

TOP 500[®]

NOVEMBER 2008

PRESENTED BY

UNIVERSITY OF
MANNHEIM

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

ICL 
INNOVATIVE COMPUTING
LABORATORY

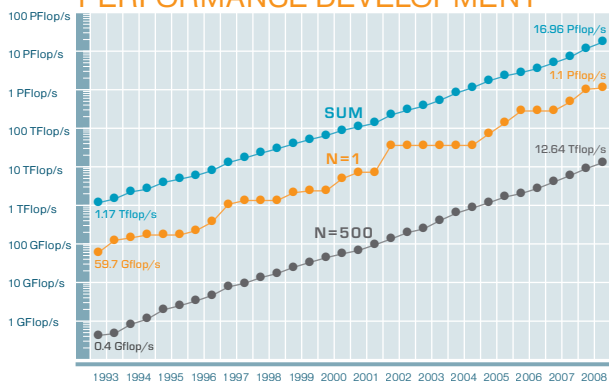
<http://icl.cs.utk.edu/>


BERKELEY LAB

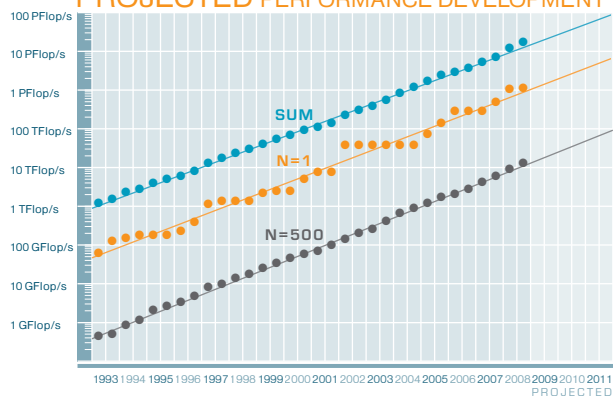
<http://www.lbl.gov/>

	MANUFACTURER/COMPUTER	LOCATION	COUNTRY	CORES	R_{max}
1	IBM BladeCenter QS22/LS21, PowerXCell 3.2 Ghz / Opteron 1.8 GHz , Voltaire Iband	DOE/NNSA/LANL	USA	129600	1105000
2	Cray XT5 QC 2.3 GHz	DOE/OS/ORNL	USA	150152	1059000
3	SGI Altix ICE 8200EX, Xeon QC 3.0/2.8 GHz	NASA/Ames Research Center/NAS	USA	51200	487000
4	IBM eServer Blue Gene Solution	DOE/NNSA/LLNL	USA	212992	478200
5	IBM Blue Gene/P Solution	DOE/OS/ANL	USA	163840	450300

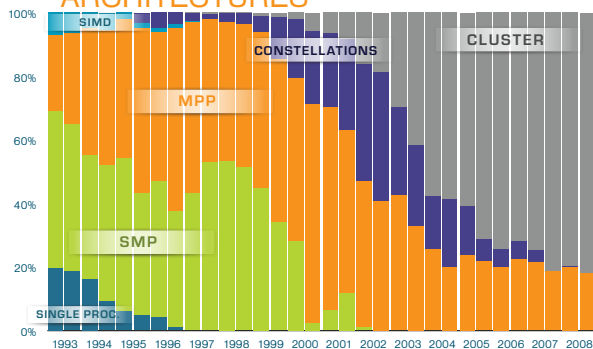
PERFORMANCE DEVELOPMENT



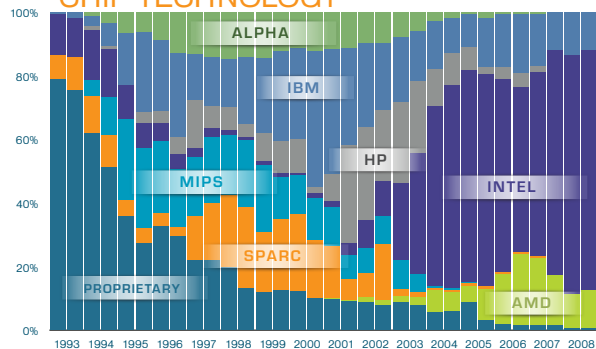
PROJECTED PERFORMANCE DEVELOPMENT



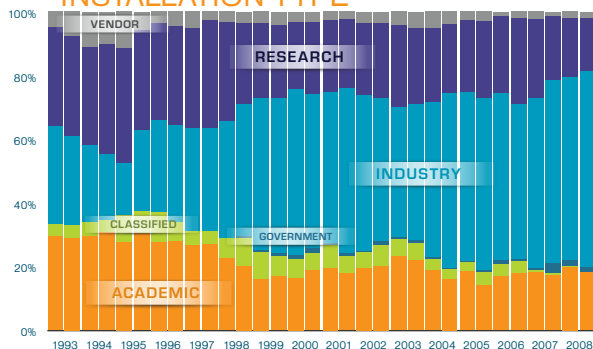
ARCHITECTURES



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