



This Technical Advisory describes an issue which may or may not affect the customer's product

# Intel Technical Advisory

TA-1185-00

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## Differences in Redfish\* logging between Intel® power supply models.

### Products Affected

Power Supply Model	Efficiency	Intel Product Code	Intel MM#	Intel P/N	Maker P/N
<b>Group A</b>					
1300W AC Common Redundant Power Supply AXX1300TCRPS	Titanium	AXX1300TCRPS	956542	H79286-013	PSSF132202A
1600W AC Common Redundant Power Supply AXX1600PCRPS	Platinum	FXX1600PCRPS	915606	G36234-020	PSSF162202A
1600W AC Common Redundant Power Supply AXX1600TCRPS	Titanium	AXX1600TCRPS	99ADF2	J78186-009	PSSF162205A
2700W Air-Cooled Power Supply FCXX27CRPSAC (FC2000 Family)	Titanium	FCXX27CRPSAC	99AZAM	M67572-001	DPS-2700CB
<b>Group B</b>					
2100W AC Common Redundant Power Supply FCXX2100CRPS	Platinum	FCXX2100CRPS	99C4MW	K31215-008	PSSF212201A
2100W AC Common Redundant Power Supply FCXX2100TCRPS	Titanium	AXX2100TCRPS	99CGL3	M97240-003	PSSF212202A
3000W Liquid-Cooled Power Supply FCXX30CRPSLC (FC2000 Family)	Platinum	FCXX30CRPSLC	99ARZ3	M85780-005	PSSF302201A
3000W Liquid-Cooled Power Supply FXX30CRPSTLC (FC2000 Family)	Titanium	FXX30CRPSTLC	99CC1W	N16318-001	PSSF302201B

### Description

When AC power is removed (power cord is unplugged) from a "Cold Redundant" PSU listed in the group "A" above, such power supply unit will go out of the "Cold Redundant" state and will start driving 12V power line. This event will be registered in the Redfish log with two records:

```

2022-01-19T01:42:26+00:00 Informational NM SmarT&CLST sensor. State
Deasserted(throttling released)
2022-01-19T01:42:26+00:00 Informational NM SmarT&CLST sensor. State
Asserted(throttling enforced)

```

The "Deasserted" message in this pair is wrong and should be ignored.

## Root Cause

Rack-optimized Intel® server systems are designed to support multiple power supply units (PSU) in a server chassis. If a server system's power demand can be satisfied with less than the total number of PSUs installed in the chassis, such a power subsystem is called “redundant” and will be able to provide sufficient power even if one of the power supplies fails. To save power consumption, one of the power supplies in the redundant power configuration can be configured into the “Cold Redundant” mode consuming very little amount of energy. In case one of the active power supplies fails, the PSU in the “Cold Redundant” state will transition into the active state. This transition is very quick and happens automatically to provide power to the server system without interruption. The Baseboard Management Controller (BMC) configures power supplies and monitors their state. Each transition of a PSU state is logged into the system Redfish log file.

There is a difference in how different power supply models report their state to the BMC when a PSU is in the “Cold Redundant” state. When AC power is removed (power cord is unplugged) from a “Cold Redundant” PSU listed in the group “A” above, such power supply unit will go out of the “Cold Redundant” state immediately and will start driving 12V power line. This event will be registered in the Redfish log with two records:

```
2022-01-19T01:42:26+00:00 Informational NM SmarT&CLST sensor. State
Deasserted(throttling released)
2022-01-19T01:42:26+00:00 Informational NM SmarT&CLST sensor. State
Asserted(throttling enforced)
```

The “Deasserted” message in this pair is wrong and should be ignored.

In contrast, the “Cold Redundant” power supply models from Group B will immediately report failure to BMC and go into the “Off” state. As a result, there will be no additional faulty “Deasserted” entry in the system Redfish log.

## Corrective Action / Resolution

Customers should be aware of this phenomenon. Intel believes this issue does not impact the usage of the Intel server products. Apart from the faulty Redfish log entry, there is no other detrimental effect on the systems with power supply units from Group A in “Cold Redundant” mode. No corrective action is required. Intel does not plan to change the behavior of the PSUs from group “A”.

**Contact your local Intel Sales Representative if you require more specific information about this issue.**

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