

Module 4

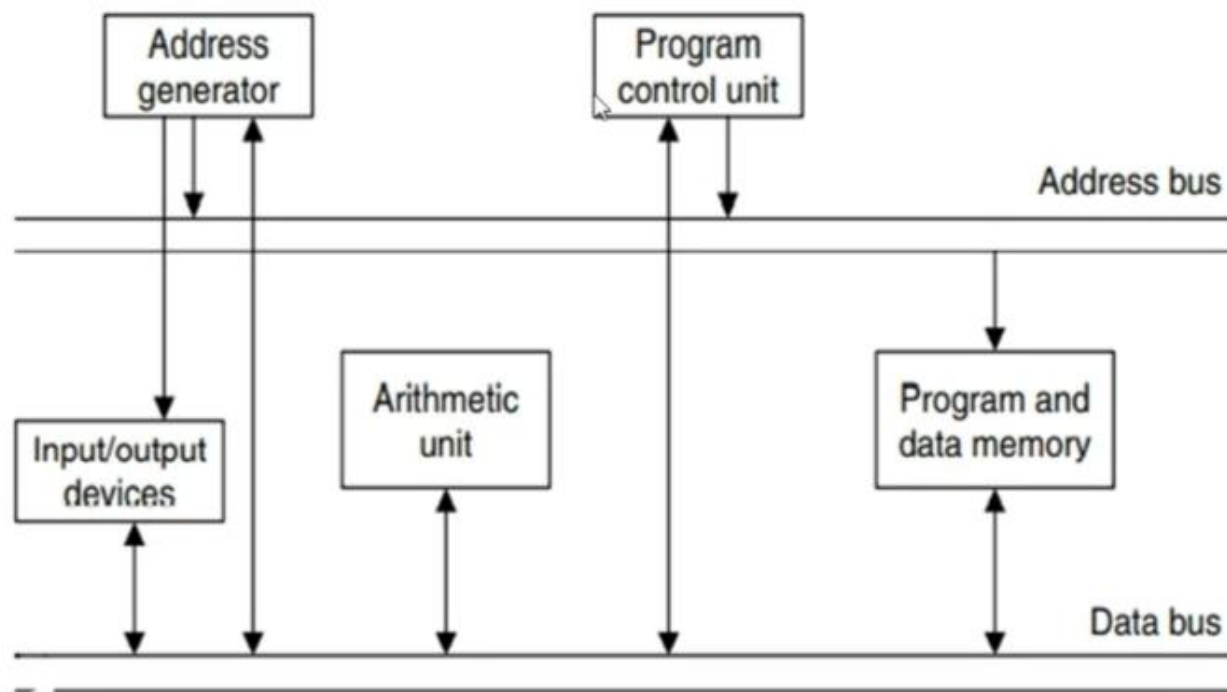
Introduction to Digital Signal (DS) Processors:

Introduction, Digital Signal Processor
Architecture- Von Neumann architecture and
Harvard architecture, Fixed- and Floating-Point
Format for DS processors.

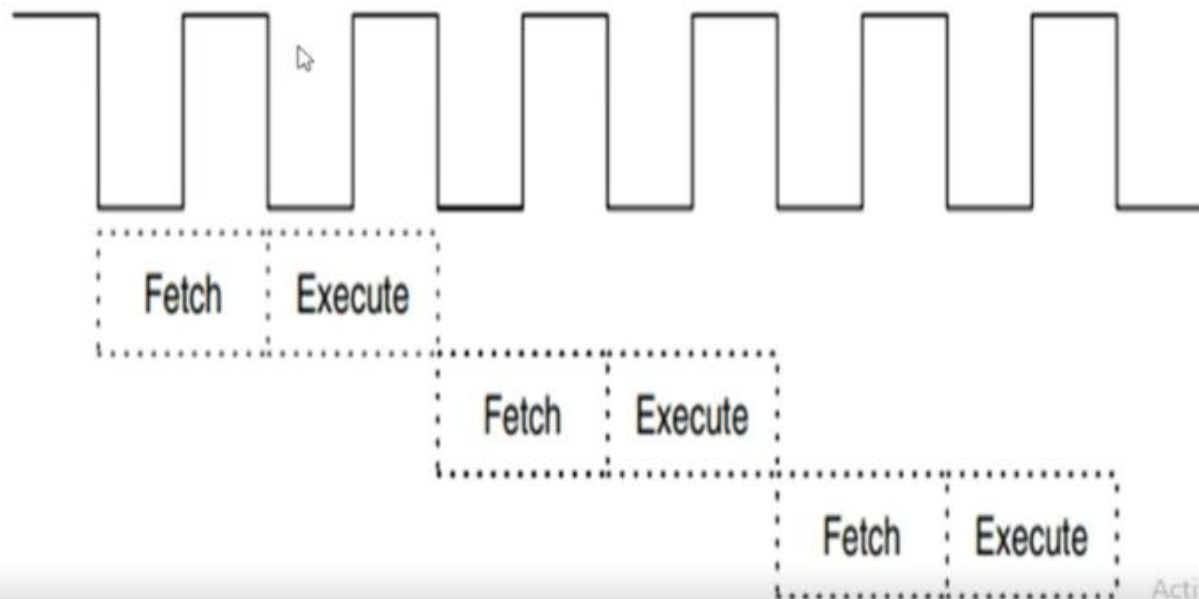
Text Book

1. Proakis & Manolakis, "Digital signal processing – Principles Algorithms & Applications", *Pearson education*, 4th Edition, New Delhi, 2007.
2. Li Tan, "Digital Signal Processing", Academic Press, *Elsevier*, 2007.

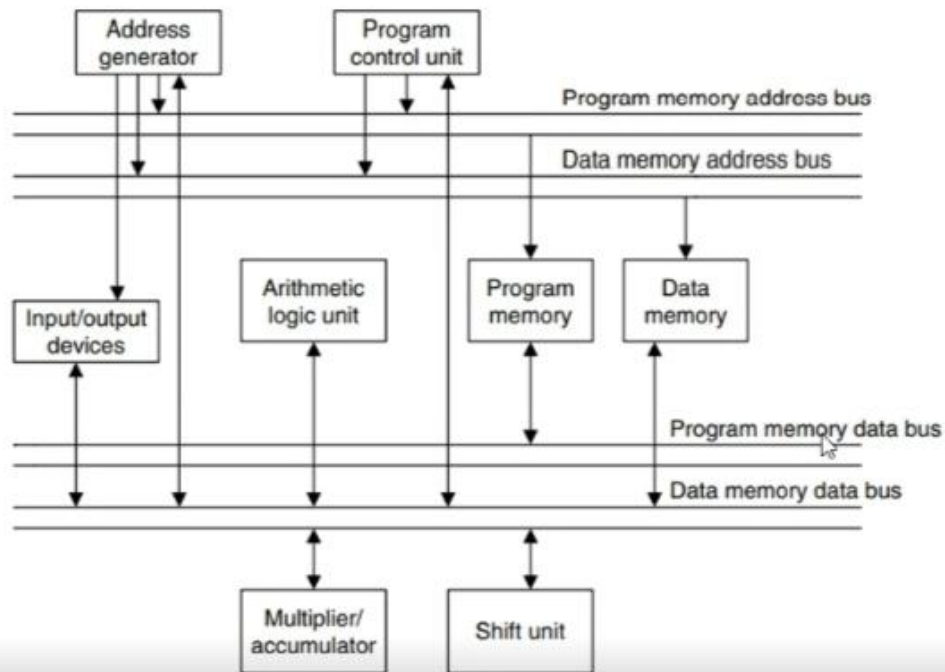
Von Neumann Architecture



Execution cycle based on the Von Neumann Architecture

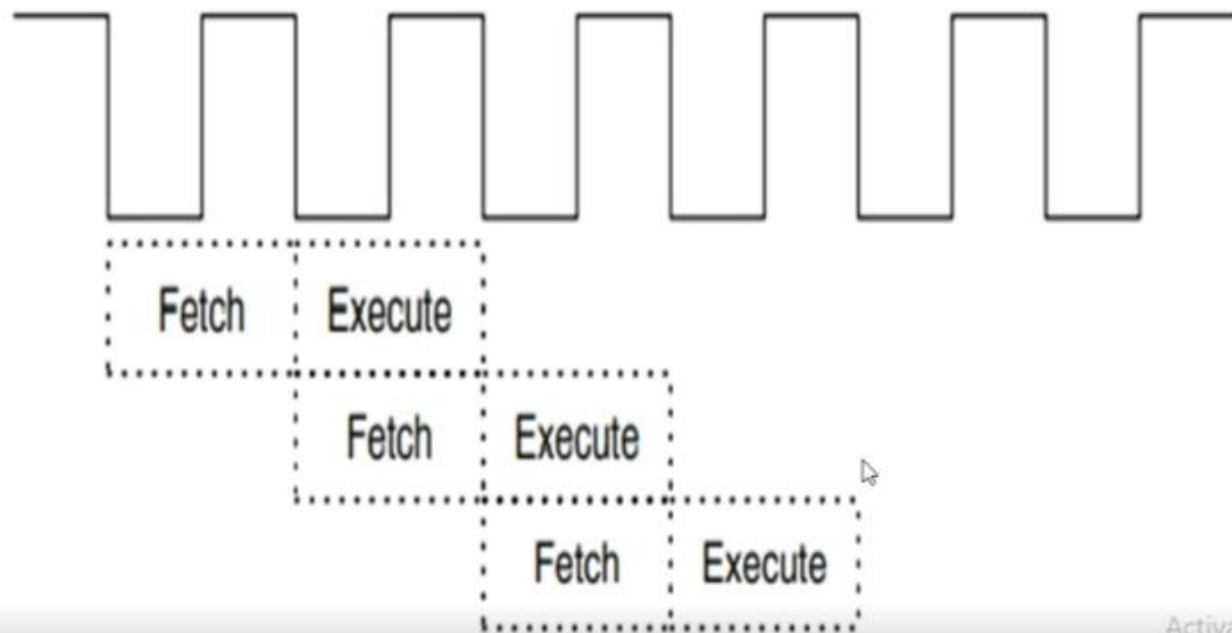


Harvard Architecture

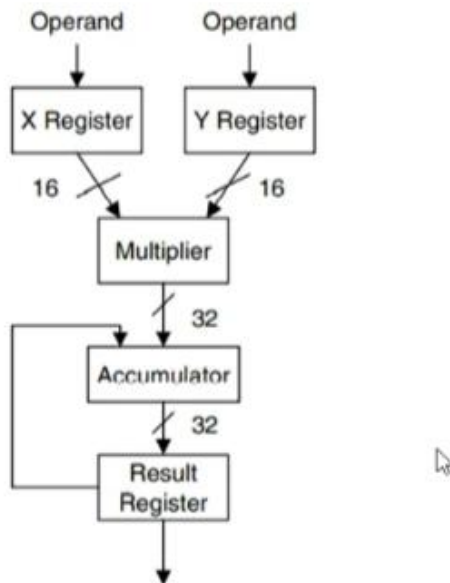


Activate Windows
Go to Settings to activate Windows.

Execution cycle based on the Harvard Architecture



Multiplier and Accumulator Unit(MAC) Dedicated to DSP



Fixed Point format - 2's Complement Integer format
~~floating point~~

Click to add title

- Click to add text

