

Crafting a 'boot time' program

How we can utilize some standard 'real-mode' routines that reside in the PC's ROM-BIOS firmware

Our 'bare machine'

- If we want to do a “hands on” study of our CPU, without any operating system getting in our way, we have to begin by exploring ‘Real Mode’ (it’s the CPU’s startup state)
- We will need to devise a mechanism by which our program-code can get loaded into memory (since we won’t have an OS)
- This means we must write a ‘boot loader’

Our 'bare machine'

- If we want to do a “hands on” study of our CPU, without any operating system getting in our way, we have to begin by exploring ‘Real Mode’ (it’s the CPU’s startup state)
- We will need to devise a mechanism by which our program-code can get loaded into memory (since we won’t have an OS)
- So we utilize the ROM-BIOS ‘boot loader’