

Chapter 05: Basic Processing Units ... Control Unit Design

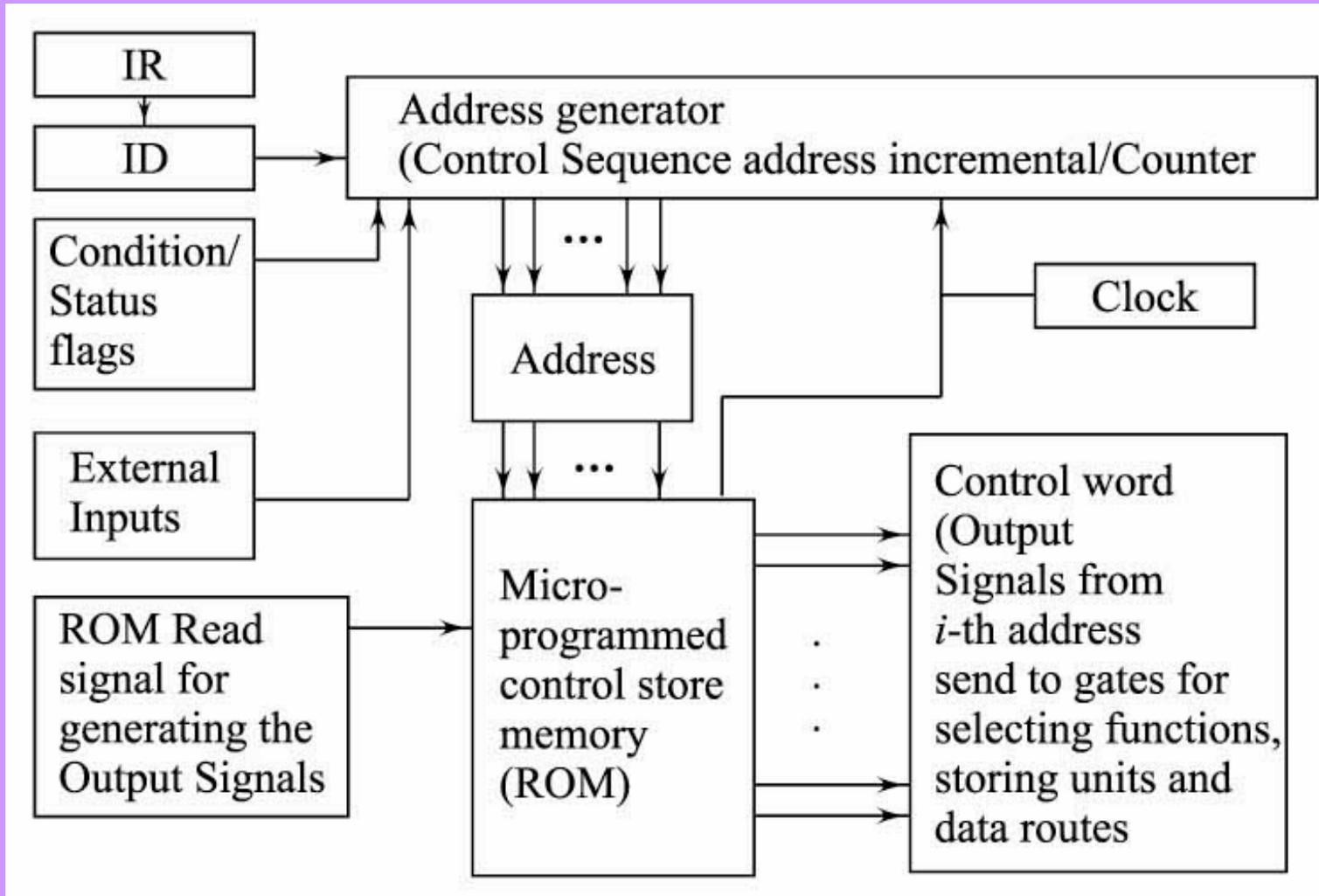
Lesson 18: Nanoprogramming

Objective

- Learn concept of nanoprogramming
- Learn use of nanoinstructions in secondary control memory

Microprogrammed Control Unit Organization

Generating a Set of Outputs for the Given Set of Microinstructions (Set of Control-Signal Sequences)

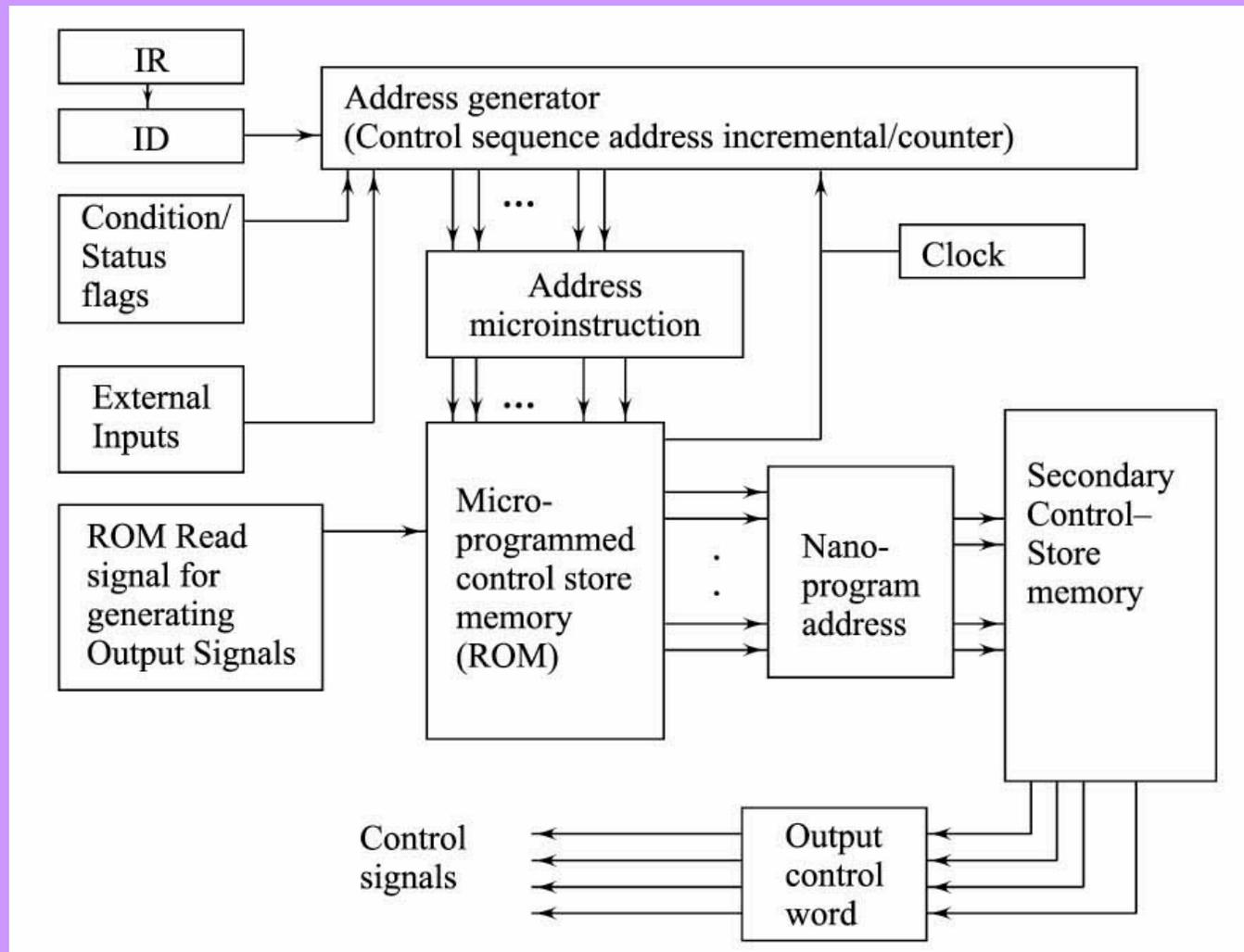


Nanoinstructions

An alternative strategy to generate control signals

- Having the concept of a secondary control memory
- A microinstruction is in primary control-store memory, it then has the control signals generated for each microinstruction using a secondary control store memory
- The output word from the secondary memory is called nanoinstruction

Two levels Microprogrammed and Nanoprogrammed control Units organisation



Summary

We Learnt

- Learn concept of nanoprogramming
- Learn use of nanoinstructions in secondary control memory

End of Lesson 18 on
Nanoprogramming