

**KTGM4533.rom:**

Fixed Secure CMOS problem when P/N replaced by Batch number.

**KTGM4532.rom:**

Added feature LVDS 50% PWM on backlight when LVDS is enabled.

**KTGM4531.rom:**

Improved IRQ support for IEEE controller.

**KTGM4530.rom:**

Improved VIA 1708S control.

**KTGM4529.rom:**

Fixed problem in Extended Memtest + Quickboot.

**KTGM4528.rom:**

Customized version.

**KTGM4527.rom:**

Improved support for Adaptec Raid Card 6805  
Added "Low RPM Fan Range"

**KTGM4526.rom:**

Added LVDS PWM controlled backlight for Win7.

**KTGM4525.rom:**

Improved PEG control.

**KTGM4524.rom:**

Improved Power Button handling when > 4 Sec.

**KTGM4523.rom:**

Added support for RTC resume function.

**KTGM4522.rom:**

(Not used)

**KTGM4521.rom:**

Improved support for PCI Riser card (PCIR-CB03R).

**KTGM4520.rom:**

Fix PCIe problem in BIOS 18 and 19.

**KTGM4519.rom:**

Added support for PCI Riser card (PCIR-CB03R)

**KTGM4518.rom:**

Added option "Fan Minimum Speed".

**KTGM4517.rom:**

Added option "PEG Force X1 Link Width".

**KTGM4516.rom:**

Fix failed booting when CPU temperature is 80 degrees Celsius.  
Added option to disable on-board Firewire.

**KTGM4515.rom:**

Added support for more busses (from 32 to 64).

**KTGM4514.rom:**

Improved support for bridged devices having multi IRQs.  
PCIe routing updated.

**KTGM4513.rom:**

SMDATA/DMI area accessible by BF tool.  
TV-out boot delay increased.  
Updated display block to V0.05.  
DRAM error code directed to Speaker and Line-out.  
Automatic CMOS Default load if required in combination with BIOS upgrade.  
Improved Always Power On stability when using 12V only PSU.

**KTGM4512.rom:**

System Temperature sensor and CPU Temperature sensor offset corrected.

**KTGM4511.rom:**

INTA & INTB on PCIe roothub swapped.

**KTGM4510.rom:**

Added Bootfail retry option.  
Added SMBIOS - DMI type 11.  
Fixed Serial redir name strings.  
Fixed LVDS panel lid status.  
Added support for raw card type G/H (Kingston RAM 1Gb / 2Gb KVR1333D3N9/1G / KVR1066D3N7K2/G4).  
Updated display block to V0.04  
Updated VGA BIOS to version 2052.

**KTGM4509.rom:**

Improved support for Expansion rom on multimedia class boards.

Updated display block to V0.02.

Fix Force boot: "Any Harddrive" no longer allow large USB devices to boot.

When SATA disk is running in AHCI mode or as "Non-raid" disk, then force boot can be controlled like this:

Primary IDE Master = Port 0

Secondary IDE Master = Port 1

5th IDE Master = Port 4

5th IDE Slave = Port 5

**KTGM4508.rom:**

Added support for CAN bus LPC adapter.

**KTGM4507.rom:**

Fixed PCIe X4 reset problem.

**KTGM4506.rom:**

Fixed display of OEM defaults enable scenario.

Added support for Dallas3231 device.

Added Time "set" in standard time & date menu.

Added option for "System Date/Time Backup".

**KTGM4505.rom:** Initial release