



# IA-32 Intel<sup>®</sup> Architecture and Intel<sup>®</sup> Extended Memory 64 Technology Software Developer's Manual

## Documentation Changes

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| *August 2004*

**Notice:** The IA-32 Intel<sup>®</sup> Architecture and Intel<sup>®</sup> Extended Memory 64 Technology may contain design defects or errors known as errata that may cause the product to deviate from published specifications. Current characterized errata are documented in the specification updates.

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## Revision History

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Version	Description	Date
-001	<ul style="list-style-type: none"> <li>Initial Release</li> </ul>	November 2002
-002	<ul style="list-style-type: none"> <li>Added 1-10 Documentation Changes.</li> <li>Removed old Documentation Changes items that already have been incorporated in the published Software Developer's manual</li> </ul>	December 2002
-003	<ul style="list-style-type: none"> <li>Added 9 -17 Documentation Changes</li> <li>Removed Documentation Change #6 - References to bits Gen and Len Deleted</li> <li>Removed Documentation Change #4 - VIF Information Added to CLI Discussion</li> </ul>	February 2003
-004	<ul style="list-style-type: none"> <li>Removed Documentation changes 1-17</li> <li>Added Documentation changes 1-24</li> </ul>	June 2003
-005	<ul style="list-style-type: none"> <li>Removed Documentation Changes 1-24</li> <li>Added Documentation Changes 1-15</li> </ul>	September 2003
-006	<ul style="list-style-type: none"> <li>Added Documentation Changes 16- 34</li> </ul>	November 2003
-007	<ul style="list-style-type: none"> <li>Updated Documentation changes 14, 16, 17, and 28.</li> <li>Added Documentation Changes 35-45.</li> </ul>	January 2004
-008	<ul style="list-style-type: none"> <li>Removed Documentation Changes 1-45</li> <li>Added Documentation Changes 1-5</li> </ul>	March 2004
-009	<ul style="list-style-type: none"> <li>Added Documentation Changes 7-27</li> </ul>	May 2004
-010	<ul style="list-style-type: none"> <li>Removed Documentation Changes 1–27</li> <li>Added Documentation Changes 1</li> </ul>	August 2004

## Preface

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This document is an update to the specifications contained in the Affected Documents/Related Documents table below. This document is a compilation of documentation changes. It is intended for hardware system manufacturers and software developers of applications, operating systems, or tools.

### Affected Documents/Related Documents

Document Title	Document Number
<i>IA-32 Intel<sup>®</sup> Architecture Software Developer's Manual: Volume 1, Basic Architecture</i>	253665
<i>IA-32 Intel<sup>®</sup> Architecture Software Developer's Manual: Volume 2A, Instruction Set Reference</i>	253666
<i>IA-32 Intel<sup>®</sup> Architecture Software Developer's Manual: Volume 2B, Instruction Set Reference</i>	253667
<i>IA-32 Intel<sup>®</sup> Architecture Software Developer's Manual: Volume 3, System Programming Guide</i>	253668
<i>Intel<sup>®</sup> Extended Memory 64 Technology Software Developer's Guide Volumes 1 and 2</i>	300835

### Nomenclature

**Documentation Changes** include errors or omissions from the current published specifications. These changes will be incorporated in the next release of the Software Development Manual.



# Summary Table of Changes

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The following table indicates documentation changes which apply to the IA-32 Intel Architecture. This table uses the following notations:

## Codes Used in Summary Table

Change bar to left of table row indicates this erratum is either new or modified from the previous version of the document.

## Summary Table of Documentation Changes

Number	Documentation Changes
1.	The mechanism for handling the Extended Family ID and Extended Model ID fields has been updated

# Documentation Changes

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## 1. The mechanism for handling the Extended Family ID and Extended Model ID fields has been updated

In Chapter 3, *IA-32 Intel Architecture Software Developer's Manual, Volume 2B*; the CPUID section has been updated. Text defining the recommended mechanisms for handling the Extended Family ID and the Extended model ID fields have been updated. The updated text is reproduced below.

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The Extended Family ID is to be examined only if the Family ID is 0FH; the Extended Model ID is to be examined only if the Family ID is 0FH or 06H. Often software displays processor information as a combination of family, model and stepping.

The recommended mechanism for integrating Family ID fields into a display follows:

Displayed\_Family = (Extended\_Family\_ID) (8-bits) + Family\_ID (4-bits zero extended to 8-bits)

The recommended mechanism for integrating Model ID fields into a display follows:

Displayed\_Model = ((Extended\_Model\_ID (4-bits) << 4))(8-bits) + Model\_ID (4-bits zero extended to 8-bits)

