

Fontfile Format *.mfs (simplefont) for the firmware

valid from the GUI (graphical user interface) version 4.9.1 on (firmware > 3.0)

Header:

4 BYTES 0xFF 0xF0
 0XXXXX (Version Number>0)

Name:

32 BYTES Name of Font with .mff extension for vectorfonts and
 .dmf extension for dot-matrix font.

Sizes:

22 BYTES

0XXXXX 2 Bytes Reference Size ('EM_size')
0XXXXX 2 Bytes minx Minimum x-position of all chars
0XXXXX 2 Bytes maxx Maximum x-position of all chars
0XXXXX 2 Bytes miny Minimum y-position of all chars
0XXXXX 2 Bytes maxy Maximum y-position of all chars
0XXXXX 2 Bytes BaselineY of char '2'
0XXXXX 2 Bytes MaxsizeX for char '2'
0x..... 8 Bytes reserved

Indexheader (4Bytes position pointer array):

1024 BYTES (for version number = 1)

0XXXXXXXXX 4Bytes (position of char 0)
0XXXXXXXXX 4Bytes (position of char 1)
.....
.....
0XXXXXXXXX 4Bytes (position of char 255)

4096 BYTES (for version number = 2)

0XXXXXXXXX 4Bytes (position of glyph 0 for char 0)
0XXXXXXXXX 4Bytes (position of glyph 1 for char 0)
0XXXXXXXXX 4Bytes (position of glyph 2 for char 0)
0XXXXXXXXX 4Bytes (position of glyph 3 for char 0)
....
....
0XXXXXXXXX 4Bytes (position of glyph 0 for char 255)
0XXXXXXXXX 4Bytes (position of glyph 1 for char 255)
0XXXXXXXXX 4Bytes (position of glyph 2 for char 255)
0XXXXXXXXX 4Bytes (position of glyph 3 for char 255)

Data for each character:

0XXXXX 2 Bytes minchar_x Minimum x-position (WORD)
0XXXXX 2 Bytes maxchar_x Maximum x-position (WORD)

0XXXXX 2 Bytes Number of Outlines (WORD)
0XXXXX 2 Bytes Number of points (WORD)

0XXXXXXXXX	4 Bytes	x-position (int)
0XXXXXXXXX	4 Bytes	y-position (int)
0xXX	1 Bytes	Cp Type (0x00 for line, 0x01 for spline)

.....

.....

Remarks:

Extension name .mff: standard outline fonts where the points are connected by straight lines.

Extension name .dmf: same format as standard font but points are not connected but just marked as a dot (crystall font).

Cp Type: the default value is 0x00 indicating straight lines between the outline points.

x/y position: an integer value. A value of “-2147483647-1” (INT_MIN) would terminate the actual outline.

Glyph0 is the glyph for the standard character. Glyph 1 – Glyph3 are only used for some arabic fonts where a single character has different glyphs according to the appearance of the character in the word.