

```

BOOT SECTOR & VOLUME BOOT RECORD (VBR) -> logical sector 0
#####
Sector  BPB      Field      Description
offset  offset  length
-----
0x0000          BYTE      EB (JMP)
0x0001          BYTE      ADR (to BOOT LOADER ADDRESS)          EB 3C -> JMP 003E
0x0002          BYTE      90 (NOP)
0x0003          8 BYTE     SYSTEM ID, OEM NAME
-----
DOS 2.0 -----BPB BEGIN-
0x000B  0x00      WORD      Bytes per logical sector
0x000D  0x02      BYTE      Logical sectors per cluster
0x000E  0x03      WORD      Reserved logical sectors
0x0010  0x05      BYTE      Number of FATs
0x0011  0x06      WORD      Root directory entries
0x0013  0x08      WORD      Total logical sectors
0x0015  0x0A      BYTE      Media descriptor
0x0016  0x0B      WORD      Logical sectors per FAT
-----
DOS 3.31 -----
0x0018  0x0D      WORD      Physical sectors per track
0x001A  0x0F      WORD      Number of heads
0x001C  0x11      DWORD     Hidden sectors
0x0020  0x15      DWORD     Large total logical sectors
-----
DOS 4.0 -----
0x0024  0x19      BYTE      Physical drive number
0x0025  0x1A      BYTE      Flags etc.
0x0026  0x1B      BYTE      Extended boot signature
0x0027  0x1C      DWORD     Volume serial number
0x002B  0x20      11 BYTE   Volume label
0x0036  0x2B      8 BYTE     File-system type
-----BPB END-----
.....
DOS BOOT LOADER
.....
0x1FE          BYTE      0x55 (Boot sector signature)
0x1FF          BYTE      0xAA
-----BOOT SECTOR END-
0x200          512 BYTE

```

```

#####
BOOT SECTOR (512 byte)
-----

```

| | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07-08 | 09 | 0A | 0B | 0C | 0D | 0E | 0F | |
|------|----|----|----|----|----|----|----|-------|----|----|----|----|----|----|----|-----------------------|
| 0000 | EB | 3C | 90 | 4D | 53 | 44 | 4F | 53-35 | 2E | 30 | 00 | 02 | 02 | 01 | 00 | .<.MSDOS5.0..... |
| 0010 | 02 | 70 | 00 | D0 | 02 | FD | 02 | 00-09 | 00 | 02 | 00 | 00 | 00 | 00 | 00 | .p..... |
| 0020 | 00 | 00 | 00 | 00 | 00 | 00 | 29 | 08-19 | 25 | 3B | 52 | 45 | 54 | 52 | 4F |) .%;RETRO |
| 0030 | 43 | 4D | 50 | 20 | 20 | 20 | 46 | 41-54 | 31 | 32 | 20 | 20 | 20 | FA | 33 | CMP FAT12 .3 |
| 0040 | C0 | 8E | D0 | BC | 00 | 7C | 16 | 07-BB | 78 | 00 | 36 | C5 | 37 | 1E | 56 |x.6.7.V |
| 0050 | 16 | 53 | BF | 3E | 7C | B9 | 0B | 00-FC | F3 | A4 | 06 | 1F | C6 | 45 | FE | .S.>E. |
| 0060 | 0F | 8B | 0E | 18 | 7C | 88 | 4D | F9-89 | 47 | 02 | C7 | 07 | 3E | 7C | FB |M...G...> . |
| 0070 | CD | 13 | 72 | 79 | 33 | C0 | 39 | 06-13 | 7C | 74 | 08 | 8B | 0E | 13 | 7C | ..ry3.9... t... |
| 0080 | 89 | 0E | 20 | 7C | A0 | 10 | 7C | F7-26 | 16 | 7C | 03 | 06 | 1C | 7C | 13 |&... |
| 0090 | 16 | 1E | 7C | 03 | 06 | 0E | 7C | 83-D2 | 00 | A3 | 50 | 7C | 89 | 16 | 52 |P ...R |
| 00A0 | 7C | 4B | 49 | 7C | 89 | 16 | 4B | 7C-B8 | 20 | 00 | F7 | 26 | 11 | 7C | 8B | .I ...K . ..& . . |
| 00B0 | 1E | 0B | 7C | 03 | C3 | 48 | F7 | F3-01 | 06 | 49 | 7C | 83 | 16 | 4B | 7C |H...I ...K |
| 00C0 | 00 | BB | 00 | 05 | 8B | 16 | 52 | 7C-A1 | 50 | 7C | E8 | 92 | 00 | 72 | 1D |R .P ...r. |
| 00D0 | B0 | 01 | E8 | AC | 00 | 72 | 16 | 8B-FB | B9 | 0B | 00 | BE | DF | 7D | F3 |r.....}. |
| 00E0 | A6 | 75 | 0A | 8D | 7F | 20 | B9 | 0B-00 | F3 | A6 | 74 | 18 | BE | 9E | 7D | .u... ..t...} |
| 00F0 | E8 | 5F | 00 | 33 | C0 | CD | 16 | 5E-1F | 8F | 04 | 8F | 44 | 02 | CD | 19 | ..3...^....D... |
| 0100 | 58 | 58 | 58 | EB | E8 | 8B | 47 | 1A-48 | 48 | 8A | 1E | 0D | 7C | 32 | FF | XXX...G.HH... 2. |
| 0110 | F7 | E3 | 03 | 06 | 49 | 7C | 13 | 16-4B | 7C | BB | 00 | 07 | B9 | 03 | 00 |I ...K |
| 0120 | 50 | 52 | 51 | E8 | 3A | 00 | 72 | D8-B0 | 01 | E8 | 54 | 00 | 59 | 5A | 58 | PRQ::r...T.YZX |
| 0130 | 72 | BB | 05 | 01 | 00 | 83 | D2 | 00-03 | 1E | 0B | 7C | E2 | E2 | 8A | 2E | r..... |
| 0140 | 15 | 7C | 8A | 16 | 24 | 7C | 8B | 1E-49 | 7C | A1 | 4B | 7C | EA | 00 | 00 |\$...I ...K ... |
| 0150 | 70 | 00 | AC | 0A | C0 | 74 | 29 | B4-0E | BB | 07 | 00 | CD | 10 | EB | F2 | p....t)..... |
| 0160 | 3B | 16 | 18 | 7C | 73 | 19 | F7 | 36-18 | 7C | FE | C2 | 88 | 16 | 4F | 7C | ;.. s..6.O |
| 0170 | 33 | D2 | F7 | 36 | 1A | 7C | 88 | 16-25 | 7C | A3 | 4D | 7C | F8 | C3 | F9 | 3..6. ...% .M ... |
| 0180 | C3 | B4 | 02 | 8B | 16 | 4D | 7C | B1-06 | D2 | E6 | 0A | 36 | 4F | 7C | 8B |M60 . |
| 0190 | CA | 86 | E9 | 8A | 16 | 24 | 7C | 8A-36 | 25 | 7C | CD | 13 | C3 | 0D | 0A |\$.6% |
| 01A0 | 4B | 65 | 69 | 6E | 20 | 53 | 79 | 73-74 | 65 | 6D | 20 | 6F | 64 | 65 | 72 | Kein System oder |
| 01B0 | 20 | 4C | 61 | 75 | 66 | 77 | 65 | 72-6B | 73 | 66 | 65 | 68 | 6C | 65 | 72 | Laufwerksfehler |
| 01C0 | 0D | 0A | 57 | 65 | 63 | 68 | 73 | 65-6C | 6E | 20 | 75 | 6E | 64 | 20 | 54 | ..Wechseln und T |
| 01D0 | 61 | 73 | 74 | 65 | 20 | 64 | 72 | 81-63 | 6B | 65 | 6E | 0D | 0A | 00 | 49 | aste dr.cken..I |
| 01E0 | 4F | 20 | 20 | 20 | 20 | 20 | 20 | 53-59 | 53 | 4D | 53 | 44 | 4F | 53 | 20 | O SYMSDOS |
| 01F0 | 20 | 20 | 53 | 59 | 53 | 00 | 00 | 00-00 | 00 | 00 | 00 | 00 | 00 | 55 | AA | SYS.....U. |