



SPEC® MPIM2007 Result

Copyright 2006-2010 Standard Performance Evaluation Corporation

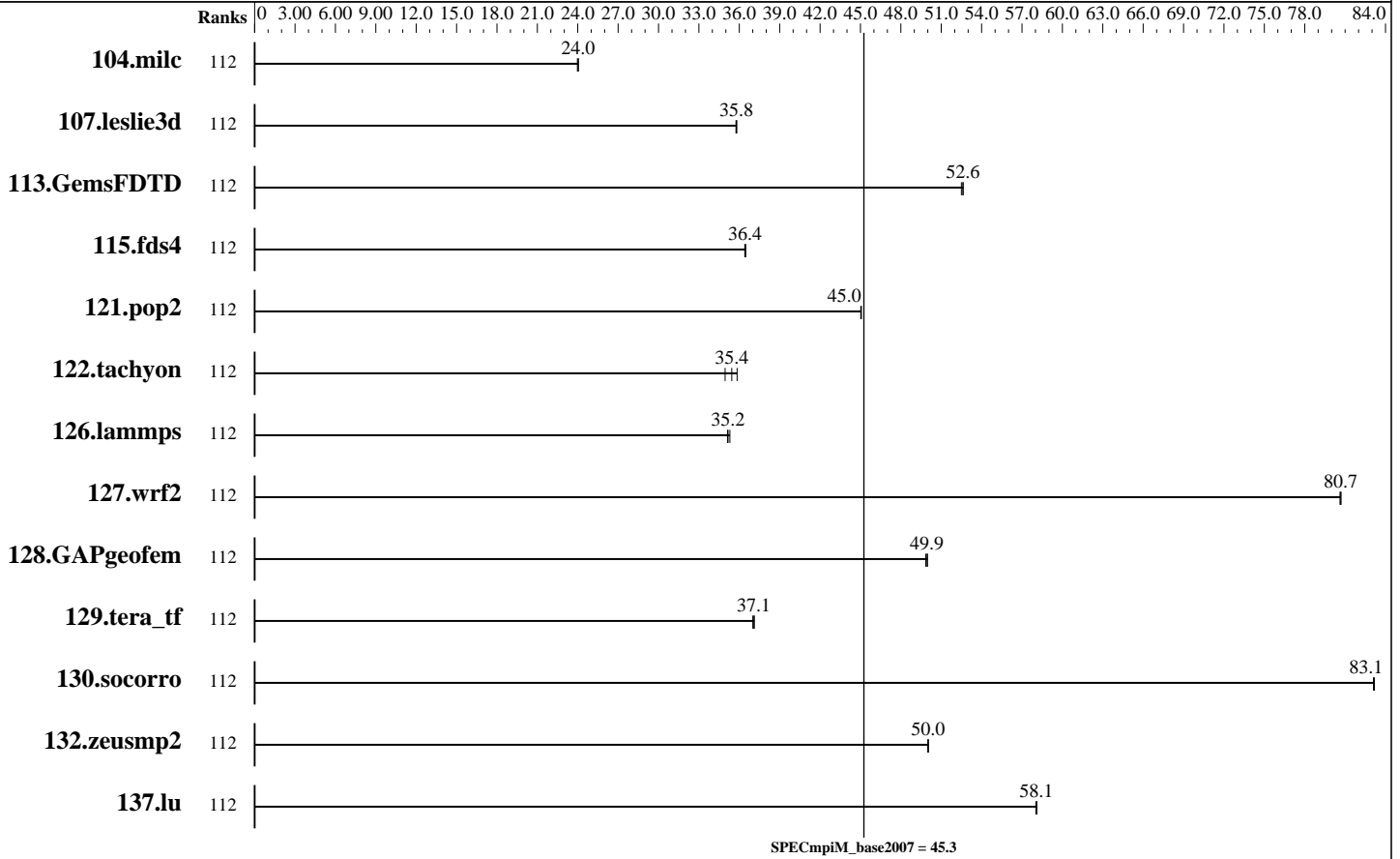
xFusion FusionServer 2288H V7

SPECmpiM_peak2007 = Not Run

SPECmpiM_base2007 = 45.3

MPI2007 license: 6488
Test sponsor: xFusion
Tested by: xFusion

Test date: Dec-2022
Hardware Availability: Jan-2023
Software Availability: Jul-2022



Results Table

Benchmark	Base							Peak						
	Ranks	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Ranks	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
104.milc	112	65.3	24.0	65.1	24.0	<u>65.1</u>	<u>24.0</u>							
107.leslie3d	112	146	35.8	146	35.8	<u>146</u>	<u>35.8</u>							
113.GemsFDTD	112	120	52.5	<u>120</u>	<u>52.6</u>	120	52.6							
115.fds4	112	53.6	36.4	53.5	36.5	<u>53.5</u>	<u>36.4</u>							
121.pop2	112	91.6	45.1	<u>91.7</u>	<u>45.0</u>	91.7	45.0							
122.tachyon	112	78.0	35.8	<u>78.9</u>	<u>35.4</u>	80.0	34.9							
126.lammps	112	83.0	35.1	82.6	35.3	<u>82.9</u>	<u>35.2</u>							
127.wrf2	112	96.7	80.6	96.6	80.7	<u>96.6</u>	<u>80.7</u>							
128.GAPgeofem	112	41.3	50.0	<u>41.3</u>	<u>49.9</u>	41.4	49.9							
129.tera_tf	112	<u>74.7</u>	<u>37.1</u>	74.6	37.1	74.8	37.0							

Table continues on next page. Results appear in the order in which they were run. Bold underlined text indicates a median measurement.



SPEC MPIM2007 Result

Copyright 2006-2010 Standard Performance Evaluation Corporation

xFusion
FusionServer 2288H V7

SPECmpiM_peak2007 = Not Run

SPECmpiM_base2007 = 45.3

MPI2007 license: 6488
Test sponsor: xFusion
Tested by: xFusion

Test date: Dec-2022
Hardware Availability: Jan-2023
Software Availability: Jul-2022

Results Table (Continued)

Benchmark	Base								Peak							
	Ranks	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Ranks	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio		
130.socorro	112	45.9	83.2	45.9	83.1	45.9	83.1									
132.zeusmp2	112	62.0	50.0	62.0	50.0	62.0	50.0									
137.lu	112	63.3	58.1	63.3	58.0	63.3	58.1									

Results appear in the order in which they were run. Bold underlined text indicates a median measurement.

Hardware Summary

Type of System: Heterogenous
 Compute Node: FusionServer 2288H V7 Node
 File Server Node: FusionServer 2288H V7 Node
 Head Node: FusionServer 2288H V7 Node
 Total Compute Nodes: 1
 Total Chips: 2
 Total Cores: 112
 Total Threads: 112
 Total Memory: 512 GB
 Base Ranks Run: 112
 Minimum Peak Ranks: --
 Maximum Peak Ranks: --

Software Summary

C Compiler: C/C++: Version 2022.2.1 of Intel oneAPI DPC++/C++ Compiler for Linux Build 20221020;
 C++ Compiler: C/C++: Version 2022.2.1 of Intel oneAPI DPC++/C++ Compiler for Linux Build 20221020;
 Fortran Compiler: Fortran: Version 2021.7.1 of Intel Fortran Compiler for Linux Build 20221019;
 Base Pointers: 64-bit
 Peak Pointers: Not Applicable
 MPI Library: Intel MPI Library for Linux OS, Version 2021.7 Build 20221022
 Other MPI Info: None
 Pre-processors: No
 Other Software: jemalloc memory allocator V5.2.1

Node Description: FusionServer 2288H V7 Node

Hardware

Number of nodes: 1
 Uses of the node: head, compute, fileserver
 Vendor: xFusion
 Model: FusionServer 2288H V7
 CPU Name: Intel Xeon Platinum 8480+
 CPU(s) orderable: 1, 2 chips
 Chips enabled: 2
 Cores enabled: 112
 Cores per chip: 56
 Threads per core: 1
 CPU Characteristics: Enable LP [Global] disabled
 CPU MHz: 1900
 Primary Cache: 32 KB I + 48 KB D on chip per core
 Secondary Cache: 2 MB I+D on chip per core
 L3 Cache: 105 MB I+D on chip per chip
 Other Cache: None
 Memory: 512 GB (16 x 32 GB 2Rx8 PC5-4800B-R)
 Disk Subsystem: 1 x 1920 GB SATA SSD
 Other Hardware: None
 Adapter: None
 Number of Adapters: 0
 Slot Type: None
 Data Rate: None

Software

Adapter: None
 Adapter Driver: None
 Adapter Firmware: None
 Operating System: Red Hat Enterprise Linux release 9.0 (Plow) 5.14.0-70.13.1.el9_0.x86_64
 Local File System: xfs
 Shared File System: None
 System State: Multi-User
 Other Software: jemalloc memory allocator V5.2.1

Continued on next page



SPEC MPIM2007 Result

Copyright 2006-2010 Standard Performance Evaluation Corporation

xFusion
FusionServer 2288H V7

SPECmpiM_peak2007 = Not Run

SPECmpiM_base2007 = 45.3

MPI2007 license: 6488
Test sponsor: xFusion
Tested by: xFusion

Test date: Dec-2022
Hardware Availability: Jan-2023
Software Availability: Jul-2022

Node Description: FusionServer 2288H V7 Node

Ports Used: 0
Interconnect Type: None

Submit Notes

The config file option 'submit' was used.

Base Compiler Invocation

C benchmarks:
 mpiicc

C++ benchmarks:

 126.lammps: mpiicpc

Fortran benchmarks:
 mpiifort

Benchmarks using both Fortran and C:
 mpiicc mpiifort

Base Portability Flags

121.pop2: -DSPEC_MPI_CASE_FLAG
126.lammps: -DMPICH_IGNORE_CXX_SEEK
127.wrf2: -DSPEC_MPI_CASE_FLAG -DSPEC_MPI_LINUX

Base Optimization Flags

C benchmarks:
 -O3 -xCORE-AVX512 -no-prec-div -L/usr/local/lib
 -Wl,--rpath=/usr/local/lib -ljemalloc

C++ benchmarks:

 126.lammps: -O3 -xCORE-AVX512 -no-prec-div -L/usr/local/lib
 -Wl,--rpath=/usr/local/lib -ljemalloc

Fortran benchmarks:
 -O3 -xCORE-AVX512 -no-prec-div -L/usr/local/lib
 -Wl,--rpath=/usr/local/lib -ljemalloc

Continued on next page



SPEC MPIM2007 Result

Copyright 2006-2010 Standard Performance Evaluation Corporation

xFusion
FusionServer 2288H V7

SPECmpiM_peak2007 = Not Run

SPECmpiM_base2007 = 45.3

MPI2007 license: 6488
Test sponsor: xFusion
Tested by: xFusion

Test date: Dec-2022
Hardware Availability: Jan-2023
Software Availability: Jul-2022

Base Optimization Flags (Continued)

Benchmarks using both Fortran and C:

```
-O3 -xCORE-AVX512 -no-prec-div -L/usr/local/lib  
-Wl,--rpath=/usr/local/lib -ljemalloc
```

The flags files that were used to format this result can be browsed at

http://www.spec.org/mpi2007/flags/xFusion_x86_64_Intel_linux.html
<http://www.spec.org/mpi2007/flags/xfusion-specmpi-platform-flag.html>

You can also download the XML flags sources by saving the following links:

http://www.spec.org/mpi2007/flags/xFusion_x86_64_Intel_linux.xml
<http://www.spec.org/mpi2007/flags/xfusion-specmpi-platform-flag.xml>

SPEC and SPEC MPI are registered trademarks of the Standard Performance Evaluation Corporation. All other brand and product names appearing in this result are trademarks or registered trademarks of their respective holders.

For questions about this result, please contact the tester.
For other inquiries, please contact webmaster@spec.org.

Tested with SPEC MPI2007 v2.0.1.
Report generated on Wed Jan 11 14:04:46 2023 by SPEC MPI2007 PS/PDF formatter v1463.
Originally published on 11 January 2023.