



DPSD BIOS ENGINEERING

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TO: DPSD Business Unit
CC: iPG / DPSD BIOS Engineering
FROM: iPG / DPSD BIOS Engineering
SUBJECT: BN81510A.86A Standard D815BN

About This Release

- BN81510A.86A.0004.P05.0105310952

Features/Errata Fixed in This Release

P05-0004

- Fixed boot failures to the USB LS-120 devices.
- Fixed intermittent boot failures to certain SCSI Host Bus Adapters.
- Added new PXE code (Intel Boot Agent 4.0.17 containing PXE 2.0 build 83).
- Added new Video BIOS (VBIOS 6.2 Version 2313 Intel® 815 Chipset).
- Removed "Wake On LAN" option from the BIOS Setup.
- Added some string translations for foreign languages.
- Fixed issue where memory size is stored when saving Custom Defaults in Setup.
- Fixed issue where passwords are updated when custom defaults are loaded.

P04-0003

- Added new release of PXE code. (Intel Boot Agent 4.0.14 containing PXE build 82).
- Fixed issue where going in and out of S3 Windows* was losing some USB devices connected to certain USB hubs.
- Added code to display an "Invalid Memory Configuration" message at POST if more than four banks of 133MHz SDRAM is installed.
- Added AMI BBS 3.0 and USB boot functionality.
- Added BBS Runtime function support to the BIOS.
- Changed Setup and POST to conform to the INTEL OPSD Password specification.
- Added support for PCI IDE Bus Mastering (DMA) for BIOS INT 13h hard-disk reads and writes on IDE devices that support IDE Bus Mastering.
- Added new external procedures for setup questions for IDE configuration in advanced setup. Informational text on the IDE configuration sub-menu setup screens will now disappear when not appropriate. For instance, the "Configuration Options Selected By BIOS" will disappear when the drive is not found.
- Strings for certain Setup questions were being displayed incorrectly in ABSCMOS.
- Adding support for new Intel processors.
- Fixed issue where the BIOS would report false information in the Extended System Configuration Data (ESCD).

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

- Optimized Option ROM space.
- Correct issue with non-functional PS/2 keyboard and mouse when booting to Win2K or NT4 with unattended start and legacy USB enabled.
- Corrected issues with USB pointing devices not working (Host Controller (HC) 1 and 2) in USB legacy mode.
- North Bridge/South Bridge separation.
- After all ATA/ATAPI devices are initialized, Security Freeze Lock command is issued to all ATA hard disks if the respective device supports Security Mode Feature Set. After this command is executed, the device rejects all other security mode commands until next power cycle. This may help eliminate the possibility of installing password into the devices by any un-authorized entity. This is the default implementation of the Security Mode Feature Set.
- Added support for doing 32-bit IDE PIO mode data transfers inside BIOS INT 13h.
- Allow CTRL, ALT, and SHIFT key states to be preserved throughout POST so that shift states will be available to the OS for Safe Mode entry, bypass startup files.
- Fixed APM so that drives would correctly power down in APM mode.
- Fixed a problem where pressing F10 while in Setup caused "Entering Setup..." to appear on the bottom of the screen.
- USB Keyboard POST issues fixed.
- Fixed yellow bang in device manager when PS/2 devices were missing.
- Fixed issue where the Unattended Start password must first be entered to unlock the keyboard so that the Setup password could be entered. The correct behavior will let the user enter the Setup Password without the need for the Unattended start password upon entrance into setup.
- Modified Maintenance Mode to never enable Unattended Start even if it is enabled in Setup.
- Fixed issue where the system was always reporting 80-conductor IDE cable type (regardless of actual cable type) when certain ATAPI devices were connected as the slave device on an IDE channel.
- Memory count during POST is displayed in the same row where "Checking NVRAM" message is displayed. This is ok for English language but in some other language (e.g. German) the "Checking NVRAM" message is longer than the length of memory count string which is causing garbage on the screen. Removed the checking NVRAM message from POST screen.
- Updated algorithm for dynamic generation of BIOS Copyright date at build time.
- Fixed a problem where an FDC error was displayed during POST if a SCSI/ATA100 card was connected to the system, and the user had never entered setup.
- Corrected problem with SCSI Host Bus Adapter resource conflict in Microsoft Windows* 2000 when using AGP video.
- Resolved an issue with SMBIOS data structure not reporting PCI slot supports SMBus.
- Changed Type 8 SMBIOS structures to correctly reflect internal connectors.
- Fixed a SMBIOS problem where the Type 9 System slot - "current usage" field always showed up as "unknown" instead of "Available"/"In Use" for the AGP slot.
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- Corrected video corruption and system hang when the setup question "Fixed Disk Boot Sector" is set to "Write Protect" and an OS attempts to write the boot sector.

- Fixes appearance of Date and Time in Setup while in User Access View Only mode. Previously Date/Time both appeared to be editable but were not.
- Made "Language" setup item non-editable when user setup access level is set to "View Only".
- Made password entries case-insensitive.
- Fix to setup to enable dynamically Shaded fields.
- Rearranged Power Management Setup Options to clarify under which context each option functions. The Setup Options having to do with power management were often confused so this change is to clarify which options are used under ACPI, which are used under APM, and which are used regardless of power management mode.
- Added core support for the following languages: UK (UK English), AU (Australian English), CA (Canadian French), NL (Dutch), SE (Swedish), DK (Danish), NO (Norwegian), FI (Finnish).
- Added new AC'97 initialization code. This should be used on ICH products which do not support CNR or AMR slots.
- Fixed Ultra DMA timing error for ATA-100 devices in ICH platforms.
- Clock SPD state machine if necessary.
- Removed code to stop and then re-initialize all USB devices before going into Setup.
- Fixed initialization of OPROM area in RAM that corrects an intermittent hang at POST code 13h.
- Fixed an issue where unpopulated DIMM slot is shown as 'Unknown' in type 17 of the SMBIOS structure.
- Fixed a problem where the SMBIOS information for the onboard Audio (On Board Devices Information TYPE 10) always returned "Device status" set to Enabled.
- Corrected memory size reporting with SMBIOS Type 17, Type 19, and Type 20.
- Fixed E8h hang in recovery.

P03-0002

- Updated copyright string.
- Addresses Pentium® III processor E76 Erratum.

P02-0001

- First production Release of the D815BN BIOS

Known Errata with This Release
