 GB DRAM, 3072 GB Persistent Memory, SAP BW edition for SAP HANA Standard Application Benchmark Version 3, 3-tier scale-up configuration, Bare-Metal environment, SAP HANA 2.0, SAP NetWeaver 7.50, SUSE Linux Enterprise Server 15, 7.8 billion initial records, 14472 seconds runtime of last data set, 4734 query executions/h, 94 seconds total runtime of complex query phase.
- Certification [2021004](#): Huawei FusionServer 2488H V6, 4 processors / 112 cores / 224 threads Intel Xeon Platinum 8380H processor, 1536 GB DRAM, 3072 GB Persistent Memory, SAP BW edition for SAP HANA Standard Application Benchmark Version 3, 3-tier scale-up configuration, Bare-Metal environment, SAP HANA 2.0, SAP NetWeaver 7.50, SUSE Linux Enterprise Server 15, 7.8 billion initial records, 14472 seconds runtime of last data set, 4722 query executions/h, 94 seconds total runtime of complex query phase.
- Certification [2020040](#): FUJITSU Server PRIMERGY RX4770 M6, 4 processors / 112 cores / 224 threads Intel Xeon Platinum 8380HL processor, 1536 GB DRAM, 3072 GB Persistent Memory, SAP BW edition for SAP HANA Standard Application Benchmark Version 3, 3-tier scale-up configuration, Bare-Metal environment, SAP HANA 2.0, SAP NetWeaver 7.50, SUSE Linux Enterprise Server 15, 7.8 billion initial records, 12752 seconds runtime of last data set, 4729 query executions/h, 90 seconds total runtime of complex query phase.
- Certification [2020037](#): Lenovo ThinkSystem SR860 V2, 4 processors / 112 cores / 224 threads Intel Xeon Platinum 8380HL processor, 1536 GB DRAM, 3072.0 GB Persistent Memory, SAP BW edition for SAP HANA Standard Application Benchmark Version 3, 3-tier scale-up configuration, Bare-Metal environment, SAP HANA 2.0, SAP NetWeaver 7.50, SUSE Linux Enterprise Server 15, 7.8 billion initial records, 13258 seconds runtime of last data set, 4616 query executions/h, 93 seconds total runtime of complex query phase.
- Certification [2020034](#): Cisco UCS C480-M5, 4 processors / 112 cores / 224 threads Intel Xeon Platinum 8280L processor, 1536 GB DRAM, 3072 GB Persistent Memory, SAP BW edition for SAP HANA Standard Application Benchmark Version 3, 3-tier scale-up configuration, Bare-Metal environment, SAP HANA 2.0, SAP NetWeaver 7.50, SUSE Linux Enterprise Server 15, 7.8 billion initial records, 20905 seconds runtime of last data set, 3515 query executions/h, 109 seconds total runtime of complex query phase.
- Certification [2019040](#): Dell EMC PowerEdge R940, 4 processors / 112 cores / 224 threads Intel Xeon Platinum 8280 processor, 768 GB DRAM, 3072 GB Persistent Memory, SAP BW edition for SAP HANA Standard Application Benchmark Version 3, 3-tier scale-up configuration, Bare-Metal environment, SAP HANA 2.0, SAP NetWeaver 7.50, Red Hat Enterprise Linux 7.6, 7.8 billion initial records, 29195 seconds runtime of last data set, 3433 query executions/h, 106 seconds total runtime of complex query phase.

## References

### SAP

- [SAP Standard Application Benchmarks](#)
- [SAP BW edition for SAP HANA benchmark results](#)

### Fujitsu

- [SAP Standard Application Benchmarks](#)