

Special FONTS

- Generality (rules)
- Interpretation of wrong Unicode types, sizes or styles
- Web-editor
- Unicode FONTS at the disposal

Generality

The user is able to provide additional fonts to satisfy his requirements regarding the languages he is using **or/and** regarding special fonts/style/size which are not standard in the MB panel.

Examples of languages: Russian, Greek, Chinese, Japanese, Korean

Examples of fonts: Arial Italic or Arial Bold 72

All these characters can be combined with different sizes: 10,12,14 ... or styles: plain (or regular), bold ...

Arial Unicode font could be recommended to be sure to cover all the characters. This is especially for languages using a lot of characters as the Chinese.

This is done through the use of Unicode font files (.bft), which are being generated and provided by Saia-Burgess. The firmware searches at the following locations for the font files:

M1_FLASH:/FONT

SLOFLASH:/FONT (in the case of SD card is installed)

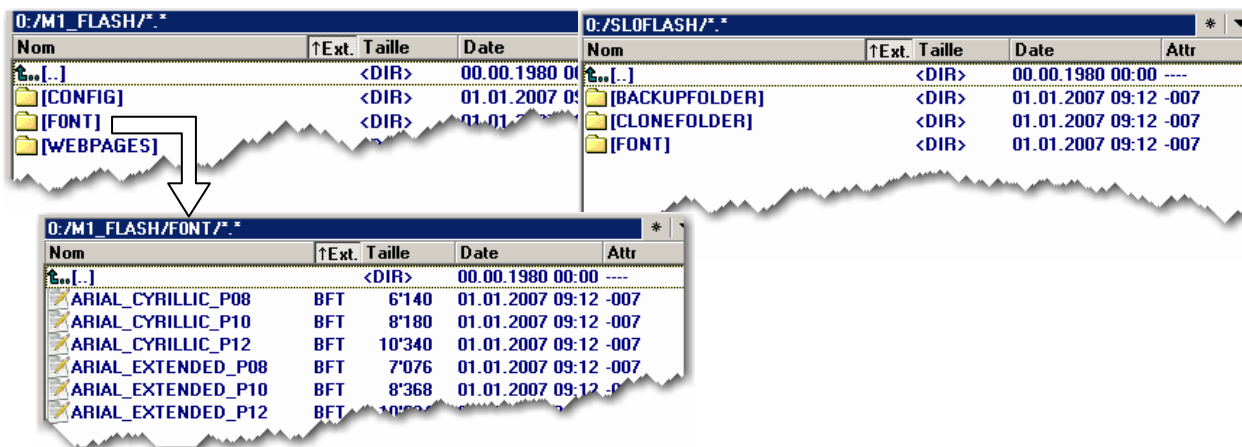
INTFLASH:/FONT

A font file contains the data for one continuous range of characters. In case one needs for example Greek and Cyrillic two files should be loaded, one containing the Greek alphabet, the other one containing the Cyrillic characters.

The size of a font file must not exceed 128 KBytes.

There are a lot of files to cover the CJK (Chinese/Japanese/Korean) languages

If a font file is found it is registered. It is possible to register a maximum of 65 different files. As soon as a character is needed, the font file will be opened and the data of the character retrieved. These data will be cached for later reuse.



→ Font file name: 24 ASCII characters max without spaces (extension file included)

→ Font files installation: By copying the files via a FTP connection to the FTP server of the MB panel.

→ Chinese fonts: size 12 is the minimum size readable.

Interpretation of wrong Unicode types, sizes or styles

→ QVGA MB panel from the firmware version 1.08.02

→ VGA MB panel up to the firmware version 1.01.04

In case a font is unknown a search is performed using the following strategy:

- 1.same name, same style, changing size
- 2.same name, plain, changing size
- 3.Arial, same style, changing size
- 4.Arial, plain, changing size

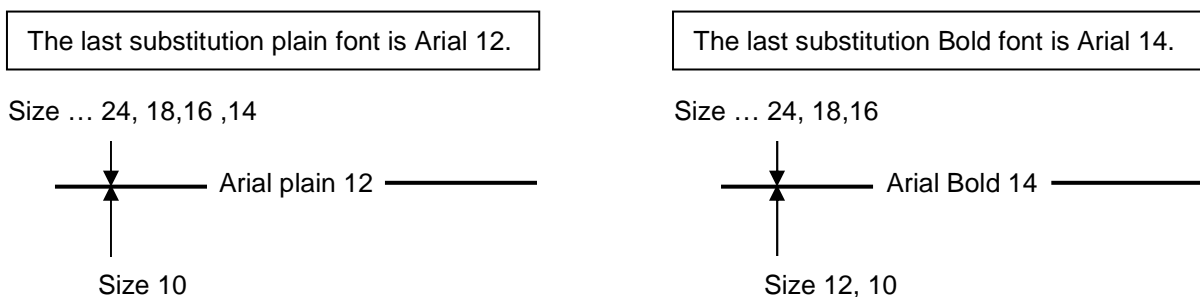
The last search is guaranteed to yield a result, because of the built in Arial fonts. The substitution of a font with a other font is reported in the log file.

In case a character is unknown, the following search algorithm is used:

- 1.Arial, same style, changing size
- 2.Arial, plain, changing size

If none of the above described searches yields a positive result a square is displayed.

Last level of substitution.



→ VGA MB panel up to the firmware version 1.12.04 (new rules)

1. Arial, same style,**keep** size
2. Arial, plain,**keep** size

If this size does not exist for Arial :

3. Same font name, same style,**reduce size to the next best**
4. Same font name, plain,**reduce size to the next best**

If a smaller font does not exist for this font name:

5. Arial, same style,**reduce size to the next best**
6. Arial, plain,**reduce size to the next best**

If a smaller font also does not exist for Arial:

7. Arial, same style or plain ,**use the smallest available size**

Web-editor

The Unicode characters set are available:

- by using the source type "HTML tag" in the web editor and via a .CSV file.(recommended)
- by entering directly the text as a "string" in the web editor .

Be careful: by using unicode fonts as a "string", the project becomes linked to the Microsoft Windows language of your PC.

Don't export/import and re-compile a project, which is made and compile with a Microsoft Windows using Unicode characters set of a language, to an other PC which is using a Microsoft Windows using unicode character set of an other language.

Multi languages: example

→ Change a language by pressing on a button (set variable on mouse down)

Basic example is a translation of Happy Birthday in "Czech" in using "HTML TAG" type.

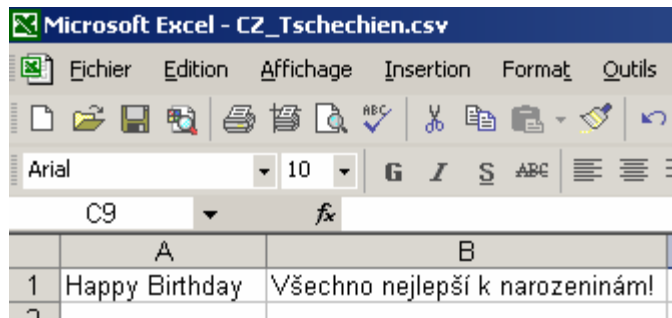
The "Czech" language needs extended European characters which are downloadable from sbc-support site in restricted area.

What's the drill?

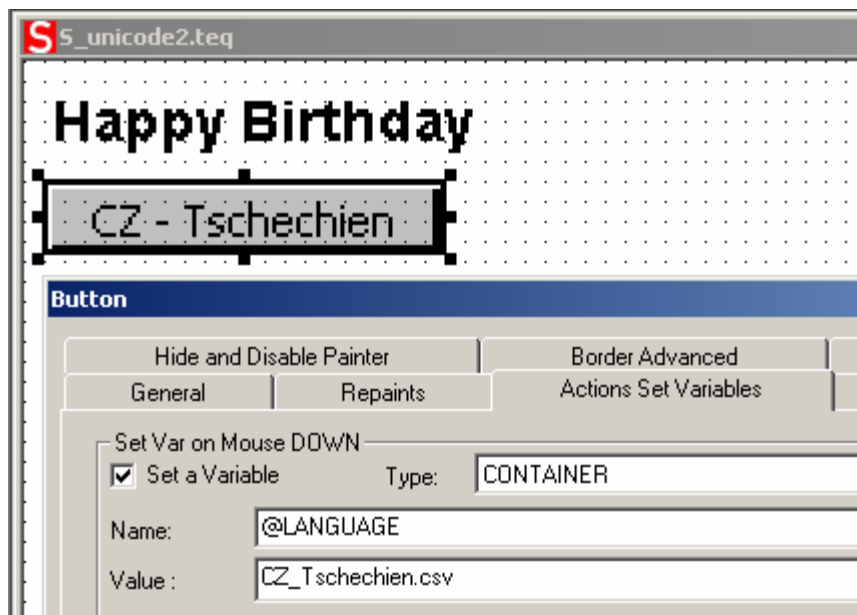
- 1) The Unicode Font(s).bft file(s) with extended European characters must be copied under ... /FONT
- 2) Web-editor: Edit a static text with the text "Happy Birthday" and chose the "HTML TAG" type.



3) Create an excel file and write in the first column the word in English "Happy Birthday". Be careful: "case sensitive" and in the second column the translation: "Všechno nejlepší k narozeninám". Save the file with .txt Unicode format (.txt Unicode format is into the list of excel saving format) then change manually the .txt format by .csv (it is possible to change the format afterward in Windows® explorer).



4) Web-editor: create a button with the following "Actions Set variables" parameters: type is "container", name is "@LANGUAGE" then the Unicode .csv file.



5) **Attention:** Copy (by ftp) the Unicode .csv file (or files if several languages → as many languages as many .csv files) under M1_flash/ Webpages/...
Job done

New Unicode FONTS at the disposal.

Valid for QVGA and VGA MB panels

Definition and range (HEX)	Font size style	Support Site	Zip file
Arial(20-FF) Latin standard	P08/P48/P72/P100 and B10/B12/B16/B48/B72	yes	ARIAL.zip
Courier-new (20-FF) Latin standard	P10/P24/P36/P48/P72 and B10/B12/B24/B48/B72	yes	COURIER-NEW.zip
Tahoma (20-FF)) Latin standard	P08/P10/P36/P48/P72 and B08/B10/B12/B16/B48	yes	TAHOMA.zip
Arial Italic (20-FF) Latin Standard	P08/P10/P12/P16/P20/P24/P48/P72	yes	ARIAL_ITALIC.zip
Arial_extended (Hex20-180)	P08/P10/P12/P16/P20/P24/P36/P48 and B08/B10/B12/B16/B20/B24/B36/B48	yes	ARIAL_EXTENDED.zip
Courier-new_extended (Hex20-180)	P08/P10/P12/P24/P48	yes	COURIER-NEW_EXTENDED.zip
Tahoma_extended (Hex20-180)	P08/P10/P12/P24/P48 and B08/B10/B12/B24/B48	yes	TAHOMA_EXTENDED.zip
Arial Cyrillic (400-52F)	P10/P12/P14/P16/P20/P24/P26/P36/P48 and B10/B12/B14/B20/B24/B26/B36/B48	yes	ARIAL_CYRILLIC.zip
Arial Modern Greek (370-3FF)	P10/P12/P14/P24/P36/P48	yes	ARIAL_GREEK.zip
Arial CJK Chinese/Japanese/Korean (4E00-9FFF)	P12	yes	ARIAL_CJK_P12 .zip
Arial CJK Chinese/Japanese/Korean (4E00-9FFF)	P16	yes	ARIAL_CJK_P16 .zip
Arial CJK Chinese/Japanese/Korean (4E00-9FFF)	B14	yes	ARIAL_CJK_B14 .zip
Arial CJK Chinese/Japanese/Korean (4E00-9FFF)	B20	yes	ARIAL_CJK_B20 .zip
Arial Japanese Hiragan & katagana (3040-30FF)	P10/P12/P24/P48	yes	ARIAL_HIRA-KATA.zip

The zip files are downloadable from the PCD support site (Restricted Area)

To get other fonts/sizes... please contact our
 Technical Customer Support PCDSupport@saia-burgess.com