



Intel® Desktop Board D925XECV2 Specification Update

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The Intel® Desktop Board D925XECV2 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 D925XECV2 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
November 2004	-001	This document is the first Specification Update for the Intel® Desktop Board D925XECV2.
December 2004	-002	Added Erratum 1. Added Documentation Changes 1-3.

PREFACE

This document is an update to the specifications contained in the *Intel® Desktop Board D925XECV2 Technical Product Specification* (Order number C90152). 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 D925XECV2. 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® 925X Chipset Specification Update* (Order Number 301465) for specification updates concerning the 82925X MCH Controller and that may apply to the desktop board D925XECV2. 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® IO Controller Hub 6 (ICH6) Family Specification Update* (Order Number 301474) for specification updates concerning the 82801ER I/O Controller Hub and that may apply to the desktop board D925XECV2. Unless otherwise noted in this document, it should be assumed that any ICH 6 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 D925XECV2'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 D925XECV2**

GENERAL INFORMATION

Basic Desktop Board D925XECV2 Identification Information

AA Revision	BIOS Revision	Notes
C83685-205	CV92510A.86A.0338	1-5
C84133-202	CV92510A.86A.0338	1-5

NOTES:

1. The AA number is found on a small label on the component side of the board.
2. The 82925X Chipset kit used on this AA revision consists of two components as follows:

Device	Stepping	S-Spec Numbers
82925XE MCH	B2	SL84Z
82801FR ICH6	B2	SL7W7

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 D925XECV2.
4. Refer to the *Intel® 925X Chipset Specification Update* (Order Number 301465) for errata related to the 82925X MCH that may apply to the desktop board D925XECV2.
5. Refer to the *Intel® IO Controller Hub 6 (ICH6) Family Specification Update* (Order Number 301474) for errata related to the 82801FB I/O Controller Hub that may apply to the desktop board D925XECV2.



Summary Table of Changes

The following table indicates the Specification Changes, Errata, Specification Clarifications, or Documentation Changes that apply to the Intel® Desktop Board D925XECV2. 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	Plan Fix	Alert Standard Format (ASF) is non-functional
NO.	PLANS	DOCUMENTATION CHANGES
1	Doc	Change to Section 1.2, Table 1, Summary of Board Differences
2	Doc	Change to Section 1.3.1, Table 2, Feature Summary
3	Doc	Change to Section 2.10.1, D925XECV2 Form Factor

ERRATA

1. *Alert Standard Format (ASF) is Non-Functional*

PROBLEM: BIOS and device driver support is currently not implemented to support Alert Standard Format (ASF).

IMPLICATION: ASF, an interface that provides access and manageability in OS-absent environments, is currently not supported.

WORKAROUND: None.

STATUS: This erratum may be fixed in a future BIOS and driver revision.

DOCUMENTATION CHANGES

The Documentation Changes listed in this section apply to the *Intel® Desktop Board D925XECV2 Technical Product Specification* (Order Number C90152). All Documentation Changes will be incorporated into a future version of that specification.

1. Change to Section 1.2, Table 1, Summary Of Board Differences

Table 1 in Section 1.2 will be replaced in its entirety as follows:

Table 1. Summary of Board Differences

D925XECV2	<ul style="list-style-type: none"> • ATX Form Factor (12.00 inches by 9.60 inches [304.80 millimeters by 243.84 millimeters]) • Four PCI Conventional bus add-in card connectors • Two PCI Express x1 bus add-in card connectors • Auxiliary rear fan connector • Option for auxiliary power output connector • Option for SCSI hard drive indicator LED • Option for Trusted Platform Module (TPM)
D925XEBC2	<ul style="list-style-type: none"> • microATX Form Factor (9.60 inches by 9.60 inches [243.84 millimeters by 243.84 millimeters]) • Two PCI Conventional bus add-in card connectors • One PCI Express x1 bus add-in card connector

2. Change to Section 1.3.1, Table 2, Feature Summary

Table 2 in Section 1.3.1 will be replaced in its entirety as follows:

Table 2. Feature Summary

Form Factor	<ul style="list-style-type: none"> • D925XECV2: ATX (12.00 inches by 9.60 inches [304.80 millimeters by 243.84 millimeters]) • D925XEBC2: microATX (9.60 inches by 9.60 inches [243.84 millimeters by 243.84 millimeters])
Processor	Support for an Intel® Pentium® 4 processor in an LGA775 socket with a 1066, 800, or 533 MHz system bus
Memory	<ul style="list-style-type: none"> • Four 240-pin DDR2 SDRAM Dual Inline Memory Module (DIMM) sockets • Support for DDR2 400 MHz and DDR2 533 MHz DIMMs • Support for up to 4 GB of system memory • Support for 1.9 V DIMMs with 3-3-3 memory timing

Table 2. Feature Summary (continued)

Chipset	Intel® 925XE Chipset, consisting of: <ul style="list-style-type: none"> • Intel® 82925XE Memory Controller Hub (MCH) • Intel® 82801FR I/O Controller Hub (ICH6-R) • 8 Mbit Firmware Hub (FWH)
Video	One PCI Express x16 connector supporting PCI Express x16 graphics cards
Audio	Intel® High Definition Audio subsystem
I/O Control	LPC Bus I/O controller
USB	Support for USB 2.0 devices
Peripheral Interfaces	<ul style="list-style-type: none"> • Eight USB ports • One serial port • One parallel port • Four Serial ATA interfaces • One Parallel ATA IDE interface with UDMA 33, ATA-66/100 support • One diskette drive interface • PS/2* keyboard and mouse ports
BIOS	<ul style="list-style-type: none"> • Intel/AMI BIOS (resident in the 8 Mbit FWH) • Support for Advanced Configuration and Power Interface (ACPI), Plug and Play, and SMBIOS
Instantly Available PC Technology	<ul style="list-style-type: none"> • Support for PCI Local Bus Specification Revision 2.2 • Support for PCI Express Revision 1.0a • Suspend to RAM support • Wake on PCI, RS-232, front panel, PS/2 devices, and USB ports
LAN Support	Gigabit (10/100/1000 Mbits/sec) LAN subsystem using the Marvell* Yukon* 88E8050 PCI Express Gigabit Ethernet Controller
Expansion Capabilities	<ul style="list-style-type: none"> • D925XECV2: Four PCI Conventional bus add-in card connectors (SMBus routed to PCI Conventional bus connector 2), two PCI Express x1 bus add-in card connectors, and one PCI Express x16 bus add-in card connector • D925XEBC2: Two PCI Conventional bus add-in card connectors (SMBus routed to PCI Conventional bus connector 2), one PCI Express x1 bus add-in card connector, and one PCI Express x16 bus add-in card connector
Hardware Monitor Subsystem	<ul style="list-style-type: none"> • Hardware monitoring and fan control ASIC • Voltage sense to detect out of range power supply voltages • Thermal sense to detect out of range thermal values • Three fan connectors • Three fan sense inputs used to monitor fan activity • Fan speed control

3. Change to Section 2.10.1, D925XECV2 Form Factor

Section 2.10.1 will be replaced in its entirety as follows:

2.10.1 D925XECV2 Form Factor

The Desktop Board D925XECV2 is designed to fit into an ATX-form-factor chassis. Figure 27 illustrates the mechanical form factor for the Desktop Board D925XECV2. Dimensions are given in inches [millimeters]. The outer dimensions are 12.00 inches by 9.60 inches [304.80 millimeters by 243.84 millimeters]. Location of the I/O connectors and mounting holes are in compliance with the ATX specification.

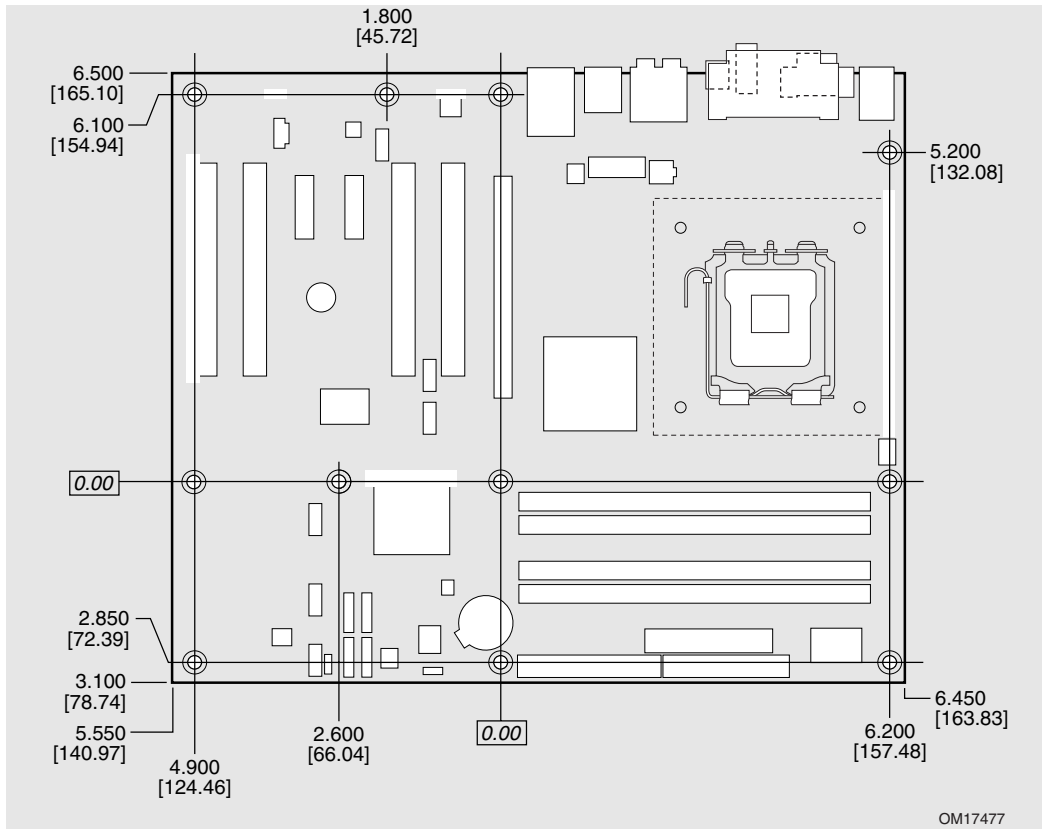


Figure 27. Desktop Board D925XECV2 Dimensions