

TOP 500[®]

JUNE 2007

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

PRESENTED BY

UNIVERSITY OF
MANNHEIM

<http://www.uni-mannheim.de/english/>

ICL **UT**
INNOVATIVE COMPUTING
LABORATORY

<http://icl.cs.utk.edu/>

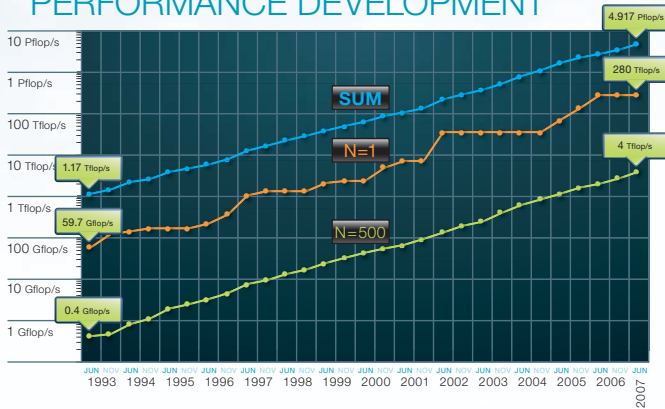
BERKELEY LAB

<http://www.lbl.gov/>

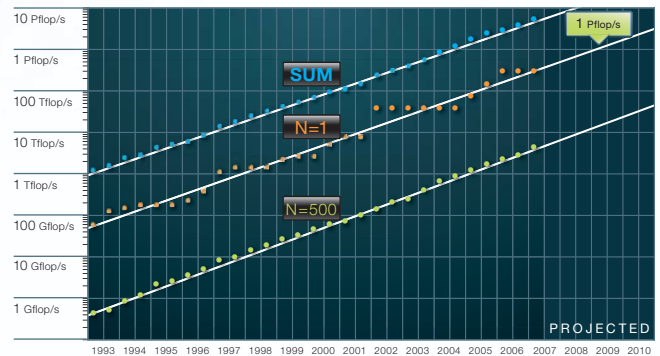
TOP 5

MANUFACTURER/COMPUTER	LOCATION	R _{MAX} (GFLOP/S)	PROCS.
1 IBM eServer Blue Gene Solution / BlueGene/L	Lawrence Livermore National Lab	USA 280600	131072
2 Cray XT4/XT3	Oak Ridge National Lab	USA 101700	23016
3 Cray XT3 Red Storm	Sandia National Lab	USA 101400	26544
4 IBM eServer Blue Gene Solution / BlueGene/W	IBM Thomas J. Watson Research Center	USA 91290	40960
5 IBM eServer Blue Gene Solution / BlueGene/L	Stony Brook/Brookhaven National Lab	USA 82161	36864

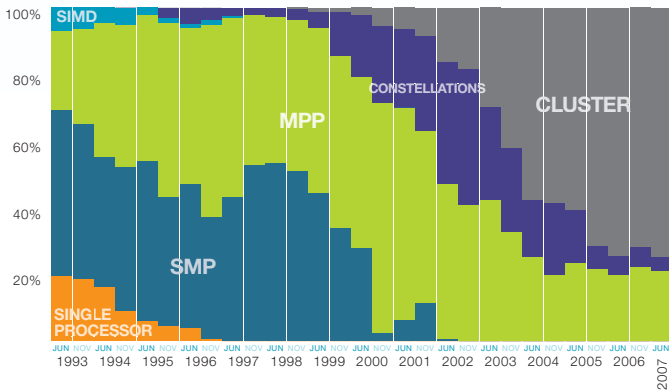
PERFORMANCE DEVELOPMENT



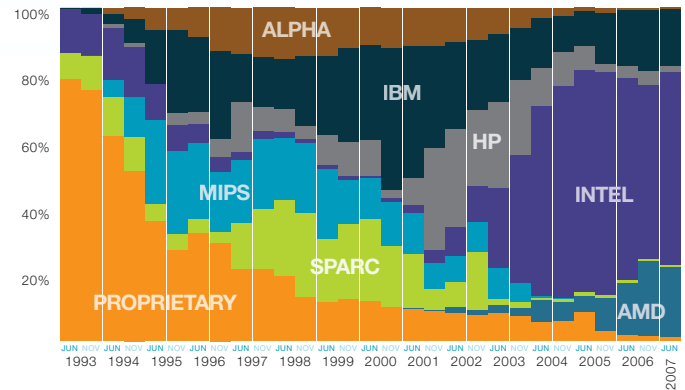
PROJECTED PERFORMANCE DEVELOPMENT



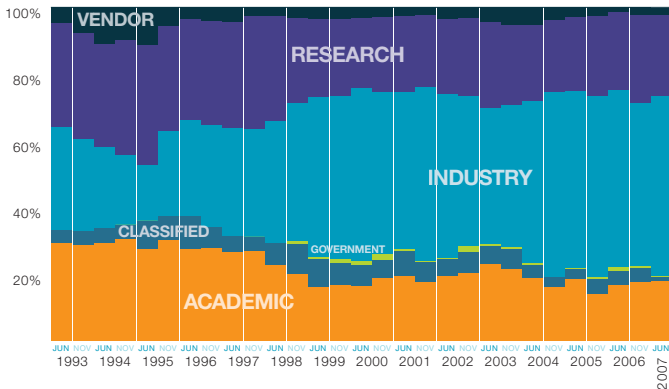
ARCHITECTURES



CHIP TECHNOLOGY



INSTALLATION TYPE



HPLINPACK

<http://icl.cs.utk.edu/hpl/>

A Portable Implementation of the High Performance Linpack Benchmark for Distributed Memory Computers

Algorithm: recursive panel factorizations, multiple lookahead depths, bandwidth reducing swapping

Easy to install, only needs MPI + BLAS or VSIBL

Highly scalable and efficient from the smallest cluster to the largest supercomputers in the world