



Intel® Desktop Board D845EBT Specification Update

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The Intel® Desktop Board D845EBT may contain design defects or errors known as errata which may cause the product to deviate from published specifications. Current characterized errata are documented in this Specification Update.

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The Intel® desktop board D845EBT may contain design defects or errors known as errata which may cause the product to deviate from published specifications. Current characterized errata are available on request.

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REVISION HISTORY

Date of Revision	Version	Description
July 2002	-001	This document is the first Specification Update for the Intel® Desktop Board D845EBT.
September 2002	-002	Added Erratum 1 and 2. Updated the Legal Disclaimer Section.
October 2002	-003	Added Erratum 3.

PREFACE

This document is an update to the specifications contained in the *Intel® Desktop Board D845EBT Technical Product Specification* (Order number A92200). It is intended for hardware system manufacturers and software developers of applications, operating systems, or tools. It will contain Specification Changes, Errata, Specification Clarifications, and Documentation Changes.

Refer to the *Intel® Pentium® 4 Processor Specification Update* (Order number 249199) for specification updates concerning the Intel Pentium 4 processor and that may apply to the desktop board D845EBT. Unless otherwise noted in this document, it should be assumed that any processor errata for a given stepping are applicable to the Altered Assembly (AA) revision(s) associated with that stepping.

Refer to the *Intel® 82845E Chipset: 82845 Memory Controller Hub (MCH) for DDR Specification Update* (Order Number 290743) for specification updates concerning the 82845E MCH Controller and that may apply to the desktop board D845EBT. Unless otherwise noted in this document, it should be assumed that any MCH errata for a given stepping are applicable to the Altered Assembly (AA) revision(s) associated with that stepping.

Refer to the *Intel® 82801DB I/O Controller Hub 4 (ICH4) Specification Update* (Order Number 290745) for specification updates concerning the 82801DB I/O Controller Hub and that may apply to the desktop board D845EBT. Unless otherwise noted in this document, it should be assumed that any ICH errata for a given stepping are applicable to the Altered Assembly (AA) revision(s) associated with that stepping.

Nomenclature

Specification Changes are modifications to the current published specifications. These changes will be incorporated in the next release of the specifications.

Errata are design defects or errors. Characterized errata may cause the desktop board D845EBT's behavior to deviate from published specifications. Hardware and software designed to be used with any given Altered Assembly (AA) and BIOS revision level must assume that all errata documented for that AA and BIOS revision level are present on all desktop boards.

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.

Specification Update for the Intel® Desktop Board D845EBT

GENERAL INFORMATION

Basic Desktop Board D845EBT Identification Information

AA Revision	BIOS Revision	Notes
A89927-303	BT84510A.86A.0003.P02	1-5
A89927-400	BT84510A.86A.0003.P02	1-5
A89927-401	BT84510A.86A.0003.P02	1-5
A89927-402	BT84510A.86A.0007.P05	1-5

NOTES:

1. The AA number is found on a small label on the component side of the board.
2. The 82845E Chipset kit used on this AA revision consists of three components as follows:

Device	Stepping	S-Spec Numbers
82845E MCH	E0	SL66N
82801DB ICH	A1	SL66K
82802AB FWH	A0 A1	SB48

3. Refer to the *Intel® Pentium® 4 Processor Specification Update* (Order Number 249199) for errata related to the Pentium 4 processor and that may apply to the desktop board D845EBT
4. Refer to the *Intel® 82845E Chipset: 82845 Memory Controller Hub (MCH) for DDR Specification Update* (Order Number 290743) for errata related to the 82845E MCH that may apply to the desktop board D845EBT
5. Refer to the *Intel® 82801DB I/O Controller Hub 4 (ICH) Specification Update* (Order Number 290745) for errata related to the 82801DB I/O Controller Hub that may apply to the desktop board D845EBT

Summary Table of Changes

The following table indicates the Specification Changes, Errata, Specification Clarifications, or Documentation Changes that apply to the desktop board D845EBT. Intel intends to fix some of the errata in a future revision of the desktop board, and to account for the other outstanding issues through documentation or specification changes as noted. This table uses the following notations:

CODES USED IN SUMMARY TABLE

Doc:	Document change or update that will be implemented.
PlanFix:	This erratum may be fixed in a future revision of the desktop board, driver, or BIOS.
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
1.	NoFix	Intel® 82801DB I/O Controller Hub 4 (ICH 4) erratum 7
2.	Fix	Hard disk drive activity LED may be inoperative when certain ATAPI devices are attached to the secondary IDE channel
3	Fixed	Wake from an ACPI sleep state using wake methodologies may fail

ERRATA

1. **Intel® 82801DB I/O Controller Hub 4 (ICH 4) Erratum 7**

PROBLEM: For a complete description of the ICH 4 erratum 7, see the Intel® 82801DB I/O Controller Hub 4 (ICH 4) Specification Update, order number 290745 found at <http://developer.intel.com/design/chipsets/specupdt>.

IMPLICATION: For a complete description of the ICH 4 erratum 7, see the Intel 82801DB I/O Controller Hub 4 (ICH 4) Specification Update, order number 290745 found at <http://developer.intel.com/design/chipsets/specupdt>.

WORKAROUND: None.

STATUS: This erratum will not be fixed.

2. **Hard Disk Drive Activity LED May be Inoperative When Certain ATAPI Devices Are Attached to The Secondary IDE Channel**

PROBLEM: In some rare instances, the hard disk drive (HDD) activity LED on the primary IDE channel may become inoperative when ATAPI devices are added to the secondary IDE channel and those ATAPI devices only marginally or do not meet the ATA/ATAPI – 5 specification, revision 3.

IMPLICATION: Some users may experience no primary HDD LED activity when certain marginal ATAPI devices are attached to the secondary IDE channel.

WORKAROUND: None.

STATUS: This issue will be fixed in a future board revision.

3. **Wake From an ACPI Sleep State Using Wake Methodologies May Fail**

PROBLEM: The desktop board hardware leaves the LAN RESET (LAN_RST#) signal unasserted before and after the resume well power (VccSus3_3 and VccSus1_5) is valid, instead of asserting it for 10 ms after valid power, which is required by the Intel 82801DB I/O Controller Hub 4 (ICH4) Datasheet (order number 290744). The result is that LAN wake attempts may fail.

NOTE: Wake from LAN* using the MagicPacket* utility will not be affected by this errata.

IMPLICATION: Users that take advantage of LAN wake methods to wake systems from an ACPI sleep state may experience some wake failures.

WORKAROUND: None.

STATUS: This erratum was fixed in BIOS revision BT84510A.86A.0008.P06.