

Linux

CynYang

May 15, 2023

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<i>debian</i>	Linux debian v6.1.0.7-amd64



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<i>debian</i> <i>bochs</i>	Linux debian v6.1.0.7-amd64 Bochs v2.6.9



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<i>debian</i> <i>bochs</i> nasm gcc	Linux debian v6.1.0.7-amd64 Bochs v2.6.9 Nasm v2.16.01 Gcc v12.2.0



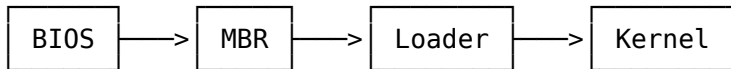
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<i>debian</i>	Linux debian v6.1.0.7-amd64
<i>bochs</i>	Bochs v2.6.9
nasm	Nasm v2.16.01
gcc	Gcc v12.2.0
<i>Emacs</i>	GNU Emacs v28.2
<i>Vim</i>	GNU Vim v0.7.2



Mbr

- ▶ 0x7C00
- ▶ 512
- ▶ Loader



0x100000	JMP F000:E05B	16B	1MB
	System BIOS	64KB-16B	
0xF0000	Expansion Area (maps ROMs for old peripheral cards)	160KB	
0xC8000	Video BIOS	32KB	
0xC0000	Legacy Video Card	128KB	
0xA0000	Ext. System BIOS	1KB	
0x9FC00	Available	~608KB	
0x7E00	MBR	512B	
0x7C00	Available	~30KB	
0x500	System BIOS	256B	
0x400	Interrupt Vector Tbl	1KB	
0			

Loader

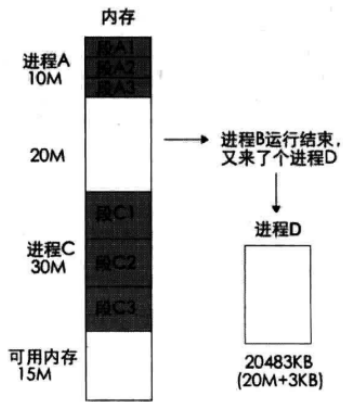
- ▶ `main`
- ▶ `main`
- ▶ `main`Kernel

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- ▶ 0x92□□□Bit□1
- ▶ □□A20□□□
- ▶ □CR0□□□□PE Bit□1



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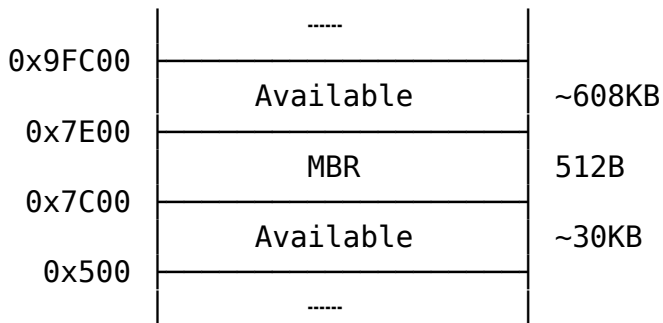


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- ▶ □□□□□□□□□□CR3
- ▶ □□□□CR0□PG Bit□1

Kernel



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- ▶ Shell

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Shell

- ▶ `L ↔ U`
- ▶ `ls`
- ▶ `cd`
- ▶ `mkdir`
- ▶ `rm`