

24th Edition of TOP500 List of World's Fastest Supercomputers Released: DOE/IBM BlueGene/L and NASA/SGI's Columbia gain Top Positions

MANNHEIM, Germany; KNOXVILLE, Tenn.; & BERKELEY, Calif. – In what has become a closely watched event in the world of high-performance computing, the 24th edition of the TOP500 list of the world's fastest supercomputers was released today (November 8, 2004) at the SC2004 Conference in Pittsburgh, Pa.

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

After a close race to the finish line, the DOE/IBM BlueGene/L beta-System was able to claim the No. 1 position on the new TOP500 list with its record Linpack benchmark performance of 70.72 Tflop/s (“teraflops” or trillions of calculations per second). This system, once completed, will be moved to the DOE's Lawrence Livermore National Laboratory in Livermore, Calif.

It is closely followed by the Columbia system built by SGI and installed at the NASA Ames Research Center in Mountain View, Calif. Columbia clocked in at 51.87 Tflop/s. Both systems represent fairly new and exciting technologies, which enabled U.S. manufacturers and research institutions to regain the top spots on the TOP500 list from the Earth Simulator supercomputer, built by NEC and installed in 2002 at the Earth Simulator Center in Yokohama, Japan. The Earth Simulator, with its Linpack benchmark performance of 35.86 Tflop/s, had held the No. 1 position for five consecutive editions of the listing and is now shown as No. 3.

The other positions in the top 10 also showed significant changes, such as the IBM-built MareNostrum cluster installed at the Barcelona Supercomputer Center, at No. 4 with 20.53 Tflop/s. The list also sees the return of the Virginia Tech X-system. This system was often referred to as ‘SuperMac’ as it is built using Apple's Xserve servers. It had temporarily disappeared from the listing 6 months ago, due to its unavailability during a major hardware upgrade, and is now listed at No. 7 with its new Linpack performance of 12.25 Tflop/s.

Here are some highlights from the newest Top 500:

The entry level for the TOP10 approaches 10 Tflop/s - only one system with less than 10-TFlop/s Linpack performance is in the TOP10. The entry point for the top 100 moved from 1.922 Gflop/s to 2.026 Tflop/s.

The number of systems exceeding the 1 Tflop/s mark on the Linpack benchmark jumped from 242 to 398 and we expect that the next list in 6 months will only list systems exceeding 1 Tflop/s.

Entry level is now 850.6 Gflop/s, compared to 624.3 Gflop/s six months ago. The last system on the list would have been listed at position 310 in the last TOP500 just six months ago. This exemplifies the continuous rapid turnover of the TOP500.

Total combined performance of all 500 systems on the list has for the first time exceeded the 1 Petaflop/s mark. It is now 1.127 Pflop/s, compared to 813 Tflop/s six months ago.

Other trends of interest:

A total of 320 systems are now using Intel processors. Six months ago there were 287 Intel-based systems on the list and one year ago only 189. The second most commonly used processors are the IBM Power processors (54 systems), ahead of Hewlett-Packard's PA Risc processors (48) and AMD processors (31).

There are 296 systems now labeled as clusters, making this the most common architecture in the TOP500.

At present, IBM and Hewlett-Packard sell the bulk of systems at all performance levels of the TOP500. IBM remains the clear leader in the TOP500 list with 43.2% of systems and 49.3% of installed performance. HP is second with 34.6% of systems and 21% of performance. No other manufacturer is able to capture more than 7% in any category.

A new geographical trend, which started during the last few years, emerges more clearly. The number of systems in Asian countries other than Japan is rising quite steadily. In this list Japan is listed with 30 systems and all other Asian countries accumulated an additional 57 systems. However, Europe is still ahead of Asia with 127 systems installed.

Seventeen of the systems in Asia are installed in China - up from 9 systems one year ago.

The number of systems installed in the U.S. has also increased to 267 -- up from 247 one year ago.

The TOP500 list is compiled by Hans Meuer of the University of Mannheim, Germany; Erich Strohmaier and Horst Simon of NERSC/Lawrence Berkeley National Laboratory; and Jack Dongarra of the University of Tennessee.

###

Contact: Erich Strohmaier, 510-495-2517, ESTrohmaier@lbl.gov

All changes are from June 2003 to November 2003:

Highlights from the Top 10:

- The Earth Simulator, built by NEC, remains the unchallenged #1.
- ASCI Q at Los Alamos is still #2 at 13.88 TFlop/s.
- The third system ever to exceed the 10 TFlop/s mark is the Terascale Cluster at the Virginia Polytechnic Institute measured at 10.28 TFlop/s. This cluster is built with the Apple G5 as building blocks and is often referred to as the 'SuperMac' in media reports. It uses a Mellanox network based on the new Infinband technology as interconnect.
- The fourth system is also a cluster. The Tungsten cluster at NCSA is a Dell PowerEdge-based system using a Myrinet interconnect. It just missed the 10 TFlop/s mark with a measured 9.82 TFlop/s.
- The list of clusters in the TOP10 continues with the upgraded Itanium2-based Hewlett-Packard system, located at DOE's Pacific Northwest National Laboratory, which uses a Quadrics interconnect.
- #6 is the first system in the TOP500 based on AMD's Opteron chip. It was installed by Linux Networx at the Los Alamos National Laboratory and also uses a Myrinet interconnect.
- The list of cluster systems in the TOP10 has grown impressively to seven systems. The Earth Simulator and the two IBM SP systems at Lawrence Livermore and Lawrence Berkeley national labs are the other three systems.
- With the exception of the leading Earth Simulator, all other TOP10 systems are installed in the U.S.
- The performance of the #10 system jumped to 6.6 TFlop/s.

General highlights from the Top 500:

- The number of systems exceeding the 1 TFlop/s mark running the Linpack benchmark jumped from 59 to 131.
- The last system on the newest list, with 403.4 GFlops/s, was listed at position 290 on the last TOP500 just six month ago. This indicates a turnover rate well above average.
- Total accumulated performance exceeded the level of half a petaflop. It is now 528 TFlop/s, compared to 375 TFlop/s six month ago.
- Entry level is now 403.4 GFlop/s, compared to 245.1 GFlop/s six month ago.
- The entry point for the top 100 moved from 708 GFlop/s to 1.142 TFlop/s.
- A total of 189 systems are now using Intel processors. Six months ago there were 119 Intel-based systems on the list and one year ago only 56.
- 208 systems are now labeled as clusters, up from 149. This makes clustered systems the most common architecture in the TOP500.
- IBM is still leading the list with respect to the total installed performance - and increased its share to 35.4 percent --- up from 31.8 percent one year ago and 34.9

percent 6 months ago. HP is second in installed performance with 22.7 percent and NEC is third with 8.7 percent.

- With respect to the number of systems, Hewlett-Packard topped IBM again by a small margin. HP is at 165 systems (up from 159) and IBM is at 159 systems (up one system) installed. SGI is again third with 41 systems, down from 54.
- No other manufacturer is able to capture more than 6 percent in any category.
- The Cray X1 system appears on the list with 10 installations, with the largest X1 listed at #19.

TOP500 Sublist for November 2004

TOP500 Team

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



Rank	Site	Manufacturer	Computer	Inst. type	Country	Year	Rmax	Processors	Rpeak	Nmax	Nhalf	Interconnect
1	IBM/DOE	IBM	BlueGene/L DD2 beta-System (0.7 GHz PowerPC 440)	Research	United States	2004	70720.00	32768	91750.00	933887		Proprietary
2	NASA/Ames Research Center/NAS	SGI	SGI Altix 1.5 GHz, Voltaire Infiniband	Research	United States	2004	51870.00	10160	60960.00	1290240		Mixed
3	The Earth Simulator Center	NEC	Earth-Simulator	Research	Japan	2002	35860.00	5120	40960.00	1075200	266240	Crossbar
4	Barcelona Supercomputer Center	IBM	eServer BladeCenter JS20 (PowerPC970 2.2 GHz), Myr	Academic	Spain	2004	20530.00	3564	31363.00	812592		Myrinet
5	Lawrence Livermore National Laboratory	California Digital Corporation	Intel Itanium2 Tiger4 1.4GHz - Quadrics	Research	United States	2004	19940.00	4096	22938.00	975000	110000	Quadrics
6	Los Alamos National Laboratory	Hewlett-Packard	ASCI Q - AlphaServer SC45, 1.25 GHz	Research	United States	2002	13880.00	8192	20480.00	633000	225000	Quadrics
7	Virginia Tech	Self-made	1100 Dual 2.3 GHz Apple XServe/Mellanox Infiniband	Academic	United States	2004	12250.00	2200	20240.00	620000		Infiniband
8	IBM - Rochester	IBM/ LLNL	BlueGene/L DD1 Prototype (0.5GHz PowerPC 440 w/Cus	Vendor	United States	2004	11680.00	8192	16384.00	331775		Proprietary
9	Naval Oceanographic Office (NAVOCEANO)	IBM	eServer pSeries 655 (1.7 GHz Power4+)	Research	United States	2004	10310.00	2944	20019.20			SP Switch
10	NCSA	Dell	PowerEdge 1750, P4 Xeon 3.06 GHz, Myrinet	Academic	United States	2003	9819.00	2500	15300.00	630000		Myrinet
11	ECMWF	IBM	eServer pSeries 690 (1.9 GHz Power4+)	Research	United Kingdom	2004	9241.00	2176	16538.00	370000		SP Switch
12	ECMWF	IBM	eServer pSeries 690 (1.9 GHz Power4+)	Research	United Kingdom	2004	9241.00	2176	16538.00	370000		SP Switch
13	US Army Research Laboratory (ARL)	Linux Networx	LNX Cluster, Xeon 3.4 GHz, Myrinet	Research	United States	2004	8770.00	2048	13926.00	630000	217440	Myrinet
14	Institute of Physical and Chemical Res. (RIKEN)	Fujitsu	RIKEN Super Combined Cluster	Research	Japan	2004	8728.00	2048	12534.00	474200	120000	Mixed
15	IBM Thomas J. Watson Research Center	IBM/ LLNL	BlueGene/L DD2 Prototype (0.7 GHz PowerPC 440)	Research	United States	2004	8655.00	4096	11469.00	294911		Proprietary
16	Pacific Northwest National Laboratory	Hewlett-Packard	Cluster Platform 6000 rx2600 Itanium2 1.5 GHz, Qua	Research	United States	2003	8633.00	1936	11616.00	835000	140000	Quadrics
17	Shanghai Supercomputer Center	Dawning	Dawning 4000A, Opteron 2.2 GHz, Myrinet	Research	China	2004	8061.00	2560	11264.00	728400	180000	Myrinet
18	Los Alamos National Laboratory	Linux Networx	Opteron 2 GHz, Myrinet	Research	United States	2003	8051.00	2816	11264.00	761160	109208	Myrinet
19	Lawrence Livermore National Laboratory	Linux Networx/Quadrics	MCR Linux Cluster Xeon 2.4 GHz - Quadrics	Research	United States	2002	7634.00	2304	11060.00	350000	75000	Quadrics
20	Lawrence Livermore National Laboratory	IBM	ASCI White, SP Power3 375 MHz	Research	United States	2000	7304.00	8192	12288.00	640000		SP Switch
21	NERSC/LBNL	IBM	SP Power3 375 MHz 16 way	Research	United States	2002	7304.00	6656	9984.00	640000		SP Switch
22	NCSA	IBM	TeraGrid, Itanium2 1.3/1.5 GHz, Myrinet	Academic	United States	2004	7215.00	1776	10259.00	540000		Myrinet
23	US Army Research Laboratory (ARL)	IBM	eServer Opteron 2.2 GHz, Myrinet	Research	United States	2004	7185.00	2320	10208.00	600000		Myrinet
24	Lawrence Livermore National Laboratory	IBM/Quadrics	xSeries Cluster Xeon 2.4 GHz - Quadrics	Research	United States	2003	6586.00	1920	9216.00	425000	90000	Quadrics
25	UCSD/San Diego Supercomputer Center	IBM	eServer pSeries 655/690 (1.5/1.7 GHz Power4+)	Academic	United States	2004	6385.00	1696	10406.00	504000	51000	SP Switch
26	Lawrence Livermore National Laboratory	IBM	xSeries Xeon 3.06 GHz, Quadrics	Research	United States	2004	6232.00	1540	9425.00			Quadrics
27	HPCx	IBM	eServer pSeries 690 (1.7 GHz Power4+)	Academic	United Kingdom	2004	6188.00	1600	10880.00	355000		SP Switch
28	Grid Technology Research Center, AIST	IBM	AIST Super Cluster P-32, Opteron 2.0 GHz, Myrinet	Research	Japan	2004	6155.00	2200	8800.00			Myrinet
29	Oak Ridge National Laboratory	Cray Inc.	Cray X1	Research	United States	2004	5895.00	504	6451.00	494592	53760	Crossbar
30	Forschungszentrum Juelich (FZJ)	IBM	eServer pSeries 690 (1.7 GHz Power4+)	Research	Germany	2004	5568.00	1312	8921.00	660000	60000	SP Switch
31	University of Southern California	IBM, Sun, Myricom	Sun Fire V60, IBM xServer,2.0-3.0 GHz, Myrinet	Academic	United States	2004	5510.00	1920	10752.00	307200		Myrinet
32	National Aerospace Laboratory of Japan	Fujitsu	PRIMEPOWER HPC2500 (1.3 GHz)	Research	Japan	2002	5406.00	2304	11980.00	658800	100080	Crossbar
33	Kyoto University	Fujitsu	PRIMEPOWER HPC2500 (1.56 GHz)	Academic	Japan	2004	4552.00	1472	9185.00	749340	90390	Crossbar
34	Pittsburgh Supercomputing Center	Hewlett-Packard	AlphaServer SC45, 1 GHz	Academic	United States	2001	4463.00	3016	6032.00	280000	85000	Quadrics
35	National Centers for Environmental Prediction	IBM	eServer pSeries 655 (1.7 GHz Power4+)	Research	United States	2004	4379.00	1152	7833.60	450000	60000	SP Switch
36	National Centers for Environmental Prediction	IBM	eServer pSeries 655 (1.7 GHz Power4+)	Research	United States	2004	4379.00	1152	7833.60	450000	60000	SP Switch
37	Caltech/JPL	Dell	PowerEdge 1750, P4 Xeon 3.2 GHz, Myrinet	Academic	United States	2004	4298.00	1024	6553.60	420000		Myrinet
38	Chinese Academy of Science	lenovo	DeepComp 6800, Itanium2 1.3 GHz, QsNet	Academic	China	2003	4193.00	1024	5324.80	491488		Quadrics
39	NCAR (National Center for Atmospheric Research)	IBM	pSeries 690 Turbo 1.3 GHz	Research	United States	2003	4184.00	1600	8320.00	450000	93000	SP Switch
40	Texas Advanced Computing Center/Univ. of Texas	Dell-Cray	PowerEdge 1750, Pentium4 Xeon 3.2/3.06 GHz, Myrine	Academic	United States	2004	4152.00	1024	6338.00	321600		Myrinet
41	Commissariat a l'Energie Atomique (CEA)	Hewlett-Packard	AlphaServer SC45, 1 GHz	Research	France	2001	3980.00	2560	5120.00	360000	85000	Quadrics
42	Lawrence Livermore National Laboratory	IBM	eServer pSeries 655 (1.5 GHz Power4+)	Research	United States	2004	3812.00	1024	6144.00	428800	42400	SP Switch
43	Lawrence Livermore National Laboratory	IBM	eServer pSeries 655 (1.5 GHz Power4+)	Research	United States	2004	3812.00	1024	6144.00	428800	42400	SP Switch

Rank	Site	Manufacturer	Computer	Inst. type	Country	Year	Rmax	Processors	Rpeak	Nmax	Nhalf	Interconnect
44	Bank	IBM	BladeCenter HS20 Xeon 3.06 GHz, Gig-Ethernet	Industry	United Kingdom	2004	3755.00	3200	19584.00			Gigabit Ethernet
45	Petroleum Company (G)	IBM	BladeCenter HS20 Xeon 3.2 GHz, Gig-Ethernet	Industry	Saudia Arabia	2004	3755.00	1536	9830.40			Gigabit Ethernet
46	Credit Suisse/First Boston	IBM	BladeCenter HS20 Xeon 3.06 GHz, Gig-Ethernet	Industry	United Kingdom	2004	3755.00	1500	9180.00			Gigabit Ethernet
47	Geoscience (C)	IBM	xSeries Xeon 3.06 GHz - Gig-E	Industry	United Kingdom	2004	3755.00	1128	6903.36			Gigabit Ethernet
48	Geoscience (C)	IBM	xSeries Xeon 3.06 GHz - Gig-E	Industry	United Kingdom	2004	3755.00	1128	6903.36			Gigabit Ethernet
49	Semiconductor Company (D)	IBM	xSeries Xeon 3.06 GHz - Gig-E	Industry	Israel	2004	3755.00	1120	6854.40			Gigabit Ethernet
50	Bank (H)	IBM	BladeCenter Xeon 3.06 GHz, Gig-Ethernet	Industry	Germany	2004	3755.00	1064	6511.68			Gigabit Ethernet
51	ConocoPhillips	IBM	BladeCenter Xeon 3.06 GHz, Gig-Ethernet	Industry	United States	2004	3755.00	1056	6462.72			Gigabit Ethernet
52	PGS	IBM	xSeries Cluster Xeon 3.06 GHz - Gig-E	Industry	United States	2003	3755.00	1024	6266.88			Gigabit Ethernet
53	Petroleum Company (C)	IBM	xSeries Cluster Xeon 3.06 GHz - Gig-E	Industry	Brazil	2004	3755.00	1024	6266.88			Gigabit Ethernet
54	Westgrid	IBM	BladeCenter Xeon 3.06 GHz, Gig-Ethernet	Academic	Canada	2003	3755.00	1008	6168.96			Gigabit Ethernet
55	IBM - Deep Computing Capacity on Demand Center	IBM	xSeries Xeon 3.06 GHz - Gig-E	Industry	United States	2004	3755.00	1000	6120.00	390000		Gigabit Ethernet
56	PETROBRAS	Hewlett-Packard	Cluster Platform 3000 DL140G3 Xeon 3.06 GHz GigEth	Industry	Brazil	2004	3739.00	1300	7956.00			Gigabit Ethernet
57	Naval Oceanographic Office (NAVOCEANO)	IBM	pSeries 690 Turbo 1.3 GHz	Research	United States	2004	3717.20	1408	7321.60			SP Switch
58	Walt Disney Feature Animation	Hewlett-Packard	Cluster Platform 3000 DL360G3 Xeon 3.06 GHz, Myrin	Industry	United States	2004	3379.50	900	5508.00			Myrinet
59	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
60	National Institute for Materials Science	Hitachi	SR11000-H1/56	Research	Japan	2004	3319.00	56	6093.00	413280	52920	SP Switch
61	CINECA	IBM	BladeCenter HS20 Xeon 3.06 GHz, Myrinet	Academic	Italy	2004	3231.00	768	4700.00	301000	59000	Myrinet
62	Institute of Scientific Computing/Nankai University	IBM	xSeries Xeon 3.06 GHz, Myrinet	Academic	China	2004	3231.00	768	4700.00	301000	59000	Myrinet
63	UCSD/San Diego Supercomputer Center	IBM	TeraGrid Cluster, Itanium 2 1.3 GHz, Myrinet	Academic	United States	2004	3152.00	768	3993.00	350000		Myrinet
64	Manufacturer (G)	IBM	eServer p5 570 POWER5 1.9 GHz, GigEth	Industry	United States	2004	3068.00	720	5472.00	375500		Gigabit Ethernet
65	Korea Institute of Science and Technology	IBM	xSeries Xeon 2.4 GHz, Myrinet	Research	Korea, South	2004	3067.00	1024	4915.20	230000		Myrinet
66	University of Sherbrooke	Dell	PowerEdge 750, P4 3.2 GHz, GigE	Academic	Canada	2004	3064.00	872	5580.80			Gigabit Ethernet
67	Semiconductor Company (E)	IBM	xSeries Cluster Xeon 3.06 GHz - Gig-E	Industry	United States	2003	3004.00	800	4896.00			Gigabit Ethernet
68	PETROBRAS	Hewlett-Packard	Cluster Platform 3000 DL140G3 Xeon 3.06 GHz GigEth	Industry	Brazil	2004	2992.00	1008	6169.00			Gigabit Ethernet
69	Government	Cray Inc.	Cray X1	Classified	United States	2003	2932.90	252	3225.60	338688	44288	Crossbar
70	Semiconductor Company (C)	IBM	xSeries Xeon 3.06 GHz - Gig-E	Industry	United States	2004	2928.90	780	4773.60			Gigabit Ethernet
71	Institute for Molecular Science	Hitachi	SR11000-H1/50	Research	Japan	2004	2909.00	50	5440.00	396000	84600	SP Switch
72	Sandia National Laboratories	Hewlett-Packard	Cluster Platform DL360G3, Pentium4 Xeon 2.8 GHz, M	Research	United States	2004	2880.00	1024	5734.40			Myrinet
73	Sandia National Laboratories	Hewlett-Packard	Cluster Platform DL360G3, Pentium4 Xeon 2.8 GHz, M	Research	United States	2004	2880.00	1024	5734.40			Myrinet
74	IBM	IBM	eServer pSeries 690 (1.9 GHz Power4+)	Vendor	United States	2004	2849.11	672	5107.20			SP Switch
75	Max-Planck-Gesellschaft MPI/IPP	IBM	pSeries 690 Turbo 1.3GHz	Research	Germany	2004	2735.00	1024	5324.80			SP Switch
76	Environment Canada	IBM	pSeries 690 Turbo 1.3GHz	Research	Canada	2004	2560.00	960	4992.00			SP Switch
77	Energy Company	Hewlett-Packard	Cluster Platform 6000 rx5670-4x256, Itanium2 1.3 G	Industry	United States	2003	2556.00	1024	5324.80			Gigabit Ethernet
78	University of Alaska - ARSC	IBM	eServer pSeries 655 (1.5 GHz Power4+)	Academic	United States	2004	2510.27	672	4032.00			SP Switch
79	Digital Media Company (C)	IBM	xSeries Xeon 3.06 GHz - Gig-E	Industry	United Kingdom	2004	2403.20	640	3916.80			Gigabit Ethernet
80	Sandia National Laboratories	Intel	ASCI Red	Research	United States	1999	2379.00	9632	3207.00	362880	75400	Proprietary
81	Silicon Graphics	SGI	SGI Altix 1.3 GHz	Vendor	United States	2004	2338.00	512	2662.40			NUMalink
82	Oak Ridge National Laboratory	IBM	pSeries 690 Turbo 1.3GHz	Research	United States	2002	2310.00	864	4492.80	275000	62000	SP Switch
83	Sandia National Laboratories	IBM	xSeries Xeon 3.06 GHz, Myrinet	Research	United States	2004	2223.15	512	3133.44			Myrinet
84	Louisiana State University	Atipa Technology	P4 Xeon 1.8 GHz - Myrinet	Academic	United States	2002	2207.00	1024	3686.40	280000	56000	Myrinet
85	Sandia National Laboratories	Hewlett-Packard	Cluster Platform 3000 DL360G4 Xeon 3.4 GHz, Myrine	Research	United States	2004	2200.00	1028	6990.00			Myrinet
86	Sandia National Laboratories	Hewlett-Packard	Cluster Platform 3000 DL360G4 Xeon 3.4 GHz, Myrine	Research	United States	2004	2200.00	1028	6990.00			Myrinet

Rank	Site	Manufacturer	Computer	Inst. type	Country	Year	Rmax	Processors	Rpeak	Nmax	Nhalf	Interconnect
87	Korea Meteorological Administration	Cray Inc.	Cray X1	Research	Korea, South	2004	2188.15	188	2406.40			Crossbar
88	NASA/Goddard Space Flight Center	Hewlett-Packard	AlphaServer SC45, 1 GHz	Research	United States	2002	2164.00	1392	2784.00	320000	40000	Quadrics
89	Meteorological Research Institute/JMA	NEC	SX-6/248M31 (typeE, 1.778ns)	Research	Japan	2004	2155.00	248	2232.00	220224	21816	Crossbar
90	Lawrence Livermore National Laboratory	IBM	ASCI Blue-Pacific SST, IBM SP 604e	Research	United States	1999	2144.00	5808	3856.50	431344		SP Switch
91	US Army Research Laboratory (ARL)	IBM	pSeries 690 Turbo 1.3GHz	Research	United States	2002	2140.00	800	4160.00			SP Switch
92	Sony Pictures Imageworks	IBM	xSeries Cluster Xeon 3.06 GHz - Gig-E	Industry	United States	2003	2132.84	568	3476.16			Gigabit Ethernet
93	Atomic Weapons Establishment	IBM	SP Power3 375 MHz 16 way	Classified	United Kingdom	2002	2106.00	1920	2880.00			SP Switch
94	Deutscher Wetterdienst	IBM	SP Power3 375 MHz 16 way	Research	Germany	2003	2106.00	1920	2880.00			SP Switch
95	Universitaet Wuppertal	Angstrom Microsystems	ALiCENext, Opteron 1.8 GHz, GigE, Parastation	Academic	Germany	2004	2083.00	1024	3686.40			Gigabit Ethernet
96	Semiconductor Company (C)	IBM	xSeries Xeon 3.06 GHz - Gig-E	Industry	United States	2004	2065.25	550	3366.00			Gigabit Ethernet
97	Energy Company	Hewlett-Packard	Cluster Platform 6000 rx4640-4x136 Itanium2 1.3 GH	Industry	United States	2004	2059.00	800	4160.00			Gigabit Ethernet
98	Oracle Corporation	Hewlett-Packard	Cluster Platform 3000 DL380G3, Pentium4 Xeon 2.8 G	Industry	United States	2004	2044.00	702	3931.20			Myrinet
99	United Institute of Informatics Problems	Self-made	Opteron 2.2 GHz, Infiniband	Academic	Belarus	2004	2032.00	576	2534.40	274000	25000	Infiniband
100	Geoscience (C)	IBM	xSeries Xeon 2.8 GHz, Gig-Ethernet	Industry	United Kingdom	2004	2026.00	2256	12633.00			Gigabit Ethernet
101	Credit Suisse	IBM	BladeCenter HS20 Xeon 2.8 GHz, Gig-Ethernet	Industry	Switzerland	2004	2026.00	1500	8400.00			Gigabit Ethernet
102	WETA Digital	IBM	BladeCenter Cluster Xeon 2.8 GHz, Gig-Ethernet	Industry	New Zealand	2003	2026.00	1176	6585.60			Gigabit Ethernet
103	Semiconductor Company (C)	IBM	xSeries Xeon 2.8 GHz, Gig-Ethernet	Industry	United States	2003	2026.00	1140	6384.00			Gigabit Ethernet
104	Semiconductor Company (C)	IBM	xSeries Xeon 2.8 GHz, Gig-Ethernet	Industry	United States	2003	2026.00	1140	6384.00			Gigabit Ethernet
105	WETA Digital	IBM	BladeCenter Cluster Xeon 2.8 GHz, Gig-Ethernet	Industry	New Zealand	2003	2026.00	1080	6048.00			Gigabit Ethernet
106	Semiconductor Company (C)	IBM	xSeries Xeon 2.8 GHz, Gig-Ethernet	Industry	United States	2003	2026.00	1030	5768.00			Gigabit Ethernet
107	Semiconductor Company (C)	IBM	xSeries Xeon 2.8 GHz, Gig-Ethernet	Industry	United States	2003	2026.00	1028	5756.80			Gigabit Ethernet
108	Semiconductor Company (C)	IBM	xSeries Xeon 2.8 GHz, Gig-Ethernet	Industry	United States	2003	2026.00	1028	5756.80			Gigabit Ethernet
109	C.O.R.E. Digital Pictures Inc	IBM	BladeCenter Xeon 2.8 GHz, Gig-Ethernet	Industry	Canada	2004	2026.00	1008	5644.80			Gigabit Ethernet
110	Geotrace	IBM	xSeries Xeon 2.8 GHz, Gig-Ethernet	Industry	United States	2004	2026.00	1000	5600.00			Gigabit Ethernet
111	Geotrace	IBM	xSeries Xeon 2.8 GHz, Gig-Ethernet	Industry	United States	2004	2026.00	1000	5600.00			Gigabit Ethernet
112	Geotrace	IBM	xSeries Xeon 2.8 GHz, Gig-Ethernet	Industry	United States	2003	2026.00	1000	5600.00			Gigabit Ethernet
113	Geotrace	IBM	xSeries Xeon 2.8 GHz, Gig-Ethernet	Industry	United States	2004	2026.00	1000	5600.00			Gigabit Ethernet
114	Geotrace	IBM	xSeries Xeon 2.8 GHz, Gig-Ethernet	Industry	United States	2004	2026.00	1000	5600.00			Gigabit Ethernet
115	Geotrace	IBM	xSeries Xeon 2.8 GHz, Gig-Ethernet	Industry	United States	2004	2026.00	1000	5600.00			Gigabit Ethernet
116	GX Technology	IBM	xSeries Xeon 2.8 GHz, Gig-Ethernet	Industry	United States	2004	2026.00	880	4928.00			Gigabit Ethernet
117	Semiconductor Company (C)	IBM	xSeries Xeon 2.8 GHz, Gig-Ethernet	Industry	United States	2004	2026.00	712	3987.20			Gigabit Ethernet
118	Geoscience (D)	IBM	xSeries Xeon 2.8 GHz, Gig-Ethernet	Industry	Mexico	2003	2026.00	706	3953.60			Gigabit Ethernet
119	Geoscience (D)	IBM	xSeries Xeon 2.8 GHz, Gig-Ethernet	Industry	Mexico	2003	2026.00	706	3953.60			Gigabit Ethernet
120	Geoscience (D)	IBM	xSeries Xeon 2.8 GHz, Gig-Ethernet	Industry	Mexico	2003	2026.00	706	3953.60			Gigabit Ethernet
121	UBS Warburg	IBM	BladeCenter Xeon 2.8 GHz, Gig-Ethernet	Industry	United Kingdom	2004	2026.00	650	3640.00			Gigabit Ethernet
122	Semiconductor Company (C)	IBM	xSeries Xeon 2.8 GHz, GigEthernet	Industry	United States	2004	2019.48	608	3404.80			Gigabit Ethernet
123	Semiconductor Company (C)	IBM	xSeries Xeon 2.8 GHz, GigEthernet	Industry	United States	2004	2019.48	608	3404.80			Gigabit Ethernet
124	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
125	Semiconductor Company (C)	IBM	xSeries Xeon 2.8 GHz, Gig-Ethernet	Industry	United States	2003	1999.91	602	3371.20			Gigabit Ethernet
126	Grid Technology Research Center, AIST	Linux Networx	AIST Super Cluster F-32, Xeon 3.06 GHz, GigE	Research	Japan	2004	1997.00	512	3133.40	331968		Gigabit Ethernet
127	Semiconductor Company (D)	IBM	xSeries Xeon 2.8 GHz, Gig-Ethernet	Industry	Israel	2003	1993.38	600	3360.00			Gigabit Ethernet
128	University of Sherbrooke	IBM	eServer Opteron 2.2 GHz, Infiniband	Academic	Canada	2004	1930.00	936	4118.40	400000		Infiniband
129	Semiconductor Company (C)	IBM	xSeries Xeon 2.8 GHz, Gig-Ethernet	Industry	United States	2003	1928.15	580	3248.00			Gigabit Ethernet

Rank	Site	Manufacturer	Computer	Inst. type	Country	Year	Rmax	Processors	Rpeak	Nmax	Nhalf	Interconnect
130	PETROBRAS	IBM	BladeCenter Xeon 3.2 GHz, Gig-E	Industry	Brazil	2004	1922.56	512	3276.80			Gigabit Ethernet
131	PGS	IBM	xSeries Xeon 3.06 GHz - Gig-E	Industry	Australia	2004	1922.56	512	3133.44			Gigabit Ethernet
132	PGS	IBM	xSeries Xeon 3.06 GHz - Gig-E	Industry	United States	2004	1922.56	512	3133.44			Gigabit Ethernet
133	Petroleum Company (D)	IBM	BladeCenter Xeon 3.06 GHz, Gig-Ethernet	Industry	China	2004	1922.56	512	3133.44			Gigabit Ethernet
134	UBS Warburg	IBM	BladeCenter HS20 Xeon 3.06 GHz, Gig-Ethernet	Industry	United Kingdom	2004	1922.56	512	3133.44			Gigabit Ethernet
135	Naval Oceanographic Office (NAVOCEANO)	IBM	eServer pSeries 655 (1.5 GHz Power4+)	Research	United States	2004	1918.57	512	3072.00			SP Switch
136	National Center for High Performance Computing	Hewlett-Packard	Cluster Platform 6000 rx2600 Itanium2 1.5 GHz, Qua	Academic	Taiwan	2004	1889.00	384	2304.00			Quadrics
137	Digital Media Company (E)	Hewlett-Packard	Cluster Platform 3000 DL360G3 Xeon 3.06 GHz, Myrin	Industry	United States	2004	1877.00	500	3060.00			Myrinet
138	Digital Media Company (E)	Hewlett-Packard	Cluster Platform 3000 DL360G3 Xeon 3.06 GHz, Myrin	Industry	United States	2004	1877.00	500	3060.00			Myrinet
139	Digital Media Company (E)	Hewlett-Packard	Cluster Platform 3000 DL360G3 Xeon 3.06 GHz, Myrin	Industry	United States	2004	1877.00	500	3060.00			Myrinet
140	Industrial Classified	Hewlett-Packard	Blade Cluster BL-20P, Pentium4 Xeon 3.06 GHz	Industry	United States	2004	1872.00	600	3672.00			Gigabit Ethernet
141	Industrial Classified	Hewlett-Packard	Blade Cluster BL-20P, Pentium4 Xeon 3.06 GHz	Industry	United States	2004	1872.00	600	3672.00			Gigabit Ethernet
142	Industrial Classified	Hewlett-Packard	Blade Cluster BL-20P, Pentium4 Xeon 3.06 GHz	Industry	United States	2004	1872.00	600	3672.00			Gigabit Ethernet
143	Industrial Classified	Hewlett-Packard	Blade Cluster BL-20P, Pentium4 Xeon 3.06 GHz	Industry	United States	2004	1872.00	600	3672.00			Gigabit Ethernet
144	Industrial Classified	Hewlett-Packard	Blade Cluster BL-20P, Pentium4 Xeon 3.06 GHz	Industry	United States	2004	1872.00	600	3672.00			Gigabit Ethernet
145	Industrial Classified	Hewlett-Packard	Blade Cluster BL-20P, Pentium4 Xeon 3.06 GHz	Industry	United States	2004	1872.00	600	3672.00			Gigabit Ethernet
146	Industrial Classified	Hewlett-Packard	Blade Cluster BL-20P, Pentium4 Xeon 3.06 GHz	Industry	United States	2004	1872.00	600	3672.00			Gigabit Ethernet
147	Industrial Classified	Hewlett-Packard	Blade Cluster BL-20P, Pentium4 Xeon 3.06 GHz	Industry	United States	2004	1872.00	600	3672.00			Gigabit Ethernet
148	National Centers for Environmental Prediction	IBM	pSeries 690 Turbo 1.3GHz	Research	United States	2002	1849.00	704	3660.80	240000	32500	SP Switch
149	National Centers for Environmental Prediction	IBM	pSeries 690 Turbo 1.3GHz	Research	United States	2002	1849.00	704	3660.80	240000	32500	SP Switch
150	DOE/Bettis Atomic Power Laboratory	Atipa Technology	Itanium2 1.3 GHz, Myrinet	Research	United States	2004	1820.00	536	2787.00	470016	80000	Myrinet
151	DOE/Knolls Atomic Power Laboratory	Atipa Technology	Itanium2 1.3 GHz, Myrinet	Research	United States	2004	1820.00	536	2787.00	470016	80000	Myrinet
152	Semiconductor Company (C)	IBM	xSeries Xeon 2.8 GHz, Gig-Ethernet	Industry	United States	2004	1817.26	546	3057.60			Gigabit Ethernet
153	University at Buffalo, SUNY, Center for Computational Res.	IBM	BladeCenter Xeon 2.8 GHz, Gig-Ethernet	Academic	United States	2004	1817.26	546	3057.60			Gigabit Ethernet
154	SARA (Stichting Academisch Rekencentrum)	SGI	SGI Altix 1.3 GHz	Academic	Netherlands	2003	1793.00	416	2163.00	298799		NUMalink
155	DaimlerChrysler	NEC	Opteron 2.0 GHz, GigE	Industry	Germany	2004	1778.00	896	3584.00	213000		Gigabit Ethernet
156	KISTI Supercomputing Center	IBM	xSeries Xeon 2.8 GHz - Myrinet	Research	Korea, South	2004	1762.00	512	2867.00	240000	37000	Myrinet
157	KISTI Supercomputing Center	IBM	pSeries 690 Turbo 1.7 GHz	Research	Korea, South	2003	1760.00	544	3699.20	400000		SP Switch
158	Semiconductor Company (C)	IBM	xSeries Cluster Xeon 2.4 GHz - Gig-E	Industry	United States	2003	1755.00	1834	8803.20			Gigabit Ethernet
159	Compagnie Generale de Geophysique (CGG)	IBM	xSeries Cluster Xeon 2.4 GHz - Gig-E	Industry	United Kingdom	2003	1755.00	1100	5280.00			Gigabit Ethernet
160	Arizona State University/TGEN	IBM	xSeries Cluster Xeon 2.4 GHz - Gig-E	Academic	United States	2003	1755.00	1048	5030.40			Gigabit Ethernet
161	Paradigm Geophysical	IBM	BladeCenter Cluster Xeon 2.4 GHz, Gig-Ethernet	Research	United States	2003	1755.00	1024	4915.20	335000	41600	Gigabit Ethernet
162	TotalFinaElf	IBM	xSeries Cluster Xeon 2.4 GHz - Gig-E	Industry	France	2003	1755.00	1024	4915.20	335000	41600	Gigabit Ethernet
163	Compagnie Generale de Geophysique (CGG)	IBM	BladeCenter Cluster Xeon 2.8 GHz, Gig-Ethernet	Industry	United Kingdom	2003	1732.46	520	2912.00			Gigabit Ethernet
164	University of Tokyo	Hitachi	SR8000/MPP	Academic	Japan	2001	1709.10	1152	2074.00	141000	16000	Crossbar
165	Petroleum Company (F)	IBM	xSeries Xeon 2.8 GHz, Gig-Ethernet	Industry	Netherlands	2004	1706.37	512	2867.20			Gigabit Ethernet
166	Semiconductor Company (C)	IBM	xSeries Xeon 2.8 GHz, Gig-Ethernet	Industry	United States	2003	1699.85	510	2856.00			Gigabit Ethernet
167	SG SGBI	IBM	xSeries Cluster Xeon 2.4 GHz - Gig-E	Industry	France	2003	1685.49	968	4646.40			Gigabit Ethernet
168	Media & Entertainment (B)	IBM	xSeries Xeon 2.8 GHz, Gig-Ethernet	Industry	United States	2004	1667.23	500	2800.00			Gigabit Ethernet
169	Leibniz Rechenzentrum	Hitachi	SR8000-F1/168	Academic	Germany	2002	1653.00	168	2016.00	160000	19560	Crossbar
170	Media & Entertainment (A)	IBM	xSeries Xeon 3.06 GHz - Gig-E	Industry	United States	2004	1652.20	440	2692.80			Gigabit Ethernet
171	Fleet Numerical Meteorology and Oceanography Center	IBM	xSeries Xeon 2.8 GHz - Myrinet	Research	United States	2004	1649.71	478	2676.80			Myrinet
172	Semiconductor Company (C)	IBM	xSeries Cluster Xeon 2.8 GHz - Gig-Ethernet	Industry	United States	2004	1647.66	494	2766.40			Gigabit Ethernet

Rank	Site	Manufacturer	Computer	Inst. type	Country	Year	Rmax	Processors	Rpeak	Nmax	Nhalf	Interconnect
173	Manufacturer (G)	IBM	eServer pSeries 655 (1.7 GHz Power4+, GigE)	Industry	United States	2004	1636.00	1152	7833.60			Gigabit Ethernet
174	Manufacturer (G)	IBM	eServer pSeries 655 (1.7 GHz Power4+, GigE)	Industry	United States	2004	1636.00	1152	7833.60			Gigabit Ethernet
175	Grid Technology Research Center, AIST	IBM	AIST Super Cluster M-64, Itanium2 1.3 GHz, Myrine	Research	Japan	2004	1636.00	512	2662.40	430079		Myrinet
176	CNRS/IDRIS	IBM	eServer pSeries 690 (1.7 GHz Power4+)	Academic	France	2004	1630.00	384	2611.20			SP Switch
177	Media & Entertainment (A)	IBM	xSeries Xeon 3.06 GHz - Gig-E	Industry	United States	2004	1614.65	430	2631.60			Gigabit Ethernet
178	Media & Entertainment (A)	IBM	xSeries Xeon 3.06 GHz - Gig-E	Industry	United States	2004	1614.65	430	2631.60			Gigabit Ethernet
179	Los Alamos National Laboratory	SGI	ASCI Blue Mountain	Research	United States	1998	1608.00	6144	3072.00	374400	138000	HIPPI
180	Veritas DGC	Verari Systems	Opteron 2.2 GHz, GigE	Industry	United States	2004	1580.00	992	4364.80	475000	300000	Gigabit Ethernet
181	GX Technology	IBM	xSeries Cluster Xeon 2.4 GHz - Gig-E	Industry	United States	2003	1576.25	880	4224.00			Gigabit Ethernet
182	Semiconductor Company (C)	IBM	xSeries Xeon 2.8 GHz - Gig-Ethernet	Industry	United States	2004	1575.31	472	2643.20			Gigabit Ethernet
183	Geoscience (A)	IBM	BladeCenter Xeon 3.06 GHz, Gig-Ethernet	Industry	China	2004	1547.06	412	2521.44			Gigabit Ethernet
184	Ford Motor Company	IBM	eServer Opteron 2.2 GHz, Myrinet	Industry	United States	2004	1538.59	512	2252.80			Myrinet
185	IBM - Deep Computing Capacity on Demand Center	IBM	xSeries Xeon 3.06 GHz - Gig-E	Industry	United States	2004	1524.53	406	2484.72			Gigabit Ethernet
186	IBM - Deep Computing Capacity on Demand Center	IBM	xSeries Xeon 3.06 GHz - Gig-E	Industry	United States	2004	1524.53	406	2484.72			Gigabit Ethernet
187	IBM - Deep Computing Capacity on Demand Center	IBM	xSeries Xeon 3.06 GHz - Gig-E	Industry	United States	2004	1524.53	406	2484.72			Gigabit Ethernet
188	IBM - Deep Computing Capacity on Demand Center	IBM	xSeries Xeon 3.06 GHz - Gig-E	Industry	United States	2004	1524.53	406	2484.72			Gigabit Ethernet
189	Oracle Corporation	Hewlett-Packard	Cluster Platform 3000 DL380G3, Pentium4 Xeon 2.8 G	Industry	United States	2004	1519.60	468	2620.80			Myrinet
190	Oracle Corporation	Hewlett-Packard	Cluster Platform 3000 DL380G3, Pentium4 Xeon 2.8 G	Industry	United States	2004	1519.60	468	2620.80			Myrinet
191	Oracle Corporation	Hewlett-Packard	Cluster Platform 3000 DL380G3, Pentium4 Xeon 2.8 G	Industry	United States	2004	1519.60	468	2620.80			Myrinet
192	Sandia National Laboratories	Dell	Vplant Cluster P4 XEON 2.4/2.0 GHz - Myrinet	Research	United States	2002	1504.00	660	2963.00	160000		Myrinet
193	Cornell Theory Center	Dell	PowerEdge 2650 Cluster P4 Xeon 2.4 GHz/MSWindows -	Academic	United States	2003	1503.00	640	3073.00	230400		Gigabit Ethernet
194	Petroleum Company (G)	IBM	xSeries Xeon 3.2 GHz - Gig-Ethernet	Industry	Saudia Arabia	2004	1502.00	400	2560.00			Gigabit Ethernet
195	Eltra	IBM	BladeCenter HS20 Xeon 3.06 GHz, Gig-Ethernet	Industry	Israel	2004	1502.00	400	2448.00			Gigabit Ethernet
196	Sony Online Gaming	IBM	BladeCenter Xeon 3.06 GHz, Gig-Ethernet	Industry	United States	2004	1502.00	400	2448.00			Gigabit Ethernet
197	DKRZ - Deutsches Klimarechenzentrum	NEC	SX-6/192M24	Research	Germany	2003	1484.00	192	1536.00	200064	15744	Crossbar
198	CNRS/IDRIS	IBM	eServer pSeries 655 - 4way (1.7 GHz Power4+)	Academic	France	2004	1477.00	384	2611.20	174000	40000	SP Switch
199	Verisign	IBM	xSeries Cluster Xeon 2.4 GHz - Gig-E	Industry	United States	2003	1476.94	800	3840.00			Gigabit Ethernet
200	University of Toronto	Self-made	PowerRACK-HX dual Xeon 2.4 GHz - SMC GigE	Academic	Canada	2003	1455.00	528	2534.40	170000	80000	Gigabit Ethernet
201	Cray Inc.	Cray Inc.	Cray X1	Vendor	United States	2004	1448.42	124	1587.20			Crossbar
202	US Army HPC Research Center at NCS	Cray Inc.	Cray X1	Research	United States	2003	1448.42	124	1587.20			Crossbar
203	University of Alaska - ARSC	Cray Inc.	Cray X1	Academic	United States	2003	1448.42	124	1587.20			Crossbar
204	Semiconductor Company (C)	IBM	xSeries Xeon 2.8 GHz, Gig-Ethernet	Industry	United States	2004	1428.54	428	2396.80			Gigabit Ethernet
205	IBM	IBM	pSeries 690 Turbo 1.7 GHz GigEth	Vendor	United States	2003	1424.00	384	2611.20	325000		Gigabit Ethernet
206	Energy Company	Hewlett-Packard	Cluster Platform 6000 rx4640-4x136 Itanium2 1.3 GH	Industry	United States	2003	1418.00	544	2828.80			Gigabit Ethernet
207	Naval Oceanographic Office (NAVOCEANO)	IBM	SP Power3 375 MHz	Research	United States	2000	1417.00	1336	2004.00	374000		SP Switch
208	University of Shanghai	Hewlett-Packard	Cluster Platform 3000 DL360G3 Xeon 3.06 GHz, Infin	Academic	China	2004	1401.00	348	2129.80			Infiniband
209	Joint Supercomputer Center	IBM	MVS-5000BM, eServer BladeCenter JS20 (PowerPC970 1	Academic	Russia	2004	1401.00	336	2112.00	280000	45000	Myrinet
210	Mississippi State University	IBM	xSeries Xeon 3.06 GHz - Infiniband	Academic	United States	2004	1389.00	384	2350.00	120000		Infiniband
211	Altria Group - Philip Morris Management	IBM	pSeries 690 Turbo 1.3GHz	Industry	United States	2004	1384.00	512	2662.40	200000		SP Switch
212	CINECA	IBM	pSeries 690 Turbo 1.3GHz	Academic	Italy	2002	1384.00	512	2662.40	200000		SP Switch
213	HLRN at Universitaet Hannover / RRZN	IBM	pSeries 690 Turbo 1.3GHz	Academic	Germany	2004	1384.00	512	2662.40	200000		SP Switch
214	HLRN at ZIB/Konrad Zuse-Zentrum fuer Informationstechnik	IBM	pSeries 690 Turbo 1.3GHz	Academic	Germany	2004	1384.00	512	2662.40	200000		SP Switch
215	Axiom	Hewlett-Packard	Cluster Platform 3000 DL360G3, Xeon 3.2 GHz, Myrin	Industry	United States	2004	1382.00	400	2560.00			Myrinet

Rank	Site	Manufacturer	Computer	Inst. type	Country	Year	Rmax	Processors	Rpeak	Nmax	Nhalf	Interconnect
216	National Institute for Fusion Science	NEC	SX-7/160M5	Research	Japan	2003	1378.00	160	1412.80	200000	15200	Crossbar
217	Raytheon	IBM	BladeCenter Xeon 3.06 GHz, Gig-Ethernet	Industry	United States	2003	1366.82	364	2227.68			Gigabit Ethernet
218	Biotech Company (A)	IBM	BladeCenter Xeon 2.8 GHz, Gig-Ethernet	Industry	United Kingdom	2004	1335.13	400	2240.00			Gigabit Ethernet
219	Umea University / HPC2N	Hewlett-Packard	HP Opteron 2.2 GHz, Myrinet	Academic	Sweden	2004	1329.00	384	1689.60	422400	31000	Myrinet
220	The University of Florida High-Performance Computing Center	Dell	PowerEdge 1750, Pentium4 Xeon 2.8 GHz, GigE	Academic	United States	2004	1325.00	400	2240.00	210410	61500	Gigabit Ethernet
221	Pennsylvania State University	Dell	PowerEdge 1750, P4 Xeon 3.06 GHz, Myrinet	Academic	United States	2004	1319.67	336	2056.32			Myrinet
222	Semiconductor Company (C)	IBM	xSeries Cluster Xeon 2.4 GHz - Gig-E	Industry	United States	2004	1310.61	666	3196.80			Gigabit Ethernet
223	Consumer Goods	IBM	eServer pSeries 690 (1.7 GHz Power4+, GigE)	Industry	Australia	2004	1305.33	352	2393.60			Gigabit Ethernet
224	Academy of Mathematics and System Science	lenovo	DeepComp 1800 - P4 Xeon 2 GHz - Myrinet	Academic	China	2002	1297.00	512	2048.00	172000		Myrinet
225	US Government Classified (A)	Hewlett-Packard	Cluster Platform 6000 zx6000 Itanium2 1.5 GHz, Myr	Research	United States	2004	1293.00	256	1536.00			Myrinet
226	Seoul National University	Self-made	Pegasus P4 Xeon Cluster 2.2/2.4/2.8 GHz - Gigaset	Academic	Korea, South	2004	1283.00	520	2557.00	260000		Gigaset
227	Semiconductor Company (C)	IBM	xSeries Xeon 2.8 GHz - Gig-Ethernet	Industry	United States	2004	1281.76	384	2150.40			Gigabit Ethernet
228	Digital China Ltd.	Hewlett-Packard	SuperDome 1 GHz/HPLex	Industry	China	2004	1280.97	560	2240.00			Myrinet
229	OpenPSL Ltd.	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Industry	United Kingdom	2004	1276.70	640	2240.00			Myrinet
230	Telecom Italia	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Industry	Italy	2004	1276.70	640	2240.00			Myrinet
231	Telecom Italia	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Industry	Italy	2004	1276.70	640	2240.00			Myrinet
232	Telecom Italia	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Industry	Italy	2004	1276.70	640	2240.00			Myrinet
233	Telecom Italia	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Industry	Italy	2004	1276.70	640	2240.00			Myrinet
234	Semiconductor Company (C)	IBM	xSeries Xeon 3.2 GHz - Gig-Ethernet	Industry	United States	2004	1276.70	340	2176.00			Gigabit Ethernet
235	Deutsche Telekom AG	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Industry	Germany	2004	1263.30	640	2240.00			Myrinet
236	Vodafone (KK) Chuo	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Industry	Japan	2004	1263.30	640	2240.00			Myrinet
237	Vodafone (KK) Chuo	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Industry	Japan	2004	1263.30	640	2240.00			Myrinet
238	Financial Services (H)	IBM	BladeCenter Xeon 3.06 GHz, Gig-Ethernet	Industry	United States	2004	1261.68	336	2056.32			Gigabit Ethernet
239	CEG Gramat	SGI	SGI Altix 1.5 GHz	Industry	France	2004	1258.53	256	1536.00			NUMalink
240	CSAR at the University of Manchester	SGI	SGI Altix 1.5 GHz	Academic	United Kingdom	2004	1258.53	256	1536.00			NUMalink
241	Los Alamos National Laboratory	SGI	SGI Altix 1.5 GHz	Research	United States	2004	1258.53	256	1536.00			NUMalink
242	NOAA/Geophysical Fluid Dynamics Laboratory (GFDL)	SGI	SGI Altix 1.5 GHz	Research	United States	2004	1258.53	256	1536.00			NUMalink
243	NOAA/Geophysical Fluid Dynamics Laboratory (GFDL)	SGI	SGI Altix 1.5 GHz	Research	United States	2004	1258.53	256	1536.00			NUMalink
244	Oak Ridge National Laboratory	SGI	SGI Altix 1.5 GHz	Research	United States	2003	1258.53	256	1536.00			NUMalink
245	US Army Research Laboratory (ARL)	SGI	SGI Altix 1.5 GHz	Research	United States	2004	1258.53	256	1536.00			NUMalink
246	Public Sector	IBM	xSeries Cluster Xeon 2.4 GHz - Gig-E	Government	China	2003	1255.99	622	2985.60			Gigabit Ethernet
247	University of Houston	Hewlett-Packard	Cluster Platform 6000 rx2600 Itanium2 1.3 GHz Clus	Academic	United States	2003	1253.00	304	1580.00			Myrinet
248	DaimlerChrysler	IBM	xSeries Xeon 3.06 GHz, Myrinet	Industry	Germany	2004	1231.05	260	1591.20			Myrinet
249	Societe Generale	Hewlett-Packard	Cluster Platform 3000 DL360G3, Xeon 3.2 GHz, GigEt	Industry	France	2004	1228.00	320	2048.00			Gigabit Ethernet
250	Cambridge University	Sun Microsystems	Fire 15K 1.2 GHz	Academic	United Kingdom	2002	1226.40	900	2160.00			Fireplane
251	Semiconductor Company (C)	IBM	xSeries Xeon 3.2 GHz - Gig-Ethernet	Industry	United States	2004	1216.62	324	2073.60			Gigabit Ethernet
252	Semiconductor Company (C)	IBM	xSeries Xeon 3.2 GHz - Gig-Ethernet	Industry	United States	2004	1216.62	324	2073.60			Gigabit Ethernet
253	Semiconductor Company (C)	IBM	xSeries Xeon 3.2 GHz - Gig-Ethernet	Industry	United States	2004	1216.62	324	2073.60			Gigabit Ethernet
254	Semiconductor Company (C)	IBM	xSeries Xeon 3.2 GHz - Gig-Ethernet	Industry	United States	2004	1216.62	324	2073.60			Gigabit Ethernet
255	MTU Aero Engines	IBM	xSeries Xeon 3.06 GHz, Myrinet	Industry	Germany	2004	1215.31	256	1566.72			Myrinet
256	University of Liverpool	Dell	PowerEdge 650, 3.06 GHz, Gig Ethernet	Academic	United Kingdom	2003	1212.00	940	5752.80	210000		Gigabit Ethernet
257	Telkom SA	Hewlett-Packard	Integrity Superdome, 1.5 GHz, HPLex	Industry	South Africa	2004	1210.00	384	2304.00			Myrinet
258	Banco Azteca	Hewlett-Packard	Integrity Superdome, 1.5 GHz, HPLex	Industry	Mexico	2004	1210.00	352	2112.00			Myrinet

Rank	Site	Manufacturer	Computer	Inst. type	Country	Year	Rmax	Processors	Rpeak	Nmax	Nhalf	Interconnect
259	HP Financial Services	Hewlett-Packard	Integrity Superdome, 1.5 GHz, HPLex	Industry	Germany	2004	1210.00	320	1920.00			Myrinet
260	Hewlett-Packard	Hewlett-Packard	Integrity Superdome, 1.5 GHz, HPLex	Vendor	United States	2004	1210.00	320	1920.00			Myrinet
261	Hewlett-Packard	Hewlett-Packard	Integrity Superdome, 1.5 GHz, HPLex	Vendor	United States	2004	1210.00	320	1920.00			Myrinet
262	Telkom SA	Hewlett-Packard	Integrity Superdome, 1.5 GHz, HPLex	Industry	South Africa	2004	1210.00	320	1920.00			Myrinet
263	Manufacturing Company (F)	Hewlett-Packard	Integrity Superdome, 1.5 GHz, HPLex	Industry	Italy	2004	1210.00	288	1728.00			Myrinet
264	SBM Gates Arrow Com.	Hewlett-Packard	Integrity Superdome, 1.5 GHz, HPLex	Industry	United States	2004	1210.00	288	1728.00			Myrinet
265	SDH	Hewlett-Packard	Integrity Superdome, 1.5 GHz, HPLex	Industry	Germany	2004	1210.00	288	1728.00			Myrinet
266	Tech Pacific Exports C	Hewlett-Packard	Integrity Superdome, 1.5 GHz, HPLex	Industry	India	2004	1210.00	288	1728.00			Myrinet
267	Telecom SKT	Hewlett-Packard	Integrity Superdome, 1.5 GHz, HPLex	Industry	Korea, South	2004	1210.00	288	1728.00			Myrinet
268	Carrefour	Hewlett-Packard	Integrity Superdome, 1.5 GHz, HPLex	Industry	Spain	2004	1210.00	256	1536.00			Myrinet
269	Ericsson	Hewlett-Packard	Integrity Superdome, 1.5 GHz, HPLex	Industry	Sweden	2004	1210.00	256	1536.00			Myrinet
270	Hewlett-Packard	Hewlett-Packard	Integrity Superdome, 1.5 GHz, HPLex	Vendor	United States	2004	1210.00	256	1536.00			Myrinet
271	Hewlett-Packard	Hewlett-Packard	Integrity Superdome, 1.5 GHz, HPLex	Vendor	United States	2004	1210.00	256	1536.00			Myrinet
272	Hewlett-Packard	Hewlett-Packard	Integrity Superdome, 1.5 GHz, HPLex	Vendor	United States	2004	1210.00	256	1536.00			Myrinet
273	Hewlett-Packard	Hewlett-Packard	Integrity Superdome, 1.5 GHz, HPLex	Vendor	United States	2004	1210.00	256	1536.00			Myrinet
274	Hewlett-Packard	Hewlett-Packard	Integrity Superdome, 1.5 GHz, HPLex	Vendor	United States	2004	1210.00	256	1536.00			Myrinet
275	Hewlett-Packard	Hewlett-Packard	Integrity Superdome, 1.5 GHz, HPLex	Vendor	United States	2004	1210.00	256	1536.00			Myrinet
276	Humantel	Hewlett-Packard	Integrity Superdome, 1.5 GHz, HPLex	Industry	Portugal	2004	1210.00	256	1536.00			Myrinet
277	Instituto Latinoamericano	Hewlett-Packard	Integrity Superdome, 1.5 GHz, HPLex	Academic	Mexico	2004	1210.00	256	1536.00			Myrinet
278	SARL International	Hewlett-Packard	Integrity Superdome, 1.5 GHz, HPLex	Industry	Germany	2004	1210.00	256	1536.00			Myrinet
279	SBM Gates Arrow Com.	Hewlett-Packard	Integrity Superdome, 1.5 GHz, HPLex	Industry	United States	2004	1210.00	256	1536.00			Myrinet
280	Semiconductor Company (C)	IBM	xSeries Xeon 3.06 GHz - Gig-E	Industry	United States	2004	1209.11	322	1970.64			Gigabit Ethernet
281	Bear Stearns	Hewlett-Packard	DL560, Pentium4 Xeon 2.6 GHz, Myrinet	Industry	United States	2004	1206.00	400	2080.00			Myrinet
282	BellSouth	Hewlett-Packard	Integrity Superdome, 1.5 GHz, HPLex	Industry	United States	2004	1198.10	256	1536.00			Myrinet
283	CANTV/GTE	Hewlett-Packard	Integrity Superdome, 1.5 GHz, HPLex	Industry	Venezuela	2004	1198.10	256	1536.00			Myrinet
284	HP Financial Services	Hewlett-Packard	Integrity Superdome, 1.5 GHz, HPLex	Industry	United States	2004	1198.10	256	1536.00			Myrinet
285	Hitachi	Hewlett-Packard	Integrity Superdome, 1.5 GHz, HPLex	Industry	Japan	2004	1198.10	256	1536.00			Myrinet
286	SARL International	Hewlett-Packard	Integrity Superdome, 1.5 GHz, HPLex	Industry	Germany	2004	1198.10	256	1536.00			Myrinet
287	SDH	Hewlett-Packard	Integrity Superdome, 1.5 GHz, HPLex	Industry	Germany	2004	1198.10	256	1536.00			Myrinet
288	Semiconductor Company (F)	IBM	xSeries Cluster Xeon 2.4 GHz - Gig-E	Industry	India	2003	1196.41	574	2755.20			Gigabit Ethernet
289	Lawrence Livermore National Laboratory	IBM	SP Power3 375 MHz 16 way	Research	United States	2001	1193.00	1088	1632.00			SP Switch
290	Osaka University	NEC	SX-5/128M8 3.2ns	Academic	Japan	2001	1192.00	128	1280.00	129536	10240	Crossbar
291	Semiconductor Company (C)	IBM	xSeries Xeon 2.8 GHz, Gig-Ethernet	Industry	United States	2004	1181.68	354	1982.40			Gigabit Ethernet
292	Petroleum Company (G)	IBM	xSeries Cluster Xeon 2.4 GHz - Gig-E	Industry	Saudia Arabia	2003	1181.51	562	2697.60			Gigabit Ethernet
293	Hewlett-Packard	Hewlett-Packard	SuperDome 1 GHz/HPLex	Vendor	United States	2004	1172.80	512	2048.00	491736	165780	Myrinet
294	CSC (Center for Scientific Computing)	IBM	pSeries 690 1.1GHz	Academic	Finland	2002	1170.00	512	2253.00			SP Switch
295	Florida State University	IBM	pSeries 690 1.1GHz	Academic	United States	2002	1170.00	512	2253.00			SP Switch
296	Telecom Italia	Hewlett-Packard	SuperDome 1 GHz/HPLex	Industry	Italy	2004	1170.00	512	2048.00			Myrinet
297	Doshisha University	Visual Technology	Opteron 1.8 GHz, Gig Ethernet	Academic	Japan	2003	1169.00	512	1843.20	220000	59000	Gigabit Ethernet
298	Government	Cray Inc.	T3E1200	Classified	United States	2001	1166.00	1900	2280.00	230016		Cray Interconnect
299	ERDC MSRC	Cray Inc.	T3E1200/900	Research	United States	1999	1166.00	1792	1999.00	230016		Cray Interconnect
300	National Center for High Performance Computing	Self-made	Pentium4 Xeon, 3.0/2.8 GHz, Gig Ethernet	Academic	Taiwan	2004	1166.00	340	1920.00			Gigabit Ethernet
301	NVIDIA Corporation	Hewlett-Packard	Cluster Platform 3000 DL140, Pentium4 Xeon 3.2 GHz	Industry	United States	2004	1150.00	310	1984.00			Myrinet

Rank	Site	Manufacturer	Computer	Inst. type	Country	Year	Rmax	Processors	Rpeak	Nmax	Nhalf	Interconnect
302	CSAR at the University of Manchester	SGI	SGI Altix 1.3 GHz	Academic	United Kingdom	2003	1142.00	256	1331.20	334080	46000	NUMalink
303	Institute of Statistical Mathematics	SGI	SGI Altix 1.3 GHz	Research	Japan	2004	1142.00	256	1331.20	334080	46000	NUMalink
304	Naval Research Laboratory (NRL)	SGI	SGI Altix 1.3 GHz	Research	United States	2004	1142.00	256	1331.20	334080	46000	NUMalink
305	Total Exporation Production	SGI	SGI Altix 1.3 GHz	Industry	France	2004	1142.00	256	1331.20	334080	46000	NUMalink
306	Total Exporation Production	SGI	SGI Altix 1.3 GHz	Industry	France	2004	1142.00	256	1331.20	334080	46000	NUMalink
307	University of Rochester	SGI	SGI Altix 1.3 GHz	Academic	United States	2004	1142.00	256	1331.20	334080	46000	NUMalink
308	Institute of Space & Astronautical Science (ISAS)	NEC	SX-6/128M16 (typeE, 1.778ns)	Research	Japan	2004	1141.00	128	1152.00	327680	8960	Crossbar
309	Zungwon	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Industry	Korea, South	2004	1138.70	576	2016.00			Myrinet
310	DaimlerChrysler	IBM	xSeries Xeon 2.8 GHz, Gig-Ethernet	Industry	United States	2004	1134.98	340	1904.00			Gigabit Ethernet
311	Government	Hewlett-Packard	Cluster Platform 3000 DL360G3, Xeon 3.2 GHz, Myrin	Classified	United States	2004	1132.00	300	1920.00			Myrinet
312	Government	Hewlett-Packard	Cluster Platform 3000 DL360G3, Xeon 3.2 GHz, Myrin	Classified	United States	2004	1132.00	300	1920.00			Myrinet
313	Moffitt Cancer Center	Hewlett-Packard	Cluster Platform 3000 DL140, Pentium4 Xeon 3.2 GHz	Research	United States	2004	1132.00	300	1920.00			Myrinet
314	National Supercomputer Centre (NSC)	Self-made	Pentium Xeon Cluster 2.2 GHz - SCI 3D	Academic	Sweden	2002	1132.00	400	1760.00	212000	32800	SCI
315	Bull	Bull SA	NovaScale5160, Itanium2 1.3 GHz, Quadrics	Industry	France	2004	1131.00	256	1331.20	335872	32000	Quadrics
316	Bureau of Meteorology / CSIRO HPCCC	NEC	SX-6/144M18	Research	Australia	2004	1130.00	144	1152.00	225216	11232	Crossbar
317	Petroleum Company (A)	IBM	xSeries Cluster Xeon 2.4 GHz - Gig-E	Industry	United States	2003	1129.38	520	2496.00			Gigabit Ethernet
318	Sony Intelligence Dynamics Laboratories Inc	IBM	eServer Opteron 2.2 GHz, Myrinet	Industry	Japan	2004	1128.00	352	1548.80		185000	Myrinet
319	UBS Warburg	IBM	xSeries Xeon 3.06 GHz - Gig-E	Industry	United States	2004	1126.50	300	1836.00			Gigabit Ethernet
320	The Wellcome Trust Sanger Institute	IBM	BladeCenter Xeon 2.8 GHz, Gig-Ethernet	Research	United Kingdom	2004	1121.64	336	1881.60			Gigabit Ethernet
321	Compagnie Generale de Geophysique (CGG)	IBM	xSeries Cluster Xeon 2.4 GHz - Gig-E	Industry	Malaysia	2003	1119.44	512	2457.60			Gigabit Ethernet
322	Lockheed Martin	IBM	xSeries Cluster Xeon 2.4 GHz - Gig-E	Industry	United States	2003	1119.44	512	2457.60			Gigabit Ethernet
323	China Meteorological Administration	IBM	eServer pSeries 655 (1.7 GHz Power4+)	Research	China	2004	1107.00	1008	6854.40			SP Switch
324	IBM Benchmark and Enablement Center	IBM	eServer pSeries 655 (1.7 GHz Power4+)	Vendor	United States	2004	1107.00	256	1740.80	224000	14000	SP Switch
325	NASA/Goddard Space Flight Center	Self-made	Pentium4 Xeon 2.4 GHz, Myrinet	Research	United States	2003	1104.00	528	2534.40	120000	35000	Myrinet
326	Semiconductor Company (C)	IBM	xSeries Xeon 3.2 GHz - Gig-Ethernet	Industry	United States	2004	1103.97	294	1881.60			Gigabit Ethernet
327	Semiconductor Company (C)	IBM	xSeries Xeon 3.2 GHz - Gig-Ethernet	Industry	United States	2004	1103.97	294	1881.60			Gigabit Ethernet
328	Semiconductor Company (C)	IBM	xSeries Xeon 3.2 GHz - Gig-Ethernet	Industry	United States	2004	1103.97	294	1881.60			Gigabit Ethernet
329	Australian Centre for Advanced Computing and Communications	Dell	PowerEdge 1750, Pentium4 Xeon 3.06 GHz, GigE	Academic	Australia	2003	1095.00	304	1860.48	179000	40000	Gigabit Ethernet
330	Semiconductor Company (C)	IBM	BladeCenter Cluster Xeon 2.4 GHz, Gig-Ethernet	Industry	United States	2003	1089.65	488	2342.40			Gigabit Ethernet
331	CILEA	Exadron	Pentium4 Xeon 3.06 GHz, Myrinet	Research	Italy	2004	1084.00	256	1566.72	247000	38000	Myrinet
332	Nestec S.A.	IBM	pSeries 690 Turbo 1.3GHz	Industry	Switzerland	2003	1081.00	400	2080.00			SP Switch
333	Sandia National Laboratories	Linux Networx	P4 Xeon 3.06 GHz, Infiniband	Research	United States	2003	1076.00	256	1566.72	145000	27350	Infiniband
334	AVNET Computer	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Industry	United States	2004	1075.00	544	1904.00			Myrinet
335	Ford Motor Company	SGI	SGI Altix 1.5 GHz	Industry	United States	2004	1069.00	256	1536.00			Mixed
336	Semiconductor Company (C)	IBM	xSeries Xeon 2.8 GHz, Gig-Ethernet	Industry	United States	2004	1068.26	320	1792.00			Gigabit Ethernet
337	Compagnie Generale de Geophysique (CGG)	Dell	PowerEdge 1750, P4 Xeon 3.06 GHz, GigE	Industry	United States	2003	1068.00	1024	6266.88			Gigabit Ethernet
338	Media & Entertainment (C)	IBM	eServer pSeries 690 (1.7 GHz Power4+, GigE)	Industry	United States	2004	1068.00	288	1958.40			Gigabit Ethernet
339	Verizon	Hewlett-Packard	Integrity Superdome, 1.5 GHz, HPLex	Industry	United States	2004	1061.00	224	1344.00			Myrinet
340	US Army Research Laboratory (ARL)	Linux Networx	Pentium4 Xeon 3.06 GHz, Myrinet	Research	United States	2003	1060.00	256	1566.72	159432	29858	Myrinet
341	CYTS Sysnet Electric	Hewlett-Packard	Integrity Superdome, 1.5 GHz, HPLex	Industry	United Kingdom	2004	1058.80	224	1344.00			Myrinet
342	Humantel	Hewlett-Packard	Integrity Superdome, 1.5 GHz, HPLex	Industry	Portugal	2004	1058.80	224	1344.00			Myrinet
343	Indiana University	IBM	AVIDD-B+AVIDD-I - xSeries Cluster Xeon 2.4 GHz - M	Academic	United States	2003	1058.00	384	1843.00	220000		Myrinet
344	General Motors	Hewlett-Packard	Cluster Platform DL360G3, Pentium4 Xeon 2.8 GHz, M	Industry	United States	2003	1057.00	320	1792.00			Myrinet

Rank	Site	Manufacturer	Computer	Inst. type	Country	Year	Rmax	Processors	Rpeak	Nmax	Nhalf	Interconnect
345	Los Alamos National Laboratory	Linux Networx	Opteron 1.6 GHz, Infiniband	Research	United States	2003	1053.00	512	1638.00	114000	22202	Infiniband
346	Chemical Company (A)	IBM	BladeCenter HS20 Xeon 3.06 GHz, Gig-Ethernet	Industry	Germany	2004	1051.40	280	1713.60			Gigabit Ethernet
347	University of Kentucky	Hewlett-Packard	Integrity Superdome, 1.5 GHz, HFabric	Academic	United States	2003	1049.00	220	1320.00			Myrinet
348	EDS	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Industry	United Kingdom	2004	1048.00	512	1792.00			Myrinet
349	EDS	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Industry	United Kingdom	2004	1048.00	512	1792.00			Myrinet
350	Government	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Classified	United Kingdom	2004	1048.00	512	1792.00			Myrinet
351	Hitachi	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Industry	Japan	2004	1048.00	512	1792.00			Myrinet
352	Omnitel Vodafone	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Industry	Italy	2004	1048.00	512	1792.00			Myrinet
353	University of Toronto	IBM	xSeries Cluster Xeon 2.4 GHz - Gig-E	Academic	Canada	2003	1040.00	448	2150.40	195000		Gigabit Ethernet
354	XinJiang Oil	IBM	BladeCenter Cluster Xeon 2.4 GHz, Gig-Ethernet	Industry	China	2003	1040.00	448	2150.40	195000		Gigabit Ethernet
355	Applera/Celera Genomics	IBM	pSeries 690 Turbo 1.3GHz	Industry	United States	2002	1038.00	384	1996.80	245000		SP Switch
356	Lawrence Livermore National Laboratory	Promicro/Quadrics	Pentium4 Xeon 2.8 GHz Cluster - Quadrics	Research	United States	2003	1036.00	256	1433.60	170000	30600	Quadrics
357	Lawrence Livermore National Laboratory	Promicro/Quadrics	Pentium4 Xeon 2.8 GHz Cluster - Quadrics	Research	United States	2003	1036.00	256	1433.60	170000	30600	Quadrics
358	University of Minnesota/Supercomputing Institute	IBM	eServer pSeries 655 (1.5 GHz Power4+)	Academic	United States	2004	1031.03	272	1632.00			SP Switch
359	BMW AG	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Industry	Germany	2004	1024.30	512	1792.00			Myrinet
360	BMW AG	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Industry	Germany	2004	1024.30	512	1792.00			Myrinet
361	BMW AG	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Industry	Germany	2004	1024.30	512	1792.00			Myrinet
362	Centrica Plc	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Industry	United Kingdom	2004	1024.30	512	1792.00			Myrinet
363	Centrica Plc	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Industry	United Kingdom	2004	1024.30	512	1792.00			Myrinet
364	POSDATA	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Industry	Korea, South	2004	1024.30	512	1792.00			Myrinet
365	Verizon	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Industry	United States	2004	1024.30	512	1792.00			Myrinet
366	University of Utah	Angstrom Microsystems	Arches AMD 1.4 GHz, Myrinet	Academic	United States	2004	1017.00	500	1400.00	232000	30700	Myrinet
367	AGIP	Hewlett-Packard	Cluster Platform 3000 DL360G3, Xeon 3.2 GHz, Myrin	Industry	Italy	2004	1015.50	260	1664.00			Myrinet
368	BMW AG	Hewlett-Packard	Cluster Platform 3000 DL140, Pentium4 Xeon 3.2 GHz	Industry	United Kingdom	2004	1015.50	256	1638.40			Myrinet
369	Bio Informatics Institute	Hewlett-Packard	Cluster Platform 3000 DL360G3, Xeon 3.2 GHz, Myrin	Research	Singapore	2004	1015.50	256	1638.40			Myrinet
370	Fudan University	Hewlett-Packard	Cluster Platform 3000 DL360G3, Xeon 3.2 GHz, Myrin	Academic	China	2004	1015.50	256	1638.40			Myrinet
371	Siemens	Hewlett-Packard	Cluster Platform 3000 DL360G3, Xeon 3.2 GHz, Myrin	Industry	Germany	2004	1015.50	256	1638.40			Myrinet
372	Siemens	Hewlett-Packard	Cluster Platform 3000 DL360G3, Xeon 3.2 GHz, Myrin	Industry	Germany	2004	1015.50	256	1638.40			Myrinet
373	Synopsis	Hewlett-Packard	Cluster Platform 3000 DL360G3, Xeon 3.2 GHz, Myrin	Industry	United States	2004	1015.50	256	1638.40			Myrinet
374	University of Georgia	Hewlett-Packard	Cluster Platform 3000 DL140, Pentium4 Xeon 3.2 GHz	Academic	United States	2004	1015.50	256	1638.40			Myrinet
375	Life Science (A)	IBM	BladeCenter Xeon 2.8 GHz, Gig-Ethernet	Industry	United Kingdom	2004	1014.89	304	1702.40			Gigabit Ethernet
376	Amdocs	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Industry	United States	2004	1013.00	512	1792.00			Myrinet
377	Amdocs	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Industry	United States	2004	1013.00	512	1792.00			Myrinet
378	Amdocs Software Systems	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Industry	United Kingdom	2004	1013.00	512	1792.00			Myrinet
379	BellSouth	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Industry	United States	2004	1013.00	512	1792.00			Myrinet
380	CIE Gegetel SI	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Industry	France	2004	1013.00	512	1792.00			Myrinet
381	HP Financial Services	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Industry	United States	2004	1013.00	512	1792.00			Myrinet
382	Huapu Information Technology	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Industry	China	2004	1013.00	512	1792.00			Myrinet
383	Magirus International	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Industry	Germany	2004	1013.00	512	1792.00			Myrinet
384	Morse Computer	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Industry	United Kingdom	2004	1013.00	512	1792.00			Myrinet
385	Morse Computer	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Industry	United Kingdom	2004	1013.00	512	1792.00			Myrinet
386	Telecom Italia	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Industry	Italy	2004	1013.00	512	1792.00			Myrinet
387	Youngwoo	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Industry	Korea, South	2004	1013.00	512	1792.00			Myrinet

Rank	Site	Manufacturer	Computer	Inst. type	Country	Year	Rmax	Processors	Rpeak	Nmax	Nhalf	Interconnect
388	Zungwon	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Industry	Korea, South	2004	1013.00	512	1792.00			Myrinet
389	Financial Services Company (E)	IBM	BladeCenter Cluster Xeon 2.4 GHz, Gig-Ethernet	Industry	United States	2003	1009.17	440	2112.00			Gigabit Ethernet
390	Doshisha University	IBM	eServer BladeCenter JS20 (PowerPC970 1.6 GHz), Myr	Academic	Japan	2004	1009.00	252	1613.00	163295		Myrinet
391	Government	Hewlett-Packard	Cluster Platform 3000 DL140, Pentium4 Xeon 3.2 GHz	Classified	United States	2004	1007.67	254	1625.60			Myrinet
392	Argonne National Laboratory	Linux Networx	LCRC Xeon 2.4 GHz - Myrinet	Research	United States	2002	1007.00	361	1732.80	208000	35000	Myrinet
393	Japan Atomic Energy Research Institute	Hewlett-Packard	AlphaServer SC40, 833 MHz	Research	Japan	2002	1007.00	812	1352.80	252700	39954	Quadrics
394	Boeing	Linux Networx	Pentium4 Xeon 2.8 GHz, Myrinet	Industry	United States	2004	1004.00	256	1433.60	245245		Myrinet
395	Boeing	Linux Networx	Pentium4 Xeon 2.8 GHz, Myrinet	Industry	United States	2004	1004.00	256	1433.60	245245		Myrinet
396	Commissariat a l'Energie Atomique (CEA)	Hewlett-Packard	AlphaServer SC45, 1.25 GHz	Research	France	2003	1004.00	512	1280.00	159700	34560	Quadrics
397	Institute of Mathematical Sciences, C.I.T Campus	IMSc-Netweb-Summaton	Pentium Xeon Cluster 2.4 GHz - SCI 3D	Research	India	2004	1002.00	288	1382.40	184300	31300	SCI
398	Sandia National Laboratories	Self-made	CPlant/Ross Cluster	Research	United States	2002	996.90	1800	1782.50	310000	56000	Myrinet
399	Boeing	Linux Networx	Pentium Xeon 2.66 GHz, Myrinet	Industry	United States	2004	987.90	256	1361.90	205576		Myrinet
400	Financial Services Company (G)	IBM	eServer Opteron 2.0 GHz, Gig-E	Industry	United States	2004	987.10	900	3600.00			Gigabit Ethernet
401	GX Technology	IBM	eServer Opteron 2.0 GHz, Gig-E	Industry	United States	2004	987.10	880	3520.00			Gigabit Ethernet
402	Unicredito	IBM	eServer Opteron 2.2 GHz, Gig-E	Industry	Italy	2004	987.10	800	3520.00			Gigabit Ethernet
403	Automotive Manufacturer (F)	IBM	eServer Opteron 2.0 GHz, Gig-E	Industry	Italy	2004	987.10	512	2048.00			Gigabit Ethernet
404	Government	IBM	eServer Opteron 2.0 GHz, Gig-E	Classified	United States	2004	987.10	480	1920.00			Gigabit Ethernet
405	Government	IBM	eServer Opteron 2.0 GHz, Gig-E	Classified	United States	2004	987.10	480	1920.00			Gigabit Ethernet
406	Government	IBM	eServer Opteron 2.0 GHz, Gig-E	Classified	United States	2004	987.10	480	1920.00			Gigabit Ethernet
407	Government	IBM	eServer Opteron 2.0 GHz, Gig-E	Classified	United States	2004	987.10	480	1920.00			Gigabit Ethernet
408	FinanzIT	IBM	eServer Opteron 2.0 GHz, Gig-E	Industry	Germany	2004	987.10	432	1728.00			Gigabit Ethernet
409	Government	IBM	eServer Opteron 2.0 GHz, Gig-E	Research	France	2004	987.10	432	1728.00			Gigabit Ethernet
410	NEC Fuchu Plant	NEC	SX-6/128M16	Vendor	Japan	2002	982.00	128	1024.00	204800	12800	Crossbar
411	BMW AG	Hewlett-Packard	Integrity Superdome, 1.5 GHz, HPLex	Industry	Germany	2004	971.20	192	1152.00			Myrinet
412	BMW AG	Hewlett-Packard	Integrity Superdome, 1.5 GHz, HPLex	Industry	Germany	2004	971.20	192	1152.00			Myrinet
413	BMW AG	Hewlett-Packard	Integrity Superdome, 1.5 GHz, HPLex	Industry	Germany	2004	971.20	192	1152.00			Myrinet
414	Ericsson	Hewlett-Packard	Integrity Superdome, 1.5 GHz, HPLex	Industry	Sweden	2004	971.20	192	1152.00			Myrinet
415	Humantel	Hewlett-Packard	Integrity Superdome, 1.5 GHz, HPLex	Industry	Portugal	2004	971.20	192	1152.00			Myrinet
416	METCASH Trading Ltd.	Hewlett-Packard	Integrity Superdome, 1.5 GHz, HPLex	Industry	United Kingdom	2004	971.20	192	1152.00			Myrinet
417	METCASH Trading Ltd.	Hewlett-Packard	Integrity Superdome, 1.5 GHz, HPLex	Industry	United Kingdom	2004	971.20	192	1152.00			Myrinet
418	Saxony Developments Ltd	Hewlett-Packard	Integrity Superdome, 1.5 GHz, HPLex	Industry	China	2004	971.20	192	1152.00			Myrinet
419	Digital Media Company (B)	Hewlett-Packard	Cluster Platform 3000 DL360G3 Xeon 3.06 GHz, Myrinet	Industry	United States	2004	971.00	256	1566.70			Myrinet
420	Digital Media Company (B)	Hewlett-Packard	Cluster Platform 3000 DL140 Xeon 3.06 GHz, Myrinet	Industry	United States	2004	971.00	256	1566.70			Myrinet
421	Digital Media Company (B)	Hewlett-Packard	Cluster Platform 3000 DL140 Xeon 3.06 GHz, Myrinet	Industry	United States	2004	971.00	256	1566.70			Myrinet
422	Digital Media Company (B)	Hewlett-Packard	Cluster Platform 3000 DL140 Xeon 3.06 GHz, Myrinet	Industry	United States	2004	971.00	256	1566.70			Myrinet
423	Atos Origin	Hewlett-Packard	Integrity Superdome, 1.5 GHz, HPLex	Industry	Netherlands	2004	969.10	192	1152.00			Myrinet
424	Avinia Com. Ltd	Hewlett-Packard	Integrity Superdome, 1.5 GHz, HPLex	Industry	South Africa	2004	969.10	192	1152.00			Myrinet
425	HP Financial Services	Hewlett-Packard	Integrity Superdome, 1.5 GHz, HPLex	Industry	Netherlands	2004	969.10	192	1152.00			Myrinet
426	Itochu Techno-Science Corp.	Hewlett-Packard	Integrity Superdome, 1.5 GHz, HPLex	Industry	Japan	2004	969.10	192	1152.00			Myrinet
427	Jeis Tokyo Shiten	Hewlett-Packard	Integrity Superdome, 1.5 GHz, HPLex	Industry	Japan	2004	969.10	192	1152.00			Myrinet
428	KBR/ Halliburton	Hewlett-Packard	Integrity Superdome, 1.5 GHz, HPLex	Industry	United States	2004	969.10	192	1152.00			Myrinet
429	Nihon Synopsis	Hewlett-Packard	Integrity Superdome, 1.5 GHz, HPLex	Industry	Japan	2004	969.10	192	1152.00			Myrinet
430	Trading Company	Hewlett-Packard	Integrity Superdome, 1.5 GHz, HPLex	Industry	Switzerland	2004	969.10	192	1152.00			Myrinet

Rank	Site	Manufacturer	Computer	Inst. type	Country	Year	Rmax	Processors	Rpeak	Nmax	Nhalf	Interconnect
431	Voicestream Wireless	Hewlett-Packard	Integrity Superdome, 1.5 GHz, HPlex	Industry	United States	2004	969.10	192	1152.00			Myrinet
432	State Farm	IBM	eServer pSeries 655 (1.7 GHz Power4+, GigE)	Industry	United States	2004	962.35	320	2176.00			Gigabit Ethernet
433	Colsa	IBM	BladeCenter HS20 Xeon 3.06 GHz, Gig-Ethernet	Industry	United States	2004	961.28	256	1566.72			Gigabit Ethernet
434	Geoscience (C)	IBM	xSeries Xeon 3.06 GHz - Gig-E	Industry	India	2004	961.28	256	1566.72			Gigabit Ethernet
435	Hitachi	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Industry	Japan	2004	960.30	480	1680.00			Myrinet
436	Telecom Italia	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Industry	Italy	2004	960.30	480	1680.00			Myrinet
437	Government	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Classified	United Kingdom	2004	951.00	480	1680.00			Myrinet
438	Telkom LTD	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Industry	United Kingdom	2004	951.00	480	1680.00			Myrinet
439	Vodafone	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Industry	Spain	2004	951.00	480	1680.00			Myrinet
440	IBM Benchmark and Enablement Center	IBM	eServer pSeries 690 (1.7 GHz Power4+, GigE)	Vendor	United States	2004	949.33	256	1740.80			Gigabit Ethernet
441	Compagnie Generale de Geophysique (CGG)	IBM	xSeries Cluster Xeon 2.4 GHz - Myrinet	Industry	United Kingdom	2003	949.01	320	1536.00			Myrinet
442	University of California, Los Angeles	Self-made	Apple XServe, 2.0 GHz, GigEthernet	Academic	United States	2004	948.70	256	2048.00	138000		Gigabit Ethernet
443	Geoscience (B)	IBM	BladeCenter Xeon 3.06 GHz, Gig-Ethernet	Research	India	2004	946.26	252	1542.24			Gigabit Ethernet
444	Geoscience (B)	IBM	BladeCenter Xeon 3.06 GHz, Gig-Ethernet	Research	India	2004	946.26	252	1542.24			Gigabit Ethernet
445	Geoscience (B)	IBM	BladeCenter Xeon 3.06 GHz, Gig-Ethernet	Research	India	2004	946.26	252	1542.24			Gigabit Ethernet
446	Geoscience (B)	IBM	BladeCenter Xeon 3.06 GHz, Gig-Ethernet	Research	India	2004	946.26	252	1542.24			Gigabit Ethernet
447	Rice University	Hewlett-Packard	Cluster Platform 6000 zx6000 Itanium2 1.5 GHz, Myr	Academic	United States	2004	943.00	196	1176.00			Myrinet
448	Credite Lyonnais	Hewlett-Packard	Blade Cluster BL-20P, Pentium4 Xeon 3.06 GHz	Industry	France	2004	941.20	256	1566.70			Gigabit Ethernet
449	Credite Lyonnais	Hewlett-Packard	Blade Cluster BL-20P, Pentium4 Xeon 3.06 GHz	Industry	France	2004	941.20	256	1566.70			Gigabit Ethernet
450	Digital Media Company (B)	Hewlett-Packard	Blade Cluster BL-20P, Pentium4 Xeon 3.06 GHz	Industry	United States	2004	941.20	256	1566.70			Gigabit Ethernet
451	PETROBRAS	Sun Microsystems	Fire V60 Cluster, 2.8 GHz, Gig E	Industry	Brazil	2004	939.64	340	1904.00			Gigabit Ethernet
452	Government	Cray Inc.	Cray X1	Classified	United States	2004	937.00	80	1024.00	194560	21376	Crossbar
453	University of Queensland	SGI	SGI Altix 1.3 GHz	Academic	Australia	2003	936.84	208	1081.60			NUMalink
454	Ohio Supercomputer Center	Advanced Computing/Voltaire	P4 Xeon 2.4 GHz, Infiniband	Academic	United States	2004	933.10	256	1228.80	140000		Infiniband
455	Geoscience (C)	IBM	xSeries Xeon 3.06 GHz - Gig-E	Industry	United Kingdom	2004	931.24	248	1517.76			Gigabit Ethernet
456	University Groningen	IBM	eServer Opteron 2.0 GHz, Gig-E	Academic	Netherlands	2004	931.15	400	1600.00			Gigabit Ethernet
457	United Kingdom Meteorological Office	NEC	SX-6/120M15	Research	United Kingdom	2003	927.60	120	960.00	204000	19440	Crossbar
458	United Kingdom Meteorological Office	NEC	SX-6/120M15	Research	United Kingdom	2003	927.60	120	960.00	204000	19440	Crossbar
459	AMD Developer Center	Appro International	Opteron 2.0 GHz, Infiniband	Industry	United States	2004	922.80	288	1152.00	200000	32500	Infiniband
460	Chevron	Hewlett-Packard	Cluster Platform 3000 DL360G3, Xeon 3.2 GHz, Myrin	Industry	United States	2004	919.00	228	1459.20			Myrinet
461	Government	Hewlett-Packard	Cluster Platform 3000 DL360G3, Xeon 3.2 GHz, Myrin	Classified	United States	2004	919.00	228	1459.20			Myrinet
462	High Energy Accelerator Research Organization /KEK	Hitachi	SR8000-F1/100	Research	Japan	2000	917.00	100	1200.00	115000	15000	Crossbar
463	Scripps Institution of Oceanography	IBM	xSeries Xeon 2.8 GHz, NPACI-ROCKS, Myrinet	Research	United States	2004	916.50	256	1433.60	150000	25000	Myrinet
464	Government	Hewlett-Packard	Cluster Platform 3000 DL380G3, Pentium4 Xeon 2.8 G	Classified	United States	2003	902.00	260	1456.00			Myrinet
465	Boeing	Hewlett-Packard	Cluster Platform 3000 DL380G3, Pentium4 Xeon 2.8 G	Industry	United States	2003	899.30	256	1433.60			Myrinet
466	Hewlett-Packard	Hewlett-Packard	Cluster Platform DL360G3, Pentium4 Xeon 2.8 GHz, M	Vendor	United States	2003	899.30	256	1433.60			Myrinet
467	EDS	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Industry	United Kingdom	2004	897.00	448	1568.00			Myrinet
468	Magirus International	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Industry	Germany	2004	897.00	448	1568.00			Myrinet
469	Orange Telecom	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Industry	United Kingdom	2004	897.00	448	1568.00			Myrinet
470	Samsung SDS	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Industry	Korea, South	2004	897.00	448	1568.00			Myrinet
471	Boston University School of Medicine	IBM	BladeCenter Xeon 2.8 GHz, Gig-Ethernet	Academic	United States	2004	894.80	268	1500.80			Gigabit Ethernet
472	Universitaet Aachen/RWTH	Sun Microsystems	Fire 15k/6800 Cluster	Academic	Germany	2003	891.40	672	1209.60			Fireplane
473	VW (Volkswagen AG)	NEC	Opteron 2.0 GHz, GigE	Industry	Germany	2004	891.00	360	1440.00	260000		Gigabit Ethernet

Rank	Site	Manufacturer	Computer	Inst. type	Country	Year	Rmax	Processors	Rpeak	Nmax	Nhalf	Interconnect
474	Maui High-Performance Computing Center (MHPCC)	IBM	SP Power3 375 MHz 16 way	Research	United States	2001	891.00	812	1218.00			SP Switch
475	University of Nebraska	Atipa Technology	Prairiefire Opteron 2.2 GHz, Myrinet	Academic	United States	2004	888.50	256	1126.40	245600	30000	Myrinet
476	Maui High-Performance Computing Center (MHPCC)	IBM	pSeries 690 Turbo 1.3GHz	Research	United States	2002	887.30	320	1664.00			SP Switch
477	Sandia National Laboratories	Dell	PowerEdge 1750, Pentium4 Xeon 3.06 GHz, Infiniband	Research	United States	2004	882.00	192	1175.00	150000		Infiniband
478	Pennsylvania State University	Dell	PowerEdge 2650 Cluster P4 Xeon 2.4 GHz - Quadrics	Academic	United States	2003	877.90	256	1228.80	160000		Quadrics
479	Shenzhen University	Tsinghua University, ShenZhen University	DeepSuper-21C, P4 Xeon 3.06/2.8 GHz, Myrinet	Academic	China	2003	877.30	256	1500.16	112000	27560	Myrinet
480	China Petroleum	Hewlett-Packard	Blade Cluster BL-20P, Pentium4 Xeon 3.06 GHz	Industry	China	2004	873.00	238	1456.60			Gigabit Ethernet
481	University of Tokyo	Hitachi	SR8000/128	Academic	Japan	1999	873.00	128	1024.00	120000	16000	Crossbar
482	Pennsylvania State University	Sun Microsystems	Fire V60 Cluster, 2.8 GHz, Gig Ethernet	Academic	United States	2003	872.27	320	1792.00			Gigabit Ethernet
483	Diversa	Hewlett-Packard	Cluster Platform 3000 DL140, Pentium4 Xeon 3.2 GHz	Industry	United States	2004	867.00	212	1356.80			Myrinet
484	ERDC MSRC	Hewlett-Packard	AlphaServer SC45, 1 GHz	Research	United States	2002	862.20	512	1024.00	205000	26000	Quadrics
485	Hewlett-Packard	Hewlett-Packard	AlphaServer SC45, 1 GHz	Vendor	United States	2002	862.20	512	1024.00	205000	26000	Quadrics
486	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
487	PETROBRAS	Hewlett-Packard	Cluster Platform 4000 DL145 Opteron 2.2 GHz GigEth	Industry	Brazil	2004	861.00	264	1161.60			Gigabit Ethernet
488	Compagnie Generale de Geophysique (CGG)	IBM	BladeCenter Cluster, Xeon 2.8 GHz, Gig-Ethernet	Industry	Indonesia	2003	854.77	256	1433.60			Gigabit Ethernet
489	Ford Motor Company	IBM	BladeCenter Cluster, Xeon 2.8 GHz, Gig-Ethernet	Industry	United States	2004	854.77	256	1433.60			Gigabit Ethernet
490	IBM - Deep Computing Capacity on Demand Center	IBM	xSeries Xeon 2.8 GHz, GigEthernet	Industry	United States	2003	854.77	256	1433.60			Gigabit Ethernet
491	IBM - Deep Computing Capacity on Demand Center	IBM	xSeries Xeon 2.8 GHz, GigEthernet	Industry	United States	2003	854.77	256	1433.60			Gigabit Ethernet
492	IBM - Deep Computing Capacity on Demand Center	IBM	xSeries Xeon 2.8 GHz, GigEthernet	Industry	United States	2003	854.77	256	1433.60			Gigabit Ethernet
493	IBM - Deep Computing Capacity on Demand Center	IBM	xSeries Xeon 2.8 GHz, GigEthernet	Industry	United States	2003	854.77	256	1433.60			Gigabit Ethernet
494	Lockheed Martin	IBM	xSeries Xeon 2.8 GHz, GigEthernet	Industry	United States	2003	854.77	256	1433.60			Gigabit Ethernet
495	Petroleum Company (A)	IBM	xSeries Xeon 2.8 GHz, GigEthernet	Industry	United States	2003	854.77	256	1433.60			Gigabit Ethernet
496	University of Hong Kong	IBM	xSeries Xeon 2.8 GHz, GigEthernet	Academic	Hong Kong	2003	854.77	256	1433.60			Gigabit Ethernet
497	Digital China Ltd.	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Industry	China	2004	850.60	416	1456.00			Myrinet
498	Magirus International	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Industry	Germany	2004	850.60	416	1456.00			Myrinet
499	SBC Service Inc	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Industry	United States	2004	850.60	416	1456.00			Myrinet
500	SberBank	Hewlett-Packard	SuperDome 875 MHz/HyperPlex	Industry	Russia	2004	850.60	416	1456.00			Myrinet