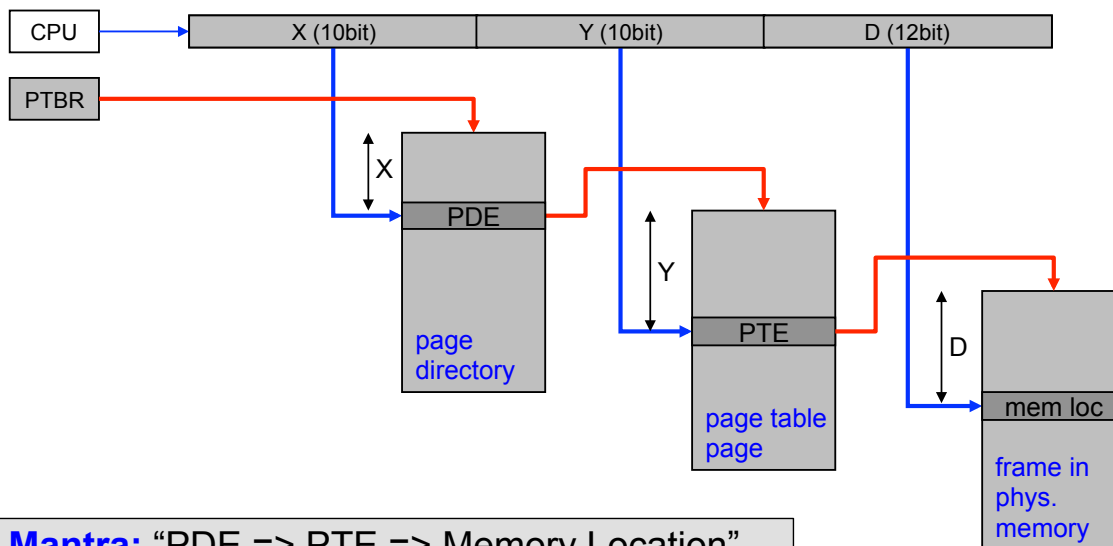


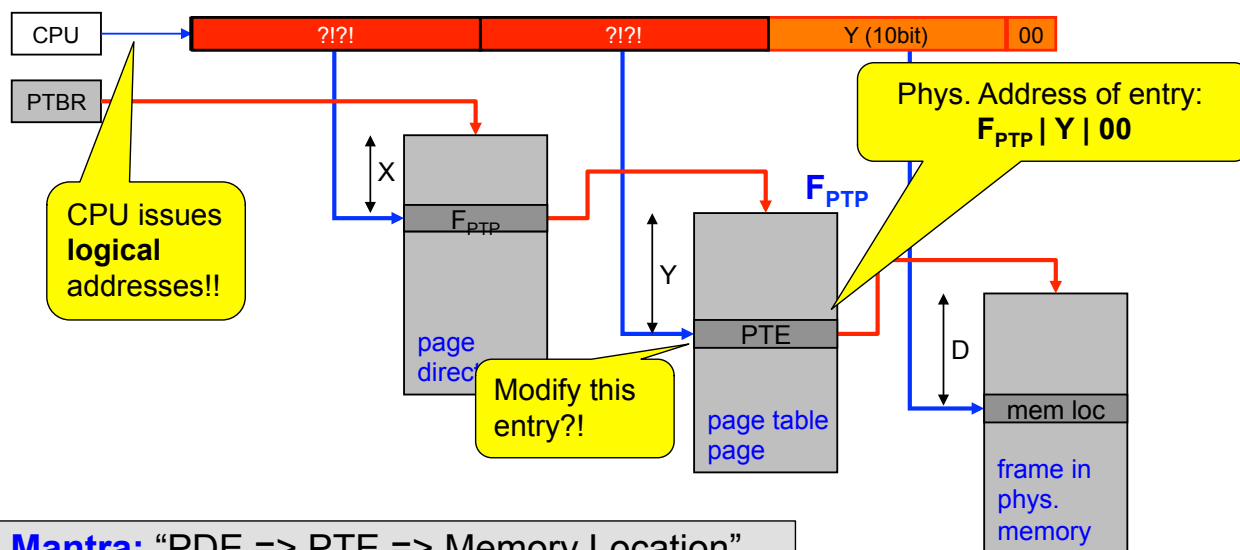
## Recursive Page Table Lookup in the x86

- How to access PDEs and PTEs in virtual memory?
- RECAP: Address Translation in the x86
- Accessing PTEs and PDEs?
- Addressing a PTE using RPTL
- Addressing a PDE using RPTL

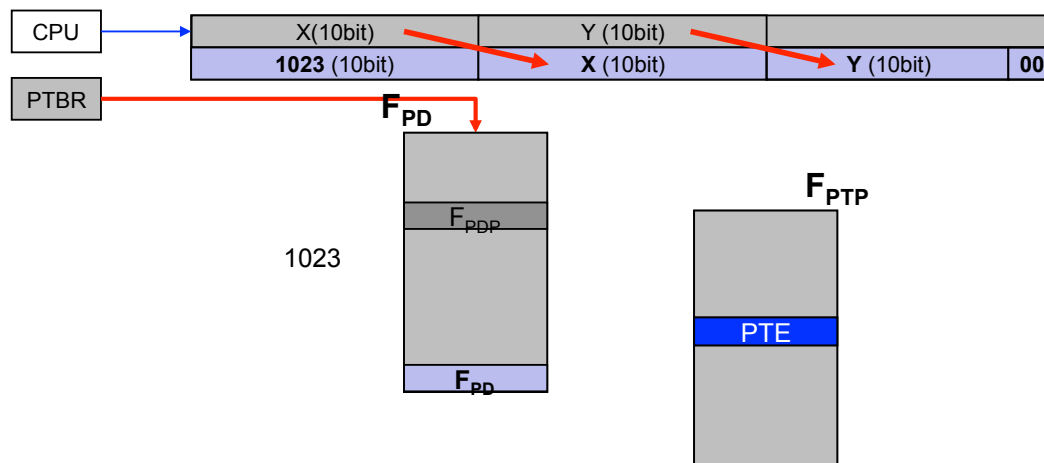
## RECAP: Logical Address Translation in x86



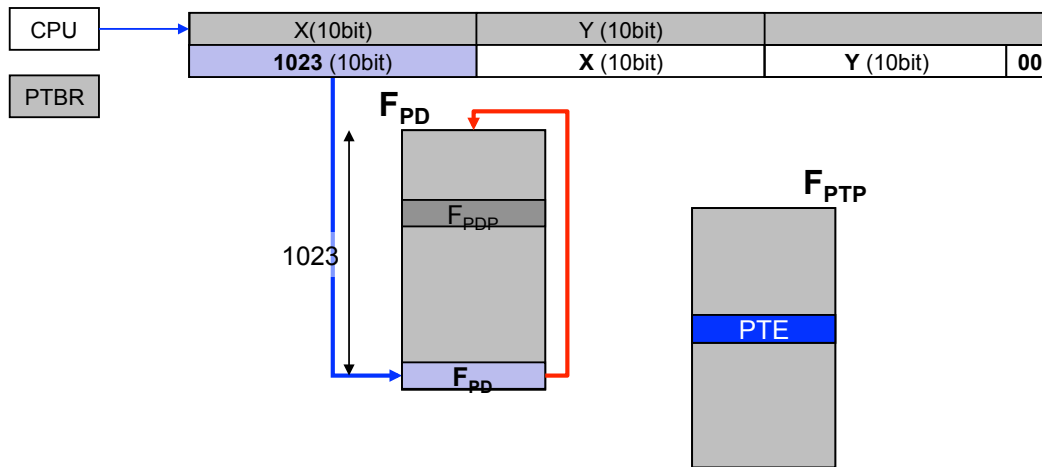
## Accessing PTEs and PDEs?!



## Addressing a PTE using Recursive Table Lookup

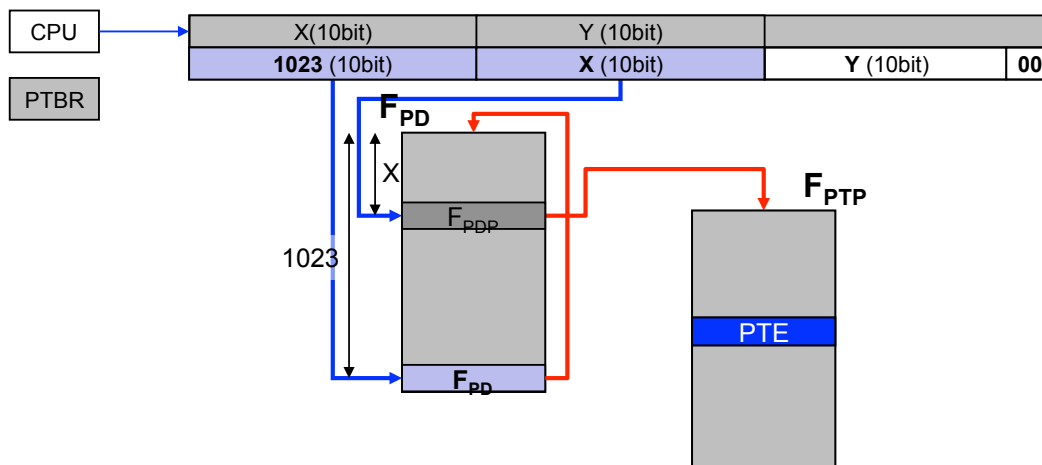


## Addressing a PTE using Recursive Table Lookup



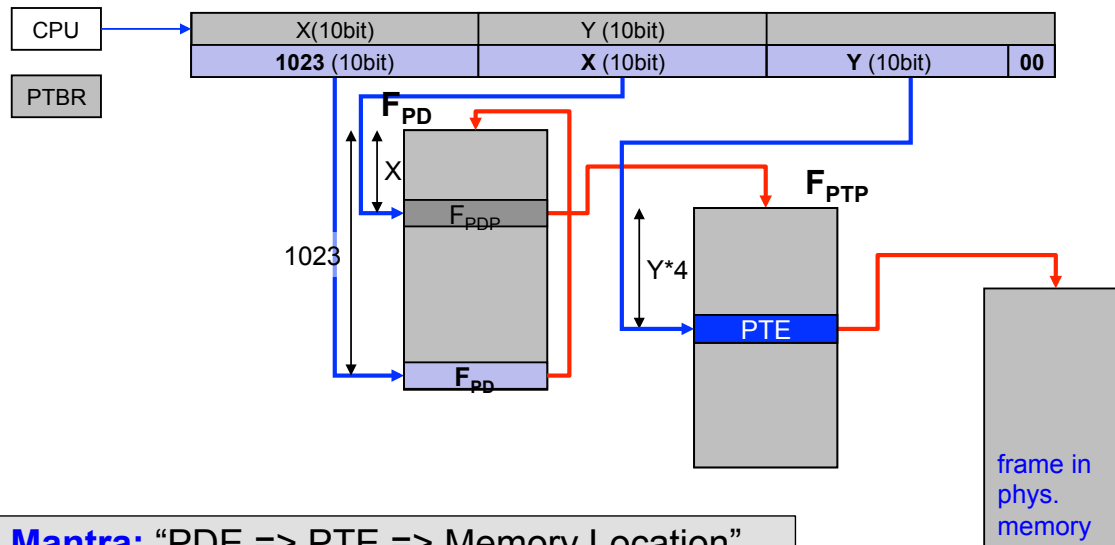
**Mantra:** "PDE => PTE => Memory Location"

## Addressing a PTE using Recursive Table Lookup

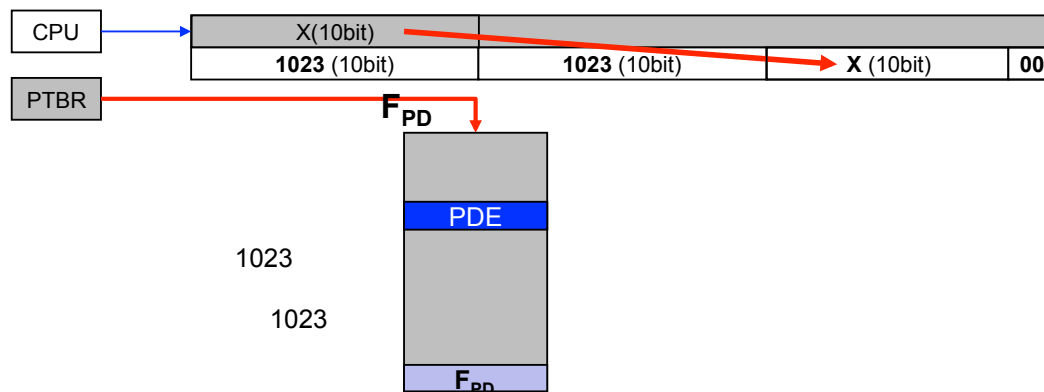


**Mantra:** "PDE => PTE => Memory Location"

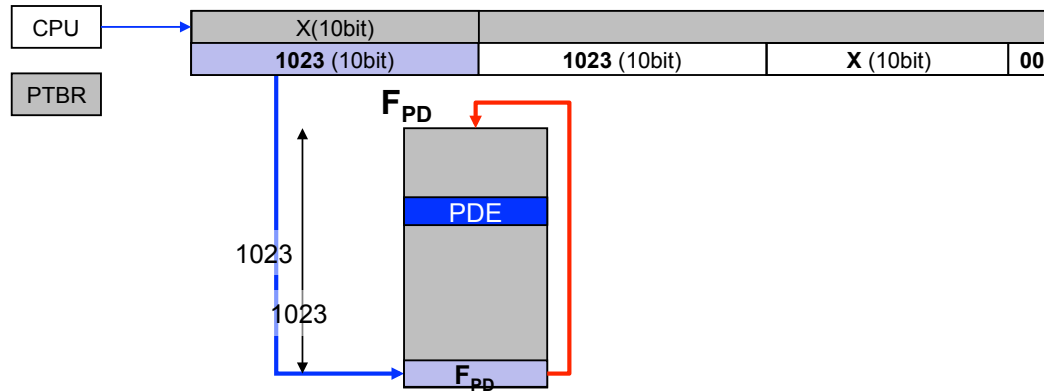
## Addressing a PTE using Recursive Table Lookup



## Addressing a PDE using Recursive Table Lookup

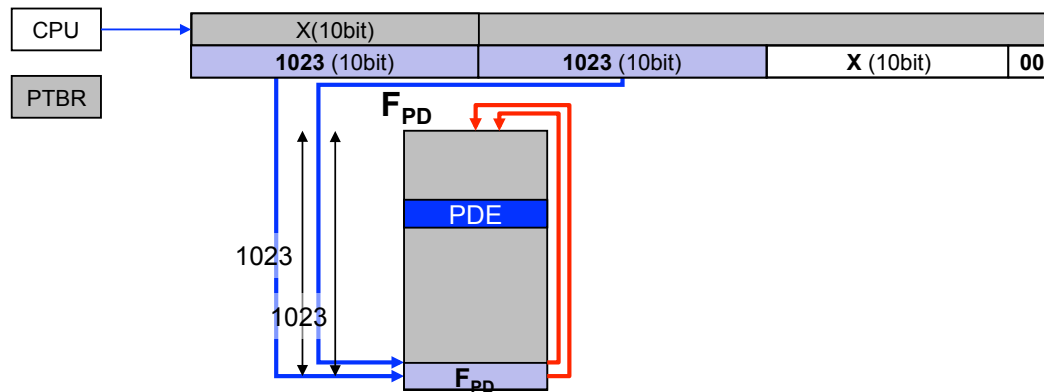


## Addressing a PDE using Recursive Table Lookup



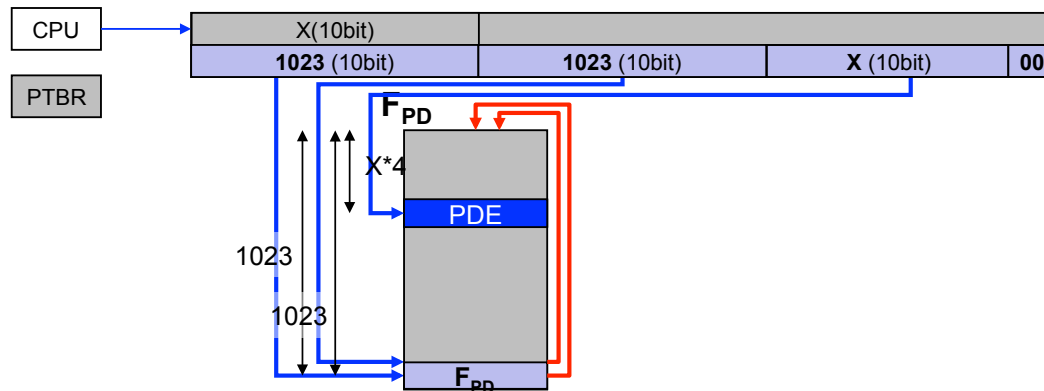
**Mantra:** “PDE => PTE => Memory Location”

## Addressing a PDE using Recursive Table Lookup



**Mantra:** "PDE => PTE => Memory Location"

## Addressing a PDE using Recursive Table Lookup



**Mantra:** "PDE => PTE => Memory Location"

## Memory Usage of Recursive Table Lookup

