

Here is the crux for Intel iAPX88 Architecture:

Main Crux:

1. Intel iAPX88 (8088) Architecture:

- Focus on the Intel iAPX88, also known as the **8088 processor**.
- IBM PC, based on Intel architecture, is widely used because of its **availability** and **free tools**.
- Discussion on **8088** in the first half and **iAPX386** (a 32-bit processor) in the second half.
- **iAPX386** is **downward compatible** with the **8088**.

2. History:

- Intel first introduced **4-bit processors**, but the first significant processor was the **8080** (8-bit).
- Based on **8080**, Intel released **8085**, popular for its **simplicity** and **versatility**.
- The **8088** was the first **16-bit processor**, used in the original **IBM PC**.
- With a speed of **4.43 MHz** and a maximum memory of **1 MB**, the **8088** brought the personal computer revolution.
- **IBM PC XT** became extremely successful due to its **open architecture**.
- **Unexpected success**: Intel originally designed the architecture with a **timer tick count** for **only five years**, yet the design has persisted for over 25 years.

This crux summarizes the **Intel iAPX88 architecture**, its **history**, and its impact on the personal computing world, especially through the **IBM PC XT**.