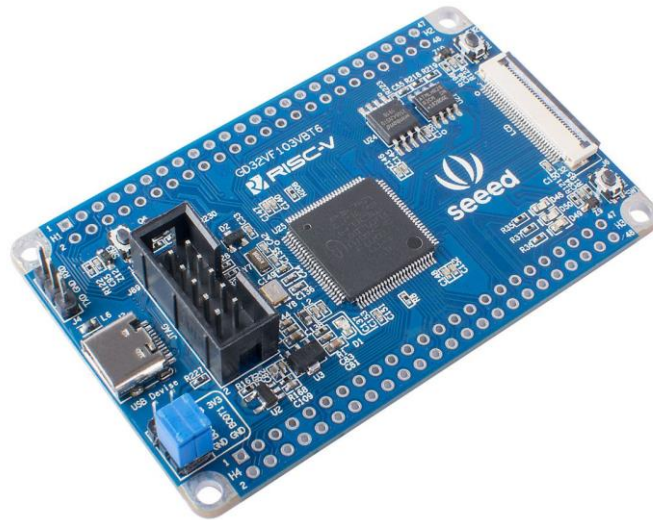# SEEED - 102991315

## SeeedStudio GD32 RISC-V Dev Board

PRODUCT DETAILS

Well, one more RISC-V board in Seeed. What's the difference? The new SeeedStudio GD32 RISC-V Dev Board equipt with a more powerful GD32VF103VBT6 MCU and has more I/O resources, onboard flash, communicate interface, etc. Simply put, more power, more possibility! You can even try GUI with this board.

SeeedStudio GD32 RISC-V Dev Board is based on GD32VF103VBT6 MCU which can run at up to 108MHz. GD32VF103 device is a 32-bit general-purpose microcontroller based on the RISC-V core, it provides128 KB on-chip Flash memory and 32 KB SRAM memory. Meanwhile, it provides a wealth of interface resources: 5x U(S)ART, 2 x I2C, 3 x SPI, 2 x I2S, 2 x CAN2.0, 1 x USBFS.

We break out all the I/O Pins(80 GPIOs in total) of GD32VF103, which will meet your diverse development needs. With the onboard 8MB flash and 256Byte EEPROM, you can implement more complex applications. Moreover, we provide a wealth of peripheral resources on the development board, including an LCD, a type c USB port, a TF card slot, two user buttons, and three user LEDs.

SeeedStudio has been actively involved in the RISC-V software ecosystem. We support the PlatformIO IDE and the Arduino framework for Seeedstudio gd32. You can either develop with the Arduino API you are familiar with or copy your existing Arduino applications and directly compile and run them.
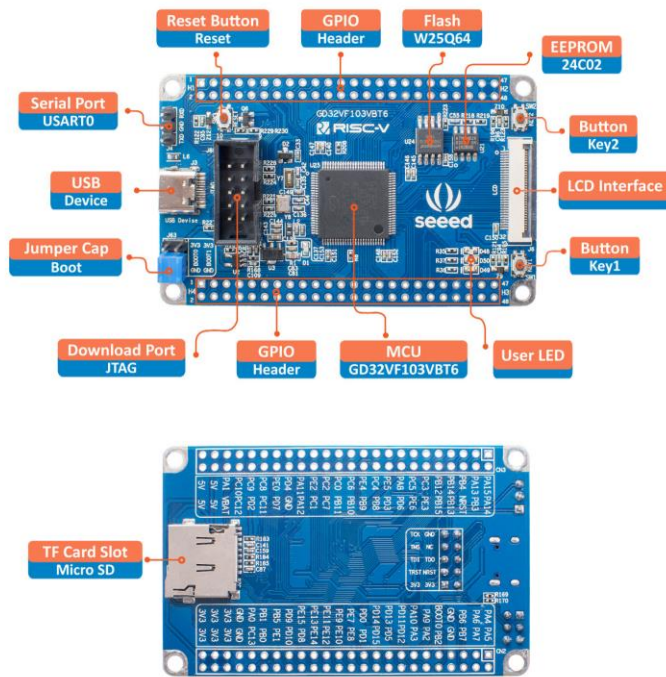
In addition, with this product, we have brought surprises to the developers who are interested in RISC-V, We support Seeed_Arduino_LCD for this product, which is a lightweight GUI based on Bodmer's TFT_eSPI.You can use the TFT_eSPI API to develop your own products, and you can take applications based on TFT_eSPI and run them directly.
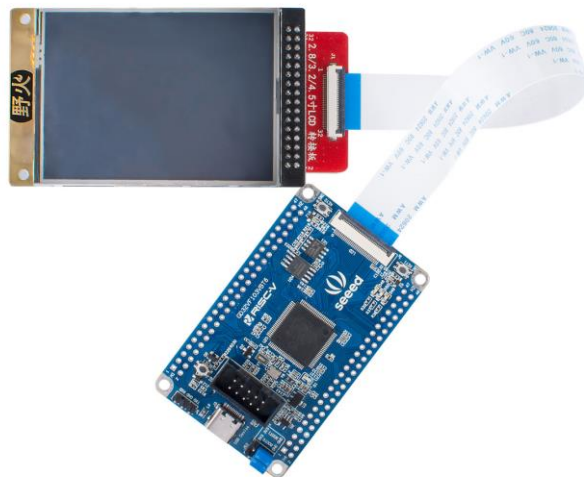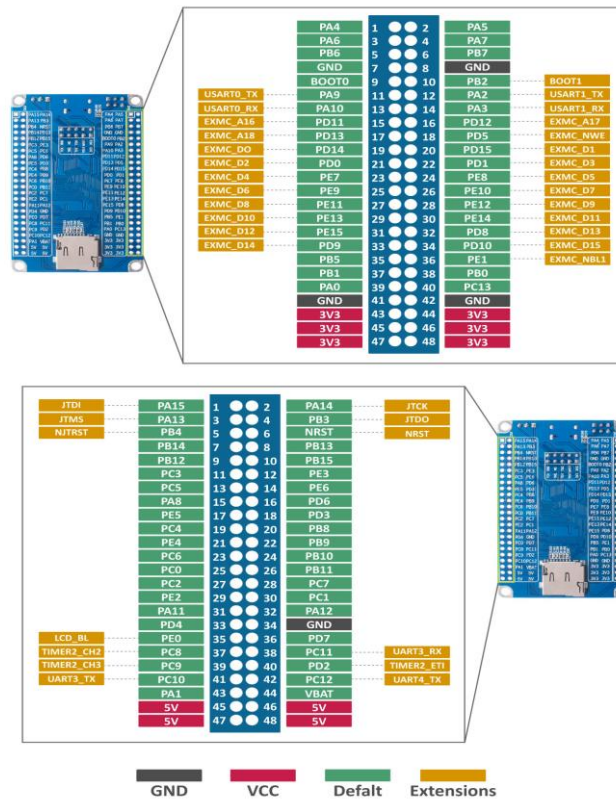

Features

- GD32VF103VBT6 RISC-V MCU @108MHz
- 128KB on-chip Flash + 8MB on-board Flash
- LCD Interface: 16-bit 8080 interface and SPI touch screen control interface
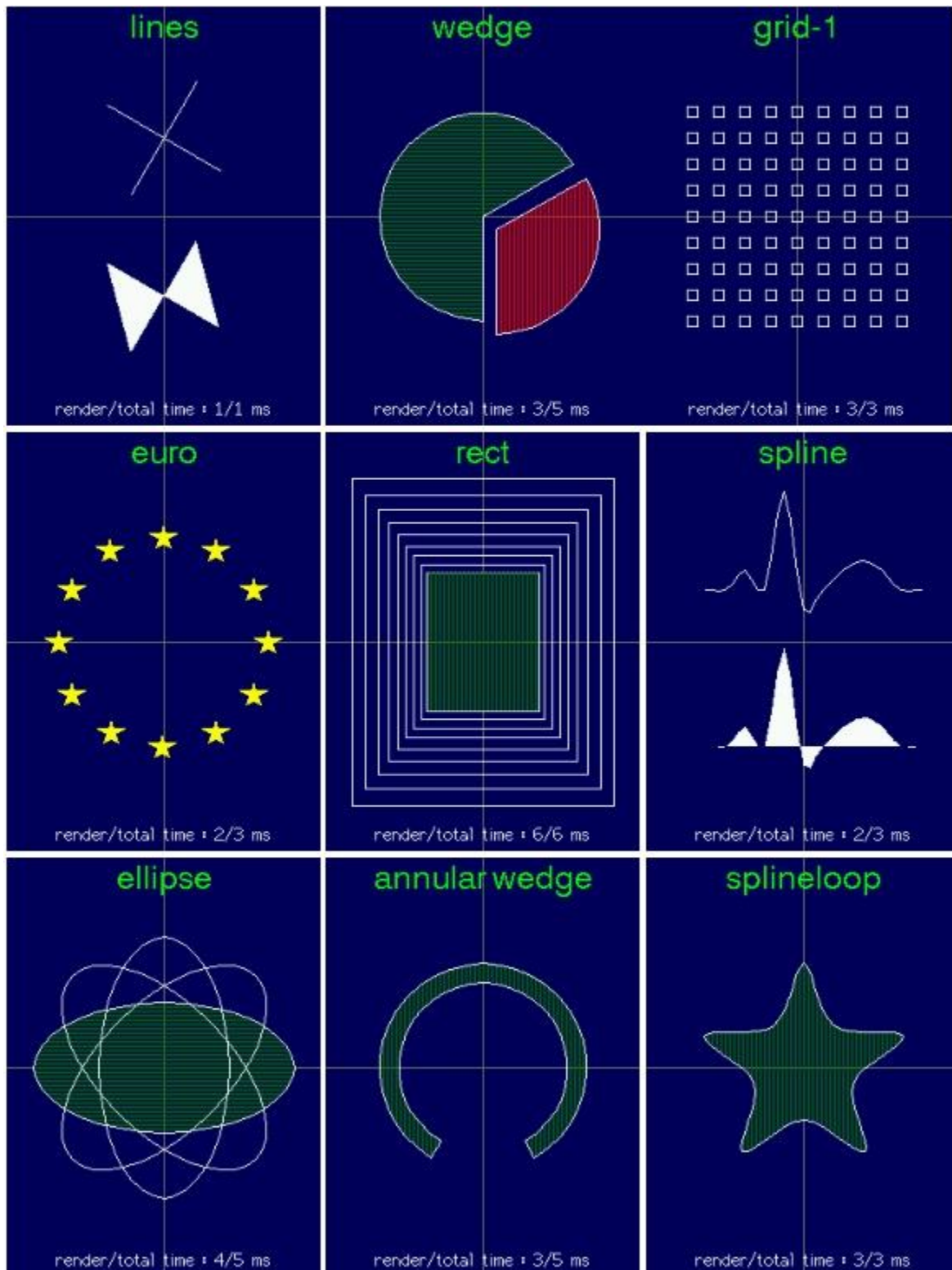- USB Type C
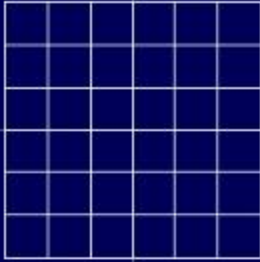- GUI support

Hardware Overview

Pinout

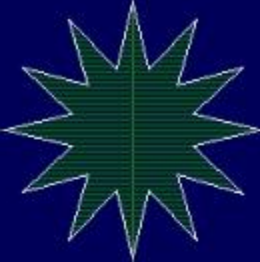| GND | VCC | Defalt | Extensions |

Demo

lines	wedge	grid-1
render/total time : 1/1 ms	render/total time : 3/5 ms	render/total time : 3/3 ms
euro	rect	spline
render/total time : 2/3 ms	render/total time : 6/6 ms	render/total time : 2/3 ms
ellipse	annular wedge	splineloop
render/total time : 4/5 ms	render/total time : 3/5 ms	render/total time : 3/3 ms
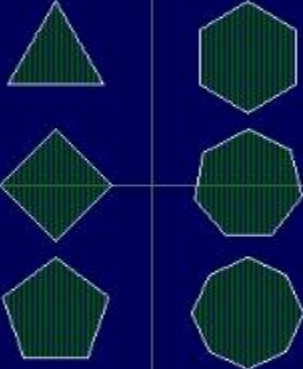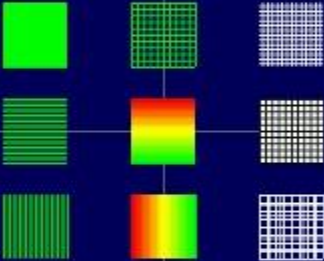
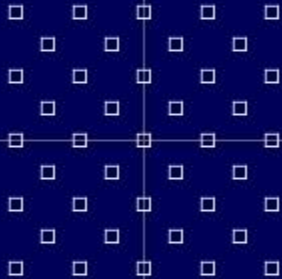| linegrid	tetris	star
render/total time : 4/4 ms	render/total time : 3/3 ms	render/total time : 2/3 ms
Ngon	fillstyles-1	grid-2
render/total time : 4/6 ms	render/total time : 4/5 ms	render/total time : 2/3 ms
fillstyles-2	pivot rotation	pivot scale
render/total time : 5/6 ms	render/total time : 4/4 ms	render/total time : 2/2 ms
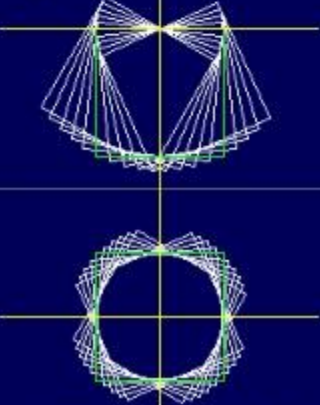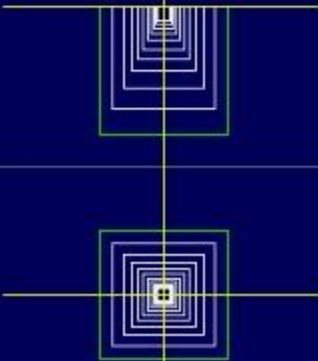
Dimension
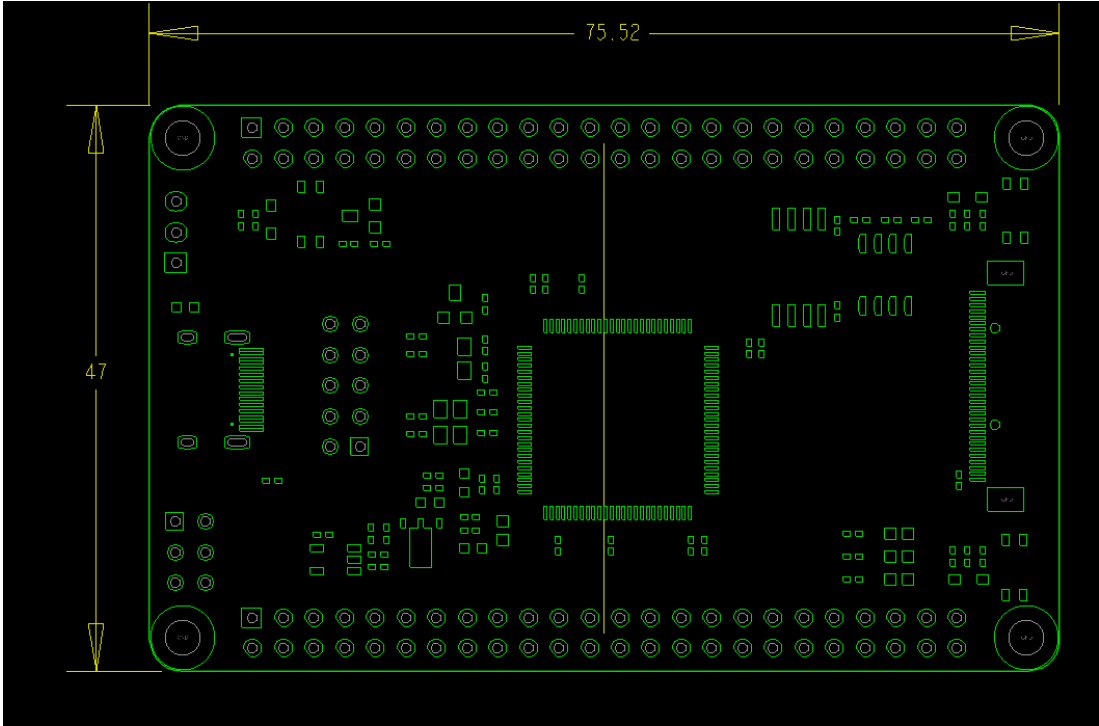
Part List

Part List	
SeeedStudio GD32 RISC-V Dev Board	x1
2x24 Pin Header	x2