# Ahsanullah University of Science & Technology

## Department of Computer Science & Engineering

**Course No** : CSE2214
**Course Title** : Assembly Language Programming Sessional
**Assignment No** : 01

**Date of Performance** : 01/12/21
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Question no: 01

Question: Draw the Diagram of the Intel 8086 Microprocessor organization.

Answer:

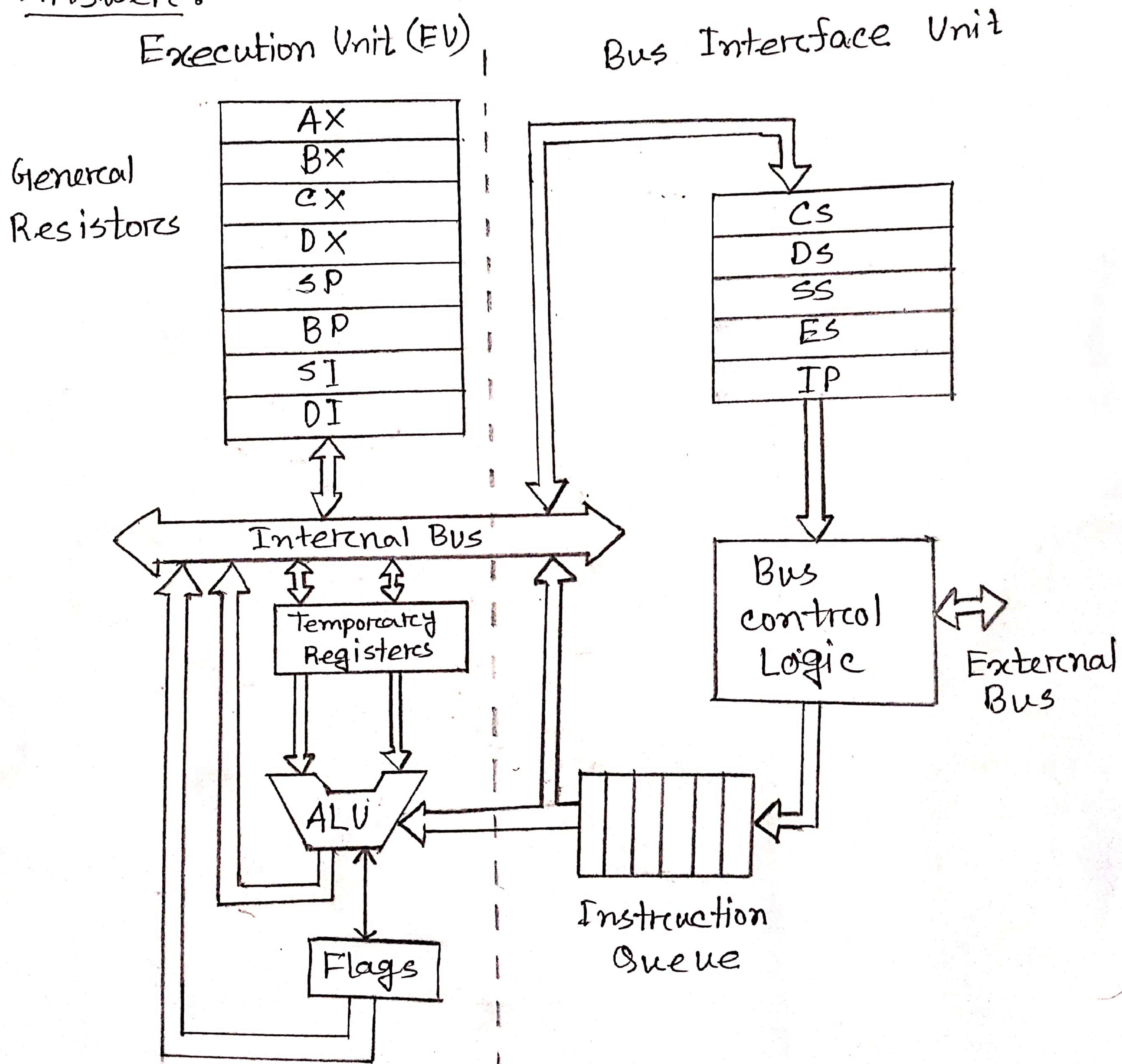Execution Unit (EU)                    Bus Interface Unit



Figure: Intel 8086 Microprocessor Organization.

Question no: 02

Question: Consider a machine language instruction that moves a copy of the contents of register AX in the CPU to a memory word. What happens during the fetch cycle and execution cycle.

Answer:

MOV memory, AX

During fetch cycle:
1. Fetch the instruction (contents of AX) from the memory.
2. Decode the instruction. On recieving the instruction, a decoder circuit in the EU decodes the instruction and determines that it is a MOV operation.

During Execution cycle:
1. Perform the operation. Hold the contents of register AX.
2. Store the result in the memory. While starting, the previous contents of memory word are overwritten by the new one.