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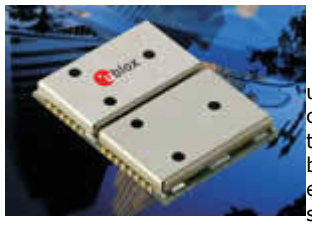
Welcome to our February edition of Braemac Product News.

u-blox launches revolutionary 50-channel LEA-5 GPS module series



u-blox AG, the leading Swiss provider of GPS chips, modules and services, today announced the launch of two GPS modules that set new benchmarks in terms of speed, sensitivity and ease of integration. The LEA-5 GPS module series is based on u-blox' fifth generation positioning engine, u-blox 5, which boasts an acquisition performance of less than one second.

These versatile, stand-alone GPS receivers combine an extensive array of features with flexible connectivity options. Their ease of integration results in fast times-to-market for a wide range of automotive, consumer and industrial applications with strict size and cost requirements.

"The LEA-5 GPS module series brings the high performance of the u-blox 5 positioning engine to the industry standard LEA form factor", said Karsten Tietz, u-blox Vice President Sales EMEA. This new generation is backwards compatible and ensures our customers an easy migration from LEA-4 module designs, with even better performance and improved cost-efficiency."

u-blox 5 offers an ultra-fast acquisition time thanks to its 50-channel GPS architecture with over 1 million correlators and separate acquisition and tracking engines, capable of massively parallel searches. Combined with u-blox' AssistNow A-GPS service, the u-blox 5 chip and module generation acquires satellites in less than one second.

"These LEA-5 modules are ultra fast and boast an impressive -160 dBm acquisition and tracking sensitivity. These features, added to the module's small size and low cost make them ideally suited for use in mass market GPS-enabled consumer devices," said u-blox Chief Executive, Thomas Seiler. "This breakthrough technology is yet another endorsement of the strength of u-blox' research and development team."

The LEA-5 GPS module series is lead free and has an industrial temperature range of -40 to 85°C. Its small form factor and SMT pads allow for fully automatic assembly processes with standard pick-and-place equipment and reflow soldering, enabling cost-efficient, high-volume production.

The LEA-5H GPS module comes with a Flash EPROM that enables easy firmware upgrades and set-up configuration saving options. The ROM-based LEA-5S offers further cost efficiencies. Both modules feature u-blox' OMA SUPL compliant A-GPS interface and support AssistNow Online and AssistNow Offline A-GPS services.

Braemac has kits and modules in stock.

For further information: Click Here.

Exar Adds 5V RS-485/RS-422 Half-Duplex Transceiver

Ideal for Industrial and Remote Data Collection Applications

Exar Corporation released a new highly integrated 5V RS-485/RS-422 half duplex transceiver -- the SP4082E -- which complements Exar's SP308x family of transceivers. The SP4082E, when added to Exar's full serial transceiver product portfolio, gives customers a wide variety of options for their designs. The SP4082E targets remote E-metering monitoring, building automation, HVAC controls, security camera systems and applications on long, or un-terminated transmission lines, amongst others.

"The SP4082E offers robust features and functions appropriate for applications that require optimal system performance vs. cost," said Hensen Wong, technical marketing manager, Interface Products. "Furthermore, the SP4082E was designed for harsh environments where device reliability and sustained performance is critical."

Key Product Features

The SP4082E is designed for reliable, bidirectional communication on multipoint bus transmission lines and contains one differential driver and one differential receiver. It supports the entire common-mode voltage range from -7V to +12V. Receivers are specially designed to fail-safe to a logic high output state if the inputs are left un-driven or shorted. In addition, all receivers have exceptionally high input impedance, which places only 1/8th the standard load on a shared bus. All RS-485 bus-pins are protected against severe ESD events up to ±15kV (Human Body Model). Drivers are protected from excess current flow caused by bus contention or output short-circuits by both an internal current limit and a thermal-overload shutdown. Up to 256 transceivers may coexist while preserving full signal margin. The device is compliant with TIA/EIA-485 and TIA/EIA-422 standards.

The device operates from a single 5.0V power supply and draws negligible quiescent power. The device can independently enable and disable the driver and receiver and enter a low power shutdown mode if both driver and receiver are disabled. All outputs maintain high impedance in shutdown or when powered-off.

Interface Products

Exar has one of the broadest portfolios of high-performance interface solutions including UARTs, serial transceivers -- RS-232, RS-485, and multi-protocol -- and integrated UART/transceiver combinations.

For chip-to-chip or system-to-system connections, Exar's single and multi-channel interface ICs provides immediate competitive advantages to designers: low power, reduction in board space requirements, increased

bandwidth capacity, and enhanced product features.

Interface devices are found practically everywhere including point-of-sale (POS) terminals, digital televisions, industrial automation equipment, handheld devices, and networking environments.

For further information: Click Here.

Atmel's AVR32 UC3 Microcontroller Named to EDN's Hot 100 Products of 2007

Atmel announced today its AVR®32 UC3 microcontrollers have been named by EDN magazine to the list of products recognized in its annual Hot 100 Products issue at the end of 2007. The AT32UC3 32-bit Flash microcontrollers feature DSP instructions and have established new standards for computation efficiency and an industry leader for low power consumption of 1.3 mW per MHz for 32-bit microcontrollers.

EDN Editorial Director Maury Wright stated, "Our editorial team covers new product introductions on a daily basis and we see a lot of worthy products. We look back once a year and choose the introductions that we believe will have the greatest significance to the design engineer and create the Hot 100 list."

"We are honored to receive the recognition from the EDN's technical editor's community", said Oyvind Strom, Atmel's Director of AVR32 products. "We believe this highlights the various innovations we bring with our AVR32 architecture that makes the UC3 family the best-in-class 32-bit Flash microcontrollers".

The AVR32 UC3 delivers up to 83 Dhrystone MIPS (DMIPS) performance at 66 MHz and provides a wide range of DSP instructions including a single-cycle fractional Multiply & Accumulate with saturation and rounding. With a direct interface between the SRAM and the CPU that bypasses the system bus, a single-cycle read/write to SRAM is guaranteed. In addition, a peripheral DMA controller and multi-layer high speed bus architecture, makes UC3 core ideal for high throughput applications. UC3 devices are perfectly suited for portable and battery-based applications because of its outstanding performance/power consumption ratio up to 1.08 DMIPS per mW.

AT32UC3 microcontrollers rich feature set includes up to 512KB Flash, up to 64KB SRAM, Ethernet MAC, Full Speed USB with OTG, 10-bit ADC, SPIs, SSC, two-wire interface (I2C compatible), UARTs, general purpose timers, thirteen pulse width modulators and a full set of supervisory functions.

For further information: Click Here.

New Zero-Power MAX IIZ CPLD: Minimize Power, Space and Cost

Zero-Power CPLD: Maximize Your Advantage

Altera's commitment to low-power, restricted space, and low-cost application development is on display with the new zero-power MAX IIZ CPLDs. Zero-power MAX IIZ CPLDs offer the same non-volatile, instant-on advantages found in low-cost MAX II CPLD family and are applicable to a wide range of functions:

Power Management Applications

* Power sequencing
* Power down timer
* Battery ID check
* Battery power gauge interface

Human-Machine Interface Applications

* Keyboard decoder
* Touch screen encoder
* Capacitive touch sensor
* Color LED driver
* Display interface correction

System Management Applications

* GPIO pin expansion
* Voltage level translation
* Peripheral control
* Memory and storage device interface
* Interrupt processing
* Remote system updating

Zero Power, Small Form Factor and Low Cost
Manage power effectively, save PCB real estate and design feature-packed portable applications with MAX IIZ CPLDs:

* Low power consumption—as low as 29 µA. With the industry's lowest dynamic and static power consumption, MAX IIZ can meet the needs of the most demanding battery or low- power applications.

* Ultra-small packages—as small as 5 mm x 5 mm. MAX IIZ CPLDs provide up to 6X the density and 3X the I/O resources in the same package sizes as traditional macrocell-based CPLDs. This means you will be able to pack greater functionality into a smaller PCB space.
Greater logic integration at a lower price. Low-cost MAX IIZ CPLDs will help you deliver feature-rich portable products at competitive prices.

For further information: Click Here.

Contact Us

For further information, product data sheets and pricing, please contact your local Braemac sales representative. or email info@braemac.com.au

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About Braemac

Braemac is Australia's largest electronic component distributor with offices throughout Australia, New Zealand, USA, Singapore, Hong Kong and the UK. Our product offer includes some of the world's most prestigious suppliers including Atmel, Altera, Hitachi (Renesas), STMicroelectronics, Cirrus Logic, Marvell and Wavecom which allows our customers to choose from a wide selection of quality, well recognised components.

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