

CMOS Protection

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1. CMOS Protection is Conditioned

As a senior programmer and technician, in my eyes, CMOS protection is hard to be real.

Under either pure DOS or Windows DOS, we can change CMOS by debug.com to corrupt the CMOS check-sum, and then reboot PC, enter CMOS setup with default settings, re-setup CMOS to result in the card-not-plugged compatibility problem, i.e. the HDD recovery card is ignored by BIOS. Here the card is "just like not plugged" and CMOS has no protection.

Because of the above, CMOS protection has two preconditions.

- < DO NOT corrupt the CMOS check-sum by debug.com. Or
- < The card-not-plugged compatibility problem WOULD NOT occur no matter how to setup CMOS. We made a absolutely CMOS protection in 1998, but it was less compatible and was canceled.

2. Clever Protection (1) by hddGuarder™

In 1999, we made a clever CMOS protection. After hddGuarder™ "Protect CMOS" is "Enable", while CMOS changed and PC booting, hddGuarder™ will restore CMOS and reboot automatically if no hotkey menu required. On the other hand, if hotkey menu is required, hddGuarder™ will work by the other steps.

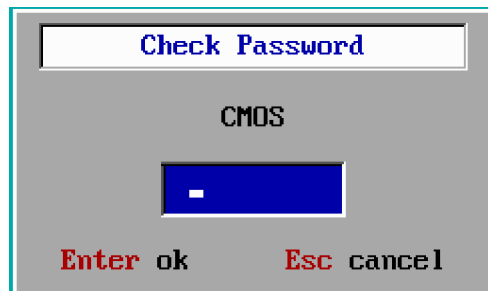
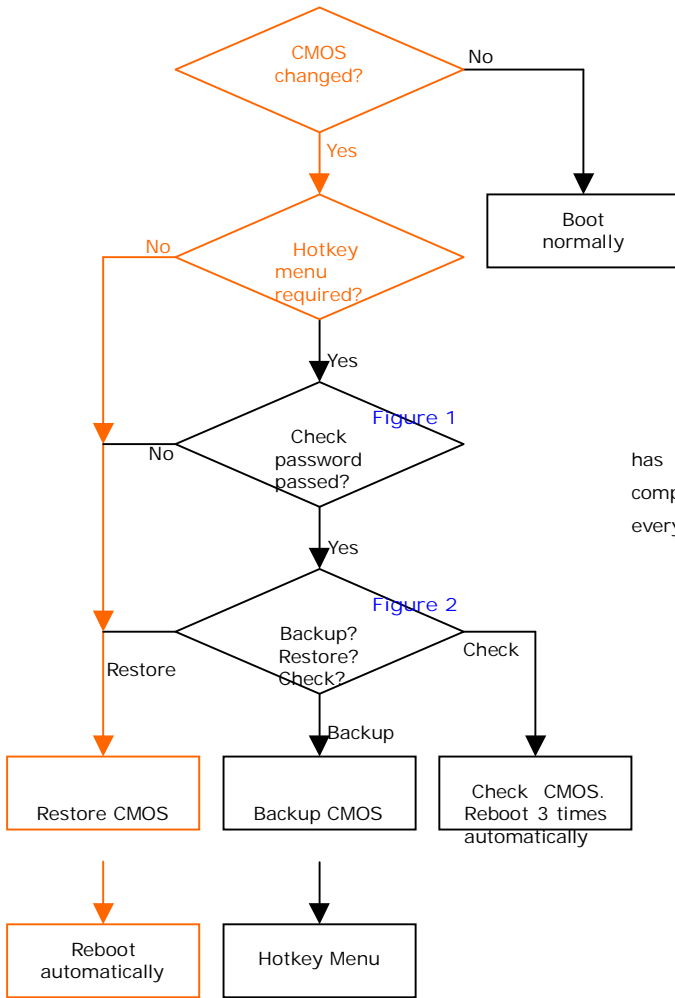


Figure 1

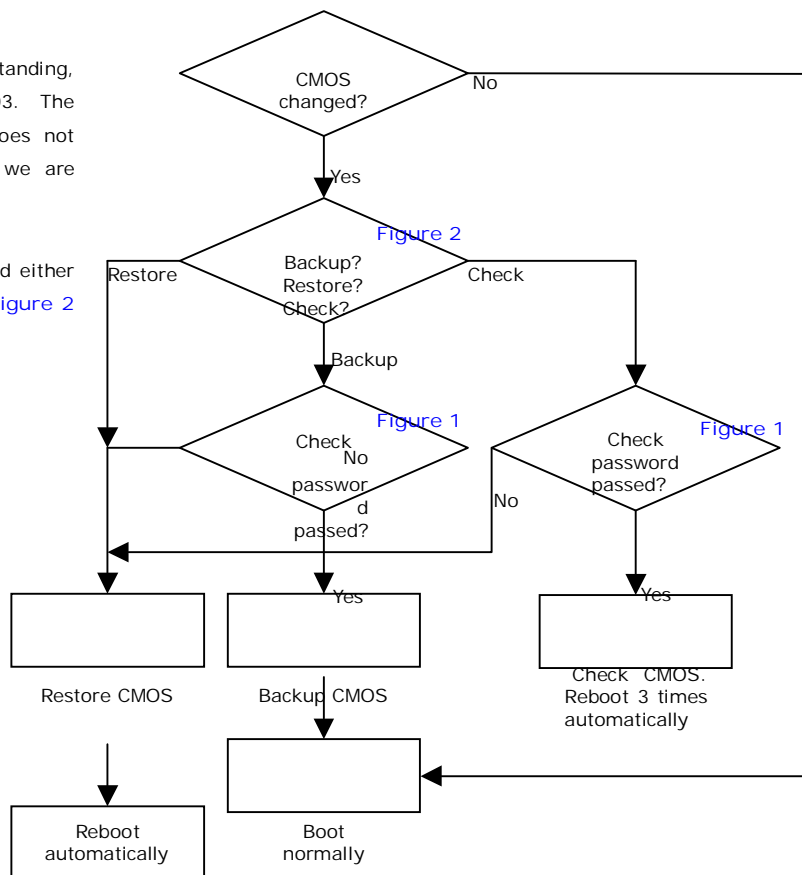


This solution has good cover-up, but usually has users misunderstand that hddGuarder™ has the looped-boot compatibility problem while CMOS is changed automatically by BIOS every boot time. On the left figure, we show it in color ORANGE.

3. Clever Protection (2) by hddGuarder™

Because of the users misunderstanding, we modified the CMOS protection in 2003. The new solution has not good cover-up, but does not result in the looped-boot because of which we are usually misunderstood.

As right figure shown, if CMOS is changed either automatically by BIOS or manually by users, Figure 2 will always appear.



4. What use does “Check CMOS” have?

Before I give the answer, kindly please you think of

< What will happen if CMOS is changed automatically by BIOS every boot time?

< How we can do if we want to change CMOS a little and DO hope hddGuarder™ not to restore CMOS or not to display any menu? Now, we can choose “Check CMOS”. During the three auto-reboot times, all the changes in CMOS either automatically by BIOS or

manually by users will be marked as “changable”.

5. Dated CMOS Protection Method

Since 1999, we have been confounded why other brands have users to choose “CMOS Protection” as “Standard”, “Enhanced”, “Normal” or “No”. By now we have no answer yet.

Could anyone of users please give a answer?

We come out with the CMOS map. Is it the answer?

Primary CMOS		Secondary CMOS
00-0F System	Used by	Expanded by Intel In 1998
10-3F Zone	Standard	
40-7F Zone	Extended	

“Used by System” does not need protection and cannot be protected.

6. Copyright

The hddGuarder™ clever CMOS protections MUST NOT be copied.

