

Introduction to the Internet of Things and Embedded Systems

WEEK 3: QUIZ

1. Under what conditions should an integrated circuit be used in an IoT device?

Ans:

- When highest performance is required.
- When lowest power is required.
- When the function is already commonly available as an integrated circuit.

2. Given a choice between implementing a function as an integrated circuit (in hardware) or as a program (in software), what factor needs to be considered the least?

Ans: The physical look of the final device.

3. Generally, in a computer-based system, main memory is much larger than cache.

Ans: True

4. What is the fastest type of storage in a computer-based device?

Ans: Registers

5. Which statement is false?

Ans: Machine language is universal, allowing programs written in machine language to be executed on any microprocessor.

6. What does an assembler generate?

Ans: Machine code from assembly code.

7. Compiled code generally executes faster than interpreted code.

Ans: True

8. Which of the following is NOT a benefit of using an operating system?

Ans: The frequency of the microcontroller clock can be significantly increased.