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URT Releases 7" TFT LCD Displays with LVDS Interface



Consumers are demanding more realistic video, 3-D graphics and photo-realistic images in the office and in the home. Solutions exist today to move this high-speed digital data both on very short and very long distances: on a printed circuit board (PCB) and across fibre or satellite networks. Moving this data from board-to-board or box-to-box, however, requires an extremely high-performance solution that consumes a minimum of power, generates little noise (must meet increasingly stringent FCC/CISPR EMI requirements), is relatively immune to noise and is inexpensive. Unfortunately existing solutions are a compromise of these four basic ingredients:

performance, power, noise, and cost.

LVDS which stands for Low Voltage Differential Signalling addresses this need. It is a way to communicate data using a very low voltage swing (about 350mV) differentially over two PCB traces or a balanced cable. LVDS is a low swing, differential signalling technology which allows single channel data transmission at hundreds or even thousands of Megabits per second (Mbps). Its low swing and current-mode driver outputs create low noise and provide very low power consumption across frequency.

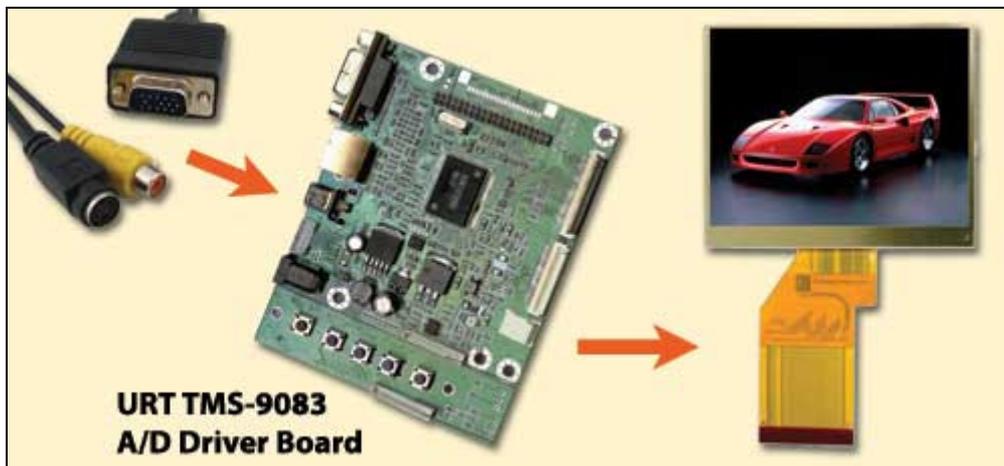
URT introduces its new 7" TFT LCD displays with LVDS interface and with 800xRGBx480 dots resolution, 262K colour depth, and touch panel interface. Module size (W x H x T) is 163.9 x 103.95 x 9.35 mm while viewing area is 155.2 x 94.24 mm. This new display has transmissive LCD type, LED backlight, built-in timing controller, and DC/DC converter. Key specifications include typical current consumption of 150mA, maximum response time of 20ms, typical viewing angles of 140° horizontal and 110° vertical, high brightness of 350 nits (typical), and contrast ratio of 400:1 (typical).

To interface this TFT LCD display with analogue video (NTSC/PAL/SECAM with Composite or S-Video interface) or PC VGA signals, you can use the URT A/D Driver Board TMS-9083 (see next article in this newsletter).

For more details about 7" TFT LCD displays with LVDS interface from URT, please send us an email at sales@glyn.com.au



URT Introduces A/D Driver Board to Interface Analogue Video to Digital TFT LCD Panels



URT, available through [Glyn High-Tech Distribution](#), is introducing the TMS-9083 A/D Driver Board to make it easier to interface PC VGA and analogue video signals (NTSC / PAL / SECAM) to digital TFT LCD modules.

The TMS-9083 is a high performance compact sized panel driving board, which can directly support PC VGA Input and Video Input. The board for PC VGA input can allow from 640x480 @ 60Hz to 1024x768 @ 75 Hz input, and the Video Input can allow for NTSC/PAL/SECAM video for Composite or S-Video input.

For the panel display output, this board can support small sized TFT LCD panel from URT or other manufacturers with resolution from 320x240 to 1280x768 panels and with CMOS-TTL / TTL-TCON / LVDS interface. The output resolution and interface can be decided by internal firmware setting and optional.

Features:

- Support QVGA, VGA, SVGA, XGA, WXGA resolution TFT LCD panel
- Support CMOS-TTL / TTL_TCON / LVDS panel interface TFT LCD panel
- Support Standard VESA PC VGA Input Mode
- Support Standard Video Input for NTSC / PAL / SECAM
- Auto-adjustment function for PC input
- Built in Normal brightness LED driver (LED 10.2V max. 200mA / LED 13.2V max.150mA)
- Built in High brightness LED driver for Optional Model (10.2V Max 800mA)
- Compact size (Main Board: 90 mm x 83 mm, Key Board: 20.2mm x 83 mm)

For more details about the URT TMS-9083 A/D Driver Board, please send us an email at sales@glyn.com.au



Telit Presents GE865: the Smallest GSM/GPRS Module in the World



Telit, available through [GLYN High-Tech Distribution](#), is unveiling the GE865, the latest extension to its GE product range. The innovative Ball Grid Array (BGA) module is based on a single-chip solution with a form factor of just 22 x 22 x 3 mm. This makes it the smallest globally available GSM/GPRS module. The GE865 can be incorporated perfectly into high-volume M2M applications in which the module size and low energy consumption play a key role. Thanks to quad-band technology, this module can be operated on all of the global GSM networks and makes all of the various data services possible over GSM/GPRS networks. An integrated TCP/IP protocol stack provides support for UDP, FTP and SMTP via AT commands.

GE865 also features RUN AT Commands. This feature allows users to run any AT Command via SMS or TCP. The remote control of different events on the application side is drastically simplified by using text messages from any phone for both activation commands and receiving replies. Some of the major applications are related to monitoring of GPIOs, roaming, battery level, voltage, or module state with the possibility to send alerts in the event that conditions change. The GE865-QUAD also enables its use in an extended temperature range from -30 to +80°C.

"The advantages of the GE865 lie both in its compactness and in its improved product performance and features. It consequently provides the ideal solution to the high demands on complex M2M applications," explains Felix Marchal, Global VP Sales at Telit Communications PLC. "With this module, Telit is reinforcing its claim to technical innovation leadership on the M2M market." In terms of software, as with all Telit modules, the GE865 can be fully integrated with previous Telit platforms and can thus be implemented easily into existing designs. The module is ideal for locating people or objects in both professional and consumer applications. It will be fully certified for all international markets and is already available in sample quantities.

For more details about Telit's GE865 module, please send us an email at sales@glyn.com.au



Tamura Hall Effect Current Sensors Now Available from GLYN



[GLYN High-Tech Distribution](#) is partnering with Tamura Corporation of Japan to offer Hall-Effect current sensors which are essential in various applications. Tamura Corporation is a world-class manufacturer of high quality electronic components for the global industrial, telecom and consumer markets. With 2007 sales greater than 700 Million US Dollars, Tamura Corporation is one of the largest suppliers of magnetic components and power supplies in the world.

Hall Effect current sensors offer advantages over other current measuring methods such as DC shunts, AC transformers, and 'home-made' current sensors by providing a fully integrated current sensor able to measure AC, DC, and complex currents at a lower total implementation cost. Tamura's Hall Effect current sensors can measure currents in DC, AC, and pulse waveforms while providing galvanic isolation, fast response, and zero insertion loss at competitive prices.

Typical applications for Hall Effect current sensors include:

- Variable speed drives
- Motion control
- Overcurrent protection
- Ground fault detectors
- Current feedback control systems
- Robotics
- UPS and telecommunication power supplies
- Welding power supplies
- Automotive - Battery management systems
- Wattmeters
- Lifts

There are two types of Hall Effect current sensors – Open Loop and Closed Loop. Open Loop Hall Effect current sensors with its output voltage proportional to the primary current are the right choice for many applications. Nonetheless, Open Loop sensors may not reach the linearity and gain requirements of some applications. Closed Loop current sensors offer higher accuracy by correcting the linearity and gain errors through a negative feedback. The output current of a Closed Loop current sensor is an exact representation of the primary current scaled by the number of turns in the secondary coil.

Tamura also have equivalent Hall Effect current sensors to those offered by its competitors such as LEM or Honeywell.

For more information on Tamura's Hall Effect current sensor products, please send us an email at sales@glyn.com.au



FTDI Releases USB-RS485, USB-RS422 and USB-COM232-PLUS1 Converter Cables and PCB Modules



Future Technology Devices International (FTDI) announced recently the availability of two serial interface converter cables that incorporate transceivers to facilitate connecting RS-422 or RS-485 based peripherals to a PC's USB port. Using FTDI's FT232RQ USB to asynchronous serial interface IC, the USB-RS485-WE converter cable includes an RS-485 transceiver while the USB-RS422-WE cable utilises a RS-422 transceiver. The far end of the 1.8m cables are wire ended (no connector).

With the electronics encapsulated in the USB connector, these cables provide a quick, easy and completely transparent method of supporting these serial interface standards. With the complete USB protocol being managed within the FT232RQ device, there is no requirement for designers or end-customers to concern

themselves with how to implement the USB standard. Additionally, royalty-free device drivers for the FT232RQ are available to download free from <http://www.ftdichip.com/FTDrivers.htm>. Both VCP and D2XX drivers are available for most popular operating systems such as Microsoft Windows, MAC OS X and Linux.

FT232RQ also provides a user writeable EEPROM area. This allows the cable's USB interface to be customised using FTDI's MPROG, available from <http://www.ftdichip.com/Resources/Utilities.htm>. The internal EEPROM can be programmed in-circuit over the USB interface without any additional voltage requirements.

The converter cables are ideal for a broad range of industrial applications such as instrumentation, machine control and data collection.

The USB-RS485 and USB-RS422 are also available in PCB module format.

FTDI also announced recently the release of its USB-COM232-PLUS1 module. The first in its family of USB-COM-PLUS modules, the USB-COM232-PLUS1 is a USB to single channel RS232 level serial UART. The module incorporates FTDI's FT232RQ IC which handles all the USB signalling and USB to UART protocols. The modules provide a fast, simple way to connect devices with an RS232 level serial UART interface (9 way standard D-type connector) to USB (type B socket). Supporting communications with any RS232 device, the module's RS232 port provides full hardware handshaking capability and a data rate of up to 1Mbps. It also has three LEDs which indicate power and gives a visual indication of traffic through the module.

The FT232RQ is a proven, industry standard USB to asynchronous serial interface IC. More information on the FT232R can be found at <http://www.ftdichip.com/Products/FT232R.htm>

Device drivers for all current Microsoft Windows, Mac OS X and Linux operating systems are available for free download from <http://www.ftdichip.com/FTDrivers.htm>

The USB-COM232-PLUS1 module has a wide range of operating temperature from – 40 °C to + 85 °C making it suitable for applications in harsh environments. Likely applications include industrial machinery such as CNC machines and lathes, retail equipment such as point of sale scanners, printers and other data collection devices. Other target sectors include medical monitoring devices, sports equipment and many other home automation and person electronic devices.

For more information on FTDI's new USB-RS485, USB-RS422 and USB-COM232 converter products, please send us an email at sales@glyn.com.au



For more information about GLYN Ltd products, please visit our website at www.glyn.com.au

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