Information	Address(hex)
IDT	0000 0000 – 0000 0FFF
Kernel Page Table	0000 1000 – 0000 1FFF
Buddy allocation	0000 2000 – 0000 2FFF
Kernel Page Dir	0000 3000 – 0000 3DFF
GDT	0000 3E00 – 0000 3FFF
Kernel Data	0000 4000 – 006F FFFF (initial kernel 1Mb)
Kernel Stack	0070 0000 – 007F FFFF
DMA area	0080 0000 – max 1000 0000
User/System	1000 0000 –FFFF FFFF

GDT

Name	Offset	Limit	Attributes
Null-GDT	0x0000 0000	0	0
Linear	0x0000 0000	0x000F FFFF	Present, data, r/w, 32bit, not avail.
Kernel Code	0x0000 0000	0xFFFF FFFF	Present, code, read, 32bit,
Kernel Data	0x0000 0000	0xFFFF FFFF	Present, data, r/w, 32bit
Kernel Stack	0x0000 0000	0xFFFF FFFF	Present, data, r/w, 32bit
User Code			
User Data			

IDT list:

Vector No. Mnemonic Description Type Error Code Source

0 #DE Divide Error Fault No DIV and IDIV instructions.
1 #DB Debug Fault/
Trap
No Any code or data reference or the
INT 1 instruction.
2 — NMI Interrupt Interrupt No Nonmaskable external interrupt.
3 #BP Breakpoint Trap No INT 3 instruction.
4 #OF Overflow Trap No INTO instruction.
5 #BR BOUND Range Exceeded Fault No BOUND instruction.
6 #UD Invalid Opcode (Undefined
Opcode)
Fault No UD2 instruction or reserved
opcode.1
7 #NM Device Not Available (No
Math Coprocessor)
Fault No Floating-point or WAIT/FWAIT
instruction.
8 #DF Double Fault Abort Yes
(Zero)
Any instruction that can generate
an exception, an NMI, or an INTR.
9 Coprocessor Segment
Overrun (reserved)
Fault No Floating-point instruction.2
10 #TS Invalid TSS Fault Yes Task switch or TSS access.
11 #NP Segment Not Present Fault Yes Loading segment registers or
accessing system segments.
12 #SS Stack-Segment Fault Fault Yes Stack operations and SS register
loads.
13 #GP General Protection Fault Yes Any memory reference and other
protection checks.
14 #PF Page Fault Fault Yes Any memory reference.
15 — (Intel reserved. Do not use.) No

16 #MF Floating-Point Error (Math		
Fault)		
Fault No Floating-point or WAIT/FWAIT		
instruction.		
17 #AC Alignment Check Fault Yes		
(Zero)		
Any data reference in memory.[3]		
18 #MC Machine Check Abort No Error codes (if any) and source		
are model dependent.[4]		
19 #XF Streaming SIMD Extensions Fault No SIMD floating-point instructions[5]		
20-31 — Intel reserved. Do not use.		
32-		
— User Defined (Nonreserved)		
Interrupt External interrupt or		