

2014 China TOP100 List of High Performance Computer

The Specialty Association of Mathematical & Scientific Software, CSIA

Evaluation Center of High Performance Computer, National 863 Plan

High Performance Computing Technique Committee, CCF

(<http://www.samss.org.cn>)

(November 1st, 2014)

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This work was supported partially by National 863 Plan of China under contract No. 2006AA01A105

Rank	Vendor	System	Installation Location	Installation Year	Application area	Num of Cores	Linpack Value (Gflops)	Linpack Source	Peak Value(Gflops)	Efficiency
1	NUDT	TH-IVB-FEP Cluster, Intel Xeon E5-2692 12C 2.200GHz, TH Express-2, Intel Xeon Phi 31S1P	National Supercomputer Center in Guangzhou	2013	Supercomputing Center	3120000	33862700	Q	54902400	0.617
2	NUDT	TianHe One A/7168x2 Intel Hexa Core Xeon X5670 2.93GHz + 7168 Nvidia Tesla M2050@1.15GHz+2048 Hex Core FT-1000@1GHz/Network 80Gbps	National Supercomputer Center in Tianjin	2010	Supercomputing Center	202752	2566000	Q	4701000	0.546
3	NUDT	TianHe Two A/1792x IntelXeon E5-2692 + 2688 Intel Phi 31S1P/TH Express-2	Cloud Computing Center in Lvliang, Shanxi	2014	Cloud Computing	21504	2071390	C	3075000	0.674
4	National parallel computer engineering technology research center	Sunway BlueLight /8575x16 Core SW 1600@975MHz/QDR Infiniband	National Supercomputer Center in Jinan	2011	Supercomputing Center	137200	795900	Q	1070160	0.744

5	NUDT	TianHe One A-HN/2048x2 Intel Hexa Core Xeon X5670 2.93GHz + 2048 Nvidia Tesla M2050@1.15GHz/Network 80Gbps	National Supercomputer Center in Changsha	2011	Supercomputing Center	53248	771700	Q	1343200	0.575
6	DAWNING	DAEWNING NEBULA /Dawning TC3600 Blade/2560x (2 Intel Hexa Core X5650 + Nvidia Tesla C2050 GPU) /QDR Infiniband	National Supercomputer Center in Shenzhen	2011	Supercomputing Center	52416	749200	C	1296320	0.578
7	Inspur	Inspur Smartrack/Intel Xeon E5-2450v2*26746/Giga Ethernet	Network Company	2013	Internet	213968	641900	C	4279360	0.15
8	Inspur	Inspur Smartrack/Intel Xeon E5-2650V2*14956/Giga Ethernet	Network Company	2014	Internet	119648	522620	C	2488680	0.21
9	IPECAS	Mole-8.5 Cluster/320x2 Intel QCXeon E5520 2.26 Ghz + 320x6 Nvidia Tesla C2050/QDR Infiniband	Institute of Process Engineering, Chinese Academy of Sciences	2010	Scientific Computing	33120	496500	U	1138440	0.436
10	Lenovo (IBM)	xSeries x3650M3 Cluster, Xeon X5650 6C 2.66 GHz, Gigabit Ethernet	ISP	2011	Internet	81577	459684	T6-1	867966	0.53
11	Lenovo (IBM)	xSeries x3650M3 Cluster, Xeon X5650 6C 2.66 GHz, Gigabit Ethernet	ISP	2011	Internet	81577	459684	T6-2	867966	0.53

		Ethernet								
12	Lenovo (IBM)	xSeries x3650M4 Cluster, Xeon E5-2670 8C 2.600GHz, Gigabit Ethernet	Electricity Company	2013	Industry	77328	435744	T3	1608423	0.271
13	Lenovo (IBM)	xSeries x3650M4 Cluster, Xeon E5-2670 8C 2.600GHz, Gigabit Ethernet	ISP	2013	Internet	76272	429795	T7-2	1586457	0.271
14	IBM	IBM PureFlex 460/560x4 IBM Power7 8C/QDR Infiniband	China Meteorological Administration	2013	Meteorology	17920	427500	C	508930	0.84
15	IBM	IBM PureFlex 460/560x4 IBM Power7 8C/QDR Infiniband	China Meteorological Administration	2013	Meteorology	17920	427500	C	508930	0.84
16	Inspur	Inspur Smartrack/Intel Xeon E5-2450*7834/Giga Ethernet	Network Company	2014	Internet/Bigdata	62672	421160	C	1052890	0.4
17	DAWNING	DAEWNING TC5000/7200*Intel Xeon 2420v2 6core 2.2GHz/Giga-E	Internet Company (BAT)	2014	Internet	43200	418100	C	760320	0.55
18	Inspur	Smartrack/Intel Xeon E5-2450*12414/Giga Ethernet	Network Company	2014	Internet	99312	417110	C	1668440	0.25
19	Lenovo (IBM)	xSeries x3650M4 Cluster, Xeon E5-2670 8C 2.600GHz, Gigabit Ethernet	ISP	2013	Internet	73104	411942	T3	1520562	0.271
20	Lenovo (IBM)	xSeries x3630 Cluster, Xeon E5-2670 8C 2.600GHz, Gigabit	ISP	2013	Internet	72896	410772	T4	1516236	0.271

		Ethernet								
21	Lenovo (IBM)	xSeries x3550M3 Cluster, Xeon E5-2670 8C 2.600GHz, Gigabit Ethernet	Engineering Company	2013	Industry	72768	410048	T4	1513576	0.271
22	DAWNING	DAEWNING TC5000/6600*Intel Xeon 2420v2 6core 2.2GHz/Giga-E	Internet Company (BAT)	2014	Internet	39600	383300	C	696960	0.55
23	Lenovo (IBM)	iDataPlex DX360M3, Xeon E56496C 2.530GHz, Gigabit Ethernet	Telecom Company	2012	TeleComm	66864	376780	T4	676664	0.557
24	DAWNING	DAEWNING 5000/9600*Intel Xeon 2407 4core 2.2GHz/Giga-E	Network Company	2013	Internet	38400	371700	C	675840	0.549
25	Lenovo (IBM)	xSeries x3650 Cluster, Xeon E56496C 2.530GHz, Gigabit Ethernet	ISP	2012	Internet	65472	368936	T4-1	662576	0.557
26	Lenovo (IBM)	xSeries x3650 Cluster, Xeon E56496C 2.530GHz, Gigabit Ethernet	ISP	2012	Internet	65472	368936	T4-2	662576	0.557
27	DAWNING	DAEWNING TC5000/4800*Intel Xeon E7-4830 8core 2.13GHz/Giga-E	State Grid	2014	Electric Power	38400	354300	C	654336	0.541
28	Inspur	Inspur Smartrack/Intel Xeon E5-2620*9244/Giga Ethernet	Network Company	2014	Internet	55464	346100	C	887420	0.39

29	DAWNING	DAEWNING NEBULA /Dawning TC3600 Blade/3040 x 2 Intel Hexa Core X5650/QDR Infiniband	National Supercomputer Center in Shenzhen	2011	Cloud Computing	36480	342300	C	389169	0.88
30	DAWNING	DAEWNING TC5000/4240*AMD Opteron 6376 16core 2.3GHz/Giga-E	China Mobile Communications Corporation	2014	TeleComm	78080	339000	C	624128	0.543
31	Inspur	Inspur Tiansuo TS10000/Intel Xeon E5-2630*10232/Giga Ethernet	Internet Company	2014	Gaming	61392	338880	C	1129610	0.3
32	DAWNING	DAEWNING TC5000/4680*AMD Opteron 6348 12core 2.8GHz/Giga-E	AGRICULTURAL BANK OF CHINA	2014	Financial	56160	337600	C	628992	0.537
33	DAWNING	DAEWNING 5000/6400*Intel Xeon 2620 6core 2.0GHz/Giga-E	Network Company	2013	Internet	38400	334900	C	614400	0.545
34	HP	HP Cluster Platform 3000 DL360/Xeon 2650V2 2.6GHz 8 Core/Giga-E	ISP	2014	Internet	320000	332000	C	665000	0.499
35	IBM	IBM PureFlex 460/427x4 IBM Power7 8C/QDR Infiniband	Guangdong Meteorological Administration	2013	Meteorology	13664	329850	C	388060	0.85
36	DAWNING	DAEWNING TC5000/5600*Intel Xeon 2420v2 6core 2.2GHz/Giga-E	Internet Company (BAT)	2014	Internet	33600	325200	C	591360	0.55
37	Inspur	Inspur Tiansuo TS10000/Intel	Internet Company	2014	Information	54408	320350	C	1001110	0.32

		Xeon E5-2630*9068/Giga Ethernet			n Security					
38	Inspur	Inspur Smartrack/Intel Xeon E5-2430*6858/Giga Ethernet	Cloud Computing Company	2014	Cloud Computing	41148	318650	C	724200	0.44
39	Inspur	Inspur Smartrack/Intel Xeon E5-2430*6624/Giga Ethernet	Network Company	2014	Electronic Commerce	39744	307780	C	699490	0.44
40	DAWNING	DAEWNING TC5000/3200*Intel Xeon 2650v2 8core 2.6GHz/Giga-E	Government	2014	Government	25600	290800	C	532480	0.546
41	Lenovo (IBM)	xSeries x3650M4 Cluster, Xeon E5-2670 8C 2.600GHz, Gigabit Ethernet	ISP	2013	Internet	50848	286530	T7-1	1057638	0.271
42	Lenovo (IBM)	xSeries x3650M4 Cluster, Xeon E5-2670 8C 2.600GHz, Gigabit Ethernet	ISP	2013	Internet	50848	286530	T7-3	1057638	0.271
43	Inspur	Inspur Smartrack/Intel Xeon E5-2620V2*6200/Giga Ethernet	Information Company	2014	Internet	37200	281230	C	624960	0.45
44	DAWNING	DAEWNING 5000/7200*Intel Xeon 2407 4core 2.2GHz/Giga-E	Network Company	2013	Internet	28800	280700	C	506880	0.554
45	Inspur	Inspur Smartrack/Intel Xeon E5-2420*13340/Giga Ethernet	Network Company	2014	Internet	80040	279820	C	1216610	0.23
46	DAWNING	DAEWNING TC5000/4800*Intel Xeon 2420v2 6core 2.2GHz/Giga-E	Internet Company (BAT)	2014	Internet	28800	278700	C	506880	0.55
47	Inspur	Inspur Smartrack/Intel Xeon	Network Company	2014	Internet	82800	276880	C	1258560	0.22

		E5-2420*13800/Giga Ethernet								
48	Inspur	Inspur Smartrack/Intel XeonE5-2650V2*3384/Giga Ethernet	Network Company	2014	Internet	27072	275920	C	563100	0.49
49	Lenovo	DeepCom -7000-SD330/Intel E5 2420/6C/1.9G/1Gbps/10Gbps	Internet Company (BAT)	2014	Internet	106752	275847	C	1622630	0.17
50	Lenovo (IBM)	xSeries x3650M3 Cluster, Xeon X5670 6C 2.93 GHz, Gigabit Ethernet	Engineering Company	2011	Industry	48624	273996	T4	569872	0.481
51	DAWNING	DAEWNING TC5000/6120*Intel Xeon 2609v2 4core 2.5GHz/Giga-E	Information Company	2014	Information Security	24480	269200	C	489600	0.55
52	Inspur	Inspur Smartrack /Intel Xeon E5-2630*5286/Giga Ethernet	Network Company	2014	Electronic Commerce	31716	268440	C	583570	0.46
53	Inspur	Inspur Smartrack/Intel Xeon E5-2620*5838/Giga Ethernet	Network Company	2013	Internet	35028	257810	C	560450	0.46
54	DAWNING	DAEWNING TC6000/680*Intel Xeon E5-2680v2 10core 2.8GHz + 80*Intel Xeon Phi 5110P + 60*NVIDIA Tesla K20 GPU/FDR Infiniband	Computer Network Information Center, Chinese Academy of Sciences	2014	Supercomputing Center	12380	255500	C	303320	0.842
55	Lenovo	DeepCom 7000-RD540/Intel E5 2620v2/2.1G/6C/1Gbps/10Gbps	Internet Company (BAT)	2014	Internet	91596	252462	C	1538813	0.164

56	Lenovo	DeepCom -7000-SD330/Intel E5 2420/6C/1.9G/1Gbps/10Gbps	Internet Company (BAT)	2013	Internet	99888	250570	C	1518298	0.165
57	DAWNING	DAEWNING TC5000/4520*Intel Xeon E5-2620v2 2.1GHz/Giga-E 6core	Information Company	2014	Information Security	27120	248000	C	1622630.4	0.153
58	Inspur	Inspur Tiansuo TS10000/Intel Xeon E5-2620*5600/Giga Ethernet	Telecom Company	2013	TeleComm	33600	247300	C	537600	0.46
59	DAWNING	DAEWNING TC5000/3600*AMD Opteron 6344 12core 2.6GHz/Giga-E	China Mobile Communications Corporation	2014	TeleComm	63040	246600	C	449280	0.549
60	Inspur	TS10000/Intel Xeon E5-2620V2*5298/Giga Ethernet	Internet Company	2014	Internet/Bigdata	31788	245660	C	534040	0.46
61	Lenovo	DeepCom -RD440/Intel E5 2620v2/6C/2.1G/10Gbps	Guizhou Province	2014	Government	26412	244047	C	443722	0.55
62	Inspur	Inspur Smartrack/Intel Xeon E5-2620v2*5142/Giga Ethernet	Network Company	2014	Internet/Video	30852	243610	C	518310	0.47
63	Lenovo	DeepCom 7000-RD530/Intel E5 2620/2.1G/6C/1Gbps/10Gbps	Internet Company (BAT)	2013	Internet	87156	241650	C	1464221	0.165
64	Lenovo (IBM)	xSeries x3650M4 Cluster, Xeon X5650 6C 2.660GHz, Gigabit Ethernet	Service Provider	2013	Internet	32160	241630	T2	342182	0.706
65	Lenovo	Flex System x240/Intel Xeon	Sinopetrol	2013	石油	12000	241400	C	284000	0.85

		E5-2670 v2+GPU/10Gbps+QDR Infiniband								
66	Lenovo	DeepCom -RD540/Intel E5 2620v2/2.1G/6C/1Gbps/10Gbps	Internet Company (BAT)	2014	Internet	85704	240440	C	1439827	0.167
67	DAWNING	DAEWNING TC5000/3600*Intel Xeon E5-2620v2 6core 2.1GHz/Giga-E	Information Company	2014	Information Security	25920	238800	C	435456	0.548
68	HP	Cluster Platform DL388p, Xeon E5-2609 4C 2.400GHz, Gigabit Ethernet	Telecom Company	2013	TeleComm	23832	237497	T2	457575	0.519
69	DAWNING	DAEWNING 5000/4096*AMD Opteron 6337HE 12core 2.2GHz/Giga-E	Power Company	2013	Electric Power	49152	236800	C	432538	0.547
70	DAWNING	DAEWNING TC5000/4200*Intel Xeon 2620v2 6core 2.1GHz/Giga-E	China Telecom	2014	TeleComm	25200	234800	C	423360	0.555
71	DAWNING	DAEWNING TC5000/4000*Intel Xeon 2420v2 6core 2.2GHz/Giga-E	Internet Company (BAT)	2014	Internet	24000	232300	C	422400	0.55
72	Lenovo	DeepCom 7000-RD540/Intel E5 2630v2/2.6G/6C/1Gbps/10Gbps	Internet Company (BAT)	2014	Internet	58752	231872	C	1222042	0.19
73	Lenovo	DeepCom 7000-R680/Intel E7 4807/6C/1.86G/10Gbps	Government	2012	Government	41400	231011	C	308015	0.75

74	DAWNING	DAEWNING TC5000/3200*AMD Opteron 6348 12core 2.8GHz/Giga-E	AGRICULTURAL BANK OF CHINA	2014	Financial	38400	230200	C	430080	0.535
75	Lenovo	DeepCom -RD540/Intel E5 2620/2.1G/6C/1Gbps/10Gbps	Internet Company (BAT)	2013	Internet	82044	228820	C	1378339	0.166
76	Lenovo	DeepCom -RD440X/Intel E5 2450v2/8C/2.5G/1Gbps/10Gbps	Internet Company (BAT)	2014	Internet	68528	227530	C	1370560	0.166
77	Inspur	Inspur Tiansuo TS10000/Intel Xeon E5-2620V2*4800/Giga Ethernet	Software Company	2013	Gaming	28800	227400	C	483840	0.47
78	HP	HP Cluster Platform 3000 DL360/Xeon 2620V2 2.1GHz 6 Core/Giga-E	ISP	2014	Internet	300000	227000	C	504000	0.45
79	华为	Tecal RH2288H V2 Cluster, Xeon E5 2650V2 8C 2.6GHz + Gigabit Ethernet	Internet Company (BAT)	2014	Internet	20480	225470	C	416000	0.542
80	Lenovo	DeepCom 700-SD210X4/Intel E3 1230V2/4C/3.3G/1Gbps/10Gbps	Internet Company (BAT)	2012	Internet	52016	225294	C	1373222	0.164
81	HP	Cluster Platform DL380e Gen8, Xeon E5-2450 8C 2.100GHz, Gigabit Ethernet	Service Provider	2013	Internet	27392	224670	T	460186	0.488
82	DAWNING	DAEWNING TC5000/3680*Intel Xeon 2620v2 6core 2.1GHz/Giga-E	China Telecom	2014	TeleComm	24288	224400	C	408038	0.55

83	Lenovo (IBM)	xSeries x3650M3, Xeon X56xx 2.53 GHz, GigaE	ISP	2011	Internet	39816	224364	T3	402938	0.557
84	DAWNING	DAEWNING TC5000/2000*Intel Xeon E7-4830 8core 2.13GHz + 640*Intel Xeon E7-8850 10core 2.0GHz/Giga-E	State Grid	2014	Electric Power	24640	223960	C	412544	0.543
85	Lenovo	DeepCom 7000-RD540/Intel E5 2620v2/2.1G/6C/1Gbps/10Gbps	Internet Company (BAT)	2014	Internet	80604	223487	C	1354147	0.165
86	HP	Cluster Platform DL380p Gen8 , Xeon E5-2650 8C 2.000GHz, Gigabit Ethernet	ITService Provider	2013	Internet	28672	222796	T	458752	0.486
87	Lenovo	DeepCom -RD630/Intel E5 2620/6C/2.1G/10Gbps	Government	2012	Government	18888	222123	C	317318	0.7
88	DAWNING	DAEWNING TC5000/2400*Intel Xeon E7-8837 8core 2.67GHz/Giga-E	Government	2014	Government	19200	220400	C	410112	0.537
89	DAWNING	DAEWNING TC5000/2400*Intel Xeon E5-2650v2 8core 2.6GHz/Giga-E	Government	2014	Government	19200	219600	C	399360	0.55
90	Inspur	Inspur Tiansuo TS10000/Intel Xeon E5-26XXv2*2074/Giga Ethernet	Network Company	2013	Internet	12444	219010	C	438030	0.5

91	Lenovo	DeepCom 7000-RD540/Intel E5 2630v2/2.4G/6C/1Gbps/10Gbps	Internet Company (BAT)	2014	Internet	67980	217960	C	1305216	0.167
92	Lenovo	DeepCom 700-SD210X4/Intel E3 1230V2/4C/3.3G/1Gbps/10Gbps	Internet Company (BAT)	2012	Internet	47136	217768	C	1244390	0.175
93	DAWNING	DAEWNING TC5000/2400*Intel Xeon E5-2650v2 8core 2.6GHz/Giga-E	Information Company	2014	Information Security	19200	217600	C	399360	0.545
94	DAWNING	DAEWNING TC5000/3200*AMD Opteron 6344 12core 2.6GHz/Giga-E	State Grid	2014	Electric Power	38400	215600	C	399360	0.54
95	Lenovo	DeepCom -7000-SD330/Intel E5 2420/6C/1.9G/1Gbps/10Gbps	Internet Company (BAT)	2014	Internet	82560	214463	C	1225500	0.175
96	DAWNING	DAEWNING TC6000/1200*Intel Xeon E5-2670v2 10core 2.5GHz/FDR Infiniband	Northeastern University	2014	University	12000	213600	C	240000	0.89
97	Inspur	Inspur Smartrack/Intel Xeon E5-2630*4016/Giga Ethernet	Cloud Computing Company	2014	Internet/Bigdata	24096	212820	C	443370	0.48
98	DAWNING	DAEWNING 5000/4000*Intel Xeon 2620 6core 2.0GHz/Giga-E	Network Company	2013	Internet	24000	211200	C	384000	0.55

99	DAWNING	DAEWNING TC5000/3200*Intel Xeon 2420v2 6core 2.2GHz/Giga-E	Internet Company (BAT)	2014	Internet	21600	209000	C	380160	0.55
100	DAWNING	DAEWNING TC5000/3960*Intel Xeon E5-2620 6core 2.0GHz/Giga-E	Government	2014	Government	23760	206200	C	380160	0.542

Note:

- (1) The data source in this list was limited to the mainland of China.:
 - a) Linpack Data Labeled “U”: Commercial Public Data, National Department Certified Data, User Provided Data or Data Measured by SAMSS. For user data, SAMSS is only responsible for its reasonability and user is responsible for its truth; SAMSS will provide more data measured by itself depending on human and financial condition;
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- (3) From now on, this rank list will be published on first half of November each year;
- (4) You are welcome to provide feedback and bug report, please return your report to Dr .Yunquan Zhang(zyq@ict.ac.cn).