

KNOWLEDGE PROBE 2: PROGRAMMABLE LOGIC DEVICES

PLD Concepts & Types

Learning Objectives

1. Identify basic components of any different types of PLDs.
 2. Identify the programming differences between the different PLDs.
-
1. OTP PLDs can be reprogrammed.
 - a. True
 - b. False
 2. Most PLDs are organized as
 - a. Depends on the types of PLD
 - b. Product of sums (POS)
 - c. Sum of products (SOP)
 - d. None of the above
 3. The SPLD that implements logic as a LUT is the
 - a. GAL
 - b. PLA
 - c. PLA
 - d. PROM
 4. In a PROM, which logic array is programmable?
 - a. AND
 - b. OR
 - c. Both
 - d. Neither
 5. In a PLA, which logic array is programmable?
 - a. AND
 - b. OR
 - c. Both
 - d. Neither
 6. In a PAL, which logic array is programmable?
 - a. AND
 - b. OR
 - c. Both
 - d. Neither



7. In a GAL, which logic array is programmable?
 - a. AND
 - b. OR
 - c. Both
 - d. Neither
8. Which is the least used SPLDs?
 - a. GAL
 - b. PAL
 - c. PLA
 - d. PROM
9. If $\neg X$ is 1, then X is
 - a. 0
 - b. 1
 - c. Open circuit
 - d. No way to tell
10. Which circuit is used to select one of two inputs?
 - a. AND
 - b. OR
 - c. FF
 - d. MUX
11. A GAL is a reprogrammable
 - a. FPGA
 - b. PAL
 - c. PLA
 - d. PROM
12. Prop delay of a PLD is affected by
 - a. Logic transistor size
 - b. Programmable connections
 - c. Wiring
 - d. All of the above