RISC FREE PERFORMANCE

Prepare to be amazed by the new FUSION® 1200 SMP server and its groundbreaking performance. Leave costly, proprietary RISC-based solutions behind and enjoy ease of operation and superior performance based on dual-core Intel® Xeon® processors.

Fulfill your High Performance Technical Computing needs with the FUSION® 1200 stellar performance. Leapfrog your competition by gaining faster insight from your application in Computational Structure Mechanics, Computational Fluid Dynamics, Bio-Informatics, Computational Chemistry, Reservoir Simulation, Seismic Processing and Interpretation fields.

FUSION® 1200 is a scalable 12-processor SMP system for the High Performance Technical Computing (HPTC) market. Available in both deskside and 19-inch rack-mount design, the FUSION® 1200 is a scalable alternative to traditional RISC based servers. FUSION® 1200 Series is an enterprise-class system for an IT department looking to leverage the benefits of Intel® standards in a data center. With the flexibility to grow from 12 to 48 Intel® Xeon® processors (single or dual core), the FUSION® 1200 Series scales beyond conventional Intel® based platforms while delivering superior price-performance compared to traditional high-end servers. The SMP operational model of the FUSION® 1200 provides reduced management costs compared to clusters. This Intel® Xeon® processor based server, supporting Intel® Extended Memory 64 Technology and the ScaleMP® vSMP architecture, is the ideal platform for clients with applications that require high processor count and large shared memory.

APPLICATIONS:

Computational Structural Mechanics
- ANSYS Mechanical
- ABAQUS/Explicit
- ABAQUS/Standard
- LSTC LS-DYNA

Computational Fluid Dynamics
- Fluent
- ANSYS CFX
- CD-Adapco STAR-CD
- AVL FIRE

Bio-Informatics
- HMMER

Computational Chemistry
- Schrödinger Jaguar
- Schrödinger Glide
- NAMD
- DOCK
- GAMESS
- GOLD

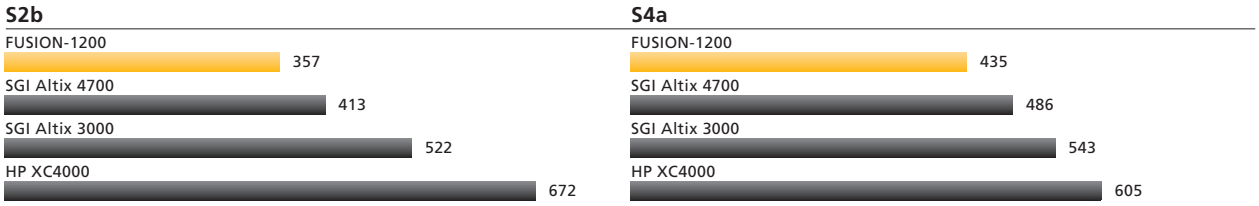
Reservoir Simulation
- Schlumberger ECLIPSE

Seismic Processing and Interpretation
- Paradigm GeoDepth
- 3DGEO 3DPSDM

COMPUTATIONAL STRUCTURAL MECHANICS

ABAQUS Standard (6.6)

RUNTIME (SEC.) - LOWER IS BETTER

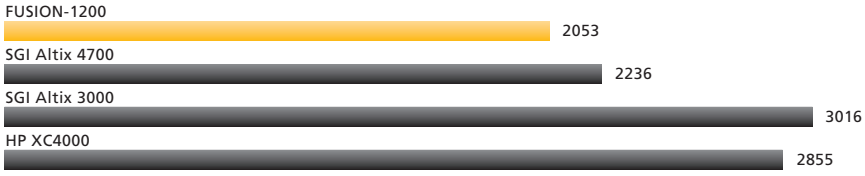


HW Characteristics:

FUSION-1220 (vSMPowered™):	12 x Intel XEON 5160 DC (Woodcrest), 3GHz, 4MB L2; 36/48GB RAM (vSMP Foundation 1.6)	(Source: ScaleMP)
SGI Altix 3000:	16 x Intel Itanium2, 1.6 GHz; 128GB RAM	(Source: Public)
SGI Altix 4700:	8 x Intel Itanium2 DC, 1.6 GHz; 256GB RAM	(Source: Public)
HP XC4000:	16 node cluster: 16 x 2 x AMD Opteron 275, 2.2GHz, 2MB L2; Voltaire InfiniBand	(Source: Public)

ABAQUS Explicit (6.6)

RUNTIME (SEC.) - LOWER IS BETTER



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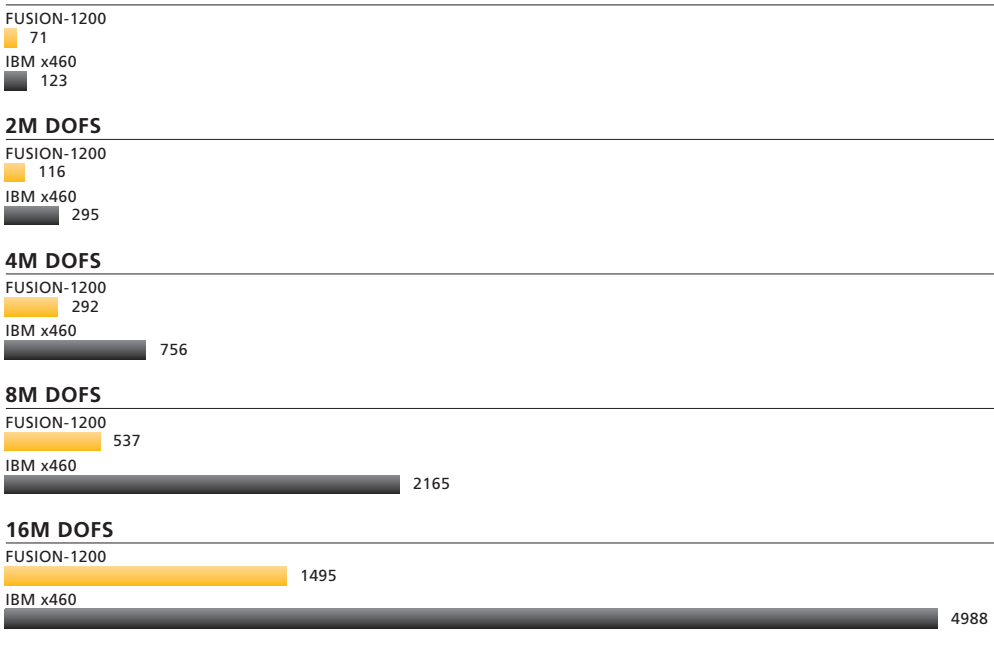
HP XC4000:	16 node cluster: 16 x 2 x AMD Opteron 275, 2.2GHz, 2MB L2; Voltaire InfiniBand	(Source: Public)

ANSYS 10SP1, WingSolid95, PCG solver

RUNTIME (SEC.) - LOWER IS BETTER



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IBM x460:	8 x Intel XEON 7040 DC (Paxville), 3GHz, 2x2MB L2; 16GB	(Source: ScaleMP)

COMPUTATIONAL FLUID DYNAMICS

CD-Adapco, STAR-CD

RUNTIME (SEC.) - LOWER IS BETTER

A-Class

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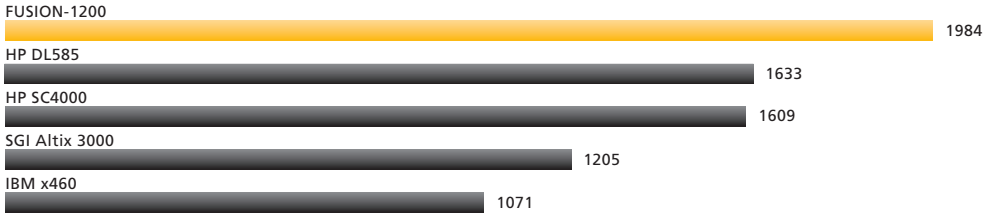
CRAY XD1:	16 x AMD Opteron DC 275 2.2 GHz	(Source: Public)
SGI Altix 3700 Bx2:	8 x Intel Itanium2, 1.6GHz, 9M L3	(Source: Public)
IBM x460:	8 x Intel XEON 7040 DC (Paxville), 3GHz, 2x2MB L2; 16GB RAM	(Source: ScaleMP)

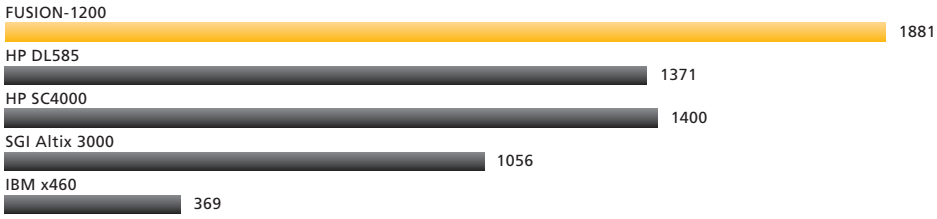
FLUENT, FL5 (Large Class)

RATE - HIGHER IS BETTER

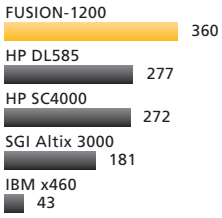
L1



L2



L3



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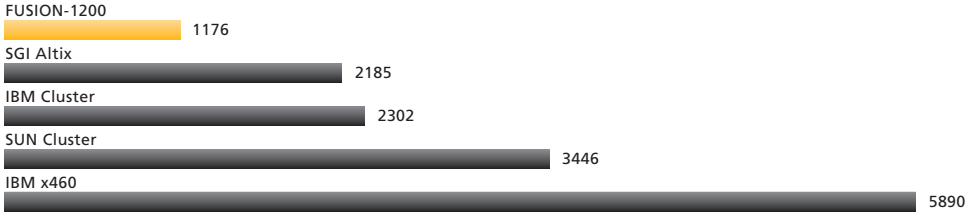
IBM x460:	8 x Intel XEON 7040 DC (Paxville), 3GHz, 2x 2MB L2; 16GB RAM	(Source: ScaleMP)
HP XC4000:	8 node cluster: 8 x 2 x AMD Opteron 250, 2.4GHz, 2MB L2; Voltaire Infiniband	(Source: Public)
HP DL585:	4 node cluster: 4 x 4 x AMD Opteron 250, 2.4GHz, 2MB L2; Voltaire Infiniband	(Source: Public)
SGI Altix 3000:	16 x Intel Itanuim2, 1.6 GHz	(Source: Public)

RESERVOIR SIMULATION

Schlumberger Eclipse

RUNTIME (SEC.) - LOWER IS BETTER

ONEM1 (1.3m)



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FUSION-1220 (vSMPowered™):	12 x Intel XEON 5160 DC (Woodcrest), 3GHz, 4MB L2; 36/48GB RAM (vSMP Foundation 1.6)	(Source: ScaleMP)
IBM x460:	8 x Intel XEON 7040 DC (Paxville), 3GHz, 2x2MB L2; 16GB RAM	(Source: ScaleMP)
IBM Cluster:	4 nodes cluster: 2 x Intel XEON DP (Nocona), 3.4GHz; InfiniBand	(Source: Schlumberger)
SUN Cluster:	4/8 nodes cluster: 2 x AMD Opteron 248 SC, 2.2GHz, 1MB L2; 4GB RAM; InfiniBand	(Source: Schlumberger)
SGI Altix:	8 x Itanium2, 1.5GHz; 32GB RAM; Propack 4	(Source: Schlumberger)