

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

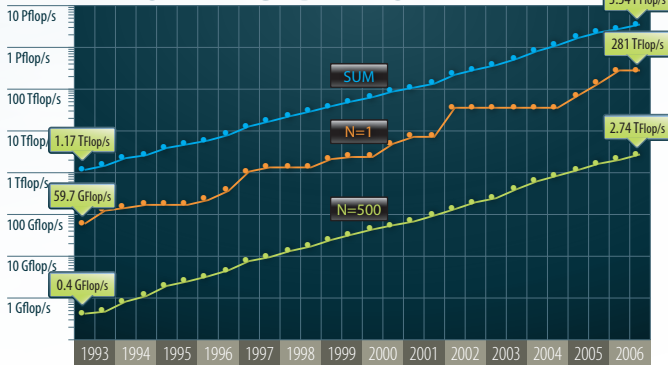
MANUFACTURER/COMPUTER

- 1 IBM eServer Blue Gene Solution / BlueGene/L
- 2 Cray XT3 Red Storm
- 3 IBM eServer Blue Gene Solution / BlueGene W
- 4 IBM eServer pSeries p5 575 / ASCI Purple
- 5 IBM BladeCenter JS21 Cluster, PPC 970 w/Myrinet

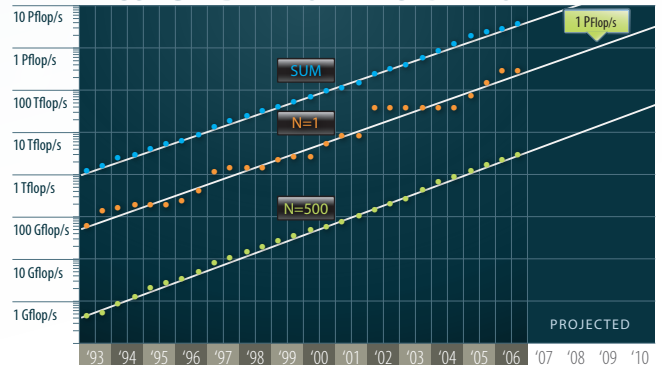
LOCATION

LOCATION		R _{MAX} (GFLOP/S)	PROCESSORS
Lawrence Livermore National Lab	USA	280600	131072
Sandia National Lab	USA	101400	26544
IBM Thomas J. Watson Research Center	USA	91290	40960
Lawrence Livermore National Lab	USA	75760	12208
Barcelona Supercomputer Center	Spain	62630	10240

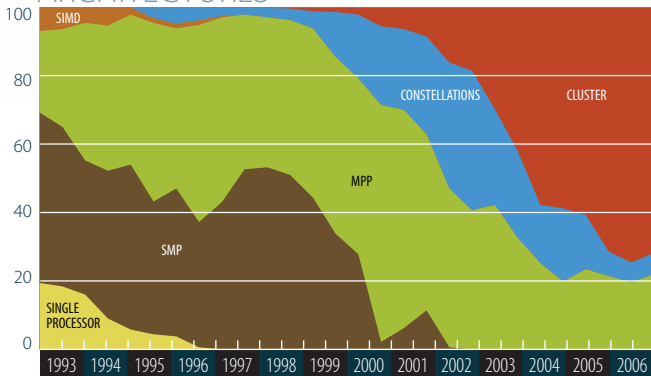
PERFORMANCE DEVELOPMENT



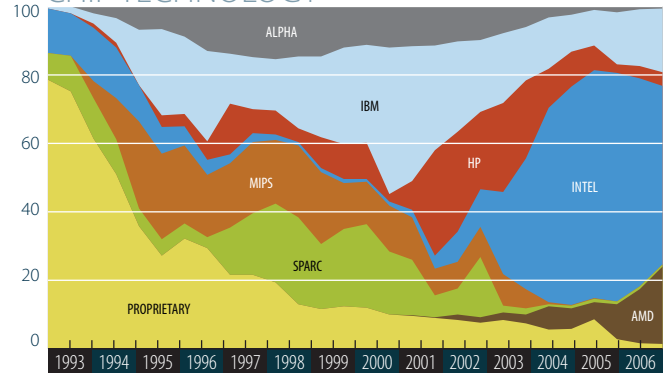
PROJECTED PERFORMANCE DEVELOPMENT



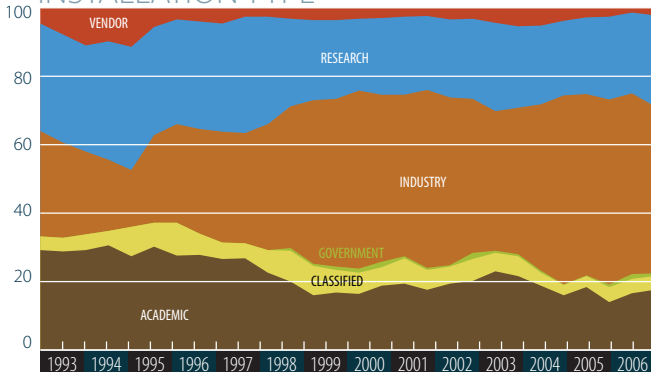
ARCHITECTURES



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