

**886LCD50.rom:**

Display block V1.12 added.

Fix for Winbond E version. Set reg F0h to 01 of LDN B & set bit0,1 in HWmon register 04h (As DHG version requires).

**886LCD49.rom:**

PMC chip now supported.

Transcend (DOM) reset fix added.

**886LCD48.rom:**

Add prober drive prefix for drives controlled by RAID.

Now force boot will recognize a RAID ready drive as it is now found as "3M-" (3rd. master).

**886LCD47.rom:**

Fix for freezing problem when using some types of HDD (Maxtor 20GB, Fujitsu MHT2020AT).

**886LCD46.rom:**

Power button fix: When Restore on AC power loss = Always on, the system will power-up even if AfterG3 bit is set.

**886LCD45.rom:**

F11 BBS popup boot menu, control setup added. Can be setup to override Force boot device.

Display block V1.10 added.

Add setup of default control of the BKLTCTL PWM signal.

**886LCD44.rom:**

Any harddrive boot added to force boot options.

**886LCD43.rom:**

Fixed problem with 10 deg temperature offset.

**886LCD42.rom:**

Options for reserve IRQ5 & IRQ7 added, If the LPT setup is conflicting its IRQ will be disabled.

Prevent reverting to the first drive to be disabled when second drive is removed:

- 1) 1 Sata disc, 1 Pata disc connected.
- 2) Default boot order is Pata -> Sata, user changes this to Sata->Pata.
- 3) User removes Pata disc from system.
- 4) System can no longer boot from Sata, reason 1. drive -> Disabled !

Third IDE Master setup will now also serve as force boot order for RAID volumes.

Fix in secure CMOS handling:

Before:

Loading an OEM default image into a newer system will lead to an incorrect eeprom checksum; however the BIOS still showed OEM default as active.

The setup fingerprint was not shown and eeprom default was not actually used.

Users had to manually erase eeprom ("bf epoke c 0") and redo the process.

Now:

The BIOS will revert back to standard secure enable/disable option and overwrite the "bad" image when the user save & exits.

**886LCD41.rom:**

When "Force boot device" is set to Network and Bootrom fails, then try again without requesting key press from the user.

Link speed/status for LAN now displayed in setup.

**886LCD40.rom:**

"Enabled Early" Onboard amplifier option added:

If Enabled the AMP is turned on after boot (default) If Early, bios beeps will be send out as "PC Beep" is routed through the codec.

Problems with DRAM will be announced through AMP regardless of this setting.

Display block V1.08 & VGA bios updated.

**886LCD39.rom:**

Fixed so that the TAB key and exit without save setting will restore to text mode using long splash.

DRAM beep frequency changed to around 2600Hz.

**886LCD38.rom:**

Add Long Splash option with WinXP and Vista selection.

**886LCD37.rom:**

Display Logo2 V21 added.

**886LCD36.rom:**

Fix problem with HDDlock and some hard disks.

**886LCD35.rom:**

Problem with "SMI on OS Ownership Change" sometimes not generating a SMI, causing handoff to OS fail.

Problem seen with "ON Time Boot disk".

Setup for default Mass storage emulation type added.

**886LCD34b.rom:**

Fixed ACPI S3 problem.

**886LCD34.rom:**

KT Hard disk Lock feature added (HDDlock).

Vendor code must be used to activate feature.

**886LCD33.rom:**

When manufacturer string differs from "Kont" in 886LCD32... changed to check for "Kontron Technology"

Option for PCI latency 8 and 16 added.

Via EXT-PCI Rev-B routing corrected.

Seen from the expanded top slot :

Lane A -> Same as base Slot/Lane D,+3 = D

Lane B -> Same as base Slot/Lane A,+3 = A

Lane C -> Same as base Slot/Lane B,+3 = B

Lane D -> Same as base Slot/Lane C,+3 = C

Seen from the expanded top slot :

Lane E -> Same as base Slot/Lane H,+3 = H

Lane F -> Same as base Slot/Lane E,+3 = E

Lane G -> Same as base Slot/Lane F,+3 = F

Lane H -> Same as base Slot/Lane G,+3 = G

**886LCD32.rom:**

SMBIOS type 1 & 2 are now equal containing Kontron board type, part + serial.

When manufacturer string differs from "Kont" the BIOS will not fill any info into that type.

EEPROM info will override Chassis type.

BIOS do not use absolute values for SMBIOS block any longer.

Display block V1.07 added.

GPIO port 4 is now activated by default and still input.

**886LCD31.rom:**

System FAN is now restored when doing a S3.

**886LCD30.rom:**

AMI USB module updated for improved USB floppy support.

**886LCD29.rom:**

PME was always set in DOS and Linux even if it was disabled in the BIOS.

**886LCD28.rom:**

AC Power Loss Restart = On was not supported with Reset signal forced low externally during AC power down.

**886LCD27.rom:**

Fix to support embedded M-system USB boot.  
Otherwise it is considered as a floppy image.

**886LCD26.rom:**

Added RT32 Support (LabVIEW).

**886LCD25.rom:**

Updated AMI USB module added (ver. -2.24.0-11.4) for support of Philips ISP-1520 USB HUB.

**886LCD24.rom:**

BIOS setting: Backlight Signal Inversion default changed to "Disable".  
After a corrupt CMOS, loading BIOS defaults using F1 caused Kontron Defaults to be loaded and not the OEM setup defaults. Problem fixed so Failsafe CMOS settings are now loaded after a corrupt CMOS.  
Fix Primary Master + Primary Slave hard disk type "NOT installed" issue with load Failsafe settings using OEM defaults with no hard disks installed.

Vendor code added for user defined key to default CMOS settings during boot:

"BF epoke 8 01" will setup ESC key to be used.

"BF epoke 8 FF" will set back to normal / no key setup

Common keys :

01	ESC
0F	TAB
1D	Left Ctrl
29	\$/½
3A	Capslock
3B-44	F1-F10
45	NumLock

If running with secure CMOS, the original Failsafe values will be loaded.

If running with OEM defaults, the OEM defaults values will be loaded.

The key must be pressed approx 1 sec. after power on.

**886LCD23.rom:**

Secure CMOS problem on 886LCD22 BIOS solved.

Expansion ROM on Multimedia class PCI add-on cards boards would not run, fixed.

USB 2 hot-plug devices caused problem when BIOS setting set to HiSpeed.

The USB2.0 can not handle IRQ6 via LNKH, so it is fixed by removing that option from PCI routing tables.

PXE GUID is now the Serial + Part number (Kontron numbers).

Add Version 1.06 of display block.

**886LCD22.rom:**



Support for following board versions added:

886LCD-M/mITX:

Board P/N: 5383xxxx and above

Sales P/Ns: 710182-xxxx-R15 and above, 710187-xxxx-R15 and above, 710191-xxxx-R15 and above, 710195-xxxx-R15 and above.

886LCD-M/Flex:

Board P/Ns: 5365xxxx and above

Sales P/Ns: 710180-xxxx-R17 and above, 710184-xxxx-R17 and above.

886LCD-M/ATX:

Board P/Ns: 5392xxxx and above

Sales P/Ns: 710183-xxxx-R14 and above

**IMPORTANT: For above board versions, the BIOS 2.2 is required.**

BIOS version 2.2 is backwards compatible and can be used for all previous board versions.

Extended Hardware Watchdog support added for boards listed above with BIOS 2.2 (BIOS options of 16sec, 38sec, 1min, 2min, 5min, 10min added).

ACPI Wake-on RTC (Real Time Clock) "Day" register fixed to Wake correctly on "Day".

Support for 32byte Microsoft SLP key (System Locked Pre-installation) added.

"Force HDD boot" BIOS option changed to include "Network" option (force network boot). "Force HDD boot" BIOS option renamed to "Force boot device".

Detection routine for ETH2 and ETH3 improved for better support of early PCB versions.

Vendor codes added for specific customer requests.

When OEM defaults are activated, "Load optimal defaults" BIOS option is removed.

Setup Fingerprint added and displayed in BIOS Exit Menu whenever Secure or OEM defaults are activated.

The checksum (Fingerprint) is calculated on BIOS Secure or OEM Setup defaults parameters selected and displayed for validation of BIOS parameters selected on a certain system.

CPU MTRR registers fixed for correct caching of main memory area.

IRQ 6 added to Preferred IRQ menu in the PCI configuration menu.

IRQ reservation support added for assigning a unique IRQ for selected PCI slot.

Latest Display Block added.

Fixed bug with USB Mass Storage Device Configuration/ USB Mass Storage Reset Delay and USB Mass Storage Device Configuration/ Emulation Type not working correctly.

Fixed issue with Video memory setup in BIOS to 1MB will cause 2MB to be assigned.