BMP Contents

The following table contains a description of the contents of the BMP file. For every field, the file offset, the length and the contents will be given. For a more detailed discussion, see the following chapters.

Offset	Field	Size	Contents
0000h	Identifier	2 bytes	The characters identifying the bitmap. The following entries are possible: 'BM' - Windows 3.1x, 95, NT, … 'BA' - OS/2 Bitmap Array 'CI' - OS/2 Color Icon 'CP' - OS/2 Color Pointer 'IC' - OS/2 Icon 'PT' - OS/2 Pointer
0002h	File Size	1 dword	Complete file size in bytes.
0006h	Reserved	1 dword	Reserved for later use.
000Ah	Bitmap Data Offset	1 dword	Offset from beginning of file to the beginning of the bitmap data.
000Eh	Bitmap Header Size	1 dword	Length of the Bitmap Info Header used to describe the bitmap colors, compression, … The following sizes are possible: 28h - Windows 3.1x, 95, NT, … 0Ch - OS/2 1.x F0h - OS/2 2.x
0012h	Width	1 dword	Horizontal width of bitmap in pixels.
0016h	Height	1 dword	Vertical height of bitmap in pixels.
001Ah	Planes	1 word	Number of planes in this bitmap.
001Ch	Bits Per Pixel	1 word	Bits per pixel used to store palette entry information. This also identifies in an indirect way the number of possible colors. Possible values are: 1 - Monochrome bitmap 4 - 16 color bitmap 8 - 256 color bitmap 16 - 16bit (high color) bitmap 24 - 24bit (true color) bitmap 32 - 32bit (true color) bitmap
001Eh	Compression	1 dword	Compression specifications. The following values are possible: 0 - none (Also identified by BI_RGB) 1 - RLE 8-bit / pixel (Also identified by BI_RLE4) 2 - RLE 4-bit / pixel (Also identified by BI_RLE8) 3 - Bitfields (Also identified by BI_BITFIELDS)
0022h	Bitmap Data Size	1 dword	Size of the bitmap data in bytes. This number must be rounded to the next 4 byte boundary.
0026h	HResolution	1 dword	Horizontal resolution expressed in pixel per meter.
002Ah	VResolution	1 dword	Vertical resolution expressed in pixels per meter.
002Eh	Colors	1 dword	Number of colors used by this bitmap. For a 8-bit / pixel bitmap this will be 100h or 256.
0032h	Important Colors	1 dword	Number of important colors. This number will be equal to the number of colors when every color is important.
0036h	Palette	N * 4 byte	The palette specification. For every entry in the palette four bytes are used to describe the RGB values of the color in the following way: 1 byte for blue component 1 byte for green component 1 byte for red component 1 byte filler which is set to 0 (zero)
0436h	Bitmap Data	x bytes	Depending on the compression specifications, this field contains all the bitmap data bytes which represent indices in the color palette.

Note: *The following sizes were used in the specification above:*

Size	# bytes	Sign
char	1	signed
word	2	unsigned
dword	4	unsigned