

Flash BIOS update - CD-ROM ISO image version
for ThinkStation P500
Version A4KT73A
Installation README

This package updates the basic input/output system (BIOS) on ThinkStation P500 systems.

BIOS is programming that controls low-level hardware operations, including interactions with diskette drives, hard drives, and the keyboard. The BIOS is stored on a chip. Your computer uses flash BIOS, which can be updated through a program on a flash diskette so that you do not have to replace the BIOS chip to update the BIOS.

Note: Make note of any settings you have changed in the BIOS Configuration Utility. These settings may have to be re-entered after updating the BIOS.

Print this file so that you can refer to it during the installation.

Important Note

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Installing this update involves creating a BIOS flash CD and running the flash program from the CD. You must have access to a CD-R or CD-RW drive and CD-R software which is capable of creating a CD from an ISO image.

Downloading the package

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1. Click the file link to download the file from the web page.
2. When prompted, select a drive and directory in which to save the downloaded file.

Create the bootable CD

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Create a CD from the CD ISO file, a4j973usa.iso.

Use your CD-R software's feature for creating a CD from an ISO image; RecordNow! calls this feature "Burn Image". Refer to the help provided with your CD-R software for further assistance.

Installing the package

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1. Close all open applications.
2. Insert the bootable CD into your CD-ROM drive.
3. Shutdown the computer.
4. With the CD still inserted in the CD-ROM drive, power on the system.
5. The current BIOS level on the system is compared to that on the flash update CD. If the levels are the same, or the level on the CD is older than the ROM, a message is displayed stating:

"BIOS ROM file is older than (or same as) BIOS ROM image.

Continue Anyway? (y/n)"

6. The update may take up to 2 minutes. Do not power off or restart the system during this procedure!
7. Wait until you see a message stating that the update has completed successfully.
8. Remove the CD from the CD-ROM drive.
9. Press Enter.

Note:

If your system boots back to a 1962 POST error or displays a picture of a diskette on the screen, enter the Setup utility by pressing F1 during startup and change the Startup options to include your hard drive.

Summary of Changes

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General Information:

A4KTxxA is the binary image level. (BIOS)

NOTE: All changes carry forward. That is, if a change is added in 01, it is also in 02, 03 etc.

A4KT73A

- Fixes an issue "PCH DMI ASPM" still enabled while the "ASPM" item disabled
- Fixes sometimes flash SIO firmware failed.

A4KT72A

- Fixes P3700 with Windows 7 32bit legacy can not resume from S4
- Solve can not find SMBIOS header in F0000 when CSM disable.
- Fixes an issue to correctly list BIOS setting values via WMI

A4KT71A

- Optimize sSATA driver strength for P500.

A4KT70A

- Update RC
- Update Ucode to M6F306F2_0000002E.

A4KT67A

- Fixes Boot device double appears in F12 menu sometimes.
- Support multiple Intel DC750 400GB PCI-e SSD in boot sequence.
- Fixes 0162 error at POST when updating BIOS if current BIOS setup values are changed many times.
- Updates UEFI diagnostic from v02.06.00 to v02.07.02 (F10 function).

A4KT66A

- Fixes garbage characters are shown on screen if PXE boot from F12 menu with 2K monitor.
- Fixes the system can be waked up from S3& S4 via COM modem when disable wake up function.
- Fixes LSI MegaRAID SAS 9364-8i list again when sSATA set to RAID (Mixed Raid with LSI Raid+ Onboard Raid).
- Fixes can't wake up at 2015-03-01 00:00:00 when setting wake up on alarm time.
- Fixes can't clear mhdP via WMI

A4KT65A

- Fixes hang up issue after update from A4KT62A or older on some special configuration machines.

A4KT64A

- Fixes Legacy Linux S3 resume fail caused by last version(AxKT63A).
- Enhances the security that defined in AMI_Aptio_5.x_SMM_Bad_BAR_Protection.docx
- Patches for the issue the M.2 SSD preload UEFI OS fail in Legacy mode
- Adjust WMI for USB items and ASPM/AES items
- Patches for OA2 active fail if update from version AxKT58A

A4KT63A

- Enhances S3 security with updating BootScriptHide_00 module and Linux related part.
- Patches for P3700 S3/S4 resume.
- Implement TERA1200_and_TERA2200_PCoIP_BIOS_Requirements SPEC to patch for Teredici card S4 resume.
- Fixes S3 resume fail with blackscreen if HDD password set.
- Enables AES feature of CPU in BIOS setup

A4KT62A

- Gray out CSM setup item when set OS optimized to enable.
- Updates UefiDiagnostic from v02.04.02 to v02.06.00.
- Updates thermal tables.
- Fixes some bios items can not be modified through WMI.

A4KT61A

- Always to arrange below 4G memory space to the active video card.
- Fixes can not boot Intel NVMe device on BIOS 60A.

A4KT60A

- Always to arrange below 4G memory space to the active video card.
- Fixes issue that boot to incorrect M.2 SSD after exchange 2 M.2 devices boot sequence.
- Set Extended Sync to enable if Thuban card attached
- Fixes BIOS A4KT57A side effect that system can't be powered off from Win8.1 with Thunderbolt.

A4KT59A

- Reduced Boot time by about 10 seconds.
- Fixes Onboard Raid 1 boot fail if without Keyboard.

A4KT58A

- Patch for SLI ROC Raid card S3 resume BSOD issue.

A4KT57A

- Changes secure boot to disable automatically if CSM enabled
- Support to change MMCFGBase in BIOS setup for 32-bit OS more memory reserving.
- Fixes the issue that there is two IPV6 boot option in F12 menu sometimes
- Patched for LSI ROC Raid card S3 resume BSOD issue
- Removes "Floppy A" message in System Summary when OS optimized set to enabled

A4KT55A

- Removes the limitation to active Video memory mapping below 4G.

A4KT54A

- Correct the GPIO44 setting
- Patch for the USB ODD can't boot with F12 popup menu sometimes
- Recover the issue F11 no function with M.2 SSD as DATA disk in 51A-53A

A4KT53A

- Updates Platform Key.

A4KT52A

- Patch for FUSB.

A4KT51A

- Fixes sometimes power up will hangup 0xb7 on SKHynix Memory(only happened on Montage

Buffer).

- Turn off LAN2 LED if disable LAN2.
- Removes CardReader boot option from STARTUP Menu if disable SD card.
- Fixes Front port malfunction if disable SD card reader in setup
- Fixes POST show 0211 Keyboard Not found if install USB Keyboard on Front USB charging port.
- Fixes sometimes can not boot to USB key when cold boot and insert USB key on Front USB ports.
- Fixes can't find network boot device on boot sequence when Boot Agent from SMC to PXE.

A4KT50A

- Fixes issue that Front Audio LED is ON when disable audio on bios
- Fixes item "Hard Drive Backplane LEDs" no function
- Updates CPU Microcode to ver 29.
- Fixes issue that Can't boot to efi disk when change OSOptimized Default to Enable.
- Fixes issue that Connect 6 thunerbolt devices, devices would not enumerate after Shut down then Power on host.
- Support PCI Lan can wake up from S5.
- Fixes issue that Press F12 can enter to temporary startup device menu when startup device menu prompt to disabled
- Fixes issue that Can't boot from legacy OS HDD with intel AMT GUI remote control
- Fixes issue that USB Key is shown at the Startup Menu when rear USB Port set to 'Disabled'
- Fixes issue that The EC version isn't correct with SMBIOS type 11
- Support M.2 PCIe - SSD active LED
- Fixes issue that POST shows 'Wait REG bit timeout._.config fail' after do clear Diag log data.
- Fixes issue that Front usb port can't detect usb key or usb fdd when cold boot the system.

A4KT49A

- Fixes issue that CPU Cores Enabled can't match real under Intel Xeon E5-2637 v3(QGSP) if specific in setup.
- Adjust Bios setup menu and help message.
- Adjust setup WMI.
- Adjust card reader related functions.

A4KT48A

- Hide multiple language item in setup.

A4KT47A

- Fixes that System stop at Lenovo LOGO when connect usb 4TB HDD with NTFS partition.
- Fixes Sleep and PNP with IO fail on ACPI device.

A4KT46A

- Changes PXE ROM version to 1.5.51.
- Fixes ACPI Logo Test fail caused by 45A.

A4KT45A

- Adjust BIOS setup and WMI.
- Adjust Front FAN error name.
- Patch for the issue Boot menu appears additional item UEFI OS when Vmware OS installed
- Changes setup item "DIAG 7-Segment Mode" default to "Only DIAG Error Code"
- Patch for SMBus read memory SPD fail sometimes

A4KT44A

- Adjust BIOS setup and WMI.
- Updates UefiDiagnostic APP from v02.04.01 to v02.04.02.
- Fixes cover Tamper Activated is fail when remove cover.
- Fixes Fan error string don't match silk print

A4KT43A

- Fixes the issue that Can't find SCSI boot device on boot sequence.
- Fixes the issue that can't use SIO health utility.

- Changes Auto Detect ROC Card Rules and upgrade Pele Fan Control Table 20140727
- Support OEM Activation 3.0 BIOS Implementation Guide 1.3 draft
- Fixed Teredici card related issue

A4KT42A

- Gray out some setup item when login with POP if PAP set.
- Fixes Front USB LED issue in S4/S5
- Removes Nuvoton WMI ACPI code.
- Show "Add an Attempt" item in iSCSI Configuration.

A4KT41A

- Updates CPU microcode to 23.
- Changes XHCI mode default to smart auto.
- AMD Cards be limited below 4G addressing.
- Fixes warm reset become global reset issue.

A4KT40A

- Initial version.

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