



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

# Intel Technical Advisory

TA-1118

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## BIOS Update Required for the Intel® Visual Compute Accelerator to Conform to Intel Reliability Target

### Products Affected:

<i>Product Name</i>	<i>Product Code</i>	<i>VCA BIOS Version</i>
Intel® Visual Compute Accelerator (VCA)	VCA1283LVV	Older than BIOS 1.3.48

### Description:

In the Graphics/Media-enabled Intel® Xeon® Processor E3 Family product offering, Intel offers skus targeted for maximum performance, and skus targeted for maximum life. The Intel® Xeon® Processor E3 1283L v4 is targeted for maximum performance.

The Intel® VCA1283LVV uses 3 x Intel® Xeon® E3-1283L v4 devices. With GPU operating at the 1.15GHz specified maximum frequency, Intel projects the 3- and 5-year failure rates for the Intel® Xeon® E3-1283L v4 would exceed Intel reliability targets in high utilization media transcode use cases.

### Corrective Action / Resolution:

To align with the Intel reliability targets for high utilization media transcode use cases, Intel has released a BIOS to cap the GPU maximum frequency to 1.0 Ghz. The BIOS is available for download at

<https://downloadcenter.intel.com/download/25590>.

Customer Instructions to identify if BIOS is required to be updated:

- (1) First check if the VCA BIOS is older than 1.3.48, if it is, then an update is required.
- (2) Run the command below as root
  - `ssh <node_IP> dmidecode -t bios|grep ACGC`

```
[root@localhost ~]# ssh 172.31.5.1 dmidecode -t bios|grep ACGC
The authenticity of host '172.31.5.1 (172.31.5.1)' can't be established.
ECDSA key fingerprint is 07:f8:88:cc:c8:3d:82:f3:07:c2:93:6d:12:af:59:78.
Are you sure you want to continue connecting (yes/no)? yes
Warning: Permanently added '172.31.5.1' (ECDSA) to the list of known hosts.
Error reading response length from authentication socket.
root@172.31.5.1's password:
Version: 0ACGC106.0000
[root@localhost ~]#
```

If the number after string "ACGC" is lower than 106, then the BIOS is required to be upgraded.

Follow the steps below to upgrade the BIOS.

**Note:** The VCA1283LVV board (all nodes) will reboot during this process

- Download the latest BIOS (<https://downloadcenter.intel.com/download/25590>)
- Unzip Intel®VisualComputeAccelerator\_BIOS\_<version>.zip into a temporary location on the host.
- Make sure BIOS image selection jumpers are correctly placed (refer to Section *BIOS Image Selection Jumpers* in VCA\_Spec\_HW\_Users\_Guide)
- Run "vcactl reset"
- Run "vcactl wait-BIOS"
- Run "vcactl update-BIOS VCA-BIOS\_0ACGC<version>.img"
- Run "vcactl wait-BIOS"
- After running the command above, the screen should show that the BIOS is "UP"
- To verify if the BIOS was successfully updated, run "ssh <node\_IP> dmidecode -t bios|grep ACGC"
- The string after "ACGC" should now show a number greater than 106.

On success, BIOS upgrade is finished. Host reboot is NOT required with this upgrade.

### Intel Recommendations:

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

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