



# Intel<sup>®</sup> Desktop Board DH55TC Specification Update

December 2011

Order Number: E88213-006

The Intel<sup>®</sup> Desktop Board DH55TC 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.

# Revision History

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Revision	Revision History	Date
-001	This document is the first Specification Update for the Intel® Desktop Board DH55TC	January 2010
-002	Update to the General Information section	April 2010
-003	Update to the General Information section	July 2010
-004	Update to the General Information Section	December 2010
-005	Update to the Specification Changes Section	March 2011
-006	Update to the Specification Changes Section	December 2011

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The Intel® Desktop Board DH55TC 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.

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

Copies of documents which have an ordering number and are referenced in this document, or other Intel literature, may be obtained from:

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# Specification Update for the Intel<sup>®</sup> Desktop Board DH55TC

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This document is an update to the specifications contained in the *Intel<sup>®</sup> Desktop Board DH55TC Technical Product Specification* (Order Number: E81940). 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<sup>®</sup> Core™ i7-800 and Intel<sup>®</sup> Core™ i5-700 Desktop Processor Series Specification Update* (Order Number: 322166) as well as to the *Intel<sup>®</sup> Core™ i5-600, Intel<sup>®</sup> Core™ i3-500 Desktop Processor Series and Intel<sup>®</sup> Pentium<sup>®</sup> Processor G6950 Series Specification Update* (Order Number: 322911) for specification updates concerning supported processors that may apply to the desktop board DH55TC. 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<sup>®</sup> 5 Series Chipset and Intel<sup>®</sup> 3400 Series Chipset Specification Update* (Order Number: 322170) for specification updates concerning the Intel<sup>®</sup> H55 Express Chipset that may apply to the desktop board DH55TC. Unless otherwise noted in this document, it should be assumed that any Platform Controller Hub errata for a given stepping are applicable to the Altered Assembly (AA) revision(s) associated with that stepping.

## Terminology

**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 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.

## General Information

### Basic Desktop Board DH55TC Identification Information

AA Revision	BIOS Revision	Notes
E70932-204	TCIBX10H.86A.0020	1,2
E70932-205	TCIBX10H.86A.0027	1,2
E70932-206	TCIBX10H.86A.0027	1,2
E70932-300	TCIBX10H.86A.0032	1,2
E70932-301	TCIBX10H.86A.0035	1,2
E70932-302	TCIBX10H.86A.0037	1,2
E95621-206	TCIBX10H.86A.0027	1,2
E95621-300	TCIBX10H.86A.0032	1,2
E95621-301	TCIBX10H.86A.0035	1,2
E95621-302	TCIBX10H.86A.0037	1,2

Notes:

1. The AA number is found on a small label on the component side of the board.
2. The Intel® H55 Express Chipset used on this AA revision consists of the following component:

Device	Stepping	S-Spec Numbers
82H55 Platform Controller Hub (PCH)	B3	SLGZX

## Summary of Changes

The following table indicates the Specification Changes, Errata, Specification Clarifications, or Documentation Changes that apply to the Intel® Desktop Board DH55TC. 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.

The following notations are used in the table:

Doc:	Document change or update that will be implemented.
Plan Fix:	This erratum may be fixed in a future revision of the desktop board, driver, or BIOS.
Fixed:	This erratum has been previously fixed.
No Fix:	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	Fixed	The Intel Desktop Board DH55TC will support memory voltage override in a future revision of the motherboard. Any related settings in the initial board revision are not enabled in hardware.
2	Fixed	The Intel Desktop Board DH55TC will support chassis intrusion detection via a header in a future revision of the motherboard. Initial revision of the motherboard does not provide such header.
3	Fixed	The Intel Desktop Board DH55TC will support triggering Intel® Remote PC Assist Technology via a header in a future revision of the motherboard. Initial revision of the motherboard does not provide such header.

No.	Plans	Specification Changes
1	Doc	Updated Section 2.2.2.2 and Section 2.2.2.6 of the Technical Product Specification as shown in the Specification Changes Section below.
2	Doc	Corrected the number of Conventional PCI connectors in Section 2.2.2.2 of this Specification Update from three to one.

# Specification Changes

The Specification Changes listed in this section apply to the *Intel® Desktop Board DH55TC Technical Product Specification* (Order Number E81940).

1. Updated Section 2.2.2.2 Add-in Card Connectors and Section 2.2.2.6 Front Panel USB Headers of the *Intel Desktop Board DH55TC Technical Product Specification* as shown below.

## 2.2.2.2 Add-in Card Connectors

The board has the following add-in card connectors:

- One PCI Express 2.0 x16: this connector supports simultaneous transfer speeds of up to 8 GB/s of peak bandwidth per direction.
- Two PCI Express 2.0 x1: each of these connectors support simultaneous transfer speeds of up to 250 MB/s (2.5 GT/s) of peak bandwidth per direction.
- Three Conventional PCI (rev 2.3 compliant) connectors.

## 2.2.2.6 Front Panel USB Headers

Figure 12 is a connection diagram for the front panel USB headers.



### NOTES

- *The +5 V DC power on the USB headers is fused.*
- *Use only a front panel USB connector that conforms to the USB 2.0 specification for high-speed USB devices.*
- *USB Header 2 (FP USB 2) has Pin 10 routed to the HDD LED to support specific USB SSD devices. Connecting any device to this header, that has any connection to Pin 10, may cause the HDD LED to behave erratically or stay on continuously.*

2. Corrected the number of Conventional PCI connectors in Section 2.2.2.2 of this Specification Update from three to one.

## 2.2.2.2 Add-in Card Connectors

The board has the following add-in card connectors:

- One PCI Express 2.0 x16: this connector supports simultaneous transfer speeds of up to 8 GB/s of peak bandwidth per direction.
- Two PCI Express 2.0 x1: each of these connectors support simultaneous transfer speeds of up to 250 MB/s (2.5 GT/s) of peak bandwidth per direction.
- One Conventional PCI (rev 2.3 compliant) connectors.