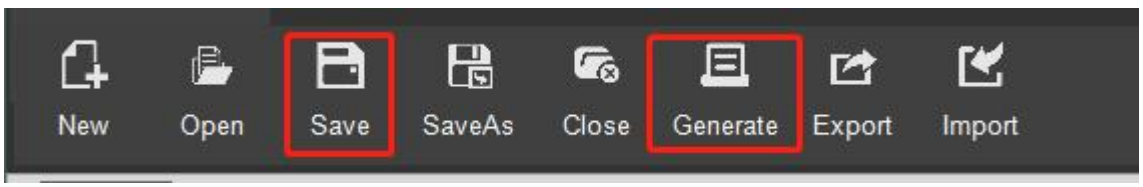
The Process of How To Replace DWIN K600+ with L5L

First of all, the differences between K600+ and T5L:

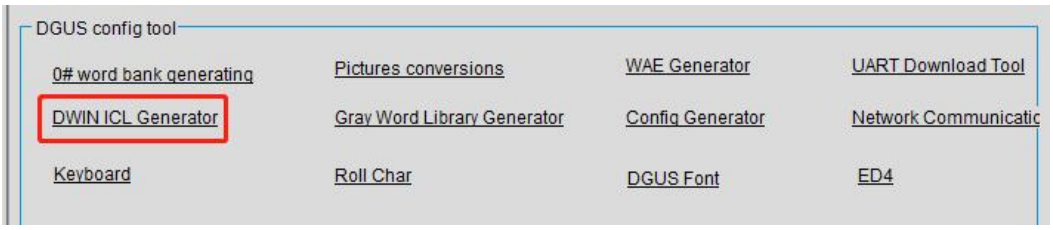
1. First of all, the software version used is different. K600+ uses software version DGUS V5.08, and T5L uses software version V7.6XX or above, V7.642 is currently recommended.
2. The background image processing methods are different. The images of K600+ can be downloaded directly, but the background images of T5L need to be generated by tool software first, and there is a configuration storage location in the configuration file (factory default configuration No. 32 storage location).
3. The generated icon library, K600+ is to generate ICO files, when replacing to T5L, you need to use V7.624 software to regenerate the ICL icon library file.
4. The hardware configuration file is different. K600+ is configured in the CONFIG.TXT file. T5L needs to generate a new hardware configuration file T5LCFG*.CFG, and reconfigure according to the *T5L Development Guide.*
5. Variable address usage range. The variable address of K600+ allows users to use the range of 0000-6FFF, and the range of variable address of T5L is 1000-FFFF.
6. Font storage space, K600+ has 32M font storage space, the naming range is 0-127 (it is recommended that users start naming and using from 24), T5L only has 16M storage space, and the naming range is 0-63. If there is more than this range, you need to adjust the naming, control settings also need to be modified synchronously.
7. K600+ can use 80/81 instructions to read and write DUGS registers to achieve related functions, T5L uses variable mode to drive work, and users use 82/83 instructions to call the system variable interface to achieve related functions.
8. Compared with the development of K600+, T5L lacks these functions: rotation adjustment, RTC input, list display. But there are many more cool features added, which can be learned later.

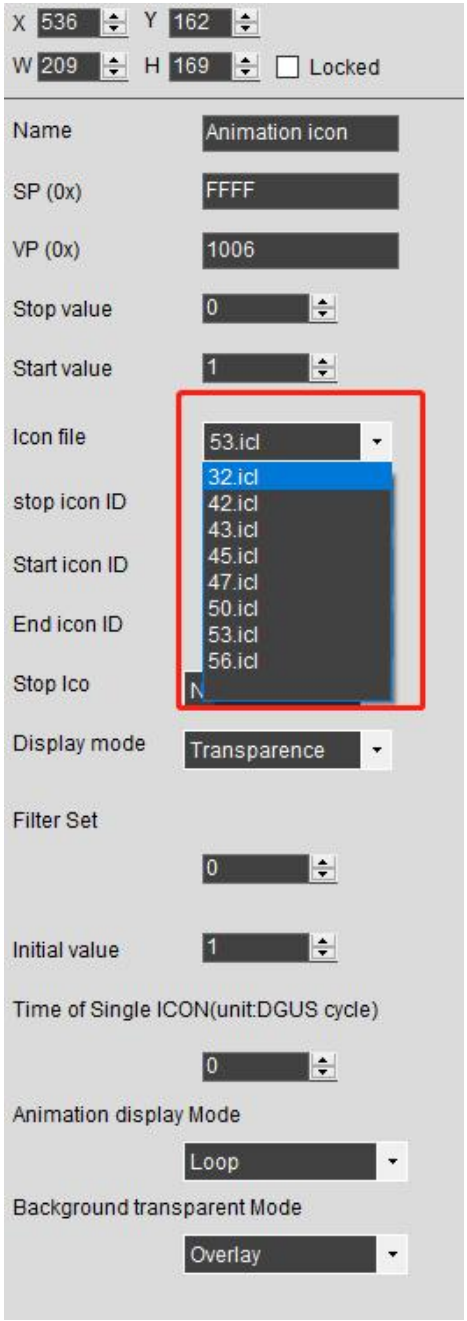
The detailed introduction of how to replace DWIN K600+ with L5L:

1. First create a new blank folder as the new project file save path.
2. Open the original project file with T5L development software V7.642, and then click Save As to save the new project folder in the first step.
3. and then click Generate, Save, and generate a new configuration file for T5L No. 13, No. 14, etc.

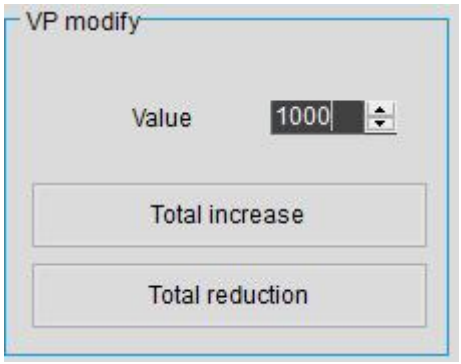


4. Open the new project folder, delete all ICO files generated by the original project file, and use V7.642 to regenerate the corresponding new ICL icon library file (pay attention to the naming range, do not exceed the storage space, a storage location is 256KB). If there is an icon library in the project file, you need to re-select a new ICL icon library.





5. If the previous project has used variable addresses in the range of 0000-0FFF, it can be increased by 1000H in batches through the variable address adjustment on the software.



6. Modify the hardware configuration file.

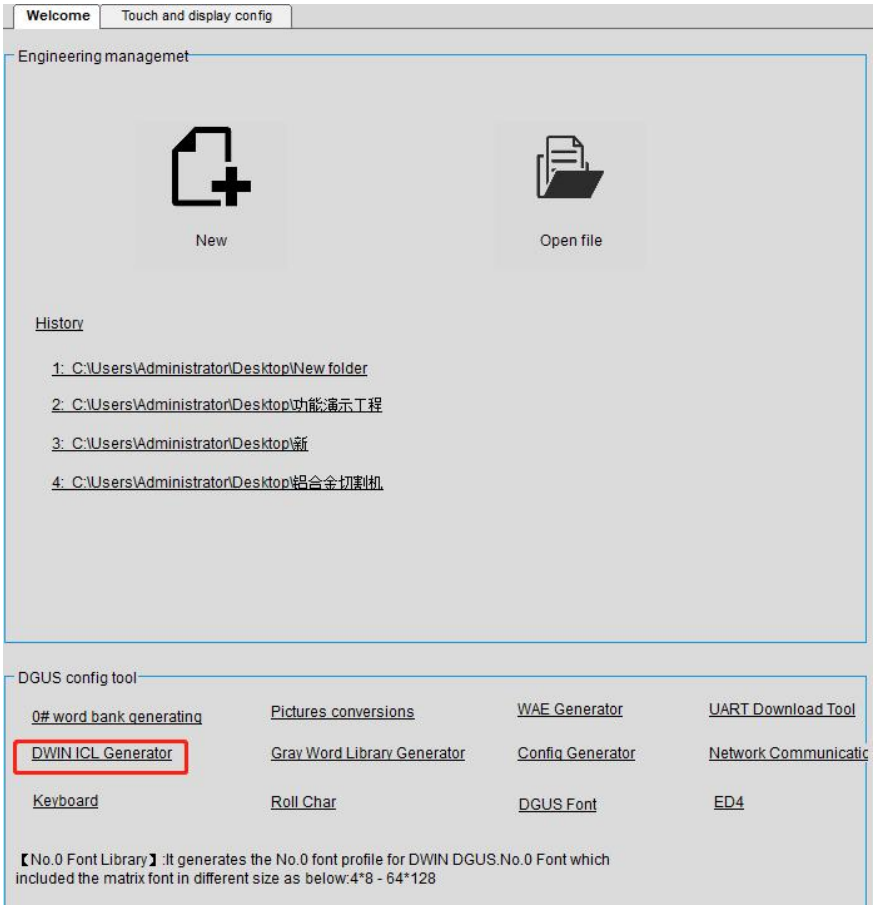
T5L CFG *. CFG hardware configuration file is in binary data format and can be edited by UltraEdit.

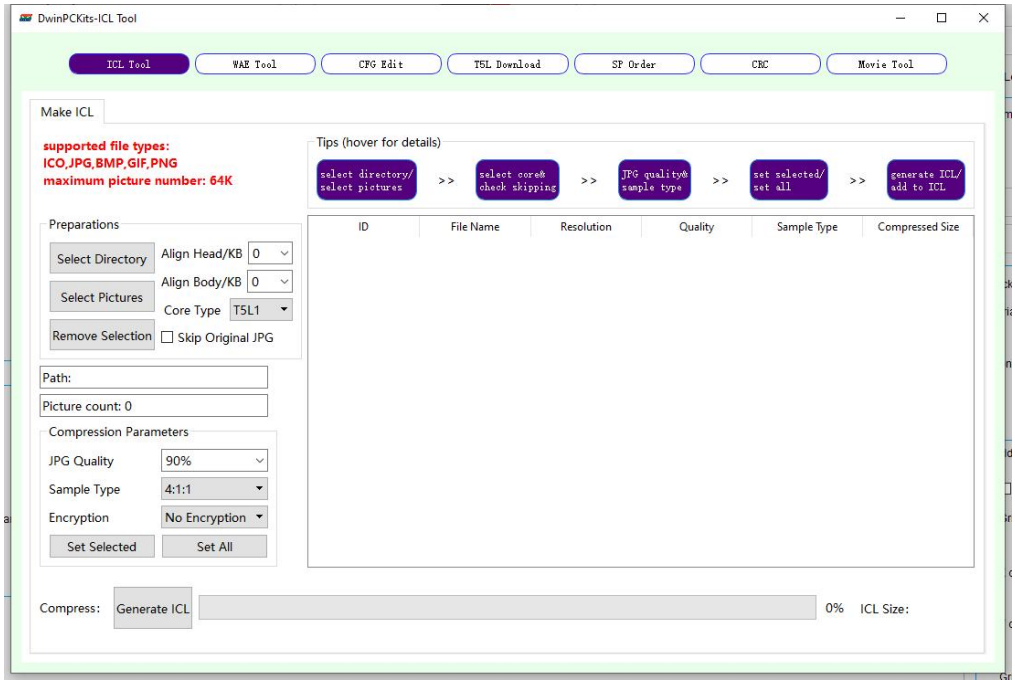
The description is as follows :

Category	Address	Length	Definition	Description
Recognition configuration	0x00	5	0x54 0x35 0x4C 0x43 0x31	Fixed content.
System configuration	0x05	1	Parameter configuration	.7: UART CRC check 0=close 1=open
				.6: Buzzer / music playback selection. 0=Buzzer 1=music playback
				.5: Load 22 file initialization VP at power-on 1= Load 0= No Load
				.4: Touch variable automatic upload 1=On, 0= Off
				.3:Touch panel audio 1= Open 0= Close
				.2: Touch panel standby backlight 1= Open 0=Close
				.1-.0: Display direction 00 = 0°, 01 = 90°, 10 =180° ,11 = 270°
	0x06	1	Parameter configuration 1	.7: PWM output 0=user control; 1= PMW backlight brightness control, 1KHz frequency. .6: Expand SPI NAND Flash. 0=not expanded 1=expanded. .5: Set 1 to start SPI NAND Flash format (data will be cleared). .4: SPI NAND Flash memory. 0=1Gbits; 1=4Gbits. .3: Set to 1 to erase all off-chip Flash contents. .2: AD return value resolution selection. 0=12bit; 1=16bit. .1:OS CPU user 8051 program download encryption. 0=unencrypted ; 1=encrypted. (In case of encryption, users should use DWIN tool to encrypt before downloading the 8051 program. 0: Reserved, write 0 .
	0x07	1	Music WAE file location	0x00-0x3F(00-63)
	0x08	1	Background image ICL file location	0x10-0x3F(16-63), correspond to 12MB-4MB background image size.
	0x09	1	Touch panel reporting point rate	0x01-0xFF. By default 0x28, reporting point rate=400Hz/set value
				Baud rate =3225600/set baud rate (max of 0x03FF)

Use the .CFG file such as T5LCFG.CFG to implement the configuration on the original CONFIG.TXT file: settings such as serial port 2 baud rate, screen display direction, whether to load 22 files, etc.

7. Generate ICL background image library. All background images of T5L must generate ICL files before they can be downloaded to the screen to be recognized. The default storage location is 32, and the storage location can be modified through CFG file 08 location configuration.





Select the picture to generate the ICL, name 32 background ICL, the default storage location of the background pictures

8. All the above newly generated files are saved in the DWIN_SET folder as before. T5L does not support hot swap of SD card. Download process: power off and insert the card -- power on and enter the blue screen download interface, after displaying END---- - power off and pull out the card---Power on to see the effect.