



# **Intel<sup>®</sup> SDS2 Server Board Supported Processor List**



**Revision 2.0**

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**Enterprise Platforms and Services Division**

## ***Revision History***

<b>Date</b>	<b>Revision Number</b>	<b>Modifications</b>
1/11/2001	1.0	Initial Release
8/5/03	2.0	Updated Processors for tB1 Stepping, 512K L2 Cache, Boxed Processors SL6BW, SL6BX, SL6BY

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# 1. Introduction

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This document is intended for use by Intel's customers and is intended to provide readers with the supported processors for the Intel SDS2 server board. It provides tables to show the supported processors, core stepping information, CPUID, speed and MM ordering information that Intel tested with the SDS2 server board. It can also be found at <http://support.intel.com/support/motherboards/server/sds2/procsupp.htm>.

Pentium III processors are tested during manufacturing to ensure they will work in dual-processor configurations with processors of the same speed. Operation with different speed processors is not prohibited, but is not tested by Intel. Intel tests dual processor configurations with different steppings of the Pentium III processor as new processor steppings are introduced. For more information, see Mixing Processor Steppings below. Intel still recommends using processors of the same stepping when integrating dual processor systems.

## Recommendations for Integration of Dual Processor Systems:

Ship dual-processor systems with both processors installed to ensure that processor speeds and steppings are the same. When partially populated systems are shipped, a customer returning for additional processors may have difficulty locating a processor with the same stepping. If this occurs, the customer may have to replace the original processor to obtain a system with two processors of the same stepping.

If a system is shipped with only one processor installed, first test the system with both processors installed. This will demonstrate whether the motherboard will support dual-processor operation. Provide customers with the speed and stepping information of the original processor in these systems and make sure they understand the importance of having processors of the same speed and stepping. Warn customers of the risk of having to replace the original processor in the future if earlier stepping processors are not available.

If a system is shipped with only one processor, install the operating system with two processors installed. Some operating systems will install different kernel versions, depending on the number of processors present. The second processor can then be removed before system shipment. This technique alleviates the need to reinstall the operating system if a second processor is added later.

Integrators that want to mix processor steppings within a dual-processor system should first read Mixing Processor Steppings below for an overview of the issues involved.

## Matching Processor Steppings:

The easiest way to match steppings is to compare the 5-character test specification numbers on the top of Pentium® III processors. The number starts with an "S" and is followed by 4 characters (for example, "SL3CC"). Boxed Pentium III processors have the test specification number also printed on the box label.

Identical silicon steppings may sometimes be shipped with different test specification numbers, depending on whether they are for OEMs or for system integrators. Some Intel boxed processors may have OEM test specification numbers.

#### Mixing Processor Steppings:

Even though Intel recommends using identical processor steppings in multiprocessor systems whenever possible (as this is the only configuration which receives Intel's full testing), Intel supports mixing processor steppings, and does not actively prevent various steppings of the Pentium III processor from working together in dual-processor systems. However, since Intel cannot test every possible combination of devices, each new stepping of a device is fully tested only against the latest steppings of other processors and chipset components.

With mixed stepping configurations, all processors must be run at an identical frequency. The workarounds for various errata must take all processors into account. Errata for the Pentium III processor are published in the Pentium® III Processor Specification Update. Errata for all processor steppings present in a system will affect that system, unless worked around.

Refer to the Pentium® III Processor Specification Update for information on processor errata, their workarounds, and potential performance issues before integrating dual processor systems. The specification update can be obtained from Intel's Developer Site, <http://developer.intel.com>.

## 2. Supported Processors

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This section contains a table of supported processors that Intel tested with the SDS2 server board. Package and Revision is FC-PGA2 370 Pin.

S-Spec	Core Step	CPUID	Speed (MHz) Core/Bus	L2 Cache Size	MM#	Boxed or Tray
SL5QJ	cD0	068Ah	1BGHz/133	256	836606	Tray
SL5PU	tA1	06B1h	1.13GHz/133	512	836716	Tray
SL5LV	tA1	06B1h	1.13GHz/133	512	836384	Boxed
SL5QL	tA1	06B1h	1.26GHz/133	512	836721	Tray
SL5LW	tA1	06B1h	1.26GHz/133	512	836583	Boxed
SL5XL	tA1	06B1h	1.4GHz/133	512	838253	Tray
SL657	tA1	06B1h	1.4GHz/133	512	843849	Boxed
SL6BY	tB1	06B4h	1.4GHz/133	512	851297	Boxed
SL6BX	tB1	06B4h	1.26GHz/133	512	851289	Boxed
SL6BW	tB1	06B4h	1.13GHz/133	512	851298	Boxed