intel®Technical Advisory

TA-0675-3

2800 Center Drive North
Dupont, Wa 98327

December 15, 2003

Intel® Telco and Industrial Grade Server TIGPR2U 500W AC Power Supply Failure Rate Above Average

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Products Affected

Product Name	Product Code
Intel® Carrier / Industrial Grade Server TIGPR2U	TLPA0201
	TLA0200
Intel® Carrier / Industrial Grade Server TIGPR2U 500 W Power Supply Spare Kit	TLPACPSU002

Description

AC redundant power (BRP) supply modules (Intel® part number A76009-XXX) currently being used within the Intel® Telco and Industrial Grade Server System TIGPR2U have the potential to fail during sustained, powered-on operation due to a diode failure in the power supply module. If a diode failure occurs, systems operating in a non-redundant power supply configuration (only one power supply module installed in the power supply cage) may experience an immediate system power down. Systems operating in a redundant power supply configuration should continue normal operation, and the power supply module failure will be indicated by the power supply, the system front panel status LEDs, and Intel® Server Management software (If in use).

Intel® has recorded a higher than expected failure rate of the AC power supply modules used within the Intel® Telco and Industrial Grade Server TIGPR2U Platform as well as on other platforms utilizing the same power supply. Approximately 1.8% of the power supply modules shipped in 2003 have reported failures.

Root Cause

Failure of the diode may occur due to inherent defects in the base material (substrate) used to fabricate the diode. The failure is not related to the design of the power supply module.

Corrective Action / Resolution

A diode screening process has been implemented to prevent this issue from occurring in the future.

All power supply modules built after October 24, 2003 will be built with the screened diodes. Power supply modules not affected by this issue are marked with Serial # DLD**0343**XXXXXX or later. These power supplies were built with diodes not affected by this issue.

The decode mechanism for the serial number is: First and Second Digits=Year, Third and Fourth Digits=Work Week, X=Don't Care.

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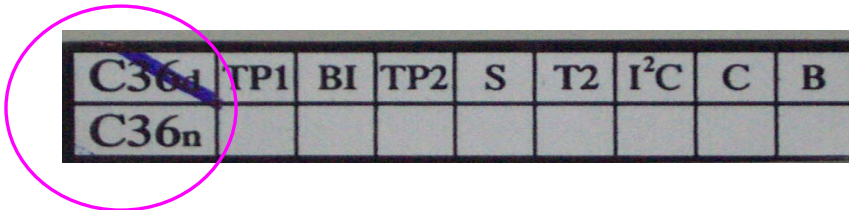
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Power supply modules with the listed date codes and serial number rages listed below have been reworked with a screened diode. The reworked power supply's can be identified with a blue tracking label mark ╲ " on the power supply production tracking label in either "C36d" or "C38d" (Figure A) box that is located on the release handle (figure B) of the 500W module.

Datecode	S/N range
ww0342	DLD0342044620~4946
ww0341	DLD0341044230~4462;
ww0342	DLD0342044500~4592
ww0342	DLD0342045272~5595; DLD0342044947~5270
ww0342	DLD0342045596~6019

Figure A

(Note: Either "C36d" or "C38d" will have a blue slash if the power has been reworked. If there is **NOT** a slash mark in either "C36d" or "C38d" boxes and there are markings in other boxes the power supply has **NOT** been reworked.

Figure B
(Note: This is an example **only** and does not display the marking of a reworked power supply**)**

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Specific to the Intel® Telco and Industrial Grade Server TIGPR2U, the below serial numbers for the systems and spares have been reworked as well.

Systems (TLA0200)

All TLA0200 systems built WW44 or later were built with screened/reworked modules. You can identify these systems by checking if the system serial # is ADLP**344**XXXX or later. These systems were built with power supplies not affected by this issue.

The decode mechanism for the serial number is: First and Second Digits=Year, Third and Fourth Digits=Work Week, X=Don't Care.

In addition, the following specific system serial numbers are also not affected:

Serial #
ADLP3447451 to ADLP3447486

Systems (TLPA0201)

All TLPA0201 systems built WW44 or later were built with screened/reworked modules. You can identify these systems by checking if the system serial # is ADLP**344**XXXX X or later. These systems were built with power supplies not affected by this issue.

The decode mechanism for the serial number is: First and Second Digits=Year, Third and Fourth Digits=Work Week, X=Don't Care.

In addition, the following specific system serial numbers are also not affected:

Serial #
ADLP3416303
ADLP3416348 to ADLP3416350
ADLP3416352 to ADLP3416353
ADLP3416362 to ADLP3416364
ADLP3416366
ADLP3416368 to ADLP3416371
ADLP3416380
ADLP3416389 to ADLP3416390
ADLP3416401
ADLP3416423 to ADLP3416429
ADLP3416492 to ADLP3416493
ADLP3416498
ADLP3416536
ADLP3426507 to ADLP3426509
ADLP3436914 to ADLP3436931

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TLPACPSU002 Spares

All spares built WW44 or later were built with screened/reworked modules. You can identify these spares by checking if the spare serial # is ADLP**344**XXXX or later. These spares were built with power supplies not affected by this issue.

The decode mechanism for the serial number is: First and Second Digits=Year, Third and Fourth Digits=Work Week, X=Don't Care.

In addition, the following specific spare serial numbers are also not affected:

Serial #
ADLP3385530
ADLP3385546
ADLP3426525
ADLP3426527
ADLP3426528
ADLP3426530
ADLP3426533 to ADLP3426536

Intel recommends performing a replacement of the power supply modules during the system's next preventative maintenance schedule. Customers may replace a power supply module in a non-redundant system configuration without requirement for a system power-down by using a second spare power supply module to keep the system powered on while the other module is replaced. This requires that the customer have two AC power supply cords connected to the system. Customers who have potentially affected power supply modules may request replacement of their power supply modules. To obtain replacement power supply modules, contact Intel using your normal warranty process. Please indicate that you are calling regarding TA 675-2 and have the part number and the serial numbers for the systems needing the replacement part.

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