Manually Setting Your Memory Timings and Voltage (BIOS screens may be different depending on the motherboard model)

Intel AWARD BIOS

AMD AMI BIOS

AWARD Intel BIOS



Select Advanced Chipset Features.

CPU Configuration	[Press Enter]	
System Voltages NVMEM memory test Load timing/voltage set Save timing/voltage set System BIOS Cacheable HPET Function	[Press Enter] [Press Enter] [Disable] [Press Enter] [Press Enter] [Disabled] [Enabled]	Menu Level ▶

Select FSB & Memory Config.

Parameters × SLI-Ready Memory	Setting Current Value Not Detected	Item Help
CPU Freq, MHz CPU Multiplier FSB - Memory Clock Mode × FSB - Memory Ratio × FSB (QDR), MHz Actual FSB (QDR), MHz × MEM (DDR), MHz Actual MEM (DDR), MHz	2400.0 2400.0 9X 9X [Auto] Auto 1066.7 1066.7 Auto 800.0 800.0	Menu Level System clock mode [Auto] Set FSB and memory speed automatically [Linked] Enter FSB Speed
▶ Nemory Timing Setting	lfress EnterJ	manually. Memory Sp changes proportionally. [Unlinked] Enter FSB and memory speed manually.

Select Memory Timing Setting.

Parameters	Setting	Current Value	Item Help
Memory Timing Setting	[Optimal]		Menu Level
x tCL (CAS Latency)	Auto(5)	5	
× tRCD	Auto(5)	5	Select [Expert] to
× tRP	Auto(5)	5	enter timings manual
× tRAS	Auto(18)	18	and a second sec
× Command Per Clock (CMD)	Auto(2T)	ZT	
** Advanced Memory Sett × tRRD	ings ** Auto(3)	3	
× tRC	Auto(22)	22	
X 1.WH	Auto(5)	5	
X TWTR	Auto(9)	9	
X THEF	HUED	r.ouo	

Set Memory Timing Setting to Expert.

Leave your Advanced Memory Settings all to Auto.

Set these memory timings as instructed

tCL tRCD tRP tRAS CMD

Press Esc twice to get back to Advanced Chipset Features.



Select System Voltages.

Parameters	Setting	Current Value	Item Help
CPU Core	[Auto]	1.190	
CPU FSB	[Auto]	1.20	Menu Level
Memory	[Auto]	1.8500	
nForce SPP	[Auto]	1.300	Voltage level for CP
nForce MCP	[Auto]	1.500V	Core (CPU VID)
HT nForce SPP <-> MCP	[Auto]	1.200	
GTLUREF Lane 0	[Auto]	+00mu	
GTLUREF Lane 1	[Auto]	+00mU	
GTLUREF Lane 2	[Auto]	+00mu	
GTLUREF Lane 3	[Auto]	+00m∪	
Users should exercise c ,as it can cause system warranties and damage c	aution whe instabili omponents	n over-voltaging ty or even void	

Set your Memory voltage as instructed.

AMI AMD BIOS

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lain Advanced Boot	BIOS SETUP UTILITY Security Power JU	JSTw00t! Exit
System Overview		-
System Time System Date Floppy A Primary IDE Master Primary IDE Slave SATA Port1 SATA Port3 SATA Port2 SATA Port4 USB Device	105:57:48] Wed 07/02/2008] 11.44 MB 3½"] : [Not Detected] : [Not Detected] : [Not Detected] : [Not Detected] : [Not Detected] : [Not Detected] : [Not Detected]	 Select Screen Select Item Enter Go to Sub Screen F1 General Help F10 Save and Exit ESC Exit

Go to the JUSTw00t! menu.

B Main Advanced Boot Sec	OS SETUP UTILITY curity Power	JUSTw0	Ot!	Exit
Over Voltage and Clock Settings	3	T	o Enal nboard	ble/Disable 1 PCIE LAN Boot
Rani Haciahin Comurol				
Memory Configuration	(D			
Sold support	LUISabled]			
CPU Voltage Control	LAutol			
DRAM Voltage Control	[Auto]			
Chipset Voltage Control	[Auto]			
CPU/LDT Spread Spectrum	[Disabled]			
SATA Spread Spectrum	[Disabled]			
iGPU Spread Spectrum	[Disabled]			
		+	Se	lect Screen
► AMD Overclocking Configuration	m	T	I S	elect Item
SB to K8(CPU) Freq Auto	[Enabled]	+-	- C	hange Ontion
SB to K8(CPU) LinkWidth	[8 4 8 1]	F	6	eneral Help
CPU Frequency Control	[Manual]	FI	0 5	aue and Exit
CPU Frequency, MHz	[200]	FS	C E	xit
MCP PCI-Express Frequency, MHz	[100]	1		
GPU Over Clock, MHz	E 5001			

Set your DRAM Voltage Control as instructed. Select Memory Configuration.



Select DRAM Timing Configuration.



Set these timings as instructed.

Tcl Trcd Trp Tras Memory 2T Mode (If you can not set Trc to Auto then leave it to the original setting.)

PC Health		CPUFan confiruration
SYS Temp CPU Temp	:36°C/96*F :52°C/125*F	mode setting
CPU Fan	:3183 RPM	
CPU Voltage 3.30 Voltage +120 Voltage VRAM Voltage Chip Voltage +50 Voltage VBAT	:1:368 U :3.312 U :12.091 U :1.920 U :1.152 U :5.094 U :3.120 U	• Select Screen 14 Select Item
CPUFAN PUM Control	12501	+- Change Option F1 General Help F10 Save and Exit ESC Exit

Check your DRAM Voltage in Power\PC Health.

Main Advanced Boot Ser	curity Power	JUSTw	00t1	Exit
Over Voltage and Clock Settings	5		To En Onboa	able/Disable urd PCIE LAN Bootl
Memory Configuration				
SUID support	[Disabled]			
CPU Voltage Control	[Auto]			
DRAM Voltage Control	[Auto]			
Chipset Voltage Control	[Auto]			
CPU/LDT Spread Spectrum	[Disabled]			
SATA Spread Spectrum	[Disabled]			
iGPU Spread Spectrum	[Disabled]			
			- :	Select Screen
P HOU Overclocking Configuratio	on	1	1	Select Item
SB to KB(CPU) Freq Auto	[Enabled]		-	Change Option
SB to Ka(CPU) LinkWidth	18 1 8 11	F	1	General Help
Cru Frequency Control	[Manual]	F	10	Save and Exit
Cru frequency, MHz	[200]	E	SC	Exit
Chu from Charles Frequency, MHz	[100]			
oru over clock, Hz	[500]			

Go back to Justw00t!

Change the DRAM Voltage Control by adding or subtract to the manufacturer's recommended voltage.