

News Highlights – Issue 16 (July 2007):

Many thanks to all our customers who visited our stand at the recent Manufacturing Technology InFocus exhibition at the Sydney Convention and Exhibition Centre!

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GLYN Introduces GR1 GSM/GPRS2/GPS Card

GLYN introduces the GR1 card, a complete GSM/GPRS/GPS solution, based on the Telit GE863 GSM/GPRS/GPS module. The GR1 comes with Python scripting where customer application programs can be stored inside the modem, making the terminal a complete customer solution. The RoHS-compliant GR1 also has a 20 pin connector to provide access to the board power supply, and GE863 serial UART, control lines and GPIO ports. SMA connectors are also provided for the GSM and GPS antennas.

Product Features

- Quad-Band EGSM 850/900/1800/1900 MHz
- Output Power Class 4 (2W) 850/900MHz, Class 1 (1W) 1800/1900MHz
- AT commands according to GSM 07.05, 07.07 and Telit proprietary AT commands
- RoHS compliant
- Supply Voltage Range: 5-14 Vdc
- Power Consumption: power off: 26uA, idle: 4 mA, GPRS(max): 700 mA
- Dimensions: 68 x 33 x 10 mm
- Weight: 35 g (with 1300ma/H battery 60 g)
- Temperature Range: -20 to +70°C
- 2 I/O General Purpose I/O
- 9 pin board connector for UART communication, 300 to 115,000 bps
- SMA female, 50 ohm connector for GSM
- SMA female, 50 ohm connector for GPS
- PYTHON script interpreter engine, 3 MB non-volatile memory for user scripts and data and 1.5 MB RAM for Python engine usage
- GPS High sensitivity for indoor reception up to -159 dBm
- Fast TTFF's at low signal levels. Hot starts less than 2 seconds
- Supports 20-Channel GPS. GPS NMEA 0183 output format

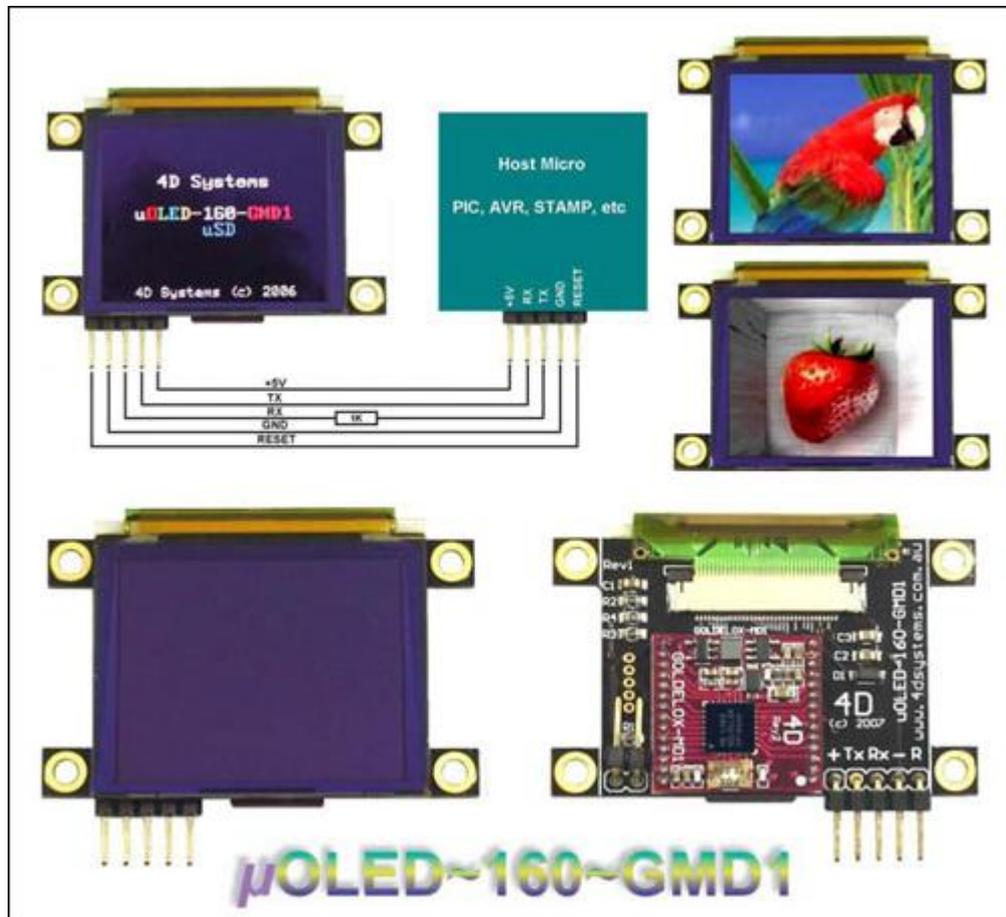


For more details about the GR1, please send us an email at sales@glyn.com.au



GLYN Offers Cost-effective OLED Display Modules with Graphics Controller from 4D Systems

GLYN is partnering with 4D Systems to offer our customers with cost-effective, turnkey OLED modules with built-in embedded graphics controller to greatly simplify the task of adding high-performance display functionality to product designs.



The **μOLED modules** from 4D Systems are 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 65K or 262K colours whilst freeing up the host processor from the ‘processor hungry’ screen control functions.

μOLED Part Numbers

- **μOLED-128-GMD1**: 128 x 128 pixel resolution, 65K or 262K true to life colours with 1.5” diagonal display
- **μOLED-160-GMD1**: 160 x 128 pixel resolution, 65K or 262K true to life colours with 1.69” diagonal display

μOLED Features

- No backlighting, near 180° viewing angle
- Easy 5 pin interface to any host device: 5V, TX, RX, GND, and 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 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-MB5) modules
- Onboard micro-SD (μSD) memory card adaptor included for storing of icons, images,

animations, etc. 64Mb to 1Gig μ SD 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, TEXT, PAINT, USER BITMAP, BACKGROUND COLOUR, PUT PIXEL, IMAGE, etc. just to name a few.

These μ OLED modules are powered by the fully integrated GOLDELOX-MD1 module from 4D Systems. The GOLDELOX modules have a custom virtual 16/32 bit processor (4DGP - 4D Graphics Processor) built in that runs 4DGL user code. 4DGP is a customised processor with a 16/32 bit instruction set designed specifically for the GOLDELOX modules and 4DGL is a new language designed specifically to run on the 4DGP. 4DGL (4D Graphics Language) is a cross between C, BASIC, ASSEMBLER and the syntax of the language is extremely easy to learn and understand.

The heart of the GOLDELOX module is its rich graphics oriented command set. This comprises of powerful instructions that can draw lines, circles, rectangles, text, images, etc. to provide a full graphical user interface. The GOLDELOX commands can be executed using one of two methods: (1) sent via the serial link, or (2) called as functions from the built-in library if the platform is running a higher level language such as 4DGL.

For the second method, a free PC-based 4DGL compiler and IDE will be made available soon from 4D Systems. 4DGP/4DGL is powerful enough such that there is no need to employ a separate onboard host processor/controller. Spare GOLDELOX module I/O pins are available under complete user control to implement buttons, generate complex sounds and tones, drive LEDs, etc.

The GOLDELOX graphics command set is divided into 3 groups:

- **General Command Set**

These commands are generic and display independent. These are standard commands that apply across all applications.

- **Display Specific Command Set**

These commands are display specific. Certain displays may have hardware functions that allow operations to be performed much faster than otherwise possible if they were to be implemented in firmware. These commands utilise those features, if available.

- **Extended Command Set**

The GOLDELOX module supports a built in micro-SD (μ SD) memory card. It can also support an external SD or MMC type card. These commands are specific to the memory card related operations. Graphics commands in the form of objects can be stored into the memory card and later recalled under user control.

For more details about μ OLED 4D Systems products, please send us an email at sales@glyn.com.au



New Vinculum VDIP2 USB Host Evaluation Module from FTDI



FTDI, available through [GLYN High-Tech Distribution](#), has released a new version of the VDIP module with two USB connectors to allow for easier prototyping of applications requiring two full-speed USB host/slave interfaces.

The VDIP2 module is an MCU to embedded USB host controller development module for the VNC1L IC device. The VDIP2 is supplied on a PCB designed to fit into a 40 pin DIP socket, and provides access to the

UART, parallel FIFO, and SPI interface pins on the VNC1L device, via its AD and AC bus pins. All other Vinculum I/O pins are also accessible. Not only is it ideal for developing and rapid prototyping of VNC1L designs, but also an attractive quantity discount structure makes this module suitable for incorporation into low and medium volume finished product designs.

The Vinculum VNC1L is the first of FTDI's Vinculum family of embedded USB host controller integrated circuit devices. Not only is it able to handle the USB Host Interface and data transfer functions but owing to the inbuilt MCU and embedded Flash memory, Vinculum can encapsulate the USB device classes as well. When interfacing to mass storage devices such as USB Flash drives, Vinculum also transparently handles the FAT File structure communicating via UART, SPI or parallel FIFO interfaces via a simple to implement command set. Vinculum provides a new cost effective solution for providing USB Host capability into products that previously did not have the hardware resources available. The VNC1L is available in Pb-free (RoHS compliant) compact 48-Lead LQFP package.

VDIP2 Features

- Uses F.T.D.I.'s VNC1L embedded USB host controller I.C. device.
- Two vertically mounted USB 'A' type socket to interface with USB peripheral devices
- Jumper selectable UART, parallel FIFO, or SPI MCU interfaces.
- Single 5V supply input.
- Auxiliary 3.3 V / 200 mA power output to external logic.
- Power and traffic indicator LED's.
- Program or update firmware via USB Flash disk or via UART interface.
- VNC1L firmware programming control pins PROG# and RESET# brought out onto jumper interface
- VDIP2 is a Pb-free, RoHS complaint development module.
- VDIP2 module is supplied pre-loaded with Vinculum VDAP firmware.
- Schematics, and firmware files available for download from the [Vinculum website](#).

For more details about the FTDI VDIP2 module, please send us an email at sales@glyn.com.au



Jennic Launches ZigBee e-Learning Website



Jennic, available through [GLYN High-Tech Distribution](#), has launched an e-learning website to introduce the fundamental concepts and principles of the ZigBee standard for modern wireless networks. This standard is defined in the ZigBee Specification from the ZigBee Alliance.

The course does not assume any specific previous knowledge of wireless networks. A technical background and a general familiarity with the idea of a network should be a sufficient foundation.

The course is divided into six modules. Each module forms a self-contained learning experience comprising a series of content pages (containing text, graphics and animations) followed by an on-screen end-of-module test.

The six modules are as follows:

- Module 1: ZigBee Essential Facts and Features
- Module 2: ZigBee Topologies

- Module 3: ZigBee Software Architecture
- Module 4: ZigBee Applications
- Module 5: ZigBee Reliability and Security
- Module 6: ZigBee Initialisation and Operation

For more details about the Jennic ZigBee e-Learning website, please visit the link below:
<http://www.jennic.com/elearning/zigbee/index.htm>

For more details about Jennic ZigBee modules and evaluation kits, please send us an email at sales@glyn.com.au



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