



Intel[®] Desktop Board DQ35J0 Specification Update

July 2010

Order Number: E21492-005US

The Intel[®] Desktop Board DQ35J0 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

Revision	Revision History	Date
-001	This document is the first Specification Update for the Intel® Desktop Board DQ35JO	August 27, 2007
-002	Updated General Information and Specification Changes Sections	May 2008
-003	Updated General Information Section	October 2008
-004	Updated Specification Changes Section	April 2009
-005	Updated the Specification Changes Section	July 2010

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The Intel® Desktop Board DQ35JO 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:

Intel Corporation
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or call in North America 1-800-548-4725, Europe 44-0-1793-431-155, France 44-0-1793-421-777, Germany 44-0-1793-421-333, other Countries 708-296-9333

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Specification Update for the Intel[®] Desktop Board DQ35JO

This document is an update to the specifications contained in the *Intel[®] Desktop Board DQ35JO Technical Product Specification* (Order Number D96939). 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.

For specification updates concerning the Intel processor that may apply to this desktop board, refer to the following:

- *Intel[®] Core[™]2 Quad Desktop Processor Q6600Δ Specification Update* (Order Number 315593)
- *Intel[®] Core[™]2 Duo Desktop Processor E6000Δ Sequence Specification Update* (Order Number 313279)
- *Intel[®] Pentium[®] Dual-Core Desktop Processor E2000Δ Sequence Specification Update* (Order Number 316982)
- *Intel[®] Celeron[®] 400Δ Sequence Specification Update* (Order Number 316964)

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[®] 3 Series Chipset Family Specification Update* (Order Number 316967) for specification updates concerning the 82Q35 GMCH Controller and that may apply to the desktop board DQ35JO. 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[®] I/O Controller Hub 9 (ICH9) Family Specification Update* (Order Number 316973) for specification updates concerning the 82801IDO I/O Controller Hub and that may apply to the desktop board DQ35JO. Unless otherwise noted in this document, it should be assumed that any ICH9 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 DQ35JO Identification Information

AA Revision	BIOS Revision	Notes
D82085-700	JOQ3510J.86A.0546	1,2
D82085-701	JOQ3510J.86A.0559.	1,2
D82085-702	JOQ3510J.86A.0559	1,2
D82085-800	JOQ3510J.86A.0559	1,2
D82085-801	JOQ3510J.86A.0559	1,2
D82085-802	JOQ3510J.86A.0865	1,2
D82085-803	JOQ3510J.86A.0882	1,2
D82085-804	JOQ3510J.86A.0882	1,2
D82085-805	JOQ3510J.86A.0942	1,2
D82085-806	JOQ3510J.86A.0942	1,2

Notes:

1. The AA number is found on a small label on the component side of the board.
2. The Q35 Chipset kit used on this AA revision consists of two components as follows:

Device	Stepping	S-Spec Numbers
82Q35	A2	SLAEX
82801IDO	A2	SLAFD

Summary of Changes

The following table indicates the Specification Changes, Errata, Specification Clarifications, or Documentation Changes that apply to the Intel® Desktop Board DQ35JO. 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.
- 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	Specification Changes
1	Doc	Section 1.6.3.3 has been added to the Technical Specification.
2	Doc	The MTBF hours have been updated in Section 2.7 Reliability.
No.	Plans	Errata
		There are no characterized erratum for this product

Specification Changes

Changes to the feature description in the board technical product specification. Typically the customer does not have to do anything to achieve proper device functionality as a result of the change.

1. Section 1.6.3.3 has been added to the Technical Specification.

1.6.3.3 Intel® Rapid Recover Technology

The Intel® Desktop Board DQ35JO incorporates the Intel® Rapid Recover Technology. Intel Rapid Recover Technology is a feature of Intel® Matrix Storage Manager. It uses RAID 1 (mirroring) functionality to copy data from a designated master drive to a designated recovery drive. The master drive data can be copied to the recovery drive either continuously or on request.

When using the continuous update policy, changes made to the data on the master drive while the recovery drive is disconnected or offline are automatically copied to the recovery drive when it is reconnected. When using the on request update policy, the master drive data can be restored to a previous state by copying the data on the recovery drive back to the master drive. The table below provides an overview of the advantages, disadvantages, and the typical usage of Intel Rapid Recover Technology.

Hard Drives Required	2
Advantage	More control over how data is copied between master and recovery drives; fast volume updates (only changes to the master drive since the last update are copied to the recovery drive); member hard drive data can be viewed in Microsoft Windows* Explorer.
Disadvantage	No increase in volume capacity.
Application	Critical data protection; fast restoration of the master drive to a previous or default state.

2. The MTBF hours have been updated in Section 2.7 Reliability.

2.7 Reliability

The Mean Time Between Failures (MTBF) prediction is calculated using component and subassembly random failure rates. The calculation is based on the Bellcore Reliability Prediction Procedure, TR-NWT-000332, Issue 4, September 1991. The MTBF prediction is used to estimate repair rates and spare parts requirements.

The MTBF data is calculated from predicted data at 55 °C. The Desktop Board DQ35MP MTBF is ~~207,844~~ 134,697 hours.

