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Intel® Xeon™ Processor 3.0 GHz and Above Support in the Intel Server Chassis SR1300

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Products Affected

Product	Product Codes
SR1300	KCW

Description

When using single or dual Intel® Xeon™ processors at speeds of 3.0 GHz and above with the Intel Server Chassis SR1300, Intel's thermal testing results show that operating these server system configurations at an ambient inlet temperature of 35 degrees Celsius may potentially cause internal system components to exceed their maximum specified operating temperatures. Intel has verified that internal system components do not exceed their maximum specified operating temperatures when these server system configurations are operated at a maximum ambient inlet temperature of 30 degrees C.

Root Cause

Although Intel provides a leading chassis solution for cooling and power, we test to conservative Intel specifications to ensure robust operation of our server systems. Intel thermal specifications are designed for a very conservative case (Intel Xeon processors at high Thermal Design Power (TDP), fully loaded server configuration, etc.)

Workaround

Customers may integrate Intel Xeon processors at speeds of 3.0 GHz and above into the Intel Server Chassis SR1300, however, customers should be aware that the Server Chassis SR1300 is specified at a maximum ambient inlet temperature of 30 degrees C when a Intel Xeon processors of speed 3.0 GHZ or above are utilized in this chassis.

Customers should also note that use of Xeon processor at speeds of 3.0 GHz and above requires a KCW chassis with top assembly (TA) number A88248-008 or greater (MM number 854013). This KCW chassis version includes power supply modifications and higher performance fans, which enables support of 3.0 GHz and above Xeon processors. Please reference PCN 103110-01 for further information on the Power Supply changes. Customers should also use the latest FRU/SDR package (version: 5.5.7) and the latest Baseboard Management Controller (BMC) Firmware (version: 1.18) when running with 3.0GHz and above Xeon processors in an Intel Server Chassis SR1300. FRU/SDR 5.5.7 and BMC Firmware 1.18 can be downloaded from Intel's secure web site, IBL, or from the following Intel customer support website:
http://support.intel.com/support/motherboards/server/se7501wv2/

FRU/SDR 5.5.7 ramps the system fan speeds quicker when running with 3.0GHz and above Xeon processors in an Intel Server Chassis SR1300. It also causes system fans to reach their maximum speed by the time the maximum ambient inlet temperature of 30 degrees C is met. BMC Firmware 1.18 corrects an issue where false VRM low voltage events were being logged in the System Event Log while running 3.06GHz Xeon processors.

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

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