Intel® Embedded Media and Graphics Driver and Video BIOS v1.16
Windows® 7/Windows® Embedded Standard 7

Specification Update

October 2012

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## Revision History

<table>
<thead>
<tr>
<th>Date</th>
<th>Revision</th>
<th>Description</th>
</tr>
</thead>
</table>
Introduction

The Intel® Embedded Media and Graphics Driver, EFI Driver, and Video BIOS (Intel® EMGD) are designed to meet the requirements of embedded applications. Featuring Intel® Dynamic Display Configuration Technology (DDCT), the drivers run on the following Embedded Intel® Architecture (eIA) chipsets:

- Intel® Atom™ Processor E6xx
- Intel® System Controller Hub US15W/US15WP/WPT chipset

Intel® EMGD is designed to work with fixed-function systems, such as In-vehicle Infotainment (IVI) devices, Point-of-Sale (POS) devices, ATMs, gaming devices, etc. It can be configured to work with various hardware and software systems and supports Microsoft Windows* 7 and Windows Embedded Standard operating systems.

The Intel Embedded Graphics Suite consists of both the Intel® EMGD and a Video BIOS (vBIOS) component. These two components are configurable and work together to provide a wide range of features.

Please refer to the Intel® Embedded Media and Graphics Driver and Video BIOS User Guide and RELNOTES.txt in the software package for a detailed description of the supported features and display devices.

Purpose/Scope/Audience

This document is a compilation of Errata. It is intended for those who need to work with the graphics subsystem. This includes, but is not limited to: platform designers, system BIOS developers, system integrators, original equipment manufacturers (OEMs), system control application developers, as well as end users.

This document may also contain information that was not previously published.

This document provides information on open errata in all supported Intel® EMGD packages for version 1.16 of the Intel® EMGD product. It includes information on the following packages:

- Windows* 7 and Windows* Embedded Standard 7
- vBIOS
Table 1. **Affected Documents, Related Documents, and Reference Information**

<table>
<thead>
<tr>
<th>Title</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel® Atom™ Processor E6xx Series Specification Update</td>
<td>457843</td>
</tr>
<tr>
<td>Intel® Atom™ Processor E6xx Series External Design Specification</td>
<td>433303</td>
</tr>
<tr>
<td>Intel® Embedded Media and Graphics Driver and Video BIOS User’s Guide</td>
<td>472133</td>
</tr>
<tr>
<td>VESA BIOS Extensions/Display Data Channel Standard, available at the following website: <a href="http://www.vesa.org/public/VBE/VBEDDC11.PDF">http://www.vesa.org/public/VBE/VBEDDC11.PDF</a></td>
<td>N/A</td>
</tr>
<tr>
<td>VESA BIOS Extension (VBE) Core Functions Standard Version 3.0, available at the following website: <a href="http://www.vesa.org/public/VBE/vbe3.pdf">http://www.vesa.org/public/VBE/vbe3.pdf</a></td>
<td>N/A</td>
</tr>
</tbody>
</table>

This document provides information on the 4F VBE functions, which are supported by the Intel embedded Video BIOS.

Table 2. **Conventions and Terminology**

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Errata</td>
<td>Errata are design defects or errors. These may cause the Intel® Embedded Media and Graphics Driver, EFI Driver, and Video BIOS’ behavior to deviate from published specifications. Hardware and software designed to be used with any given release must assume that all errata documented for that release are present on all devices.</td>
</tr>
</tbody>
</table>
### Summary Tables of Current Product Issue Activity

Table 4 shows the Errata that apply to the Intel® EMGD product. Intel may fix some of the Errata in a future release of the software as noted in Table 3. Table 4 uses the codes listed in Table 3. For known issues related to Display Flickering on Intel® Atom™ Processor E6xx Series (B0-Stepping), please refer to *Display Flickering Sightings and Characterization on Intel® Atom™ Processor E6xx Series (B0-Stepping)* white paper for details.

#### Table 3. Summary Tables Legend

<table>
<thead>
<tr>
<th>Status Indicator</th>
<th>Column</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>Driver Version</td>
<td>Indicates that an erratum exists</td>
</tr>
<tr>
<td>Plan Fix</td>
<td>Status</td>
<td>This erratum may be fixed in a future release.</td>
</tr>
<tr>
<td>Fixed</td>
<td>Status</td>
<td>This erratum has been previously fixed.</td>
</tr>
<tr>
<td>No Fix</td>
<td>Status</td>
<td>There are no plans to fix this erratum.</td>
</tr>
<tr>
<td>TBD</td>
<td>Status</td>
<td>This erratum still under investigation. Status to be determined.</td>
</tr>
</tbody>
</table>

A change bar to the left of a table row indicates an item that is either new or modified from the previous version of this Specification Update.

#### Table 4. Errata Summary (Sheet 1 of 3)

<table>
<thead>
<tr>
<th>ID</th>
<th>Impacted Platform(s)</th>
<th>Package</th>
<th>Title</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>203390</td>
<td>US15W/WP/ WPT</td>
<td>Windows 7</td>
<td>3DMark 06 Game Test 5 or 6 causes system blue screen.</td>
<td>No Fix (Hardware limitation)</td>
</tr>
<tr>
<td>203403</td>
<td>US15W/WP/ WPT</td>
<td>Windows 7</td>
<td>Running D3D DX9 DepthOfField.exe in full HD may cause system blue screen.</td>
<td>No fix (Hardware limitation)</td>
</tr>
<tr>
<td>203407</td>
<td>Atom E6xx, US15W/WP/ WPT</td>
<td>Windows 7</td>
<td>sDVO option disappears from CUI Display Device page when playing video using Windows Media Player 12 or PDVD8.</td>
<td>No Fix</td>
</tr>
<tr>
<td>203416</td>
<td>Atom E6xx</td>
<td>Windows 7</td>
<td>Display flickers when playing H.264 video with Windows Media Player 12.</td>
<td>No fix (Hardware defect)</td>
</tr>
<tr>
<td>203507</td>
<td>Atom E6xx</td>
<td>Windows 7</td>
<td>Playback video using PowerDVD changes the Windows 7 OS Aero mode to Basic mode.</td>
<td>No fix (Third-party defect)</td>
</tr>
<tr>
<td>203513</td>
<td>Atom E6xx, US15W/WP/ WPT</td>
<td>Windows 7</td>
<td>Incorrect DirectX version reported in CUI Information box.</td>
<td>No fix (Third-party defect)</td>
</tr>
<tr>
<td>ID</td>
<td>Platform(s)</td>
<td>Package</td>
<td>Title</td>
<td>Status</td>
</tr>
<tr>
<td>--------</td>
<td>-------------</td>
<td>----------------------</td>
<td>-----------------------------------------------------------------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td>203521</td>
<td>Atom E6xx</td>
<td>Windows 7</td>
<td>Blue flickering may occur when running Direct 3D 9 SDK application in full screen (PostProcess.exe).</td>
<td>No Fix (Third-party defect)</td>
</tr>
<tr>
<td>203584</td>
<td>US1SW/WP/WPT</td>
<td>Windows 7</td>
<td>VC-1 AP@L3, H.264, and MPEG-2 video may lag on higher display resolutions using PDVD8 full screen mode.</td>
<td>No fix (Hardware limitation)</td>
</tr>
<tr>
<td>203590</td>
<td>Atom E6xx,</td>
<td>Windows 7</td>
<td>Wallpaper is not shown in Extended display when set using Windows Properties.</td>
<td>No Fix (Third-party defect)</td>
</tr>
<tr>
<td></td>
<td>US1SW/WP/WPT</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>203600</td>
<td>Atom E6xx</td>
<td>Windows 7</td>
<td>3DMark03 GT1-Wings of Fury display flickers with Single display setup.</td>
<td>No Fix (Third-party defect)</td>
</tr>
<tr>
<td>203602</td>
<td>Atom E6xx,</td>
<td>Windows 7</td>
<td>Some OGL Mesa Demo applications fail to work correctly when running on Windows 7 Pro.</td>
<td>No Fix</td>
</tr>
<tr>
<td></td>
<td>US1SW/WP/WPT</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>203613</td>
<td>US1SW/WP/WPT</td>
<td>Windows 7</td>
<td>sDVO-CH7308 display becomes intermittently blank when changing to 1024x768 resolution.</td>
<td>TBD</td>
</tr>
<tr>
<td>203619</td>
<td>Atom E6xx,</td>
<td>Windows 7</td>
<td>Display Corruption when running 3DMark06 &quot;GT1-Return To Proxycon&quot;.</td>
<td>No Fix (Third-party defect)</td>
</tr>
<tr>
<td></td>
<td>US1SW/WP/WPT</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>203653</td>
<td>Atom E6xx,</td>
<td>Windows 7</td>
<td>Error pop up appears when running DirectX 9.0 SDK application in full screen with rotated and Aero modes on 19x10 resolution monitor.</td>
<td>No Fix (Hardware limitation)</td>
</tr>
<tr>
<td></td>
<td>US1SW/WP/WPT</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>203756</td>
<td>Atom E6xx</td>
<td>Windows 7</td>
<td>sDVO-SI1364 display corruption may occur with color correction set to minimum followed by hibernate mode.</td>
<td>TBD</td>
</tr>
<tr>
<td>203808</td>
<td>Atom E6xx</td>
<td>Windows 7</td>
<td>Not able to boot into Windows when using E620/E620T 0.6 GHz SKU with EMGD1.8 Gold build 2025.</td>
<td>No Fix (OS limitation)</td>
</tr>
<tr>
<td>204199</td>
<td>Atom E6xx</td>
<td>Windows Embedded Standard 7</td>
<td>Burn In Pro V6.0 and V7.0 test forced system crash and reboot.</td>
<td>TBD</td>
</tr>
<tr>
<td>204339</td>
<td>Atom E6xx</td>
<td>Windows 7</td>
<td>3D Mark 03 application menu resized after test loops finished.</td>
<td>No fix (Third-party defect)</td>
</tr>
<tr>
<td>204494</td>
<td>US1SW/WP/WPT</td>
<td>VBIOS</td>
<td>With Clone mode portorder 24000, the intLVDS shows blank screen when entering CMOS setup.</td>
<td>TBD</td>
</tr>
<tr>
<td>204517</td>
<td>Atom E6xx</td>
<td>Windows 7</td>
<td>Unable to change video format through CUI on a CH7022-S Video or Composite display setup.</td>
<td>TBD</td>
</tr>
<tr>
<td>204665</td>
<td>Atom E6xx</td>
<td>Windows Embedded Standard 7</td>
<td>sDVO-CH7315 display becomes abnormal when display mode is changed to Extended.</td>
<td>No Fix (OS limitation)</td>
</tr>
<tr>
<td>204725</td>
<td>Atom E6xx</td>
<td>Windows 7</td>
<td>Display distorted when running Direct3D 9 Cull application.</td>
<td>TBD</td>
</tr>
<tr>
<td>204735</td>
<td>Atom E6xx</td>
<td>Windows 7</td>
<td>System freeze while running CrystalMark09 D2D application.</td>
<td>TBD</td>
</tr>
<tr>
<td>204800</td>
<td>Atom E6xx</td>
<td>Windows Embedded Standard 7</td>
<td>Error &quot;Display open failed - invalid call&quot; occurs after running 3DMark 03 for long hours (~10hours).</td>
<td>No Fix (Third-party defect)</td>
</tr>
<tr>
<td>204860</td>
<td>Atom E6xx</td>
<td>Windows 7</td>
<td>VBIOS Configuration ID does not match OS configuration ID or vice versa.</td>
<td>No Fix (Third-party defect)</td>
</tr>
</tbody>
</table>
### Table 4. Errata Summary (Sheet 3 of 3)

<table>
<thead>
<tr>
<th>ID</th>
<th>Impacted Platform(s)</th>
<th>Package</th>
<th>Title</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>204875</td>
<td>Atom E6xx</td>
<td>Windows 7</td>
<td>Device lost error message pop up when running 3DMark 06 with loop test.</td>
<td>No Fix (Third-party defect)</td>
</tr>
<tr>
<td>204917</td>
<td>Atom E6xx</td>
<td>Windows 7</td>
<td>After resuming from sleep mode, performing driver uninstallation may cause LVDS screen to black out.</td>
<td>TBD</td>
</tr>
<tr>
<td>205048</td>
<td>Atom E6xx</td>
<td>Windows 7 Ultimate</td>
<td>Display Attribute page in CUI shows blank with sDVO-CH7036 display setup.</td>
<td>TBD</td>
</tr>
<tr>
<td>205151</td>
<td>Atom E6xx</td>
<td>Windows 7</td>
<td>A block of white pixels appears around double backslash of the url during web page loading with Internet Explorer 8.</td>
<td>TBD</td>
</tr>
<tr>
<td>205172</td>
<td>Atom E6xx</td>
<td>Windows 7</td>
<td>System hangs and TDR/BSOD when running OpenGL Chip demo.</td>
<td>TBD</td>
</tr>
</tbody>
</table>
Errata


Reference #: 203322
Driver: Graphics
Package: Windows 7
Resolution: This appears to be an issue caused by Windows Media Player. The WMPlayer.exe event traces show that Video Process Blt events stop occurring, from the analysis the last two frames where never blt. This is a third-party defect that cannot be fixed in the graphics driver.
Status: No Fix (Third-party defect)

2. 3DMark 06 Game Test 5 or 6 causes system blue screen.

Reference #: 203390
Driver: Graphics
Platform: US15W/ WP/WPT
Package: Windows 7
Resolution: To workaround this issue on US15W, there are two possible solutions:

- Start regedit from the command line,
  Go to: HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Control\GraphicsDrivers
  Right-click New .. dword .. enter name: ”TdrLevel” .. double-click .. enter value: ”TdrLevelOff”.
  or

- Start regedit
  Go to: HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Control\GraphicsDrivers
  Right-click New .. dword .. enter name: ”TdrDelay” .. double-click .. enter hex-value: ”00000005”

After you make the changes above, restart the system and then run 3DMark06. After the benchmark finishes and you get the score, remove the changes above and restart your system.
Status: No Fix (Hardware limitation)
3. Running D3D DX9 DepthOfField.exe in full HD may cause system blue screen.
Reference #: 203403
Driver: Graphics
Platform: US15W/WP/WPT
Package: Windows 7
Resolution: When running D3D DX9 DepthOfField.exe with 1920x1080 display resolution on US15W systems, may experience blue screen. This issue has been determined to be a hardware limitation where the GPU may have a limitation in processing large resolution color/depth buffers. This issue cannot be fixed by the graphics driver.
Status: No fix (Hardware limitation)

4. sDVO option disappears from CUI Display Device page when playing video using Windows Media Player 12 or PDVD8.
Reference #: 203407
Driver: Graphics
Package: Windows 7
Resolution: The sDVO option disappears from CUI Display Device while a video is playing. This behavior is seen on all display modes (Single, Clone, and Extended) when playing video using WMP12 or PDVD8.
This is the intended behavior, to prevent mode switching while video is playing and eliminate a media player pop up with an error message.
Status: No Fix

5. Display flickers when playing H.264 video with Windows Media Player 12.
Reference #: 203416
Driver: Graphics
Platform: Atom E6xx
Package: Windows 7
Resolution: This issue occurs on Intel® Atom™ Processor E6XX platform with B0 stepping. Display may flicker when playing video on Single, Clone, or Extended mode with resolution 10x7 or above. This has been determined to be an Intel® Atom™ Processor E6xx hardware defect and the issue cannot be resolved by graphics driver. Consider using B1 stepping as a solution.
Status: No fix (Hardware defect)

6. Playback video using PowerDVD changes the Windows 7 OS Aero mode to Basic mode.
Reference #: 203507
Driver: Graphics
Platform: Atom E6xx
Package: Windows 7
Resolution: When Windows 7 is in Aero mode PowerDVD software changes it to the Basic mode by default upon launch. Please contact CyberLink for more details.
Status: No fix (Third-party defect)
7. **Incorrect DirectX version reported in CUI Information box.**

Reference #: 203513  
Driver: Graphics  
Package: Windows 7  
Resolution: Incorrect DirectX version reported in CUI > Information > System. It is reported as system having a version 10.0 while Windows dxdiag check shows DirectX 11. This may be possibly due to an incorrect value returned by dwDirectXVersionMajor. This issue cannot be fixed by graphics driver. Please contact Microsoft for any possible corrections.  
Status: No fix (Third-party defect)

8. **Blue flickering may occur when running Direct 3D 9 SDK application in full screen (PostProcess.exe).**

Reference #: 203521  
Driver: Graphics  
Platform: Atom E6xx  
Package: Windows 7  
Resolution: Flickering appears to be an expected behavior when the application is using asynchronous flips, which means to “flip immediately.” The application does not check for completeness of blits to the framebuffer to which it is switching and it is requesting the display controller to do the flip before hardware has completed the current blit. This is reason flickering occurs.  
To avoid flickering, the application should check for the blit completeness; for instance, the app can call the GetCurrentScanLine DDI to get the current scan line to which the display is currently blitting. Based on the number returned, the application can perform polling before requesting the next flip operation.  
Status: No Fix (Third-party defect)

9. **VC-1 AP@L3, H.264, and MPEG-2 video may lag on higher display resolutions using PDVD8 full screen mode.**

Reference #: 203584  
Driver: Graphics  
Platform: US15W/ WP/WPT  
Package: Windows 7  
Resolution: PDVD8 does not support Enhanced Video Renderer (EVR) for overlay display on Windows 7. The video frame is rendered to the display through 3D blend function. The video lagging does not occur on Atom E6xx but occurs only on the US15W platform. The issue has been determined to be a US15W GPU limitation where it is running at 200 MHz compared to Atom E6xx’s 400 MHz GPU. This issue cannot be fixed by the graphics driver.  
Status: No fix (Hardware limitation)
10. **Wallpaper is not shown in Extended display when set using Windows Properties.**

Reference #: 203590  
Driver: Graphics  
Package: Windows 7  
Resolution: By pressing the <Windows>-P button or using the Windows Properties to switch to an Extended desktop display configuration, the system may not paint the desktop background of the secondary monitor. This has been determined to be an issue in the OS. Please contact Microsoft for details. At this time the suggested workaround is to select any background other than the Windows 7 default background.  
Status: No Fix (Third-party defect)

11. **3DMark03 GT1-Wings of Fury display flickers with Single display setup.**

Reference #: 203600  
Driver: Graphics  
Platform: Atom E6xx  
Package: Windows 7  
Resolution: Flickering appears to be an expected behavior when the application is using asynchronous flips, which means to “flip immediately.” The application does not check for completeness of blits to the framebuffer to which it is switching and it is requesting the display controller to do the flip before hardware has completed the current blit. This is reason flickering occurs.

To avoid flickering, the application should check for the blit completeness; for instance, the app can call the `GetCurrentScanLine` DDI to get the current scan line to which the display is currently blitting. Based on the number returned, the application can perform polling before requesting the next flip operation.  
Status: No Fix (Third-party defect)

12. **Some OGL Mesa Demo applications fail to work correctly when running on Windows 7 Pro.**

Reference #: 203602  
Driver: Graphics  
Package: Windows 7  
Resolution: When running OGL Mesa Demo test, some of the tests, such as gamma, gearbox, gltestperf and tessdemo, cannot produce correct results. This issue will not be fixed in the graphics driver.  
Status: No Fix
13. **sDVO-CH7308 display becomes intermittently blank when changing to 1024x768 resolution.**

Reference #: 203613  
Driver: Graphics  
Platform: US15W/WP/WPT  
Package: Windows 7  
Resolution: This issue is under investigation and there is no planned workaround at this time.  
Status: TBD

14. **Display Corruption when running 3DMark06 “GT1-Return To Proxycon”.**

Reference #: 203619  
Driver: Graphics  
Package: Windows 7  
Resolution: This appears to be an issue caused by the texture shadows mapping in IMG DDK code. A possible workaround is to disable the hardware shadow mapping in the benchmark settings page.  
Status: No Fix (Third-party defect)

15. **Error pop up appears when running DirectX 9.0 SDK application in full screen with rotated and Aero modes on 19x10 resolution monitor.**

Reference #: 203653  
Driver: Graphics  
Package: Windows 7  
Resolution: This issue occurs on the Atom E6xx B1 platform with configuration of single sDVO display in 90,180 or 270 degree rotated mode. When running the DX9SDK applications, an error message appears “Failed creating the Direct3D device” during full screen mode. This issue happens only in 19x10 or 19x12 resolution with Aero mode. Dx9SDK applications can run in full screen in basic/classic mode. This issue happens on the default graphics driver as well. This issue is caused by hardware memory limitations on rotation mode. The driver needs to create the same size of the desktop surface for the rotation process. The Aero mode requires 32-bit color depth, so in 19x12 or 19x10 resolution, the driver requests a larger memory for the 3D full screen surface which fails to be created. This issue cannot be fixed in the graphics driver.  
Status: No Fix (Hardware limitation)
16. **SDVO-SI1364 display corruption may occur with color correction set to minimum followed by hibernate mode.**

Reference #: 203756  
Driver: Graphics  
Platform: Atom E6xx  
Package: Windows 7  
Resolution: SDVO-SI1364 display corruption may occur after changing the color correction setting to minimum followed by cycling through the hibernate mode and resuming from it. This issue was observed on Crown Bay platform with B1 silicon; it does not occur on B0 silicon platform nor US15W platform. This issue is under investigation and there is no planned workaround at this time.  
Status: TBD  

17. **Not able to boot into Windows when using E620/E620T 0.6 GHz SKU with EMGD1.8 Gold build 2025.**

Reference #: 203808  
Driver: Graphics  
Platform: Atom E6xx  
Package: Windows 7  
Resolution: On the 0.6GHz (E620, E620T) SKU processor, after installing Intel® EMGD and rebooting the system, the system may become stuck at the OS loading page and not be able to boot into Windows.

Note that Intel® EMGD for Windows* 7/Windows* Embedded Standard 7 supported Intel® Atom™ Processor E6xx SKUs include 1.0 GHz (E640), 1.3 GHz (E660) and 1.6 GHz (E680). Intel® EMGD does not support the 0.6 Ghz (E620, E620T) SKU because the minimum system requirement for Microsoft Windows* 7 is 1 GHz 32-bit (x86) processor or above.

As a workaround, you are able to run the installation of Intel® EMGD on the 0.6 GHz processor, however upon system reboot after the driver installation process, the system will boot up in VGA mode with the default graphics driver. Under Device Manager a yellow exclamation (!) may appear on the Intel® Atom™ E6xx Embedded Media and Graphics Controller display adaptor to indicate the driver was not successfully installed.

Status: No Fix (OS limitation)
18. **Burn In Pro V6.0 and V7.0 test forced system crash and reboot.**

Reference #: 204199  
Driver: Graphics  
Platform: Atom E6xx  
Package: Windows Embedded Standard 7  
Resolution: When running Burn in Pro v7 with 2D and 3D test by either sequence/concurrently, the system will reboot or crash.

To work around this issue, there are three possible solutions:

- In HKLM\System\CurrentControlSet\Control\GraphicsDrivers
  - Completely disable TDR - DWORD TdrLevel = 0 or;
  - Increase the time that the OS waits for the GPU - DWORD TdrDelay = 3 (default is 2 seconds, try increasing) or ;
  - Increase the number of TDRs allowed in a given time period (default is 5 TDRs in 60 seconds) - DWORD TdrLimitCount = 10

Status: TBD

19. **3D Mark 03 application menu resized after test loops finished.**

Reference #: 204339  
Driver: Graphics  
Platform: Atom E6xx  
Package: Windows 7  
Resolution: This sighting occurs on 3DMark 03 test loops. After the test loops are finished, the 3D Mark 03 application windows is resized. This issue has been determined to be 3DMark03 application issue that cannot be fixed by the graphics driver. Please contact Futuremark* for more details.

Status: No fix (Third-party defect)

20. **With Clone mode portorder 24000, the intLVDS shows blank screen when entering CMOS setup.**

Reference #: 204494  
Driver: VBIOS  
Platform: US15W/WP/WPT  
Package: VBIOS  
Resolution: This issue is under investigation and there is no planned workaround at this time.

Status: TBD
21. Unable to change video format through CUI on a CH7022-S Video or Composite display setup.

Reference #: 204517
Driver: Graphics
Platform: Atom E6xx
Package: Windows 7
Resolution: With CH7022 S Video or Composite display setup, the Video Standard format option in CUI always defaults to NTSC-M. Changing the option is not possible as it reverts to default when you click Apply. This issue is under investigation and there is no planned workaround at this time.

Status: TBD

22. sDVO-CH7315 display becomes abnormal when display mode is changed to Extended.

Reference #: 204665
Driver: Graphics
Platform: Atom E6xx
Package: Windows Embedded Standard 7, Windows 7
Resolution: This issue occurs when using Window 7 32-bit Professional version and with Aero enabled. When changing the display mode from Single sDVO-CH7315 HDMI display to Extended mode, the system does not paint the desktop background of the secondary monitor properly. This has been determined to be a issue in the OS. Please contact Microsoft for details.

To workaround this issue following these steps:
1. Open RegEdit.
2. Open Find window (Ctrl+F).
3. Check the option box for Values.
4. Search for PortOrder
You should find a key that look something like this:
HKEY_LOCAL_MACHINE\SYSTEM\ControlSet001\Control\Class\{4D36E968-E325-11CE-BFC1-08002BE10318}\0000\ALL\1\General

5. If there is no GdiSettings key create one:
   a. Right-click New DWORD
   b. Name “GdiSettings”
   c. Right-click Modify
   d. Change to 0 for off
   e. Change to 1 for on

---

Or use a slideshow theme for the background.

Status: No Fix (OS limitation)
23. **Display distorted when running Direct3D 9 Cull application.**
Reference #: 204725
Driver: Graphics
Platform: Atom E6xx
Package: Windows 7
Resolution: This issue is under investigation and there is no planned workaround at this time.
Status: TBD

24. **System freeze while running CrystalMark09 D2D application.**
Reference #: 204735
Driver: Graphics
Platform: Atom E6xx
Package: Windows 7
Resolution: This issue appears when booting up the system in single display mode, executing CrystalMark09.exe, clicking on GDI to run the 2D application until it ends, and then running D2D, which causes the system to freeze. This issue is under investigation and there is no planned workaround at this time.
Status: TBD

25. **Error “Display open failed - invalid call” occurs after running 3DMark 03 for long hours (~10 hours).**
Reference #: 204800
Driver: Graphics
Platform: Atom E6xx
Package: Windows Embedded Standard 7, Windows 7
Resolution: 3DMark was developed for single benchmark runs or a few repeated benchmark runs in batch-run mode; it is not recommended for loop test. This issue has been determined to be a third-party defect that cannot be fixed by graphics driver. Please contact Futuremark for more details.
Status: No Fix (Third-party defect)
26. **VBIOS Configuration ID does not match OS configuration ID or vice versa.**

Reference #: 204860  
Driver: Graphics  
Platform: Atom E6xx  
Package: Windows 7  
Resolution: This issue occurs when using AMI* BIOS 0ABTN032 with VBIOS that is configured with multi config ID for LVDS EDIDless panels. When a user selects Config 1 in CMOS Menu- VBIOS flat panel type and then boots into the OS the graphics driver does not load config ID 1. Investigation results show that the system BIOS is not returning the correct value to the VBIOS when INT 15h AX=5F40 is called. The menu index of the user's selection for panel type should be returned in CL when this call returns. However the system BIOS returns the same value (04) each time, irrespective of the user's selection. This appears to be an AMI* BIOS issue that cannot be fixed in graphics driver. Please contact AMI for more details.

For a workaround, configure the VBIOS with single config ID and use different VBIOS, one for each LVDS panel.

Status: No Fix (Third-party defect)

27. **Device lost error message pop up when running 3DMark 06 with loop test.**

Reference #: 204875  
Driver: Graphics  
Platform: Atom E6xx  
Package: Windows 7  
Resolution: There is a known issue with 3DMark 06 when looped multiple times and run over multiple days where the application hangs or closes unexpectedly. This issue has been determined to be 3DMark06 application issue that cannot be fixed by the graphics driver. Please contact Futuremark* for more details.

As a workaround, please avoid or disable any operations such as ACPI events, some services, or applications that have pop-up messages while running the 3DMark application.

Status: No Fix (Third-party defect)

28. **After resuming from sleep mode, performing driver uninstallation may cause LVDS screen to black out.**

Reference #: 204917  
Driver: Graphics  
Platform: Atom E6xx  
Package: Windows 7  
Resolution: This issue is under investigation and there is no planned workaround at this time.

Status: TBD
29. **Display Attribute page in CUI shows blank with sDVO-CH7036 display setup.**

Reference #: 205048  
Driver: Graphics  
Platform: Atom E6xx  
Package: Windows 7 Ultimate  
Resolution: With CH7036 display setup, the Display Attribute page in CUI shows a blank page. Follow steps described below for a possible workaround.  
1. Run the following command once from an administrator command prompt:  
   c:\Windows\system32>regsvr32.exe igfxsrvc.dll  
2. Check for the system prompt, "the registry is successfully implemented".  
3. Reboot the system.  
4. Run CUI.  
Status: TBD

30. **A block of white pixels appears around double backslash of the url during web page loading with Internet Explorer 8.**

Reference #: 205151  
Driver: Graphics  
Platform: Atom E6xx  
Package: Windows 7  
Resolution: This issue is under investigation and there is no planned workaround at this time.  
Status: TBD

31. **System hangs and TDR/BSOD when running OpenGL Chip demo.**

Reference #: 205172  
Driver: Graphics  
Platform: Atom E6xx  
Package: Windows 7  
Resolution: This issue is under investigation and there is no planned workaround at this time.  
Status: TBD
Issues Closed in Version 1.16

Issues that have been either resolved or for some other reason are no longer considered open in the current software version are included here.

Table 5. Resolved Issues

<table>
<thead>
<tr>
<th>ID</th>
<th>Impacted Platform</th>
<th>Package</th>
<th>Errata</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>204945</td>
<td>Atom E6xx</td>
<td>Windows 7</td>
<td>Plugging in S-Video or Composite connector to CH7022 add card during BIOS boot up may cause system hang on B2 stage.</td>
<td>Fixed</td>
</tr>
</tbody>
</table>