intel® Technical Advisory

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Intel® E7320 MCH Transposed Interrupt Messages across Hub Interface Erratum: Impact to Intel® Server Board SE7320VP2

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Products Affected

Product Code	MM #	PBA#
SE7320VP2	859198	C63184-603
BVP7320	859199	C63184-603

Description
An erratum affecting PCI Express* slot capabilities has been found in the Intel® E7320 server chipset during testing and is root caused. Please reference *Intel® E7320 MCH Specification Update* Erratum #23: "Transposed Interrupt Messages across Hub Interface Erratum" for a complete description of the MCH errata. The Intel® Server Board SE7320VP2 is affected by this erratum.

Intel Server Board SE7320VP2 based systems running with a single processor thread and operating in legacy PIC mode or virtual wire Mode A may hang under high I/O-driver interrupt stress. For systems operating in full APIC mode where the number of virtual interrupt lines (intA, intB, etc.) used by all PCI-Express* adapters in a system exceeds the number of logical processors (threads), the system may hang.

Root Cause
Please reference *Intel® E7320 MCH Specification Update* Erratum #23: "Transposed interrupt messages across Hub Interface Erratum" for a complete description of the MCH errata.

Corrective Action / Resolution
PCI Express* add-in adapter card support is limited to single function devices with the Intel Server Board SE7320VP2, PBA# C63184-603.

A BIOS workaround is required for PIC mode operation. The BIOS workaround has been incorporated into Intel Server Board SE7320VP2 BIOS Production Release version P01 and later. Intel recommends that customers update all Intel® Server Board SE7320VP2 to the latest BIOS version. The latest BIOS version is available from iBL and http://support.intel.com.

An MCH component stepping change was implemented on the Intel Server Board SE7320VP2, PBA# C63184-604 in early November 2004 to add support for broad PCI Express* adapter add-in cards. PCI Express* add-in adapter cards tested and supported with the Intel Server Board SE7320VP2 are listed in the *Intel Server Board SE7320VP2 Tested Hardware and Operating System List* (THOL) document.

Please contact your Intel Sales Representative if you require more specific information about this issue.

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