

This page describes supported displays. Ucglib only supports color displays with internal controller and local display RAM. The setup for Ucglib depends on the internal controller, which is build into the color display.

Alternative names and descriptions for the pins:

| Ucglib Pin Name | Description      | Other Names    |
|-----------------|------------------|----------------|
| sclk            | SPI clock signal | CLK, SCK       |
| data            | SPI data signal  | DIN, SDI, MOSI |
| cd              | Command / Data   | D/C, DC, A0    |
| cs              | Chip select      | CS             |
| reset           | Reset input      | RESET, RES     |

## ST7735

- Type: Color TFT
- Dimension: 128x160
- Color Depth: 18 Bit
- Interfaces: HW SPI, SW SPI
- Tutorial: [How to Connect a ST7735 Display](#)

## Arduino Constructor

| Constructor   | Description  |
|---|--------------|
| <code>Ucglib_ST7735_18x128x160_SW_SPI</code><br><code>ucg(sclk, data,</code><br><code>cd, cs, [reset])</code> | Software SPI |
| <code>Ucglib_ST7735_18x128x160_HW_SPI</code><br><code>ucg(cd, cs,</code><br><code>[reset])</code>             | Hardware SPI |

## Device Procedures

- Controller Device: `ucg_dev_st7735_18x128x160`
- Extensions: `ucg_ext_st7735_18`, `ucg_ext_none`

## ILI9341

- Type: Color TFT

- Dimension: 240x320
- Color Depth: 18 Bit
- Interfaces: HW SPI, SW SPI
- Tutorial: How to connect a ILI9341 display

## Arduino Constructor

| Constructor   | Description       |
|---|-------------------|
| Ucglib_ILI9341_18x240x320_SW_SPI<br>ucg(sclk, data,<br>cd, cs, [reset]) | 18x240x320_SW_SPI |
| Ucglib_ILI9341_18x240x320_HW_SPI<br>ucg(cd, cs,<br>[reset])             | 18x240x320_HW_SPI |

## Device Procedures

- Controller Device: ucg\_dev\_ili9341\_18x240x320
- Extensions: ucg\_ext\_ili9341\_18, ucg\_ext\_none

## ILI9163

- Type: Color TFT
- Dimension: 128x128
- Color Depth: 18 Bit
- Interfaces: HW SPI, SW SPI
- Tutorial: Not yet available

## Arduino Constructor

| Constructor   | Description       |
|---|-------------------|
| Ucglib_ILI9163_18x128x128_SW_SPI<br>ucg(sclk, data,<br>cd, cs, [reset]) | 18x128x128_SW_SPI |
| Ucglib_ILI9163_18x128x128_HW_SPI<br>ucg(cd, cs,<br>[reset])             | 18x128x128_HW_SPI |

## Device Procedures

- Controller Device: `ucg_dev_ILI9163_18x128x160`
- Extensions: `ucg_ext_ILI9163_18`, `ucg_ext_none`

## PCF8833

- Type: Color TFT
- Dimension: 132x132
- Color Depth: 16 Bit
- Interfaces: HW SPI, SW SPI
- Tutorial: How to connect a PCF8833 display

## Arduino Constructor

| Constructor   | Description      |
|---|------------------|
| <code>Ucglib_PCF8833_16x132x132_SWSPI</code><br><code>ucg(sclk, data,</code><br><code>cd, cs, [reset])</code> | 16x132x132 SWSPI |
| <code>Ucglib_PCF8833_16x132x132_HWSPI</code><br><code>ucg(cd, cs,</code><br><code>[reset])</code>             | 16x132x132 HWSPI |

## Device Procedures

- Controller Device: `ucg_dev_pcf8833_16x132x132`
- Extensions: `ucg_ext_pcf8833_16`, `ucg_ext_none`

## SSD1331

- Type: Color OLED
- Dimension: 96x64
- Color Depth: 16 Bit (Note: The interface uses 18 bit transfers, but the display only has 16 bit color depth)
- Interfaces: HW SPI, SW SPI
- Tutorial: n.a.

## Arduino Constructor

| Constructor                          | Description           |
|--------------------------------------|-----------------------|
| Ucglib_SSD1331_18x32x32_Software_SPI | 18x32x32 Software SPI |
| ucg(sclk, data, cd, cs, [reset])     |                       |
| Ucglib_SSD1331_18x32x32_HW_SPI       | 18x32x32 HW SPI       |
| ucg(cd, cs, [reset])                 |                       |

## SSD1351

- Type: Color OLED
- Dimension: 128x128
- Color Depth: 18 Bit
- Interfaces: HW SPI, SW SPI
- Tutorial: n.a.

## Arduino Constructor

| Constructor                         | Description                      |
|-------------------------------------|----------------------------------|
| Ucglib_SSD1351_18x128x128_SW_SPI    | 18x128x128 SW SPI                |
| ucg(sclk, data, cd, cs, [reset])    | GPIO set to 0 (ILSoft OLED)      |
| Ucglib_SSD1351_18x128x128_HW_SPI    | 18x128x128 HW SPI                |
| ucg(cd, cs, [reset])                | GPIO set to 0 (ILSoft OLED)      |
| Ucglib_SSD1351_18x128x128_FT_SW_SPI | 18x128x128 FT SW SPI             |
| ucg(sclk, data, cd, cs, [reset])    | GPIO set to 1 (Freetronics OLED) |
| Ucglib_SSD1351_18x128x128_FT_HW_SPI | 18x128x128 FT HW SPI             |
| ucg(cd, cs, [reset])                | GPIO set to 1 (Freetronics OLED) |

## Device Procedures

- Controller Devices: `ucg_dev_ssd1351_18x128x128_ilsoft`, `ucg_dev_ssd1351_18x128x128_ft`
- Extensions: `ucg_ext_ssd1351_18`, `ucg_ext_none`

## LD50T6160

- Type: Color OLED
- Dimension: 160x128
- Color Depth: 18 Bit
- Interfaces: 6 Bit parallel

### Arduino Constructor

| Constructor                                 | Description  |
|---|--|
| <code>Ucglib_LD50T6160_18BitParallel</code> | <code>ucg( d0, d1, d2, d3, d4, d5, wr, cd, [cs], [reset])</code> |

### Device Procedures

- Controller Device: `ucg_dev_ld50t6160_18x160x128_samsung`
- Extensions: `ucg_ext_ld50t6160_18`, `ucg_ext_none`

## SEPS225

- Type: Color OLED
- Dimension: 96x64
- Color Depth: 16 Bit (Note: The display supports 18 bit, but the SPI interface of the controller only allows 16 bit color depth with byte transfers)
- Interfaces: HW SPI, SW SPI
- Tutorial: n.a.

### Arduino Constructor

| Constructor                                 | Description                                   |
|---|---|
| <code>Ucglib_SEPS225_16x96x64_HW_SPI</code> | <code>ucg(sclk, data, cd, cs, [reset])</code> |
| <code>Ucglib_SEPS225_16x96x64_SW_SPI</code> | <code>ucg(cd, cs, [reset])</code>             |