Cs302 quiz 1 file

By

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Compose by ALI HASSAN

Which of the following is the octal equivalent of 28 decimal number?

34

The maximum decimal number that can be represented using the 64-bit unsigned representation is _____.

(2^64)-1

In a 4-variable K-map, a 2-variable product term is produced by

a 4-cell group of 1s

For a Standard SOP expression, a ____ is placed in the cell corresponding to the product term present in the expression.

1

The _____ input select/deselects both the decoders simultaneously.

Enable

NAND and _____ gates are known as Universal Gates.

NOR

The declaration section of ABEL generally includes the device declaration, _____declarations and set declarations.

Pin

An SOP expression having a domain of 2 variables will have a truth table having _____combinations of inputs and corresponding output values.

4

In the 32-bit Single Precision Floating formation, the exponent value _____ is reserved to represent 0 exponents.

0

CMOS technology is characterized by low power dissipation with _____ switching speeds.

Slow

The complement of a variable is always

The inverse of the variable

A (B + C) = A.B + A.C is the expression of _____.

Distributive Law

If the number 2025 is represented in floating point, then exponent is _____.

3

Excess-8 code of -6 is _____.

0010

A 3-variable Karnaugh map has

Eight cells

To represent in digital value, the number of digit (0s and 1s) that represents a quantity is _____ to the range of values that are to be represented.

Proportional

Suppose we want to transmit the data “10001101” and an “Even-Parity” bit scheme is used to detect errors, the parity bit added to the data will be_____.

Both “0” and “1” can be used

The carry propagation delay problem in parallel binary adder can be solved by _____.

Using two full adders

Two 2-input, 4-bit mulitplexers 74X157 can be connected to implement a _____ multiplexer.

2-input, 8-bit

The octal equivalent of the following binary number is _____.

117

A’ is written is ABEL as_____.

!A

Which of the following is the hexadecimal equivalent of 28?

1C

High Level Noise Margins (VNH) of CMOS 5 volt series circuits is _____.

0.9 V

Adjacent 1s detector circuit will have active high output for the input.

0011

Modern information techniques are relying more on _____ transmission.

Digital

The _____ select input(s) of the two 4-input multiplexers are common in Dual 4-input multiplexer.

Two

How many data select lines are required for selecting eight inputs?

3

Select the mode of programming in which GAL 16V8 cam be programmed.

All of the given option

_____ has the fastest switching speed and low power requirement.

Advanced low power Schottky

The PLA can be programmed to give an output of constant _____ or _____.

0.1

The minimum time for which the input signal has to be maintained at the input of flip-flop is called ___ of the flip-flop.

Hold time

A Divide-by-20 counter can be achieved by using

Flip-Flop and DIV 10

Each stage of Master-slave flip-flop works at ___ of the clock signal.

One half

In Master-Slave flip-flop the clock signal is connected to slave flip-flip using ___

NOT

A 4-bit binary UP/DOWN counter is in the binary state zero. The next state in the DOWN mode is ___

1111

___ is said to occur when multiple internal variables change due to change in one input variable

Race condition

The Synchronous counters are also known as Ripple Counters: **False**

The minimum time required for the input logic levels to remain stable before the clock transition occurs is known as the ___

Set-up time

The n flip-flops store ___ states.

2^n

When the ___ Hz sampling interval is selected, the signal at the output of the J-K flip-flop has a time period of ___

1,2

A positive edge-trigged flip-flop changes its state when ___

Low-to-high transition of clock

A decade counter is ___

Mod-10 counter