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

Intel Technical Advisory

TA-1040-01

5200 NE Elam Young Parkway
Hillsboro, OR 97124

November 01, 2013

Customers may experience an Over Current Protection (OCP) fault associated with certain Hot Swap Back Planes (HSBP) that can result in damage to the HSBP.

Products Affected

P4208CP4MHGC	P4208CP4MHGC	R2208BB4GC	R2208GZ4GS9
P4208XXMHDR	P4208IP4LHGC	R2208GL4DS9	R2208IP4LHPC
P4208XXMHEN	P4208XXMHDR	R2208GL4GS	R2216GZ4GCLX
P4208XXMHGR	P4208XXMHEN	R2208GZ4GC	R2216IP4LHPC
P4216XXMHGC	P4208XXMHGC	R2208GZ4GS9	R2224GZ4GCSAS
P4216XXMHJC	P4208XXMHGR	R2208IP4LHPC	R2224IP4LHPC
P4208XXMHDRNA	P4216IP4LHJC	R2216BB4GC	R2224IP4LHPC9
P4208XXMHENNA	P4216IP4LHKC	R2216GZ4GCLX	
P4208XXMHGRNA	P4216XXMHEN	R2224BB4GCSAS	
P4216XXMHJCNA	P4216XXMHGC	R2224GZ4GCSAS	
P4208XXMHDRNA	P4216XXMHGR	R2224IP4LHPC9	
P4208XXMHENNA	P4216XXMHJC	R2208GL4DS9	
P4208XXMHGCNA	P4224IP4LHKC	R2208GL4GS	
P4216XXMHJCNA		R2208GZ4GC	

Description

During an investigation into a customer reported issue on the 2U 2.5" Hot Swap Back Plane (HSBP) (G15232-451); Intel identified an excursion with the raw Printed Circuit Board (PCB) material. Due to a low impedance short in the HSBP a system may:

a) Experience an Over Current Protection (OCP) event which will be logged in the System Event Log (SEL) and the system will shut down.
b) Alternatively an OCP may occur in the 5V or 3.3V subsystem and an event will be logged into the SEL and the system may continue to function.

The OCP SEL for either instance would show:

Text dump:
SensorName:Pwr Unit Status Sensor Type:Power Unit Description: reports the power unit has suffered a failure –Asserted

Hex dump:
GID:0020 ER:04 ST:09 S#:01 ET:6F ED:06 FF FF

Depending on the severity of the short the HSBP may exhibit various levels of damage ranging from discoloration to an exothermic event contained within the chassis.

Root Cause

There was an excursion with the laminate used in a specific lot code of the HSBP bare fabs. This excursion in material makes the HSBP vulnerable to a low impedance short.

Corrective Action / Resolution

Exposure is limited to a maximum of 271 HSBP bare fabs manufactured between QSRU23310063 and QSR30303019; see table below. Intel recommends replacement of suspect HSBPs upon request pending suspect HSBP or BIK SN confirmation by Intel.

As there is limited traceability to the BIK level of HSBPs it is necessary to look at the HSBP serial number located on the HSBP; see picture below.

As of September 30, 2013 all Intel inventory has been screened for the impacted Serial Number range and are available for shipment.

The following IPMI commands may be used to access the FRU data:

To collect the data remotely:

- ipmitool -H <IP address> -U <user name> -P <password> fru
- ipmiutil fru -N <IP address> -U <user name> -P <password>

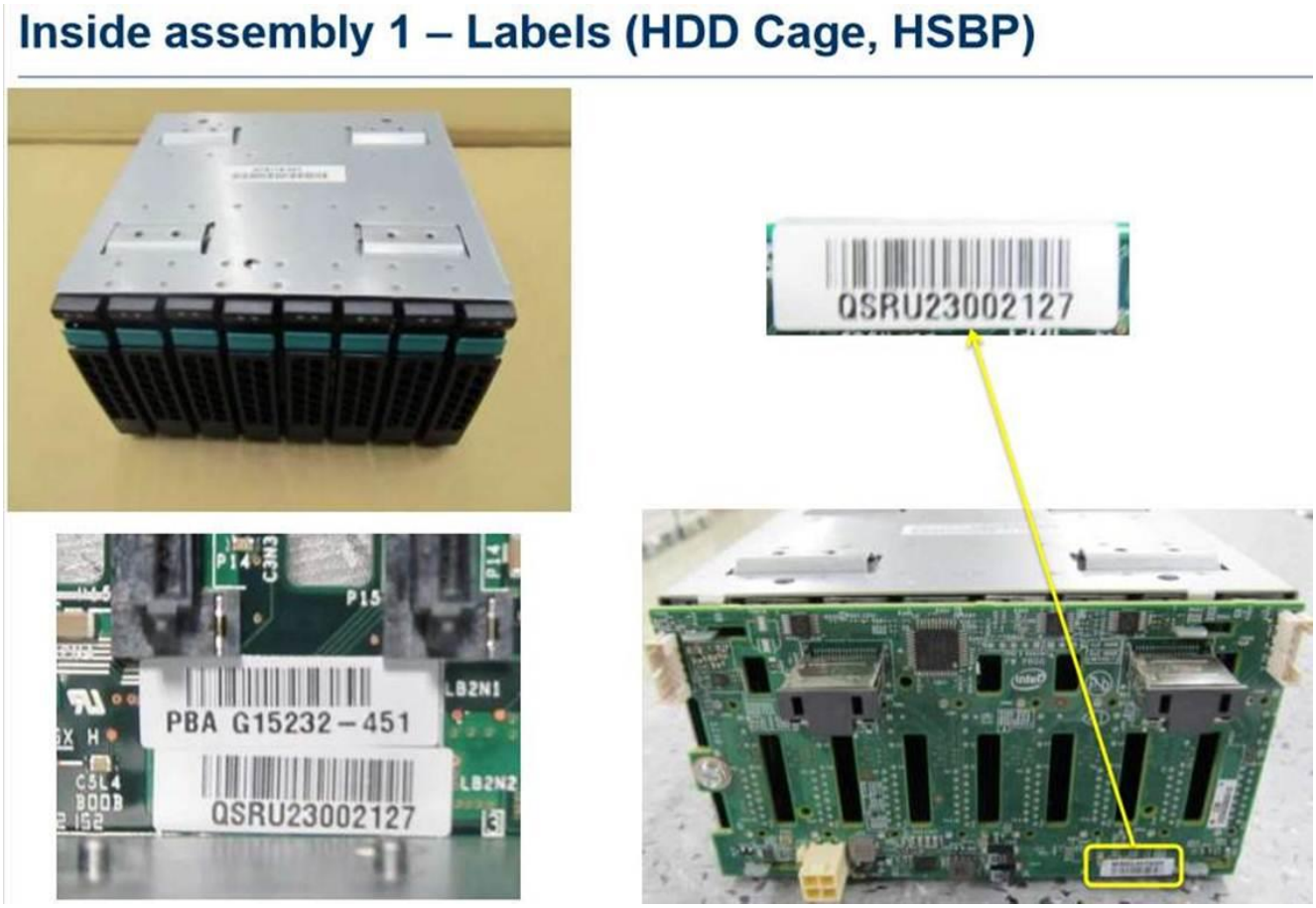
To collect the data on the local system:

- ipmitool fru
- ipmiutil fru

HSBP Serial Number Ranges (Table 1)

QSRU23310063 – QSRU23310882
QSRU23405089 – QSRU23406468
QSRU23507631 – QSRU23509430
QSRU23902094 – QSRU23903033
QSRU25005819 – QSRU25006822
QSRU25013236 – QSRU25014435
QSRU25201997 – QSRU25203996
QSRU30100601 – QSRU30102600
QSRU30213076 – QSRU30215083
QSRU30302833 – QSRU30303832

HSBP Serial Number Label (Picture)



Please contact Intel using your normal warranty process, indicating that you are calling regarding TA/AA # 1040-x. Have the following information when you call: the serial number(s) of the affected board(s) and the part number of the affected item needed.

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

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