

## 1 Overview

GUI Guider is a user-friendly graphical user interface development tool from NXP that enables the rapid development of high quality displays with the [open-source LVGL graphics library](#). The drag-and-drop GUI Guider editor makes it easy to utilize the many features of LVGL such as widgets, animations, and styles to create a GUI with minimal or no coding at all.

With the click of a button, you can run your application in a simulated environment or export it to a target project. Generated code from GUI Guider can easily be added to an MCUXpresso IDE project, accelerating the development process and allowing you to seamlessly add an embedded user interface to your application.

GUI Guider is free to use with the NXP general purpose and crossover MCUs, and includes built in project templates for several supported platforms.

## 2 V1.2.0 GA (Released on 30 July 2021)

### 2.1 New Features

- **UI Development Tool**
  - Widget search
  - Custom font size
  - UG for board support without template
- **Widgets**
  - LVGL 7.10.1
  - Events for buttons of list
  - Memory leak check
- **Toolchain**
  - IAR 9.10.2
  - MCUX IDE 11.4.0
  - MCUX SDK 2.10.x
- **Acceleration**
  - Image converter for VGLite performance augment
- **New Target / Device Support**
  - LPC54s018m, LPC55S69
  - i.MX RT1010

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## 2.2 Known Issues

- **LGLGUIB-1405: Run Target does not reset and run the application.**

When IAR is selected from the "Run Target" feature, the board is not reset automatically after image programming. The user must manually reset the EVK using the reset button once the programming has completed.

- **LGLGUIB-1407: [Tileview] Child widgets are not updated in real time.**

When a new tile is added in tileview widget, the widgets tree in the left panel of GUI Guider is not refreshed if no child widget is added in the new tile. A child widget must be added to the tile for it to appear in the left-most panel.

- **LGLGUIB-1409: Random framing error.**

Occasionally the top menus may be cut off after widgets adding and deleting operation in the UI editor. No other details regarding this issue are available at this time. The only known solution if this issue occurs is to close and reopen the GUI Guider application.

- **LGLGUIB-1411: ButtonCounterDemo application performance issue.**

When buttonCounterDemo is built for LPC54S018 by using IAR v9.10.2, the poor application performance may be experienced. When pressing one button and then the other, there is a noticeable delay of ~500 ms before the screen updates.

- **LGLGUIB-1412: Building demo applications may fail.**

If the Export code feature is used to export code of GUI APP without running "Generate Code" first, the build will fail after importing the exported code in MCUXpresso IDE or IAR.

## 3 V1.1.0 GA (Released on 17 May 2021)

### 3.1 New Features

- **UI Development Tool**

- Menu shortcut and keyboard control
- New states: FOCUSED, EDITED, DISABLED
- Frame rate customization
- Screen transition configuration
- Parent / children widgets
- Callback function setting for animation image
- VGLite enablement on IDE
- Header path auto-config

- **Widgets**

- BMP and SVG assets
- 3D animation for PNG
- Support tileview as standard widget

- **Acceleration**

- Initial VGLite for RT1170 and RT595

- **New Target / Device Support**

- i.MX RT1170 and i.MX RT595

## 3.2 Known Issues

- **LGLGUIB-1273: Simulator cannot display full screen when screen size is greater than host resolution.**

When the target screen resolution is greater than the PC screen resolution, the entire simulator screen cannot be viewed. In addition, the control bar is not visible so it is impossible to move the simulator screen.

- **LGLGUIB-1277: The simulator is blank for i.MX RT1170 and RT595 project when large resolution is selected.**

When the large resolution, for example 720x1280, is used to create project for i.MX RT1170 and i.MX RT595, the simulator is blank when GUI APP is running in simulator. The reason is that only partial screen is displayed when device screen size is larger than the PC screen resolution.

- **LGLGUIB-1294: printer demo: Click does not work when icon image is clicked.**

When the printer demo is running, there is no response when the icon image is clicked. This happens because the event trigger and action are not configured for the icon image.

- **LGLGUIB-1296: Size of text style is not to be exported in the list widget.**

After setting the text size of the list widget in the attributes window of GUI Guider, the configured text size does not take effect when the GUI APP is running.

## 4 V1.0.0 GA (Released on 15 January 2021)

### 4.1 New Features

- **UI Development Tool**
  - Supports Windows 10 and Ubuntu 20.04
  - Multi-language (English, Chinese) for IDE
  - Compatible with LVGL v7.4.0, MCUXpresso IDE 11.3.0, and MCU SDK 2.9
  - Project management: create, import, edit, delete
  - What You See Is What You Get (WYSIWYG) UI design by drag & drop
  - Multi-page application design
  - Shortcut of bring forward and backward, copy, paste, delete, undo, redo
  - Code viewer for UI definition JSON file
  - Navigation bar to view the selected source file
  - LVGL C code auto-generation
  - Widget attributes group and setting
  - Screen copy function
  - GUI editor zoom in and zoom out
  - Multiple fonts support and 3rd party fonts import
  - Customizable Chinese character scope
  - Widgets alignment: left, center and right
  - PXP acceleration enable and disable
  - Support default style and custom style
  - Integrated demo applications
  - Compatible with MCUXpresso project

- Real-time log display

- **Widgets**

- Supports 33 widgets

- Button (5): button, image button, checkbox, button group, switch
    - Form (4): label, drop-down list, text area, calendar
    - Table (8): table, tab, message box, container, chart, canvas, list, window
    - Shape (9): arc, line, roller, led, spin box, gauge, line meter, color, spinner
    - Image (2): image, animation image
    - Progress (2): bar, slider
    - Others (3): page, tile view, keyboard

- Animation: animation image, GIF to animation, animation easing and path

- Support event trigger and action selection, custom action code

- Chinese display

- Support default style and custom style

- **New Target / Device Support**

- NXP i.MX RT1050, i.MX RT1062, and i.MX RT1064

- NXP LPC54S018 and LPC54628

- Device template, auto-build, and auto-deploy for supported platforms

- Run simulator on X86 host

## 4.2 Known Issues

- **LGLGUIB-675: Animation refresh may not work well in simulator sometimes.**

The images of animation are not refreshed correctly in simulator sometimes, the root cause is that animation image widget does not handle image source changing properly.

- **LGLGUIB-810: Animation image widget may have distorted hues.**

During the operation of an animation widget, the animated image may have a discolored hue in the background. The issue is caused due to the unhandled style properties.

- **LGLGUIB-843: Erratic mouse operation when moving widgets when UI editor is zoomed in.**

When the UI editor is zoomed in, there may be erratic mouse operation when moving widgets in the editor.

- **LGLGUIB-1011: The screen overlay effect is incorrect when screens of different sizes are switched.**

When a second screen with opacity value 100 is created to cover the current screen (which is not deleted), the background screen effect is not displayed correctly.

- **LGLGUIB-1077: Cannot display Chinese in Roller widget.**

When Chinese characters are used as row text in roller widget, the Chinese are not displayed when the APP is running.

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