@Sree Vishnu Varthini

Day - 9

Embedded Systems Programming

TRIGGERING

Triggering refers to the action that occurs in response to a clock signal. It determines when a circuit should read or change its output based on the clock pulse.

Triggers determine how and when a circuit responds to clock signals, especially in sequential circuits like flip-flops and registers.

TYPES OF TRIGGERING

- Level triggering
- Edge triggering

LEVEL TRIGGERING

Level triggering responds to the level of the clock signal rather than its edges.

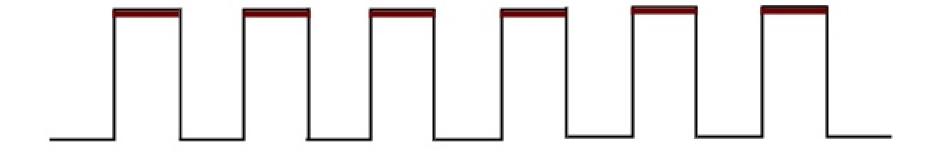
LEVEL TRIGGERING TYPES

- Positive Level triggering
- Negative Level triggering

POSITIVE LEVEL TRIGGERING

The circuit responds as long as the clock signal is high (1).

Visual Representation

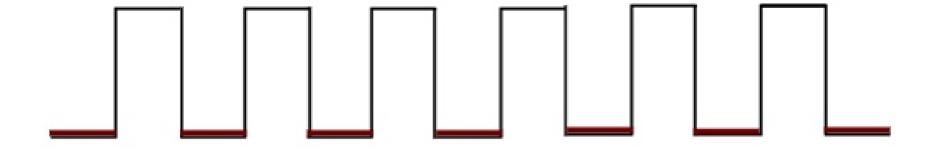


Positive level triggering maintains the output while the clock signal is high.

NEGATIVE LEVEL TRIGGERING

The circuit responds as long as the clock signal is low (0).

Visual Representation



Nagative level triggering maintains the output while the clock signal is low.

EDGE TRIGGERING

Edge triggering responds to changes in the clock signal, specifically to the rising or falling edges of the signal.

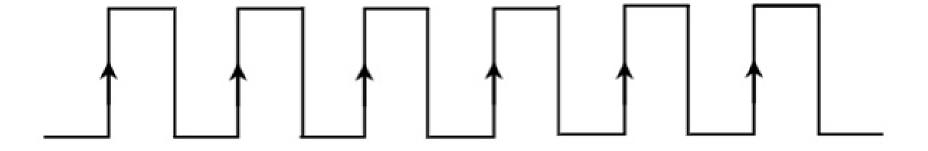
EDGE TRIGGERING TYPES

- Positive Edge triggering
- Negative Edge triggering

POSITIVE EDGE TRIGGERING

The circuit activates its output when the clock signal transitions from low (0) to high (1).

Visual Representation

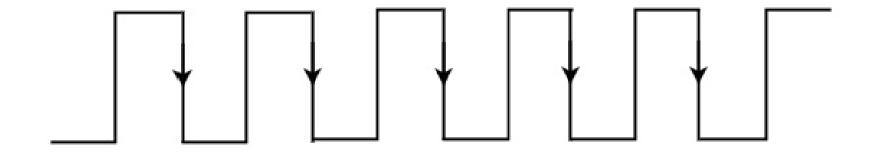


Positive edge triggering occurs on the rising edge of the clock signal.

NEGATIVE EDGE TRIGGERING

The circuit activates its output when the clock signal transitions from high (1) to low (0).

Visual Representation



Negative edge triggering occurs on the falling edge of the clock signal.

@Sree Vishnu Varthini

Did you like the post? follow for more!



