

TOP500 Supercomputer Sites

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¹Dedicated to Dr. Hans-Martin Wacker in honour of his 60th birthday

3 The TOP500 List

Table 1 shows the 500 most powerful commercially available computer systems known to us. To keep the list as compact as possible, we show only a part of our information here:

• N_{world}	Position within the TOP500 ranking
• Manufacturer	Manufacturer or vendor
• Computer	Type indicated by manufacturer or vendor
• Installation Site	Customer
• Location	Location and country
• Year	Year of installation/last major update
• Field of Application	
• # Proc.	Number of processors ²
• R_{max}	Maximal LINPACK performance achieved
• R_{peak}	Theoretical peak performance
• N_{max}	Problemsize for achieving R_{max}
• $N_{1/2}$	Problemsize for achieving half of R_{max}

If R_{max} from Table 3 of the LINPACK Report [3] is not available, we use the TPP performance given in Table 1 [3] for solving a system of 1000 equations. In a few cases we interpolated between two measured system sizes or we scaled by cycle times. For models where we did not receive the requested data, the performance of the next smaller system measured is used.

If there should be any changes in the performances given in Table 1 we will update them.

In Table 1, the computers are ordered first by their R_{max} value. In the case of equal performances (R_{max} value) for different computers, we have chosen to order by R_{peak} . For sites that have the same computer, the order is by memory size and then alphabetically.

TOP500 Supercomputers - Worldwide

N <i>world</i>	Manufacturer Computer	Installation Site Location/Year	Field of Application	# Proc.	R_{max} <i>R_{peak}</i> [Mflop/s]	<i>N_{max}</i> <i>N_{1/2}</i>
161	Cray Y-MP C98/8512	Electricite de France Clamart France /1994	Industry Energy	8	6850 7619	.
162	Cray Y-MP C916/8512	Minnesota Supercomputer Center USA /1994	Academic	8	6850 7619	.
163	Cray Y-MP C916/8256	NASA/Ames Research Center/CCF Moffett Field USA /1993	Research Aerospace	8	6850 7619	.
164	Cray Y-MP C98/8128	UCSD/San Diego Supercomputer Center San Diego USA /1993	Academic	8	6850 7619	.
165	Cray Y-MP C916/8256	US Navy/Fleet Numerical Oceanography Center Monterey USA /1994	Research Weather	8	6850 7619	.
166	IBM SP2/37	GMD Germany /1995	Research	37	6690 9860	.
167	IBM SP2/36	Rensselaer Polytechnic Troy USA /1994	Academic	36	6500 9570	.
168	Cray T3D MC64-8	CINECA Bologna Italy /1995	Research	64	6400 9600	20736 2368
169	Cray T3D MC64-2	Mitsubishi Electric Corporation Kanagawa Japan /1994	Industry Electronics	64	6400 9600	20736 2368
170	Cray T3D MCA64-8	NASA/Lewis Research Center Cleveland USA /1994	Research	64	6400 9600	20736 2368
171	Cray T3D MCA64-8	NCAR (National Center for Atmospheric Research) Boulder USA /1994	Research Weather	64	6400 9600	20736 2368
172	IBM SP2/35	Phillips University of Marburg Marburg Germany /1995	Academic	35	6340 9330	.
173	Intel XP/S15	Government Washington DC USA /1995	Classified	208	6250 10400	.
174	Intel XP/S15	NOAA Boulder USA /1994	Research	208	6250 10400	.
175	IBM SP2/33	PCS Inc USA /1995	Industry	33	5990 8800	.
176	Intel XP/S14	Grant Tensor Houston USA /1995	Industry Geophysics	192	5800 9600	.
177	IBM SP2/32	Amerada Hess USA /1994	Industry	32	5800 8500	18000 4500
178	IBM SP2/32	CINECA Bologna Italy /1995	Research	32	5800 8500	18000 4500
179	IBM SP2/32	CNUSC Montpellier France /1995	Academic	32	5800 8500	18000 4500
180	IBM SP2/32	China Meterological Administration China /1995	Research	32	5800 8500	18000 4500

TOP500 Supercomputers - Germany

N <i>local</i> <i>world</i>	Manufacturer Computer	Installation Site Location/Year	Field of Application	# Proc.	R _{max} R _{peak} [Mflop/s]	N _{max} N _{1/2}
1 38	Cray T3D SC256-8/464	ZIB/Konrad Zuse-Zentrum fuer Informationstechnik Berlin Germany /1995	Academic	256	25300 38000	40960 4918
2 62	Cray Y-MP C916/16256	DKRZ Hamburg Germany /1995	Research Weather	16	13700 15238	10000 650
3 95	Cray T3D MCA128-8	Max-Planck-Gesellschaft MPI Munchen Germany /1995	Research	128	12800 19000	20736 3408
4 100	IBM SP2/70	Leibniz Rechenzentrum Muenchen Germany /1995	Academic	70	12510 18620	. .
5 105	NEC SX-3/24R	German Aerospace Laboratory (DLR) Goettingen Germany /1994	Research Aerospace	2	11600 13000	4352 516
6 108	NEC SX-3/24R	VW (Volkswagen AG) Wolfsburg Germany /1995	Industry Automotive	2	11600 13000	42 516
7 112	IBM SP2/60	DLR Koeln Germany /1995	Research	60	10730 16000	. .
8 128	Parsytec GC PowerPlus/192	Universitaet Heidelberg - IWR Heidelberg Germany /1995	Academic	192	7999 15360	27192 9500
9 129	Parsytec GC PowerPlus/192	Universitaet Paderborn - PC2 Paderborn Germany /1995	Academic	192	7999 15360	27192 9500
10 134	IBM SP2/43	PIK Potsdam Germany /1994	Research	43	7725 11430	. .
11 166	IBM SP2/37	GMD Germany /1995	Research	37	6690 9860	. .
12 172	IBM SP2/35	Phillips University of Marburg Marburg Germany /1995	Academic	35	6340 9330	. .
13 202	Fujitsu VPP500/4	Universitaet Aachen Aachen Germany /1993	Academic	4	5600 6400	7344 1250
14 203	Fujitsu VPP500/4	Universitaet Darmstadt Darmstadt Germany /1994	Academic	4	5600 6400	7344 1250
15 214	Parsytec GC PowerPlus/128	Technische Universitaet Chemnitz Chemnitz Germany /1994	Academic	128	5246 10240	22000 7800
16 215	Parsytec GC PowerPlus/128	Universitaet Hamburg-Harburg Hamburg-Harburg Germany /1994	Academic	128	5246 10240	22000 7800
17 243	Intel XP/S10	KFA Juelich Germany /1994	Research	144	4450 7200	. .
18 248	IBM SP2/24	DKFZ Heidelberg Germany /1995	Research	24	4400 6380	. .
19 257	Cray Y-MP T94/3128	debis Stuttgart Germany /1995	Industry Automotive	3	4327 5400	. .
20 264	SGI POWER CHALLENGE	BMW AG Muenchen Germany /1994	Industry Automotive	18	4142 5400	2604 570