

Product Overview:

The micro-OLED (**μOLED-160-GMD1**) 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 262,000 colours whilst freeing up the host processor from the 'processor hungry' screen control functions.

Main Features:

- 160 x 128 pixel resolution, 65K or 262K true to life colours.
- 1.69" diagonal. Active Area: 33.6 x 26.9mm.
- No backlighting with near 180° viewing angle.
- Easy 5 pin interface to any host device: VCC, TX, RX, GND, RESET
- Voltage supply from 3.6V to 6.0V, current @ 40mA nominal when using a 5.0V supply source.
- Serial RS-232 (0V to 3.3V) with auto-baud feature (300 to 256K baud). If interfacing to a system greater than 3.6V supply, a series resistor (1K) is required on the RX line.
- Powered by the fully integrated **GOLDELOX-MD1** module (also available as separate OEM modules for volume users)
- Optional USB to Serial interface via the 4D micro-USB (**uUSB-MB5**) module.
- Onboard micro-SD (**μSD**) memory card adaptor for storing of icons, images, animations, etc. 64Mb to 1Gig μSD memory cards can be purchased separately.
- 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, RECTANGLE, TEXT, 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 software utility tools.

Micro**OLED**

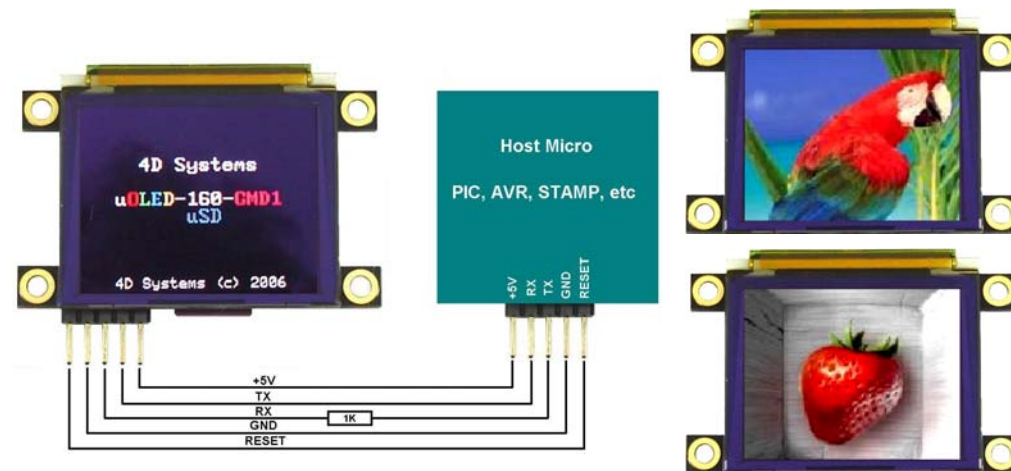


figure 1: typical interface with a microcontroller

figure 2: Sample screen shots

Available Options:

- **μUSB-MB5** (USB to Serial)
- **uSD-64MB** (memory card)
- **uSD-256MB** (memory card)



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-160-GMD1
- Questions and technical support please email support@4dsystems.com.au