

2 TSS

IDTR

Farbulla  
ID

GDTR

Tab.  
globale D

LDTR

lobale D

Bat. lokal  
Farbulla

CS

Descriptor  
Seg. program

BAS

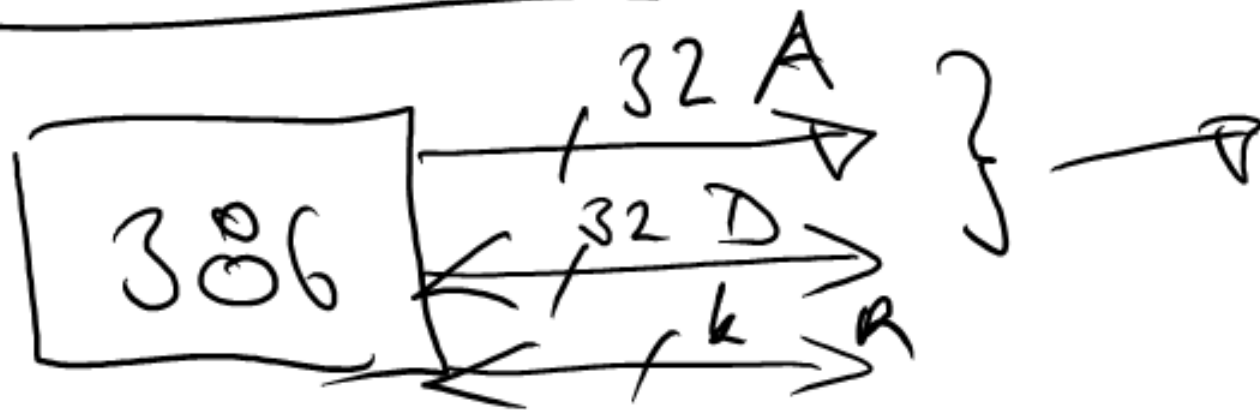
IP

+

instructions

A

n' 80386 :



**E** AX  $\rightarrow$  AH, AL

**E** BX  $\rightarrow$  BH, BL

**E** CX  $\rightarrow$  CH, CL

**E** DX  $\rightarrow$  DH, DL

**E** SI

**E** DI

**E** SP

**E** BP

**E** IP

DS

ES

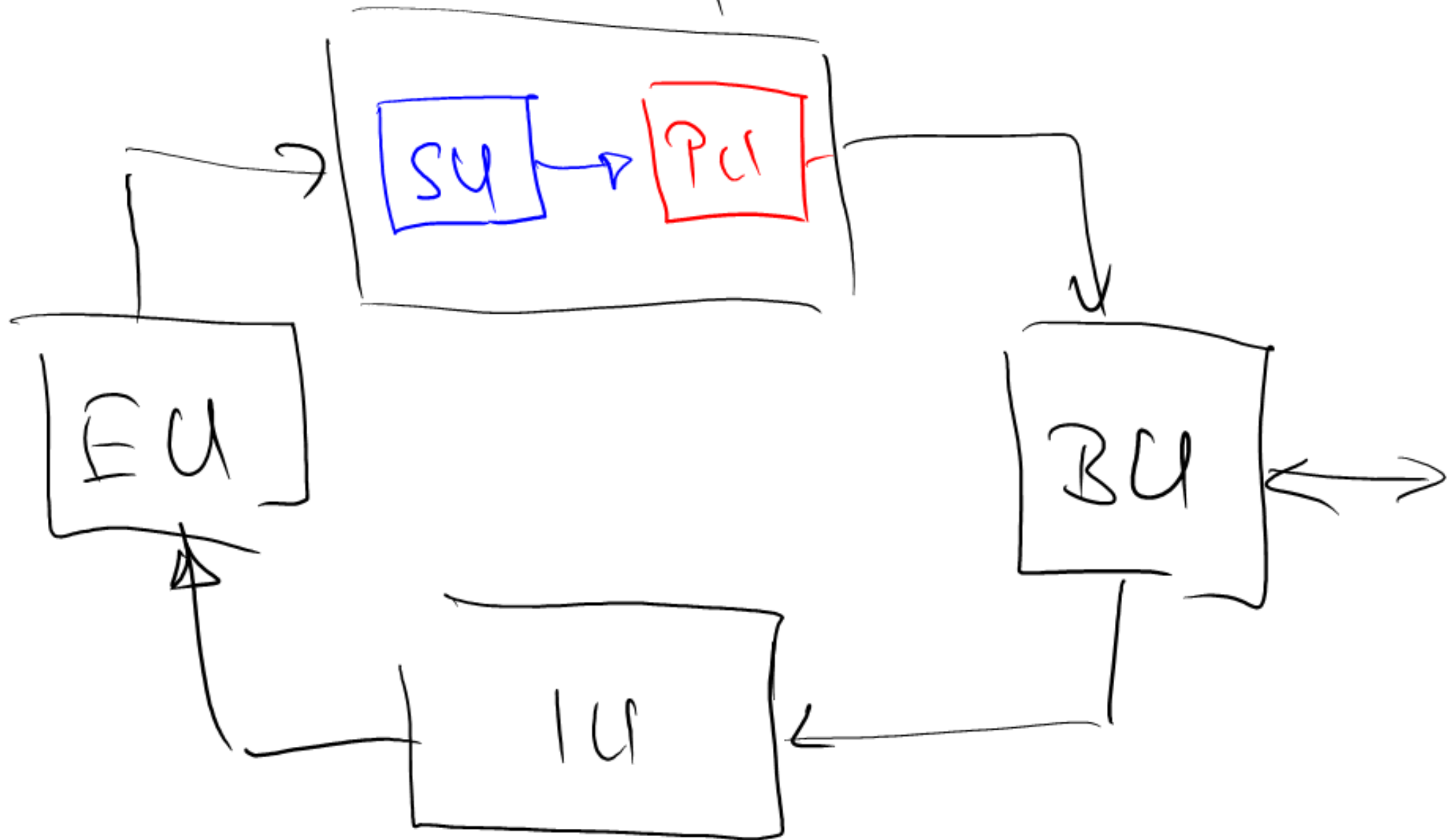
SS

CS

**FS**

**GS**

MMU



7	Bata <sub>24-31</sub>				G				Limit <sub>16-19</sub>	6
5	P	DPL							Bata <sub>16-22</sub>	4
3	Bata <sub>8-15</sub>								Bata <sub>0-7</sub>	2
1	Limit <sub>8-15</sub>								Limit <sub>0-7</sub>	0

G - granularity - 0 → 1MB  
 1 → 4GB

$LA \equiv SEL:RA$

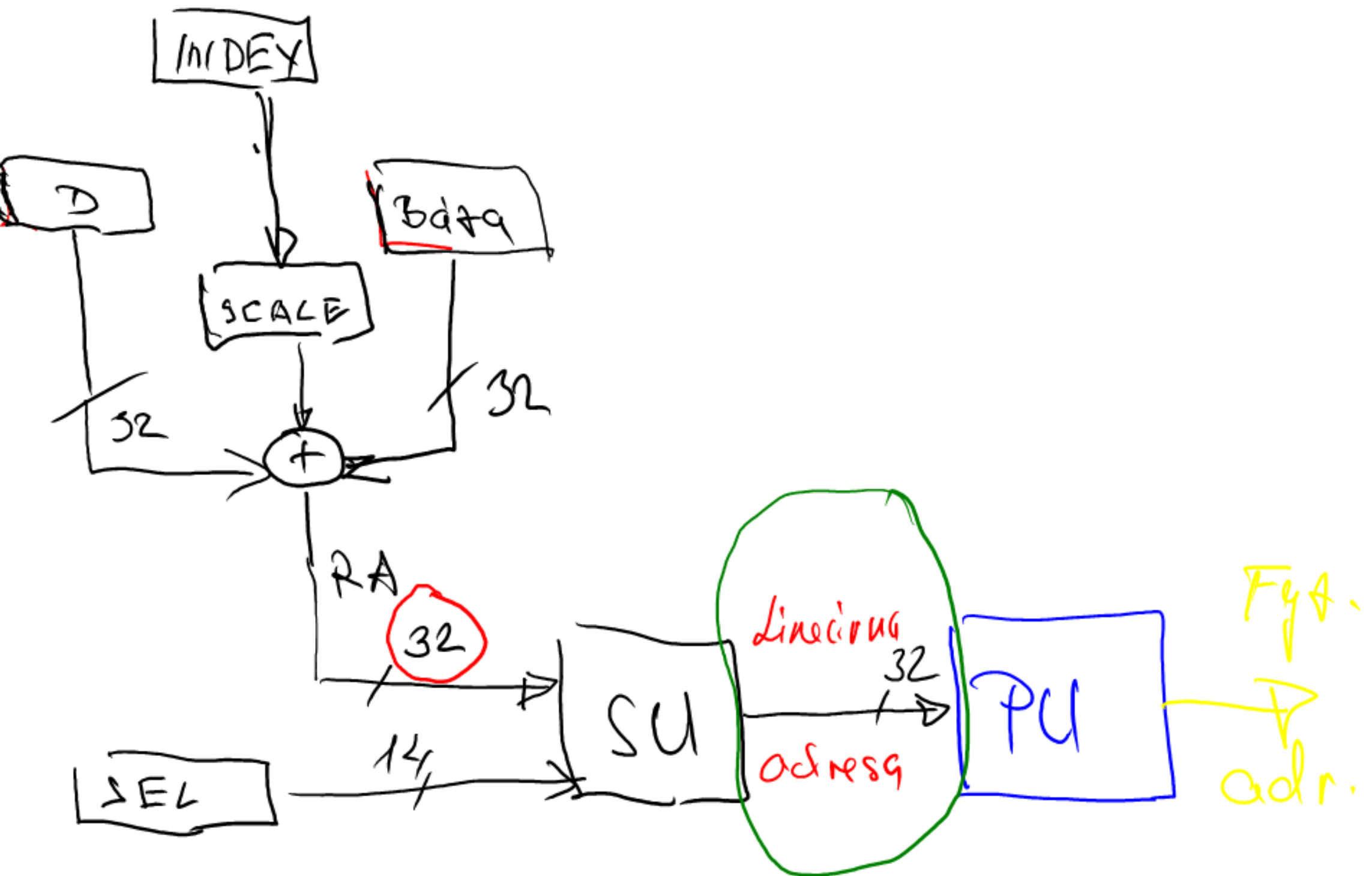
$2^{14}$   $2^{16}$

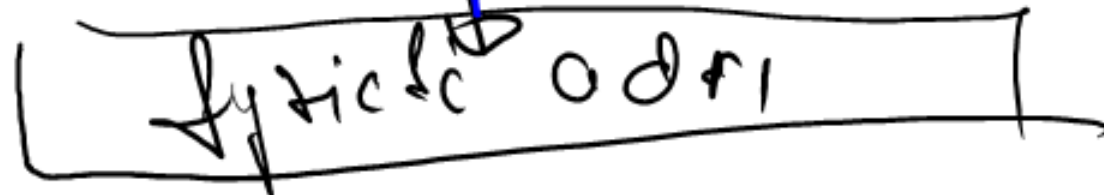
$2^{30} \equiv 1G$

$2^{14}$

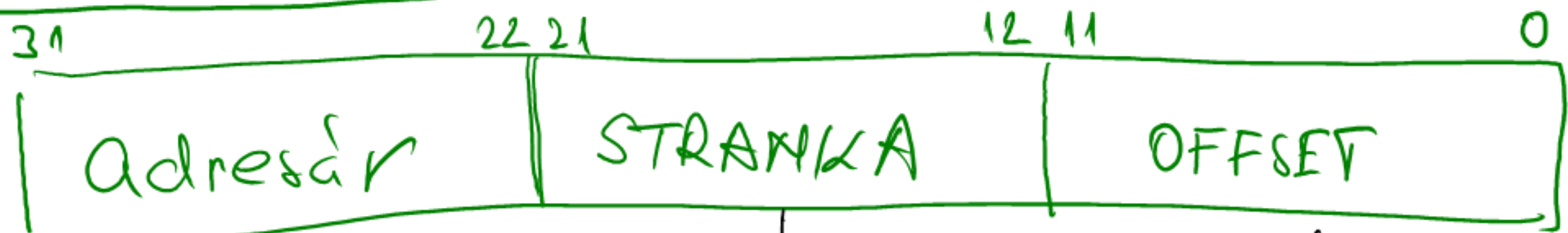
$2^{32}$

$2^{46} \equiv 2^6 \cdot 2^{10} \cdot 2^{10} \cdot 2^{10} \cdot 2^{10} = 64TB$

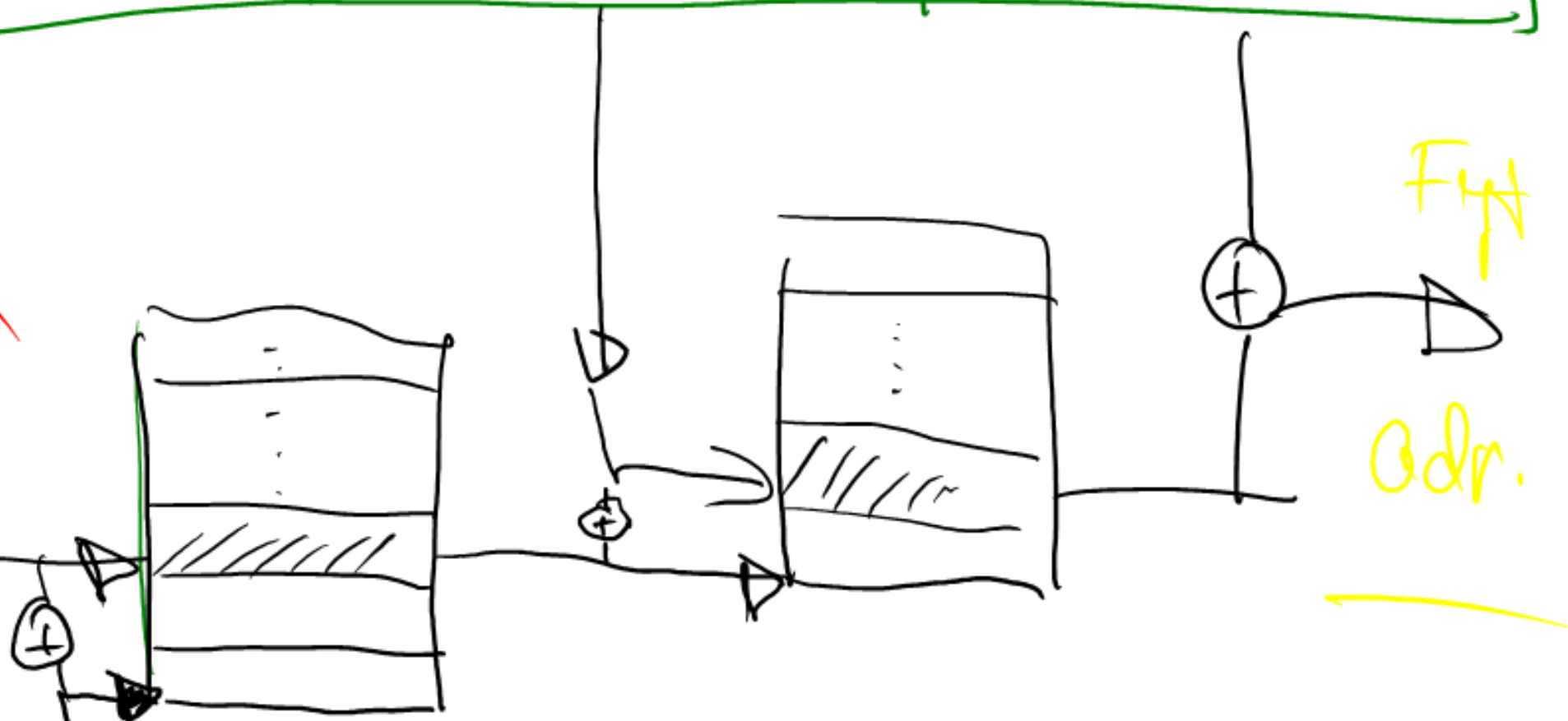




# Lineární adresa:



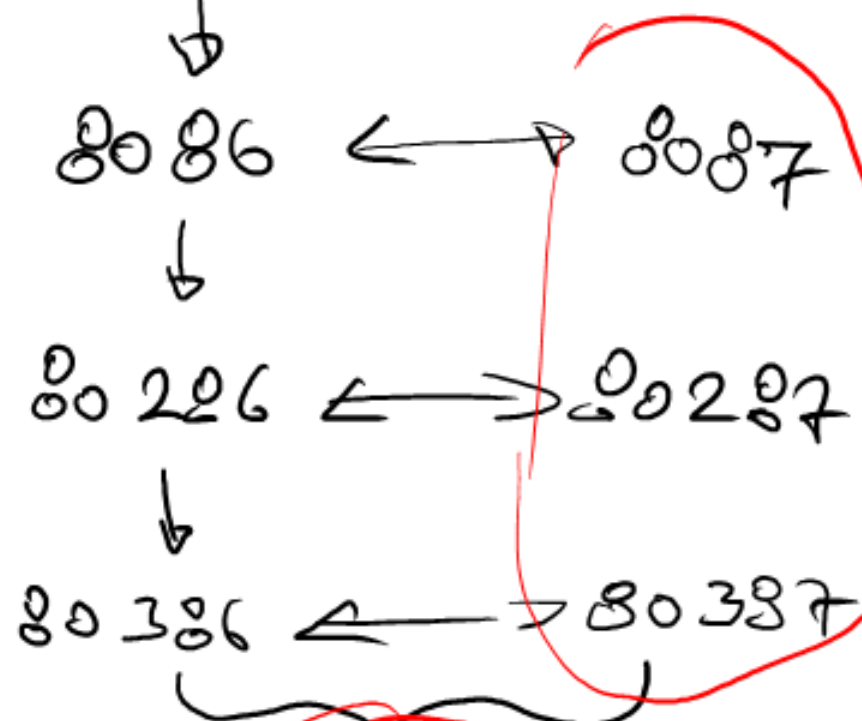
*Segment  
Výběr*



CR 0  
CR 1  
CR 2  
CR 3



8080



80486 + CACHE

80586 ≡ Pentium

P1 - 2X CACHE

P-Pro  
P-MMX

P11 → 36-bit adr. 4G

36-bit. address:

physical  $\rightarrow$  64 GB

Virtual.  $\Rightarrow$

$$2^{41} \cdot 2^{36} = 2^{50} = 1PB$$

P III  $\rightarrow$  1048576KB virtual. address.

P IV  $\rightarrow$  CACHE no programming errors

64 bitovi sistema:

adresa: 40 bitova  $\rightarrow$  50 bitova

physich 1TB  $\rightarrow$  1PB

Virtual 16PB  $\rightarrow$  16EB

Stack to 2