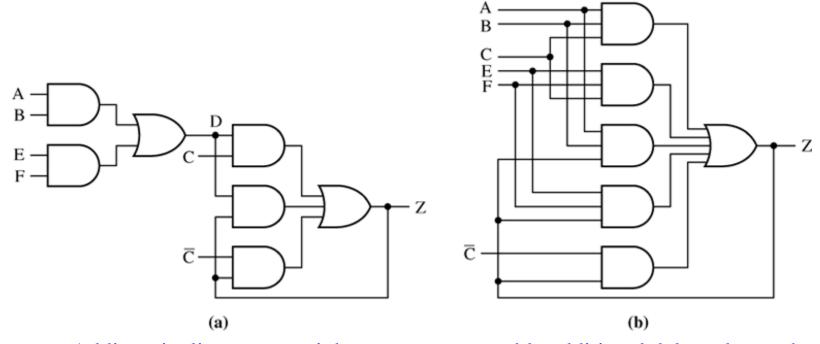
EL318: Lecture 3-2

Pipelining Latching

Converted from an HTML page to make a more cohesive life.

Pipeline latches



• Adding pipeline stages might cause unacceptable additional delays due to the required latches. The Earle latch (a), however, can be merged (b) with the preceding combinatorial stages so that no additional logic layers are required. The middle AND gate in (a) covers a potential hazard and ensures glitch-free operation.