item availability -> 8 bils => mem og width (31 bil) allocated [23:18] 28-1 = 255 Jon each item item_lost -> 16 bets => memory [15:0] $2^{16-1} = 65,335$ Here CDC in between will be Rst Currency Jem block output block Sync woveny Valid (15:1). Sync woveny Value (8 bef) Item select Input currency Polk (50 Myg) Pastn Config mode (161t) **APB** Memory

States

Idle State > waits for valid I tem select

Wait for money > Check I tem cost in CFCr

Paerumulate money > item

Dis pen a Item > Send I tem dispone valid signal send update may to CFGr block.

Retwon - change > Retwork excess revoicing.

Back to IDLE State

Eneron handling

Lif Item not available go to eveturn-change and eveturn all

Latery of 10 Llocks [challenge]