

Application Note

071

Updating the AMD E6760 graphics driver

Overview

This application note describes how to update the graphics driver on an AMD E6760 GPU in Amulet Hotkey DXM blade workstations. The update instructions are applicable for updating the driver from any earlier version to the latest supported version.

At March 2014, the latest supported graphics driver is version 13.351.

To enable support for the latest E6760 graphics driver, you must:

1. *(Optional)* Update the VBIOS.
2. Obtain the new graphics driver.
3. Uninstall the existing graphics driver.
4. Install the new graphics driver.
5. *(Optional)* If temporal dithering is enabled on the blade workstation, users may experience poor performance and high bandwidth usage. To resolve these issues, you must disable temporal dithering.

These steps are described in detail in the following sections.

Note: This application note supersedes earlier Application Notes 061 and 062.

1. Update the VBIOS

(Optional) We recommend that the E6760 GPU is running the latest Amulet Hotkey VBIOS before you update the graphics driver. Instructions for updating the VBIOS are in Application Note 072, available on the Amulet Hotkey web site.

2. Obtain the new E6760 graphics driver

Follow these steps:

1. Download a zip file containing the driver from the AMD web site:
<http://support.amd.com/en-us/download>
Alternatively, you can obtain a copy of this driver from Amulet Hotkey.
2. Unzip the contents of the zip file to a local folder on the target blade.

3. Uninstall the existing E6760 graphics driver

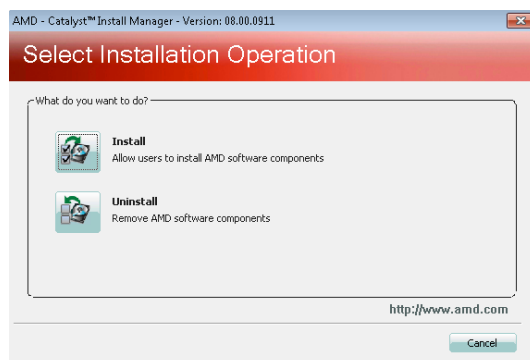
1. Use the Programs and Features applet to manually uninstall the existing graphics driver. This applet is part of the Control Panel.
2. In Programs and Features, right-click the AMD Catalyst Install Manager and choose Change.
3. When the wizard starts, go to the Catalyst Install Manager screen.
4. Select the Express Uninstall AMD Software check box.
5. In the final wizard screen, click OK to begin the uninstallation.
Important! Do *not* restart the computer at this stage.
6. From the Start menu, right-click Computer and choose Manage.
Device Manager starts up.
7. Expand the Display Adapters branch. Then:
 - a. If the AMD Radeon E6760 adapter is listed, right-click it and choose Uninstall.
In the Confirm Device Uninstall dialog, select the 'Delete the driver software for this device' check box and click OK.
 - b. If the Standard VGA adapter is listed, right-click it and choose Uninstall.
In the Confirm Device Uninstall dialog, select the 'Delete the driver software for this device' check box and click OK.
8. Restart the blade workstation.

4. Install the new graphics driver

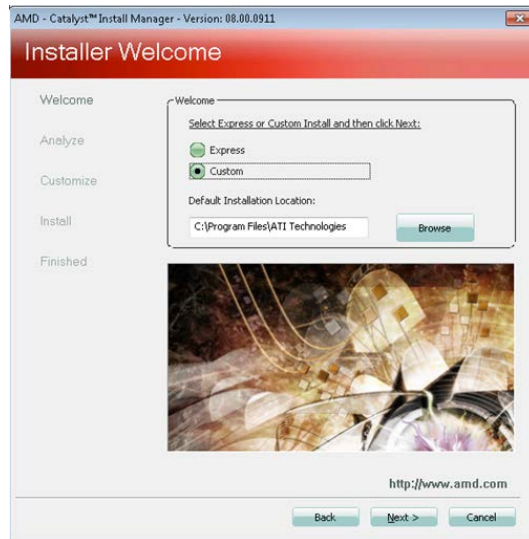
When you run the installation wizard, you can choose to install only the new driver (see [section 4.a](#)). Alternatively, you can install the driver plus various associated AMD components (see [section 4.b](#)).

4.a Install the graphics driver only

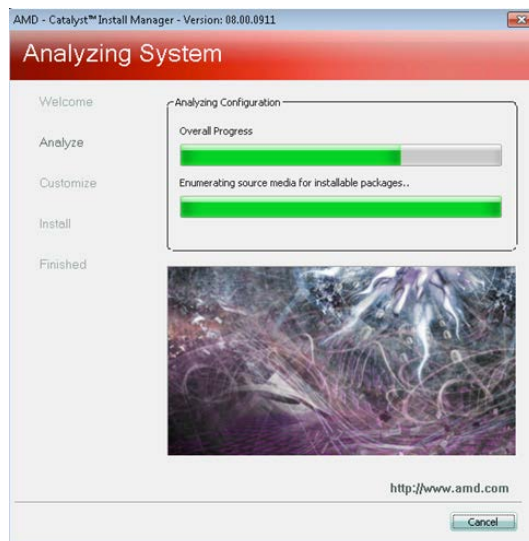
1. In the folder containing the unzipped files, run setup.exe as an administrator.
The AMD Catalyst Install Manager launches.
2. In the Welcome screen, click Next to start the installation.
3. In the Select Installable Operation screen, click Install.



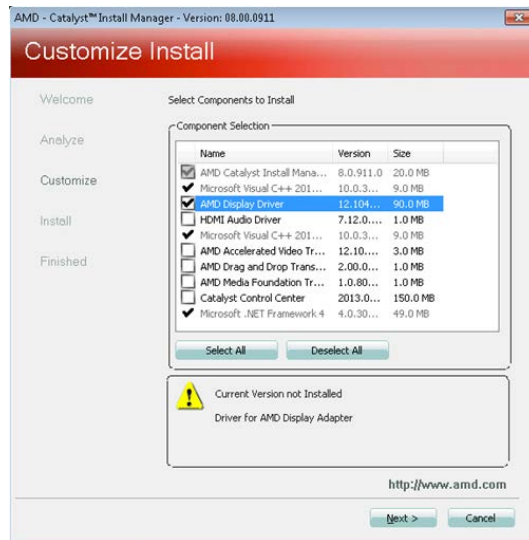
4. In the Installer Welcome screen:
 - a. Select a Custom installation.
 - b. Specify the default installation location.
 - c. When the 'Specify folder to install to' dialog displays, confirm the installation folder.
 - d. Click Next to start the system analysis process.



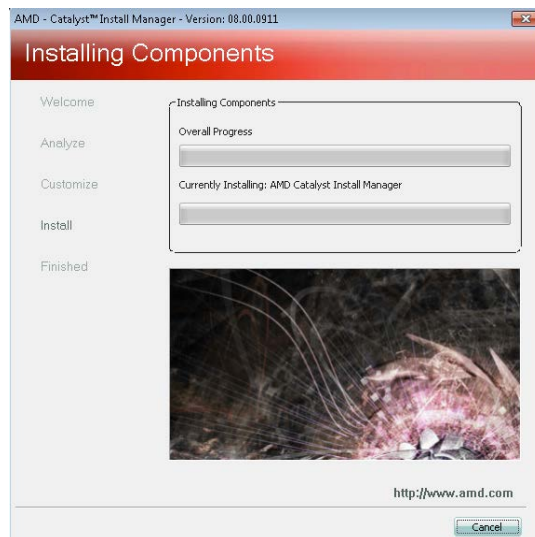
5. Wait for the system analysis to complete:



- When the Customize Install screen displays, select only the AMD Display Driver component. Then click Next to continue.



- Accept the End User Licence Agreement. Then click Next to continue.
- Wait for the installation to complete:



- When the installation is complete, restart the blade workstation.

This completes the E6760 graphics driver update process.

If temporal dithering is enabled on the blade, users may experience poor performance and high bandwidth usage. To resolve these issues, you must disable temporal dithering. See [section 5](#) for details.

4.b Install the graphics driver plus associated components

1. In the folder containing the unzipped files, run setup.exe as an administrator.
The AMD Catalyst Install Manager launches.
2. In the Installer Welcome screen:
 - e. Select an Express installation.
 - f. Specify the default installation location.
 - g. When the 'Specify folder to install to' dialog displays, confirm the installation folder.
 - h. Click Next.
3. The AMD Catalyst Install Manager steps through the driver installation process.
4. When the installation is complete, restart the blade workstation.

This completes the E6760 graphics driver update process.

If temporal dithering is enabled on the blade, users may experience poor performance and high bandwidth usage. To resolve these issues, you must disable temporal dithering. See [section 4](#) for details.

5. Disable temporal dithering

(Optional) Temporal dithering is a technique used by graphics cards to generate intermediate colours by rapidly alternating a pixel between two adjacent colour values. The effect is not perceptible to the human eye but results in a significant overhead for any compression algorithm, such as that used by PCoIP, when dealing with the increased pixel colour activity. If temporal dithering is enabled on a machine using PCoIP, poor performance and high bandwidth usage can result, even when the display is seemingly static.

To resolve these issues, you must disable temporal dithering on the blade workstation.

1. Right-click the desktop and choose AMD Catalyst Control Center.
2. In the AMD Catalyst Control Center, click Preferences.
3. Enable the Advanced View setting.
4. In the left-hand menu, click Information > Software.

The Software page lists the registry key containing the **2D Driver Path**. Write down the full path for this registry key. This is the *target registry key*.

You will need to create one or, for octal video head systems, two new registry values in this target registry key. The registry path is similar to this:

```
HKLM\System\Control Set001\Control\Class\{4D36E968-E325-11CE-BFC1-08002BE10318}\0000
```

5. Launch the Registry Editor.
6. Browse to the target registry key as listed in step 4.

In the example above, the target registry key is named '0000'.

In systems with octal video heads, there will be two target registry keys. The name of the second target key is incremented by 1. So if the first target registry key is '0000', the second key is '0001'.

7. In the target registry key:
 - a. Create a new 32-bit DWORD registry value named:
DP_DisableDither
 - b. Set the data for the new registry value to 1.

On systems with octal video heads, repeat this step for both target registry keys. That is, create 32-bit DWORD registry values, both named DP_DisableDither, in the two target registry keys.

8. Restart the blade workstation.

Temporal dithering is now disabled.

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