## **General Description**

This package contains release **Version 1.3.2.0** of the processor driver, amdk8.sys, with Microsoft<sup>®</sup> digital signature, and release **Version 1.0.0.0** of the AMD Processor Power Management Driver.

- ❖ AMD PowerNow!™ and Cool'n'Quiet™ technologies allow the system to dynamically and automatically select the processor speed, voltage and power combination that match the instantaneous user performance need.
- ❖ The processor driver is compatible with the AMD Athlon™ 64, Mobile AMD Athlon 64, Mobile Sempron™, Sempron™, AMD Turion™ Mobile Technology, AMD Phenom™ and all Opteron™ processors including Quad-Core.
- This software will not run on a system that does not support the AMD PowerNow! or Cool'n'Quiet technologies via specific features of the motherboard and BIOS.

# **Revision History**

#### Installer Version 1.3.2.53- 8/22/07:

 Installer Change – Added the AMDPPM driver to support Quad Core AMD Opteron<sup>™</sup> processors and AMD Phenom<sup>™</sup> processors.

#### <u>Installer Version 1.3.2.6– 9/11/06:</u>

Installer Change – Fixed Provider and Copyright information in localized strings.

### Installer Version 1.3.2.1-6/22/06:

Initial Installshield Revision of 1.3.2.0

#### **Driver Version 1.3.2.0–6/19/06:**

- Driver Change This release fixes an S3/S4 "Resume" event issue introduced in driver v1.3.1.
   Specifically, this driver properly restores the p-state that was in effect at the previous S3/S4 "Suspend" event.
- Known Issues None.

#### **Driver Version 1.3.1.0– 5/11/06:**

- Driver Change This release fixes an S3/S4 "Suspend" issue introduced in driver v1.2.2.
- Known Issues Under power schemes where policy is enforced one (i.e., non-adaptive policy), on a "resume" event, the v1.3.1 driver fails to restore the p-state that was in effect at the corresponding "suspend" event. This condition remains in effect until there is a change in policy, either by a change in power source (AC/DC), or a change in power scheme.
- Impact of Known Issues Either battery life or performance, depending on the expected p-state, compared to the current p-state. For example, resuming at a high p-state, instead of the expected low p-state, would degrade battery life.

### **Driver Version 1.3.0.0-4/14/06:**

Driver Change –Support added for 100Mhz frequency steps when available.

### **Driver Version 1.2.2.0 – 3/09/05:**

- The processor driver supports performance state transitions on the AMD dual-core processor systems.
- Known Issues Under power schemes that enforce adaptive policy (e.g., "Portable Laptop"), and
  under stress conditions that force the processor to make p-state transitions, while at the same
  time the system is attempting to "suspend" (S3/S4 sleep state), the v1.2.2 driver may reach a
  dead-lock condition by attempting a p-state transition while in the midst of the "suspend
  sequence.
- Impact of Known Issues Investigation and testing confirms that the dead-lock condition is very unlikely to occur under normal user scenarios. However, if it does occur, the system will soft-lock (e.g., the system will remain at: "Preparing to Standby..."), and would have to be rebooted.

## **Usage Notes**

- Run Setup.exe for installation wizard.
- Run Setup.exe /s from the command-line console for a silent installation.
- Instructions for enabling Cool'n'Quiet on Windows XP with user accounts that do not have Administrative Rights
  - 1. Log on as Administrator on the Local Machine.
  - 2. Click Start, then Run...
  - 3. Enter Regedt32 into the run dialog box and click Ok.
  - 4. Locate and click the following registry key:

    HKEY\_LOCAL\_MACHINE\Software\Microsoft\Windows\Current\Version\ControlsFolder\PowerCfg\GlobalPowerPolic

    V
  - 5. Right click and from the context menu, click Permissions.
  - 6. Click on "Users" group entry.
  - 7. Click in the Full Control box under the Allow heading and click Ok.
  - 8. Locate and click the next registry key: HKEY\_LOCAL\_MACHINE\Software\Microsoft\Windows\CurrentVersion\ControlsFolder\PowerCfg\PowerPolicies
  - 9. Right click and from the context menu, click Permissions.
  - 10. Click on "Users" group entry.
  - 11. Click in the Full Control box under the Allow heading and click Ok.
  - 12. Close the Registry.
- Verify that users have the right to shut down the system:
  - 1. In Control Panel, double-click Administrative Tools, and then double-click "Local Security Policy..."
  - 2. In the left pane, expand Local Policies and click User Rights Assignment.
  - 3. In the right pane, double-click "Shut down the system".
  - If the Security Setting does not include the "Users" group, click on button to add the "Users" group.
- Making these changes will allow normal users to alter power scheme settings without being added to the Local Administrators group.

# **System Requirements**

Microprocessors supported:

- Any AMD Athlon 64, Sempron, Turion 64, Phenom or Opteron processor with PowerNow! or Cool'n'Quiet enabled processor and appropriate BIOS support.
- \* This software installs and operates under the following operating systems:

  - Microsoft<sup>®</sup> Windows<sup>®</sup> XP 32-bit or x64 Edition Microsoft<sup>®</sup> Windows<sup>®</sup> Server 2003 32-bit or x64 Edition
- \* The following languages are supported:
  - English, Chinese (Simplified and Traditional), Czhech, Danish, Dutch, Finnish, French, German, Greek, Hungarian, Italian, Japanese, Korean, Norwegian, Polish, Portuguese, Spanish, Swedish, Turkish, Arabic, Hebrew.
- KNOWN Windows XP LIMITATIONS: \*
  - "System Properties" reports wrong processor speed. For more information, please refer to the following website: http://support.microsoft.com/default.aspx?scid=kb;en-us;303602
  - The Processor speed may be reported incorrectly in Windows XP. For more information, please refer to the following website: http://support.microsoft.com/default.aspx?scid=kb;en-us;316965
  - If not running ServicePack 2 (SP2), the processor performance state may not be restored to the maximum state if the CPU runs at 100 percent. This problem occurs if the computer is 100 percent busy when the power policy changes. For more information and support options, please refer to the following website: http://support.microsoft.com/?kbid=330512
- **NOTE:** As with all driver installations on Windows®, you need to login as Administrator or \* have administrator rights for your domain login.

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