Every PC motherboard has a battery. That battery serves two purposes: to feed the configuration memory (also called CMOS) and to feed the real time clock of the computer (the one that show the date and the time).

An indication it is time to change the motherboard battery is receiving one of the following error messages when you turn on your computer: CMOS CHECKSUM FAILURE, CMOS BATTERY STATE LOW, CMOS SYSTEM OPTIONS NOT SET and CMOS TIME AND DATE NOT SET. Another indicator of a low battery is a clock that, after being set, runs well while the computer is on, but shows the wrong time when the computer is turned on the following day (it is late).

The motherboard battery can be built using three different technologies: Nickel-cadmium (NiCd), NVRAM (Non-Volatile RAM) and Lithium (Li). The Lithium battery, which is a round one (the size of a coin) and can be easily found at watchmaker's and computer parts stores, has long been the most used type. To buy one of these batteries, all you have to do is to look for a model CR2032 one.

Replacing the motherboard lithium battery demands some care. It seems to be a simple task, but it is not.

The lithium battery may use basically three socket types: socket with upper tab (Figure 1), socket with lateral tab (Figure 2), and the socket into which the battery stands instead of lying (Figure 3).

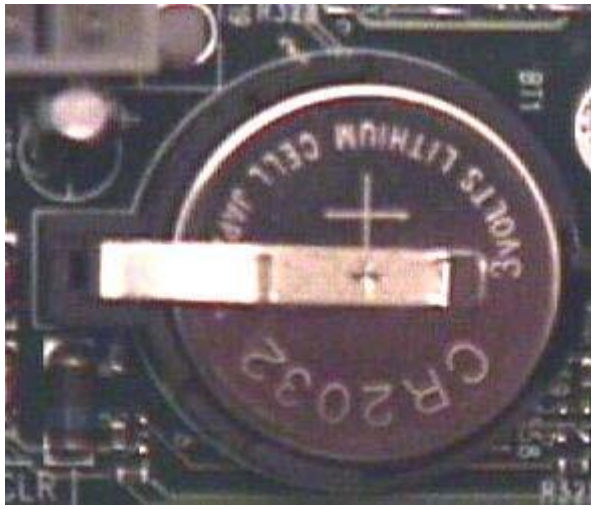

Figure 1: Socket with upper tab.

Figure 2: Socket with lateral tab.

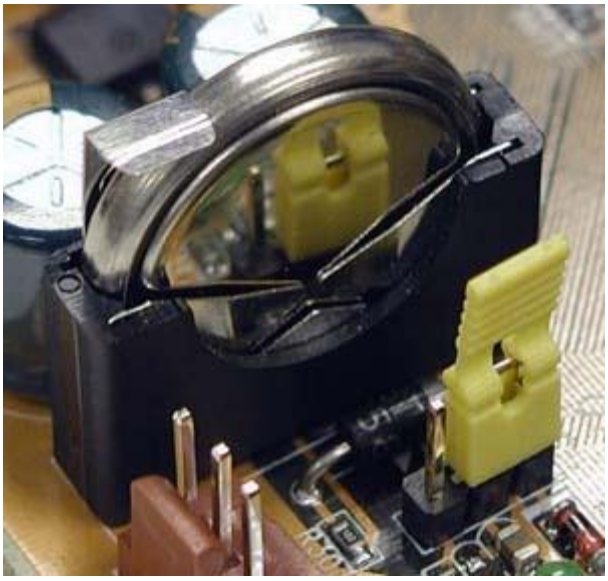

Figure 3: Another kind of battery socket.

While the replacement of the battery in the socket with the lateral tab or of the one that stands is simple (Figures 2 and 3) – all you have to do is draw back the tab using your finger or a small screwdriver and replace it – the replacement of the batter that has an upper tab covering it (Figure 1) demands extra care. In this type of socket, if you raise the metallic tab to replace the battery, it will lose its pressure and will not make contact with the battery anymore, damaging the socket. In this case, the correct replacement of the battery in done pressing a small plastic lock at the side of the socket with the fingers or using a small screwdriver. That will allow the battery "to slide" laterally, not damaging the upper tab.

Whatever the socket used, don't forget that the replacement of the battery should be done while the computer is off.