GLYN Newsletter
High-Tech Distribution

News Highlights – Issue 40:

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Telit Reaches Two Million GE864 GSM/GPRS Modules Sold

Telit Wireless Solutions, the internationally leading specialist in machine-to-machine (M2M) technology and available through GLYN High-Tech Distribution, recently announced the delivery of the two-millionth GE864 GSM/GPRS module. Its reliability and robustness predestine the GE864 module to be widely employed in the telematics and automotive industries. This success in terms of sales has been accompanied by Telit's outstanding financial performance, plus a growth rate of 30 per cent achieved in the second six months of 2009.

Dominikus Hierl, Managing Director Strategic Accounts & Corporate Business Development at Telit Communications PLC, proudly announced the sale of the two-millionth module from the GE864 product family: *"*Customers in the telematics and automotive industries place special demands on our products. On the one hand, the products must demonstrate a high degree of innovation, on the other, they need to fulfil requirements such as maximum durability in the field and high quality standards. Telit has developed GE864-QUAD Automotive, a version of the module designed specifically for the automotive industry. It's a segment in which we see enormous potential for growth given that, starting from 2013, practically all vehicles will come equipped with an internet connection and an automatic emergency call function. The Telit module is set to play a key role in the implementation of this new functionality. Our customers in the automotive industry can rest assured that we will continue to set new benchmarks with our solutions and service packages in the future*."*

The GE864: maximum practicality and flexibility

With its GE864 product family, Telit offers a GSM/GPRS quad-band module in an extremely compact format. Thanks to its reduced dimensions (30 x 30 x 3 mm), and reliable, energy-efficient operation, the model is suitable for use in large-volume applications in the telemetry and telematics industries, in addition to terminals for data transfer, remote maintenance and remote surveillance. Moreover, the GE864 product family stands out on account of its quad-band support, RoHS compliance and increased temperature tolerance. The module can operate in an extended temperature range of between -40°C to +85°C and comes equipped with a powerful, yet energy-

saving baseband processor. The module also supports the integration of customer-specific programs, via Python.

GE864-QUAD Automotive: mobile quality standard for on-board terminals

The car of the future will be a terminal that extends the term 'mobility' into a fourth, virtual dimension. Buyers will expect the same kind of functionality from their vehicle as they would from any other mobile terminal. Telit recognised this increased need early on and, in recent years, has embarked on an R&D process up that meets the standards of the automotive industry. One of the key products within this is the GE864-QUAD Automotive module. The module is produced according to ISO/TS16949 and validated during the Production Part Approval Process (PAPP), to ensure compliance with the quality standards applicable in the automotive industry. Thanks to its sturdy construction and long service life, the module is especially well suited for use in vehicles. In addition, its extended temperature range and improved resistance to mechanical loads and harsh environmental conditions guarantee interference- and error-free use. Its new chipset makes the GE864-QUAD Automotive even more powerful. At the same time, however, the module's energy needs have been cut even further.

Telit recently announced the GE864-QUAD Automotive's ability to integrate eCall features (eCall is an automatic emergency call system for vehicles, initiated by the European Union). With eCall, vehicle manufacturers will soon be in a position to install this functionality in all vehicle systems.

GE864-QUAD Atex: developed for explosive atmospheres

Telit has developed the GE864-QUAD Atex according to strict EU ATEX (ATmosphère Explosible) standards especially to meet heightened requirements in respect of protection from explosion Maximum intrinsic safety makes the module a secure option for use in the most critical atmospheres (Group II, Category 1). It can be integrated into applications which operate in potentially explosive atmospheres, or linked to other applications that do so. Thanks to its compact size, extended temperature range and ESD- and EMC-compliance, the GE864-QUAD Atex is the ideal platform for all Atex M2M markets, whether for OEMs or aftermarket applications.

For more details about GE864 and other Telit products, please send us an email at
sales@glyn.com.au

FTDI's New Vinculum VNC2 Dual USB 2.0 Host/Slave SOC Now User Programmable and at Reduced Cost

Future Technology Devices International (FTDI), available through GLYN High-Tech Distribution, recently announced the launch of their Vinculum VNC2 user programmable dual USB 2.0 Host/Slave intelligent SOC controller.

Building on FTDIs competitive advantage of fully supporting designers and customers by delivering a complete solution, VNC2 enhances the initial member of the Vinculum family, the VNC1L, by reducing the device cost as well as introducing the capability for designers to develop their own application firmware and program the host controller themselves. VNC2 provides users with the ability to customise and develop firmware to run directly on the VNC2 device, without the need for an external MCU or processor.

VNC2 comes with a royalty free software development environment – the Integrated Design Environment (IDE) which includes a compiler, linker and debugger to fully utilise the increased memory and multitude of communication protocols handled by VNC2. The software developed toolkit is based on the 'C' language and provides a comprehensive suite of object files to provide support for USB host functionality including USB Flash Drive (B.O.M.S.) storage, HID, USB COMMs class and FAT File functionality.

VNC2 includes a new, customised 16bit MCU core, 256kB on chip programmable e-Flash program memory and 16kB of SRAM data memory. The IO communication capability has been enhanced to include 2 SPI slave controllers, 1 SPI master controller, 1 high speed UART interface (up to 3M

baud) plus a flexible 8 channel PWM block allowing precise 16-bit control of motors, servos and other analogue application areas. In addition to these enhancements, VNC2's 1-Pin debugger interface, which functions independently of the MCU core, provides a simple yet sophisticated debugging / device programming interface. All this at a substantially lower cost than it predecessor.

VNC2 launches in 3 different pin-count sizes, 32LD, 48LD and 64LD supporting up to 44 user defined IO pins. Each pin-count size is available in LQFP or the more compact QFN package option - 6 variants in total. The 48LD LQFP version, offers a "close-fit" equivalent pin-out to the current VNC1L allowing easy system upgrades to the new VNC2, often with just a simple BOM change.

Operating from a single +3.3 VDC supply, the VNC2 has a low standby current of typically 128uA and also has 3 low power modes.

The Vinculum VNC2 suits a broad range of USB consumer and industrial related applications including camera, mobile accessories, data loggers, toys, keyboards, game controller interfacing, POS applications and USB to USB bridges.

Engineering samples of VNC2 are now available with mass production expected from May 2010. For 10,000+ quantities the VNC2 48-pin LQFP/QFN is priced at US$2.80 while the 32-pin LQFP/QFN is priced at US$2.55.

For more details about Vinculum VNC2 and other FTDI products, please send us an email at sales@glyn.com.au

Bluegiga Releases WT41 Long Range Bluetooth Module

The world's leading Bluetooth OEM module manufacturer, Bluegiga Technologies, releases a long range Bluetooth module that provides exceptional radio performance.

Bluegiga Technologies, available through GLYN High-Tech Distribution, releases the first truly long range Bluetooth module, WT41. It provides +20 dBm output power which is the maximum allowed in Americas, Europe and various Asian countries. WT41 Bluetooth module can achieve 1000 meters distance in optimal conditions and several hundreds of meters in urban or office environments. In addition to an RF power amplifier WT41 also implements a low noise amplifier significantly improving the module sensitivity down to -90 dBm. The sensitivity improvement extends the WT41's range to Bluetooth class 2 devices such as mobile phones or PDAs. WT41 module is available with integrated chip antenna or U.FL antenna connector.

WT41 is targeted for numerous application areas requiring the best possible performance and reliability for the Bluetooth wireless data or audio connections. The main benefit of WT41 module for an OEM is that the sudden "no coverage" situations can be avoided and the link remains up even in most demanding conditions. Also the WT41 module offers the best possible Enhanced Data performance and range for data intensive applications.

"This new WT41 module is a result of our over 100 man-years experience of building Bluetooth wireless technology. The module design incorporates some of the world's finest radio components and our extremely well thought hardware design. The most challenging task, when implementing a high power radio product, is to design it so that it provides best performance in its class but still meets all the regulatory limits defined by CE and FCC. But we succeeded in doing so.", comments Tom Nordman, Bluegiga's Vice President of Sales and Marketing.

The WT41 Bluetooth module is available with Bluegiga's iWRAP firmware offering support for several Bluetooth profiles such as: SPP, HDP, DUN, OPP, FTP HFP, HSP, AVRCP, PBAP, DI, HID and standard HCI over UART or USB.

For more information on WT41 module and other Bluegiga products, please send us an email at sales@glyn.com.au

Yitran's IT700 Powerline Communication IC & Module Target Smart Grid and Smart Home Applications

Yitran, available through GLYN High-Tech Distribution, releases the IT700, a highly integrated System-on-a-Chip (SoC) Powerline Communication (PLC) IC that incorporates Yitran's extremely robust Physical Layer (PHY), high-performance Data Link Layer (DLL) and Network (Y-Net) protocol. IT700 also features a 8051 Micro with 256 KB Flash for protocol stack and application implementation as well as 24 general purpose I/Os.

The IT700 IC complies with worldwide regulations (FCC part 15, ARIB and CENELEC bands) and is designed for HomePlug Command & Control. IT700 is an ideal solution for a variety of command and control PLC applications.

The IT700 PLC modem core uses Yitran's patented Differential Code Shift Keying (DCSK) advanced spread spectrum modulation technique for extremely robust communication with data rates up to 7.5Kbps. The device also utilizes several other mechanisms for enhanced communication robustness, such as a patented forward short-block soft-decoding error-correction algorithm and special synchronization algorithms.

The IT700 is available in two versions:

- The *Protocol Controller Architecture* version includes Yitran's Y-Net network protocol stack. A UART interface and simple command language provide seamless connection to an external Host controller and simplify application development. In this version, no access to the microcontroller's resources is provided.
- The *Open Solution Architecture* version allows utilization of the IT700 microcontroller's peripheral functions such as timers, interrupts, communication interfaces, A/D, spare memory resources and general-purpose I/Os to implement the application code, thereby eliminating the requirement for an external host controller. An Application Programming Interface (API) will enable easy integration of the application code with Yitran's code.

Smart Grid Applications:

- Automated Meter Reading (AMR)

- Advanced Meter Management (AMM)
- Demand Response & Real-Time pricing

Smart Home & Energy Management:

- Home & Building Automation
- Appliance Control & Diagnostics
- Security and Access Control
- Environmental Control

Commercial Applications:

- Street Light Control
- Vending Machine Control
- Signage Control

For more information on Yitran IT700 IC and module, please send us an email at sales@glyn.com.au

GLYN Launches Antenna Store and Power Modules Websites

Due to the increasing demand for wireless products especially for M2M (*machine-to-machine*) communications and related applications, GLYN has created a dedicated M2M Antenna Store website (www.antennastore.com.au / www.antennastore.co.nz) to specifically address the antenna needs of this fast growing market segment.

The antennas supplied by GLYN include external and internal GSM/3G antennas, active and GPS antennas, GSM/3G + GPS combo antennas, high gain GSM/3G antennas, ZigBee/Bluetooth/WiFi 2.4GHz antennas, ISM band (433/868/915 MHz antennas), VHF antennas as well as interface cables with a variety of connectors and cable lengths.

Aside from antennas, GLYN has also launched a specialist Power Modules website (www.powermodules.com.au / www.powermodules.co.nz) with an increasing number of companies now developing more energy efficient products. This website also caters to equipment repairers and maintenance companies who need power modules with short delivery lead times to repair mission-critical equipment.

For more information on Glyn's antenna and power module 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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