

Product Overview:

The microOLED (**µOLED-96** and **uOLED-96-xMb**) is a compact and cost effective all in one 'SMART" **OLED** Display with an embedded graphics controller that will deliver 'stand-alone' functionality to your project. The 'simple to use' embedded commands not only control background colour but can produce text in a variety of sizes as well as draw shapes (which can include user definable bitmapped characters such as logos) in 65,000 colours whilst freeing up the host processor from the 'processor hungry' screen control functions.

Main Features:

- 96(RGB) x 64 dots resolution, 65K true to life colours, Enhanced OLED screen.
- 0.95" diagonal (24mm), 28mm x 24mm x 5mm.
- No backlighting, near 180° viewing angle.
- Easy 4 pin interface to any host device: 5V, Tx, Rx, GND.
- 5 Volts supply, current @ 40mA nominal.
- Serial RS-232 (0V to 3.3V) with auto-baud feature (300 to 128K baud). If interfacing to a 5V system a series resistor (1K) is required on the Rx line.
- Optional USB interface via the 4D microUSB (**uUSB** or **uUSB-MB**) modules.
- Optional onboard Flash Memory for storing of icons, images, animations, etc.
- Three selectable font sizes (5x7, 8x8 and 8x12) for ASCII characters as well as user-defined bitmapped characters (64 @ 8x8).
- Built in graphics commands such as: LINE, CIRCLE, TEXT, PAINT, USER BITMAP, BACKGROUND COLOUR, PUT PIXEL, IMAGE, etc. just to name a few.

Typical Applications:

- Full colour graphics **OLED** display for any microcontroller project.
- Interface to any PIC, AVR, Basic Stamp, ARM or any other microcontroller as well as a PC.
- Ideal to implement as an electronic panel meter or gauge of any sort for instrumentation or automotive applications.
- Can be used as a mini Bill-Board for advertising.
- Ideal User Interface for any medical or industrial handheld equipment.
- Cost effective ready to go intelligent display for hobbyist, student or professional engineer.
- Download images, icons, animations and pages of text from any PC with the aid of freely available companion "Graphics Composer" utility software.



figure 1: typical interface with a microcontroller

figure 2: Sample screen shots

Available Models:

- uOLED-96 (Standard Model)
- uOLED-96-1Mb (1Mb Flash, enhanced image/animation commands)
- uOLED-96-8Mb (8Mb Flash, enhanced image/animation commands)

For Help and Other Information:

 Assistance with latest information and downloads visit the µOLED product web-page of your distributor or visit

www.4dsystems.com.au/downloads/micro-OLED/uOLED-96

Questions and technical support please email <u>support@4dsystems.com.au</u>