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 “Comaptible 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 indivudual 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 µm
Electrical Properties	
Current Consumption Min	17 µA
Current Consumption Max	34 mA
Physical Properties	
Operating Temperature Min	-20 °C
Operating Temperature Max	70 °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.