intel. Technical Advisory

TA-253-2

5200 NE Elam Young Parkway
Hillsboro, OR 97124

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C440GX+ server management functionality at risk when updating the Baseboard Management Controller (BMC) firmware

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Products Affected

BC440GX	MM# 821904	PBA# 726134-415 or earlier
BC440GXS	MM# 828603	PBA# 726134-415 or earlier
BOX440GX	MM# 821095	AA# 727218-005 or earlier

Description
BMC functionality will be lost at an indeterminate time after performing a flash update of the Baseboard Management Controller (BMC) firmware on the C440GX+ server board.

With the loss of BMC functionality, all server management functions are lost. These include: the ability to power down the system, the system will no longer log system events in the System Event Log, server management software will not be able to communicate to the on-board sensors, Emergency Management Port (EMP) functionality, and Platform Event Paging (PEP) functionality.

Root Cause
Intel has determined that the method used to update the flash part is causing a degradation of the information retention properties of the flash part. This is causing corruption to the BMC firmware resulting in eventual loss of BMC functionality. The specific time at which the firmware becomes corrupted cannot be determined. A BMC failure may occur immediately after updating the firmware, or it may occur sometime after the update.

Intel believes that C440GX+ based servers with the original BMC firmware, as shipped from its factory, are not affected. Systems that have been updated from their original factory configuration, up to and including BMC firmware 1.04 are affected.

Corrective Action
To fully address this issue, Intel has determined an enhanced method for flashing the BMC firmware to the flash device. FWUPDATE utility version 2.1 is now released and must be used to update the BMC firmware. The new FWUPDATE utility will only be compatible with BMC firmware versions 1.05 and later. The version 2.1 of the FWUPDATE utility is NOT backwards compatible to support BMC firmware version before 1.04. The version 2.1 FWUPDATE utility and version 1.05 BMC firmware will be posted to Intel's Support web site http://support.intel.com and to its secure web sites.

Intel Recommendations
If the C440GX+ based system has had its BMC firmware updated from its original Intel factory configuration, Intel recommends updating the BMC firmware to version 1.05 or later using the FWUPDATE utility version 2.1 or later.

Systems that have the original Intel factory configuration do not need to be updated.

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System integrators that currently use the original Intel factory configuration but wish to update to a later BMC firmware version should do so using the FWUPDATE utility version 2.1, or later, with the C440GX+ BMC firmware version 1.05 or later.

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

Server Products Division (SPD)
Intel Corporation

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