Sector Format

A sector can be divided into four major sections. These are the header sync
field, the header field, the data sync field, and the data field. These fields
combined add up to 733.5 code bytes minimum.

Header Sync Field   (6.25 bytes + sync overhead)
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5 bit slip FFs minimum   (FF,3F,CF,F3,FC,FF)

The header sync field contains a pattern of ones and zeroes that synchronizes
the hardware state machine with the data on the disk. The header sync and
header fields are written only when the diskette is formatted. The formatter
should make this field as large as possible since this field buffers expansion
of the previous sector's data field due to speed variation of the drive.

Header Field (11 bytes)

D5 AA 96 Trk Sect Side Fmt ChkSum DE AA off

The header field identifies the sector. The sub-fields are:

D5 AA 96   address marks: this identifies the field as a header field.
Track   encoded low 6 bits of track number
Sector   encoded sector number
Side   encoded high 2 bits of track number and side bit:
                    · decoded bit 5 = 0 for side 0, 1 for side 1
                      decoded bit 0 is the high-order bit of the track number
                      decoded bits 1-4 are reserved and should be 0
Format   encoded format specification:
                      decoded bit 5 = 0 for single-sided formats
                      decoded bits 0-4 define the format interleave:
                      standard 2:1 interleave formats have a 2 in this field
Checksum   checksum formed by exclusive 'or'ing the track, sector, side,
                    and format fields
DE AA   bit slip marks: this identifies the end of the field
off   pad byte where the write electronics were turned off

Data Sync Field   (6.25 bytes)
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5 bit slip FFs (FF,3F,CF,F3,FC,FF)

The data sync field contains a pattern of ones and zeroes that synchronizes
the state machine with the data on the disk. This field is written whenever
the data field is written.

apple computer inc.

SIZE
A

DRAWING NUMBER
699-0285-A

SCALE:

SHEET 34 OF 39