



NL440BX/T440BX Server Board Specification Update

Release Date: October 2000

Order Number: 243783-028

*The NL440BX/T440BX Baseboard Product
Discontinuance was announced July 1, 2000 (OEM
Board) & August 31, 2000 (Channel Boxboard). No
Further Specification Updates will be issued on
these products. Please see PCN #101367-00 &
PCN #101444-00 for more details.*

Information in this document is provided in connection with Intel products. No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document. Except as provided in Intel's Terms and Conditions of Sale for such products, Intel assumes no liability whatsoever, and Intel disclaims any express or implied warranty, relating to sale and/or use of Intel products including liability or warranties relating to fitness for a particular purpose, merchantability, or infringement of any patent, copyright or other intellectual property right. Intel products are not intended for use in medical, life saving, or life sustaining applications. Intel may make changes to specifications and product descriptions at any time, without notice.

The NL440BX and T440BX UP Server systems may contain design defects or errors known as errata that may cause the product to deviate from the published specifications. Current characterized errata are documented in this Specification Update.

Copyright © Intel Corporation 2000.

*Third-party marks and brands are the property of their respective owners.

CONTENTS

CONTENTS	iii
REVISION HISTORY	iv
PREFACE	v
Nomenclature	v
GENERAL INFORMATION.....	2
Identification Information	2
Summary Table of Changes	4
Codes Used in Summary Table	4

REVISION HISTORY

Date of Revision	Description
July, 1998	This document is the first Specification Update for the NL440BX UP Server system.
August, 1998	Corrected DP to UP, corrected status in summary table for errata 7 & 9
September, 1998	Updated errata 2 & 13, added -404 PBA's, BIOS 2.0 & SSU 2.0 to identification table
October, 1998	Updated errata 7
November, 1998	No updates
December, 1998	Added -405 PBA's & BIOS 4.0 information to identification table
January, 1999	No Updates
February, 1999	Updated BIOS 4.1 and SSU 3.0 to identification table
March, 1999	Updated identification information
April 1999	Updated identification information
May, 1999	Errata incorporated into Appendix of the NL440BX/T440BX Technical Product Specification. Document changes incorporated into the TPS.
June, 1999	No Updates
July, 1999	No Updates
August, 1999	No Updates
September, 1999	Updated the General Information section.
October, 1999	Updated the General Information section.
November, 1999	No Updates
December, 1999	Updated the General Information section.
January, 2000	No Updates
February, 2000	No Updates
March, 2000	No Updates
April, 2000	Updated the General Information section.
May, 2000	No Updates
June, 2000	No Updates
July, 2000	No Updates
August, 2000	No Updates
September, 2000	No Updates
October, 2000	Updated the Specification Update cover page to reflect the NL440BX/T440BX Product Discontinuance.



PREFACE

This document is an update to the specifications contained in the *NL440BX/T440BX DP Server Technical Product Specification* (Order Number 243701), and the *Intel Columbus III Chassis Technical Product Specification* (Order Number 245153). It is intended for hardware system manufacturers and software developers of applications, operating systems, or tools. It will contain Specification Changes, Specification Clarifications, Errata, and Document Changes.

Refer to the *Pentium® II Processor Specification Update* (Order Number 243337) for specification updates concerning the Pentium II processor. Items contained in the Pentium II Processor Specification Update that either do not apply to the NL440BX/T440BX UP Server board or have been worked around are noted in this document. Otherwise, it should be assumed that any processor errata for a given stepping are applicable to the Printed Board Assembly (PBA) revisions(s) associated with that stepping.

Refer to the latest *Intel 82440BX PCIset Specification Update* for specification updates concerning the Intel 82440BX PCIset. Items contained in these Specification Updates that either do not apply to the NL440BX/T440BX UP Server board or have been worked around are noted in this document. Otherwise, it should be assumed that any PCIset errata for a given stepping are applicable to the Printed Board Assembly (PBA) revisions(s) associated with that stepping.

Nomenclature

Specification Changes are modifications to the current published specifications for the NL440BX/T440BX UP Server board. These changes will be incorporated in the next release of the specifications.

Specification Clarifications describe a specification in greater detail or further highlight a specification's impact to a complex design situation. These clarifications will be incorporated in the next release of the specifications.

Documentation Changes include typos, errors, or omissions from the current published specifications. These changes will be incorporated in the next release of the specifications.

Errata are design defects or errors. Errata may cause the NL440BX/T440BX UP Server board's behavior to deviate from published specifications. Hardware and software designed to be used with any given processor stepping must assume that all errata documented for that processor stepping are present on all devices.

**Specification Update for
the NL440BX/T440BX UP Server Board**

GENERAL INFORMATION

Identification Information

Below are the specific boards, BIOS and components covered by this update.

Baseboard Fab #	Baseboard PBA #	BIOS	SSU	Processor Stepping	Chipset Stepping (82440BX)
4.0	695741-403	Release 1.0	Release 1.0	Pentium® II processor: A0, A1, B0, B1, C0, C1	B1
4.0	710888-403	Release 1.0	Release 1.0	Pentium® II processor: A0, A1, B0, B1, C0, C1	B1
4.0	695741-404	Release 1.0	Release 2.0	Pentium® II processor: A0, A1, B0, B1, C0, C1	B1
4.0	710888-404	Release 1.0	Release 3.0	Pentium® II processor: A0, A1, B0, B1, C0, C1	B1
4.0	695741-405	Release 4.0	Release 3.0	Pentium® II processor: A0, A1, B0, B1, C0, C1	C1
4.0	710888-405	Release 4.0	Release 3.0	Pentium® II processor: A0, A1, B0, B1, C0, C1	C1
4.0	695741-415	Release 6.0	Release 3.0	Pentium® II processor: A0, A1, B0, B1, C0, C1 Pentium® III processor: B0, C0	C1
4.0	710888-415	Release 6.0	Release 3.0	Pentium® II processor: A0, A1, B0, B1, C0, C1 Pentium® III processor: B0, C0	C1
4.0	695741-416	Release 9.0	Release 4.0	Pentium® II processor: A0, A1, B0, B1, C0, C1 Pentium® III processor: B0, C0	C1
4.0	710888-416	Release 9.0	Release 4.0	Pentium® II processor: A0, A1, B0, B1, C0, C1 Pentium® III processor: B0, C0	C1
4.0	695741-417	Release 10	Release 4.0	Pentium® II processor: A0, A1, B0, B1, C0, C1 Pentium® III processor: B0, C0	C1
4.0	710888-417	Release 10	Release 4.0	Pentium® II processor: A0, A1, B0, B1, C0, C1 Pentium® III processor: B0, C0	C1
4.0	695741-418	Release 11	Release 4.0	Pentium® II processor: A0, A1, B0, B1, C0, C1 Pentium® III processor: B0, C0	C1
4.0	710888-418	Release 11	Release 4.0	Pentium® II processor: A0, A1, B0, B1, C0, C1 Pentium® III processor: B0, C0	C1



NL440BX/T440BX DP SERVER SPECIFICATION UPDATE

Baseboard Fab #	Baseboard PBA #	BIOS	SSU	Processor Stepping	Chipset Stepping (82440BX)
4.0	695741-419	Release 11	Release 4.0	Pentium® II processor: A0, A1, B0, B1, C0, C1 Pentium® III processor: B0, C0	C1
4.0	710888-419	Release 11	Release 4.0	Pentium® II processor: A0, A1, B0, B1, C0, C1 Pentium® III processor: B0, C0	C1

Summary Table of Changes

The following tables indicate the Errata and the Document Changes that apply to the NL440BX and/or T440BX UP Server systems. Intel intends to fix some of the errata in a future stepping of the component, and to account for the other outstanding issues through documentation or specification changes as noted. These tables use the following notations:

CODES USED IN SUMMARY TABLE

- Doc: Intel intends to update the appropriate documentation in a future revision.
- Fix: This erratum is intended to be fixed in a future stepping of the component.
- Fixed: This erratum has been previously fixed.
- NoFix: There are no plans to fix this erratum.
- Shaded: This erratum is either new or modified from the previous version of the document.

NO.	Plans	ERRATA
		Product errata has been incorporated into the Technical Product Specification. There are no additional errata.

NO.	Plans	DOCUMENT CHANGES
		Document Changes have been incorporated into the Technical Product Specification.