

VLSI MCQ

VLSI is an acronym for ____?

- A Very large Scale Integration
- B Varying large Scale Integration
- C Varying large Scale Integrity
- D None of the above

Answer : A

which below option is used form integrated circuit VLSI technology?

- A diodes
- B transistors
- C switches
- D triodes

Answer : B

MOSFETs possess _____.

- A Low packing density
- B High packing density
- C Poor packing density
- D None of the above

Answer : B

Which among the following is a process of transforming design entry information of the circuit into a set of logic equations?

- A Simulation
- B Optimization
- C Synthesis
- D Verification

Answer : C

Integrated chip with lesser than 10 transistors is known as _____.

- A Small-scale integration
- B Medium-scale integration
- C Large-scale integration
- D Very large-scale integration

Answer : A

_____ is the fundamental architecture block or element of a target PLD.

- A System Partitioning
- B Pre-layout Simulation
- C Logic cell
- D Post-layout Simulation

Answer : C

How many gates are present on each chip for Medium scale integration?

- A 3-30
- B 30-300
- C 300-3000
- D All the above

Answer : B

Logic design of VLSI is used _____

- A LIFO
- B FIFO
- C LILO
- D FILO

Answer : B

In VLSI design, which process deals with the determination of resistance & capacitance of interconnections?

- A Floorplanning
- B Extraction
- C Placement & Routing
- D Testing

Answer : B

Which type of MOSFET exhibits no current at zero gate voltage?

- A Depletion MOSFET
- B Enhancement MOSFET
- C Both A & B
- D None of the above

Answer : B

The metal preferred in VLSI for contacting is _____.

- A Antimony
- B Aluminum
- C Germanium

D Silicon

Answer : B

Which type of simulation mode is used to check the timing performance of a design?

A Behavioural

B Switch-level

C Gate-level

D Transistor-level

Answer : C

Doping can also be done by using _____.

A Contact metallization

B Ion implantation

C Oxidation

D Diffusion

Answer : B

In the simulation process, which step specifies the conversion of VHDL intermediate code so that it can be used by the simulator?

A Compilation

B Elaboration

C Initialization

D Execution

Answer : B

MOSFET is a _____ device.

A Uni-polar

B Bipolar

C Complementary

D Supplementary

Answer : A

The VLSI design flow starts with:

A RTL synthesis

B Library mapping

C Product specifications

D None of the above

Answer : C

Register transfer level description specifies all of the registers in a design & _____ logic between them.

- A Sequential
- B Combinational
- C Both a and b
- D None of the above

Answer : B

Which model is used for scaling?

- A constant electric and voltage scaling
- B constant current model
- C constant voltage scaling
- D constant electric scaling

Answer : A

Which is the high level representation of VLSI design?

- A Logic design
- B Functional design
- C HDL program
- D Problem statement

Answer : D

Depletion mode n MOSFETs have _____ threshold voltage.

- A Positive
- B Negative
- C Zero
- D None of the above

Answer : B