

# Kernel mode

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For the kernel mode, CPU is allowed to execute all instructions.

Some of kernel mode instructions:

① HLT (Halts the CPU)

We don't want any process to shut down the machine. So HLT is always run in kernel mode.

② MOV DBR / MOV CR0

There are special privileged registers. In kernel mode we could access all the memory in machine.

③ LMSW, SMSW (load/store machine status word register).

④ IN/OUT.

In kernel mode, process can access/modify any memory location.

It can modify any registers of CPU.

Kernel instructions run in kernel mode.