

Try LVGL SquareLine Demo on AT32

Introduction

This sample code is used to demonstrate how to try out LVGL SquareLine free of charge on AT-F437-SURF evaluation board.

Demo video link:

LVGL square line smart gadget demo on AT32F437

<https://b23.tv/KeNfoUL>

LVGL square line eBike demo on AT32F437

<https://b23.tv/vjDcQuG>

LVGL square line 3d printer demo on AT32F437

<https://b23.tv/Xw5yAJN>

LVGL square line audio player demo on AT32F437

<https://b23.tv/To5vc3T>



Applicable products:

Product series	AT32F435xx
	AT32F437xx

A list of major peripherals used:

Peripherals	XMC
	DMA
	USART

1 Squareline Studio overview

Squareline Studio is a multiplatform designer tool launched by LVGL GUI, with the following main features:

Simple user interface

The next-generation UI editor targeting both hobbyists and professionals. It is able to create beautiful Graphical User Interfaces quickly and easily for embedded and desktop applications.

Try for free

Try our SquareLine Studio's Business version in a 30-day trial.

Just download it, install, launch and enjoy it. It works even without registering an account.

Vendor agnostic

Exports platform independent C or MicroPython code for LVGL which can be compiled for any vendor's device

Iterate without re-building

Just click the "Play" button to try out the UI instantly without rebuilding it in Pixel Perfect Preview

Components

Create custom components from the built-in widgets using styles, animations and events

Cross platform

Has no external dependencies and can be compiled to any MCU or MPU and (RT)OS to drive ePaper, OLED or TFT display, or even monitors

Lightweight

Needs 32kB RAM and 128kB Flash, a frame buffer, and a least an 1/10 screen sized buffer for rendering

SquareLine Studio official website

<https://lvgl.io/demos>

2 Quick start

2.1 Hardware resources

- 1) AT-SURF-F437 evaluation board
- 2) The example case comes with 3.5' TFTLCD MODULE. and ALIENTEK 4.3 TFTLCD, which is described in readme.txt file.

2.2 Software resources

- SC0109_SourceCode

2.3 Example case

Use software to open corresponding project under “**projectat_surf_f437\applications**”, compile and download it to the evaluation board.

3 Revision history

Table 1. Document revision history

Date	Revision	Changes
2023.02.16	2.0.0	Initial release

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