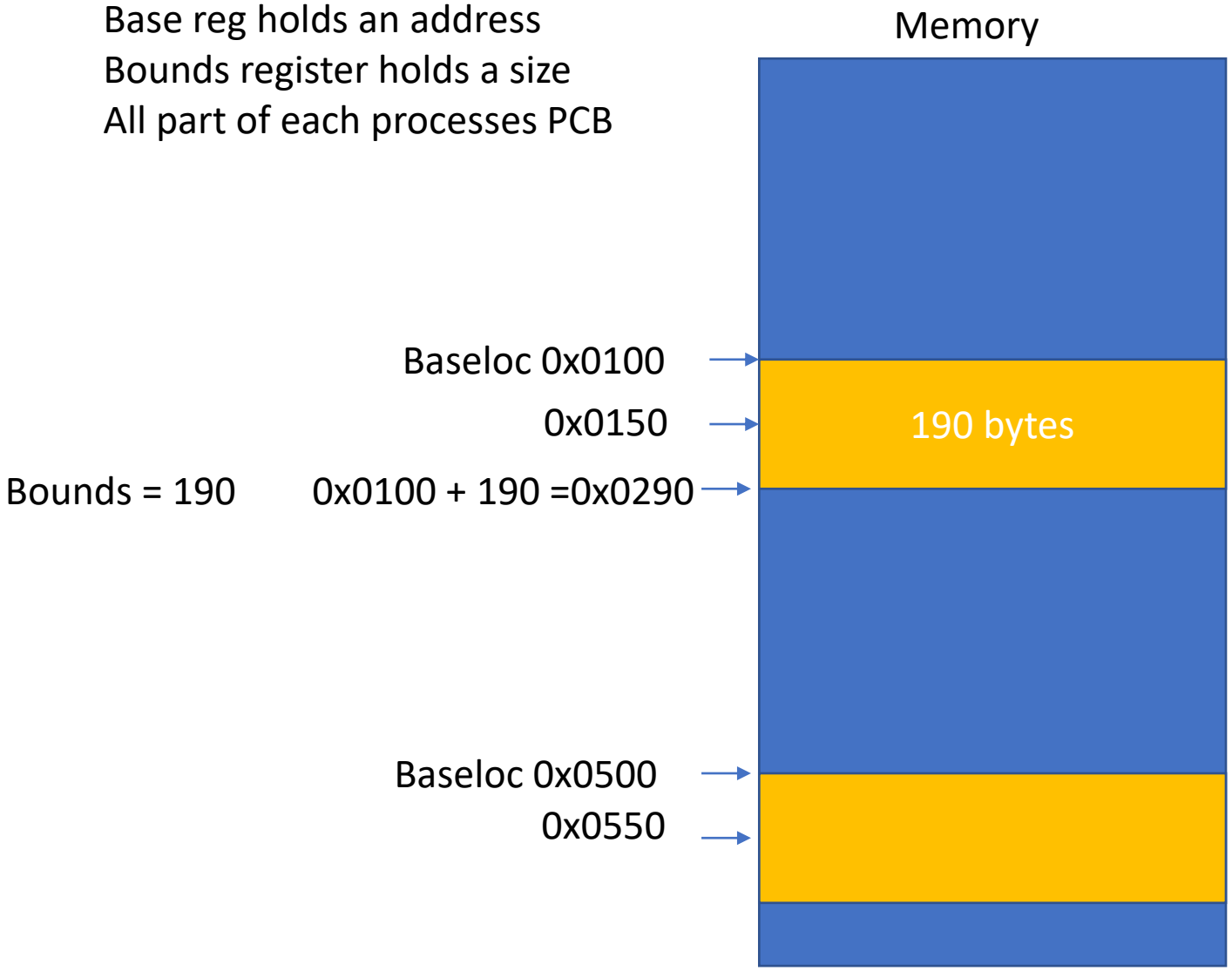
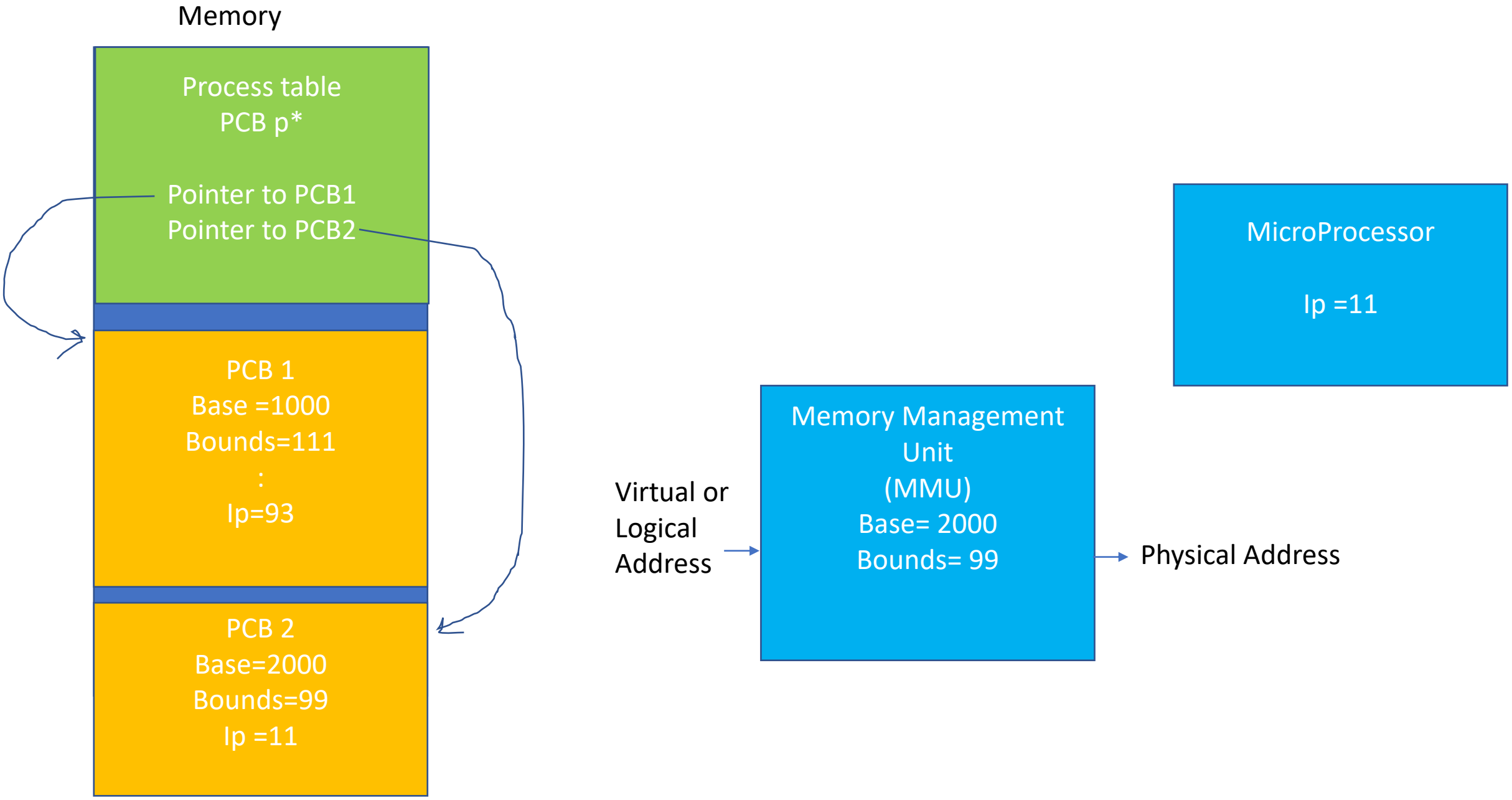
Relative addressing helper

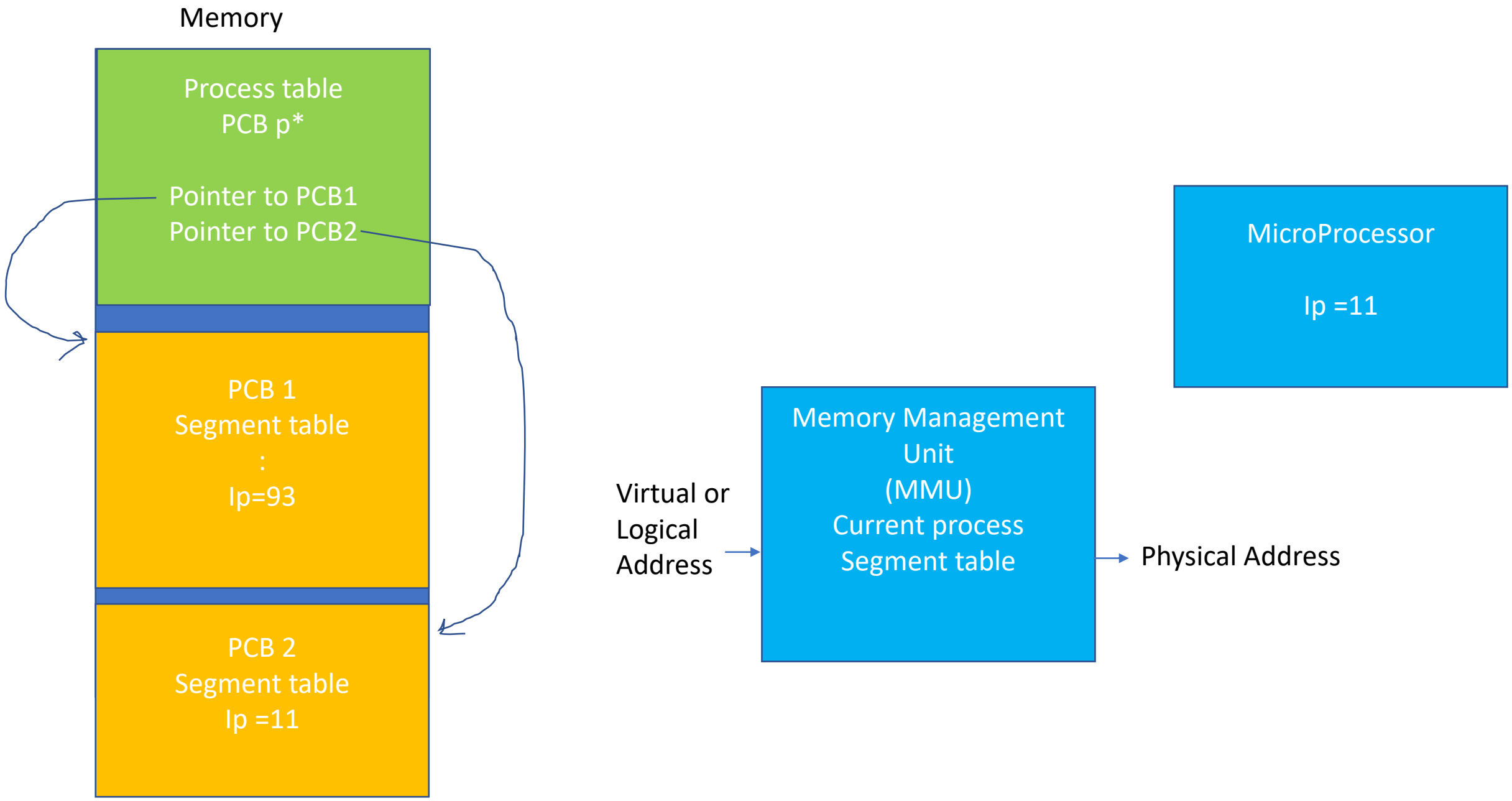
Base reg holds an address
Bounds register holds a size
All part of each processes PCB

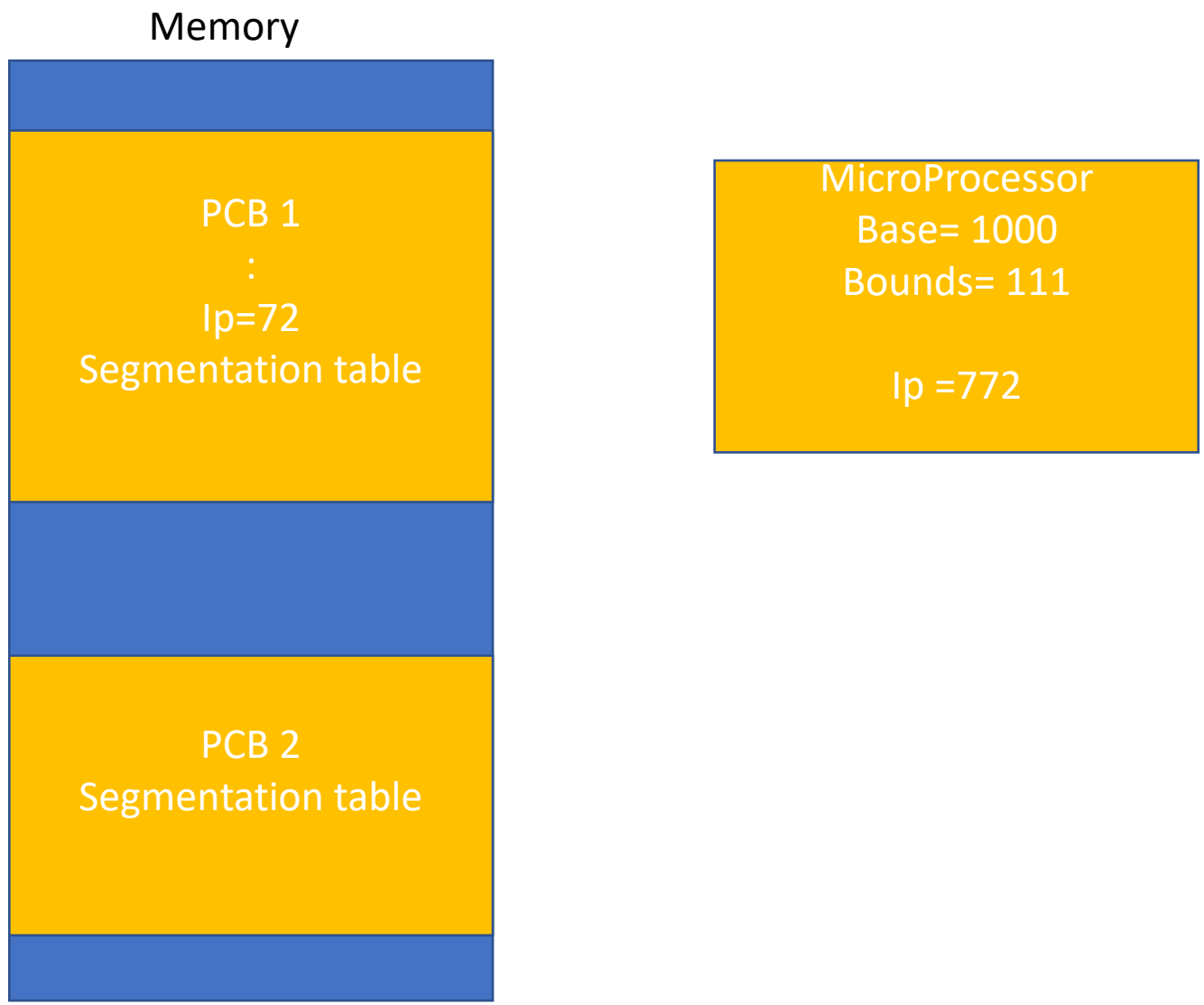


Absolute addressing, must give absolute address for EVERY memory Access. This changes depending on where program Is loaded in memory
Go here 0x0150
Go Here 0x0550

Relative addressing, just change base register and reference all addresses off that
Go here Baseloc + 50


Memory
Process table
PCB p*
Pointer to PCB1
Pointer to PCB2
PCB 1
Base =1000
Bounds=111
:
Ip=93
PCB 2
Base=2000
Bounds=99
Ip =11
MicroProcessor
Ip =11
Virtual or
Logical
Address
Memory Management
Unit
(MMU)
Base= 2000
Bounds= 99
Physical Address


Memory
Process table
PCB p*
Pointer to PCB1
Pointer to PCB2
PCB 1
Segment table
:
Ip=93
PCB 2
Segment table
Ip =11
MicroProcessor
Ip =11
Virtual or
Logical
Address
Memory Management
Unit
(MMU)
Current process
Segment table
Physical Address


Memory
PCB 1
:
Ip=72
Segmentation table
PCB 2
Segmentation table
MicroProcessor
Base= 1000
Bounds= 111
Ip =772

2**8 =256

2**10 = 1024

2**12 = 4000 (roughly)

2**20 =1,000,000 (roughly)

Binary	Hex
0000	0
0100	4
:	
1111	F

Binary	Hex
00	0
1 1	
10	
11	