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Title

TOP500 Supercomputers for November 2002

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Authors

Strohmaier, Erich
Meuer, Hans W.
Dongarra, Jack
et al.

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Contact: Erich Strohmaier, EStrohmaier@lbl.gov

20th Edition of TOP500 List of World's Fastest Supercomputers Released

MANNHEIM, Germany; KNOXVILLE, Tenn.; & BERKELEY, Calif. – In what has become a much-anticipated event in the world of high-performance computing, the 20th edition of the “TOP500” list of the world’s fastest supercomputers was released today (November 15, 2002).

The Earth Simulator supercomputer installed earlier this year at the Earth Simulator Center in Yokohama, Japan, is with its Linpack benchmark performance of 35.86 Tflop/s (trillions of calculations per second) retains the number one position. The #2 and #3 positions are held by two new, identical ASCI Q systems at Los Alamos National Laboratory (7.73 Tflop/s each). These systems are built by Hewlett-Packard and based on the AlphaServer SC computer system.

For the first time ever, 2 PC-based clusters were able to gain a top 10 spot. At position 5 is a cluster at Lawrence Livermore National Laboratory built by Linux NetworkX and Quadrics. At position 8 is a cluster at the Forecast Systems Laboratory at NOAA built by HPTi with a Myrinet interconnect.

The new TOP500 list, as well as the former lists, can be found on the Web at <http://www.top500.org/>.

Gaining entry into the top 10 positions on the new list now requires achieving a Linpack performance of more than 3.2 Tflop/s. Already 47 systems are reported to exceed Linpack performance of 1 Tflop/s. Clearly, Teraflop-level systems are in widespread use now.

Performance levels at all positions of the TOP500 list keep growing impressively driven by Moore’s Law. The total combined performance of all 500 computers on the list is 293 Tflop/s, compared to 222 Tflop/s just six months ago. The “slowest” system on the newest listing is now 195.8 Gflop/s (billions of calculations per second), compared to 134.3 Gflop/s six months ago.

In terms of total performance of all the installed systems, the latest TOP500 edition shows IBM as still the clear leader with 31.8 percent, ahead of HP with 22.1 percent and NEC with 14.6 percent.

For the second time, Hewlett-Packard is the leader in terms of the number of systems on the list, with 137 installed systems - only slightly ahead of IBM with 131 systems. Sun is third in this category with 88 systems. No other company was able to gain more than 10 percent in either of these two categories.

The list is compiled by Hans Meuer of the University of Mannheim, Germany, Erich Strohmaier and Horst Simon of the U.S. Department of Energy’s National Energy Research Scientific Computing Center at Lawrence Berkeley National Laboratory, and Jack Dongarra of the University of Tennessee. The list was released today and will be presented in detail at the SC2002 Conference in Baltimore, MD, which starts Saturday, Nov. 16, and continues through Friday, Nov. 22.

A total of 55 Intel-based and eight AMD-based PC clusters are now present in the TOP500. The number of clusters in the TOP500 grew again to a total of 93 systems. Fourteen of these clusters are labeled as 'Self-Made' as they are designed and assembled by the end users themselves.

The number of systems reported at industrial customers fell slightly to 226 systems, down from 248 six months ago and 261 one year ago.

Seven of the TOP10 systems, 46% of all 500 systems, and 51% of the total performance are installed in the United States. Also 91% of all 500 systems are produced in the United States. These market shares demonstrate the leadership of the U.S. in the usage and production of High Performance Computing.

#

All changes are from June 2002 to November 2002:

Highlights from the TOP 10:

- The Earth Simulator build by NEC remains the unchallenged #1.
- 2 segments of the ASCI Q at Los Alamos are new at #2 and #3 with 7.7 TF/s Linpack each.
- 2 new PC cluster made the TOP 10:
 - #5 is a Linux NetworkX/Quadrics cluster at Lawrence Livermore National Laboratory.
 - #8 is a HPTi/Myrinet cluster at the FSL/NOAA.
- Two other systems are new in the TOP10:
 - at #9 a IBM Power4 system installed in UK at the HPCx Consortium,
 - at #10 a IBM Power4 system installed at NCAR.
- 3.2 TF/s are needed to enter the top 10.
- Hewlett-Packard has 4 systems in the TOP 10 followed by IBM with 3 systems, and one from NEC, Linux NetworX, and HPTi each.
- ASCI Red which was in the top 10 since June 1997 (7 times as #1) dropped out of the top 10.
- 7 of the TOP 10 systems are installed in the US, and one in Japan, France and UK each.

General highlights from the Top 500:

- The number of systems exceeding the 1 TFflop/s mark on the Linpack is now 47 up from to 23 just 6 month ago.
- 100 systems have peak performance above 1 TFlop/s up from 70 systems 6 month ago
- The last system on the list with 195.8 GF/s was listed at position 318 in the last TOP500 just 6 month ago.
- Total accumulated performance is 293 TFlop/s compared to 222 TFlop/s 6 month ago.
- Entry level is now 195.8 GF/s compared to 134.3 GF/s 6 month ago.
- The entry point for the top100 moved from 447 GF/s to 558 GF/s.
- PC Cluster are now present at all levels of performance.
- A total of 55 Intel based and 8 AMD based PC cluster are in the TOP500.
- Including 4 Sun and 3 Alpha based clusters and 23 HP AlphaServer, the number of clusters in the top500 grew further to 93 from 80 systems.
- 14 of these clusters are labeled as 'Self-Made'.
- The number of systems at industrial customers fell slightly to 226 systems down from 248 6 month ago and 261 one year ago.

- The US keeps it's prime position as supercomputer user (46% of systems and 51% of installed performance) and producer (91% of systems) with only little changes in geographical distribution.
- Despite the large performance of the ES, Japan is third in installed performance and number of systems behind Europe.

- IBM is still leading the list with respect to the installed performance with a stable share of 31.8% ahead of HP 22.1% and NEC with 14.6%.
- Hewlett-Packard stays slightly ahead of IBM with respect to the number of systems installed (HP 137 and IBM 131). Sun is third with 88 systems.

- No other manufacturer is able to capture more than 10% in any category.

TOP500 Sublist for November 2002

TOP500 Team

<http://www.top500.org/>



Rank	Site	Manufacturer	Computer	Inst. type	Country	Year	Rmax	Processors	Rpeak	Nmax	Nhalf	Interconnect
1	The Earth Simulator Center	NEC	Earth-Simulator	Research	Japan	2002	35860.00	5120	40960.00	1075200	266240	Crossbar
2	Los Alamos National Laboratory	Hewlett-Packard	ASCI Q - AlphaServer SC45, 1.25 GHz	Research	United States	2002	7727.00	4096	10240.00	590000	126100	Quadrics
3	Los Alamos National Laboratory	Hewlett-Packard	ASCI Q - AlphaServer SC45, 1.25 GHz	Research	United States	2002	7727.00	4096	10240.00	590000	126100	Quadrics
4	Lawrence Livermore National Laboratory	IBM	ASCI White, SP Power3 375 MHz	Research	United States	2000	7226.00	8192	12288.00	518096	179000	SP Switch
5	Lawrence Livermore National Laboratory	Linux Networx/Quadrics	MCR Linux Cluster Xeon 2.4 GHz - Quadrics	Research	United States	2002	5694.00	2304	11060.00	450000	90000	Quadrics
6	Pittsburgh Supercomputing Center	Hewlett-Packard	AlphaServer SC45, 1 GHz	Academic	United States	2001	4463.00	3016	6032.00	280000	85000	Quadrics
7	Commissariat a l'Energie Atomique (CEA)	Hewlett-Packard	AlphaServer SC45, 1 GHz	Research	France	2001	3980.00	2560	5120.00	360000	85000	Quadrics
8	Forecast Systems Laboratory - NOAA	HPTi	Aspen Systems, Dual Xeon 2.2 GHz - Myrinet2000	Research	United States	2002	3337.00	1536	6758.00	285000	75000	Myrinet
9	HPCx	IBM	pSeries 690 Turbo 1.3GHz	Academic	United Kingdom	2002	3241.00	1280	6656.00	300000		SP Switch
10	NCAR (National Center for Atmospheric Research)	IBM	pSeries 690 Turbo 1.3GHz	Research	United States	2002	3164.00	1216	6323.00	400000	73000	SP Switch
11	Naval Oceanographic Office (NAVOCEANO)	IBM	pSeries 690 Turbo 1.3GHz	Research	United States	2002	3160.00	1184	6156.80			SP Switch
12	NERSC/LBNL	IBM	SP Power3 375 MHz 16 way	Research	United States	2001	3052.00	3328	4992.00	371712	102400	SP Switch
13	ECMWF	IBM	pSeries 690 Turbo 1.3GHz	Research	United Kingdom	2002	2560.00	960	4992.00			SP Switch
14	ECMWF	IBM	pSeries 690 Turbo 1.3GHz	Research	United Kingdom	2002	2560.00	960	4992.00			SP Switch
15	Sandia National Laboratories	Intel	ASCI Red	Research	United States	1999	2379.00	9632	3207.00	362880	75400	Proprietary
16	Oak Ridge National Laboratory	IBM	pSeries 690 Turbo 1.3GHz	Research	United States	2002	2310.00	864	4492.80	275000	62000	SP Switch
17	Louisiana State University	Atipa Technology	P4 Xeon 1.8 GHz - Myrinet	Academic	United States	2002	2207.00	1024	3686.40	280000	56000	Myrinet
18	NASA/Goddard Space Flight Center	Hewlett-Packard	AlphaServer SC45, 1 GHz	Research	United States	2002	2164.00	1392	2784.00	320000	40000	Quadrics
19	Lawrence Livermore National Laboratory	IBM	ASCI Blue-Pacific SST, IBM SP 604e	Research	United States	1999	2144.00	5808	3856.50	431344		SP Switch
20	US Army Research Laboratory (ARL)	IBM	pSeries 690 Turbo 1.3GHz	Research	United States	2002	2140.00	800	4160.00			SP Switch
21	Max-Planck-Gesellschaft MPI/IPP	IBM	pSeries 690 Turbo 1.3GHz	Research	Germany	2002	2010.00	752	3910.40			SP Switch
22	University at Buffalo, SUNY, Center for Computational Res.	Dell	PowerEdge 2650 Cluster P4 Xeon 2.4 GHz - Myrinet	Academic	United States	2002	2004.00	600	2880.00	253400	42200	Myrinet
23	Atomic Weapons Establishment	IBM	SP Power3 375 MHz 16 way	Classified	United Kingdom	2002	1910.00	1920	2880.00			SP Switch
24	National Centers for Environmental Prediction	IBM	pSeries 690 Turbo 1.3GHz	Research	United States	2002	1849.00	704	3660.80	240000	32500	SP Switch
25	National Centers for Environmental Prediction	IBM	pSeries 690 Turbo 1.3GHz	Research	United States	2002	1849.00	704	3660.80	240000	32500	SP Switch
26	University of Tokyo	Hitachi	SR8000/MPP	Academic	Japan	2001	1709.10	1152	2074.00	141000	16000	Crossbar
27	Leibniz Rechenzentrum	Hitachi	SR8000-F1/168	Academic	Germany	2002	1653.00	168	2016.00	160000	19560	Crossbar
28	Los Alamos National Laboratory	SGI	ASCI Blue Mountain	Research	United States	1998	1608.00	6144	3072.00	374400	138000	HIPPI
29	Naval Oceanographic Office (NAVOCEANO)	IBM	SP Power3 375 MHz	Research	United States	2000	1417.00	1336	2004.00	374000		SP Switch
30	CINECA	IBM	pSeries 690 Turbo 1.3GHz	Academic	Italy	2002	1384.00	512	2662.40	200000		SP Switch
31	Deutscher Wetterdienst	IBM	SP Power3 375 MHz 16 way	Research	Germany	2001	1293.00	1280	1920.00			SP Switch
32	Sandia National Laboratories	Dell	Vplant Cluster P4 XEON 2.4/2.0 GHz - Myrinet	Research	United States	2002	1272.00	660	2963.00	240500		Myrinet
33	NCAR (National Center for Atmospheric Research)	IBM	SP Power3 375 MHz 16 way	Research	United States	2001	1272.00	1260	1890.00			SP Switch
34	Osaka University	NEC	SX-5/128M8 3.2ns	Academic	Japan	2001	1192.00	128	1280.00	129536	10240	Crossbar
35	National Centers for Environmental Prediction	IBM	SP Power3 375 MHz	Research	United States	2001	1179.00	1104	1656.00			SP Switch
36	National Centers for Environmental Prediction	IBM	SP Power3 375 MHz	Research	United States	2000	1179.00	1104	1656.00			SP Switch
37	CSC (Center for Scientific Computing)	IBM	pSeries 690 1.1GHz	Academic	Finland	2002	1170.00	512	2253.00			SP Switch
38	Florida State University	IBM	pSeries 690 1.1GHz	Academic	United States	2002	1170.00	512	2253.00			SP Switch
39	Government	Cray Inc.	T3E1200	Classified	United States	2001	1166.00	1900	2280.00	230016		Cray Interconnect
40	ERDC MSRC	Cray Inc.	T3E1200/900	Research	United States	1999	1166.00	1792	1999.00	230016		Cray Interconnect
41	Lawrence Livermore National Laboratory	IBM	SP Power3 375 MHz 16 way	Research	United States	2001	1100.00	1088	1632.00			SP Switch
42	Energy Company	Hewlett-Packard	Cluster Platform 6000 rx5670 Itanium2 900 MHz Clus	Industry	United States	2002	1090.00	545	1962.00			Gigabit Ethernet
43	Academy of Mathematics and System Science	lenovo	DeepComp 1800 - P4 Xeon 2 GHz - Myrinet	Academic	China	2002	1046.00	512	2048.00	153600	49920	Myrinet

Rank	Site	Manufacturer	Computer	Inst. type	Country	Year	Rmax	Processors	Rpeak	Nmax	Nhalf	Interconnect
44	HLRN at Universitaet Hannover / RRZN	IBM	pSeries 690 Turbo 1.3GHz	Academic	Germany	2002	1038.00	384	1996.80	245000		SP Switch
45	HLRN at ZIB/Konrad Zuse-Zentrum fuer Informationstechnik	IBM	pSeries 690 Turbo 1.3GHz	Academic	Germany	2002	1038.00	384	1996.80	245000		SP Switch
46	Argonne National Laboratory	Linux Networx	LCRC Xeon 2.4 GHz - Myrinet	Research	United States	2002	1007.00	361	1732.80	208000	35000	Myrinet
47	Japan Atomic Energy Research Institute	Hewlett-Packard	AlphaServer SC40, 833 MHz	Research	Japan	2002	1007.00	812	1352.80	252700	39954	Quadrics
48	Sandia National Laboratories	Self-made	CPlant/Ross Cluster	Research	United States	2002	996.90	1800	1782.50	310000	56000	Myrinet
49	DKRZ - Deutsches Klimarechenzentrum	NEC	SX-6/128M16	Research	Germany	2002	982.00	128	1024.00	204800	12800	Crossbar
50	NEC Fuchu Plant	NEC	SX-6/128M16	Vendor	Japan	2002	982.00	128	1024.00	204800	12800	Crossbar
51	National Supercomputer Centre (NSC)	Self-made	Pentium Xeon Cluster 2.2 GHz - SCI 3D	Academic	Sweden	2002	960.40	400	1760.00	220800	32800	SCI
52	UCSD/San Diego Supercomputer Center	IBM	SP Power3 375 MHz 8 way	Academic	United States	2000	929.00	1152	1728.00	220000	62000	SP Switch
53	High Energy Accelerator Research Organization /KEK	Hitachi	SR8000-F1/100	Research	Japan	2000	917.00	100	1200.00	115000	15000	Crossbar
54	US Army HPC Research Center at NCS	Cray Inc.	T3E1200	Research	United States	2000	892.00	1084	1300.80			Cray Interconnect
55	ECMWF	Fujitsu	VPP5000/100	Research	United Kingdom	2000	886.00	100	960.00	195600	18000	Crossbar
56	University of Tokyo	Hitachi	SR8000/128	Academic	Japan	1999	873.00	128	1024.00	120000	16000	Crossbar
57	ERDC MSRC	Hewlett-Packard	AlphaServer SC45, 1 GHz	Research	United States	2002	862.20	512	1024.00	205000	26000	Quadrics
58	Hewlett-Packard	Hewlett-Packard	AlphaServer SC45, 1 GHz	Vendor	United States	2002	862.20	512	1024.00	205000	26000	Quadrics
59	Wright-Patterson Air Force Base/DoD ASC	Hewlett-Packard	AlphaServer SC45, 1 GHz	Research	United States	2002	862.20	512	1024.00	205000	26000	Quadrics
60	NASA/Ames Research Center/NAS	SGI	ORIGIN 3000 600 MHz	Research	United States	2002	852.90	1024	1228.80	129024	31744	NUMAflex
61	Pacific Northwest National Laboratory	Hewlett-Packard	Cluster Platform 6000 rx2600 Itanium2 1 GHz Cluste	Research	United States	2002	851.00	256	1024.00	232000	24650	Quadrics
62	Maui High-Performance Computing Center (MHPCC)	IBM	SP Power3 375 MHz 16 way	Research	United States	2001	837.00	812	1218.00			SP Switch
63	Australian Partnership for Advanced Computing (APAC)	Hewlett-Packard	AlphaServer SC45, 1 GHz	Academic	Australia	2002	825.50	508	1016.00	170000	26000	Quadrics
64	Universitaet Heidelberg - IWR	Megware	HELICS AMD 1.4 GHz - Myrinet	Academic	Germany	2002	825.00	512	1433.60	171000		Myrinet
65	Government	Cray Inc.	T3E900	Classified	United States	1997	815.00	1324	1191.60	134400	26880	Cray Interconnect
66	Charles Schwab	IBM	SP Power3 375 MHz	Industry	United States	2000	795.00	768	1152.00			SP Switch
67	Institute for Materials Research/Tohoku University	Hitachi	SR8000-G1/64	Academic	Japan	2001	790.70	64	921.60	110000	8504	Crossbar
68	GSIC Center, Tokyo Institute of Technology	Self-made	Presto III Athlon 1.6 GHz	Academic	Japan	2002	760.20	496	1587.20	109980		Myrinet
69	Media & Entertainment (C)	IBM	pSeries 690 Turbo 1.3GHz	Industry	United States	2002	755.00	264	1372.80			SP Switch
70	North Carolina Supercomputing Center (NCSC)	IBM	SP Power3 375 MHz	Academic	United States	2000	741.00	720	1080.00			SP Switch
71	IBM	IBM	pSeries 690 Turbo 1.3GHz	Vendor	United States	2002	736.60	256	1331.20	285000	25000	SP Switch
72	IBM	IBM	pSeries 690 Turbo 1.3GHz	Vendor	United States	2002	736.60	256	1331.20	285000	25000	SP Switch
73	Swiss Scientific Computing Center (CSCS)	IBM	pSeries 690 Turbo 1.3GHz	Research	Switzerland	2002	736.60	256	1331.20	285000	25000	SP Switch
74	Joint Supercomputer Center	Self-made	MVS1000M EV67 667 MHz	Academic	Russia	2002	734.60	768	1024.00	270000	30000	Myrinet
75	University of Tsukuba	Fujitsu	VPP5000/80	Research	Japan	2001	730.00	80	768.00	273600	15360	Crossbar
76	Oak Ridge National Laboratory	IBM	SP Power3 375 MHz	Research	United States	2000	723.00	704	1056.00	187000	37500	SP Switch
77	Japan Meteorological Agency	Hitachi	SR8000-E1/80	Research	Japan	2000	691.30	80	768.00	120000	9408	Crossbar
78	Los Alamos National Laboratory/ACL	SGI	ORIGIN 2000 250 MHz	Research	United States	1999	690.90	2048	1024.00	229248	80640	Crossbar
79	ERDC MSRC	Hewlett-Packard	AlphaServer SC40, 833 MHz	Research	United States	2002	690.90	512	853.00	185000	40000	Quadrics
80	Seoul National University	Self-made	Pentium 4 Xeon Cluster 2.2/2.4/2.8 GHz - Gigaset -	Academic	Korea, South	2002	685.50	360	1651.00	234000		Gigaset
81	Colsa	IBM	pSeries 690 Turbo 1.3GHz	Industry	United States	2002	680.00	240	1248.00			SP Switch
82	NCSA	IBM	Titan Cluster Itanium 800 MHz	Academic	United States	2001	677.90	320	1024.00	183000	32000	Fast Ethernet
83	CSAR at the University of Manchester	Cray Inc.	T3E1200	Academic	United Kingdom	2000	671.00	812	974.40			Cray Interconnect
84	Deutscher Wetterdienst	Cray Inc.	T3E1200	Research	Germany	1999	671.00	812	974.40			Cray Interconnect
85	Los Alamos National Laboratory	Self-made	Space Simulator, P4 2.53 GHz - GigEth	Research	United States	2002	665.10	288	1457.00	180000	65000	Gigabit Ethernet
86	CBRC - Tsukuba Advanced Computing Center - TACC/AIST	NEC	Magi Cluster PIII 933 MHz	Research	Japan	2001	654.00	1040	970.00	217600	29000	Myrinet

Rank	Site	Manufacturer	Computer	Inst. type	Country	Year	Rmax	Processors	Rpeak	Nmax	Nhalf	Interconnect
87	Manufacturer (G)	IBM	pSeries 690 Turbo 1.3GHz	Industry	United States	2002	623.90	224	1164.80	135000		SP Switch
88	University of Utah	Dell	PowerEdge 2650 Cluster P4 Xeon 2.4 GHz - GigE	Academic	United States	2002	618.30	256	1228.80	166000	51000	Gigabit Ethernet
89	Real World Computing (RWCP)/Tsukuba Research Center	Self-made	SCore IIIe/PIII 933 MHz	Research	Japan	2001	618.30	1024	955.40	146000	23000	Myrinet
90	NCSA	IBM	Netfinity Cluster PIII 1 GHz - Myrinet	Academic	United States	2001	594.00	1024	1024.00			Myrinet
91	CNRS/IDRIS	IBM	pSeries 690 Turbo 1.3 GHz, GigEth	Academic	France	2002	590.20	256	1331.20	158000		Gigabit Ethernet
92	National Center for High Performance Computing	IBM	pSeries 690 Turbo 1.3 GHz, GigEth	Academic	Taiwan	2002	590.20	256	1331.20	158000		Gigabit Ethernet
93	University of Tokyo/Institute for Solid State Physics	Hitachi	SR8000-F1/60	Academic	Japan	2000	577.00	60	720.00	89000	10000	Crossbar
94	Naval Research Laboratory (NRL)	Appro International	1200X P4 Xeon 2.2 GHz - Myrinet	Research	United States	2002	575.00	256	1126.40	112500	22500	Myrinet
95	Telecom Italia	IBM	pSeries 690 Turbo 1.3GHz	Industry	Italy	2002	574.00	200	1040.00			SP Switch
96	Japan Atomic Energy Research Institute	Fujitsu	VPP5000/64	Research	Japan	2001	563.00	64	614.40	235776	12288	Crossbar
97	Kyushu University	Fujitsu	VPP5000/64	Academic	Japan	2000	563.00	64	614.40	235776	12288	Crossbar
98	Sprint PCS	IBM	SP Power3 375 MHz 16 way	Industry	United States	2002	561.00	528	792.00			SP Switch
99	EDS/ Adam Opel AG	IBM	pSeries 690 Turbo 1.3GHz	Industry	Germany	2002	558.20	192	998.40	245000	22000	SP Switch
100	Institute of High Performance Computing (IHPC)	IBM	pSeries 690 Turbo 1.3GHz GigEth	Academic	Singapore	2002	555.30	224	1164.80	226800		Gigabit Ethernet
101	IBM Thomas J. Watson Research Center	IBM	SP Power3 375 MHz 16 way	Research	United States	2002	554.00	520	780.00			SP Switch
102	Deutsche Telekom AG	IBM	SP Power3 375 MHz	Industry	Germany	2000	553.00	528	792.00			SP Switch
103	Wright-Patterson Air Force Base/DoD ASC	IBM	SP Power3 375 MHz	Research	United States	2000	553.00	528	792.00			SP Switch
104	United Kingdom Meteorological Office	Cray Inc.	T3E900	Research	United Kingdom	1997	552.00	876	788.40			Cray Interconnect
105	State Farm	IBM	SP Power3 375 MHz	Industry	United States	2001	546.00	520	780.00			SP Switch
106	Petroleum Company (G)	IBM	SP Power3 375 MHz 16 way	Industry	Saudia Arabia	2001	546.00	512	768.00	148000	33000	SP Switch
107	US Army Research Laboratory (ARL)	IBM	SP Power3 375 MHz 16 way	Research	United States	2000	546.00	512	768.00	148000	33000	SP Switch
108	Wright-Patterson Air Force Base/DoD ASC	Hewlett-Packard	AlphaServer SC45, 1 GHz	Research	United States	2002	540.00	324	648.00	154000	20000	Quadrics
109	Los Alamos National Laboratory	Hewlett-Packard	ASCI Q - AlphaServer SC45, 1.25 GHz	Research	United States	2002	538.40	256	640.00	160000	22000	Quadrics
110	Pharmaceutical Company	IBM	SP Power3 375 MHz	Industry	Germany	2001	536.00	510	765.00			SP Switch
111	Indiana University	IBM	SP Power3 375 MHz	Academic	United States	2001	534.00	508	762.00			SP Switch
112	United Kingdom Meteorological Office	Cray Inc.	T3E1200	Research	United Kingdom	1999	526.00	636	763.20			Cray Interconnect
113	NASA/Goddard Space Flight Center	Cray Inc.	T3E	Research	United States	2000	525.00	1356	813.60			Cray Interconnect
114	OverWrite	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Industry	United Kingdom	2002	524.30	256	896.00			Myrinet
115	State Farm	IBM	SP Power3 375 MHz	Industry	United States	2001	512.00	488	732.00			SP Switch
116	Hewlett-Packard	Hewlett-Packard	AlphaServer SC ES40/EV67	Vendor	United States	2000	507.60	512	682.66	200000	30000	Quadrics
117	Lawrence Livermore National Laboratory	Hewlett-Packard	AlphaServer SC ES40/EV67	Research	United States	2000	507.60	512	682.66	200000	30000	Quadrics
118	National Aerospace Laboratory of Japan	NEC	SX-6/64M8	Research	Japan	2002	495.20	64	512.00	122880	6656	Crossbar
119	National Institute for Environmental Studies	NEC	SX-6/64M8	Research	Japan	2002	495.20	64	512.00	122880	6656	Crossbar
120	Centre Informatique National (CINES)	IBM	SP Power3 375 MHz	Academic	France	2001	494.00	472	708.00			SP Switch
121	Nagoya University	Fujitsu	VPP5000/56	Academic	Japan	1999	492.00	56	537.60	228480	12768	Crossbar
122	Kyoto University	Fujitsu	VPP800/63	Academic	Japan	1999	482.00	63	504.00	234360	12852	Crossbar
123	Umea University / HPC2N	Self-made	AMD 1.66 GHz - SCI 3D-torus	Academic	Sweden	2002	481.00	240	800.00	116100	24570	SCI
124	Lawrence Livermore National Laboratory	IBM	SP Power3 375 MHz 16 way	Research	United States	2001	480.00	448	672.00	138000	31000	SP Switch
125	Hewlett-Packard	Hewlett-Packard	SuperDome 750 MHz/HyperFabric	Vendor	United States	2002	470.90	256	768.00	340092	90072	Myrinet
126	Lawrence Livermore National Laboratory	IBM	ASCI Blue-Pacific CTR, IBM SP 604e	Research	United States	1998	468.20	1344	892.40	205000	65000	SP Switch
127	Applera/Celera Genomics	IBM	pSeries 690 Turbo 1.3GHz	Industry	United States	2002	468.00	160	832.00			SP Switch
128	IKON	IBM	pSeries 690 Turbo 1.3GHz	Industry	United States	2002	468.00	160	832.00			SP Switch
129	Government	SGI	ORIGIN 3000 600 MHz	Classified	United States	2002	466.00	512	614.40	111104	19840	NUMAflex

Rank	Site	Manufacturer	Computer	Inst. type	Country	Year	Rmax	Processors	Rpeak	Nmax	Nhalf	Interconnect
130	Norwegian University of Science and Technology	SGI	ORIGIN 3000 600 MHz	Academic	Norway	2002	466.00	512	614.40	111104	19840	NUMAflex
131	Hewlett-Packard	Hewlett-Packard	SuperDome 750 MHz/HyperPlex	Vendor	United States	2002	449.40	256	768.00	340092	110052	Myrinet
132	Tsukuba Advanced Computing Center - TACC/AIST	Hitachi	SR8000/64	Research	Japan	1999	449.00	64	512.00	92000	9160	Crossbar
133	Cray Inc.	Cray Inc.	T3E1200	Vendor	United States	1998	447.00	540	648.00	181440	17280	Cray Interconnect
134	Forschungszentrum Juelich (FZJ)	Cray Inc.	T3E1200	Research	Germany	1999	447.00	540	648.00	181440	17280	Cray Interconnect
135	Government	Cray Inc.	T3E1200	Classified	United States	1998	447.00	540	648.00	181440	17280	Cray Interconnect
136	Government	Cray Inc.	T3E1200	Classified	United States	1999	447.00	540	648.00	181440	17280	Cray Interconnect
137	Government	Cray Inc.	T3E1200	Classified	United States	2001	447.00	540	648.00	181440	17280	Cray Interconnect
138	University of Nebraska	Atipa Technology	Prairiefire AMD 1.4 GHz - Myrinet	Academic	United States	2002	442.50	256	716.80	112000	30000	Myrinet
139	Financial Institution	IBM	SP Power3 375 MHz	Industry	Hong Kong	2000	441.00	424	636.00			SP Switch
140	University of Kentucky	Hewlett-Packard	SuperDome 750 MHz/HyperPlex	Academic	United States	2001	431.70	224	672.00			Myrinet
141	Government	IBM	pSeries 690 Turbo 1.3GHz GigEth	Classified	United States	2002	430.00	176	915.20			Gigabit Ethernet
142	Postbank	IBM	pSeries 690 Turbo 1.3GHz GigEth	Industry	Germany	2002	430.00	176	915.20			Gigabit Ethernet
143	Commissariat a l'Energie Atomique (CEA)	Hewlett-Packard	AlphaServer SC40, 833 MHz	Research	France	2000	427.40	318	529.80	143000	19000	Quadrics
144	Defense	Sun Microsystems	HPC 4500 400 MHz Cluster	Classified	Sweden	1999	420.44	896	716.80	144000	43200	N/A
145	Service Provider	Sun Microsystems	HPC 4500 400 MHz Cluster	Industry	United States	2000	420.44	896	716.80	144000	43200	N/A
146	Service Provider	Sun Microsystems	HPC 4500 400 MHz Cluster	Industry	United States	2000	420.44	896	716.80	144000	43200	N/A
147	Sun	Sun Microsystems	HPC 4500 400 MHz Cluster	Vendor	United States	2000	420.44	896	716.80	144000	43200	N/A
148	Energy Company	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Industry	Italy	2002	417.30	192	672.00			Myrinet
149	Telecom Italia	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Industry	Italy	2002	417.30	192	672.00			Myrinet
150	Centre Informatique National (CINES)	SGI	ORIGIN 3000 500 MHz	Academic	France	2002	405.60	512	512.00	230000		NUMAflex
151	Fleet Numerical Meteorology and Oceanography Center	SGI	ORIGIN 3000 500 MHz	Research	United States	2001	405.60	512	512.00	230000		NUMAflex
152	Government	SGI	ORIGIN 3000 500 MHz	Classified	United States	2002	405.60	512	512.00	230000		NUMAflex
153	Japan Atomic Energy Research Institute	SGI	ORIGIN 3000 500 MHz	Research	Japan	2001	405.60	512	512.00	230000		NUMAflex
154	Kyoto University, Institute for Chemical Research	SGI	ORIGIN 3000 500 MHz	Academic	Japan	2002	405.60	512	512.00	230000		NUMAflex
155	Los Alamos National Laboratory	SGI	ORIGIN 3000 500 MHz	Research	United States	2002	405.60	512	512.00	230000		NUMAflex
156	Manufacturing Company	SGI	ORIGIN 3000 500 MHz	Industry	United States	2002	405.60	512	512.00	230000		NUMAflex
157	SARA (Stichting Academisch Rekencentrum)	SGI	ORIGIN 3000 500 MHz	Academic	Netherlands	2000	405.60	512	512.00	230000		NUMAflex
158	SARA (Stichting Academisch Rekencentrum)	SGI	ORIGIN 3000 500 MHz	Academic	Netherlands	2000	405.60	512	512.00	230000		NUMAflex
159	I2 Technologies Inc.	IBM	pSeries 690 1.1GHz	Industry	United States	2002	396.00	160	704.00			SP Switch
160	EDINFOR	IBM	SP Power3 375 MHz	Industry	Portugal	2002	393.00	380	570.00			SP Switch
161	KISTI Supercomputing Center	IBM	pSeries 690 Turbo 1.3GHz	Research	Korea, South	2002	378.20	128	665.60	200000	16000	SP Switch
162	Logicon	IBM	pSeries 690 Turbo 1.3GHz	Industry	United States	2002	378.20	128	665.60	200000	16000	SP Switch
163	SARA/IC3A (Stichting Academisch Rekencentrum)	IBM	pSeries 690 Turbo 1.3GHz	Academic	Netherlands	2002	378.20	128	665.60	200000	16000	SP Switch
164	US Department of the Treasury	IBM	pSeries 690 Turbo 1.3GHz	Government	United States	2002	378.20	128	665.60	200000	16000	SP Switch
165	Wachovia Corporation	IBM	pSeries 690 Turbo 1.3GHz	Industry	United States	2002	378.20	128	665.60	200000	16000	SP Switch
166	Center for Computational Physics, Univ of Tsukuba	Hitachi/Tsukuba	CP-PACS/2048	Academic	Japan	1996	368.20	2048	614.40	103680	30720	Crossbar
167	Geoscience (C)	IBM	Netfinity Cluster PIII 1.4 GHz - Eth	Industry	United Kingdom	2002	366.00	1280	1792.00			Ethernet
168	Mississippi State University	IBM	Netfinity Cluster PIII 1/1.26 GHz - Eth	Academic	United States	2002	366.00	1024	1144.00			Ethernet
169	Centrica Plc	Hewlett-Packard	SuperDome 750 MHz/HyperPlex	Industry	United Kingdom	2002	361.40	192	576.00			Myrinet
170	Hewlett-Packard	Hewlett-Packard	SuperDome 750 MHz/HyperPlex	Vendor	United States	2002	361.40	192	576.00			Myrinet
171	Universitaet Aachen/RWTH	Sun Microsystems	Fire 15K	Academic	Germany	2002	357.10	288	518.40			Fireplane
172	Pennsylvania State University	Dell	PowerEdge 2650 Cluster P4 Xeon 2.4 GHz - Myrinet	Academic	United States	2002	356.10	162	777.60	128000		Myrinet

Rank	Site	Manufacturer	Computer	Inst. type	Country	Year	Rmax	Processors	Rpeak	Nmax	Nhalf	Interconnect
173	Systems Research Group, University of Hong Kong	Self-made	Gideon 300 Cluster P4 2 GHz Fast Ethernet	Academic	Hong Kong	2002	355.50	300	600.00	129600		Fast Ethernet
174	Max-Planck-Gesellschaft MPI/IPP	Cray Inc.	T3E	Research	Germany	1997	355.00	812	487.20			Cray Interconnect
175	FBI	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Government	United States	2002	351.10	160	560.00			Myrinet
176	NRI for Earth Science and Disaster (NIED)	Fujitsu	VPP5000/38	Research	Japan	2002	351.10	38	364.80	1996080	9120	Crossbar
177	Japan Marine Science and Technology	Hewlett-Packard	AlphaServer SC40, 833 MHz	Research	Japan	2001	349.90	256	426.50	142000	7000	Quadrics
178	Los Alamos National Laboratory	Hewlett-Packard	AlphaServer SC40, 833 MHz	Research	United States	2001	349.90	256	426.50	142000	7000	Quadrics
179	Center for Astrophysics and Supercomputing, Swinburne UT	Dell	PowerEdge 2650/Prec. Workst. 530 Cluster P4 Xeon 2	Academic	Australia	2002	343.40	180	768.00	100000		Gigabit Ethernet
180	HWW/Universitaet Stuttgart	Cray Inc.	T3E900	Industry	Germany	1996	341.00	540	486.00			Cray Interconnect
181	Pittsburgh Supercomputing Center	Cray Inc.	T3E900	Academic	United States	1998	341.00	540	486.00			Cray Interconnect
182	ZIB/Konrad Zuse-Zentrum fuer Informationstechnik	Cray Inc.	T3E900	Academic	Germany	1999	341.00	540	486.00			Cray Interconnect
183	Bank of America	IBM	pSeries 690 Turbo 1.3GHz	Industry	United States	2002	330.00	112	582.40			SP Switch
184	EDS	IBM	pSeries 690 Turbo 1.3GHz	Industry	United States	2002	330.00	112	582.40			SP Switch
185	University of Minnesota/Supercomputing Institute	IBM	SP Power3 375 MHz	Academic	United States	2000	330.00	322	483.00			SP Switch
186	University at Buffalo, SUNY, Center for Computational Res.	Dell	PowerEdge 2650 Cluster P4 Xeon 2.4 GHz - GigE	Academic	United States	2002	327.90	200	960.00	100000		Gigabit Ethernet
187	Maui High-Performance Computing Center (MHPCC)	IBM	SP Power3 375 MHz	Research	United States	2000	327.00	320	480.00			SP Switch
188	Petroleum Company (G)	IBM	Netfinity Cluster PIII 1.13 GHz - Eth	Industry	Saudia Arabia	2001	326.00	2048	2314.00			Ethernet
189	WesternGeco	IBM	Netfinity Cluster PIII 1.13 GHz - Eth	Industry	United States	2002	326.00	1040	1175.00			Ethernet
190	Compagnie Generale de Geophysique (CGG)	IBM	Netfinity Cluster PIII 1.13 GHz - Eth	Industry	United Kingdom	2002	326.00	1024	1157.00			Ethernet
191	Compagnie Generale de Geophysique (CGG)	IBM	Netfinity Cluster PIII 1.13 GHz - Eth	Industry	United Kingdom	2002	326.00	1024	1157.00			Ethernet
192	Geoscience (C)	IBM	Netfinity Cluster PIII 1.13 GHz - Eth	Industry	Egypt	2001	326.00	1024	1157.00			Ethernet
193	Shell	IBM	Netfinity Cluster PIII 1.13 GHz - Eth	Industry	Netherlands	2002	326.00	1024	1157.00			Ethernet
194	Doshisha University	Self-made	Xenia / IBM Intellistation Xeon 2.4 GHz Myrinet	Academic	Japan	2002	323.70	128	614.40	86000	14600	Myrinet
195	High Performance Computing Virtual Laboratory	Sun Microsystems	Fire 15k/Fire 6800/Sun Fire Link	Research	Canada	2002	321.00	336	633.00			Fireplane
196	University of Oklahoma	Aspen Systems Inc.	P4 Xeon Cluster 2 GHz - Myrinet	Academic	United States	2002	320.80	264	1056.00	153600	33600	Myrinet
197	Institute of Physical and Chemical Res. (RIKEN)	Fujitsu	VPP700/160E	Research	Japan	1999	319.00	160	384.00	168000	24000	Crossbar
198	CSAR at the University of Manchester	SGI	ORIGIN 3000 400 MHz	Academic	United Kingdom	2001	315.50	512	409.60	130560	108800	Crossbar
199	ERDC MSRC	SGI	ORIGIN 3000 400 MHz	Research	United States	2001	315.50	512	409.60	130560	108800	Crossbar
200	Energy Company	SGI	ORIGIN 3000 400 MHz	Industry	United States	2002	315.50	512	409.60	130560	108800	Crossbar
201	NASA/Ames Research Center/NAS	SGI	ORIGIN 3000 400 MHz	Research	United States	2001	315.50	512	409.60	130560	108800	Crossbar
202	NASA/Goddard Space Flight Center	SGI	ORIGIN 3000 400 MHz	Research	United States	2001	315.50	512	409.60	130560	108800	Crossbar
203	Silicon Graphics	SGI	ORIGIN 3000 400 MHz	Vendor	United States	2001	315.50	512	409.60	130560	108800	Crossbar
204	US Army Research Laboratory (ARL)	SGI	ORIGIN 3000 400 MHz	Research	United States	2000	315.50	512	409.60	130560	108800	Crossbar
205	Communications Res. Lab. (CRL)	NEC	SX-6/40M5	Research	Japan	2002	311.70	40	320.00	102400	4480	Crossbar
206	Scalable Systems Group, Dell Computer	Dell	PowerEdge 2650 Cluster P4 Xeon 2.4 GHz - Myrinet	Vendor	United States	2002	308.30	128	614.40	115000		Myrinet
207	Fidelity Investments	IBM	pSeries 690 Turbo 1.3GHz	Industry	United States	2002	308.00	104	540.80			SP Switch
208	ERDC MSRC	IBM	SP Power3 222 MHz	Research	United States	2000	307.60	512	454.60	148000	35000	SP Switch
209	Government	IBM	pSeries 690 Turbo 1.3GHz GigEth	Classified	United States	2002	306.40	128	665.60	112000		Gigabit Ethernet
210	Government	SGI	ORIGIN 3000 500 MHz	Classified	United States	2002	306.30	384	384.00			NUMAflex
211	NRI for Earth Science and Disaster (NIED)	SGI	ORIGIN 3000 500 MHz	Research	Japan	2002	306.30	384	384.00			NUMAflex
212	Norwegian University of Science and Technology	SGI	ORIGIN 3000 500 MHz	Academic	Norway	2001	306.30	384	384.00			NUMAflex
213	CNRS/IDRIS	NEC	SX-5/40M3	Academic	France	2000	303.00	40	320.00			Crossbar
214	University of California - Santa Cruz	Verari Systems	RS1100 AMD 1.4 GHz - Dolphin	Academic	United States	2002	301.80	264	739.20	115000	15000	Myrinet
215	NASA/Ames Research Center/NAS	SGI	ORIGIN 2000 400 MHz	Research	United States	2000	300.20	512	409.60	130560	21216	Crossbar

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216	Nanyang Technological University - BIRC	Hewlett-Packard	AlphaServer SC45, 1 GHz	Academic	Singapore	2002	299.70	176	352.00	132000	13000	Quadrics
217	Agilent	Hewlett-Packard	SuperDome 750 MHz/HyperPlex	Industry	United States	2001	296.20	144	432.00			Myrinet
218	Central Research Institute of Electric Power Industry/CRIEPI	Fujitsu	VPP5000/32	Research	Japan	2000	296.10	32	307.20	170880	7680	Crossbar
219	PGS	IBM	SP Power3 375 MHz	Industry	United States	2001	295.00	290	435.00			SP Switch
220	Geoscience (C)	IBM	Netfinity Cluster PIII 1 GHz - Eth	Industry	United Kingdom	2001	289.00	1040	1040.00			Ethernet
221	WesternGeco	IBM	Netfinity Cluster PIII 1 GHz - Eth	Industry	United States	2002	289.00	1040	1040.00			Ethernet
222	Compagnie Generale de Geophysique (CGG)	IBM	Netfinity Cluster PIII 1 GHz - Eth	Industry	United Kingdom	2001	289.00	1024	1024.00			Ethernet
223	Pemex Gas	IBM	Netfinity Cluster PIII 1 GHz - Eth	Industry	Mexico	2002	289.00	1024	1024.00			Ethernet
224	Shell	IBM	Netfinity Cluster PIII 1 GHz - Eth	Industry	Netherlands	2001	289.00	1024	1024.00			Ethernet
225	US Army Space and Missile Defense Command	IBM	SP Power3 375 MHz	Research	United States	2000	288.00	284	426.00			SP Switch
226	BMW AG	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Industry	Germany	2002	286.00	128	448.00			Myrinet
227	BMW AG	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Industry	Germany	2002	286.00	128	448.00			Myrinet
228	Centrica Plc	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Industry	United Kingdom	2002	286.00	128	448.00			Myrinet
229	Samsung SDS	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Industry	Korea, South	2002	286.00	128	448.00			Myrinet
230	Verizon SCell	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Industry	United States	2002	286.00	128	448.00			Myrinet
231	Verizon SCell	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Industry	United States	2002	286.00	128	448.00			Myrinet
232	Meteo-France	Fujitsu	VPP5000/31	Research	France	1999	286.00	31	297.60			Crossbar
233	UCSD/Cal-IT*2/SDSC	IBM	COMPAS-ECCO meta cluster, PIII 1 GHz, Myrinet, Roc	Research	United States	2002	285.90	480	480.00	150000	17000	Myrinet
234	Continental Teves AG	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Industry	Germany	2002	285.80	128	448.00			Myrinet
235	DeTeCSM	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Industry	Germany	2002	285.80	128	448.00			Myrinet
236	DeTeCSM	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Industry	Germany	2002	285.80	128	448.00			Myrinet
237	Telecom Italia Mobile	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Industry	Italy	2002	285.80	128	448.00			Myrinet
238	Maui High-Performance Computing Center (MHPCC)	IBM	Netfinity Cluster PIII 933 MHz - Myrinet	Research	United States	2001	285.00	520	485.16			Myrinet
239	Advanced Info Service	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Industry	Thailand	2002	284.40	128	448.00			Myrinet
240	Voicestream Wireless	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Industry	United States	2002	284.40	128	448.00			Myrinet
241	CSC (Center for Scientific Computing)	Cray Inc.	T3E750	Academic	Finland	2000	284.00	540	405.00			Cray Interconnect
242	Institute for Molecular Science	Fujitsu	VPP5000/30	Research	Japan	2000	277.00	30	288.00			Crossbar
243	Geoscience (C)	IBM	Netfinity Cluster PIII 933 MHz - Eth	Industry	Egypt	2002	269.00	1024	955.30			Ethernet
244	NCSA	SGI	ORIGIN 2000 195/250 MHz	Academic	United States	1998	264.90	1024	327.68			Crossbar
245	Oak Ridge National Laboratory	Hewlett-Packard	AlphaServer SC ES40/EV67	Research	United States	2000	263.60	256	341.33	106000	20000	Quadrics
246	Pittsburgh Supercomputing Center	Hewlett-Packard	AlphaServer SC ES40/EV67	Academic	United States	2000	263.60	256	341.33	106000	20000	Quadrics
247	DeTeCSM	IBM	SP Power3 375 MHz	Industry	Germany	2001	262.00	260	390.00			SP Switch
248	Hewlett-Packard	Hewlett-Packard	rp8400 750 MHz/HyperFabric	Vendor	United States	2002	261.10	128	384.00			Myrinet
249	Purdue University	IBM	SP Power3 375 MHz	Academic	United States	2000	257.00	256	384.00	148000	24000	SP Switch
250	Meteorological Research Institute/JMA	Hitachi	SR8000/36	Research	Japan	1999	255.00	36	288.00	69000	5968	Crossbar
251	Hewlett-Packard	Hewlett-Packard	SuperDome 750 MHz/HyperFabric	Vendor	United States	2002	254.90	128	384.00			Myrinet
252	BMW AG	Hewlett-Packard	rp8400 750 MHz/HyperPlex	Industry	Germany	2001	251.10	128	384.00	234144	70092	Myrinet
253	Chemical Company	IBM	SP PC604e 332 MHz	Industry	Germany	2000	250.00	716	475.40			SP Switch
254	BMW AG	Hewlett-Packard	SuperDome 750 MHz/HyperPlex	Industry	Germany	2002	245.30	128	384.00	170100	55080	Myrinet
255	Beijing Social Insurance	Hewlett-Packard	SuperDome 750 MHz/HyperPlex	Industry	China	2001	245.30	128	384.00	170100	55080	Myrinet
256	Belgacom	Hewlett-Packard	SuperDome 750 MHz/HyperPlex	Industry	Belgium	2002	245.30	128	384.00	170100	55080	Myrinet
257	Belgacom	Hewlett-Packard	SuperDome 750 MHz/HyperPlex	Industry	Belgium	2002	245.30	128	384.00	170100	55080	Myrinet
258	EDS	Hewlett-Packard	SuperDome 750 MHz/HyperPlex	Industry	United Kingdom	2001	245.30	128	384.00	170100	55080	Myrinet

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259	France Telecom	Hewlett-Packard	SuperDome 750 MHz/HyperPlex	Industry	France	2001	245.30	128	384.00	170100	55080	Myrinet
260	Netsiel S.P.A.	Hewlett-Packard	SuperDome 750 MHz/HyperPlex	Industry	Italy	2002	245.30	128	384.00	170100	55080	Myrinet
261	Omnitel Pronto Italia	Hewlett-Packard	SuperDome 750 MHz/HyperPlex	Industry	Italy	2002	245.30	128	384.00	170100	55080	Myrinet
262	debis Systemhaus	Hewlett-Packard	SuperDome 750 MHz/HyperPlex	Industry	Germany	2001	245.30	128	384.00	170100	55080	Myrinet
263	Government	SGI	ORIGIN 3000 600 MHz	Classified	United States	2002	245.20	256	307.20	120000		NUMAflex
264	Government	SGI	ORIGIN 3000 600 MHz	Classified	United States	2002	245.20	256	307.20	120000		NUMAflex
265	NOAA/Geophysical Fluid Dynamics Laboratory (GFDL)	SGI	ORIGIN 3000 600 MHz	Research	United States	2001	245.20	256	307.20	120000		NUMAflex
266	NOAA/Geophysical Fluid Dynamics Laboratory (GFDL)	SGI	ORIGIN 3000 600 MHz	Research	United States	2001	245.20	256	307.20	120000		NUMAflex
267	NOAA/Geophysical Fluid Dynamics Laboratory (GFDL)	SGI	ORIGIN 3000 600 MHz	Research	United States	2001	245.20	256	307.20	120000		NUMAflex
268	NOAA/Geophysical Fluid Dynamics Laboratory (GFDL)	SGI	ORIGIN 3000 600 MHz	Research	United States	2001	245.20	256	307.20	120000		NUMAflex
269	NOAA/Geophysical Fluid Dynamics Laboratory (GFDL)	SGI	ORIGIN 3000 600 MHz	Research	United States	2001	245.20	256	307.20	120000		NUMAflex
270	Silicon Graphics	SGI	ORIGIN 3000 600 MHz	Vendor	United States	2002	245.20	256	307.20	120000		NUMAflex
271	ABN AMRO	Hewlett-Packard	SuperDome 750 MHz/HyperPlex	Industry	United Kingdom	2002	245.10	128	384.00	220968	43092	Myrinet
272	BMW AG	Hewlett-Packard	SuperDome 750 MHz/HyperPlex	Industry	Germany	2002	245.10	128	384.00	220968	43092	Myrinet
273	BMW AG	Hewlett-Packard	SuperDome 750 MHz/HyperPlex	Industry	Germany	2002	245.10	128	384.00	220968	43092	Myrinet
274	BMW AG	Hewlett-Packard	SuperDome 750 MHz/HyperPlex	Industry	Germany	2002	245.10	128	384.00	220968	43092	Myrinet
275	BMW AG	Hewlett-Packard	SuperDome 750 MHz/HyperPlex	Industry	Germany	2002	245.10	128	384.00	220968	43092	Myrinet
276	BMW AG	Hewlett-Packard	SuperDome 750 MHz/HyperPlex	Industry	Germany	2002	245.10	128	384.00	220968	43092	Myrinet
277	BMW AG	Hewlett-Packard	SuperDome 750 MHz/HyperPlex	Industry	Germany	2002	245.10	128	384.00	220968	43092	Myrinet
278	Banca Sella	Hewlett-Packard	SuperDome 750 MHz/HyperPlex	Industry	Italy	2002	245.10	128	384.00	220968	43092	Myrinet
279	Centrica Plc	Hewlett-Packard	SuperDome 750 MHz/HyperPlex	Industry	United Kingdom	2002	245.10	128	384.00	220968	43092	Myrinet
280	Centrica Plc	Hewlett-Packard	SuperDome 750 MHz/HyperPlex	Industry	United Kingdom	2002	245.10	128	384.00	220968	43092	Myrinet
281	EDS	Hewlett-Packard	SuperDome 750 MHz/HyperPlex	Industry	United Kingdom	2002	245.10	128	384.00	220968	43092	Myrinet
282	Hutchison H3G	Hewlett-Packard	SuperDome 750 MHz/HyperPlex	Industry	United Kingdom	2002	245.10	128	384.00	220968	43092	Myrinet
283	IS Informationssysteme II	Hewlett-Packard	SuperDome 750 MHz/HyperPlex	Industry	Germany	2002	245.10	128	384.00	220968	43092	Myrinet
284	Itellium Systems	Hewlett-Packard	SuperDome 750 MHz/HyperPlex	Industry	Germany	2001	245.10	128	384.00	220968	43092	Myrinet
285	Magirus International	Hewlett-Packard	SuperDome 750 MHz/HyperPlex	Industry	Germany	2002	245.10	128	384.00	220968	43092	Myrinet
286	Sprint PCS	Hewlett-Packard	SuperDome 750 MHz/HyperPlex	Industry	United States	2002	245.10	128	384.00	220968	43092	Myrinet
287	Verizon	Hewlett-Packard	SuperDome 750 MHz/HyperPlex	Industry	United States	2002	245.10	128	384.00	220968	43092	Myrinet
288	WIND Telecom S.P.A.	Hewlett-Packard	SuperDome 750 MHz/HyperPlex	Industry	Italy	2002	245.10	128	384.00	220968	43092	Myrinet
289	Wachovia Corporation	Hewlett-Packard	SuperDome 750 MHz/HyperPlex	Industry	United States	2002	245.10	128	384.00	220968	43092	Myrinet
290	Wachovia Corporation	Hewlett-Packard	SuperDome 750 MHz/HyperPlex	Industry	United States	2002	245.10	128	384.00	220968	43092	Myrinet
291	PGS	IBM	Netfinity Cluster PIII 1.13 GHz - Eth	Industry	United States	2002	245.00	768	867.80			Ethernet
292	Tohoku University	NEC	SX-4/128H4	Academic	Japan	1997	244.00	128	256.00			Crossbar
293	CIE Gegetel SI	Hewlett-Packard	SuperDome 750 MHz/HyperPlex	Industry	France	2002	243.80	128	384.00			Myrinet
294	Manufacturing Company	Hewlett-Packard	SuperDome 750 MHz/HyperPlex	Industry	United States	2002	243.80	128	384.00			Myrinet
295	Telecom Italia	Hewlett-Packard	SuperDome 750 MHz/HyperPlex	Industry	Italy	2001	243.80	128	384.00			Myrinet
296	Tohoku University, Institute of Fluid Science	SGI	ORIGIN 2000 300 MHz	Academic	Japan	2000	241.40	640	384.00	147456	33984	Crossbar
297	NASA/Ames Research Center/NAS	SGI	ORIGIN 2000 300 MHz	Research	United States	1999	241.40	512	307.20	147456	33984	Crossbar
298	Bureau of Meteorology / CSIRO HPCCC	NEC	SX-5/32M2	Research	Australia	2000	241.40	32	256.00	55296		Crossbar
299	Meteorological Service of Canada (MSC)	NEC	SX-5/32M2	Research	Canada	1999	241.40	32	256.00	55296		Crossbar
300	National Research Institute for Metals	NEC	SX-5/32H2	Research	Japan	2000	241.40	32	256.00	55296		Crossbar
301	University of New Mexico	IBM	LosLobos	Academic	United States	2000	237.00	512	375.30	150000	20000	Fast Ethernet

Rank	Site	Manufacturer	Computer	Inst. type	Country	Year	Rmax	Processors	Rpeak	Nmax	Nhalf	Interconnect
302	Theoretical Chemistry, Ruhr-University Bochum	Megware	AMD AthlonMP1600+ - SCI 2D-Torus	Academic	Germany	2002	235.80	128	358.40	103200	17910	SCI
303	Government	Cray Inc.	T3E1200	Classified	United States	1999	235.00	284	340.80			Cray Interconnect
304	Massey University Albany, IIMS & The Allan Wilson Centre	Advantage Computers	HELIX AMD 1.733 GHz - GigEth	Academic	New Zealand	2002	234.80	132	457.50	82080	25000	Gigabit Ethernet
305	Ahold	IBM	pSeries 690 Turbo 1.3GHz GigEth	Industry	United States	2002	234.00	96	499.20			Gigabit Ethernet
306	BOUYGTEL	IBM	pSeries 690 Turbo 1.3GHz GigEth	Industry	France	2002	234.00	96	499.20			Gigabit Ethernet
307	Boeing	IBM	pSeries 690 Turbo 1.3GHz GigEth	Industry	United States	2002	234.00	96	499.20			Gigabit Ethernet
308	Boston University	IBM	pSeries 690 Turbo 1.3GHz GigEth	Academic	United States	2002	234.00	96	499.20			Gigabit Ethernet
309	Citicorp	IBM	pSeries 690 Turbo 1.3GHz GigEth	Industry	United States	2002	234.00	96	499.20			Gigabit Ethernet
310	Hitachi Micro Systems	IBM	pSeries 690 Turbo 1.3GHz GigEth	Industry	United States	2002	234.00	96	499.20			Gigabit Ethernet
311	Manufacturing Company	IBM	pSeries 690 Turbo 1.3GHz GigEth	Industry	United States	2002	234.00	96	499.20			Gigabit Ethernet
312	National Association of Securities	IBM	pSeries 690 Turbo 1.3GHz GigEth	Industry	United States	2002	234.00	96	499.20			Gigabit Ethernet
313	Universitaet Darmstadt	IBM	pSeries 690 Turbo 1.3GHz GigEth	Academic	Germany	2002	234.00	96	499.20			Gigabit Ethernet
314	University of Bergen	IBM	pSeries 690 Turbo 1.3GHz GigEth	Academic	Norway	2002	234.00	96	499.20			Gigabit Ethernet
315	Forschungszentrum Juelich (FZJ)	Cray Inc.	T3E	Research	Germany	1996	234.00	540	324.00	86400	14400	Cray Interconnect
316	SARA (Stichting Academisch Rekencentrum)	IBM	Netfinity Cluster PIII 1 GHz - Myrinet	Academic	Netherlands	2002	232.00	400	400.00			Myrinet
317	Taiwan Central Weather Bureau & CAA	Fujitsu	VPP5000/25	Research	Taiwan	2001	232.00	25	240.00			Crossbar
318	General Motors	Hewlett-Packard	SuperDome 750 MHz/HyperPlex	Industry	United States	2002	231.60	120	360.00			Myrinet
319	Hokkaido University	Hitachi	SR8000/32	Academic	Japan	2000	229.00	32	256.00	65000	5632	Crossbar
320	INTESA	IBM	pSeries 690 1.1GHz GigEth	Industry	United States	2002	228.00	112	492.80			Gigabit Ethernet
321	AT&T Wireless	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Industry	United States	2002	227.30	96	336.00			Myrinet
322	AT&T Wireless	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Industry	United States	2002	227.30	96	336.00			Myrinet
323	Arnold Engineering Development Center (AEDC)	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Research	United States	2002	227.30	96	336.00			Myrinet
324	BellSouth	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Industry	United States	2002	227.30	96	336.00			Myrinet
325	BellSouth	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Industry	United States	2002	227.30	96	336.00			Myrinet
326	BellSouth	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Industry	United States	2002	227.30	96	336.00			Myrinet
327	BellSouth	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Industry	United States	2002	227.30	96	336.00			Myrinet
328	Hanaro Telecom/Sysore	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Industry	Japan	2002	227.30	96	336.00			Myrinet
329	Lufthansa Infratec GmbH	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Industry	Germany	2002	227.30	96	336.00			Myrinet
330	Lufthansa Infratec GmbH	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Industry	Germany	2002	227.30	96	336.00			Myrinet
331	RR Donnelley	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Industry	United States	2002	227.30	96	336.00			Myrinet
332	Ohio Supercomputer Center	SGI	SGI 750 Cluster Itanium 733 MHz	Academic	United States	2001	226.00	128	375.29	157680		Fast Ethernet
333	Gesellschaft fuer wissenschaftliche Datenverarbeitung	IBM	SP Power3 375 MHz	Academic	Germany	2001	226.00	224	336.00			SP Switch
334	Manufacturing Company	IBM	SP Power3 375 MHz	Industry	United States	2001	226.00	224	336.00			SP Switch
335	Petroleum Company (G)	IBM	SP Power3 375 MHz 16 way	Industry	Saudia Arabia	2001	226.00	208	312.00			SP Switch
336	University of Maine	Microway	Pentium 3 Cluster 1.0 GHz	Academic	United States	2002	225.80	416	416.00	89500	17000	Fast Ethernet
337	Commissariat a l'Energie Atomique (CEA)	Hewlett-Packard	AlphaServer SC40, 833 MHz	Research	France	2000	223.10	166	276.50	105000	13000	Quadrics
338	KISTI Supercomputing Center	Self-made	P4 Cluster 1.7 GHz - Myrinet	Research	Korea, South	2002	221.60	128	435.20	115000	18000	Myrinet
339	Technische Universitaet Chemnitz	Self-made	CLIC PIII 800 MHz	Academic	Germany	2000	221.60	530	424.00	176640	28272	Fast Ethernet
340	CINECA	Hewlett-Packard	AlphaServer SC45, 1 GHz	Academic	Italy	2002	220.50	128	256.00	109000	11500	Quadrics
341	Honda Research and Development Company	Self-made	Pentium 4 Cluster 2.4/2.0 GHz - Giganet	Industry	Japan	2002	219.00	140	588.00	90011	31000	Giganet
342	University of Edinburgh	Cray Inc.	T3E900	Academic	United Kingdom	1997	218.00	348	313.20			Cray Interconnect
343	Williams-Sonoma	IBM	pSeries 690 Turbo 1.3GHz GigEth	Industry	United States	2002	216.00	88	457.60			Gigabit Ethernet
344	Forecast Systems Laboratory - NOAA	HPTi	ACL-284	Research	United States	2001	216.00	284	411.80			Myrinet

Rank	Site	Manufacturer	Computer	Inst. type	Country	Year	Rmax	Processors	Rpeak	Nmax	Nhalf	Interconnect
345	PSA Peugeot Citroen	IBM	SP Power3 375 MHz	Industry	France	2001	214.00	212	318.00			SP Switch
346	CDM Technoconsulting	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Industry	Italy	2002	213.10	96	336.00			Myrinet
347	GMAC	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Industry	United States	2002	213.10	96	336.00			Myrinet
348	NeiMeng Mobile	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Industry	China	2002	213.10	96	336.00			Myrinet
349	Santa Lucia SA	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Industry	Spain	2002	213.10	96	336.00			Myrinet
350	Avon Products	IBM	pSeries 690 1.1GHz GigEth	Industry	United States	2002	213.00	104	457.60			Gigabit Ethernet
351	ECMWF	Fujitsu	VPP700/116	Research	United Kingdom	1997	213.00	116	255.20	111360	18560	Crossbar
352	GSIC Center, Tokyo Institute of Technology	NEC	Titech Grid Cluster - PIII 1.4 GHz	Academic	Japan	2002	212.70	256	358.40	115000		Fast Ethernet
353	Chemical Company	IBM	SP Power3 375 MHz	Industry	Germany	2000	212.00	210	315.00			SP Switch
354	Korea Meteorological Administration	NEC	SX-5/28M2	Research	Korea, South	2000	212.00	28	224.00			Crossbar
355	Commissariat a l'Energie Atomique (CEA)	Hewlett-Packard	AlphaServer SC ES40/EV67	Research	France	1999	211.00	232	309.33	120000		Quadrics
356	Sobeys Canada	IBM	SP PC604e 332 MHz	Industry	Canada	2000	210.20	512	339.90	100000	20872	SP Switch
357	Centre Informatique National (CINES)	SGI	ORIGIN 3000 500 MHz	Academic	France	2002	210.20	256	256.00	163000		NUMAflex
358	Ford Motor Company	SGI	ORIGIN 3000 500 MHz	Industry	United States	2002	210.20	256	256.00	163000		NUMAflex
359	Government	SGI	ORIGIN 3000 500 MHz	Classified	United States	2002	210.20	256	256.00	163000		NUMAflex
360	Industry	SGI	ORIGIN 3000 500 MHz	Industry	United States	2002	210.20	256	256.00	163000		NUMAflex
361	Japan Atomic Energy Research Institute	SGI	ORIGIN 3000 500 MHz	Research	Japan	2001	210.20	256	256.00	163000		NUMAflex
362	Kyoto University, Institute for Chemical Research	SGI	ORIGIN 3000 500 MHz	Academic	Japan	2002	210.20	256	256.00	163000		NUMAflex
363	Manufacturing Company	SGI	ORIGIN 3000 500 MHz	Industry	United States	2002	210.20	256	256.00	163000		NUMAflex
364	US Army Research Laboratory (ARL)	SGI	ORIGIN 3000 500 MHz	Research	United States	2002	210.20	256	256.00	163000		NUMAflex
365	Brigham Young University	IBM	SP Power3 375 MHz 16 way	Academic	United States	2002	208.00	192	288.00			SP Switch
366	Japan Atomic Energy Research/Tokai Research Establishment	Hitachi	SR8000-FI/20	Research	Japan	2001	206.00	20	240.00	68000	4440	Crossbar
367	4SC AG	IBM	Netfinity Cluster PIII 1.26 GHz - Eth	Industry	Germany	2002	205.30	512	645.10	118500		Ethernet
368	PGS	IBM	Netfinity Cluster PIII 1.26 GHz - Eth	Industry	United States	2002	205.30	512	645.10	118500		Ethernet
369	PGS	IBM	Netfinity Cluster PIII 1.26 GHz - Eth	Industry	Egypt	2002	205.30	512	645.10	118500		Ethernet
370	Universitaet Wien	init.at	Schroedinger I AMD 1.47 GHz	Academic	Austria	2001	204.50	160	472.00	138700	44000	Fast Ethernet
371	University of Alaska - ARSC	IBM	SP Power3 375 MHz	Academic	United States	2001	203.00	200	300.00			SP Switch
372	Hitachi Mechanical Engineering Res. Lab.	Hitachi	SR8000-G1/16	Industry	Japan	2001	199.10	16	230.40	64000	3440	Crossbar
373	Gesellschaft fuer wissenschaftliche Datenverarbeitung	IBM	pSeries 690 1.1GHz GigEth	Academic	Germany	2002	198.00	96	422.40			Gigabit Ethernet
374	HeiLongJiang Mobile BOSS	IBM	pSeries 690 1.1GHz GigEth	Industry	China	2002	198.00	96	422.40			Gigabit Ethernet
375	Verizon	IBM	pSeries 690 1.1GHz GigEth	Industry	United States	2002	198.00	96	422.40			Gigabit Ethernet
376	Avent	IBM	pSeries 690 Turbo 1.3GHz GigEth	Industry	United States	2002	198.00	80	416.00			Gigabit Ethernet
377	Capital One Services	IBM	pSeries 690 Turbo 1.3GHz GigEth	Industry	United States	2002	198.00	80	416.00			Gigabit Ethernet
378	University of Rochester	IBM	pSeries 690 Turbo 1.3GHz GigEth	Academic	United States	2002	198.00	80	416.00			Gigabit Ethernet
379	AT&T	Sun Microsystems	Fire 15K	Industry	United States	2002	197.30	144	259.20			Fireplane
380	AT&T	Sun Microsystems	Fire 15K	Industry	United States	2002	197.30	144	259.20			Fireplane
381	Advanced Info Service	Sun Microsystems	Fire 15K	Industry	Thailand	2002	197.30	144	259.20			Fireplane
382	Advanced Info Service	Sun Microsystems	Fire 15K	Industry	Thailand	2002	197.30	144	259.20			Fireplane
383	Automotive Manufacturer	Sun Microsystems	Fire 15K	Industry	France	2002	197.30	144	259.20			Fireplane
384	Automotive Manufacturer	Sun Microsystems	Fire 15K	Industry	France	2002	197.30	144	259.20			Fireplane
385	Automotive Manufacturer	Sun Microsystems	Fire 15K	Industry	France	2002	197.30	144	259.20			Fireplane
386	Automotive Manufacturer	Sun Microsystems	Fire 15K	Industry	France	2002	197.30	144	259.20			Fireplane
387	Automotive Manufacturer	Sun Microsystems	Fire 15K	Industry	France	2002	197.30	144	259.20			Fireplane

Rank	Site	Manufacturer	Computer	Inst. type	Country	Year	Rmax	Processors	Rpeak	Nmax	Nhalf	Interconnect
388	Automotive Manufacturer	Sun Microsystems	Fire 15K	Industry	France	2002	197.30	144	259.20			Fireplane
389	BMW AG	Sun Microsystems	Fire 15K	Industry	Germany	2002	197.30	144	259.20			Fireplane
390	Bank	Sun Microsystems	Fire 15K	Industry	United States	2002	197.30	144	259.20			Fireplane
391	Bundesministerium der Finanzen	Sun Microsystems	Fire 15K	Government	Germany	2002	197.30	144	259.20			Fireplane
392	Caixa Economica Federal	Sun Microsystems	Fire 15K	Government	Brazil	2002	197.30	144	259.20			Fireplane
393	Cambridge University	Sun Microsystems	Fire 15K	Academic	United Kingdom	2002	197.30	144	259.20			Fireplane
394	Cambridge University	Sun Microsystems	Fire 15K	Academic	United Kingdom	2002	197.30	144	259.20			Fireplane
395	Cambridge University	Sun Microsystems	Fire 15K	Academic	United Kingdom	2002	197.30	144	259.20			Fireplane
396	Cambridge University	Sun Microsystems	Fire 15K	Academic	United Kingdom	2002	197.30	144	259.20			Fireplane
397	Commerzbank	Sun Microsystems	Fire 15K	Industry	Germany	2002	197.30	144	259.20			Fireplane
398	Commerzbank	Sun Microsystems	Fire 15K	Industry	Germany	2002	197.30	144	259.20			Fireplane
399	Commerzbank	Sun Microsystems	Fire 15K	Industry	Germany	2002	197.30	144	259.20			Fireplane
400	DaimlerChrysler	Sun Microsystems	Fire 15K	Industry	Germany	2002	197.30	144	259.20			Fireplane
401	DaimlerChrysler	Sun Microsystems	Fire 15K	Industry	Germany	2002	197.30	144	259.20			Fireplane
402	DaimlerChrysler	Sun Microsystems	Fire 15K	Industry	Germany	2002	197.30	144	259.20			Fireplane
403	DaimlerChrysler	Sun Microsystems	Fire 15K	Industry	Germany	2002	197.30	144	259.20			Fireplane
404	DaimlerChrysler	Sun Microsystems	Fire 15K	Industry	Germany	2002	197.30	144	259.20			Fireplane
405	Defense	Sun Microsystems	Fire 15K	Classified	Sweden	2002	197.30	144	259.20			Fireplane
406	Defense	Sun Microsystems	Fire 15K	Classified	Sweden	2002	197.30	144	259.20			Fireplane
407	Defense Enterprise Computing Center	Sun Microsystems	Fire 15K	Classified	United States	2002	197.30	144	259.20			Fireplane
408	Deutsche Bank	Sun Microsystems	Fire 15K	Industry	Germany	2002	197.30	144	259.20			Fireplane
409	Deutsche Bank	Sun Microsystems	Fire 15K	Industry	Germany	2002	197.30	144	259.20			Fireplane
410	Deutsche Bank	Sun Microsystems	Fire 15K	Industry	Germany	2002	197.30	144	259.20			Fireplane
411	Deutsche Bank	Sun Microsystems	Fire 15K	Industry	Germany	2002	197.30	144	259.20			Fireplane
412	EDS	Sun Microsystems	Fire 15K	Industry	Germany	2002	197.30	144	259.20			Fireplane
413	Employment Service Company	Sun Microsystems	Fire 15K	Industry	United States	2002	197.30	144	259.20			Fireplane
414	Finance Company	Sun Microsystems	Fire 15K	Industry	United States	2002	197.30	144	259.20			Fireplane
415	Finance Company	Sun Microsystems	Fire 15K	Industry	United States	2002	197.30	144	259.20			Fireplane
416	Finance Company	Sun Microsystems	Fire 15K	Industry	United States	2002	197.30	144	259.20			Fireplane
417	Finance Company	Sun Microsystems	Fire 15K	Industry	United States	2002	197.30	144	259.20			Fireplane
418	Finance Company	Sun Microsystems	Fire 15K	Industry	United States	2002	197.30	144	259.20			Fireplane
419	Finance Company	Sun Microsystems	Fire 15K	Industry	United States	2002	197.30	144	259.20			Fireplane
420	Finance Company	Sun Microsystems	Fire 15K	Industry	Spain	2002	197.30	144	259.20			Fireplane
421	Finance Company	Sun Microsystems	Fire 15K	Industry	United Kingdom	2002	197.30	144	259.20			Fireplane
422	Government	Sun Microsystems	Fire 15K	Government	United States	2002	197.30	144	259.20			Fireplane
423	Government	Sun Microsystems	Fire 15K	Government	United States	2002	197.30	144	259.20			Fireplane
424	Government	Sun Microsystems	Fire 15K	Classified	United States	2002	197.30	144	259.20			Fireplane
425	Government	Sun Microsystems	Fire 15K	Classified	United States	2002	197.30	144	259.20			Fireplane
426	Grupo Elektra	Sun Microsystems	Fire 15K	Industry	Mexico	2002	197.30	144	259.20			Fireplane
427	Instituto Mexicano del Seguro Social	Sun Microsystems	Fire 15K	Government	Mexico	2002	197.30	144	259.20			Fireplane
428	Instituto Mexicano del Seguro Social	Sun Microsystems	Fire 15K	Government	Mexico	2002	197.30	144	259.20			Fireplane
429	Instituto Mexicano del Seguro Social	Sun Microsystems	Fire 15K	Government	Mexico	2002	197.30	144	259.20			Fireplane
430	Insurance Company	Sun Microsystems	Fire 15K	Industry	United States	2002	197.30	144	259.20			Fireplane

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431	Internet Service Provider	Sun Microsystems	Fire 15K	Industry	Italy	2002	197.30	144	259.20			Fireplane
432	Kyoto University	Sun Microsystems	Fire 15K	Academic	Japan	2002	197.30	144	259.20			Fireplane
433	Littlewoods	Sun Microsystems	Fire 15K	Industry	United Kingdom	2002	197.30	144	259.20			Fireplane
434	Manufacturing Company	Sun Microsystems	Fire 15K	Industry	Taiwan	2002	197.30	144	259.20			Fireplane
435	Manufacturing Company	Sun Microsystems	Fire 15K	Industry	Germany	2002	197.30	144	259.20			Fireplane
436	Nihon Sun	Sun Microsystems	Fire 15K	Vendor	Japan	2002	197.30	144	259.20			Fireplane
437	Oil Company	Sun Microsystems	Fire 15K	Industry	United States	2002	197.30	144	259.20			Fireplane
438	Oil Company	Sun Microsystems	Fire 15K	Industry	United States	2002	197.30	144	259.20			Fireplane
439	Sotware Developer	Sun Microsystems	Fire 15K	Industry	United States	2002	197.30	144	259.20			Fireplane
440	Telecommunication Company	Sun Microsystems	Fire 15K	Industry	United States	2002	197.30	144	259.20			Fireplane
441	Telecommunication Company	Sun Microsystems	Fire 15K	Industry	France	2002	197.30	144	259.20			Fireplane
442	Telecommunication Company	Sun Microsystems	Fire 15K	Industry	Belgium	2002	197.30	144	259.20			Fireplane
443	Telecommunication Company	Sun Microsystems	Fire 15K	Industry	Germany	2002	197.30	144	259.20			Fireplane
444	Telecommunication Company	Sun Microsystems	Fire 15K	Industry	Italy	2002	197.30	144	259.20			Fireplane
445	Telecommunication Company	Sun Microsystems	Fire 15K	Industry	Germany	2002	197.30	144	259.20			Fireplane
446	Telecommunication Company	Sun Microsystems	Fire 15K	Industry	United States	2002	197.30	144	259.20			Fireplane
447	Telecommunication Company	Sun Microsystems	Fire 15K	Industry	Italy	2002	197.30	144	259.20			Fireplane
448	Telecommunication Company	Sun Microsystems	Fire 15K	Industry	South Africa	2002	197.30	144	259.20			Fireplane
449	Telecommunication Company	Sun Microsystems	Fire 15K	Industry	United States	2002	197.30	144	259.20			Fireplane
450	Telecommunication Company	Sun Microsystems	Fire 15K	Industry	Italy	2002	197.30	144	259.20			Fireplane
451	Telecommunication Company	Sun Microsystems	Fire 15K	Industry	Germany	2002	197.30	144	259.20			Fireplane
452	Telecommunication Company	Sun Microsystems	Fire 15K	Industry	Germany	2002	197.30	144	259.20			Fireplane
453	US Defense	Sun Microsystems	Fire 15K	Classified	United States	2002	197.30	144	259.20			Fireplane
454	Universitaet Aachen/RWTH	Sun Microsystems	Fire 15K	Academic	Germany	2002	197.30	144	259.20			Fireplane
455	Universitaet Aachen/RWTH	Sun Microsystems	Fire 15K	Academic	Germany	2002	197.30	144	259.20			Fireplane
456	University of Illinois	Sun Microsystems	Fire 15K	Academic	United States	2002	197.30	144	259.20			Fireplane
457	University of Illinois	Sun Microsystems	Fire 15K	Academic	United States	2002	197.30	144	259.20			Fireplane
458	University of Tokyo	Sun Microsystems	Fire 15K	Academic	Japan	2002	197.30	144	259.20			Fireplane
459	W.W. Grainger	Sun Microsystems	Fire 15K	Industry	United States	2002	197.30	144	259.20			Fireplane
460	W.W. Grainger	Sun Microsystems	Fire 15K	Industry	United States	2002	197.30	144	259.20			Fireplane
461	University of Notre Dame	Dell	Precision 530 Cluster - 1.7 GHz - GigEih	Academic	United States	2002	197.20	208	707.20	90000		Gigabit Ethernet
462	Agricultural Bank of China (ABC) Shandong	Hewlett-Packard	SuperDome/HyperPlex	Industry	China	2001	196.70	128	281.60			Myrinet
463	Amdocs	Hewlett-Packard	SuperDome/HyperPlex	Industry	United States	2001	196.70	128	281.60			Myrinet
464	Amdocs	Hewlett-Packard	SuperDome/HyperPlex	Industry	United States	2001	196.70	128	281.60			Myrinet
465	Bell Canada	Hewlett-Packard	SuperDome/HyperPlex	Industry	Canada	2001	196.70	128	281.60			Myrinet
466	Bell Canada	Hewlett-Packard	SuperDome/HyperPlex	Industry	Canada	2001	196.70	128	281.60			Myrinet
467	Brasil Telecom	Hewlett-Packard	SuperDome/HyperPlex	Industry	Brazil	2001	196.70	128	281.60			Myrinet
468	Braun GmbH	Hewlett-Packard	SuperDome/HyperPlex	Industry	Germany	2001	196.70	128	281.60			Myrinet
469	Government	Hewlett-Packard	SuperDome/HyperPlex	Classified	United States	2001	196.70	128	281.60			Myrinet
470	Government	Hewlett-Packard	SuperDome/HyperPlex	Classified	United States	2001	196.70	128	281.60			Myrinet
471	Government	Hewlett-Packard	SuperDome/HyperPlex	Classified	United States	2001	196.70	128	281.60			Myrinet
472	Government	Hewlett-Packard	SuperDome/HyperPlex	Classified	United States	2001	196.70	128	281.60			Myrinet
473	NewSky	Hewlett-Packard	SuperDome/HyperPlex	Industry	Korea, South	2001	196.70	128	281.60			Myrinet

Rank	Site	Manufacturer	Computer	Inst. type	Country	Year	Rmax	Processors	Rpeak	Nmax	Nhalf	Interconnect
474	One2One	Hewlett-Packard	SuperDome/HyperPlex	Industry	United Kingdom	2001	196.70	128	281.60			Myrinet
475	OverWrite	Hewlett-Packard	SuperDome/HyperPlex	Industry	United Kingdom	2001	196.70	128	281.60			Myrinet
476	Oy Saimaa Lines LTD	Hewlett-Packard	SuperDome/HyperPlex	Industry	Finland	2001	196.70	128	281.60			Myrinet
477	POSDATA	Hewlett-Packard	SuperDome/HyperPlex	Industry	Korea, South	2001	196.70	128	281.60			Myrinet
478	POSDATA	Hewlett-Packard	SuperDome/HyperPlex	Industry	Korea, South	2001	196.70	128	281.60			Myrinet
479	Q Application Varwest	Hewlett-Packard	SuperDome/HyperPlex	Industry	United States	2001	196.70	128	281.60			Myrinet
480	Qwest	Hewlett-Packard	SuperDome/HyperPlex	Industry	United States	2001	196.70	128	281.60			Myrinet
481	Telecommunications Equipment	Hewlett-Packard	SuperDome/HyperPlex	Industry	Finland	2001	196.70	128	281.60			Myrinet
482	Telkom LTD	Hewlett-Packard	SuperDome/HyperPlex	Industry	United Kingdom	2001	196.70	128	281.60			Myrinet
483	Telkom SA	Hewlett-Packard	SuperDome/HyperPlex	Industry	South Africa	2001	196.70	128	281.60			Myrinet
484	Titan Secure	Hewlett-Packard	SuperDome/HyperPlex	Industry	United States	2001	196.70	128	281.60			Myrinet
485	US Navy	Hewlett-Packard	SuperDome/HyperPlex	Classified	United States	2001	196.70	128	281.60			Myrinet
486	Verizon	Hewlett-Packard	SuperDome/HyperPlex	Industry	United States	2001	196.70	128	281.60			Myrinet
487	Vodafone	Hewlett-Packard	SuperDome/HyperPlex	Industry	United Kingdom	2001	196.70	128	281.60			Myrinet
488	Wirth Adolf GmBH	Hewlett-Packard	SuperDome/HyperPlex	Industry	Germany	2001	196.70	128	281.60			Myrinet
489	Amazon	Hewlett-Packard	SuperDome/HyperPlex	Industry	United States	2001	196.20	128	281.60			Myrinet
490	Government	Hewlett-Packard	SuperDome/HyperPlex	Classified	Germany	2001	196.20	128	281.60			Myrinet
491	Kone	Hewlett-Packard	SuperDome/HyperPlex	Industry	Belgium	2001	196.20	128	281.60			Myrinet
492	Brasil Telecom	Hewlett-Packard	SuperDome/HyperPlex	Industry	Brazil	2001	195.80	128	281.60			Myrinet
493	Cisco	Hewlett-Packard	SuperDome/HyperPlex	Industry	United States	2001	195.80	128	281.60			Myrinet
494	Cisco	Hewlett-Packard	SuperDome/HyperPlex	Industry	United States	2001	195.80	128	281.60			Myrinet
495	France Telecom	Hewlett-Packard	SuperDome/HyperPlex	Industry	France	2001	195.80	128	281.60			Myrinet
496	Government	Hewlett-Packard	SuperDome/HyperPlex	Classified	United Kingdom	2001	195.80	128	281.60			Myrinet
497	Government	Hewlett-Packard	SuperDome/HyperPlex	Classified	United Kingdom	2001	195.80	128	281.60			Myrinet
498	Government	Hewlett-Packard	SuperDome/HyperPlex	Classified	United Kingdom	2001	195.80	128	281.60			Myrinet
499	Government	Hewlett-Packard	SuperDome/HyperPlex	Classified	United Kingdom	2001	195.80	128	281.60			Myrinet
500	LG-EDS Systems	Hewlett-Packard	SuperDome/HyperPlex	Industry	Korea, South	2001	195.80	128	281.60			Myrinet