ABSTRACT

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PROGRAM FOR CHANGING MODE 80x86 CPU

FROM REAL TO PROTECTED

(xi + 56 pages, 6 tables, 11 figures)

In processor 80x86 families like Intel and AMD, there are two modes. The first mode is real mode. In the real mode, program work in 16 bit environment and access to memory is limited only 1 MB. While in protected mode, program can work in 32 bit environment and access to memory up to 4GB. Therefore, a program is made to change mode from real mode to protected mode.

To change mode from real to protected mode there are several things that must be concerned. There are Global Descriptor Table (GDT), Interrupt Descriptor Table (IDT), and Task State Segment (TSS). Without declaring them, the program cannot work in protected mode.

The result of program is the ability to change mode from real to protected mode. GDT and IDT have been declared and used. While TSS only has been declared, but not yet applied in program.

References: 14 (1997 - 2006).