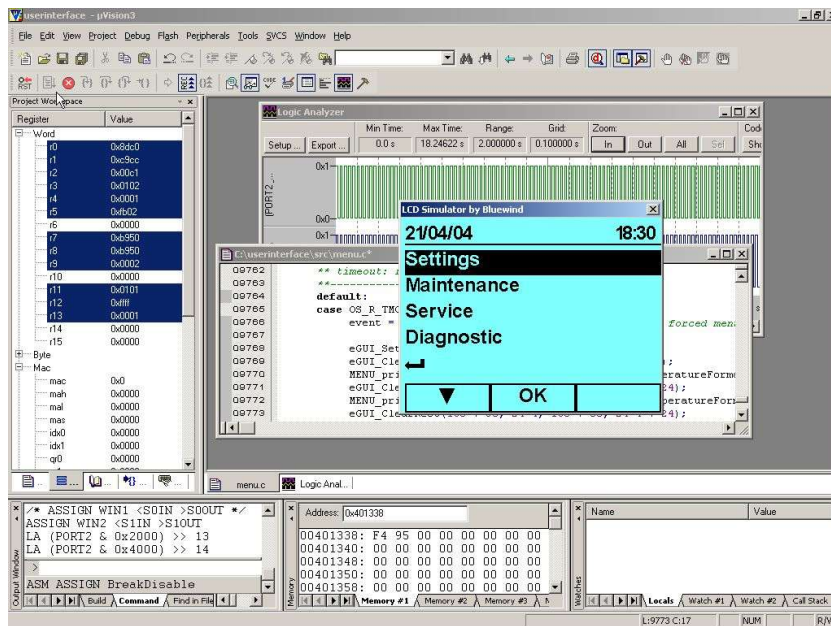


eGUI

eGUI is the simple graphical library for all your embedded applications based on the Keil Software uVision3® development environment.



eGUI is a C language library delivered with full sources and examples of usage under uVision3® for all the supported platform: 8 bit (8051), 16 bit (Infineon C16x) and 32 bit (ARM).

eGUI advantage

eGUI is a simple and cost-effective graphical library with a precise target of applications. Some features found on more complete implementations like gray-scale and color LCD management are not given here (even if they can be easily added). At the same time, an emphasis on simplicity and hardware-independent simulation makes uGUI the right choice when time is limited and a result must be obtained even before the board can be switched on.

Partial List of eGUI functions

Characters, fonts and bitmaps

```
void* eGUI_SetFont()
int eGUI_GetFontDistX()
int eGUI_GetFontDistY()
void eGUI_Dispatch()
void eGUI_DispatchString()
int eGUI_LengthString()
int eGUI_LengthChar()
void eGUI_DrawBitmap()
```

Draw

```
void eGUI_DrawPoint()
void eGUI_ClearRect()
void eGUI_FillRect()
void eGUI_InvertRect()
void eGUI_MaskRect()
```

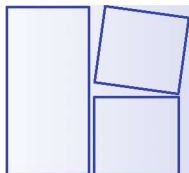
Windows

```
char eGUI_CreateWin()
void eGUI_DeleteWin()
```

General purpose

```
void eGUI_Clear()
char eGUI_GotoXY()
void eGUI_ActivateCursor()
void eGUI_DeactivateCursor()
void eGUI_ClrCursor()
void eGUI_SetCursor()
void eGUI_Lcd()
void eGUI_Update()
```

Disclaimer: eGUI and its components were developed in close contact with Keil Software for a good integration with Keil's uVision3® IDE, but this is a completely independent product under the responsibility of Bluewind. uVision3® is a registered trademark of Keil Software.



eGUI: the simple solution for a Graphical User Interface

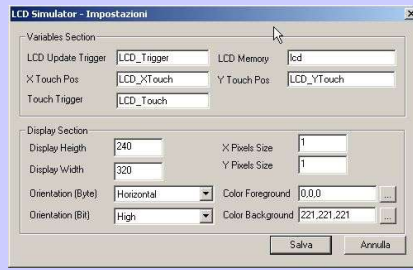
①

Include eGUI as a library in your new or existing uVision3®-based project, after having correctly configured and built it



②

Easily define the LCD base features for a correct simulation: size, orientation



③

Build the user interface using simple and powerful eGUI library functions

```
eGUI_SetFont(DEFAULT_FONT);
eGUI_ClearRect(15 + 35, 24*3, 15 + 85, 24*3 + 24);
MENU_printm(15 + 85, 24*3, LEFT,3, "%03.1f",Temperatu
eGUI_ClearRect(165 + 35, 24*3, 165 + 85, 24*3 + 24);
MENU_printm(165 + 85, 24*3, LEFT,3, "%03.1f",Temperatu
eGUI_ClearRect(165 + 35, 24*4, 165 + 85, 24*4 + 24);
MENU_printm(165 + 85, 24*4, LEFT,3, "%03.1f",Temperatu
eGUI_ClearRect(15 + 35, 24*4, 15 + 85, 24*4 + 24);
MENU_printm(15 + 85, 24*4, LEFT,3, "%03.1f",Temperatu
eGUI_ClearRect(15 + 35, 24*5, 15 + 85, 24*5 + 24);
MENU_printm(15 + 85, 24*5, LEFT,3, "%03.1f",Temperatu
eGUI_ClearRect(165 + 35, 24*5, 165 + 85, 24*5 + 24);
MENU_printm(165 + 85, 24*5, LEFT,3, "%03.1f",Temperatu
eGUI_SetFont(DEFAULT_FONT);
GUI_ClearRect(15 + 20, 24*2, 15 + 100, 24*2 + 24);
MENU_printm(15 + 80, 24*2, LEFT,3, "%03.2f",Pressure)
```

④

Check the final result while simulating your project from within uVision3®, using the eGUI LCD Simulation DLL as a new simulated peripheral to the microcontroller.



Fonts and Bitmaps

Any embedded GUI application poses the problem of fonts and bitmap images conversion: you select the character type you plan to use in your embedded device from a choice of Windows installed fonts, and then you have to convert or re-draw each single character down to the description format that the graphical library can accept. Using eGUI this process can be done using an existing application called PixelFont, that can be easily downloaded from the producer site and licensed for a very modest fee. This way any number of proportional and fixed-size fonts can be added to the examples given with the library.

EXTFONTS module

The optional EXTFONTS module makes it possible to locate more character fonts not directly embedded with the application but on a defined memory area (usually FLASH) so that downloading new fonts is independent from the application itself.

LANGUAGE module

The optional LANGUAGE module enables to consider a number of different translations of the messages printed on a menu system and substitution on-the-fly while printing on the screen.

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