

# Graphic LCD Phidget



If your project needs a user output that's more complex than LEDs but more portable than a computer screen, this graphic LCD module will suit your needs. The screen is 128 pixels wide and 64 pixels tall, and each pixel is 0.45 mm. The backlight brightness and pixel contrast can both be controlled from software. The LCD1100 connects to a port on a VINT Hub; see the "Compatible Products" tab for a list of hubs.

## **Built-in Drawing and Text Functions**

Our powerful API makes it easy to draw simple shapes on the LCD screen: Draw individual pixels, straight lines or rectangles; Write text to the screen, copy one region of the screen to another region, or even print an entire screen of pixels all at once. Use the text function to write text in one of three different fonts to the screen, or design your own font and load it into a frame buffer for continuous use.

## **Custom Frame Buffers**

You have full access to three separate frame buffers for this screen. Each one can be thought of as a blank canvas where you keep images that can be quickly and easily copied to the screen. For example, the user-customized font mentioned earlier would be stored here, and the text function can copy these images to the screen, letter by letter. Or, you could build a sprite sheet to copy in small images to be used for animating objects on the screen. One of the frame buffers can be saved to the onboard flash memory, so that its data can be maintained even when the board is powered off or used with a different computer.

## **Product Specifications**

### **Board Properties**

Controlled By VINT

### **LCD**

Screen Resolution 128 x 64

LCD Refresh Rate 5 Hz

Pixel Size 450  $\mu\text{m}$

### **Electrical Properties**

Current Consumption Min 17  $\mu\text{A}$

Current Consumption Max 34 mA

### **Physical Properties**

Operating Temperature Min -20  $^{\circ}\text{C}$

Operating Temperature Max 70  $^{\circ}\text{C}$

## **Power Saving**

### **Current Consumption (mA) Screen Backlight**

|          |     |     |
|----------|-----|-----|
| 0.035    | OFF | OFF |
| 0.36     | ON  | OFF |
| 14 – 66* | ON  | ON  |

\* Varies based on contrast setting.