

intel® Technical Advisory

TA-0306-3

5200 NE Elam Young Parkway
Hillsboro, OR 97124

December 21, 2000

STL2 Server Board Front Panel Connector Fault LED Implementation

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Products Affected

STL2PP, STL2, BTLBB, KHDBASEU, KHDHSU, KHDHSRPU, KB2HSTPP, KB2HSU, KB2HST

Description

The STL2 server board, when integrated into the SC5000, SR2050, or some third party chassis, may cause the system fault LED to be illuminated whenever power is applied to the system.

Root Cause

The SC5000 and SR2050 server chassis front panel boards combine the power fault LED signal with the fan fault LED signal into a single system fault LED. The STL2 server board implements the power fault LED signal (pin 8 of the front panel connector) as a High True signal. The fan fault LED signal (pin 6 of the front panel connector) is implemented as a Low True signal. The mixing of the High True power fault LED signal and the Low True fan fault LED signal results in the system fault LED being illuminated whenever power is applied to the system. Customers with third party chassis designs utilizing front panels that combine the power fault and fan fault LED signals into a single system fault LED may also experience this issue. Customers with third party chassis designs utilizing front panels that implement separate discrete power and fan fault LEDs should not experience this issue.

Corrective Action / Resolution

The STL2 server boxed board (STL2) will include an alternate front panel cable (Intel part number A37010-001) for use with the SC5000 and SR2050 chassis. A front panel cable spare kit (FTLFPCBL, MM# 832781) will be available for customers taking the BTLBB SKU that need to use this cable.

The alternate front panel cable effectively removes the physical fan fault LED signal from the system fault LED circuit by disconnecting front panel pins 4 and 6, and also re-routes the power fault LED signal from pin 8 to pin 4. The alternate cable should be used in combination with a modified STL2 BMC firmware, version 11.16, that routes both the power and fan fault LED signals to pin 8 on the STL2 server board, thus forming a single system fault LED. STL2 BMC firmware version 11.16 will be included on the STL2 server system CD-ROM and is available on the FDBL website. STL2 BMC firmware version 11.16 will be available at <http://support.intel.com> in October 2000.

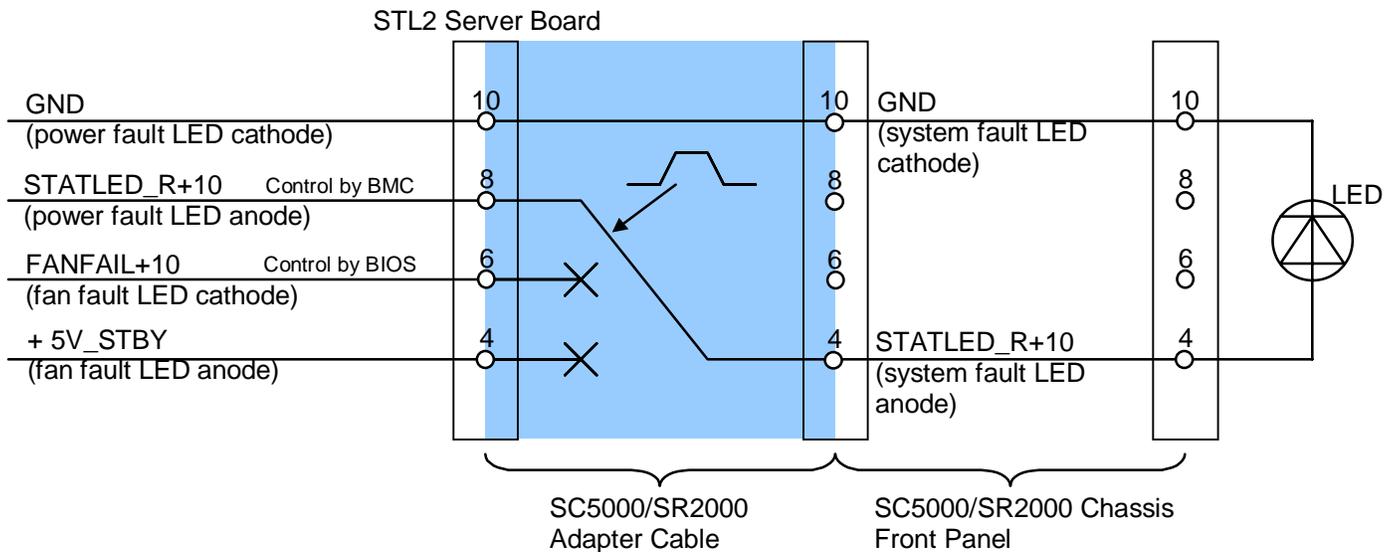
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The following circuit diagram shows the SC5000/SR2050 alternate front panel cable solution. The signals indicated at the SC5000/SR2050 chassis front panel result when the alternate front panel cable is used in combination with the modified STL2 BMC firmware version 11.16:



If the alternate cable is installed but the modified STL2 BMC firmware version 11.16 is not used, the SC5000/SR2050 chassis system fault LED will include only the power fault LED signal, instead of combined power and fan fault LED signals.

Customers with third party chassis designs utilizing front panels that implement separate discrete power and fan fault LEDs should not experience this issue and will not need to use the alternate front panel cable (Intel part number A37010-001). In addition, the modified firmware version 11.16 should not be used with chassis designs utilizing front panels that implement separate discrete power and fan fault LEDs. STL2 BMC firmware version 1.16, which supports two separate discrete fault LEDs, and which will be programmed on STL2 production level boards, should be used with chassis designs utilizing front panels that implement separate discrete power and fan fault LEDs. Use of the BMC firmware v. 11.16 with chassis designs utilizing front panels that implement separate discrete power and fan fault LEDs will result in both the power and fan fault LED signals being routed to the power LED, and the fan fault LED being inactive.

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

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