



## BIOS Update Release Notes

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### PRODUCTS: DH61AG (Standard BIOS)

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**BIOS Version 0109 - AGH6110H.86A.0109.2014.0318.1445**

#### About This Release:

- Date: March 19, 2014
- ME Firmware: Ignition SKU 8.1.0.1248
- Integrated Graphics Option ROM: Build 2137 PC 14.34
- LAN Option ROM: Intel(R) Boot Agent PXE GE v1.4.03 PXE 2.1 Build 091

BIOS version 0099 added support for Microsoft Windows 8\*. Due to structural changes in this BIOS version, once a board has been converted to this version or later, it will no longer be possible to downgrade the BIOS to version 0045 or earlier. Attempting a BIOS downgrade to a previous version may fail - the board BIOS will remain at its current version.

If your system's current BIOS version is 0039 through 0045:

1. Update to the transition version 0099.
2. Then update to 0104 or later.

If your system's current BIOS version is 0037 or earlier:

1. You must first update to version 0039.
2. Then update to the transition version 0099.
3. Finally you can update to 0104 or later.

#### New Fixes/Features:

- Fixed issue where system fan runs at full speed and cannot be set.

**BIOS Version 0108 - AGH6110H.86A.0108.2013.1211.1137**

#### About This Release:

- Date: December 11, 2013
- ME Firmware: Ignition SKU 8.1.0.1248
- Integrated Graphics Option ROM: Build 2137 PC 14.34
- LAN Option ROM: Intel(R) Boot Agent PXE GE v1.4.03 PXE 2.1 Build 091

BIOS version 0099 added support for Microsoft Windows 8\*. Due to structural changes in this BIOS version, once a board has been converted to this version or later, it will no longer be possible to downgrade the BIOS to version 0045 or earlier. Attempting a BIOS downgrade to a previous version may fail - the board BIOS will remain at its current version.

If your system's current BIOS version is 0039 through 0045:

3. Update to the transition version 0099.
4. Then update to 0104 or later.

If your system's current BIOS version is 0037 or earlier:

4. You must first update to version 0039.
5. Then update to the transition version 0099.
6. Finally you can update to 0104 or later.

**New Fixes/Features:**

- Fixed issue where Boot Device Priority cannot be changed.
- Fixed issue where Consumer Infrared does not work.
- Implemented WMI interface for RecordLED.

**BIOS Version 0106 - AGH6110H.86A.0106.2013.0509.1441**

**About This Release:**

- Date: May 9, 2013
- ME Firmware: Ignition SKU 8.1.0.1248
- Integrated Graphics Option ROM: Build 2137 PC 14.34
- LAN Option ROM: Intel(R) Boot Agent PXE GE v1.4.03 PXE 2.1 Build 091

BIOS version 0099 added support for Microsoft Windows 8\*. Due to structural changes in this BIOS version, once a board has been converted to this version or later, it will no longer be possible to downgrade the BIOS to version 0045 or earlier. Attempting a BIOS downgrade to a previous version may fail - the board BIOS will remain at its current version.

If your system's current BIOS version is 0039 through 0045:

5. Update to the transition version 0099.
6. Then update to 0104 or later.

If your system's current BIOS version is 0037 or earlier:

7. You must first update to version 0039.
8. Then update to the transition version 0099.
9. Finally you can update to 0104 or later.

**New Fixes/Features:**

- Fixed issue with SATA ports.
- Fixed issue where operating system fails to install.
- Fixed issue where Boot Order will load defaults after pressing F9.
- Implemented Intel default key support.

**BIOS Version 0105 - AGH6110H.86A.0105.2013.0311.1711**

**About This Release:**

- Date: March 11, 2013
- ME Firmware: Ignition SKU 8.1.0.1248
- Integrated Graphics Option ROM: Build 2137 PC 14.34
- LAN Option ROM: Intel(R) Boot Agent PXE GE v1.4.03 PXE 2.1 Build 091

BIOS version 0099 added support for Microsoft Windows 8\*. Due to structural changes in this BIOS version, once a board has been converted to this version or later, it will no longer be possible to downgrade the BIOS to version 0045 or earlier. Attempting a BIOS downgrade to a previous version may fail - the board BIOS will remain at its current version.

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If your system's current BIOS version is 0039 through 0045:

7. Update to the transition version 0099.
8. Then update to 0104 or later.

If your system's current BIOS version is 0037 or earlier:

10. You must first update to version 0039.
11. Then update to the transition version 0099.
12. Finally you can update to 0104 or later.

**New Fixes/Features:**

- Changed the boot priority to HDD first.

<b>BIOS Version 0104 - AGH6110H.86A.0104.2013.0227.1805</b>
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**About This Release:**

- Date: February 27, 2013
- ME Firmware: Ignition SKU 8.1.0.1248
- Integrated Graphics Option ROM: Build 2137 PC 14.34
- LAN Option ROM: Intel(R) Boot Agent PXE GE v1.4.03 PXE 2.1 Build 091

BIOS version 0099 added support for Microsoft Windows 8\*. Due to structural changes in this BIOS version, once a board has been converted to this version or later, it will no longer be possible to downgrade the BIOS to version 0045 or earlier. Attempting a BIOS downgrade to a previous version may fail - the board BIOS will remain at its current version.

If your system's current BIOS version is 0039 through 0045:

9. Update to the transition version 0099.
10. Then update to 0104 or later.

If your system's current BIOS version is 0037 or earlier:

13. You must first update to version 0039.
14. Then update to the transition version 0099.
15. Finally you can update to 0104 or later.

**New Fixes/Features:**

- Fixed issues with UEFI and Secure Boot.
- Fixed issue where video is lost after CPU thermal trip.
- Fixed issue where Hard Disk Drive Password and Master Key Hard Disk Drive Password options are missing in BIOS.
- Fixed issue where User password will be generated again if pressing F9 to load BIOS default values.
- Fixed issue where Overridden Memory Speed is missing in BIOS.
- Fixed High Precision Event Timer issue.
- Fixed issue where Intel® Integrator Toolkit reports error when trying to flash a custom splash screen.
- Fixed issue where BIOS does not support simultaneous dual-screen display.
- Fixed issue where Processor Thermal Trip(32) cannot be cleared.
- Fixed SMBIOS Structures issue.
- Fixed issue where USB3.0 Controller option is missing in BIOS.
- Fixed incorrect warning messages for S.M.A.R.T HDD and Memory Size Decrease.

\*Other names and brands may be claimed as the property of others.

- Fixed issue where events still pause POST when Event logging is disabled.
- Fixed issue where fan information shown in BIOS is incorrect.
- Updated the default values of Primary/Secondary Temperature Input.
- Fixed issue where Keyboard Ready Beep does not work.
- Fixed issue where proposed values cannot be set for Host Clock Frequency.
- Fixed issue where Overridden Processor Turbo Speed is missing in BIOS.
- Fixed issue where HDMI/DisplayPort Audio item is missing in BIOS.
- Fixed incorrect detected Video Device Priority.
- Updated processor support.

<b>BIOS Version 0099 - AGH6110H.86A.0099.2012.1219.1932</b>
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**About This Release:**

- Date: December 19, 2012
- ME Firmware: Ignition SKU 8.0.13.1502
- Integrated Graphics Option ROM: Build 2137 PC 14.34
- LAN Option ROM: Intel(R) Boot Agent PXE GE v1.3.81 PXE 2.1 Build 091

**BIOS version 0099 added support for Microsoft Windows 8\*. Due to structural changes in this BIOS version, once a board has been converted to this version or later, it will no longer be possible to downgrade the BIOS to version 0045 or earlier. Attempting a BIOS downgrade to a previous version may fail - the board BIOS will remain at its current version.**

**If your system's current BIOS version is 0039 through 0045:**

11. Update to the transition version 0039.
12. Then update to 0104 or later.

**If your system's current BIOS version is 0037 or earlier:**

16. You must first update to version 0039.
17. Then update to the transition version 0099.
18. Finally you can update to 0104 or later.

**New Fixes/Features:**

- Transition BIOS to add support for Windows 8\*.

<b>BIOS Version 0045 - AGH6110H.86A.0045.2013.0121.1756</b>
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**About This Release:**

- Date: January 21, 2013
- ME Firmware: Ignition SKU 8.0.13.1502
- Integrated Graphics Option ROM: Build 2137 PC 14.34
- LAN Option ROM: Intel(R) Boot Agent PXE GE v1.3.81 PXE 2.1 Build 091

<b>Warning:</b>
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BIOS version 0039 includes support for 3 <sup>rd</sup> Generation Intel® Core™ processors. Due to structural changes in this BIOS version, once a board has been converted to this version or later, it will no longer
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be possible to downgrade the BIOS to version 0037 or earlier. Attempting a BIOS downgrade to a previous version may fail - the board BIOS will remain at its current version.

To fully enable support for these processors, follow the special BIOS update steps at [Updating the BIOS on 6 Series chipset desktop boards.](#)

**New Fixes/Features:**

- Fixed issue with enabling/disabling LVDS in Intel® Integrator Toolkit.

**BIOS Version 0044 - AGH6110H.86A.0044.2012.1207.1017**

**About This Release:**

- Date: December 7, 2012
- ME Firmware: Ignition SKU 8.0.13.1502
- Integrated Graphics Option ROM: Build 2137 PC 14.34
- LAN Option ROM: Intel(R) Boot Agent PXE GE v1.3.81 PXE 2.1 Build 091

**Warning:**

BIOS version 0039 includes support for 3<sup>rd</sup> Generation Intel® Core™ processors. Due to structural changes in this BIOS version, once a board has been converted to this version or later, it will no longer be possible to downgrade the BIOS to version 0037 or earlier. Attempting a BIOS downgrade to a previous version may fail - the board BIOS will remain at its current version.

To fully enable support for these processors, follow the special BIOS update steps at [Updating the BIOS on 6 Series chipset desktop boards.](#)

**New Fixes/Features:**

- Changed T3 optimization setting to disabled.
- Fixed issue with display in DOS mode.

**BIOS Version 0043 - AGH6110H.86A.0043.2012.0912.1622**

**About This Release:**

- Date: September 12, 2012
- ME Firmware: Ignition SKU 8.0.13.1502
- Integrated Graphics Option ROM: Build 2137 PC 14.34
- LAN Option ROM: Intel(R) Boot Agent PXE GE v1.3.81 PXE 2.1 Build 091

**Notes**

- A BIOS update failure may occur if settings in the Performance page were changed from their default values. Before updating the BIOS on the Intel® Desktop Board, manually record any changes (from default) done on the Performance page so that they can be restored after completing the BIOS update.

**Warning:**

BIOS version 0039 includes support for 3<sup>rd</sup> Generation Intel® Core™ processors. Due to structural changes in this BIOS version, once a board has been converted to this version or later, it will no longer be possible to downgrade the BIOS to version 0037 or earlier. Attempting a BIOS downgrade to a previous version may fail - the board BIOS will remain at its current version.

To fully enable support for these processors, follow the special BIOS update steps at [Updating the BIOS on 6 Series chipset desktop boards.](#)

**New Fixes/Features:**

- Fixed issue where system hangs during POST when certain memory modules are installed.
- Fixed issue where there is no display when choosing panel #8 (1366\*768).

BIOS Version 0042 - AGH6110H.86A.0042.2012.0723.1130

**About This Release:**

- Date: July 23, 2012
- ME Firmware: Ignition SKU 8.0.13.1502
- Integrated Graphics Option ROM: Build 2137 PC 14.34
- LAN Option ROM: Intel(R) Boot Agent PXE GE v1.3.81 PXE 2.1 Build 091

**Notes**

- Some 1333 MHz memory modules configured for dual-channel mode can cause random no-boot situations if used with a 3<sup>rd</sup> Generation Intel® Core™ processor.
- A BIOS update failure may occur if settings in the Performance page were changed from their default values. Before updating the BIOS on the Intel® Desktop Board, manually record any changes (from default) done on the Performance page so that they can be restored after completing the BIOS update.

**Warning:**

BIOS version 0039 includes support for 3<sup>rd</sup> Generation Intel® Core™ processors. Due to structural changes in this BIOS version, once a board has been converted to this version or later, it will no longer be possible to downgrade the BIOS to version 0037 or earlier. Attempting a BIOS downgrade to a previous version may fail - the board BIOS will remain at its current version.

To fully enable support for these processors, follow the special BIOS update steps at [Updating the BIOS on 6 Series chipset desktop boards.](#)

**New Fixes/Features:**

- Fixed issue where updating the BIOS with iFlash does not update the Intel® ME firmware.
- Updated VBIOS to version 2137.
- Updated Intel® ME 8 firmware to version 8.0.13.1502.
- Updated Intel® ME 7 firmware to version 7.1.52.1176.
- Fixed issue where error appears in Device Manager when using a TV tuner card.

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- Fixed USB port auto-play issue.
- Fixed issue where a warning message appears when using a 3<sup>rd</sup> Generation Intel® Core™ processor with Intel® ME firmware version 7.
- Updated processor support.

**BIOS Version 040 - AGH6110H.86A.0040.2012.0524.1818**

**About This Release:**

- Date: May 24, 2012
- ME Firmware: Ignition SKU 8.0.0.1294
- Integrated Graphics Option ROM: Build 2119 PC 14.34
- LAN Option ROM: Intel(R) Boot Agent PXE GE v1.3.81 PXE 2.1 Build 091

**Warning:**

BIOS version 0039 includes support for 3<sup>rd</sup> Generation Intel® Core™ processors. Due to structural changes in this BIOS version, once a board has been converted to this version or later, it will no longer be possible to downgrade the BIOS to version 0037 or earlier. Attempting a BIOS downgrade to a previous version may fail - the board BIOS will remain at its current version.

To fully enable support for these processors, follow the special BIOS update steps at [Updating the BIOS on 6 Series chipset desktop boards.](#)

**New Fixes/Features:**

- Added warning message when CPU power is lower than 65W.
- Added BIOS setup item "All-in-One Chassis" and its functions.
- Fixed issue where turbo boost does not work.
- Fixed issue where certain flat screen panel shows bright line during POST.
- Fixed issue where onboard LAN shows an error when plugging in two wireless LAN cards.
- Removed system reset when finishing a custom EDID Payload.
- Fixed issue where All-in-One Chassis settings get reset when making changes in Maintenance mode.
- Fixed issue where chassis inverter board setting gets reset to default value on next boot.
- Fixed issue in Maintenance Mode where Flat Panel Configuration Changes will show even if locked.
- Changed default value for Integrated Graphics Device to <Always Enable>.
- Changed default value for Screen Brightness to <Neutral>.
- Changed entries under the All-in-One Chassis" menu to <Brightest>.
- Updated Setup to hide Flat Panel Configuration Changes if All-in-One Chassis is set to <None>.
- Updated Setup to hide eDP from the IGD Flat Panel menu.
- Updated IGD Secondary Video Port to <Auto> if any chassis is selected.
- Updated Setup to grey out All-in-One Chassis and IGD Flat Panel if Flat Panel Configuration Changes is locked.

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- Added Flat Panel Configuration Changes on Video page in BIOS setup.

#### **BIOS Version 0039 - AGH6110H.86A.0039.2012.0410.1054**

##### **About This Release:**

- Date: April 10, 2012
- ME Firmware: Ignition SKU 8.0.0.1294
- Integrated Graphics Option ROM: Build 2119 PC 14.34
- LAN Option ROM: Intel(R) Boot Agent PXE GE v1.3.81 PXE 2.1 Build 091

##### **Warning:**

BIOS version 0039 includes support for 3<sup>rd</sup> Generation Intel® Core™ processors. Due to structural changes in this BIOS version, once a board has been converted to this version or later, it will no longer be possible to downgrade the BIOS to version 0037 or earlier. Attempting a BIOS downgrade to a previous version may fail - the board BIOS will remain at its current version.

To fully enable support for these processors, follow the special BIOS update steps at [Updating the BIOS on 6 Series chipset desktop boards.](#)

##### **New Fixes/Features:**

- Updated processor support.
- Fixed issue where screen flashes during any resolution change on LVDS connection.
- Fixed instability issue with VGA resolution.
- Updated VBIOS to version 2119.
- Updated PXE ROM to version 1.3.81 Build 091.
- Fixed issue where fans intermittently spin at full speed at power up.
- Fixed issue where Consumer Infrared (CIR) LED does not light up.
- Fixed issue where system hangs at POST code EB if USB-powered DVDROM has no media.

#### **BIOS Version 0037 - AGH6110H.86A.0037.2012.0319.1743**

##### **About This Release:**

- Date: March 19, 2012
- ME Firmware: Ignition SKU 7.1.40.1161
- Integrated Graphics Option ROM: Build 2113 PC 14.34
- LAN Option ROM: Intel(R) Boot Agent PXE GE v1.3.65 PXE 2.1 Build 089

##### **New Fixes/Features:**

- Fixed issue where consumer infrared (CIR) LED does not light.
- Updated Intel® ME firmware to versions 7.1.40.1161.
- Fixed issue where system fails to boot when "Memory configuration" is set to "Manual - user defined".
- Updated LAN Option Rom to version 1381.
- Fixed issue where optical drive is not detected.
- Added DDR3 low voltage DIMM module support.

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- Disabled Keyboard not found event logging.
- Fixed issue where system hangs when using iFlash2 to update BIOS.

<b>BIOS Version 0033 - AGH6110H.86A.0033.2011.1206.1707</b>
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**About This Release:**

- Date: December 6, 2011
- ME Firmware: Ignition SKU 7.1.13.1088
- Integrated Graphics Option ROM: Build 2113 PC 14.34
- LAN Option ROM: Intel(R) Boot Agent PXE GE v1.3.65 PXE 2.1 Build 089

**New Fixes/Features:**

- Fixed issue where WHQL Single computer display object test fails.
- Implemented Keyboard ready beep frequency.
- Modified the USB help string.
- Updated processor support.
- Fixed issue with lost LVDS screen or LVDS option in maintenance mode.
- Removed 3.3v standby item under Intel® Desktop Utilities.
- Fixed issue where when hiding FSC fan configuration setting through Intel® Integrator Toolkit, the respective settings are locked in BIOS instead of hidden.
- Fixed issue with FSC no proposed value under FSC page.

<b>BIOS Version 0031 - AGH6110H.86A.0031.2011.0802.1111</b>
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**About This Release:**

- Date: August 2, 2011
- ME Firmware: Ignition SKU 7.1.13.1088
- Integrated Graphics Option ROM: Build 2113 PC 14.34
- LAN Option ROM: Intel(R) Boot Agent PXE GE v1.3.65 PXE 2.1 Build 089

**New Fixes/Features:**

- Set Under-Speed Threshold (RPM) range 0 to 32000.
- Updated PnpID for some vBIOS pre-defined type.
- Fixed help text for "BIOS Setup Auto-Entry" string.
- Moved 3.3V standby between +3.3V and Memory VCC from under PCH VCC.
- Set Black-on-White CPU badge instead of White-on-Blue CPU badge.
- Implemented BIOS setup Auto-Entry.
- Fix issue with "Digital Flat Panel" display resolution.
- Rolled back EDID payload filename option.
- Fixed issue where if "IGD Flat Panel" is set to <LVDS> or <eDP>, BIOS shall set the "Integrated Graphics Device" question to <Always Enable>. BIOS shall gray-out "Integrated Graphics Device" question.
- Increased POST time when setting fast boot function.
- Modified Device Locate to "SODIMM1", "SODIMM2" and Back Locator: "Channel A DIMM0", "Channel A DIMM 1".
- Modified Intel® Integrator Toolkit unsupported setup item in map file.
- Fixed issue where Fan Speed is incorrect in auto mode.

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- Fixed issue where standby LED blinking is faster than it should be 1Hz duty-cycle.
- Modified BIOS layout to add C-Status option under BIOS.
- Modified BIOS layout to add +3.3V standby option under BIOS.
- Fixed issue where +3.3V standby has a row now, however the actual value is empty (no reading).
- Fixed issue where BIOS didn't set and gray-out the memory voltage in XMP automatically when users select XMP Profile1 or Profile2.
- Implemented load EDID file under BIOS.
- Fixed issue where monitor doesn't wake from initial keyboard or mouse activity that resume from s3.
- Updated Intel® ME firmware to 7.1.13.1088.
- Updated processor support.
- Hid "IGD Primary Video" when "IGD Flat Panel" is eDP or LVDS.
- Fixed issue where PCIE slot information doesn't match BIOS Spec 1.83.
- Fixed CPU badge issue.
- Fixed LVDS/eDP item - load default when setting Pre-defined.
- Moved "Memory Speed" under "L2 Cache RAM/L3 Cache RAM".
- Removed ASCII board layout.
- Fixed issue where system does not display panel backlight lamp with graphics driver version 2372.
- Implemented BIOS auto loading XMP voltage information and auto setting it.
- Fixed issue where operating system hangs when setting USB optimization to Enable.
- Fixed issue where system can't show burn ROM information when into power button recovery mode.
- Fixed issue where USB keyboard and mouse can't work normally under DOS after installing mouse driver.
- Fixed issue where no dialog box is displayed to enter user password.

<b>BIOS Version 0023 - AGH6110H.86A.0023.2011.0525.1914</b>
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**About This Release:**

- May 25, 2011
- ME Firmware: Ignition SKU 7.1.10.1065
- Integrated Graphics Option ROM: Build 2113 PC 14.34
- LAN Option ROM: Intel(R) Boot Agent PXE GE v1.3.65 PXE 2.1 Build 089

**New Fixes/Features:**

- Initial production BIOS release

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