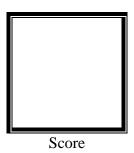


PAMANTASAN NG LUNGSOD NG MAYNILA

(University of the City of Manila) Intramuros, Manila

MICROPROCESSOR (LECTURE)

Activity No. 1 **Review of Terminologies**



Submitted by:
Opeña, Ralph Christopher F.
7:00 – 10:00 AM - Saturday / CPE 0412-1

Date Submitted **29-09-2023**

Submitted to:

Engr. Maria Rizette H. Sayo

Instruction:

- A. Define and discuss the following terminologies related to microprocessor systems:

 - MPU
 MCU
 Features of microprocessor and microcontroller
 Applications of microprocessor and microcontroller
- B. Cite your References below.

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A.

1. MPU

- MPU stands for Microprocessor Unit, during which is a fundamental component of a microprocessor system. Within a microprocessor-based system, an MPU controls the flow of data, executes instructions, and performs arithmetic and logical operations.
- The exact application and specifications of the microprocessor system in which it is employed can have a major impact on its design and capabilities.

2. MCU

- MCU or also called Microcontroller Unit, consists of a CPU core and necessary peripherals including input/output ports, timers, memory, and frequently analog interfaces on a tiny integrated circuit (IC).
- It is designed for embedded systems and is commonly used in applications where precise control and real-time processing are required.

3. Features of microprocessor and microcontroller

Microprocessor	Microcontroller
created for all-purpose computer	specifically created for embedded
applications	system applications
CPU with few on-board peripherals, I/O	Single-chip computer system featuring
connections, and memories	on-board I/O interfaces, memory, and
	peripherals
Less Integrated	Highly Integrated
CPU + support chips	Single-Chip System
Greater power	Reduced Power
More adaptable	Set of Fixed Instructions
a faster frequency, usually larger than 1	lower clock frequency, usually under
GHz	100 MHz

4. Applications of microprocessor and microcontroller

Microprocessor	Microcontroller
Smartphones	Industrial Automation
Personal Computers	IoT Devices
Gaming Consoles	Smart Cards
Engineering Applications	Security Alarms
Defense Systems	Electronics

B. Reference

theswissbay.ch/pdf/Books/Computer science/Computer Organization and Design-The HW_SW Inteface 5th edition - David A. Patterson %26 John L. Hennessy.pdf

(PDF) MC 8051 Mazidi - DOKUMEN.TIPS

What's difference between Microcontroller (μ C) and Microprocessor (μ P)? - GeeksforGeeks

Difference between Microprocessor and Microcontroller (guru99.com)

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