# PRINCO DDR3-1800 user guide and testing for DFI UTX58 T3eH8 Motherboard

CPU i7-930 2.80G

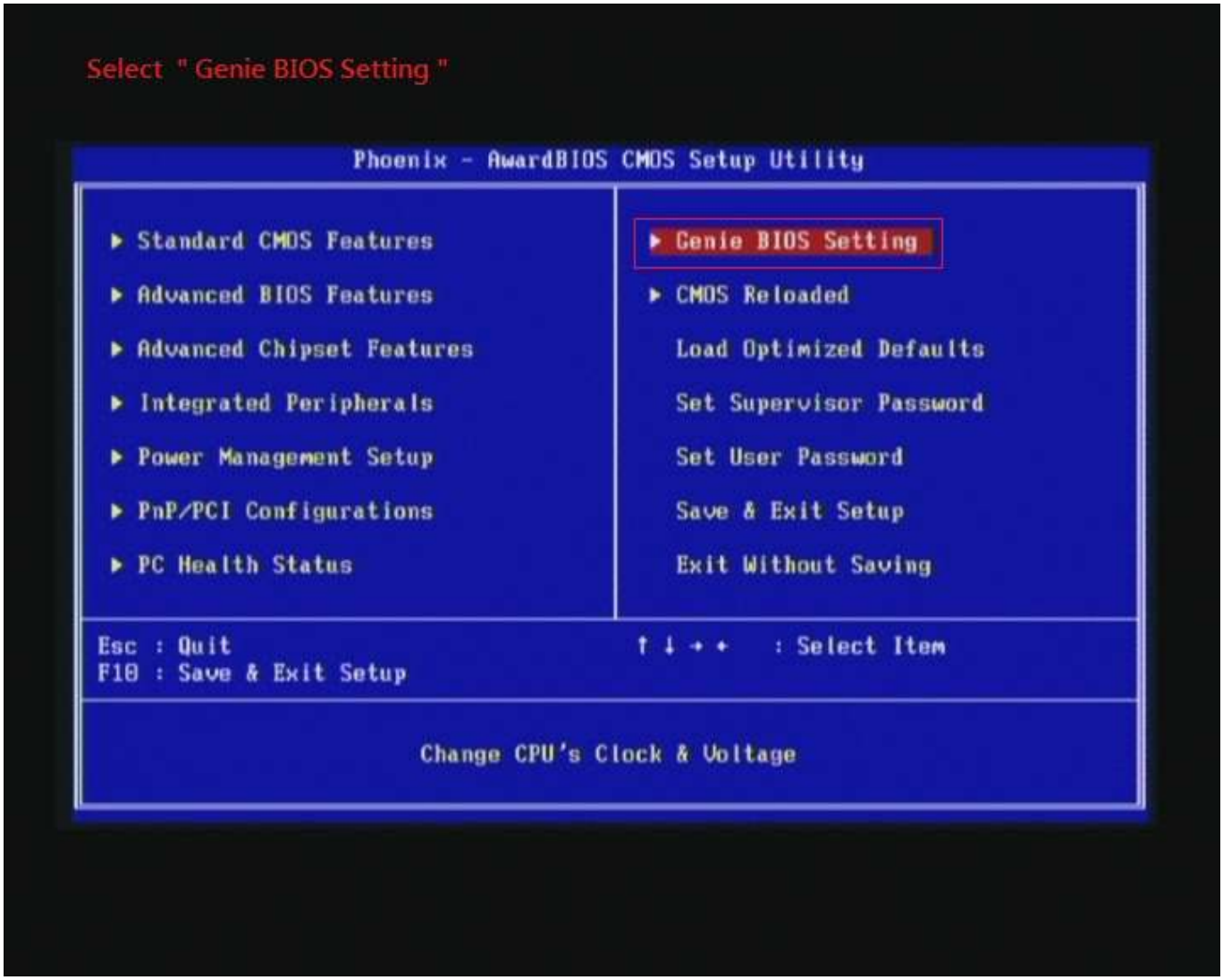
# Part I：Standard test

*It's the easiest way to enjoy overclock benefit by using PRINCO DDR3-1800 DIMM board*

How to use?

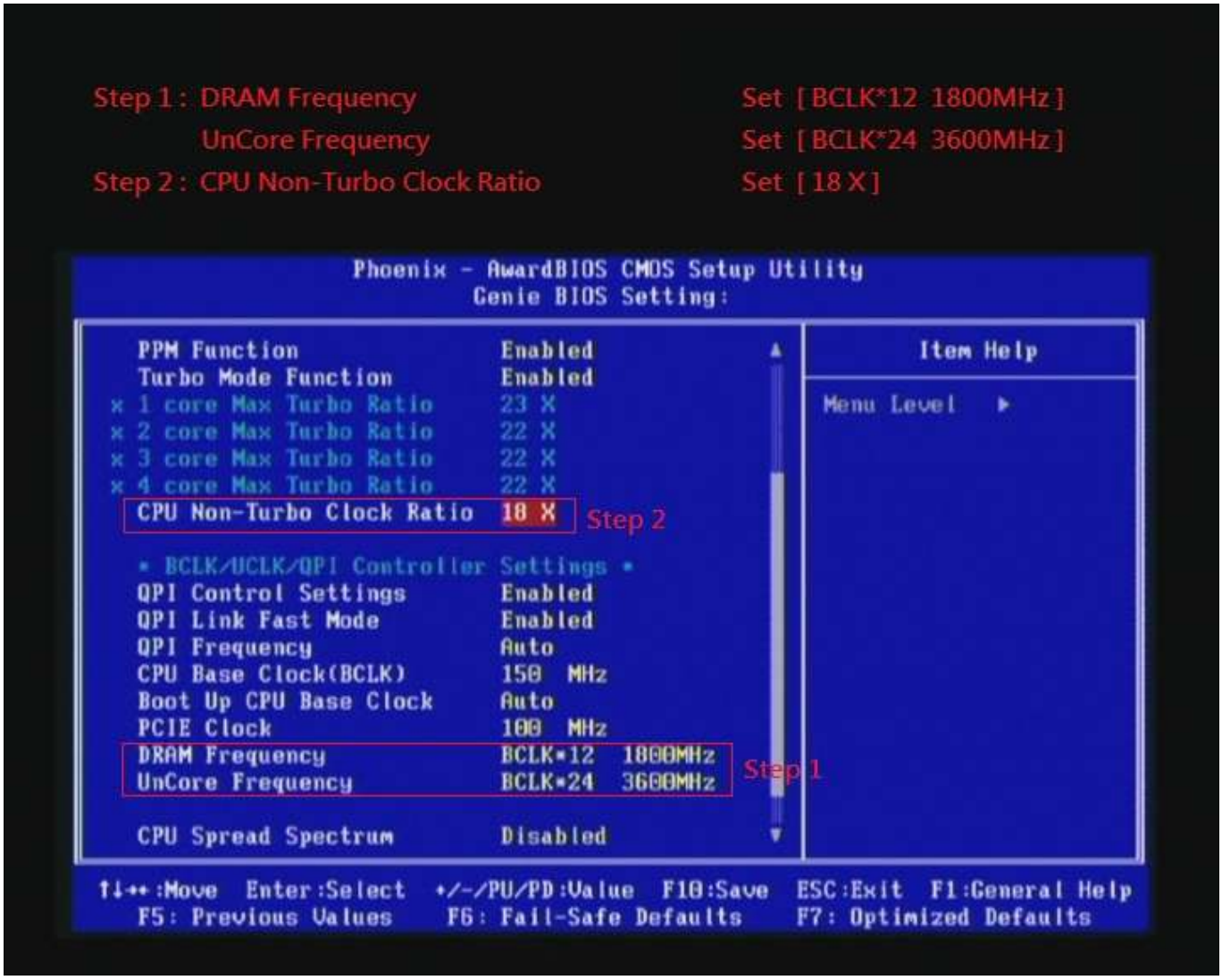
0. Clear BIOS to mainboard initial setting

1. Enter BIOS setup and [Genie BIOS Setting] menu

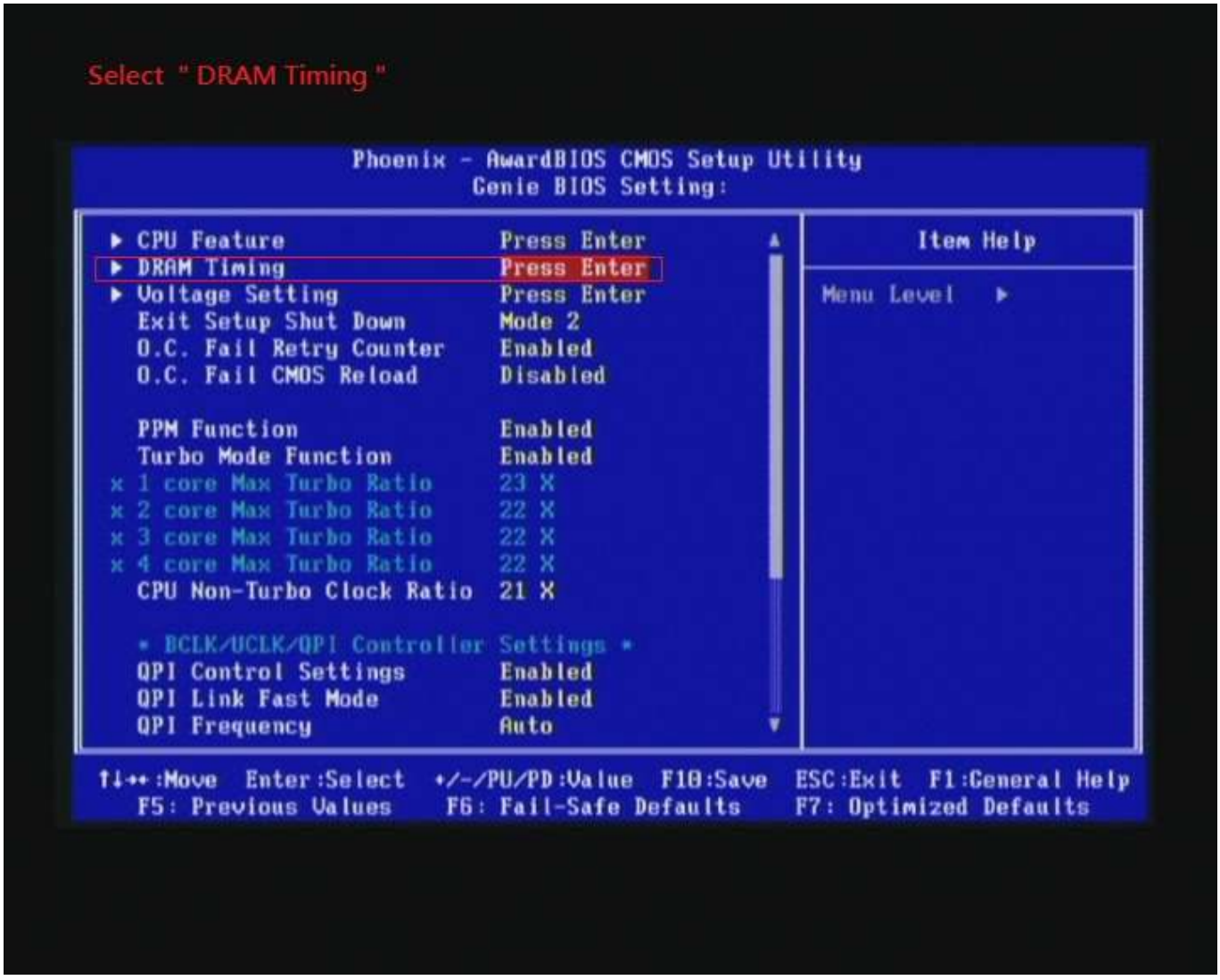


2. Select [CPU Base Clock(BCLK) ] item to (ex:150 MHz). Select [DRAM Frequency] item，and set the DDR3 memory to higher clock rate (ex:BCLK*12 1800MHz). Then select [UnCore Frequency] item to (ex:BCLK*24 3600MHz) Don't forget setting [CPU Non-Turbo Clock Ratio] item to suitable ratio (ex:18 X)

*( In this case we only focus on memory over clocking, not CPU )*



3. Enter [DRAM Timing] item



4. set [DRAM Command Rate] item to [1N]

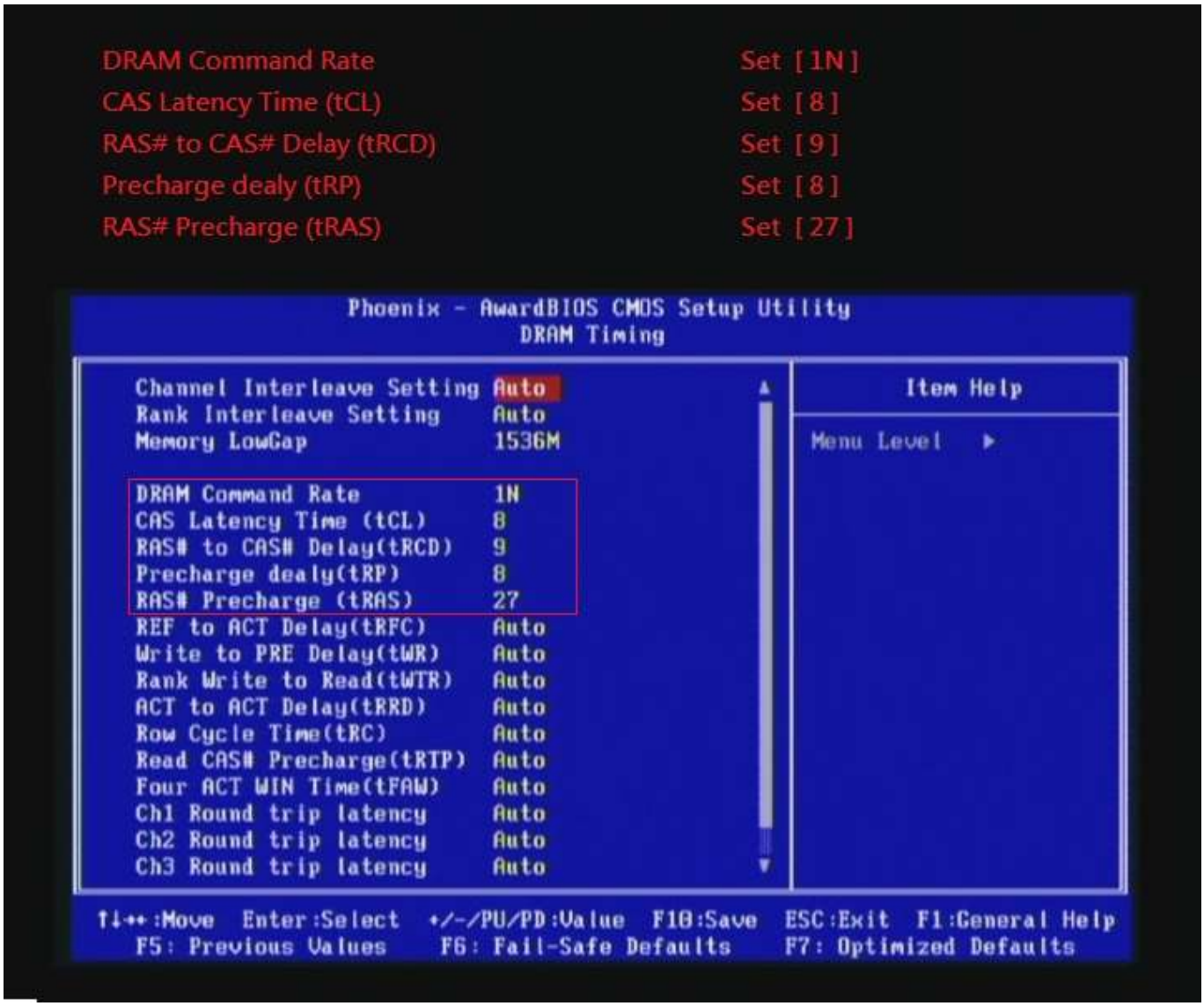
   set [DRAM Latency Time (tCL)] item to [8]

   set [RAS# to CAS# Delay (rRCD)] item to [9]

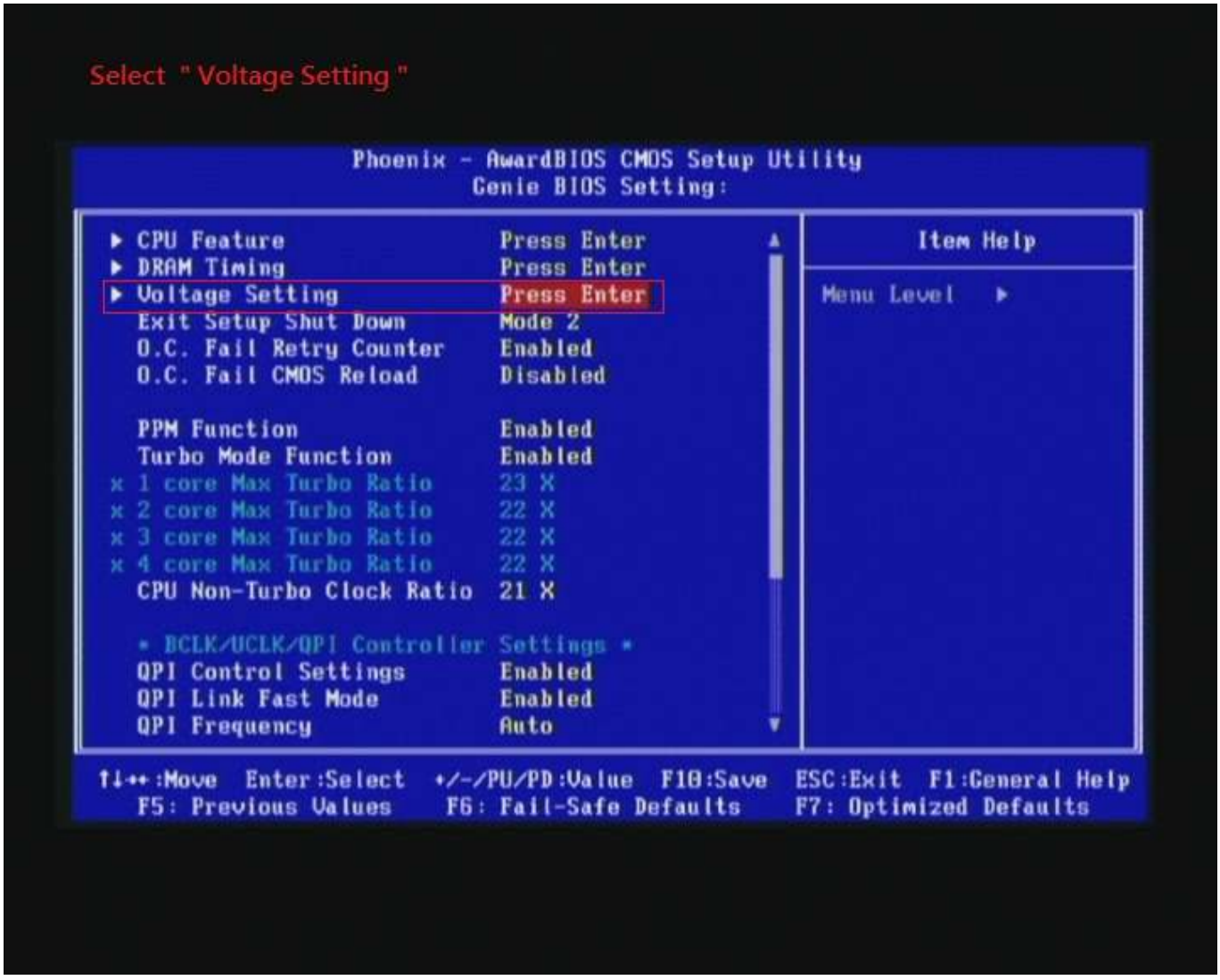
   set [Precharge dealy (tRP)] item to [8]

   set [RAS# Precharge (tRAS)] item to [27]

   then return to previous to [Genie BIOS Setting] menu

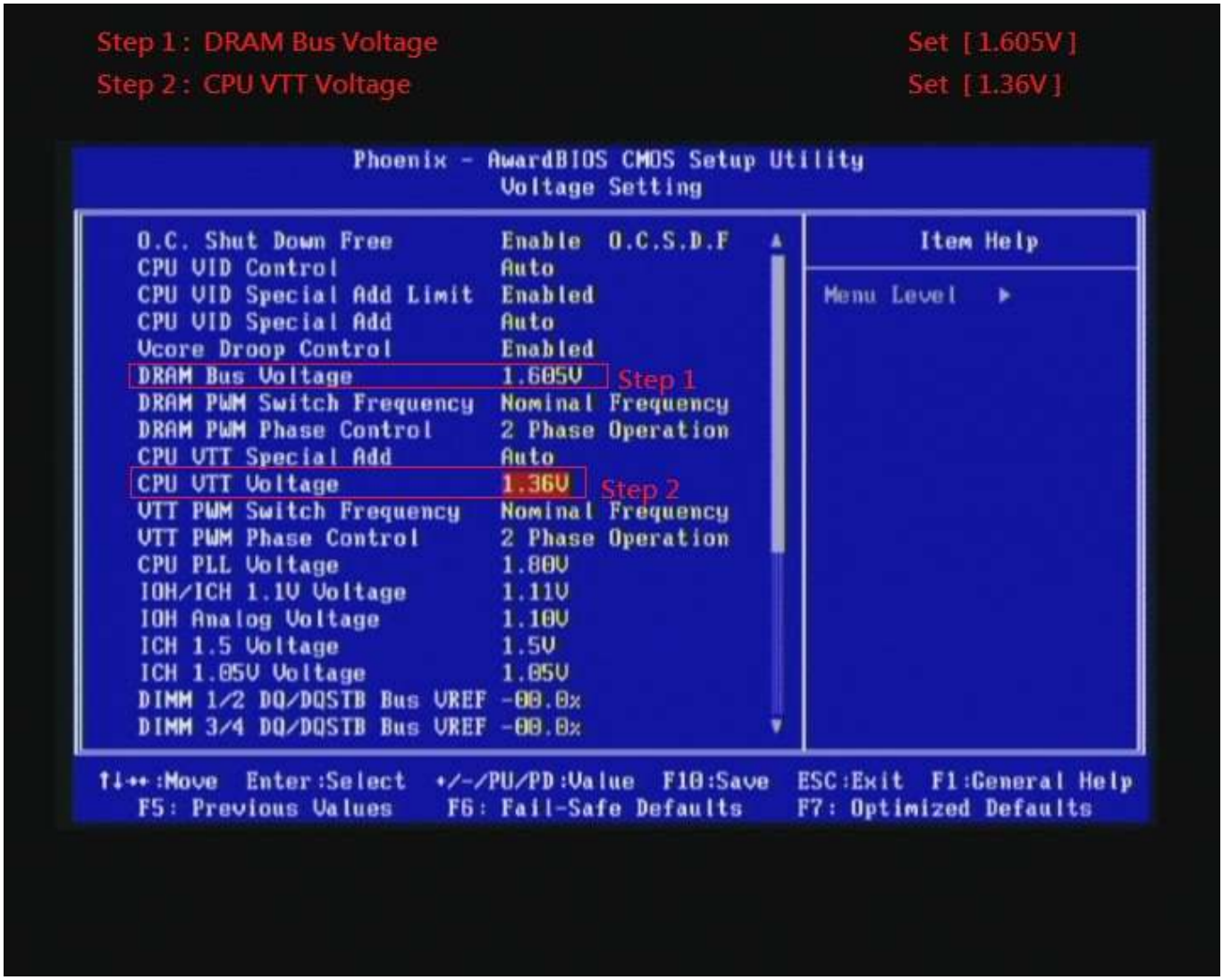


5. Enter [Voltage Setting] item

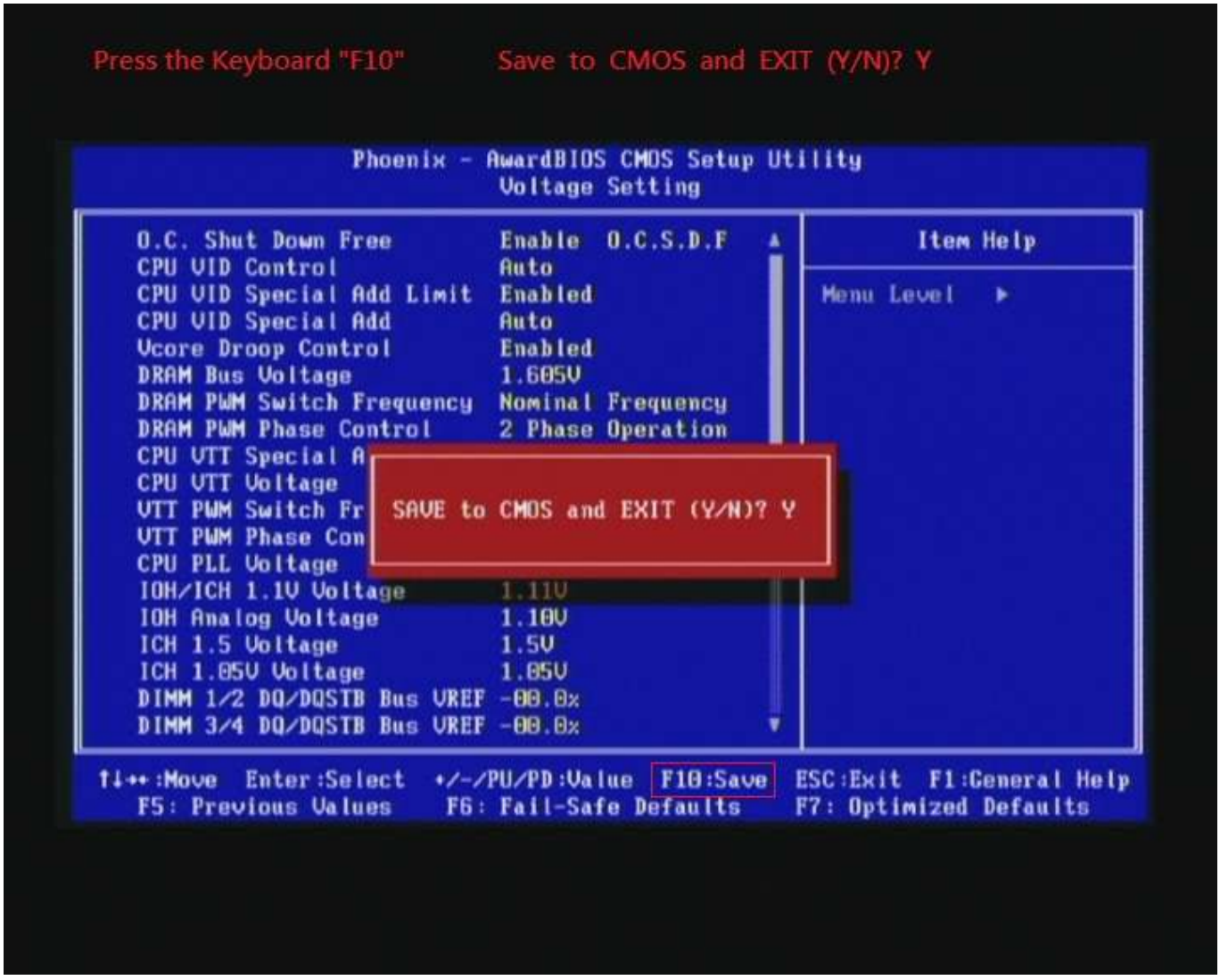


6. Select [DRAM Bus Voltage] item , and set the value to [1.605V].

   Select [CPU VTT Voltage] item , and set the value to [1.36V].



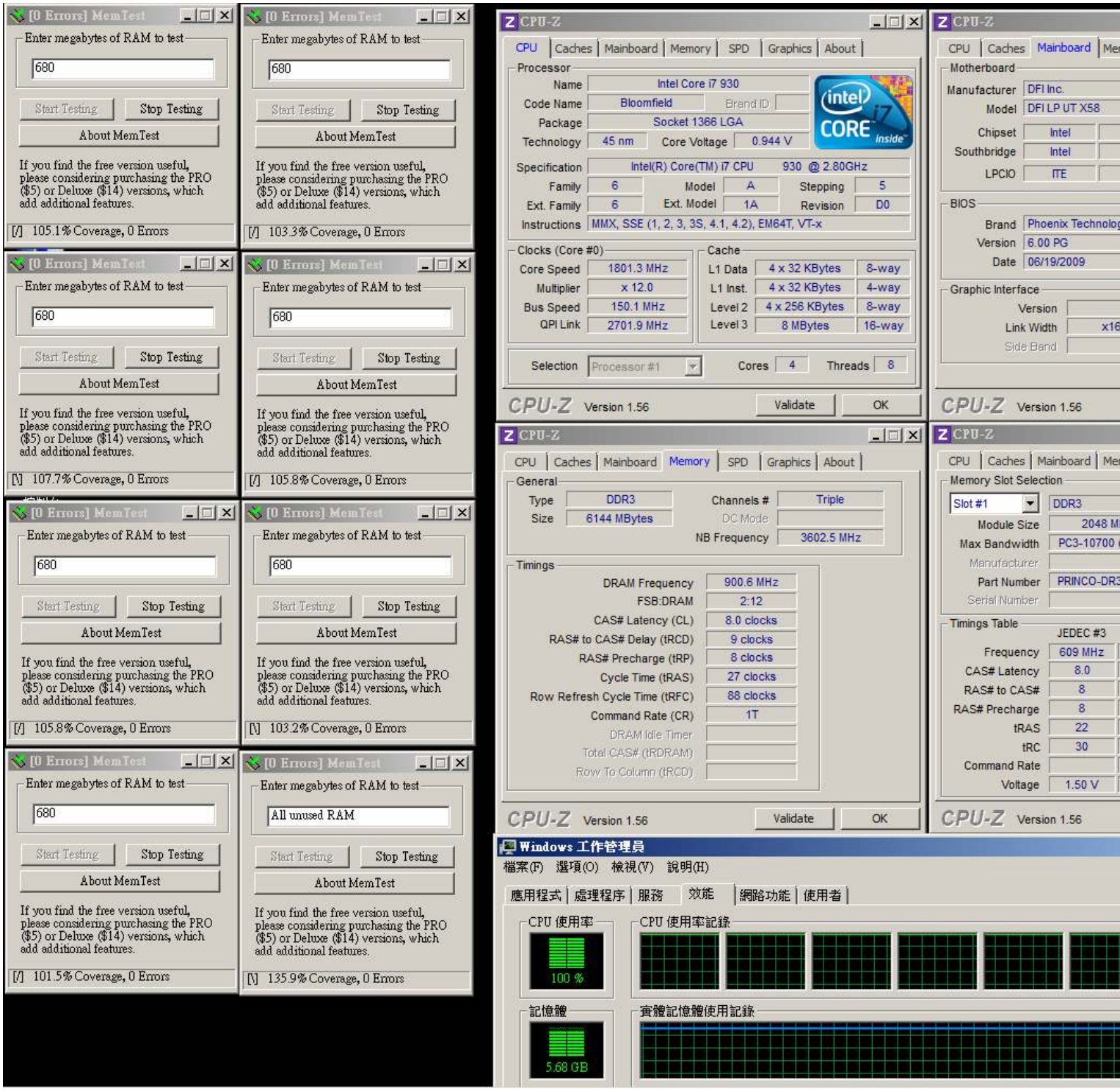
7. Save BIOS changes [F10] and exit



Test result?

In order to demonstrate the performance and stability of PRINCO DDR3-1800 DIMM board, We use the strictest stress testing, that is, multi-core MemTest in window 7.

(Data rate：900.6*2=1800,　timing：8, 9, 8, 27,　multi-core test => pass!)



# Advanced Overclocking and Testing

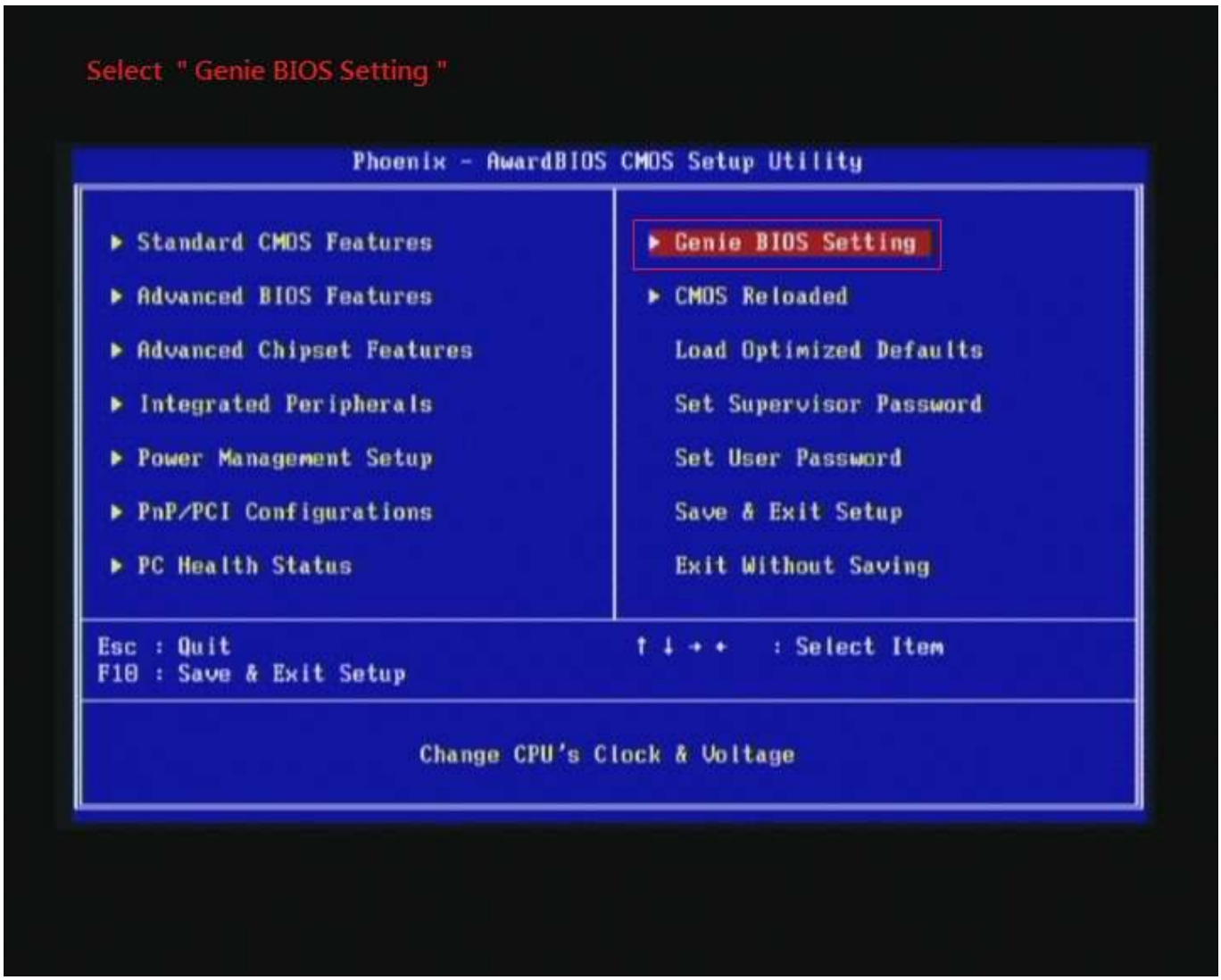
## Part II：Heavy test

*If you want to know the potential of PRINCO DDR3-1800? Following are step-by-step howto.*

How to use?

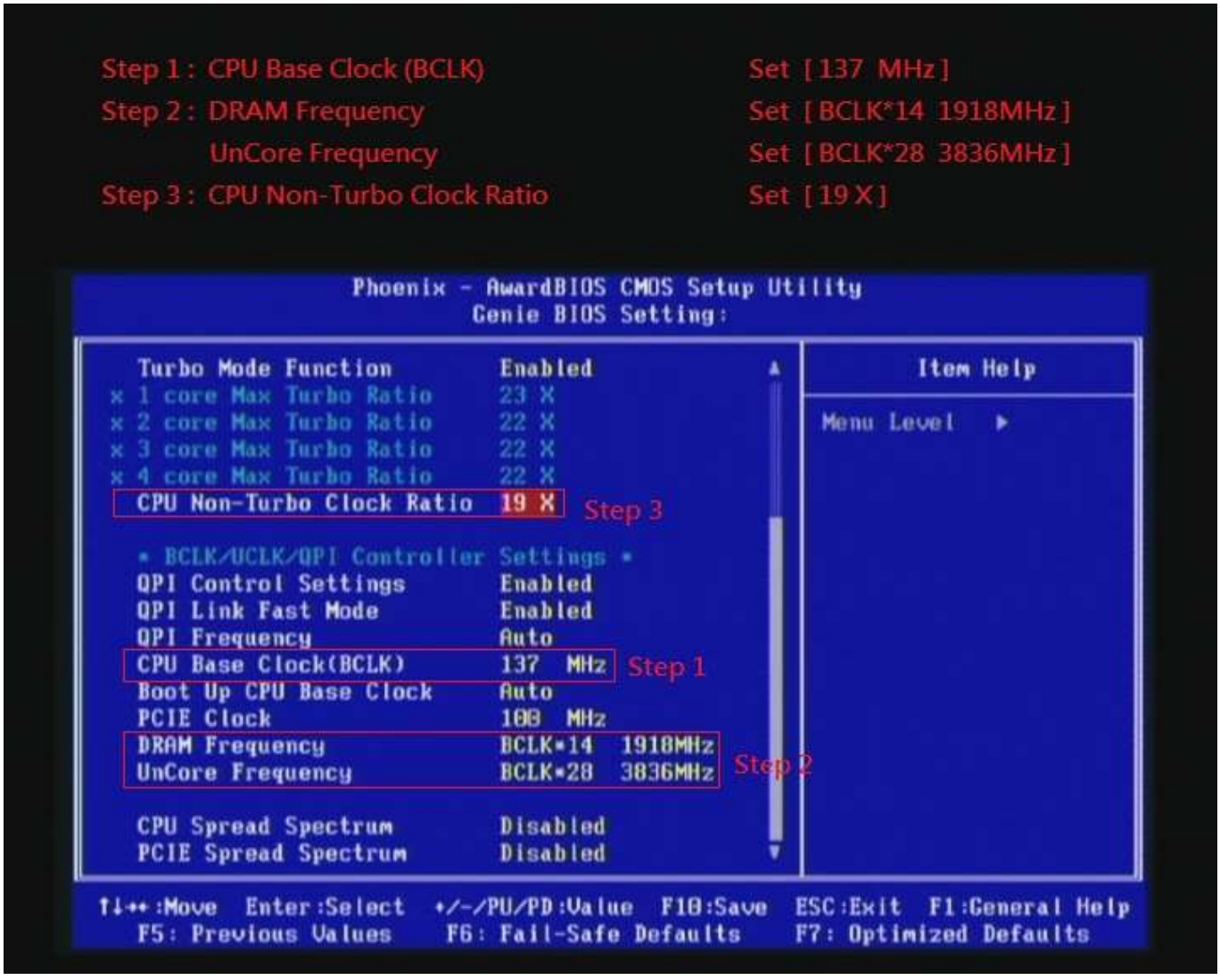
0. Clear BIOS to mainboard initial setting

1. Enter BIOS setup and [Genie BIOS Setting] menu

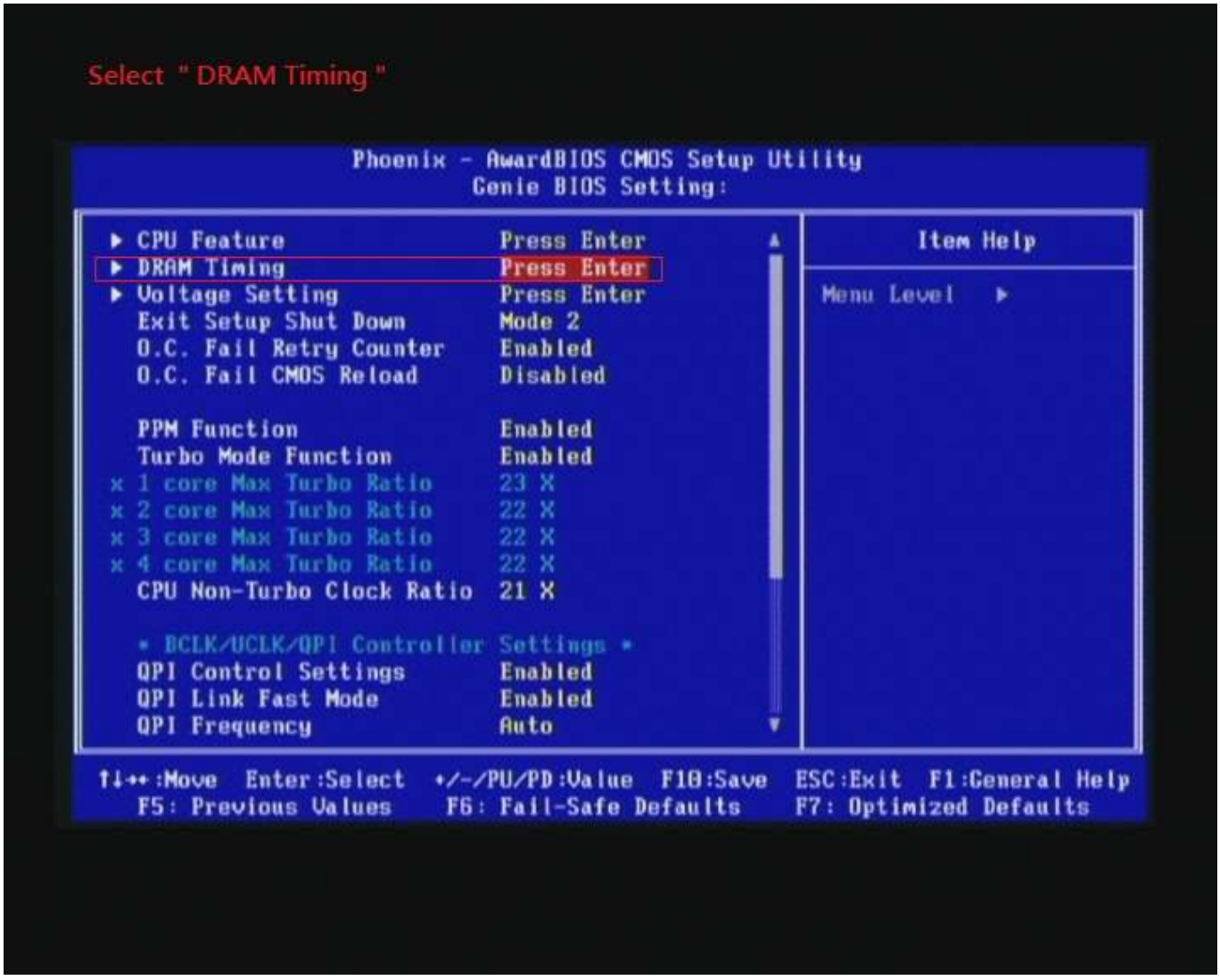


2. Select [CPU Base Clock(BCLK) ] item to (ex:137 MHz). Select [DRAM Frequency] item，and set the DDR3 memory to higher clock rate (ex:BCLK*14 1918MHz). Then select [UnCore Frequency] item to (ex:BCLK*24 3836MHz) Don't forget setting [CPU Non-Turbo Clock Ratio] item to suitable ratio (ex:19 X)

*( In this case we only focus on memory over clocking, not CPU )*



3. Enter [DRAM Timing] item



4. set [DRAM Command Rate] item to [1N]

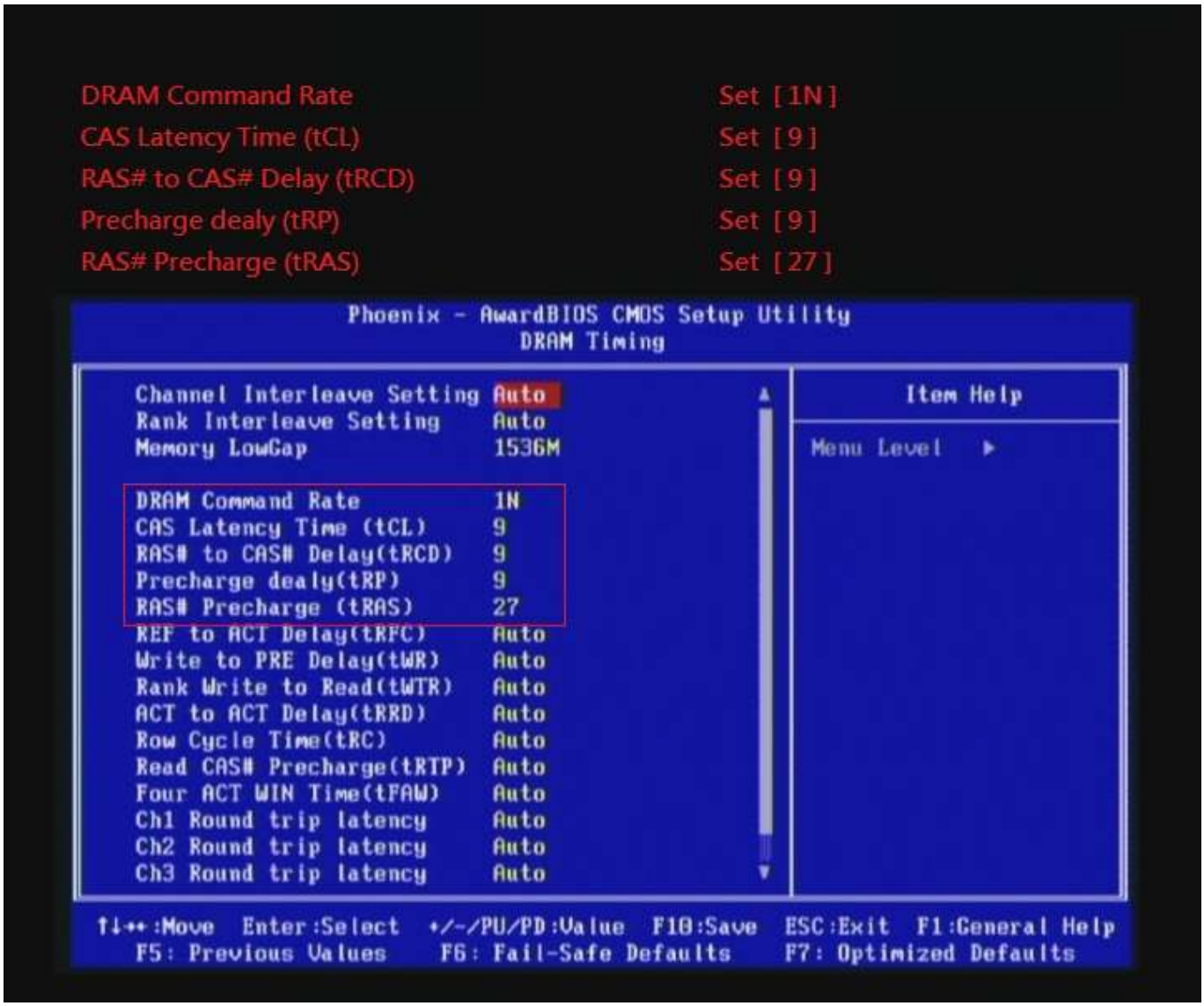
   set [DRAM Latency Time (tCL)] item to [9]

   set [RAS# to CAS# Delay (rRCD)] item to [9]

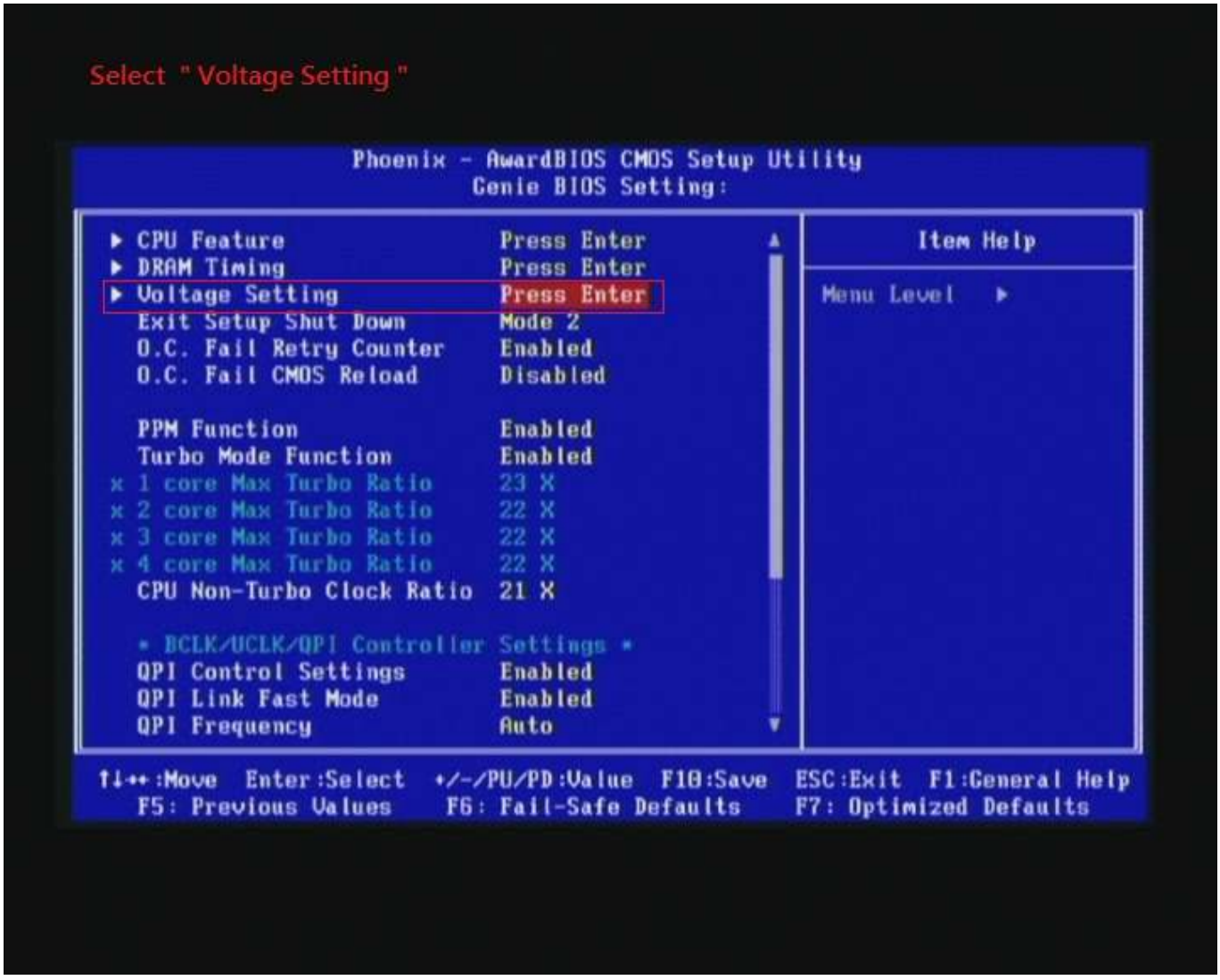
   set [Precharge dealy (tRP)] item to [9]

   set [RAS# Precharge (tRAS)] item to [27]

   then return to previous to [Genie BIOS Setting] menu

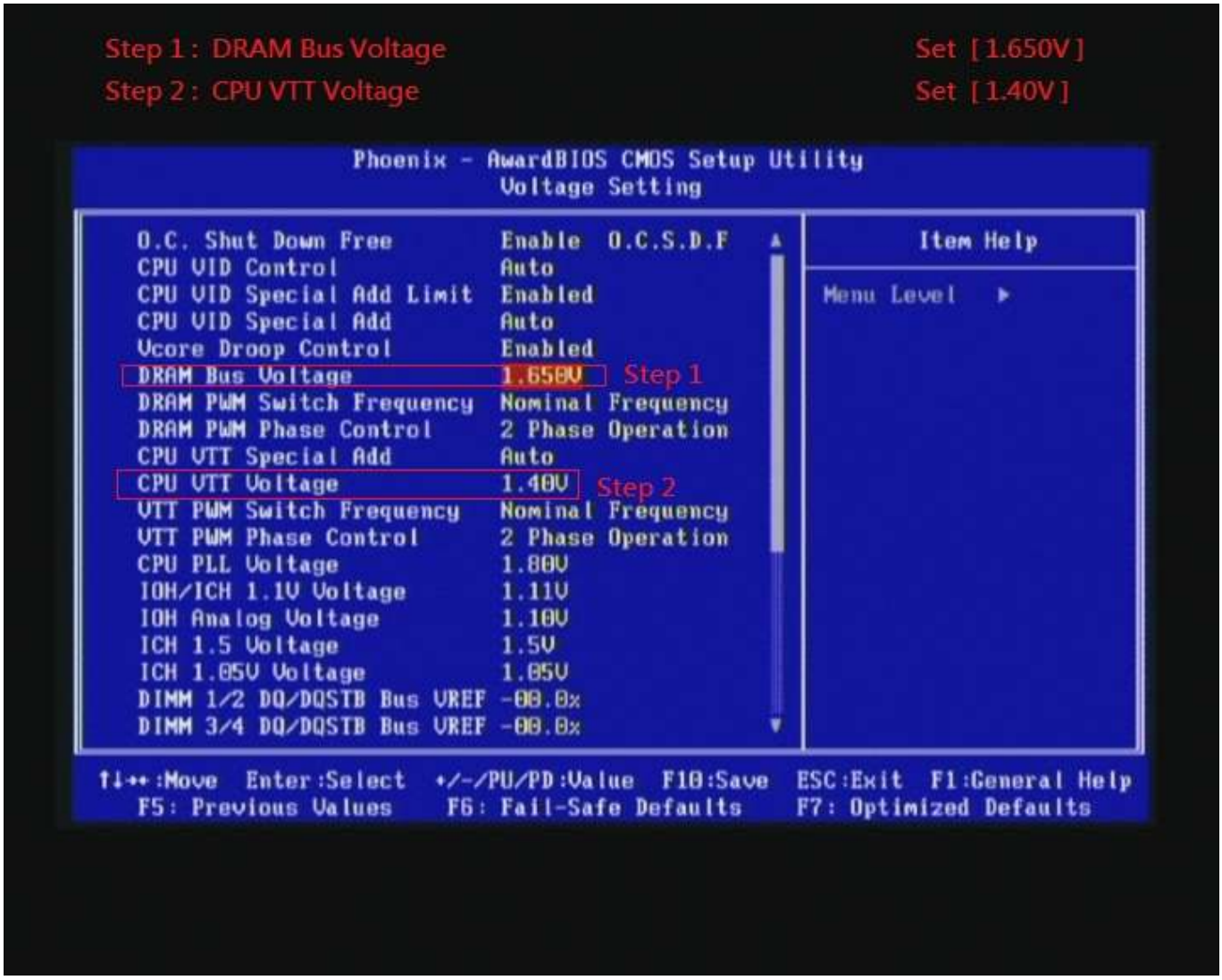


5. Enter [Voltage Setting] item

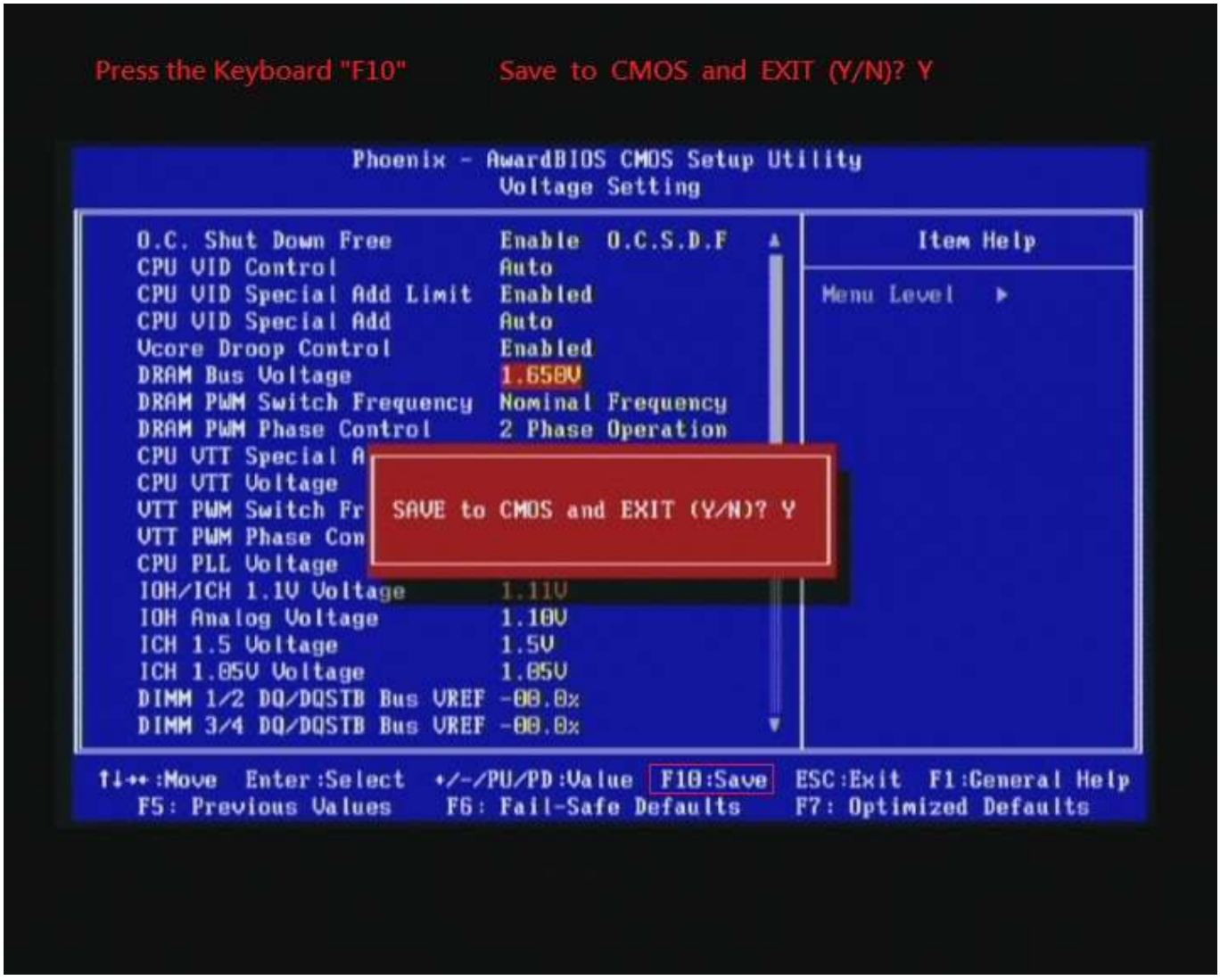


6. Select [DRAM Bus Voltage] item , and set the value to [1.650V].

Select[CPU VTT Voltage] item , and set the value to [1.40V]



7. Save BIOS changes [F10] and exit



Test result?

We use the strictest stress testing， multi-core MemTest in window 7， to show you PRINCO DDR3-1800 potential.

(Data rate：959.7*2=1914， timing：9, 9, 9, 27， multi-core test => pass!)