

I/O Devices

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Device Controller

Part of a computer system that makes sense of a signal going to or coming from CPU. Any device connected to a computer is connected by a plug or socket and the socket is connected to the controller. Device controller \rightarrow act as bridge between devices and OS.

Device Driver

Device driver is required because each type of controller may be different. It connects with the controller and takes care of responses. There is a driver for each OS. When designing an OS, we need to write a software that takes care of controller. It is basically a chunk of codes.

I/O Devices \rightarrow Controller \rightarrow Drivers

How device driver talks to controller?

- * Busy wait
 - * Interrupt
 - * Direct memory access.
- } ***

Bus \rightarrow left