Key Messages for HUAWEI Tecal E Series Blade Servers



Blade Servers

E9000 compute nodes: CH121/CH220/CH221/CH222/CH240

E6000 server blades: BH620 V2/BH621 V2/BH622 V2/BH640 V2



E9000 Key Messages

Convergence and Scalability

Highest computing density in the industry with up to 64 Romley-EP processors in the 12U chassis

High density

Customer benefits: Reduces the TCO by greatly increasing the service deployment density.

Differentiators: The 12U E9000 chassis houses up to sixteen dual 2-socket CH140 compute nodes, providing the highest computing density that is 66% higher than that of competitors' products with the Romley-EP processors.

High performance

Deep convergence of computing, storage, and networking resources, greatly improving system performance

Customer benefits: Provides cost-effective solutions by supporting flexible configurations of storage, computing, and I/O modules; maximizes customer investment in the future by supporting an evolving architecture. **Differentiators:**

- The E9000 uses a dynamic expansion architecture for 2-socket and 4-socket compute nodes, supporting evolution in future based on Intel's threegeneration, high-performance processors.
- 2. A full-width slot supports 48 DIMM slots with up to 1.5 TB highly cost-effective memory capacity.
- 3. The midplane provides the highest bandwidth (5.76 Tbit/s) in the industry and supports 40GE, InfiniBand FDR (56 Gbit/s), and evolution to 100GE and InfiniBand EDR.
- 4. The E9000 provides the largest storage capacity in the industry with 15 x 2.5" hard disks supported on a compute node.
- 5. All compute nodes support standard PCle slots for installing GPUs and SSD cards to improve system performance.

High reliability

Cutting-edge heat dissipation design and fully redundant architecture, ensuring energy efficiency and high reliability

Customer benefits: Ensures service stability in harsh environments **Differentiators:**

- 1. The system runs properly in the temperature range of 5° C to 40° C.
- 2. The system supports normal operating with 135 W, 2.9 GHz processors in the case temperature of 73 °C.
- 3. The system provides excellent cooling performance and supports fully redundant function modules, enabling seamless switchovers.
- 4. The E9000 uses a passive midplane to prevent single point of failures (SPOFs).



E6000 Key Messages

High Integration and Excellent Scalability

High density

The E6000 4-socket server blades house up to 40 processors in the 8U space, providing the highest density among counterparts.

Customer benefits: Reduces the TCO by greatly increasing the service deployment density.

Differentiators: The 8U E6000 chassis houses up to ten 4-socket BH640 V2 server blades, providing the highest computing density that is 56% higher than that of competitors' 4-socket server blades.

High reliability

The industry-leading heat dissipation design and a passive backplane ensure ultra-high reliability.

Customer benefits: The E6000 runs stably in the whole lifecycle, and it is easy to maintain, ensuring continuous and stable service running. Differentiators:

- 1. The E6000/E6000H uses passive backplanes without any active or passive components on the backplanes, which are highly reliable. Competitors' blade backplanes have active components, which are not reliable. Once an active component on a backplane fails, the whole chassis fails, and all server blades may not run properly.
- 2. The BH622 V2 supports 135 W, 2.9 GHz processors with the case temperature of 73 °C. The system cooling performance is excellent.

High performance

Optimized architecture, improving system performance

Customer benefits: Improves application performance and service processing capabilities and configures standard PCIe cards to meet requirements of various application scenarios.

Differentiators:

- 1. The Tecal V2 server blades refreshed 16 world records in SPEC integer and floating-point computing tests.
- 2. The BH622 V2 supports 135 W, 2.9 GHz processors, providing excellent system performance.
- 3. The BH621 V2 supports standard PCIe slots for installing GPUs and SSD cards to improve system performance.





HUAWEI ENTERPRISE ICT SOLUTIONS A BETTER WAY

Copyright©2012 Huawei Technologies Co., Ltd. All Rights Reserved.

The information in this document may contain predictive statements including, without limitation, statements regarding the future financial and operating results, future product portfolio, new technology, etc. There are a number of factors that could cause actual results and developments to differ materially from those expressed or implied in the predictive statements. Therefore, such information is provided for reference purpose only and constitutes neither an offer nor an acceptance. Huawei may change the information at any time without notice.