



Intel® Server Compute Blade SBX82

Specification Update

Intel Order Number D17793-010

December, 2005



Enterprise Platforms and Services Marketing

Revision History

Date	Modifications
03.08.2005	Initial release.
04.26.2005	Update errata.
05.26.2005	No update.
06.26.2005	Update BIOS, FW information and errata.
07.25.2005	Update errata.
08.25.2005	No update.
09.23.2005	No update.
10.26.2005	Update BIOS, FW information and errata.
11.23.2005	Update BIOS, FW, Diag information and errata.
12.21.2005	No update.

Disclaimers

The Intel® Server Blade SBX82 System 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.

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.

Contact your local Intel sales office or your distributor to obtain the latest specifications and before placing your product order.

Intel, Itanium, Pentium, and Xeon are trademarks or registered trademarks of Intel Corporation.

*Other brands and names may be claimed as the property of others.

Copyright © Intel Corporation 2005.

Contents

Preface..... 1

Summary Tables of Changes..... 4

Errata..... 5

- 1. No keyboard with SLES 9, Build 5 EM64T - 3GB or 5GB Memory..... 5
- 2. System hangs during POST of SCSI adapter when switching of KVM..... 5
- 3. Slow flashing of BMC occurs when SOL is enabled 5
- 4. Floppy exempt from boot order..... 5
- 5. Garbage characters listed in Memory Test of PC-Doctor diagnostics. 5
- 6. Disable Hardware Flow Control causes Linux kernel panic..... 6
- 7. Cannot get into BIOS from SOL via Windows 2000 Telnet 6
- 8. Cannot get to boot menu from SOL via telnet 6
- 9. The mouse does not function via remote control..... 6
- 10. SCSI Controller Test Removed from Diags 6

Documentation Changes..... 7

- No documentation changes are outstanding at this time..... 7

This page intentionally left blank

Preface

This document is an update to the specifications contained in the *Intel® Server Compute Blade SBX82 Installation and User's Guide* and the *Intel® Server Compute Blade SBX82 Hardware Maintenance Manual and Troubleshooting Guide*. 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 *Intel® Pentium® III Xeon™ Processor Specification Update* (Order Number 244460-021) for specification updates concerning the Pentium® Xeon™ III processor. Items contained in the *Pentium® III Xeon™ Processor Specification Update* that either do not apply to the *Intel® Server Compute Blade SBX82* 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.

Nomenclature

- **Specification Changes** are modifications to the current published specifications for Intel® Server Compute Blades. 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 server blade 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.

Product Scope

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

Intel® Server Compute Blade SBX82 Production Shipping Configuration:

Feature	Eval Shipping Configuration
Xeon® Processor	None
Memory Installed	None
Internal Drives	2 SCSI HDD mounting bracket, No drives
Add-on I/O Devices	None
BIOS/FW	BIOS Rev 1.0 Build ID BWEO08AUS Blade System Management Processor (MBC) Build ID BWB10TA Diagnostics Rev 1.00 Build ID BWOT03AUS
SBX82 Server Computer Blade	C76430-002
Board set	Blade server Board C76714-100
SBX82 Blade Chassis & Bezel	Blade Bezel with Front Panel Assy. – C76997-002

SBX82 Server Compute Blade BIOS Release:

Firmware Type	Build ID	Revision	Build Date
BIOS	BWEO08AUS	1.0	31 October 2004
BIOS	BWEO09BUS	1.01	11 November 2004
BIOS	BWEO11AUS	1.02	21 January 2005
BIOS	BWEO15AUS	1.03	25 March 2005
BIOS	BWEO16AUS	1.04	08 July 2005
BIOS	BWEO17AUS	1.05	28 July 2005

SBX82 System Management Processor Firmware:

Firmware Type	Build ID	Revision	Build Date
BMC	BWBT10A	1.0	31 October 2004
BMC	BWBT11A	1.01	01 February 2005
BMC	BWBT12A	1.02	11 February 2005
BMC	BWBT14A	1.04	27 February 2005
BMC	BWBT17A	1.07	10 June 2005
BMC	BWBT22A	1.12	20 October 2005

SBX82 Diagnostics:

Firmware Type	Build ID	Revision	Build Date
Diagnostics	BWOT03AUS	1.0	17 September 2004
Diagnostics	BWYO05AUS	1.02	11 February 2005
Diagnostics	BWYO08AUS	1.04	14 March 2005
Diagnostics	BWYO10AUS	1.06	12 September 2005

Summary Tables of Changes

The following tables indicate the errata and the document changes that apply to the SBX52. Intel intends to fix some of the errata in a future stepping of components, and to account for the other outstanding issues through documentation or specification changes as noted. The tables use the following notations:

Doc: Intel intends to update the appropriate documentation in a future revision.

Fix: Intel intends to fix this erratum in a future release 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 has been modified from the previous specification update.

Table 1 Errata Summary

No.	Plans	Description of Errata
1.	Fix	No keyboard with SLES 9, Build 5 EM64T - 3GB or 5GB Memory
2.	NoFix	System hangs during POST of SCSI adapter when switching of KVM occurs during post.
3.	NoFix	Slow flashing of BMC occurs when SOL is enabled.
4.	NoFix	Floppy exempt from boot order
5.	Fixed	Garbage characters listed in Memory Test of PC-Doctor diagnostics.
6.	NoFix	Disable Hardware Flow Control causes Linux kernel panic.
7.	NoFix	Cannot get into BIOS from SOL via windows 2000 telnet.
8.	NoFix	Cannot get to boot menu from SOL via telnet
9.	NoFix	The mouse does not function via remote control
10.	Fix	SCSI Controller Test Removed from Diags

Table 2 Documentation Changes

No.	Plans	Description of Documentation Change
1.		

Following are in-depth descriptions of each erratum / documentation change indicated in the tables above. The errata and documentation change numbers below correspond to the numbers in the tables.

Errata

1. No keyboard with SLES 9, Build 5 EM64T - 3GB or 5GB Memory

Problem: User configurations should exclude 3GB and 5GB memory configurations for SuSE 9 Enterprise Linux installations until the Service Pack is released by SuSE.

Status: The problem will be resolved in the next service pack for SLES9.

2. System hangs during POST of SCSI adapter when switching of KVM

Problem: System hangs if KVM is switched during SCSI BIOS drive detection.

Workaround: Do not switch KVM during SCSI BIOS drive detection during post.

3. Slow flashing of BMC occurs when SOL is enabled

Problem: The BMC flash update from the MM is slow when SOL is enabled on the SBX82.

Workaround: Disable SOL prior to flashing new BMC firmware on a blade.

4. Floppy exempt from boot order

Problem: If a BIOS update diskette is in the floppy drive, no matter what kind of boot sequence you set, system will boot from the floppy first.

Status: Working as designed. A BIOS flash diskette is given preference over any boot order, a normal DOS diskette will follow regular boot order.

5. Garbage characters listed in Memory Test of PC-Doctor diagnostics.

Problem After executing "Extended, Normal Test" test results for 6/10, 7/10, and 8/10 display random garbage characters instead of text. If only select the Memory tests from the Extended menu, PC-Doctor get garbage characters listed and unable to run any tests. When the test is "checked" to run, and executed PC-Doctor get a window with 0% for status and it does nothing else.

Status Fixed by Diagnostics BWYO08AUS.

6. Disable Hardware Flow Control causes Linux kernel panic

Problem When hardware flow control is disabled in the console redirection menu of bios, and execute command “sysrq –t”, the linux kernel will panic.

Status Hardware flow control is a documented requirement. No impact if customer follows instructions in the *Intel® Blade Server Chassis SBCE:Serial Over LAN (SOL) Setup Guide*. Will not fix.

7. Cannot get into BIOS from SOL via Windows 2000 Telnet

Problem Trying telnet client on MS Windows 2000 failed to get into bios.

Workaround Replace Windows 2000's telnet with Windows XP's telnet when experienced this problem.

8. Cannot get to boot menu from SOL via telnet

Problem Cannot get to boot menu by press F12 key from SOL via telnet.

Status Will not fix.

9. The mouse does not function via remote control

Problem Press F2 during boot (via remote control) to enter the diagnostics. The mouse will not function through remote control.

Status This is not a supported feature, will not fix.

10. SCSI Controller Test Removed from Diags

Problem SCSI Controller Test has been temporarily removed from Diags 10A to correct issues in a non-blades related product.

Status This test will be reinserted into a future release of the Diags.

Documentation Changes

No documentation changes are outstanding at this time.