

Intel® Server Board SE7501CW2 BIOS Release v1.03 BIOS Release Notes



Enterprise Platform & Services Marketing

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TO: Intel® Server Board SE7501CW2 customers
SUBJECT: Intel® BIOS Release Notes
BIOS Release #: v1.03

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About This Release

Release # : 1.03
Build Stamp : SE7501CW20.86B.0022.P04.0305150954
Build Date : 15 May 2003
Checksum : E6DD

BIOS Components/Contents

NIC1 PXE Ver. : PXE 2.1 Build 083(WfM 2.0) RPL V1.11, Boot Agent Version 1.1.07
NIC2 PXE Ver. : PXE 2.1 Build 083(WfM 2.0) RPL V2.74., Boot Agent Version 4.1.06
Serial ATA Ver. :
VGA Ver. : ATI* RAGE* XL GR-xlamis3y.109-4.332
BIOS Base : Phoenix* 4.0 release 6.0

Processor stepping(s) supported: Intel® Xeon™ Processors 1.8GHz, 2.0GHz, 2.2Ghz, 2.4GHz, 2.6GHz, 2.8GHz, 3.06GHz for CPUID 0F24h, 0F27h (Front Size Bus 400MHz/533MHz)

Supported functionality in this BIOS

- Multi-Processor Specification (MPS) V1.4
- APIC & PIC modes
- Intel® Xeon™ processors with 400MHz or 533MHz system bus speed, for CPUID 0F24/0F27/0F29 (B0/C1/D1 Stepping)
- Four Registered DIMMs DDR200/DDR266
- Slot1 : PCI-X 133
- Slot2/Slot3: PCI-X 100
- Slot4/Slot5 : PCI 32/33
- USB 1.1 Ports

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- Onboard PCI devices VGA(ATI* Rage* XL with 8MB video memory) / NIC1 (Intel 100 Mb NIC 82550PM) / NIC2 (Intel Gb NIC 82540EM) / Silicon Image* 3112A serial ATA with RAID & Base modes
- PS2 KB/ PS2 MS/COMA/COMB/Parallel/Floppy ports
- ICH3 IDE(ATA 100) primary/secondary channel
- POST code to Port 80h
- Multi-boot support
- BIOS warning messages in English assuming video is available instead of beep codes
- Supporting Hyper-Threading technology
- BIOS support processor Micro-code updates (POST & Runtime)
- Clear CMOS
- BIOS Setup screen
- BIOS POST message
- BIOS Summary screen
- Clear password
- BIOS update under DOS
- Disable onboard devices by BIOS (VGA / NIC1 / NIC2 / USBs)
- Disable PCI device Option ROMs (Slot1/2/3/4/5/onboard Serial ATA)
- Onboard Serial ATA RAID / Base modes detection to show to BIOS setup
- Legacy USB KB/MS
- Error handling for post error code (Event logging to flash ROM)
- ACPI SPCR (Serial Port Console Redirection)
- Clock Spectrum Spread enabled
- OS: Windows* 2000 (ACPI, MPS, PIC), Windows* Server 2003, Windows* XP, Windows NT* 4.0, Linux*
- Memory > 4GB support
- Password on Setup
- Password on Boot
- WOL(Wakeup On LAN) / WOR(Wakeup On Ring) via power button for non-ACPI mode
- ACPI 1.0b(S0,S4,S5)
- Boot without mouse.
- Boot without keyboard.
- BIOS Recovery from legacy & USB1.1 floppy with Video.
- El Torito multi-bootable image support.
- After G3 to "latest / OFF" state.
- Power Switch Disable after POST(ACPI & non-ACPI).
- Single DIMM in slot 1A.

Important Installation/Upgrade Notes

- For Intel® Server Chassis SC1350-E configurations you must first run CW533_1U.EXE utility, before updating to BIOS 1.03.
(<http://support.intel.com/support/motherboards/server/se7501cw2/index.htm>)
 - Copy CW533_1U.EXE to a bootable floppy
 - Execute command CW533_1U.EXE /WCT
 - Choose option (1) to run system fans at full speed

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- CW533_1U.EXE /RCT allows you to read system fan policy.
- Please reboot system for changes to take place.
- Changes are persistent for subsequent BIOS upgrade.
- Update to BIOS 1.03
- Run BIOS.exe to extract phlash16.exe, AUTOEXEC.BAT, OEMPHL.EXE, OPTIONS.BAT, 1.bat, 2.bat and BIOS.wph to a 1.44 floppy diskette.
- Boot the system to pure DOS mode.
- Run A:> 1.bat for auto mode, 2.bat for user mode.
- When BIOS flash is over it will show message and beep, then reboot.
- Plug jumper into “flash ROM boot block protect”(J32 Pin 7-8).
Note: The boot to DOS must be non-HIMEM management environment.

Known Issues/Workarounds

Issues fixed since last release.

- Added support for D-1 stepping of CPU (CPUID = 0F29).
Patch ID=0Fh
Date: 01/23/2003
- Updated support of CPU B0 stepping.
Patch ID=10h → Patch ID=1dh
Date: 07/19/2002 → Date: 01/16/2003
- Fixed defect for WOL failure at Windows* 2000 S5 mode.
- Fixed test string on BIOS set up screen from “Ambience” to “Ambient” for menu.
- Dynamic change “Slot 1 PCI-X 133” to “Slot 1 PCI-X 100” of setup menu, if the PCI slot1 CLK is set to 100MHz .

Features added in this release.

- Added support for Intel® Server Chassis SC1350-E for PCI-X riser card.
- Add system fan control policy. If chassis type is server chassis SC1350-E then disable BIOS fan control and set fan speed to full.
- Provide OEM tool CW533_1U.EXE for change fan control policy by chassis type.
CW533_1U / WCT: set fan control policy.
CW533_1U / RCT: read fan control policy.
- Change maximum CLK of PCI-X slot1 to 100 MHz if the fan control policy is full speed (1-U chassis).
- Utility is required to be run just once for Intel® Server Chassis SC1350-E chassis. For all future BIOS updates, changes for fan policy will be persistent.

Helpful Reference Material

- *Intel® Server Board SE7501CW2 Product Guide.*
- *Intel® Server Board SE7501CW2 TPS.*

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BIOS Recovery Instructions

- The **crisdisk.exe** content:
 - CRISBOOT.BIN** - Boot sector image
 - PHLASH16.EXE** - Execution file to program BIOS image to flash ROM
 - BIOS.WPH** - Actual BIOS image and platform information image
 - MINIDOS.SYS** - Allows the system to boot in crisis recovery mode.
 - MAKEBOOT.EXE** - Creates the boot sector on the crisis recovery diskette.
 - WINCRIS.EXE** - Creates the crisis recovery disk under Windows NT* , Windows* 2000.
 - WINCRIS.HLP** - Help file for WINCRIS.EXE
- Under Windows NT*, Windows* 2000 environment to build crisis recovery diskette as below:
 - *Boot to Windows.*
 - *Execute C:\PHLASH>WINCRIS.EXE*
 - *Follow its prompts to build crisis recovery diskette.*
- *Please follow the steps to force to execute BIOS recovery.*
 - (a) *Auto recovery:*
 - *If ROM checksum is error during POST (boot block), system will automatically perform BIOS recovery.*
 - (b) *User Recovery:*
 - *Power off system.*
 - *Plug jumper to motherboard J32 pin 3-4.*
 - *Insert recovery diskette to floppy*
 - *Power on system.*
 - *System will beep and display onboard video during recovery.*
 - *After no beep and no error message, the recovery is OK.*
 - *Power off system*
 - *Remove jumper from motherboard J32 pin 3-4.*

Safety Notice

**** THE INTERNAL WORKINGS OF SDV AND OEM UNIT CARRY
** HIGH VOLTAGES DESPITE BEING POWERED DOWN BY FRONT PANEL.
**
** IF YOU ARE NOT FAMILIAR WITH THE INTERNALS OF OEM
** OR SDV UNIT YOU MAY WANT TO UNPLUG BOTH POWER CORDS
** TO THE UNIT BEFORE ACCESSING THE LEGACY I/O CARD WHICH
** HAS THE BOOTBLOCK RECOVERY JUMPER.**