



## BIOS Update Release Notes

### PRODUCTS: DZ87KLT-75K (Standard BIOS)

**BIOS Version 0459 - KLZ8711D.86A.0459.2018.1101**

#### About This Release:

- Date: November 1, 2018
- ME Firmware: 9.0\_1.5M\_9.0.20.1447
- Integrated Graphics
  - Option ROM: Build 2179
  - UEFI Driver: 5.0.1034
- SATA RAID Option ROM: v12.0.0.1783
- LAN
  - Option ROM: v1410 PXE 2.1 Build 092
  - UEFI Driver: 5.1.00
- Visual Bios: 2.2.5 Production Candidate Build
- UEFI revision: 2.3.1

#### New Fixes/Features:

- Updated CPU Microcode (Security Advisory-00115).

**BIOS Version 0458 - KLZ8711D.86A.0458.2018.0329.1136**

#### About This Release:

- Date: March 29, 2018
- ME Firmware: 9.0\_1.5M\_9.0.20.1447
- Integrated Graphics:
  - Option ROM: Build 2179
  - UEFI Driver: 5.0.1034
- SATA RAID Option ROM: v12.0.0.1783
- LAN:
  - Option ROM: v1410 PXE 2.1 Build 092
  - UEFI Driver: 5.1.00
- Visual Bios: 2.2.5 Production Candidate Build
- UEFI revision: 2.3.1

#### New Fixes/Features:

- Updated CPU Microcode (Security Advisory-00088).

**BIOS Version 0457 - KLZ8711D.86A.0457.2015.0713.1319**

#### About This Release:

- Date: July 13, 2015
- ROM Image Checksum: 0x59515121
- ME Firmware: 9.0\_1.5M\_9.0.20.1447
- Memory Reference Code: Based on 1.6.2.0
- Integrated Graphics
  - Option ROM: Build 2179
  - UEFI Driver: 5.0.1034

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

- SATA RAID Option ROM: v12.0.0.1783
- LAN  
Option ROM: v1410 PXE 2.1 Build 092  
UEFI Driver: 5.1.00
- Visual Bios: 2.2.5 Production Candidate Build
- UEFI revision: 2.3.1

**New Fixes/Features:**

- Implemented security enhancement solution.
- Fixed issue where popup menu does not show devices.

**KLZ8711D.86A.0454.2015.0324.1631 Production BIOS**

**About This Release:**

- Date: Mar 24, 2015
- ROM Image Checksum: 0xF330
- ME Firmware: 9.0\_1.5M\_9.0.20.1447
- Memory Reference Code: Based on 1.6.2.0
- Integrated Graphics  
Option ROM: Build 2179  
UEFI Driver: 5.0.1034
- SATA RAID Option ROM: v12.0.0.1783
- LAN  
Option ROM: v1410 PXE 2.1 Build 092  
UEFI Driver: 5.1.00
- Visual Bios: 2.2.5 Production Candidate Build
- UEFI revision: 2.3.1
- Supported Flash Devices:
 

Macronix	MX25L6475E	8MB
WinBond	W25Q64FV	8MB
- Additional Microcode Updates included only in .BIO File:  
M32306C3\_00000017

**New Fixes/Features:**

1. Based on KL0453.
2. Security enhancement  
>> AMI-SMM-v1.

**BIOS Version 0453 - KLZ8711D.86A.0453.2014.1007.1848**

**About This Release:**

- Date: October 7, 2014
- ME Firmware: 9.0\_1.5M\_9.0.20.1447
- Integrated Graphics  
Option ROM: Build 2179  
UEFI Driver: 5.0.1034
- SATA RAID Option ROM: v12.0.0.1783
- LAN  
Option ROM: v1410 PXE 2.1 Build 092  
UEFI Driver: 5.1.00
- Visual Bios: 2.2.5 Production Candidate Build
- UEFI revision: 2.3.1

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

**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.**

**Note:**

BIOS version 0446 added support for Microsoft\* Windows\* 8.1. After updating to version 0446 or later, you will not be able to downgrade to version 0346 or earlier. The following warning message will display: This BIOS is not allowed to downgrade reversion, but system will do reset in 20 seconds automatically.

**New Fixes/Features:**

- Implemented security enhancements as described in Technical Advisory #1001888.
- Added "Suppress Alert Messages At Boot" setup item.
- Improved watchdog timer handling in password checking dialog.

**BIOS Version 0452 - KLZ8711D.86A.0452.2014.0605.0927**

**About This Release:**

- Date: June 5, 2014
- ME Firmware: 9.0\_1.5M\_9.0.20.1447
- Integrated Graphics
  - Option ROM: Build 2179
  - UEFI Driver: 5.0.1034
- SATA RAID Option ROM: v12.0.0.1783
- LAN
  - Option ROM: v1410 PXE 2.1 Build 092
  - UEFI Driver: 5.1.00
- Visual Bios: 2.2.5 Production Candidate Build
- UEFI revision: 2.3.1

**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.**

**Note:**

BIOS version 0446 added support for Microsoft\* Windows\* 8.1. After updating to version 0446 or later, you will not be able to downgrade to version 0346 or earlier. The following warning message will display: This BIOS is not allowed to downgrade reversion, but system will do reset in 20 seconds automatically.

**New Fixes/Features:**

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

**BIOS Version 0451 - KLZ8711D.86A.0451.2014.0501.1134**

**About This Release:**

- Date: May 1, 2014
- ME Firmware: 9.0\_1.5M\_9.0.20.1447
- Integrated Graphics
  - Option ROM: Build 2179
  - UEFI Driver: 5.0.1034

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

- SATA RAID Option ROM: v12.0.0.1783
- LAN  
Option ROM: v1410 PXE 2.1 Build 092  
UEFI Driver: 5.1.00
- Visual Bios: 2.2.5 Production Candidate Build
- UEFI revision: 2.3.1

**Note:**

BIOS version 0446 added support for Microsoft\* Windows\* 8.1. After updating to version 0446 or later, you will not be able to downgrade to version 0346 or earlier. The following warning message will display: This BIOS is not allowed to downgrade reversion, but system will do reset in 20 seconds automatically.

**New Fixes/Features:**

- Updated RC to 1.6.2.
- Updated Visual BIOS to version 2.2.5.
- Updated processor support.
- Fixed issue where memory speed is reset from 1600 to 1333 and system will not boot correctly, with a 3-beep memory error.

<b>BIOS Version 0450 - KLZ8711D.86A.0450.2014.0217.1636</b>
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**About This Release:**

- Date: February 17, 2014
- ME Firmware: 9.0\_1.5M\_9.0.20.1447
- Integrated Graphics  
Option ROM: Build 2179  
UEFI Driver: 5.0.1034
- SATA RAID Option ROM: v12.0.0.1783
- LAN  
Option ROM: v1410 PXE 2.1 Build 092  
UEFI Driver: 5.1.00
- Visual Bios: 2.1.5 Production Candidate Build
- UEFI revision: 2.3.1

**Note:**

BIOS version 0446 added support for Microsoft\* Windows\* 8.1. After updating to version 0446 or later, you will not be able to downgrade to version 0346 or earlier. The following warning message will display: This BIOS is not allowed to downgrade reversion, but system will do reset in 20 seconds automatically.

**New Fixes/Features:**

- Updated fan speed control module.
- Fixed issue that prevented booting and installing some operating systems, such as SteamOS\*.
- Fixed issue where Hard Disk Drive Password length did not match the specification.
- Fix issue where UEFI operating system fails to install.
- Improved EFI variable protection for Setup variable.
- Fixed issue where computer will not boot with XMP memory.
- Modified TCWL MAX value to 10 for XMP Profiles issue.

<b>BIOS Version 0447 - KLZ8711D.86A.0447.2014.0109.1803</b>
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**About This Release:**

- Date: January 9, 2014
- ME Firmware: 9.0\_1.5M\_9.0.20.1447
- Integrated Graphics
  - Option ROM: Build 2179
  - UEFI Driver: 5.0.1034
- SATA RAID Option ROM: v12.0.0.1783
- LAN
  - Option ROM: v1410 PXE 2.1 Build 092
  - UEFI Driver: 5.1.00
- Visual Bios: 2.1.5 Production Candidate Build

**Note:**

BIOS version 0446 added support for Microsoft\* Windows\* 8.1. After updating to version 0446 or later, you will not be able to downgrade to version 0346 or earlier. The following warning message will display: This BIOS is not allowed to downgrade reversion, but system will do reset in 20 seconds automatically.

**New Fixes/Features:**

- Updated Intel® Visual BIOS to version 2.1.5.
- Updated VBIOS to version 2179.
- 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.
- Added Mini-PCIe Slot setup item.
- Added VT-d setup item.
- Improved power button menu function.

<b>BIOS Version 0446 - KLZ8711D.86A.0446.2013.1104.2023</b>
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**About This Release:**

- Date: November 4, 2013
- ME Firmware: 9.0\_1.5M\_9.0.20.1447
- Integrated Graphics Option ROM: Build 2177
- GOP: 5.0.1034
- SATA RAID Option ROM: v12.0.0.1783
- LAN Option ROM: v1410 PXE 2.1 Build 092

**Note:**

BIOS version 0446 added support for Microsoft\* Windows\* 8.1. After updating to version 0446 or later, you will not be able to downgrade to version 0346 or earlier. The following warning message will display: This BIOS is not allowed to downgrade reversion, but system will do reset in 20 seconds automatically.

**New Fixes/Features:**

- Updated flash BIOS warning message.
- Corrected value for Rear Fan2 Under-Speed Threshold.
- Updated Secure Boot module.
- Changed DVMT default setting to 32 MB.
- Modified XHCI and EHCI USB port mapping.
- Fixed issue where Intel® Desktop Utilities value for Fan Sensor 6 (Chassis Outlet Fan) Under-Speed Threshold is 0.

**About This Release:**

- Date: October 23, 2013
- ME Firmware: 9.0\_1.5M\_9.0.20.1447
- Integrated Graphics Option ROM: Build 2177
- GOP: 5.0.1034
- SATA RAID Option ROM: v12.0.0.1783
- LAN Option ROM: v1410 PXE 2.1 Build 092

**New Fixes/Features:**

- Updated processor support.
- Updated VBIOS to version 2177.
- Updated EFI driver to version 5.0.1034
- Updated Intel® ME firmware to version 9.0.20.1447.
- 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 issue where if Supervisor Password is installed and Supervisor Password is not required to continue post when Chassis Intrusion is set to log only.
- Fixed SATA speed display in Setup boot order menu.
- Fixed key issues for Config Mode menu.
- Fixed SATA speed display in Setup boot order menu.
- Fixed key issues for Config Mode menu.
- Fixed issue where Power LED still blinks when no video is detected even when set to "NO VIDEO DETECTED ERROR BEEPS".
- Improved VT-d support.
- Changed VT-d support to be dependent on CPU installed.
- Fixed Fast Boot issue where question still can be selected after the User Password or Hard Disk Drive Password is installed.
- Fixed issue where folder names are incorrect in F7 update.
- Updated hard drive password length from "2-8" to "2-19".
- Updated Cooling page Temperatures item.
- Fixed issue where USB3.0 HDD still can be detected even when all USB3.0 ports are set to "No detect".
- Changed SATA port display string on Boot menu.
- 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.

**About This Release:**

- Date: June 21, 2013
- ME Firmware: 9.0\_1.5M\_9.0.5.1367
- Integrated Graphics Option ROM: Build 2170
- GOP: 5.0.8.1025

- SATA RAID Option ROM: v12.0.0.1783
- LAN Option ROM: v1410 PXE 2.1 Build 092

**New Fixes/Features:**

- Fixed Cooling Assistant bar issue.
- Fixed consumer infrared resource conflict issue.
- Updated Visual BIOS to version 2.0.23
- Fixed issue where custom logo is lost during BIOS Recovery.
- Fixed Boot Block Fault tolerance issue.
- Fixed issue where the ranges of Processor Core Voltage Offset(V), Ring Voltage Offset(V), and Graphics Voltage Offset(V) **are** incorrect.
- Fixed noise issue with HDMI/DP audio when playing music after resuming system from S3.
- Updated Intel® ME firmware to version 9.0.5.1367.
- Fixed standby LED behavior when system resumes from S3.

**BIOS Version 0336 - KLZ8711D.86A.0336.2013.0516.1957**

**About This Release:**

- Date: May 16, 2013
- ME Firmware: 9.0.2.1345
- Integrated Graphics Option ROM: Build 2170
- GOP: 5.0.8.1025
- SATA RAID Option ROM: v12.0.0.1783
- LAN Option ROM: v1410 PXE 2.1 Build 092

**New Fixes/Features:**

- Initial production BIOS release

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