Crystalfontz
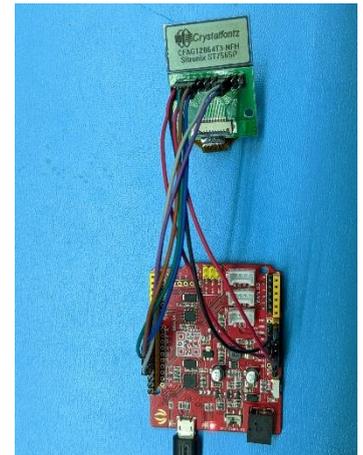
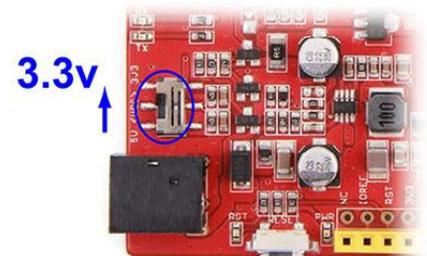## CFAG12862[T|U]3 - Quick Start Guide

1. What You Need

- Your **display**
- A **breakout board** (0.5 mm pitch, at least 18 puns)
- 3.3v Arduino Uno Clone (e.g., **Seeeduino** v4.2 board)
- **USB cable** (e.g., WR-USB-27)
- **Jumper cables** (e.g., WR-JMP-Y40 or WR-JMP-41)
- Headers (e.g., CFAPN01855)
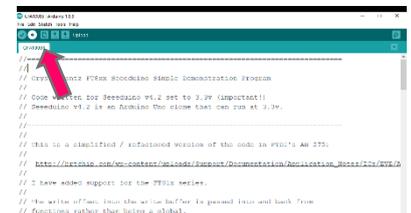- Some **code**! You can use our demo code available on the product pages.

2. Quick Start

In this guide, we're connect the display using SPI and a non-backlit display. To power the backlight, connect a power circuit to the backlight tabs (remember that LEDs are current driven rather than voltage driven).

Step 1 - Ensure the voltage selection switch on the **Seeeduino** is set to 3v3. Using 5v can permanently damage your display.

Step 2 - Insert the ZIF tail of the display into the connector on the breakout board.

Step 3 - Wire it up! Using the table below, connect the **broken-out display pins** to the **Seeeduino** using the **headers** and **jumper cables**.

Display Pin	Function	Arduino	Color
1	Power (VDD)	3.3v	Red
2	Ground (VSS)	GND	Black
3	Chip Select 1 (/CS1)	D10	Green
4	Chip Select 2 (CS2)	3.3v	Red
5	Reset (/RES)	D9	Brown
6	Data Command (RS or DC or A0)	D8	Blue
15	Serial Clock (SLK)	D13	Gray
16	MOSI	D11	Purple
7-14, 17, and 18 NC. For long term designs, fix high/low per datasheet.			

Step 4 - Connect the **Seeeduino** to your computer using a **USB cable**, and load your code to the Seeeduino.

3. Further Information

See the Crystalfontz website for further information including full product datasheets and programming examples:
https://www.crystalfontz.com/controllers/Sitronix/ST7565P/

https://www.crystalfontz.com/product/cfag12864t3nfh

For a video tutorial, check out our video "Do-It-Yourself Transparent LCD" on YouTube starting around 4:30.

We're here to help! Email your questions to support@crystalfontz.com

We'd love to hear about your project! Tag us on Facebook, Instagram, LinkedIn, Twitter, or YouTube, or send us a link to your project on the web!