Choose the right memory

Choosing the right memory is the key to getting the utmost reliability, performance, and faster return on your IT investment. As one of the largest DRAM buyers, HP chooses only the highest quality memory. HP SmartMemory is performance tested and tuned on HP ProLiant servers using proprietary software that simulates extreme operating environments and conditions.

Enjoy reliability, performance, and manageability

HP SmartMemory is a unique technology introduced for HP ProLiant Gen8 and future servers, and unlike other third-party memory, HP SmartMemory authenticates whether memory has passed HP’s rigorous qualification and test process, and provides you with the highest quality, genuine HP SmartMemory.

More importantly, verification of HP SmartMemory unlocks certain performance and high efficiency features optimized for HP ProLiant servers. In addition, HP SmartMemory provides future enhanced support through HP Active Health System and manageability software.

Key features and benefits

HP SmartMemory is the ideal tool to help you extract all the memory performance, dependability, and power savings that the HP ProLiant Gen9 server is designed to deliver. Memory plays an increasingly larger part of the server’s power consumption, and choosing the most efficient memory is a critical component in reducing your data center’s overall power and cooling requirements. These savings translate to reduced operating cost and a faster return on investment (ROI), freeing up IT budget spent on power and cooling.

Our new generation of HP DDR4 SmartMemory delivers benefits over DDR3 such as:

**Higher performance**
- 14–30 percent throughput at DDR4-2133
- 1 percent reduction in memory-related outages
- 4X memory capacity increase

**Power savings/efficiency**
- DDR4 is 37 percent more efficient than DDR3

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1 Compared to HP DDR3-1866 SmartMemory
Technical specifications

<table>
<thead>
<tr>
<th>Dimm rank</th>
<th>Registered DIMM (RDIMM)</th>
<th>Load reduced DIMM (LRDIMM)</th>
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</thead>
<tbody>
<tr>
<td>Single rank (1R)</td>
<td>Dual rank (2R)</td>
<td>Quad rank (4R)</td>
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<tr>
<td>DIMM capacity</td>
<td>8 GB</td>
<td>16 GB</td>
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<tr>
<td>Voltage</td>
<td>Standard voltage 1.2 V</td>
<td>Standard voltage 1.2 V</td>
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<tr>
<td>Populated DIMM speed (MT/s)</td>
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<tr>
<td>1 DIMM per channel</td>
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<td>2,133</td>
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<tr>
<td>2 DIMM per channel</td>
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</tr>
<tr>
<td>3 DIMM per channel</td>
<td>1,600</td>
<td>1,600</td>
</tr>
</tbody>
</table>

HP Factory Express

HP Factory Express provides customization and deployment services along with your server purchases. You can customize hardware to your exact specifications in the factory—helping speed deployment. hp.com/go/factoryexpress

Customer Technical Training

Gain the skills you need with HP ExpertOne training and certification from HP. With HP ProLiant training, you will accelerate your technology transition, improve operational performance, and get the best return on your HP investment. Our training is available when and where you need it, through flexible delivery options and a global training capability. hp.com/learn/proliant

Learn more at hp.com/go/memory