



BIOS Update Release Notes

PRODUCTS: DH87RL (Standard BIOS)

BIOS Version 0332 - RLH8710H.86A.0332.2018.1026
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About This Release:

- Date: October 26, 2018
- ME Firmware: 9.0.20.1447
- Integrated Graphics Option ROM: Build 2179 PC 14.34
UEFI GOP: 5.0.1034
- SATA RAID Option ROM: v12.0.0.1783
- SATA RAID UEFI driver: v12.5.0.1815
- LAN
Option ROM: v1403 PXE 2.1 Build 091
UEFI Driver: 5.1.00
- Visual BIOS: v2.2.5

New Fixes/Features:

- Updated CPU Microcode (Security Advisory-00115).

BIOS Version 0331 - RLH8710H.86A.0331.2018.0327.1252

About This Release:

- Date: March 27, 2018
- ME Firmware: 9.0.20.1447
- Integrated Graphics:
 - Option ROM: Build 2179 PC 14.34
 - UEFI GOP: 5.0.1034
- SATA RAID Option ROM: v12.0.0.1783
- SATA RAID UEFI driver: v12.5.0.1815
- LAN:
Option ROM: v1403 PXE 2.1 Build 091
UEFI Driver: 5.1.00
- Visual BIOS: v2.2.5

New Fixes/Features:

- Updated CPU Microcode (Security Advisory-00088)

BIOS Version 0330 - RLH8710H.86A.0330.2015.0720.1750

About This Release:

- Date: July 21, 2015
- ME Firmware: 9.0.20.1447
- Memory Reference Code: Based on 1.6.2.00
- Integrated Graphics Option ROM: Build 2179 PC 14.34
UEFI GOP: 5.0.1034
- SATA RAID Option ROM: v12.0.0.1783
- SATA RAID UEFI driver: v12.5.0.1815
- LAN

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Option ROM: v1403 PXE 2.1 Build 091
UEFI Driver: 5.1.00

- Visual BIOS: v2.2.5

This BIOS includes support only for processors launched earlier than April 2014. Refer to <http://processormatch.intel.com> for processors compatible with your Intel® Desktop Board. This site also lists third party motherboards that support the latest Intel processors.

New Fixes/Features:

- Implemented security enhancement solution.

BIOS Version 0327 - RLH8710H.86A.0327.2014.0924.1645

About This Release:

- Date: September 24, 2014
- ME Firmware: 9.0.20.1447
- Integrated Graphics Option ROM: Build 2179 PC 14.34
UEFI GOP: 5.0.1034
- SATA RAID Option ROM: v12.0.0.1783
- SATA RAID UEFI driver: v12.5.0.1815
- LAN
Option ROM: v1403 PXE 2.1 Build 091
UEFI Driver: 5.1.00
- Visual BIOS: v2.2.5

This BIOS includes support only for processors launched earlier than April 2014. Refer to <http://processormatch.intel.com> for processors compatible with your Intel® Desktop Board. This site also lists third party motherboards that support the latest Intel processors.

New Fixes/Features:

- Implemented security enhancements as described in Technical Advisory #1001888.
- Added Post Halt feature.
- Modified watchdog timer warning message.
- Fixed issue where default temperature thresholds are set too low, causing unnecessary alerts in Intel® Desktop Utilities.

BIOS Version 0326 - RLH8710H.86A.0326.2014.0528.1542

About This Release:

- Date: May 28, 2014
- ME Firmware: 9.0.20.1447
- Integrated Graphics Option ROM: Build 2179 PC 14.34
- UEFI GOP: 5.0.1034
- SATA RAID Option ROM: v12.0.0.1783
- SATA RAID UEFI driver: v12.5.0.1815
- LAN Option ROM: v1403 PXE 2.1 Build 091
- UEFI Driver: 5.1.00
- Visual BIOS: v2.2.5

This BIOS includes support only for processors launched earlier than April 2014. Refer to <http://processormatch.intel.com> for processors compatible with your Intel® Desktop Board. This site also lists third party motherboards that support the latest Intel processors.

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New Fixes/Features:

- Enhanced the protection of certain UEFI variables as described in Intel Security Advisory INTEL-SA-00038.

BIOS Version 0325 - RLH8710H.86A.0325.2014.0417.1800

About This Release:

- Date: April 16, 2014
- ME Firmware: 9.0.20.1447
- Integrated Graphics Option ROM: Build 2179 PC 14.34
UEFI GOP: 5.0.1034
- SATA RAID Option ROM: v12.0.0.1783
- SATA RAID UEFI driver: v12.5.0.1815
- LAN
Option ROM: v1403 PXE 2.1 Build 091
UEFI Driver: 5.1.00
- Visual BIOS: v2.2.5

New Fixes/Features:

- Updated RC to 1.6.2.
- Updated Visual BIOS to version 2.2.5.
- Updated processor support.
- Fixed issue where Linux Steam* OS does not boot.
- Improved EFI variable protection for Setup variable.
- Fixed issue where UEFI operating system cannot be installed.
- Fixed issue where Hard Disk Drive Password length did not match the specification.

BIOS Version 0324 - RLH8710H.86A.0324.2014.0122.1611

About This Release:

- Date: January 22, 2013
- ME Firmware: 9.0.20.1447
- Integrated Graphics Option ROM: Build 2179 PC 14.34
UEFI GOP: 5.0.1034
- SATA RAID Option ROM: v12.0.0.1783
- SATA RAID UEFI driver: v12.5.0.1815
- LAN
Option ROM: v1403 PXE 2.1 Build 091
UEFI Driver: 5.1.00
- Visual BIOS: v2.1.5

New Fixes/Features:

- Updated Fan Speed Control module to improve fan speed behavior.
 - If you have Intel® Desktop Utilities (IDU) installed, the complete fix for this fan speed issue requires that you install this BIOS update and [IDU version 3.2.8 or later](#). If you install this BIOS version but do not install the updated version of IDU, the fans will continue to run at full speed once Windows* is started.
- Improved power button menu functionality.
- Updated VBIOS to version 2179.
- Fixed POST display with certain monitor.

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BIOS Version 0323 - RLH8710H.86A.0323.2013.1204.1726

About This Release:

- Date: December 4, 2013
- ME Firmware: 9.0.20.1447
- Integrated Graphics Option ROM: Build 2177 PC 14.34
- UEFI GOP: 5.0.1034
- SATA RAID Option ROM: v12.0.0.1783
- LAN Option ROM: v1403 PXE 2.1 Build 091
- Visual BIOS: v2.1.5

New Fixes/Features:

- Updated Visual BIOS to version 2.1.5.
- Added Hard Disk Pre-Delay setup item.
- Fixed issue where external graphics card shows no video if Legacy Boot is disabled and UEFI is enabled.
- Fixed issue where 1600 MHz memory modules run at 1333 MHz.
- Added Mini-PCIe Slot setup item.

BIOS Version 0322 - RLH8710H.86A.0322.2013.1003.1952

About This Release:

- Date: October 3, 2013
- ME Firmware: 9.0.20.1447
- Integrated Graphics Option ROM: Build 2177 PC 14.34
- UEFI GOP: 5.0.1034
- SATA RAID Option ROM: v12.0.0.1783
- LAN Option ROM: v1403 PXE 2.1 Build 091

New Fixes/Features:

- Updated VBIOS to version 2177.
- Updated GOP to version 5.0.1034.
- Updated Intel® ME firmware to version 9.0.20.1447.
- Updated processor support.
- Changed VT-d support to be dependent on CPU installed.
- Changed DVMT default setting to 32 MB.
- Updated Secure Boot module.
- Fixed issue where folder names are incorrect in F7 update.
- Modified XHCI and EHCI USB port mapping.
- Updated hard drive password length from "2-8" to "2-19".
- Updated settings if CPU does not support Turbo boost Technology:
 - "OCA for Processor" and "Maximum Processor Core Ratio" will gray out.
 - "Intel Turbo Boost Technology" will be set to "disable" and hidden.
 - "Burst Mode Power Limit", "Burst Mode Power Limit (Watts)", "Sustained Mode Time (Seconds)", "Sustained Mode Power Limit (Watts)" will be hidden.
- Updated RAID OPROM to version 12.0.0.1783.
- Fixed issue where the [F3] DISABLE FAST BOOT prompt does not display and system does a BIOS recovery when selecting F3.
- Fixed issue where system does not halt when password is entered incorrectly three times and Ctrl+Alt+Del still works.
- Fixed SATA speed display in Setup boot order menu.

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- Fixed issue where Power LED still blinks when no video is detected even when set to "NO VIDEO DETECTED ERROR BEEPS".
- Changed SATA port display string on the Boot menu.
- Fixed Cooling Assistant bar function.
- Fixed issue where USB3.0 HDD still can be detected even when all USB3.0 ports are set to "No detect".
- Fixed issue where resume with Rapid Start takes too long.
- Fixed issue where system cannot clear TPM encryption in reset mode.

BIOS Version 0320 - RLH8710H.86A.0320.2013.0606.1802

About This Release:

- Date: June 6, 2013
- ME Firmware: 9.0.2.1345
- Integrated Graphics Option ROM: Build 2170 PC 14.34
- UEFI GOP: 5.0.1025
- SATA RAID Option ROM: v12.0.0.1758
- LAN Option ROM: v1403 PXE 2.1 Build 091

New Fixes/Features:

- Updated Visual BIOS to version 2.0.23.
- Fixed issue where customized logo is not saved after BIOS Recovery.
- Improved DMI protection.
- Fixed issue with Boot Block Fault tolerance.
- Fixed issue where PCIe RAID card option ROM text is still displayed after setting Expansion Card Text to "Hide All".
- Fixed issue where F9 loads original defaults instead of defaults set by Intel® Integrator Toolkit (ITK).
- Fixed issue where Cooling Assistant does not work in Visual BIOS.
- Revised Setup item string, [C6/C7 C-state] to [Lowest CPU Idle Power Setting].
- Added XTU improvements.
- Updated processor support.

BIOS Version 0317 - RLH8710H.86A.0317.2013.0426.1724

About This Release:

- Date: April 26, 2013
- ME Firmware: 9.0.2.1345
- Integrated Graphics Option ROM: Build 2170 PC 14.34
- SATA RAID Option ROM: v12.0.0.1758
- LAN Option ROM: v1403 PXE 2.1 Build 091

New Fixes/Features:

- Fixed issue with boot priority in UEFI mode after rebooting from operating system.
- Added support to use Intel® Integrator Toolkit (ITK) Custom Boot Order as Default Boot Order.
- Updated Visual BIOS to version 2.0.20.
- Fixed BIOS Config Menu display strings when secure jumper is removed.
- Updated POST function hotkey display strings.

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- Fixed issue with F3 disable Fast boot function when power button menu is displayed.
- Fixed issue with unsupported password key character warning beep.
- Fixed issue where, if Hard Drive Password Prompt is disabled, BIOS will never prompt for a Hard Drive password unless attempting to boot to a drive with a User Hard Drive Password installed.
- Added SMBUS workaround for cycling issue.
- Improved "C6/C7 state" feature.
- Removed S4 wake support for USB.
- Improved video output.
- Fixed issue where USB port information not match BIOS description.
- Updated reference to Onboard LAN MAC Address in BIOS Setup.
- Fixed issue where "High precision event timer" still appears in Device Manager after disabling it in BIOS.
- Fixed issue where active processor cores cannot be changed in BIOS Setup.
- Fixed issue where values of items which are changed in BIOS are set to default when removing security jumper.
- Fixed issue where BIOS will always generate "Flash update Failed" event log in BIOS when removing security jumper.
- Updated "Fan Usage" options as "PSU Inlet", "PSU Outlet" and "Auxiliary".
- Updated Chipset SATA Controller Configuration as five SATA ports and one eSATA.
- Removed "Ext PCI Graphics" option from "Primary Video Adaptor" page.
- Added "Startup Sound" option.
- Removed "Power Phase LEDs" option from "Onboard Devices".

RLH8710H.86A.0314.2013.0410.1954 Production Candidate BIOS

About This Release:

- Date: April 10, 2013
- ME Firmware: 9.0.2.1345
- Integrated Graphics Option ROM: Build 2170 PC 14.34
- SATA RAID Option ROM: v12.0.0.1758
- LAN Option ROM: v1403 PXE 2.1 Build 091

New Fixes/Features:

- Initial production BIOS release

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