

[Benchmark Results]

Proven Performance: 15 Fujitsu M10 World Records

#	Benchmark	Fujitsu M10's Score/Configuration	Second Position
1	Two-tier SAP® SD standard application benchmark	Score: 153,000 SAP SD users Configuration: Fujitsu M10-4S, SAP enhancement package 5 for SAP ERP 6.0, Oracle Solaris 11 and Oracle Database 11g, 40x SPARC64 X processors (640 cores, 1280 threads), 10240GB memory. Certification number: 2013014. Results as of May 23, 2013.	Score: 126,063 SAP SD users Configuration: IBM Power 795, SAP enhancement package 4 for SAP ERP 6.0, AIX 7.1 and DB2 9.7, 32x POWER7 processors (256 cores, 1024 threads), 4096GB memory. Certification number: 2010046. Results as of Nov 15, 2010.
2	Two-tier SAP® SD standard application benchmark (16 CPU class)	Score: 82,000 SAP SD users Configuration: Fujitsu M10-4S, SAP enhancement package 5 for SAP ERP 6.0, Oracle Solaris 11 and Oracle Database 11g, 16x SPARC64 X+ processors (256 cores, 512 threads), 4096GB memory. Certification number: 2014012. Results as of April 7, 2014.	Score: 70,032 SAP SD users Configuration: IBM Power 795, SAP enhancement package 4 for SAP ERP 6.0, AIX 7.1 and DB2 9.7, 16x POWER7 processors (128 cores, 512 threads), 2048GB memory. Certification number: 2010042. Results as of Oct 07, 2010.
3	SPECjbb2013 – MultiJVM max-jOPS	Score: 411,627 Configuration: Fujitsu M10-4S, SPARC64 X+ (3.7 GHz, 16 processors, 256 cores), 8192 GB of memory, OS: Oracle Solaris 11.1 SRU 15.4, JVM: Java HotSpot™ 64-Bit Server VM, version 1.8.0	Score: 308,936 Configuration: Fujitsu M10-4S, SPARC64 X (3.0 GHz, 16 processors, 256 cores), 4352 GB of memory, OS: Oracle Solaris 11.1 SRU 6.4, JVM: Java HotSpot™ 64-Bit Server VM, version 1.7.0_17
4	SPECjbb2013 – MultiJVM critical-jOPS	Score: 201,829 Configuration: Fujitsu M10-4S, SPARC64 X+ (3.7 GHz, 16 processors, 256 cores), 8192 GB of memory, OS: Oracle Solaris 11.1 SRU 15.4, JVM: Java HotSpot™ 64-Bit Server VM, version 1.8.0	Score: 168,127 Configuration: Fujitsu M10-4S, SPARC64 X (3.0 GHz, 16 processors, 256 cores), 4352 GB of memory, OS: Oracle Solaris 11.1 SRU 6.4, JVM: Java HotSpot™ 64-Bit Server VM, version 1.7.0_17
5	SPECjbb2005	Score: 35,912,688 bops 70,142 bops/JVM Configuration: Fujitsu M10-4S, SPARC64 X (3.0 GHz, 64 processors, 1,024 cores), Oracle Solaris 11.1, JVM: Java HotSpot 32-Bit Server VM on Solaris, version 1.6.0_45, JVM instances: 512	Score: 35,118,352 bops 548,724 bops/JVM Configuration: SGI UV2000, Intel Xeon E5-4650(Intel Turbo Boost Technology up to 3.3GHz) (2.7 GHz, 64 processors, 512 cores), Red Hat Enterprise Linux Server release 6.2 (Santiago) (2.6.32-71.el6.x86_64.uv), JVM : Oracle Java HotSpot 64-Bit Server VM on Linux, version 1.6.0_32, JVM instances: 64
6	SPECint_rate2006	Score: 31,400 Configuration: Fujitsu M10-4S, SPARC64 X+ (3.7 GHz, 64 processors, 1,024 cores), Oracle Solaris 11.1 SRU15.4, Version 12.3 of Oracle Solaris Studio 10/13 Patch Set	Score: 23,800 Configuration: Fujitsu M10-4S, SPARC64 X (3.0 GHz, 64 processors, 1,024 cores), Oracle Solaris 11.1, Oracle Solaris Studio 12.3, 1/13 Platform Specific Enhancement
7	SPECint_rate2006 (32CPU)	Score: 12,500 Configuration: Fujitsu M10-4S, SPARC64 X (3.0 GHz, 32 processors, 512 cores), Oracle Solaris 11.1, Oracle Solaris Studio 12.3, 1/13 Platform Specific Enhancement	Score: 11,300 Configuration: IBM Power 795, POWER7 (4.0 GHz, 32 processors, 256 cores), Red Hat Enterprise Linux Server release 6.0 (ppc64) kernel 2.6.32-71.el6.ppc64, IBM XL C/C++ for Linux, V11.1 Updated with the Nov2010 PTF
8	SPECint_rate2006 (16 CPUs)	Score: 8,290 Configuration: Fujitsu M10-4S, SPARC64 X+ (3.7 GHz, 16 processors, 256 cores), Oracle Solaris 11.1, SRU15.4, Version 12.3 of Oracle Solaris Studio 10/13 Patch Set	Score: 6,350 Configuration: Fujitsu M10-4S, SPARC64 X (3.0 GHz, 16 processors, 256 cores), Oracle Solaris 11.1, Oracle Solaris Studio 12.3, 1/13 Platform Specific Enhancement

#	Benchmark	Fujitsu M10's Score/Configuration	Second Position
9	SPECfp_rate2006	Score: 19,700 Configuration: Fujitsu M10-4S, SPARC64 X (3.0 GHz, 64 processors, 1,024 cores), Oracle Solaris 11.1, Oracle Solaris Studio 12.3, 1/13 Platform Specific Enhancement	Score: 10,500 Configuration: IBM Power 795, POWER7 (4.0 GHz, 32 processors, 256 cores), Red Hat Enterprise Linux Server release 6.0 (ppc64) kernel 2.6.32-71.el6.ppc64, IBM XL C/C++ for Linux, V11.1 Updated with the Nov2010 PTF
10	SPECfp_rate2006 (16 CPUs)	Score: 7,200 Configuration: Fujitsu M10-4S, SPARC64 X+ (3.7 GHz, 16 processors, 256 cores), Oracle Solaris 11.1 SRU15.4, Version 12.3 of Oracle Solaris Studio 10/13 Patch Set	Score: 5,860 Configuration: Fujitsu M10-4S, SPARC64 X (3.0 GHz, 16 processors, 256 cores), Oracle Solaris 11.1, Oracle Solaris Studio 12.3, 1/13 Platform Specific Enhancement
11	SPECfp_rate2006 (4 CPUs)	Score: 1,830 Configuration: Fujitsu M10-4S, SPARC64 X+ (3.7 GHz, 4 processors, 64 cores), Oracle Solaris 11.1 SRU15.4, Version 12.3 of Oracle Solaris Studio 10/13 Patch Set	Score: 1,760 Configuration: Dell PowerEdge R920, Intel Xeon E7-4890 v2 (2.80 GHz, 4 processors, 60 cores), SUSE Linux Enterprise Server 11, Intel C++ Studio XE 14.0.0.080 for Linux and Intel Fortran Studio XE 14.0.0.080 for Linux
12	SPECfp_rate2006 (1 CPU)	Score: 462 Configuration: Fujitsu M10-4S, SPARC64 X+ (3.7 GHz, 1 processors, 16 cores), Oracle Solaris 11.1 SRU15.4, Version 12.3 of Oracle Solaris Studio 10/13 Patch Set	Score: 374 Configuration: Fujitsu M10-1, SPARC64 X (2.8 GHz, 1 processors, 16 cores), Oracle Solaris 11.1, Oracle Solaris Studio 12.3, 1/13 Platform Specific Enhancement
13	STREAM (TRIAD)	Score: 4,002GB/s Configuration: Fujitsu M10-4S, SPARC64 X (3.0 GHz, 64 processors, 1,024 cores)	Score: 805GB/s Configuration: IBM Power 595, POWER6 (5 GHz, 32 processors, 64 cores)
14	STREAM (TRIAD) (32 CPUs)	Score: 2,071GB/s Configuration: Fujitsu M10-4S, SPARC64 X (3.0 GHz, 32 processors, 512 cores)	Score: 805GB/s Configuration: IBM Power 595, POWER6 (5 GHz, 32 processors, 512 cores)
15	STREAM (TRIAD) (16 CPUs)	Score: 1,023GB/s Configuration: Fujitsu M10-4S, SPARC64 X (3.0 GHz, 16 processors, 256 cores)	Score: 162GB/s Configuration: IBM Power 575, POWER6 (4.7 GHz, 16 processors, 32 cores)

World records on SPEC int_rate2006, SPECfp_rate2006 and STREAM triad are based on comparisons of benchmark results except Supercomputers. Results as of April 8, 2014.

Details and the latest information on each benchmark can be found at the following websites:

SAP: <http://www.sap.com/campaigns/benchmark/index.epx>

SPEC: <http://www.spec.org>

STREAM: <http://www.cs.virginia.edu/stream/>