A Beginner's Guide to DGUS V7.641

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Contents

1 Flash Memory

The LCD have total of 16MBytes(Mega Bytes) Flash memory for all content including fonts,images,icons,animation etc. This memory is divided into 64 id or subspaces, 0 to 63, each of 256KB size.

The files in the DWIN_SET folder are stored here for execution. each file in the folder occupies the subspace correspoding to its name, e.g the '1.bin' files goes to the 1 id/subspace and '32.icl' to 32 and so on. If the file is larger then 256KB it will blead to the next regin. For example if '32.icl' is 1 MB, then it will occupie the 32,33,34 and 35 regin.

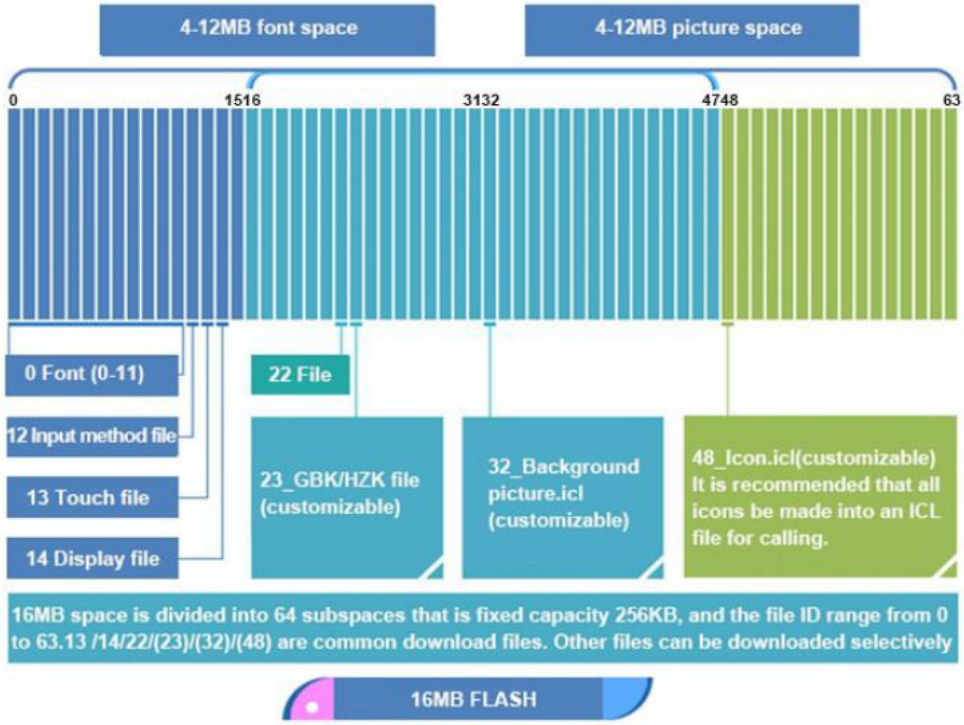

Figure 1: Dwin LCD memory spaces, and thire usage

2 Gray word font

2.1 Creating Font

Open DGUS Software, go to welcome '1' and select the grey font generator '2'. Select Font '1' to use and then enable the sizes whcih you want to use

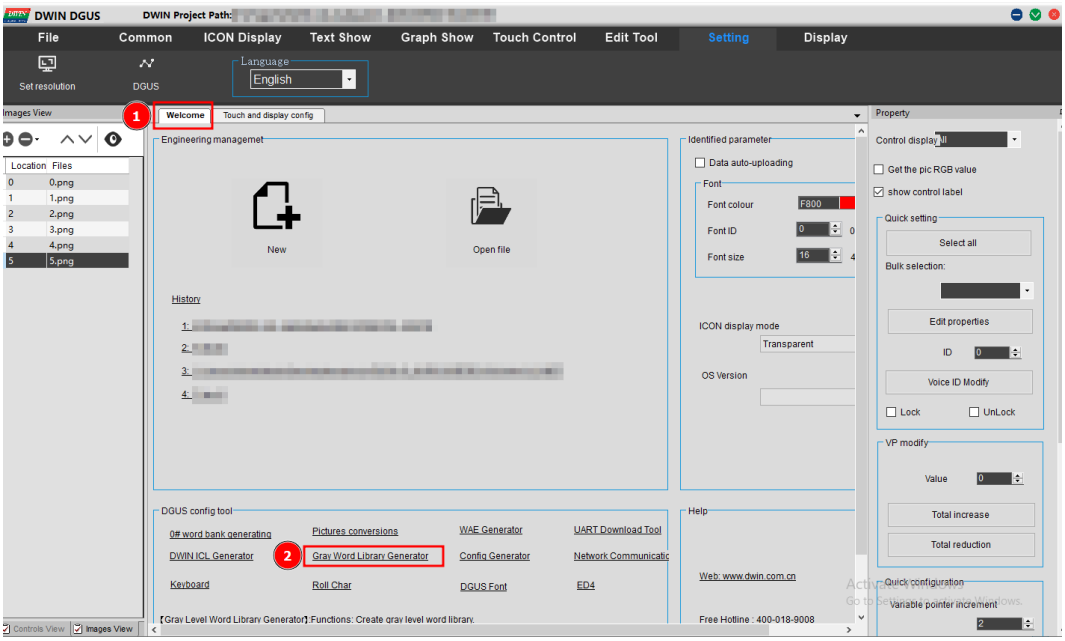

Figure 2: Dgus software, open the gray font creator.

'2', the horizontal size is same as the index (size of font) and the vertical is 2 times of horizontal size. You can note which sizes you have with these valves to use in DGUS software. '3' save the font as '1.bin' this will be used as 'Font ID' in software.

It is created using software Gray word library generator from DWIN. It has greater experience than 0 word font. For gray word font we have to use 8bit encapsulation.

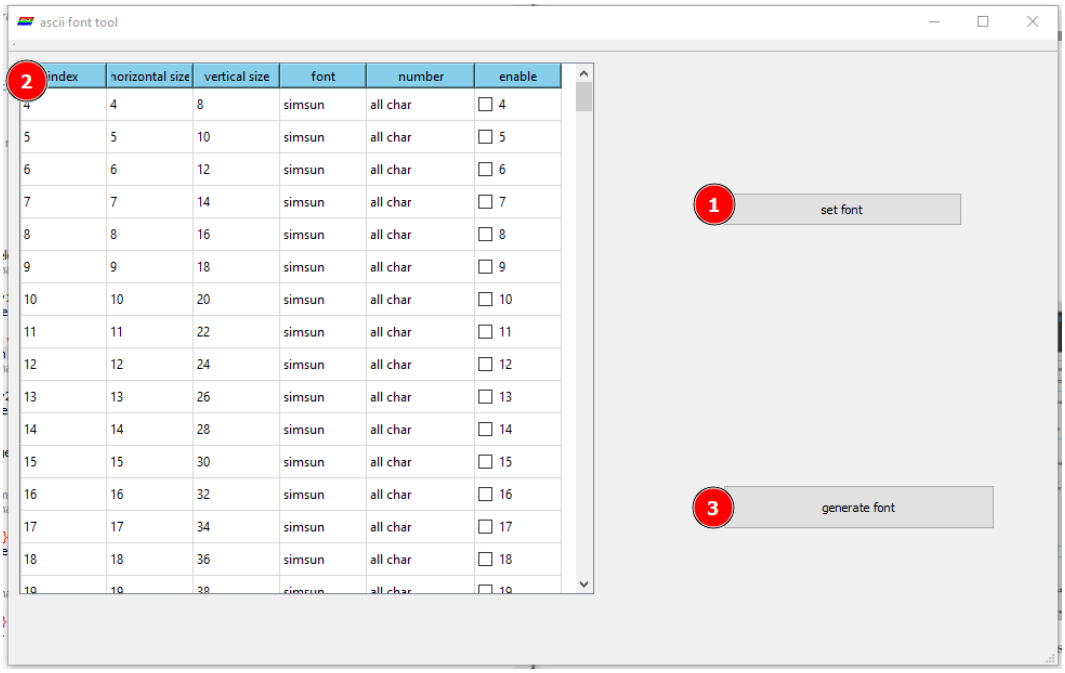

Figure 3: Creation process of grayfont

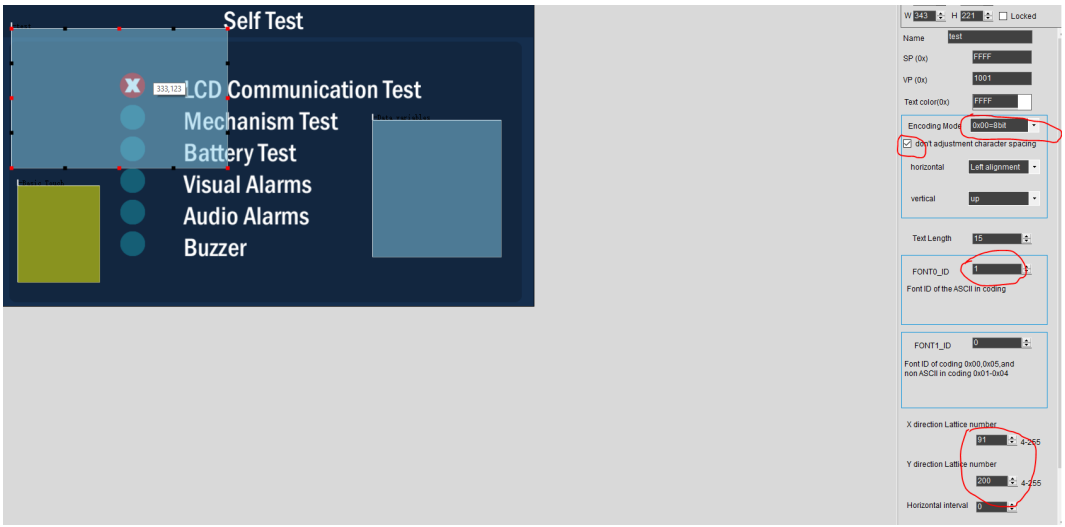

Figure 4: This picture shows necessary setting.

Encoding Mode	Explanation	Where to generate
0x00 8Bit Code	Utmost 256 characters in the font ID	Gray world library in the software page
0x01 GB2312	Chinese Internal Code	Font Generator
0x02 GBK	Chinese extended internal code or Korean HANGUL code	Font Generator;0 # Word Bank Generating
0x03 BIG5	Traditional Chinese code	Font Generator
0x04 SJIS	Japanese code	Font Generator
0x05 UNICODE	UNICODE SCOPE (UTF16)	Font Generator

Figure 5: This picture encoding settings.

3 data send serially

Note: First of all enable Touch variable automatic upload 1=On from system configuration. This is needed to send data from Syncrodata return and return key code functions of DGUS software

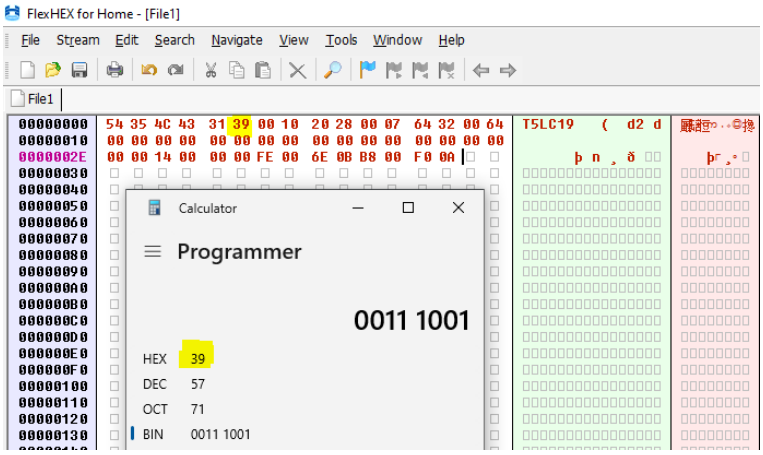

Figure 6: auto Upload commmand

following image shows the command through which data can be send/receive from MCU.
Following command will change the page. (it will make use of system vari-

able)

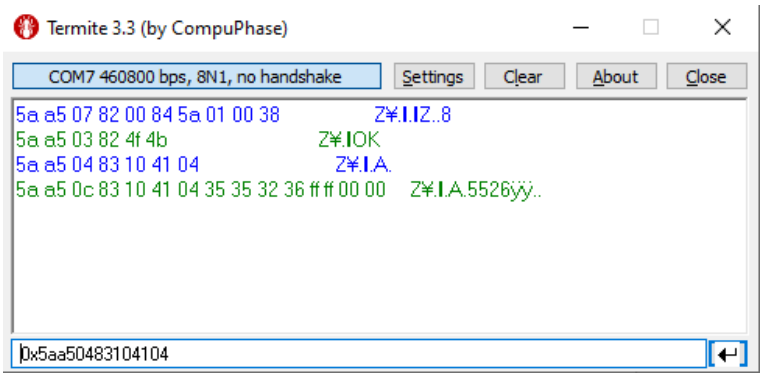

Figure 7: send/receive from MCU command (Data received is : 5523)

4 page change from synchrodata return

Page can be changed from synchodata return. see the below image.

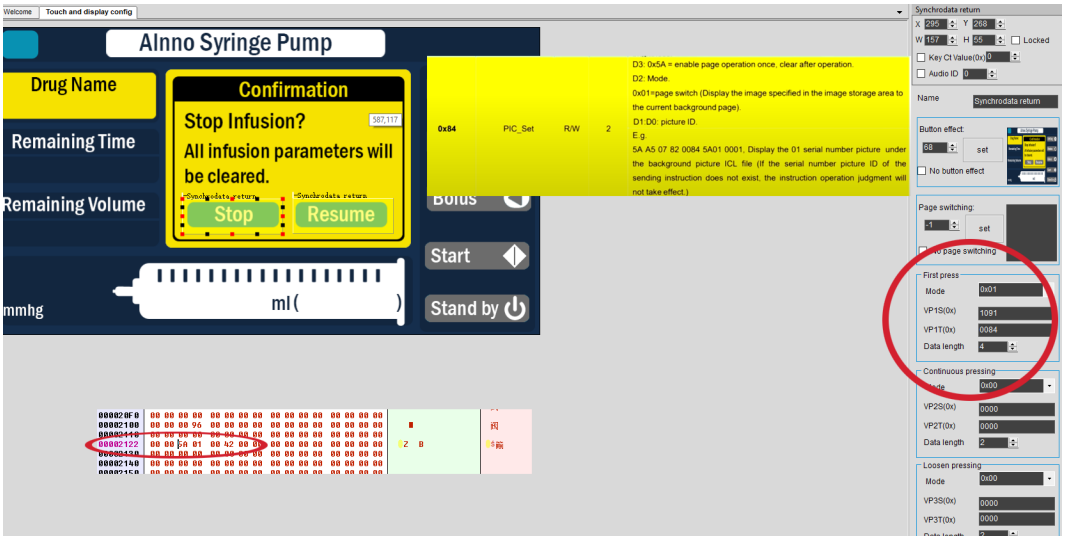

Figure 8: pageChageCommand

5 Save variable in Nor Flash

Address of nor flash, it must be an even number, the range is 0x000000 - 0x027FFE, and then one address corresponds to 2 bytes, that is the total capacity is 320KB.

for NOR flash database site
Each ID corresponds to 2KWords memory with ID range of 0 - 79. The database is located in on-chip NOR FLASH of 160KWords (320 KB). It can be used to save user data or DWIN OS program library files.

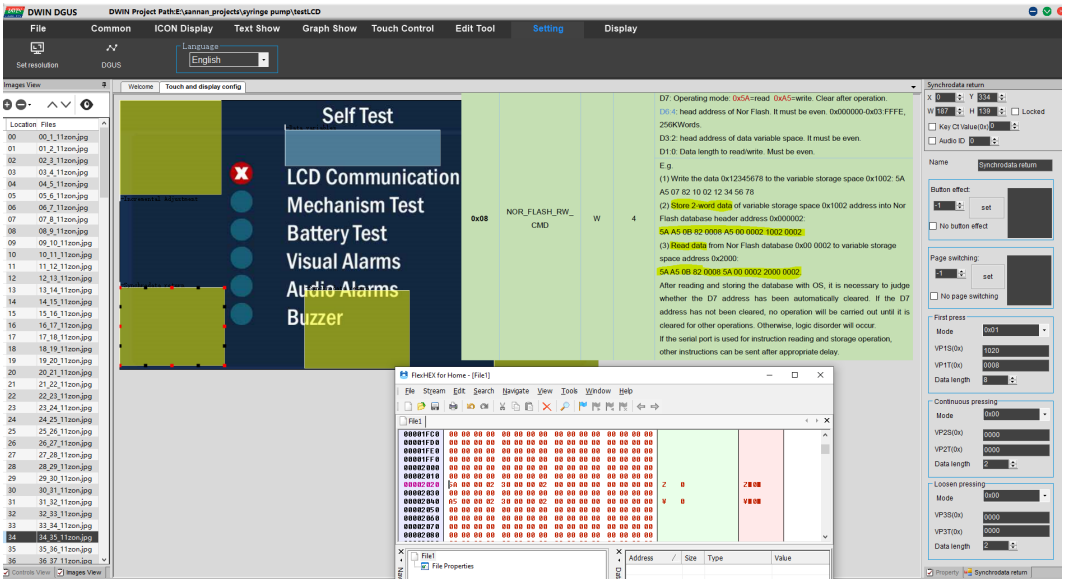

Figure 9: NorFlash