

IBM BladeCenter[®]

Performance per watt

BEATS Dell by 36%



Turn the page and see how
IBM BladeCenter[®]

Performance per watt beats Dell

Using Dell's own test, IBM demonstrated a clear advantage.
IBM's investment in innovation and technology delivers
unrivaled energy efficiency.



Surpassing “Unrivaled Performance”

IBM BladeCenter HS12 provides 36% better performance per watt than the Dell PowerEdge M600*



Key Highlights:

- Dell made a claim about beating IBM on performance per watt and has been advertising an advantage
- The IBM BladeCenter HS12 beats Dell by 36% on their own metric! (1309 BOPs / watt vs Dell's 959*)

Executive Summary:

IBM assessed both the performance and the energy efficiency of the IBM BladeCenter HS12 and compared those results with the information published in the Principled Technologies report of December 2007*. We found exactly what you would expect: IBM BladeCenter HS12 **SIGNIFICANTLY outperformed the Dell PowerEdge M600** in performance per watt, even using Dell's own metric.

While Dell claimed better performance per watt than IBM BladeCenter, they **picked the wrong fight**. Dell is using industry standard parts with no added innovation or unique offering. The IBM configuration was able to post this leadership score by using IBM's **unique solid-state drives**, leveraging our **energy-efficient BladeCenter E chassis**, and utilizing our innovative Systems Director **Active Energy Manager**.

IBM understands that it takes a holistic approach to enable a green data center. IBM has a comprehensive portfolio of energy-efficient options to meet the needs of the power constrained data center. If energy-efficiency is your requirement, IBM can provide the solution.

IBM BladeCenter HS12

The industry's FIRST Intel® processor-based single-socket blade server

The IBM BladeCenter HS12 is the first of its kind and provides customers with an affordable, reliable, proven, and power-saving alternative to two-socket blades. Today, dual-core and quad-core uni-socket servers offer enough processing power to run many single applications. No longer are customers forced to purchase more processing than needed to get into a blade server architecture. IBM is changing the blade market landscape. Now customers can “right-size” their infrastructure applications on uni-socket blades servers, **save power, increase performance per watt**, increase efficiency, and save floor space. IBM BladeCenter HS12 customers can enjoy the same availability and management features they received on their dual-socket servers. With the IBM BladeCenter HS12 you do not have to compromise on features and function.



- Supports single-, dual- and quad-core Intel processors
- The ultimate level of storage flexibility: up to two hard disk drives (hot-swap SAS, fixed SAS, or fixed SATA), and either hot-swap or fixed solid-state drives.
- Availability never before seen in this class of server with redundant I/O and power connections
- Hardware RAID-0, 1, 5 (with SIO)
- Up to 6 DIMM slots for up to 24GB of memory
- Up to 8 I/O connections/blade for high LAN and SAN throughput
- 1 PCI Express and 1 PCI-X slot

For more information:

- IBM BladeCenter HS12:**
<ftp://ftp.software.ibm.com/common/ssi/pm/sp/n/bld03014usen/BLD03014USEN.PDF>
- IBM Solid-State Storage:**
<ftp://ftp.software.ibm.com/common/ssi/pm/sp/n/bls03014usen/BLS03014USEN.PDF>
- IBM BladeCenter E:**
ftp://ftp.software.ibm.com/common/ssi/pm/sp/n/bld03018usen/BLD03018USEN_HR.PDF
- IBM BladeCenter: The right choice:**
<ftp://ftp.software.ibm.com/common/ssi/pm/br/n/blb03002usen/BLB03002USEN.PDF>
- IBM Systems Director Active Energy Manager:**
<http://www-03.ibm.com/systems/management/director/extensions/actengmrg.html>

* Results for the Dell comparison are from the Principled Technologies® December 2007 report, “SPECjbb2005 performance and power consumption on Dell, HP, and IBM blade servers”

http://www.dell.com/content/topics/topic.aspx/global/products/pedge/topics/en/m1000e_blades_landing?c=us&l=en&s=corp&dgc=AD&cid=27531&lid=625386