PRODUCTS: D410PT, D510MO (Standard BIOS)

BIOS Version 0501 - MOPNV10N.86A.0501.2010.1103.0928

About This Release:
- November 3, 2010
- Integrated Graphics Option ROM: 2036 06/14/2010
- LAN Option ROM:
    - Realtek* PCI Express Gigabit Ethernet Controller Series v2.35 (100614)
    - Realtek PCI Express 10/100M Ethernet Controller Series v1.24 (101007)
    - gPXE 1.0.0

New Fixes/Features:
- Fixed issue where 'Other' shows in processor socket type area when performing CPU Display and SMBIOS Structures test.
- Fixed issue where Intel Precision Cooling items show in Intel® Integrator Toolkit when it is not supported.
- Fixed issue where BIOS Downgrade Flash Protection test fails.
- Disabled IGD when PCI VGA exists and Primary display adapter is set to external PCI Graphics.

Notes:
- BIOS version 0311(MOPNV10J.86A.0311.2010.0802.2346) is the final "10J" BIOS version for LD510MOV, LD510MO and D510MO boards. All subsequent BIOS versions will be "10N" BIOS.
- BIOS version 0400(MOPNV10N.86A.0400.2010.0919.1014) is the transition BIOS for updates from 10J to 10N. To update from 10J BIOS to 10N BIOS, update to version 0400 first. Then update from 0400 to any other subsequent 10N BIOS if needed.
- BIOS version 0400 (updating from 10J to 10N) is supported by any of these BIOS update methods:
    - iFflash2 Update
    - Express BIOS Update
    - F7 Flash Update
    - Recovery Update
- Updates from any previous "10N" BIOS to version 0400 will fail.

BIOS Version 0400 - MOPNV10N.86A.0400.2010.1019.1048

About This Release:
- October 19, 2010
- Integrated Graphics Option ROM: 2036 06/14/2010
- LAN Option ROM:
    - Realtek* PCI Express Gigabit Ethernet Controller Series v2.35 (100614)
    - Realtek PCI Express 10/100M Ethernet Controller Series v1.23 (100728)

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

- o gPXE 1.0.0

New Fixes/Features:
- Enabled transition from 10J BIOS to 10N.
- Fixed issue where UEFI boot fails with USB drive.
- Fixed issue where alarm is not functioning correctly when running TIME_DAY test.
- Updated PXE ROM.
- Fixed issue where COM1 and COM2 are reversed in Device Manager.
- Fixed issue where Device Manager shows extra COM port.
- Fixed issue where beep occurs during POST when there is no error.
- Updated VBIOS to version 2036.

Notes:
- BIOS version 0311(MOPNV10J.86A.0311.2010.0802.2346) is the final "10J" BIOS version for LD510MOV, LD510MO and D510MO boards. All subsequent BIOS versions will be "10N" BIOS.
- BIOS version 0400(MOPNV10N.86A.0400.2010.0919.1014) is the transition BIOS for updates from 10J to 10N. To update from 10J BIOS to 10N BIOS, update to version 0400 first. Then update from 0400 to any other subsequent 10N BIOS if needed.
- BIOS version 0400 (updating from 10J to 10N) is supported by any of these BIOS update methods:
    - o iFflash2 Update
    - o Express BIOS Update
    - o F7 Flash Update
    - o Recovery Update
- Updates from any previous "10N" BIOS to version 0400 will fail.

BIOS Version 0203 – MOPNV10N.86A.0203.2010.0803.1745

About This Release:
- Date: August 3, 2010
- Integrated Graphics Option ROM: 2001 03/01/2010
- LAN Option ROM:
    - o Realtek* PCI Express Gigabit Ethernet Controller Series v2.35 (100614)
    - o Realtek PCI Express 10/100M Ethernet Controller Series v1.22 (100316)
    - o gPXE 1.0.0

New Fixes/Features:
- Fixed issue where PCI graphics cards with onboard PCI-to-PCI bridges are not detected by the system BIOS.
- Fixed issue where all bootable devices except Hard Disk Drive disappear in Intel® Integrator Assistant boot order.
- Fixed issue where CPU Family shows Other Family CPU instead of Atom CPU.
- Fixed issue where Synch string is not shown when DIMM slot is empty.
- Fixed issue where system will not display "NO BOOTABLE DEVICE" when installing the operating system in UEFI mode then setting UEFI boot to Disabled.
- Fixed issue where USB Flash ZIP cannot be controlled by ZIP emulate item.

- Fixed issue where any key of PS/2 keyboard can wake up system if power is lost then reapplied.
- Fixed issue where system will reset when running "Mstress.exe" memory test tool.
- Added 2x or 4x in display of L2 cache size, as appropriate for the processor.
- Updated mini-PCIe to SATA bridge option ROM.

BIOS Version 0196 - MOPNV10N.86A.0196.2010.0629.1555

About This Release:
- June 29, 2010
- Integrated Graphics Option ROM: 2001 03/01/2010
- LAN Option ROM:
  - Realtek* PCI Express Gigabit Ethernet Controller Series v2.35 (100614)
  - Realtek PCI Express 10/100M Ethernet Controller Series v1.22 (100316)
  - gPXE 1.0.0

New Fixes/Features:
- Fixed issue where manual configuration of memory timings will result in system hang.
- Fixed issue where fan intermittently runs at full speed when performing a cold boot.
- Fixed issue where unsupported items appear in map file with Intel® Integrator Toolkit.
- Fixed issue where option ROM of external PCI card cannot run.
- Updated PXE and gPXE ROM to the latest version.
- Fixed issue where removing and then applying AC power causes system to boot when using a PS/2 mouse.
- Fixed issue where system fan speed frequently displays as zero when fan is connected.

BIOS Version 0187 - MOPNV10N.86A.0187.2010.0524.1835

About This Release:
- May 24, 2010
- Integrated Graphics Option ROM: 2001 03/01/2010
- LAN Option ROM:
  - Realtek* PCI Express Gigabit Ethernet Controller Series v2.29 (090630)
  - Realtek PCI Express 10/100M Ethernet Controller Series v1.19 (090810)
  - gPXE 0.9.6

New Fixes/Features:
- Updated the display of USB in BIOS to be a removable group if USB emulation is set to Removable.
- Updated LVDS Configuration settings help text in BIOS setup.
- Added support for mini-PCIe to SATA bridge option ROM.
- Fixed issue where large hard drive size is displayed wrong in BIOS setup.
- Fixed WHQL failure related to memory I/O test.
- Fixed issue where Intel® Integrator Toolkit shows a RAID option of "Configure SATA As" when RAID is not supported.

- Fixed issue where F7 can update BIOS using .BIO file with different OEM version and issue where F7 can update BIOS using CVT/RST file.
- Fixed SMBIOS issue where "DDR2" is shown at empty DIMM instead of "Unknown Dev Type".
- Fixed issue where certain USB CD-ROM cannot be detected.
- Fixed event viewer error: Kernel-Processor-Power error.
- Moved the Int05h, Int17h and Int74h code to E000 Segment in CSM16.
- Fixed the <Pause> key scan code error in CSM16.
- Fixed serial redirection function issue when there is no serial controller in CSM16.
- Fixed allocating legacy memory function error in CSM16.
- Fixed issue where system cannot boot with certain USB drive.
- Removed code for setting CPU temperature offset.

BIOS Version 0178 - MOPNV10N.86A.0178.2010.0331.0947

About This Release:
- March 31, 2010
- Integrated Graphics Option ROM: 2001 03/01/2010
- LAN Option ROM:
  - Realtek* PCI Express Gigabit Ethernet Controller Series v2.29 (090630)
  - Realtek PCI Express 10/100M Ethernet Controller Series v1.19 (090810)
  - gPXE 0.9.6

New Fixes/Features:
- Updated the VBIOS to version 2001.
- Fixed issue where system does not boot with dual boot recovery partition.
- Fixed issue where processor temperature sensing is high above 125° C.
- Fixed issue where system does not boot to FreeDos with CD-ROM.
- Improved legacy USB driver architecture.

BIOS Version 0171 - MOPNV10N.86A.0171.2010.0309.1345

About This Release:
- March 9, 2010
- Integrated Graphics Option ROM: 1933 11/11/2009
- LAN Option ROM:
  - Realtek* PCI Express Gigabit Ethernet Controller Series v2.29 (090630)
  - Realtek PCI Express 10/100M Ethernet Controller Series v1.19 (090810)
  - gPXE 0.9.6

New Fixes/Features:
- Fixed issue where system cannot boot if USB drive with Linux* system is connected.
- Improved workaround for S4 Cycling issue.
- Changed DVMT Memory Size default to 256M.
- Fixed issue where USB CD-ROM without CD inserted cannot be detected.

- Fixed issue where system does not boot DOS from hard drive in PIO mode in CSM16.
- Fixed issue where memory test fails in USB with certain memory test tools.
- Adjusted USB architecture to avoid touching core files.

BIOS Version 0159 - MOPNV10N.86A.0159.2010.0104.1040

About This Release:
- January 4, 2010
- Integrated Graphics Option ROM: 1933 11/11/2009
- LAN Option ROM:
  - Realtek* PCI Express Gigabit Ethernet Controller Series v2.29 (090630)
  - Realtek PCI Express 10/100M Ethernet Controller Series v1.19 (090810)
  - gPXE 0.9.6

New Fixes/Features:
- Fixed issue where there is a long delay during S4 resume or reboot when an audio CD is in the CD/DVD-ROM.
- Fixed issue where WiMAX card in PCIE x1 slot is not detected.
- Fixed issue where 32MB and 64MB options of DVMT Memory Size cannot be selected.
- Fixed issue where system does not boot with USB card reader connected.
- Fixed issue where front panel USB will not be disabled when USB Ports are set as Disable FP USB Header.

BIOS Version 0158 - MOPNV10N.86A.0158.2009.1126.1712

About This Release:
- November 26, 2009
- Integrated Graphics Option ROM: 1933 11/11/2009
- LAN Option ROM:
  - Realtek* PCI Express Gigabit Ethernet Controller Series v2.29 (090630)
  - Realtek PCI Express 10/100M Ethernet Controller Series v1.19 (090810)
  - gPXE 0.9.6

New Fixes/Features:
- Fixed issue where system can be woken from S4 when "Wake on LAN in S5" is Disabled.
- Fixed PXE boot error.
- Fixed INT 15h Function 90h & 91h issue.
- Improved the BCV Device compatibility.
- Fixed the PMM corrupt memory issue.
- Add support for Promise Technology* SATA Card in CSM16.
- Implemented INT 13H Function 04H - disk verify function for USB floppy.
- Fixed issue where you cannot access USB FDD in FDD Image CD.
- Improved the INT 13h compatibility.
- Fixed issue where you cannot access USB Mass Storage in Full DOS.
- Fixed issue where it takes a long time to check CD/DVD media when a non-bootable CD or blank CD is inserted.

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- Added USB CD-ROM Emulation Support.

BIOS Version 0155 – MOPNV10N.86A.0155.2009.1106.0430

About This Release:
- November 6, 2009
- Integrated Graphics Option ROM: 1907 10/07/09
- LAN Option ROM:
    - Realtek* PCI Express Gigabit Ethernet Controller Series v2.29 (090630)
    - Realtek PCI Express 10/100M Ethernet Controller Series v1.19 (090810)
    - gPXE 0.9.6

New Fixes/Features:
- Initial production BIOS release

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