

Figure Computer system components involved in I/O processing.

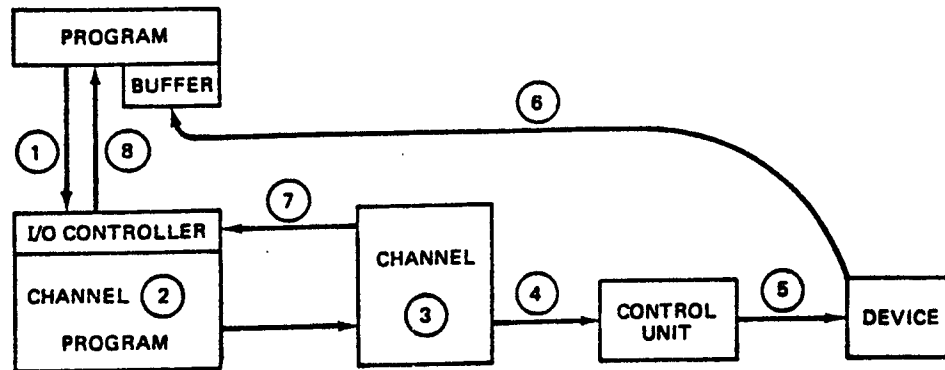


Figure Sequence of events in processing a file READ.

Processing a Read

When a program requests a READ from a file, the following sequence of events typically occurs.

1. The program issues a READ, which interrupts the I/O controller.
2. The I/O controller builds a channel program in main memory.
3. The channel program is executed by the addressed channel.
4. Appropriate signals are transmitted to the addressed control unit.
5. These signals are interpreted by the control unit and used to control device operations to read the requested data.
6. The requested data flows from the device along the pathway to the file's buffer area in the program's memory space.
7. An interrupt is issued by the channel to signal continuation of the program's execution.
8. Control returns to the program.

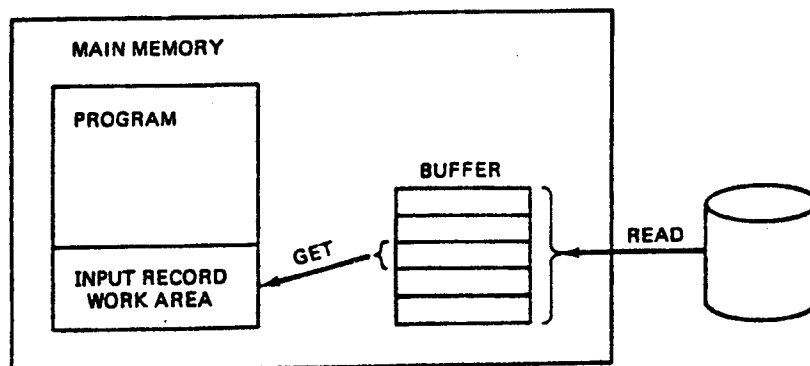


Figure Device access with blocked records.