

**G.SKILL**

# F2-8500CL5D-2GBPK



The PK Series of G.SKILL F2-8500CL5D-2GBPK is a 2048MByte matched pair kit of DDR2 SDRAM DIMM. This model of memory built with 8 layers PCB provides excellent performance in the Dual-Channel DDR2-based motherboards. It has been tested comprehensively in multiple DDR2 motherboards to ensure compatibility and performance at its rated speed. This memory has been verified to operate at DDR2 1066 with latencies of 5-5-5-15 at 2.0-2.1 VDIMM.

## SPECIFICATIONS

---

- 240-PIN DDR2 SDRAM DIMM
- DDR2 1066 / PC2 8500
- Latencies
  - 5-5-5-15 (CAS-TRCD-TRP-TRAS)
- Voltage 2.0-2.1v
- 2048 Megabytes of DDR2 memory
  - Two matched F2-8500CL5S-1GBPK
- SPD programmed at
  - JEDEC Standard latencies 5-5-5-15 at DDR2 800
- 8 Layers of PCB
- Lifetime Warranty

---

Every module is tested in G.SKILL's factory at the operating speed of DDR2 1066 with latencies 5-5-5-15 at 2.0 VDIMM. However, actual results may vary depending on the overclocking ability of your other computer components. G.SKILL may periodically update the part with new RAM versions of some greater performance. RAM used on the module may change without notice.

F2-8500CL5D-2GBPK has been tested on following motherboards.

Model	Chipset	2DIMM	4DIMM
Abit IP35, IP35-E, IP35-PRO	Intel P35	OK	OK
Abit IX38	Intel X38	OK	OK
Asus P5K Deluxe	Intel P35	OK	OK
Asus Maximus Formula	Intel X38	OK	OK
Asus Striker II Formula	nVidia 780i	OK	OK
Asus P5B Deluxe	Intel P965	OK	OK
Asus Commando	Intel P965	OK	OK
Asus P5B-E	Intel P965	OK	OK
Asus Rampage Formula	Intel X48	OK	OK
eVGA 780i-SLI	nVidia 780i	OK	OK
Gigabyte P35-DS3, EP35-DS3	Intel P35	OK	OK
Gigabyte X38-DS4, X38-DQ6, EX38-DQ6	Intel X38	OK	OK
Gigabyte X48-DQ6	Intel X48	OK	OK

---

G.SKILL does **NOT** recommend to run F2-8500CL5D-2GBPK on following motherboards.

#### Asus P5N-D

(Recommends F2-8000CL5D-2GBPK)

4DIMM on any motherboard with NB nvidia 680i and 650i

(Recommends 2DIMM only)

---

G.SKILL will periodically update the compatible motherboard table. Please check back frequently.  
If you have any question about compatible motherboard, please email to [ustech@gskill.com](mailto:ustech@gskill.com)

# Abit IP35, IP35-E, IP35-PRO BIOS Setting

- For FSB 266 MHz CPU

Phoenix - AwardBIOS CMOS Setup Utility SoftMenu Setup		Item Help
Intel(R) Core(TM)2 Duo CPU E6550 @ 2.33GHz Frequency : 1.86GHz		Menu Level ▶
CPU Operating Speed	User Defined	Select to run the CPU at factory default frequency or by user define
- External Clock	266MHz	
- Multiplier Factor	7 X	
- Estimated New CPU Clock	1866MHz	
- DRAM Speed (CPU:DRAM)	1:2.00 (DDR2-1064)	
- PCI Express Frequency	100MHz	
Voltages Control	Manual	
- CPU Core Voltage	1.3000V	
- DDR2 Voltage	2.05V	
- CPU VTT Voltage	1.2000V	
- ICH 1.50V Voltage	1.50V	
- MCH 1.25V Voltage	1.250V	
- CPU GTLREF	63.0%	
↑↓: Move Enter: Select +/-/PU/PD: Value F10: Save ESC: Exit F1: General Help F5: Previous Values F6: Fail-Safe Defaults F7: Optimized Defaults		

Phoenix - AwardBIOS CMOS Setup Utility Advanced Chipset Features		Item Help
DRAM Timing Selectable By SPD		Menu Level ▶
x - CAS Latency Time (tCL)	Auto	
x - RAS# to CAS# Delay (tRCD)	Auto	
x - RAS# Precharge (tRP)	Auto	
x - Precharge Delay (tRAS)	Auto	
x - Refresh Cycle Time (tRFC)	Auto	
x - Write Recovery Time (tWR)	Auto	
x - Write to Read Delay (tWTR)	Auto	
x - Act to Act Time (tRRD)	Auto	
x - Read to Precharge (tRTP)	Auto	
▶ PCIe Root Port Function	Press Enter	
Init Display First	PCI Slot	
PEG Force X1	Disabled	
↑↓: Move Enter: Select +/-/PU/PD: Value F10: Save ESC: Exit F1: General Help F5: Previous Values F6: Fail-Safe Defaults F7: Optimized Defaults		

- For FSB 333 MHz CPU

Phoenix - AwardBIOS CMOS Setup Utility SoftMenu Setup		Item Help
Intel(R) Core(TM)2 Duo CPU E6550 @ 2.33GHz Frequency : 1.86GHz		Menu Level ▶
CPU Operating Speed	User Defined	Select to run the CPU at factory default frequency or by user define
- External Clock	355MHz	
- Multiplier Factor	7 X	
- Estimated New CPU Clock	2485MHz	
- DRAM Speed (CPU:DRAM)	1:1.50 (DDR2-1064)	
- PCI Express Frequency	100MHz	
Voltages Control	Manual	
- CPU Core Voltage	1.3400V	
- DDR2 Voltage	2.05V	
- CPU VTT Voltage	1.2000V	
- ICH 1.50V Voltage	1.50V	
- MCH 1.25V Voltage	1.250V	
- CPU GTLREF	63.0%	
↑↓: Move Enter: Select +/-/PU/PD: Value F10: Save ESC: Exit F1: General Help F5: Previous Values F6: Fail-Safe Defaults F7: Optimized Defaults		

Phoenix - AwardBIOS CMOS Setup Utility Advanced Chipset Features		Item Help
DRAM Timing Selectable By SPD		Menu Level ▶
x - CAS Latency Time (tCL)	Auto	
x - RAS# to CAS# Delay (tRCD)	Auto	
x - RAS# Precharge (tRP)	Auto	
x - Precharge Delay (tRAS)	Auto	
x - Refresh Cycle Time (tRFC)	Auto	
x - Write Recovery Time (tWR)	Auto	
x - Write to Read Delay (tWTR)	Auto	
x - Act to Act Time (tRRD)	Auto	
x - Read to Precharge (tRTP)	Auto	
▶ PCIe Root Port Function	Press Enter	
Init Display First	PCI Slot	
PEG Force X1	Disabled	
↑↓: Move Enter: Select +/-/PU/PD: Value F10: Save ESC: Exit F1: General Help F5: Previous Values F6: Fail-Safe Defaults F7: Optimized Defaults		

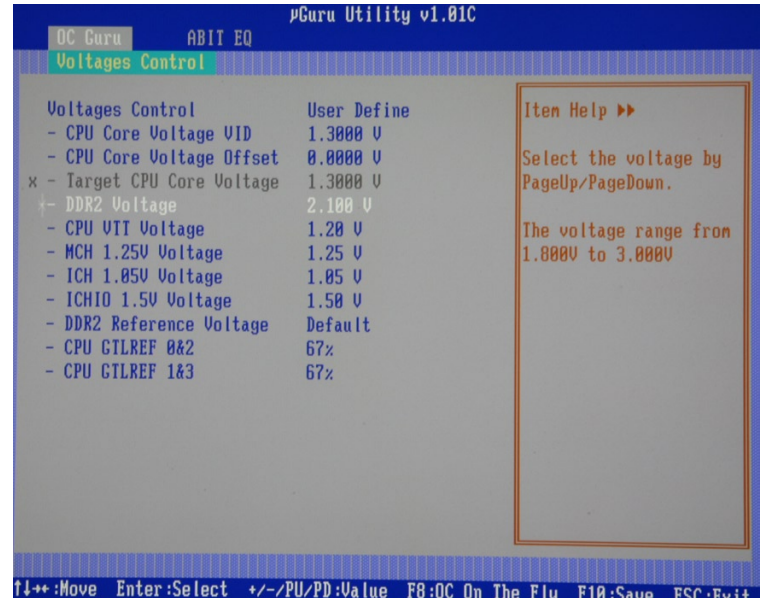
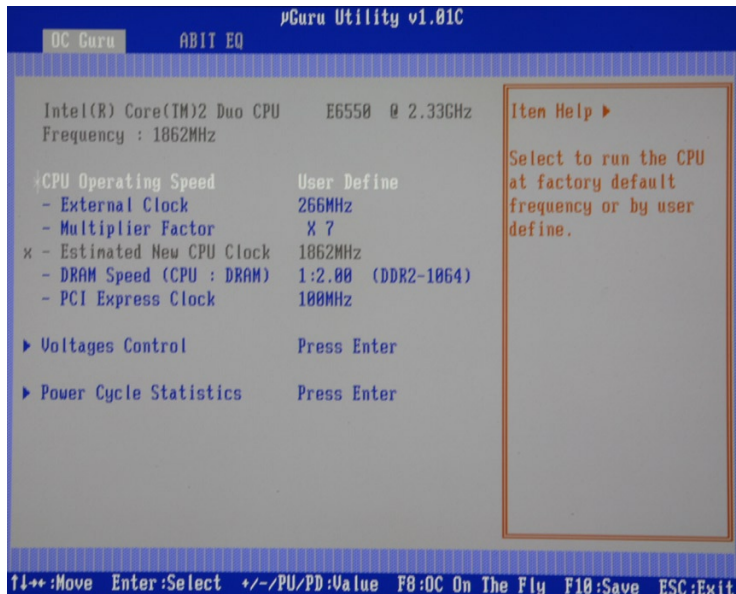
NOTE: Make sure your CPU is stable if overclocking required

G.SKILL will periodically update the compatible motherboard table. Please check back frequently.  
If you have any question about compatible motherboard, please email to [ustech@gskill.com](mailto:ustech@gskill.com)

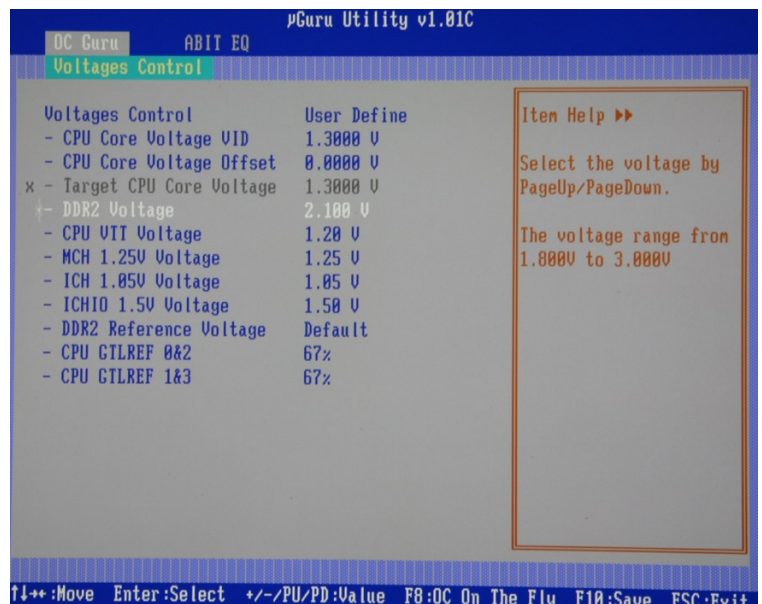
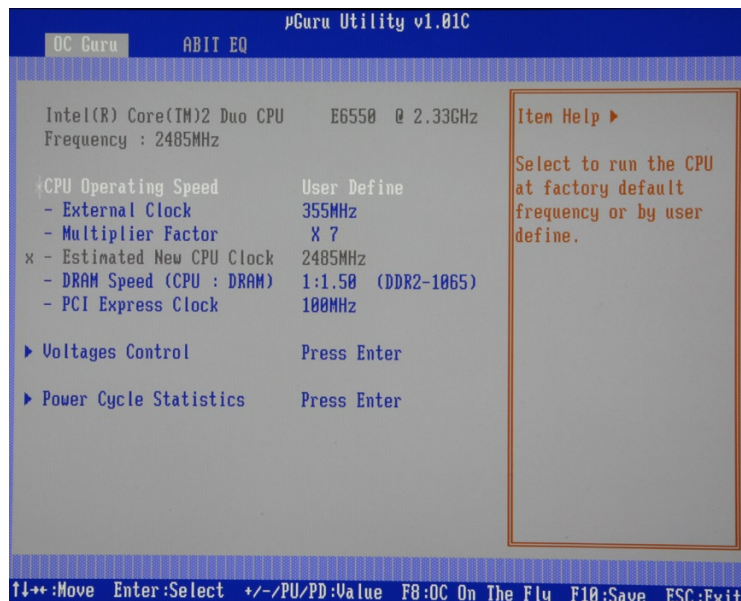


# Abit IX38 Quad GT BIOS Setting

- For FSB 266 MHz CPU



- For FSB 333 MHz CPU



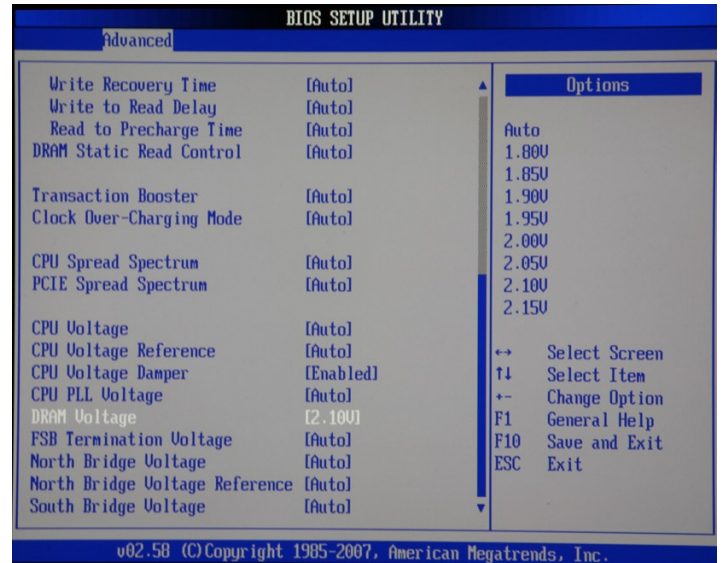
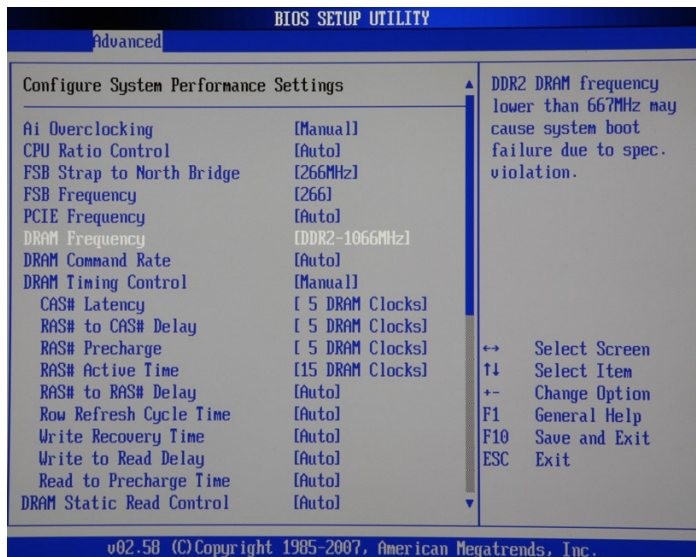
**NOTE: Make sure your CPU is stable if overclocking required**

G.SKILL will periodically update the compatible motherboard table. Please check back frequently.  
If you have any question about compatible motherboard, please email to [ustech@gskill.com](mailto:ustech@gskill.com)

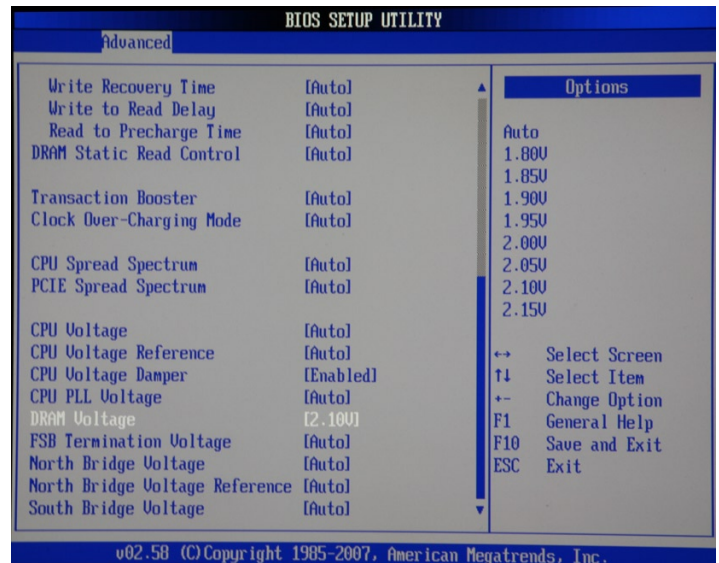
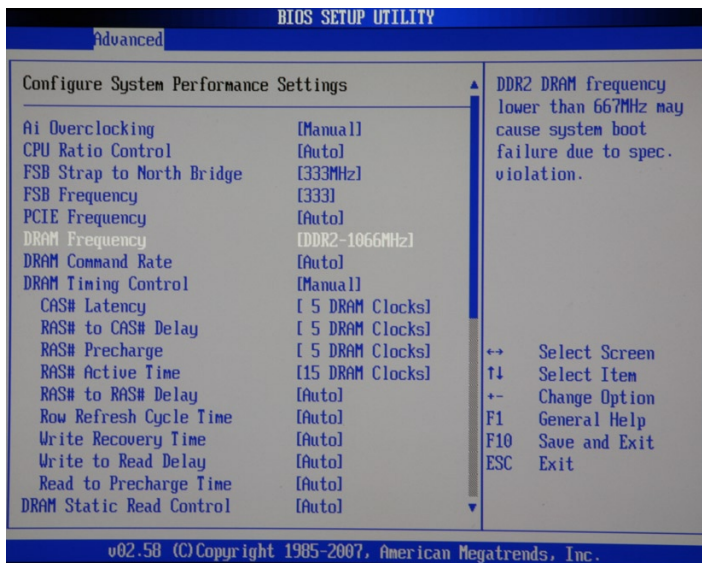


# Asus P5K Deluxe Bios Setting

- For FSB 266 MHz CPU



- For FSB 333 MHz CPU

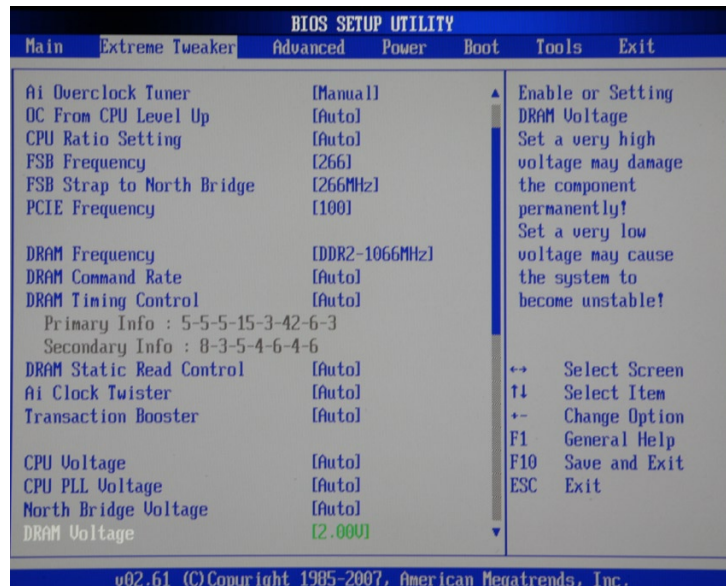


NOTE: Make sure your CPU is stable if overclocking required

G.SKILL will periodically update the compatible motherboard table. Please check back frequently.  
If you have any question about compatible motherboard, please email to [ustech@gskill.com](mailto:ustech@gskill.com)

# Asus Maximus Formula Bios Setting

- For FSB 266 MHz CPU



- For FSB 333 MHz CPU

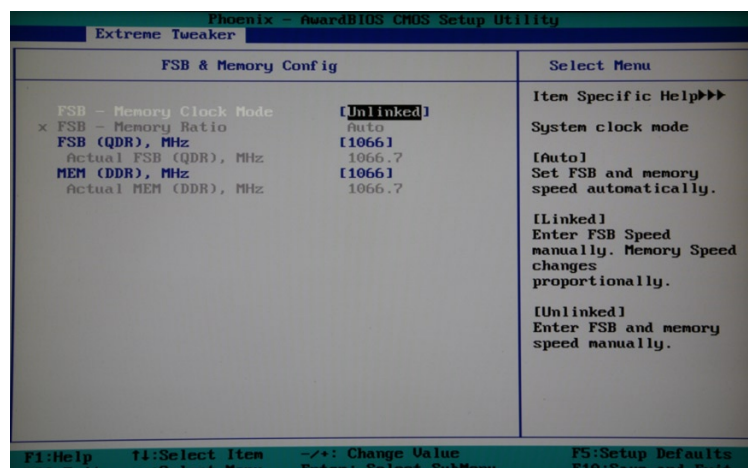


NOTE: Make sure your CPU is stable if overclocking required

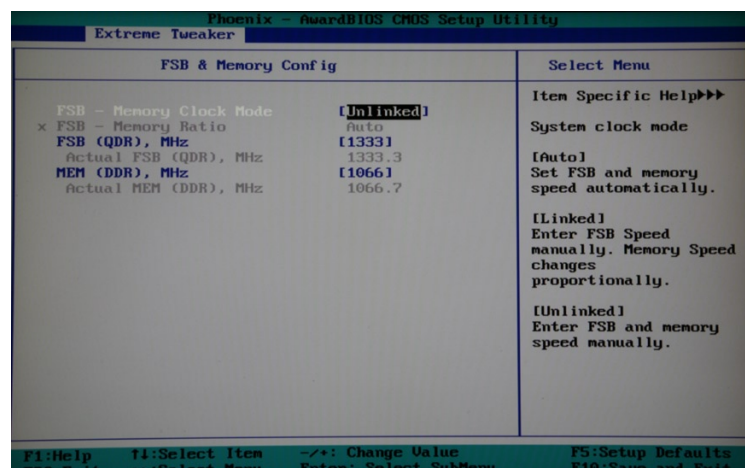
G.SKILL will periodically update the compatible motherboard table. Please check back frequently.  
If you have any question about compatible motherboard, please email to [ustech@gskill.com](mailto:ustech@gskill.com)

# Asus Striker II Formula Bios Setting

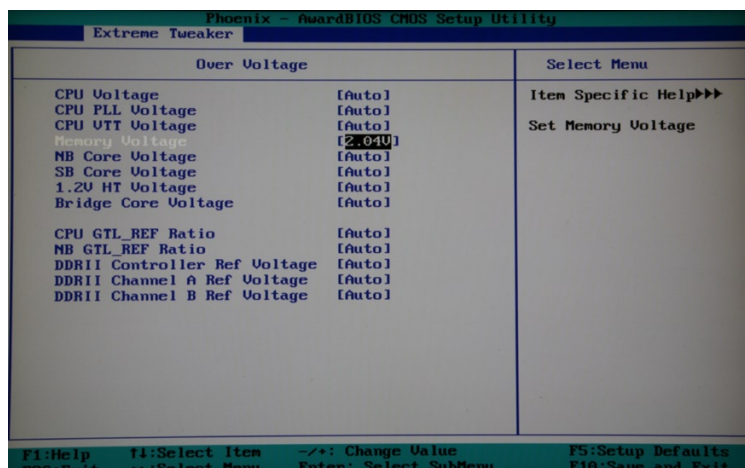
- For FSB 266 MHz CPU



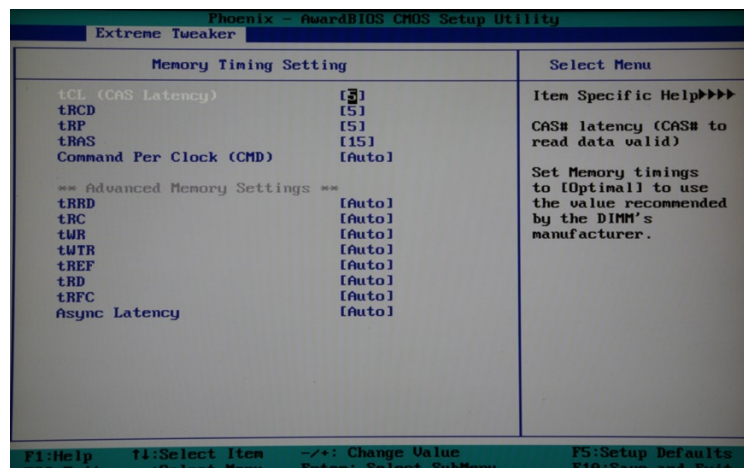
- For FSB 333 MHz CPU



- Voltage Setting



- Timing Setting



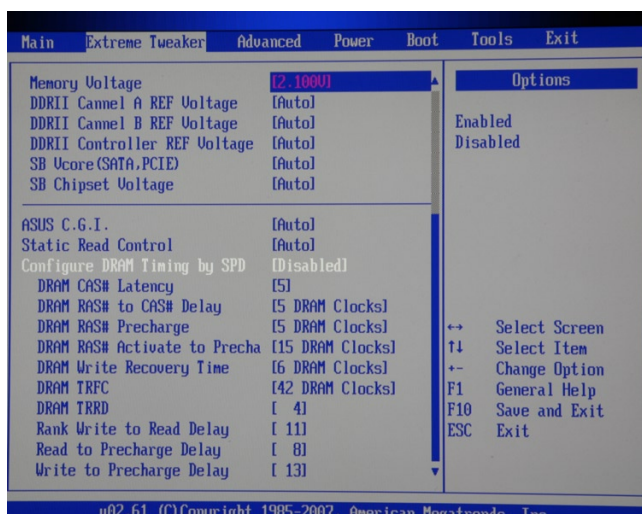
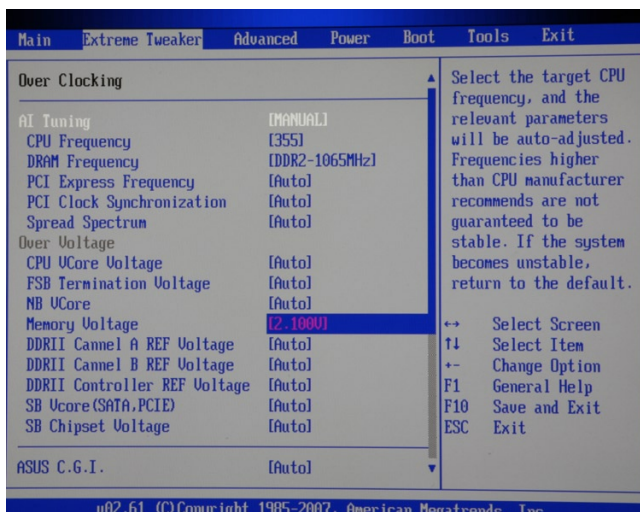
NOTE: Make sure your CPU is stable if overclocking required

G.SKILL will periodically update the compatible motherboard table. Please check back frequently.  
If you have any question about compatible motherboard, please email to [ustech@gskill.com](mailto:ustech@gskill.com)



# Asus Commando Bios Setting

- For FSB 266 and 333 MHz CPU

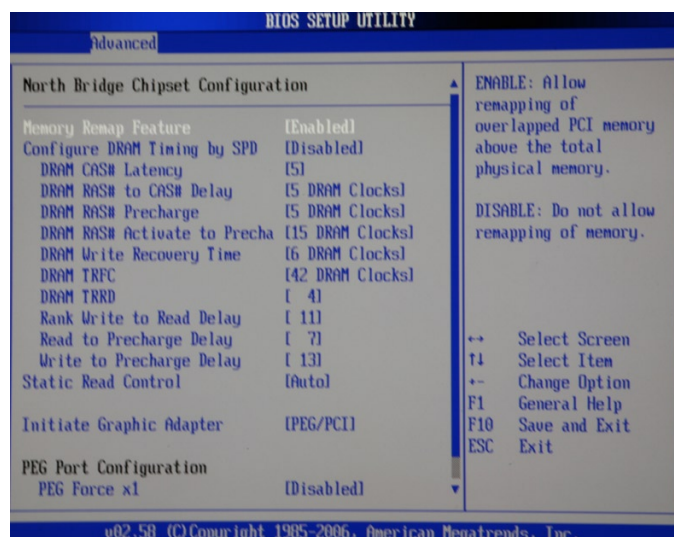
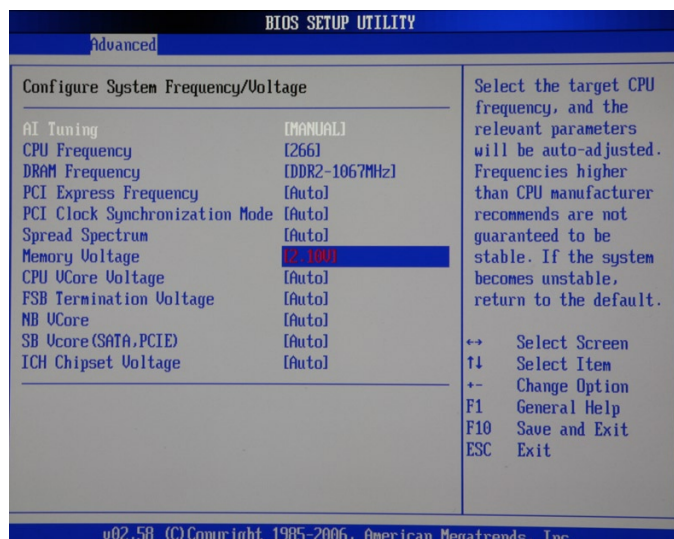


**NOTE: Make sure your CPU is stable if overclocking required**

G.SKILL will periodically update the compatible motherboard table. Please check back frequently.  
 If you have any question about compatible motherboard, please email to [ustech@gskill.com](mailto:ustech@gskill.com)

# Asus P5B Deluxe Setting

- For FSB 266 MHz CPU



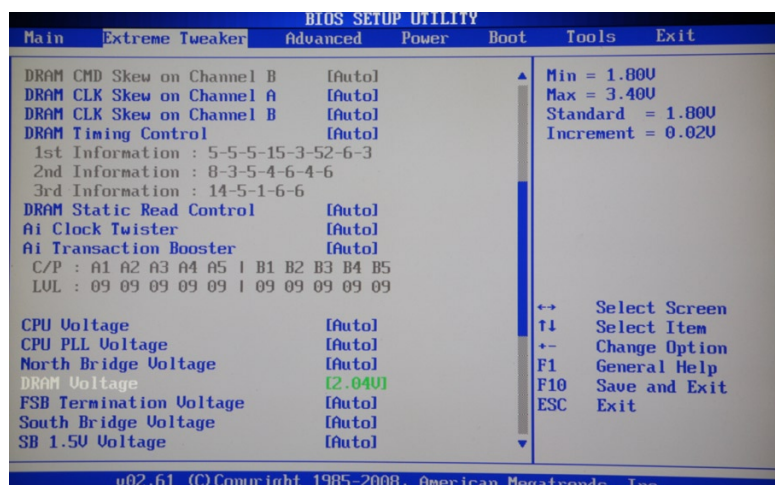
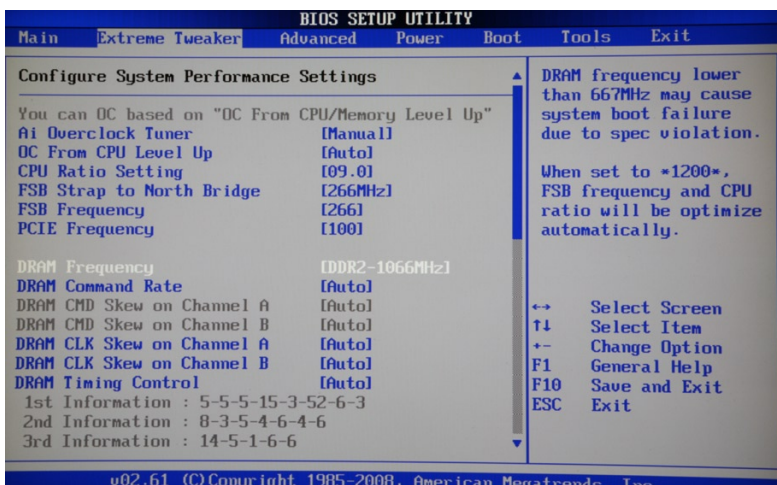
NOTE: For FSB 333MHz CPU, Please set CPU FSB Frequency to 355MHz.

NOTE: Make sure your CPU is stable if overclocking required

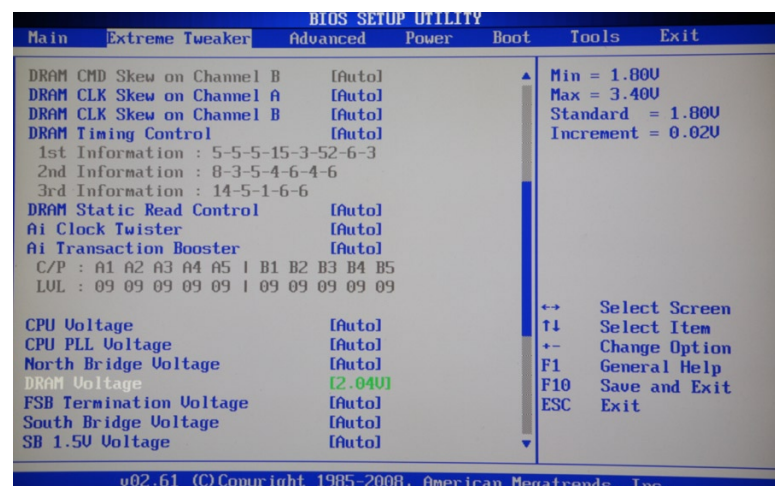
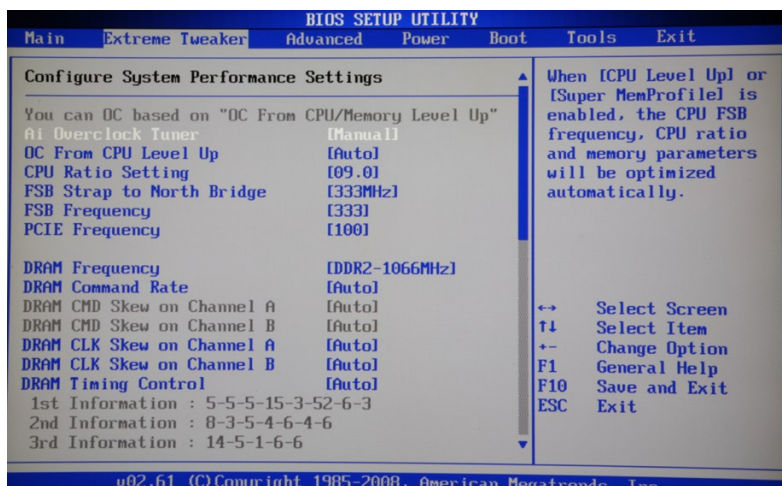
G.SKILL will periodically update the compatible motherboard table. Please check back frequently.  
If you have any question about compatible motherboard, please email to [ustech@gskill.com](mailto:ustech@gskill.com)

# Asus Rampage Formula Setting

- For FSB 266 MHz CPU



- For FSB 333 MHz CPU



NOTE: Make sure your CPU is stable if overclocking required

G.SKILL will periodically update the compatible motherboard table. Please check back frequently.  
If you have any question about compatible motherboard, please email to [ustech@gskill.com](mailto:ustech@gskill.com)



# eVGA 780i Bios Setting

- For FSB 333 MHz CPU

- Memory Voltage

Phoenix - AwardBIOS CMOS Setup Utility FSB & Memory Config			
Parameters	Setting	Current Value	Item Help
× SLI-Ready Memory		Not Detected	
CPU Freq, MHz	2332.4	2333.3	Menu Level >>
CPU Multiplier	7X	7X	
FSB - Memory Clock Mode	[Unlinked]		System clock mode
× FSB - Memory Ratio	Auto		[Auto]
FSB (QDR), MHz	[1333]	1333.3	Set FSB and memory
Actual FSB (QDR), MHz		1332.8	speed automatically.
MEM (DDR), MHz	[1066]	1066.7	
Actual MEM (DDR), MHz		1066.2	[Linked]
▶ Memory Timing Setting	[Press Enter]		Enter FSB Speed
			changes
			proportionally.
			[Unlinked]
			Enter FSB and memory
			speed manually.
↑↓←→:Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help F5:Previous Values F7: Defaults			

Phoenix - AwardBIOS CMOS Setup Utility System Voltages			
Parameters	Setting	Current Value	Item Help
CPU Core	[Auto]	1.25V	
CPU FSB	[Auto]	1.2V	Menu Level >>
Memory	[2.050V]	2.050V	
nForce SPP	[Auto]	1.40V	Voltage level for CPU
nForce MCP	[Auto]	1.500V	Core (CPU VID)
HT nForce SPP <-> MCP	[Auto]	1.20V	
GTLUREF Lane 0	[Auto]	+00mV	
GTLUREF Lane 1	[Auto]	+00mV	
GTLUREF Lane 2	[Auto]	+00mV	
GTLUREF Lane 3	[Auto]	+00mV	
Users should exercise caution when over-volting as it can cause system instability or even void warranties and damage components			
↑↓←→:Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help F5:Previous Values F7: Defaults			

- Memory Timing

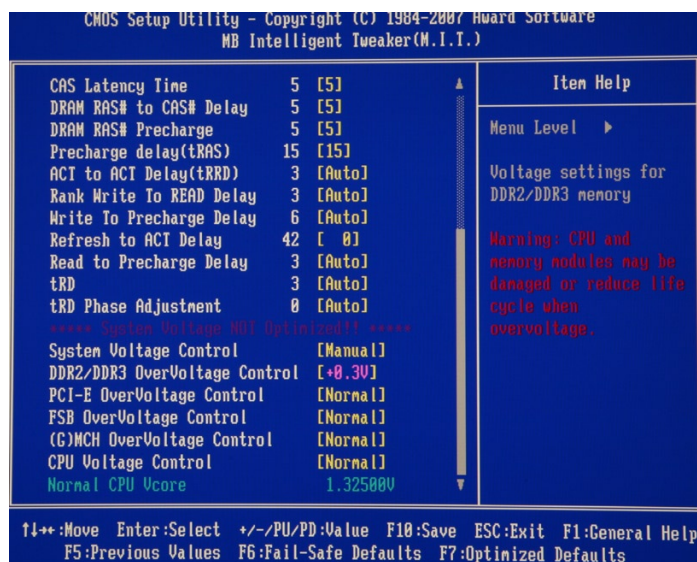
Phoenix - AwardBIOS CMOS Setup Utility Memory Timing Setting			
Parameters	Setting	Current Value	Item Help
Memory Timing Setting	[Expert]		Menu Level >>>>
tCL (CAS Latency)	[5]	5	
tRCD	[5]	5	Select [Expert] to
tRP	[5]	5	enter timings manual
tRAS	[15]	15	
Command Per Clock (CMD)	[Auto(2T)]	2T	
** Advanced Memory Settings **			
tRRD	[Auto(4)]	4	
tRC	[Auto(32)]	32	
tWR	[Auto(6)]	6	
tWTR	[Auto(10)]	10	
tREF	[Auto]	7.8uS	
↑↓←→:Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help F5:Previous Values F7: Defaults			

NOTE: For FSB 266 MHz CPU, please set FSB QDR MHz to 1066

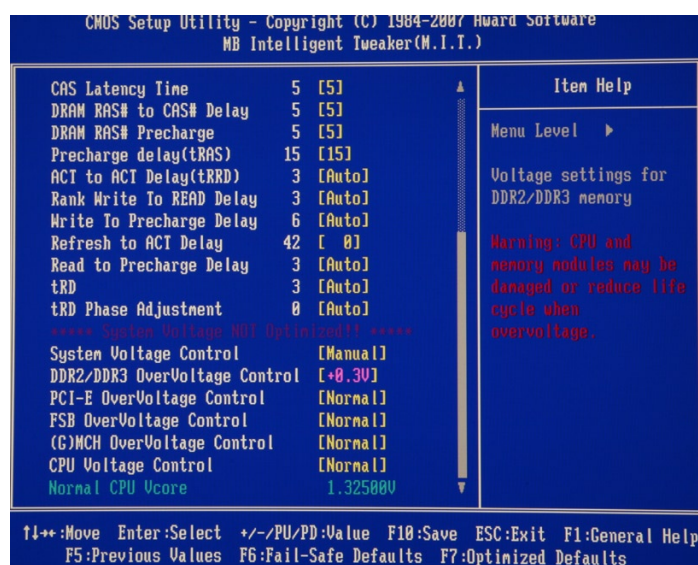
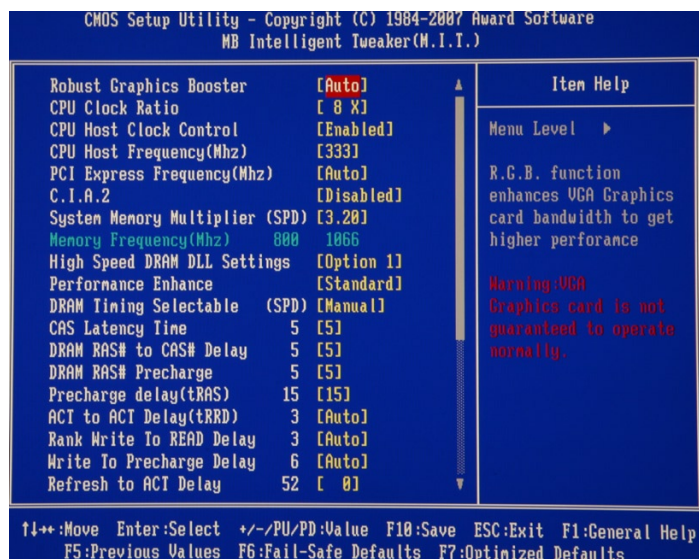
G.SKILL will periodically update the compatible motherboard table. Please check back frequently.  
If you have any question about compatible motherboard, please email to [ustech@gskill.com](mailto:ustech@gskill.com)

# Gigabyte P35 DS3 Bios Setting

- For FSB 266 MHz CPU



- For FSB 333 MHz CPU

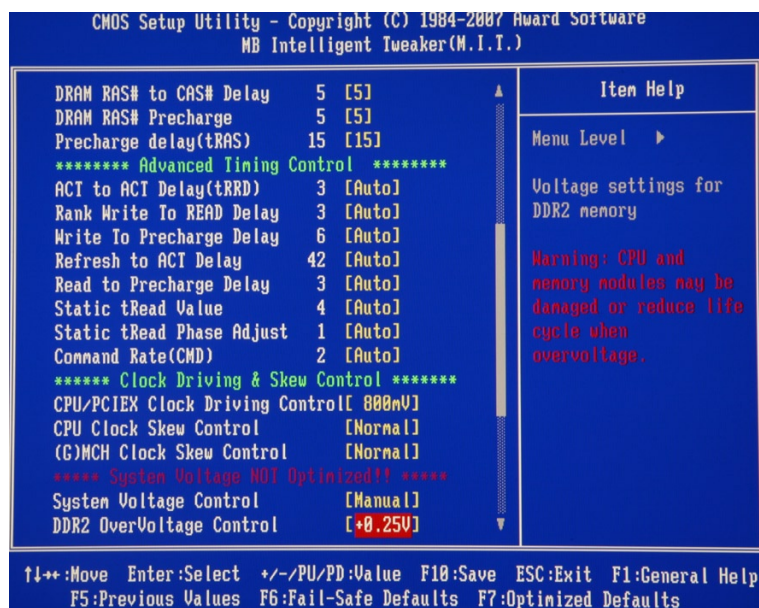
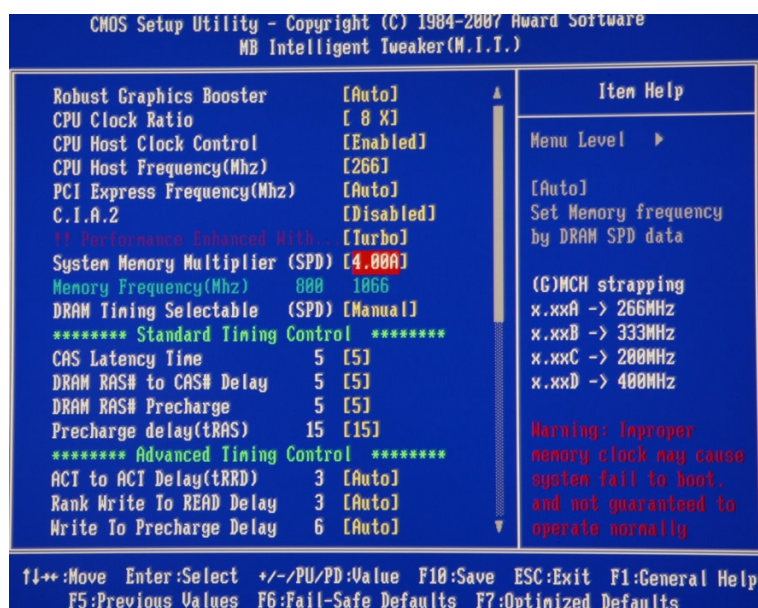


NOTE: For FSB 266 MHz CPU, please set FSB QDR MHz to 1066

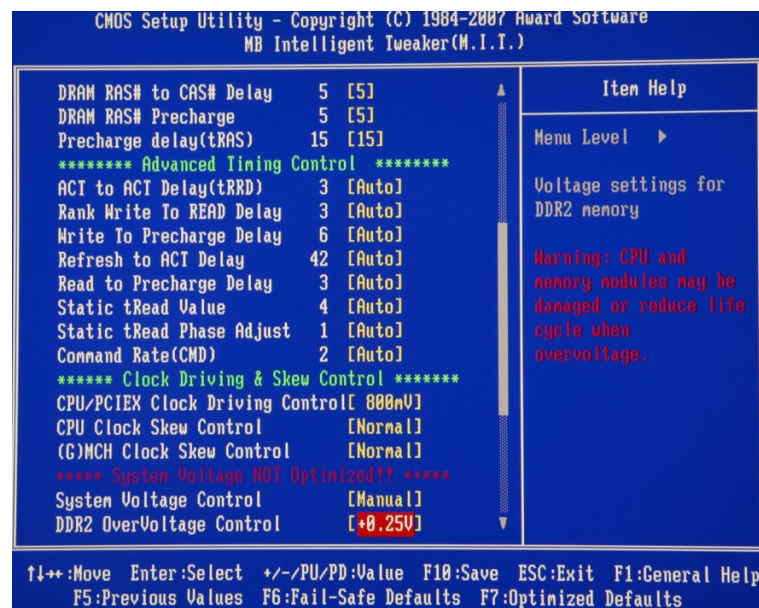
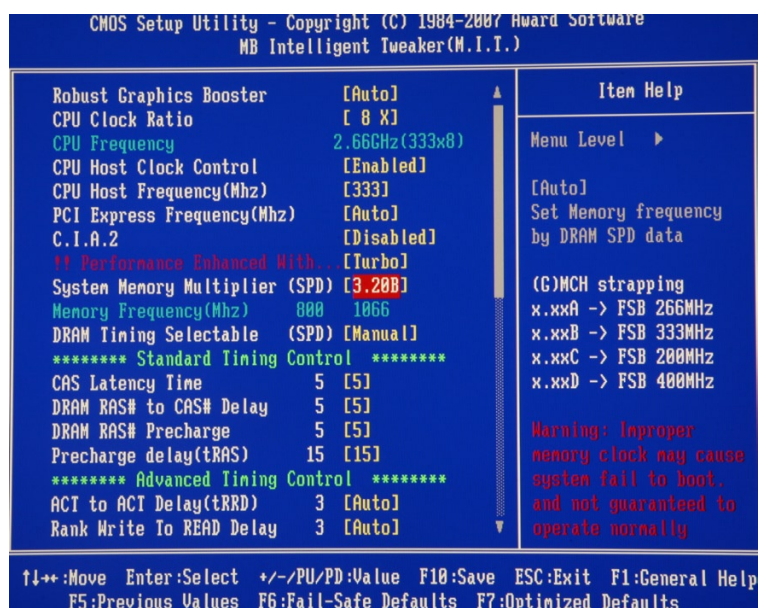


# Gigabyte X38 DS4 / DQ6 Bios Setting

- For FSB 266 MHz CPU



- For FSB 333 MHz CPU

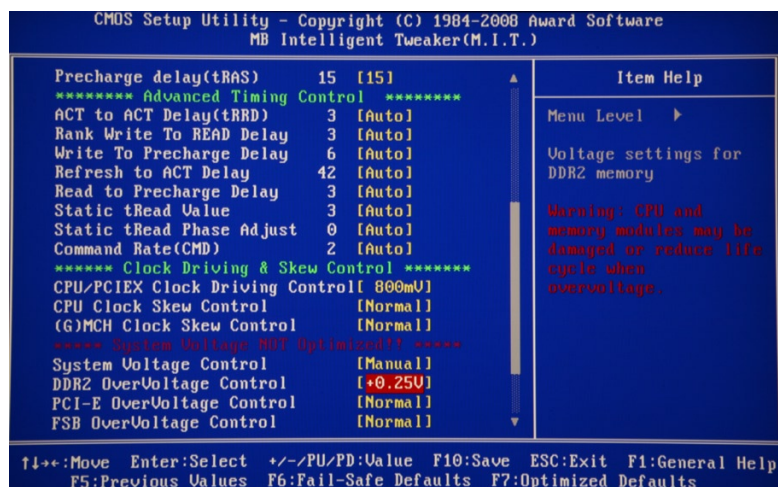
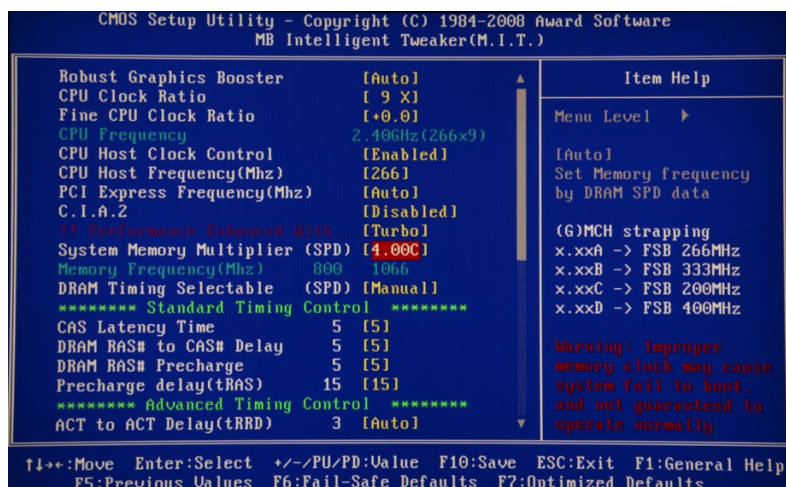


G.SKILL will periodically update the compatible motherboard table. Please check back frequently.  
If you have any question about compatible motherboard, please email to [ustech@gskill.com](mailto:ustech@gskill.com)

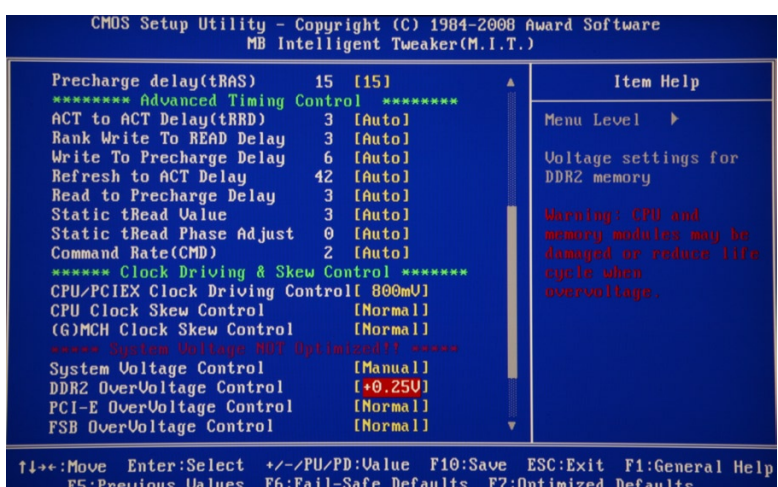
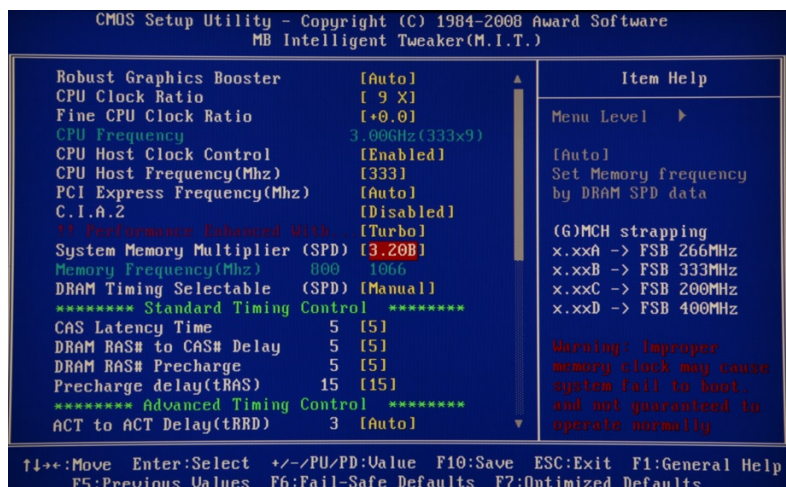


# Gigabyte X48 DQ6 Bios Setting

- For FSB 266 MHz CPU



- For FSB 333 MHz CPU



G.SKILL will periodically update the compatible motherboard table. Please check back frequently.  
If you have any question about compatible motherboard, please email to [ustech@gskill.com](mailto:ustech@gskill.com)