Intel Technical Advisory

TA-1101-01

5200 NE Elam Young Parkway
Hillsboro, OR 97124

Dec 25, 2015

Erratic RTC Timestamp Issue Found with BIOS R01.01.0013

Products Affected:

Product Name	Product Code	TA#	MM#
Intel® Server Board	BBS2600KPR	H37994-013	943789
Intel® Server Board	BBS2600KPFR	H37995-013	943790
Intel® Server Board	BBS2600KPTR	H78327-011	948036
Intel® Server Board	BBS2600TPR	H48901-012	943944
Intel® Server Board	BBS2600TPFR	H48902-012	943947
Intel® Compute Module	HNS2600TPR	H94938-001	943948
Intel® Compute Module	HNS2600TPFR	H94939-001	943949
Intel® Compute Module	HNS2600TP24R	H94945-001	943951
Intel® Compute Module	HNS2600TP24SR	H93804-001	945609
Intel® Compute Module	HNS2600KPR	H94936-001	943787
Intel® Compute Module	HNS2600KPFR	H94937-001	943788
Intel® Server Board	DBS2600CW2R	H67035-221	943803
Intel® Server Board	DBS2600CW2SR	H43725-221	943804
Intel® Server Board	DBS2600CWTR	H43723-221	943805
Intel® Server Board	DBS2600CWTSR	H43727-221	943806
Intel® Server Board	S2600WTTR	H79751-002	943785
Intel® Server Board	S2600WT2R	H79749-002	943786
Intel® Server System	R2312WTTYSR	J11495-002	943830
Intel® Server System	R2308WTTYSR	J11493-002	943829
Intel® Server System	R2224WTTYSR	J11492-002	943831
Intel® Server System	R2208WTTYSR	J11484-002	943826
Intel® Server System	R2208WTTYC1R	J11487-002	943828
Intel® Server System	R2208WT2YSR	J11485-002	943827
Intel® Server System	R1304WTTGSR	J11482-002	943891
Intel® Server System	R1304WT2GSR	J11483-002	943892
Intel® Server System	R1208WTTGSR	J11481-002	943893
Intel® Server System	R1208WT2GSR	J11465-002	943894

Description:

Users of any affected products listed above could be prompted with an "Invalid Timestamp" message during POST when the CMOS RTC coin battery is withdrawn or unplugged. Meanwhile the system time could be erratic. For an example, during POST, the time stamp displayed the year of 2013 at first and then became 2019, at last jumped to 2005.

Root Cause:

When CMOS RTC coin battery is withdrawn or unplugged, RTC controller status will be reset to unreliable value. This might set bit2 (Data mode) of RTC_REGB Register B to binary mode.
Consequently, BIOS core RTC alarm module would store this wrong setting and use it to read/write RTC time during every boot, causing an erratic variation in time series on every boot.

Corrective Action / Resolution:

BIOS core RTC module has been updated to resolve this issue.

Recommend Customer Action

Intel recommends upgrading your system BIOS to version R01.01.0014 or a subsequent version. The System Upgrade Package (SUP) including the latest BIOS is available on the Intel web site at http://downloadcenter.intel.com/.

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

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