



## BIOS ENGINEERING

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**DATE:** December 2, 2004  
**PRODUCT:** D875PBZ Standard BIOS

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### P33-0123 (P33, build 0123)

#### About This Release:

December 1, 2004  
BZ87510A.86A.0123.P33.0412011950  
New database, flash 5 and flex BIOS  
UNDI 4.1.16  
Tanacross UNDI 1.2.26

#### New Fixes/Features:

- Fixed intermittent hang issue during AC cycling.

### P32-0120 (P32, build 0120)

#### About This Release:

November 23, 2004  
BZ87510A.86A.0120.P32.0411231258  
New database, flash 5 and flex BIOS  
UNDI 4.1.16  
Tanacross UNDI 1.2.26

#### New Fixes/Features:

- Fixed issue where there is no video after pressing F12 as soon as the keyboard lights blink during POST.
- Fixed issue where there is no video when the AGP Aperture is set to 32MB or less.
- Updated manufacturing default for USB Boot default to Disabled.

### P31-0118 (P31, build 0118)

#### About This Release:

November 8, 2004  
BZ87510A.86A.0118.P31.0411080125  
New database, flash 5 and flex BIOS  
UNDI 4.1.16  
UNDI 1.2.26

#### New Fixes/Features:

- Updated PXE UNDI to v4.1.16 and UNDI to v1.2.26

- Fixed issue where PCI IRQ was not configured correctly for PCI slots
- Fixed issues where SATA drive in Port 0 is undetected when LAN is set to disabled
- Fixed CMOS lock/hide functionality in Intel® Integrator Tool Kit
- Fixed issues with 2X PCI memory and I/O space allocations
- Fixed "DPSD default logo" issue

#### **P30-0112 (P30, build 0112)**

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

October 12, 2004  
BZ87510A.86A.0112.P30.0410120947  
New database, flash 5 and flex BIOS  
UNDI 4.1.10  
UNDI 1.2.10

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

- Fixed PS/2 device drop if user presses reset button during S1 sleep
- Fixed system hang when executing Intel® Integrator Tool Kit in VM86 mode
- Added feature to enable VPD cloning for Intel® Integrator Tool Kit

#### **P27-0106 (P27, build 0106)**

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

June 28, 2004  
BZ87510A.86A.0106.P27.0406281338  
UNDI 4.1.10  
Tanacross UNDI 1.2.10

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

- Added support for latest Intel® processors.
- Fixed issue with Intel® Desktop Control Center and AGP/PCI Burn-in Mode set to non-default value.

#### **P26-0104 (P26, build 0104)**

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

June 21, 2004  
BZ87510A.86A.0104.P26.0406210900  
UNDI 4.1.10  
Tanacross\* UNDI 1.2.10

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

- Updated Intel® Desktop Control Center BIOS support for additional products.

**P25-0102 (P25, build 0102)**

**About This Release:**

June 1, 2004  
BZ87510A.86A.0102.P25.0406011350  
UNDI 4.1.10  
Tanacross\* UNDI 1.2.10

**New Fixes/Features:**

- Add POST beep codes when video card is not detected.
- Added "Wake on PS/2 Mouse from S3" setup option to allow user to Enable/Disable wake from PS/2 Mouse from S3.
- Fixed hang issue with rapid mouse activity when entering S1 or S3

**P24-0100 (P24, build 0100)**

**About This Release:**

April 30, 2004  
BZ87510A.86A.0100.P24.0404301129  
UNDI 4.1.10  
Tanacross\* UNDI 1.2.10

**New Fixes/Features:**

- Fixed issue where Intel® Celeron Badge was not displayed with latest CPU's.
- Fixed hang issue with OEM Splash logo
- Added support for latest Intel® Pentium 4 processor.
- Added Russian, Korean, Simplified Chinese language module support.

**P23-0097 (P23, build 0097)**

**About This Release:**

March 31, 2004  
BZ87510A.86A.0097.P23.0403310944  
UNDI 4.1.10  
Tanacross\* UNDI 1.2.10

**New Fixes/Features:**

- Added USB Disable option in BIOS Setup.
- Added support for latest Intel® Pentium 4 processor.
- Fixed issue where system would hang with MFG Jumper installed.
- Updated system security by increasing length of supervisor and user passwords from 7 to 16 characters and moving the storage location of user and supervisor passwords out of system CMOS.

**P22-0093 (P22, build 0093)**

**About This Release:**

Feb 24, 2004  
BZ87510A.86A.0093.P22.0402241027  
UNDI 4.1.10  
Gb LAN UNDI 1.2.10

**New Fixes/Features:**

- Fixed an issue with FCS (Fast Chip Select) bit settings. This fix ensures that third party utilities display PAT mode as enabled.

**P21-0091 (P21, build 0091)**

**About This Release:**

Jan 29, 2004  
BZ87510A.86A.0091.P21.0401291113  
UNDI 4.1.10  
Tanacross UNDI 1.2.10

**New Fixes/Features:**

- Updated ICH5R option ROM, to Intel(R) RAID for SATA - v3.5.0.3003
- Fixed issue where a 'Disk Read Error Occurred' message was displayed after installing the Intel® Application Accelerator RAID Edition drivers, setting up RAID 0/RAID 1, and rebooting.
- Updated IDCC with T-Control Support.
- Fixed issue where memory timing values were not being displayed correctly in AUTO mode on IDCC terminal page.
- Updated ETK Version in SMBIOS to 1.01

**P20-0089 (P20, build 0089)**

**About This Release:**

Jan 21, 2004  
BZ87510A.86A.0089.P20.0401211121  
New database, flash 5 and flex BIOS  
UNDI 4.1.10  
Tanacross UNDI 1.2.10

**New Fixes/Features:**

- Fixed E7h POST hang issue after Windows restart.

**P19-0087 (P19, build 0087)**

**About This Release:**

Jan 14, 2003  
BZ87510A.86A.0087.P19.0401141106  
New database, flash 5 and flex BIOS  
UNDI 4.1.10

Tanacross UNDI 1.2.10

**New Fixes/Features:**

- Added SMSC Heceta 6 support.
- Added T-Control for future processors.
- Fixed issue where system would not complete POST if video card is not plugged in and a LAN card is present.
- Updated System Configuration Data to production level.

**P18-0083 (P18, build 0083)**

**About This Release:**

December 12, 2003  
BZ87510A.86A.0083.P18.0312121502  
UNDI 4.1.10  
LAN UNDI 1.2.10

**New Fixes/Features:**

- Fixed issue where system would hang at 03h when a FSB400 CPU is used on an ICS952638AF based board.
- Fixed issue where spread turns off when burn-in mode is set to -1% on an ICS952618BF based board.
- Fixed issue where PCI clocks will not turn on if PCI card was plugged in while the board was in S5 state on an ICS952638AF based board.
- Fixed an issue with an OEM manufacturing tool reporting a CMOS checksum error.
- Fixed issue where the Hyper-Threading option does not appear in Intel(r) Integrator Toolkit.
- Added support for Memory Voltage BIOS SETUP question in IDCC.
- Added support for center spread clock mode detection in IDCC.

**P17-0081 (P17, build 0081)**

**About This Release:**

November 24, 2003  
BZ87510A.86A.0081.P17.0311241511  
New database, flash 5 and flex BIOS  
UNDI 4.1.10  
Tanacross UNDI 1.2.10

**New Fixes/Features:**

- BiM ETK Version updated to 2.1
- Fix an issue with Burn-in mode for -300 level boards.
- Fixed issue where entering the "Hardware Monitor screen" in BIOS setup will cause system hang if a certain 3<sup>rd</sup> party IDE Drive controller card is in PCI slot 3 and two IDE drives are attached to the controller.
- Fixed issue where system is unable to PXE boot if a particular 3<sup>rd</sup> party IDE PCI card is installed.

**P16-0081 (P16, build 0076)**

**About This Release:**

October 24, 2003  
BZ87510A.86A.0076.P16.0310241132  
New database, flash 5 and flex BIOS  
UNDI 4.1.10  
LAN UNDI 1.2.10

**New Fixes/Features:**

- Additional IDCC support included.

**P15-0074 (P15, build 0074)**

**About This Release:**

October 23, 2003  
BZ87510A.86A.0074.P15.0310230946  
New database, flash 5 and flex BIOS  
UNDI 4.1.10  
Tanacross UNDI 1.2.10

**New Fixes/Features:**

- Added support for IDCC (Intel Desktop Control Center)
- Added support for new unreleased processors
- Fixed an issue where system would not boot to PXE when a third party 256 MB AGP Card is present
- Fix ECC initialization issue
- Fixed issue where system would not log single or multi-bit ECC errors.
- Added new advanced memory configuration page.
- Fixed issue where PCI clocks do not turn off when no cards installed
- Updated thermal zone trip points.
- Updated system configuration data
- Fix Japanese languages translations.
- Fixed issue where system would POST hang at AFh & 13h intermittently during AC power cycling.
- Added a workaround to boot from OS recovery CD.
- Fixed issue where system would hang at D4h when user enabled the memory timing override (user defined mode)

**P14-0068 (P14, build 0068)**

**About This Release:**

September 16, 2003

BZ87510A.86A.0068.P14.0309162312  
Flash 5 and flex BIOS  
UNDI 4.1.10  
Tanacross UNDI 1.2.10

**New Fixes/Features:**

- Fixed the Blue Screen issue which was seen after a certain amount of OS resets.
- Added enhancement to flash update algorithm.
- Added IDCC fan information.
- Changed display of DDR333 to DDR320 when used with a 800MHz FSB processor.
- Fixed a system hang problem during POST with a Flash USB Flash card reader/writer.
- Fixed an issue where Power Button override when going into S3 caused system to hang on resume.
- Added IDCC Memory Extended Configuration information
- Updated 875 Memory reference code to version 1.4.
- Reclaimed flash space by removing un-needed option ROM code.

**P12-0047 (P12, build 0047)**

**About This Release:**

August 21, 2003  
BZ87510A.86A.0047.P12.0308210130  
New database, flash 5 and flex BIOS  
UNDI 4.1.10  
LAN UNDI 1.2.10

**New Fixes/Features:**

- Added support to boot using future processors.
- Fixed issue where if IFLASH was performed right after VPD area update will cause system to hangs at POST code 55h.
- Fix issue where system will POST hang at 00h after setting manufacturing jumper due to VID been cleared to 00h.

**P11-0045 (P11, build 0045)**

**About This Release:**

August 19, 2003  
BZ87510A.86A.0045.P11.0308191517  
New database, flash 5 and flex BIOS  
UNDI 4.1.10  
LAN UNDI 1.2.10

**New Fixes/Features:**

- Added initial Desktop Control Center support.
- Added Flash5 Phase 2 support.
- Moved BBS area from VPD block to backup block.

- Fixed issue where the PCI slot information silk screen on the board does not match with what is loaded into SMBIOS table.
- Added a work-around for IRQ sharing issue with a hard drive imaging application when in SATA native mode.
- Compressed the hex image to free-up boot block space. Moved Setup Client module to boot block to free-up space for main BIOS.
- Added functionality to flash update the BIOS in runtime using SMI without having to do a reboot to unlock the blocks. Both the methods are now supported and can be invoked from iFlash.
- Fixed two potential issues in boot block code.

#### **P10-0043 (P10, build 0043)**

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

August 15, 2003  
 BZ87510A.86A.0043.P10.0308151001  
 New database, flash 5 and flex BIOS  
 UNDI 4.1.10  
 LAN UNDI 1.2.10

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

- Fixed a system hang issue during POST with a Flash USB Flash card reader/writer.
- Added support to switch the display mode from the Logo to the BIOS text if an Option ROM for a PCI Mass Storage device is being executed.

#### **P09-0041 (P09, build 0041)**

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

July 22, 2003  
 BZ87510A.86A.0041.P09.0307221002  
 New database, flash 5 and flex BIOS  
 UNDI 4.1.10  
 LAN UNDI 1.2.10

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

- Added the Intel(R) ICH5R RAID Option ROM version v3.5.0.2568.
- Changed the note, displayed under Fan Control Configuration, to "The new settings will not take effect until system is completely shut down".
- Enhanced flash update algorithm to fix post code E9 hang issue.
- Intel® 875PE MCH BIOS Specification Update v1.4 & Memory Initialization Reference Code v1.3.
- Updated System Configuration Data
- Added error handling, Flash5 failed message during POST, lockdown the blocks
- Updated NWD F29 system configuration data
- Fixed display burn-in mode warning message during POST.



**P08-0038 (P08, build 0038)**

**About This Release:**

June 24, 2003  
BZ87510A.86A.0038.P08.0306241736  
New database, flash 5 and flex BIOS  
UNDI 4.1.10  
LAN UNDI 1.2.10

**New Fixes/Features:**

- Added the ability to enable center spread-spectrum host clocking via BIOS setup option.
- Fixed issue where Event log failed to clear on a reboot using a custom CMOS utility.
- Addressed an issue where a synthetic stress utility froze due to an compatibility issue with USB legacy support.

**P07-0036 (P07, build 0036)**

**About This Release:**

June 17, 2003  
BZ87510A.86A.0036.P07.0306170845  
New database, flash 5 and flex BIOS  
UNDI 4.1.10  
LAN UNDI 1.2.10

**New Fixes/Features:**

- Display "Processor Fan Speed", "Front Fan Speed", and "Rear Fan Speed" under "Hardware Monitoring" in the "Advanced" screen.
- Made the "RAID Enable/Disable" option a sub selection of the "Enhanced" SATA RAID selection. This means that RAID will only function in Enhanced Mode.
- Added ASF support for LAN
- Added faster ECC initialization support to shorten system POST time.
- Fixed the issue where ICH5 century byte makes system hang at post code 20
- Fixed the issue where boot block failed to recovery when BIOS flash update failed
- Added POST error message on a Flash update failure
- Added table for manual IRQ selection from CMOS setup
- Lowered power consumption of LAN when system is in S5.
- Added text display capability on JPEG/BMP.
- Added UserBinary support.
- Fixed an issue that caused a delay when booting to a floppy after attempting to boot to a non-bootable CD with two SATA drives attached.
- Fixed issue where Windows XP legacy-to-native IDE runtime mode switching was not functioning.
- Fixed issue where Event log fails to clear on a reboot using CMOS utility tool NCMOS.EXE.

**P06-0030 (P06, build 0030)**

**About This Release:**

May 16, 2003  
BZ87510A.86A.0030.P06.0305161505  
New database, flash 5 and flex BIOS  
UNDI 4.1.10  
LAN UNDI 1.2.10

**New Fixes/Features:**

- Fixed compatibility issues with some DDR-400 memory.
- Fixed boot block fault tolerance test failure.
- Fixed multi-bit ECC errors not being logged.
- Fixed hardware monitoring such the rear fan is monitored instead of the VREG fan.
- Improved audible progress tones to indicate BIOS update progress.
- Improved ECC options such that ECC Event logging defaults to disabled when non-ECC memory is installed and automatically enable ECC event logging when ECC memory is installed.
- Fix typo so "MHz" is displayed instead of "Mhz"
- Added fix to address CKE glitch issue during S0 to S3 transition.

**P05-0026 (P05, build 0026)**

**About This Release:**

April 23, 2003  
BZ87510A.86A.0026.P05.0304231448  
New database, flash 5 and flex BIOS  
UNDI 4.1.10  
LAN UNDI 1.2.10

**New Fixes/Features:**

- Updated BIOS support code for Intel ® Pentium 4 Processor with 800MHz system bus.
- Added in ability to flag SPD tolerant DIMM correction in setup with a "\*" (star) after the DIMM slot description.
- Fixed check point C9 hang issue.
- Fixed false memory test post time error message when no failures and when dual channel optimization message needs to appear.
- Fixed the issues with devices changing order in the boot list or being disabled when other devices are removed.
- Added support for Express BIOS Update 2.0.
- Fixed runtime Logo enable/disable issue
- JPEG image support now accessible by some OEMs.
- Fixed floppy disable issues
- Fixed issue where ABSCMOS not work correctly.
- Fixed SMBIOS Memory Data Test failure.

**P04-0023 (P04, build 0023)**

**About This Release:**

April 23, 2003  
BZ87510A.86A.0026.P05.0304231448  
New database, flash 5 and flex BIOS  
UNDI 4.1.10  
LAN UNDI 1.2.10

**New Fixes/Features:**

- Updated memory reference code to revision 1.2
- Resolved issue causing intermittent POST hangs

**P03-0021 (P03, build 0021)**

**About This Release:**

April 5, 2003  
BZ87510A.86A.0021.P03.0304051502  
New database, flash 5 and flex BIOS  
UNDI 4.1.10  
LAN UNDI 1.2.10

**New Fixes/Features:**

- Added language translations for Memory Mode: Single Channel and Dual Channel
- Fixed USB Zip drive emulation
- Enhanced SATA support for certain drives
- Added the ability to recover from non-bootable CD media (ISO9660 format).
- Fixed issue some USB devices cause lockups at boot.
- Added a workaround to ensure SATA drives operate in the correct mode.
- Lowered power consumption of LAN when system is in S5.

**P02-0019 (Production 02, build 0019)**

**Initial Release**