Overview

The Intel® Visual Compute Accelerator (Intel VCA) is a PCIe* add-in card designed to accelerate media and graphics workloads. The card is a full-length, full-height, double-width x16 card, which will fit into most 2U rack-mount servers and some custom 1U rack-mount servers. Contact the OEM to ensure the card is supported for the given server system.

The card contains three Intel® Xeon® E3 processors and supports up to 32 GB of DDR3 memory per CPU — 96 GB total per card.

All information provided here is subject to change without notice. Contact your Intel representative to obtain the latest Intel product specifications and roadmaps.

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Copies of documents that have an order number and are referenced in this document may be obtained by calling 1-800-548-4725 or by visiting Intel's website at http://www.intel.com/design/literature.htm.

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Regulatory information

This device complies with Part 15 of the FCC Rules. Operation is subject to the following conditions:

- This device may not cause harmful interference.
- This device must accept any interference received including interference that may cause undesired operation.

Certification marks
EN  **Important safety instructions**


DE  **Wichtige Sicherheitshinweise**


ES  **Instrucciones de seguridad importantes**

Consignes de sécurité


重要安全指导

Warning

Electrostatic discharge (ESD) protection: ESD can damage disk drives, boards, and other parts. We recommend that you perform all of these procedures at an ESD workstation. If an ESD workstation is not available, provide some ESD protection by wearing an antistatic wrist strap attached to any unpainted metal surface on your server’s chassis ground whenever handling parts.

Kit contents

- Intel VCA card
- Cosmetic cover
- This Quick Start Guide

Note: No cables are included in the kit. You will need to order cabling separately.
Hardware install

1. The Intel VCA card supports up to two slots of memory (8 GB and 16 GB) per CPU, for a total of 96 GB maximum (32 GB per CPU). The Intel VCA card ships with the cosmetic cover uninstalled. If you want to change the memory configuration, install DDR3 ECC SODIMM modules (Figure 1).

Figure 1 Install memory
2. Place the cosmetic cover over the card (Figure 2).

Figure 2 Place cover over the card
3. Slide the cover a half-inch (11 to 12 mm) to the left to lock it in place *(Figure 3)*.

*Figure 3* Slide the cover a half-inch to the side
4. Tighten the screw *(Figure 4).*

**Figure 4** Tighten the screw
5. Install the Intel VCA into an x16 PCIe* add-in card slot (*Figure 5*).

*Figure 5* Install Intel VCA
6. Add auxiliary power to the card (Figure 6).

Figure 6 Auxiliary power

to motherboard

7. If necessary, add custom duct to ensure airflow is directed at the PCIe* card.
Software install

CentOS 7.1 is required on the host.

1. Copy the following files to the host:
   - kernel-3.10.0_#kernel_build_number#.VCA-1.x86_64.rpm
   - daemon-vca-#vca_build_number#-0.x86_64.rpm
   - vcass-modules-3.10.0_#kernel_build_number#.VCA-#vca_build_number#-0.x86_64.rpm
   - vca_baremetal_#vac_build_number#.img

   **Note:** You can download these files from [https://downloadcenter.intel.com](https://downloadcenter.intel.com) or from one of the links in the For more information section at the end of this document.

2. Update the kernel:
   ```bash
   sudo yum -y localinstall --disablerepo=* kernel-3*rpm
   ```

3. Install the daemon:
   ```bash
   sudo yum -y localinstall --disablerepo=* daemon-vca*rpm
   ```

4. Install the modules:
   ```bash
   sudo yum -y localinstall --disablerepo=* vcass-modules*rpm
   ```
5. Update boot to the new kernel:
   `sudo grub2-set-default 0`

6. Reboot system: `sudo reboot`
   - **Boot image:** `vcactl boot vca_bare-metal_XXX.img`
   - **Check status:** `vcactl status`

   **Note:** Repeat until the status shows `net_device_ready` for all nodes.

7. Verify connection to one node:
   `ssh root@172.31.1.1`

   **Note:** Password = `vista1`. For other nodes, change the third octet in the IP address.

The booted image is not persistent by default. Refer to the user guide for instructions on how to make changes persistent across boots.
For more information

For more information on Intel VCA, visit: www.intelserveredge.com/intelvca.

For more information on media and storage solutions from Intel, visit: www.intelserveredge.com/MediaandGraphics.

For technical documents, visit: http://www.intel.com/support/GO/visual-accelerator.

For the latest download, visit: https://downloadcenter.intel.com/product/87380.

For information and software download of Intel® Media Server Studio, visit: https://software.intel.com/en-us/intel-media-server-studio.

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