



AMD Geode™ NX DB1500 Development Board

Document Revision History

Date	Revision	Changes
September 2004	A	Initial version
January 2005	B	Added Errata item #4

The AMD Geode™ NX DB1500 Development Board may contain design defects or errors known as errata that cause its behavior to differ from the published specification. Characterized *Board Errata* are documented in this Specification Update.

As needed, this Specification Update provides a summary table and more detailed descriptions of permanent *Specification Changes* made to the published product documentation.

This Specification Update also provides a summary table and more detailed descriptions of known *Documentation Errata*.

To establish Specification Update information, AMD tests to errata, specification changes, and current documentation. Specification Update information supersedes current published documentation.

NOTE: BIOS errata is outlined in the release notes of each code release. Please see the specific code release for your BIOS version for more information.

Board Errata Summary Table

The following table lists the status of all characterized board errata. A blank field under a particular Revision implies that the listed erratum does not apply to that version of the development board.

Errata No.	Revision		Errata
	1.1	1.2	
1	X		Start-up failure at power-up.
2	X		Start-up failure of the on-board 2.5V regulator.
3	X		Failure to resume from S3 (Suspend to RAM).
4	X	X	Over-voltage condition on processor SOFTVID output pins.

Board Errata

1. Start-up failure at power-up.

Description

The problem surfaces as a failure of the system to start up at power-on. No video is present. A system reset typically clears the error.

The VIA KM400A S2K compensation resistor (R348) on the board was originally set at 60.2 ohms, 1% tolerance. In response to an errata released from VIA Technologies on the KM400A, the value has been changed to 49.9 ohms, 1% tolerance.

Affected Revisions

1.1

Workaround

Shipped boards should already have this rework implemented. Design revision 1.2 reflects this change.

Status

Fixed

2. Start-up failure of the on-board 2.5V regulator.**Description**

Symptom will be failure of system to start up at any time. A system reset will have no impact. Power cycling may correct the issue. This problem was fixed by adding a pass FET to the output of L1 to prevent voltage backfeed from other circuits on the voltage rail. The pre-biasing of the regulator output causes startup failure.

Affected Revisions

1.1

Workaround

Shipped boards should already have this rework implemented. Design revision 1.2 reflects this change.

Status

Fixed

3. Failure to resume from S3 (Suspend to RAM).**Description**

The board hangs during Resume from S3 state. This problem was fixed by correcting a pull-up resistor that was tied to the wrong power rail: disconnect R54 from net VCC_5VSUS and connect to net VCC_5V.

Affected Revisions

1.1

Workaround

Shipped boards should already have this rework implemented. Design revision 1.2 reflects this change.

Status

Fixed

4. Over-voltage condition on processor SOFTVID output pins.**Description**

A schematic error allows an over-voltage condition to exist at the SOFTVID outputs of the processor. This condition may damage the SOFTVID outputs of the processor over time and result in a malfunction of the on-board regulator that generates the processor core voltage. This malfunction may prevent the system from operating normally.

Affected Revisions

1.1, 1.2

Workaround

None at this time. Revision 1.3 schematics correct this issue.

Status

Not Fixed

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