## **QuickSpecs**

Overview

## Intel® Xeon® Processor 5100 Sequence

| Intel Xeon 5110/ 1.60 GHz, 4MB L2, 1066 MHz, FSB, Intel EM64T | EY012AA |
|---|---------|
| Intel Xeon 5120/ 1.86 GHz, 4MB L2, 1066 MHz, FSB, Intel EM64T | EY013AA |
| Intel Xeon 5130/ 2.00 GHz, 4MB L2, 1333 MHz, FSB, Intel EM64T | EY014AA |
| Intel Xeon 5140/ 2.33 GHz, 4MB L2, 1333 MHz, FSB, Intel EM64T | EY015AA |
| Intel Xeon 5150/ 2.66 GHz, 4MB L2, 1333 MHz, FSB, Intel EM64T | EY016AA |
| Intel Xeon 5160/ 3.00 GHz, 4MB L2, 1333 MHz, FSB, Intel EM64T | EY017AA |
| Intel Xeon 5170/ 3.33 GHz, 4MB L2, 1333 MHz, FSB, Intel EM64T | GK991AA |

#### Introduction

These processors offer energy-efficient performance ideal for low-power, dual-core, 32- or 64-bit computing, making them ideal for compute-intensive and multitasking applications on Intel-based workstations that support 1-2 processors (2-4 cores).

These processors are expected to deliver up to two times the performance and over two times the performance/watt of previous-generation dual-core Intel Xeon processors.

Platforms based on the Dual-Core Intel Xeon processor 5100 series also support many new advanced technologies that help companies enhance operations, reduce costs and improve business continuity. These technologies include Intel's Virtualization Technology which enables multiple, independent software environments inside a single platform and Dual Independent Point-to-Point Bus (DIB) architecture provides improved performance by allowing increased FSB speeds and bandwidth.

NOTE: When installing two processors, the processors must be identical. Mixing processors with different specifications is not supported. Intel processor numbers are not a measurement of higher performance. Processor numbers differentiate features within each processor family, not across different processor families. See <a href="http://www.intel.com/products/processor\_number/">http://www.intel.com/products/processor\_number/</a> for details. Intel® EM64T requires a computer system with a processor, chipset, BIOS, operating system, device drivers, and applications enabled for Intel EM64T. Processor will not operate (including 32-bit operation) without an Intel EM64T-enabled BIOS. Performance will vary depending on your hardware and software configurations. See <a href="http://www.intel.com/info/em64t">http://www.intel.com/info/em64t</a> for more information including details on which processors support Intel EM64T or consult with your system vendor for more information.

## **Key Benefits**

- Dual-core processing
  - Significantly increases performance headroom over previous generation single core processors
  - Helps boost system utilization through virtualization
- 1066 and 1333 MHz Front Side Bus
- 4 MB shared L2 cache
  - Reduces latency and maximizes the use of main memory-to-processor bandwidth
  - Cache is dynamically allocated between cores, as needed.
- Intel Extended Memory 64 Technology (EM64T)
- Virtualization Technology
  - Supports software-based virtualization
  - Enables migration of 64-bit O/Ss and applications to virtual environments
- Smart Memory Access
- Majority of 5100 sequence processors dissipate power at 65W or below.



#### **Dual-Core Intel® Xeon® Processor with Intel EM64T**

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Overview

## Compatibility

The Dual-Core Intel Xeon Processors 5100 Sequence are compatible with HP xw6400 and xw8400 Workstations only.

NOTE: Not all models available in all regions.

## **Service and Support**

The Dual-Core Intel Xeon Processor 5100 Sequence has a one-year limited warranty or the remainder of the warranty of the HP product in which they are installed. Technical support is available seven days a week, 24 hours a day by phone, as well as online support forums. Certain restrictions and exclusions apply.



# **QuickSpecs**

## Technical Specifications

| Processor                          | Speeds   | System Bus Frequency       | Cache Type          |
|------------------------------------|--|----------------------------|---------------------|
|                                    | 1.60 GHz   | 1066 MHz Front Side<br>Bus | 4MB shared L2 cache |
|                                    | 1.86 GHz   | 1066 MHz Front Side<br>Bus | 4MB shared L2 cache |
|                                    | 2.00 GHz   | 1333 MHz Front Side<br>Bus | 4MB shared L2 cache |
|                                    | 2.33 GHz   | 1333 MHz Front Side<br>Bus | 4MB shared L2 cache |
|                                    | 2.66 GHz   | 1333 MHz Front Side<br>Bus | 4MB shared L2 cache |
|                                    | 3.00 GHz   | 1333 MHz Front Side<br>Bus | 4MB shared L2 cache |
|                                    | 3.33 GHz   | 1333 MHz Front Side<br>Bus | 4MB shared L2 cache |
| Maximum Virtual<br>Memory          | Limited by OS  |                            |                     |
| Single Device Data Correction      | ECC detects and corrects all single-bit errors. It also detects most Multi-bit errors.                   |                            |                     |
| SIMD Extensions<br>Supported       | SSE2 and SSE3  |                            |                     |
| Functional Operating<br>Parameters | Min. 41° F (5° C), Max 149° F (65° C)  |                            |                     |
| Storage Temperature                | Min40° F (-40° C), Max 185° F (85° C)  |                            |                     |
| I/O                                | Bridge functionality for PCI Express, PCI-X, PCI, USB, SATA, IDE and SMBus, and Dual-Gigabite Ethernet   |                            |                     |
| O/S                                | Genuine Windows® XP Professional x64 Edition (64-bit), Red Hat Enterprise Linux® WS 4 Update 2 and above |                            |                     |

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