Top 20+ Digital Electronics Interview Questions & Answers

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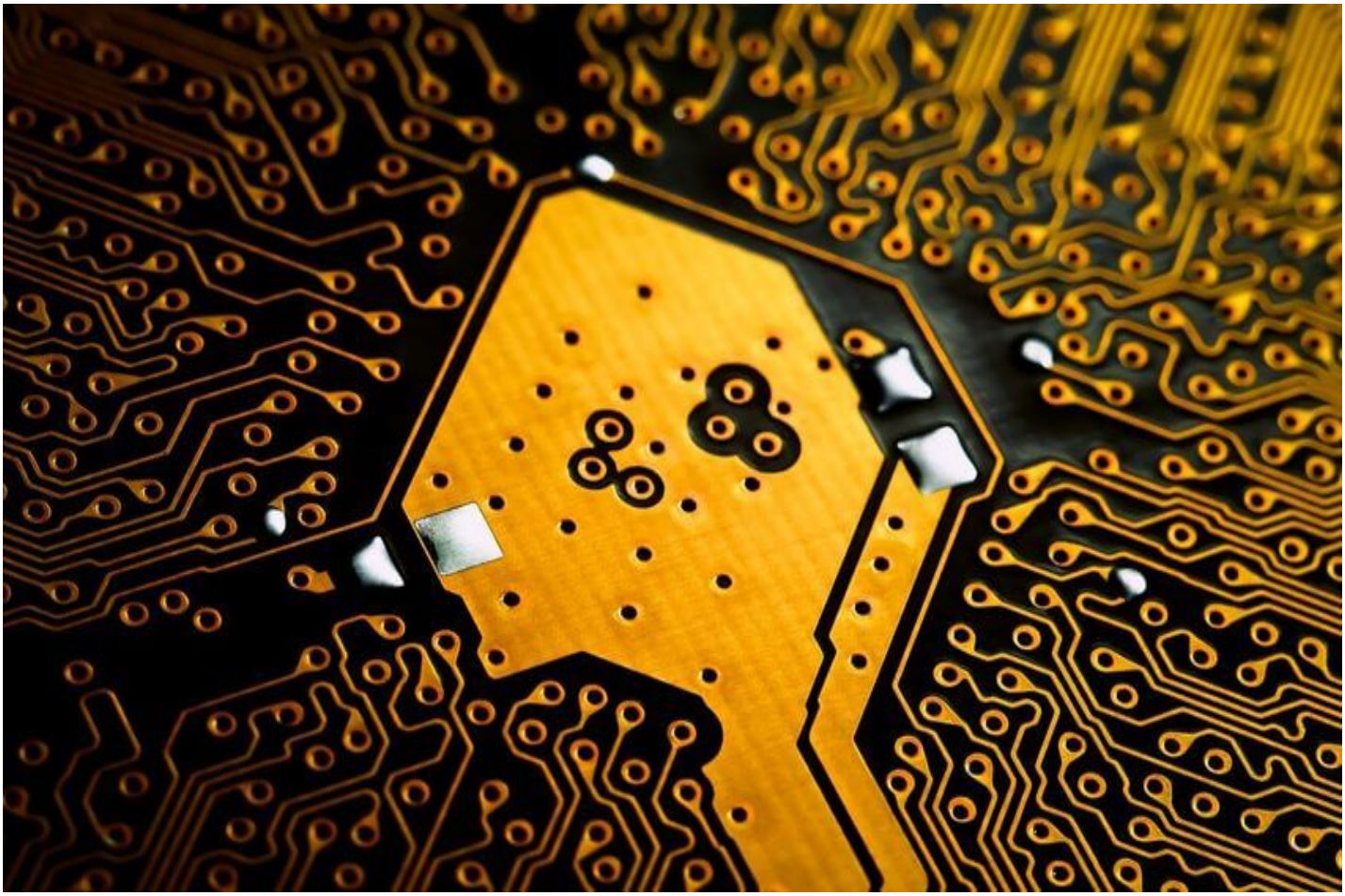

It is factual that every interview is dissimilar as per the diverse job profiles. Here, we have equipped the significant digital electronics interview questions and answers which will assist you in getting accomplishment in your interview.

Top Digital Electronics Interview Questions & Answers

1. Define CAM?

CAM is known as content available memories. It can carry out association operation in adding to the read operations performed by the conformist memories.

The two forms are:

- The product of sum form
- Sum of products form

3. What do you mean by Maxterm and Minterm?

A Minterm is known as Product of sum because they are the rational AND of the place of variables and Maxterm is known as the sum of product because they are the rational OR of the place of variables.

4. What are the characteristics of Digital ICs?

The characteristics of digital ICs are:

- Fan-in
- Fan out
- Propagation delay
- Power Dissipation
- Noise Margin

5. State the difference between flip- flop and latch?

The dissimilarity between latches and Flip-flop is that the latches are stage triggered and flip-flops are border-triggered. In latches level-triggered means that the production of the latches changes as we modify the input and edge-triggered means that the manage indication only changes its condition when it goes from low to high or high to low.

6. What is Digital system?

Digital system is the system that processes a digital signal.

7. Tell me the definition of the Duality theorem?

Duality Theorem states that we can obtain another Boolean expression with the obtainable Boolean expression by:

- Complimenting 0 and 1 in the expression by altering 0 to 1 and 1 to 0 correspondingly
- Changing the OR process (+ Sign) to AND operation (. Dot Sign) and vice versa.

8. How will you execute a full subtractor from a full adder?

It can be implemented by linking all the bits of subtractor to the xor-gate and another effort to xor as one and then hold the bit as a contribution to a full adder which wants to be made as one. So, the Full adder will labor as a Full subtractor.

9. Define edge triggered flip flop?

The difficulty of a contest around the state can be solved by using an edge-triggered flip-flop. The edge-triggered flip-flop will alter its state either at the optimistic edge or unenthusiastic edge of the

10. Define power dissipation?

Period time is the electrical power used by the reason circuits. It is spoken in mill watts or nanowatts.

Power dissipation = Supply voltage * signify present taken from the supply.

11. What is rise time?

Rise time is the time that is necessary to alter the voltage level from 10% to 90%.

12. Explain the setup time?

The least time that is necessary to uphold the steady voltage levels at the excitation inputs of the flip-flop tool before the triggering border of the clock pulse for the levels to be dependably clocked in the flip flop is known as the Setup time.

13. State the difference between D- latch and D- flip – flop?

D-latch is level responsive, whereas flip-flop is edge responsive. Flip-flops are completed up of latches.

14. Define Hold time?

The last time at which the power level becomes stable after triggering the watch pulse in order to dependably clock into the flip flop is called the Hold time.

15. Define fall time?

Fall time is the time that is necessary to modify the power level from 90% to 10%.

16. Why most interrupts active low?

If you think transistor as an example, active low means the capacitor in transistor manufacture terminal will get exciting or discharged based on signals from small to high or from high to low transitions correspondingly. When the signal goes from well-known to small, it depends on the resistor that pulls down it is known as a pull-down resistor.

17. Name the applications of Buffer?

Some of them are:

- Buffer helps for high fan-out
- Buffer helps to introduce small delays
- Buffer is used to eliminating cross talks

18. What are the applications of demultiplexer?

The applications of demultiplexer:

- It is utilised as a serial to parallel converter
- It is used as a decorator for the conversion of binary to decimal
- It is utilised in the data transmission system with error detection

Full-adder is the circuits that carry out the adding up of three bits. It has three inputs A, B and a hold bit. Full adders are represented with AND, OR and XOR reason gate.

20. What do you mean by Multiplexer?

The multiplexer is a digital control which combines all the digital information from numerous sources and gives one output.

21. Define the binary number system?

The binary system has a base 2, and it consists of only two digits 0 and 1.

For Example: Take decimal number 125
125 = 100 + 20 + 5
That means,
1×100 + 2×10 + 5
In this 125 contain of three bits, we start writing the numbers from the rightmost bit power as 0 then the second bit as power 1 and the last as power 2. So, we can represent a decimal number as

∑digit × 10 corresponding positions or bit

Here 10 is the total number of digits from 0 to 9.

22. What are the logic gates & types?

These are the fundamental building blocks of a digital system. It is an electronic circuit having one or more than one input and only one output. There are three basic logic gates:

- AND gate.
- OR gate.
- NOT gate.

So, above is the mentioned interview questions & answers for electronics engineer jobs, candidates should go through it and search more to clear the job interview.

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