

ALCOM TIPS FOR ELECTRONIC DESIGNERS



DEAR ELECTRONIC DESIGNER

Alcom is gesloten van 25 dec t/m 1 januari.

Wij wensen u prettige Kerstdagen en een voorspoedig 2010!

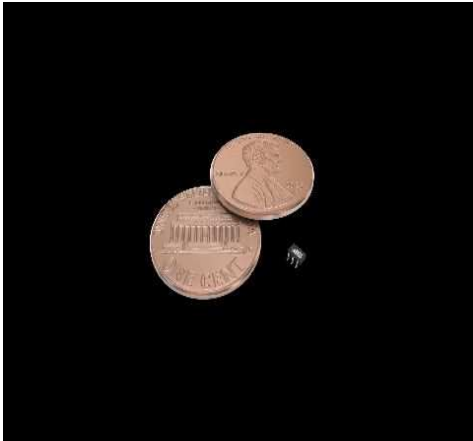


CONTENT

- ▶ [New 6-pin AVR Microcontroller Family](#)
- ▶ [100Mhz Flash offers dual and quad Serial inputs for High speed performance](#)
- ▶ [World's fastest, highest density HD FIFO](#)
- ▶ [Highly efficient LED driver prolongs lifetime of solid-state lighting systems](#)
- ▶ [600mA Synch Buck DC/DC + Dual LDO](#)
- ▶ [3G Cellular Router with Wi-Fi, GPS and Telemetry](#)
- ▶ [150 Mbps Single Stream 802.11n Wi-Fi® Chips](#)
- ▶ [Compact COM Express Module conga-CS45 with Superior Graphics Performance](#)
- ▶ [The highest performance Industrial TFT-panels from 7inch to 15,4inch](#)
- ▶ [High power, energy-efficient and cost-effective LED solutions](#)
- ▶ [The New High CRI Primax White 0.5-Watt – Energy Star Guideline Compliance](#)
- ▶ [TA35 Circuit Breaker with Rotary Knob Actuation](#)
- ▶ [Waterproof Connectors](#)
- ▶ [C4000RW Series Wide 2:1 Input, 40W Single, Dual & Triple Output DC/DC Converters](#)
- ▶ [SynQor Expands its Portfolio of Semi-Regulated Bus Converters](#)

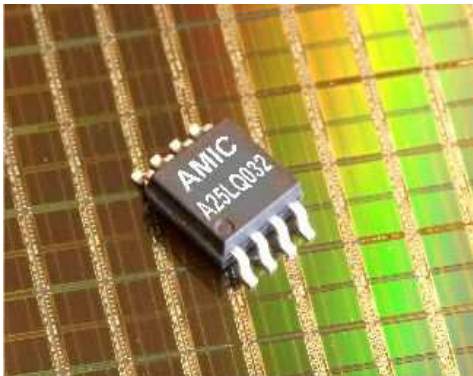
SEMICONDUCTORS

New 6-pin AVR Microcontroller Family



Atmel announced three new 6-pin picoPower® AVR® microcontrollers. The ATtiny4, ATtiny5, and ATtiny9 are pin- and code- compatible, include a rich feature set, and execute code 6-times faster than the closest competitor. Using the AVR CPU, the 6-pin tinyAVR® microcontrollers can process up to 12 MIPS at 12 MHz, six times the performance of any other similar sized microcontroller in the market. This processing efficiency significantly reduces the time in active mode and increases the time spent in power saving sleep modes. Combined with Atmel's picoPower technology, this ensures the industry's leading power consumption. ATtiny4, ATtiny5, and ATtiny9 are pin- and functional-compatible to the existing ATtiny10. Datasheet: [ATtiny4/5/9/10](#)

100Mhz Flash offers dual and quad Serial inputs for High speed performance



Amic announced the development of the new member of their next generation SPI Flash family, the A25LQ032. Packaged in a 8 lead or 16 lead SO package, the A25LQ032 offers a 32Mb low voltage Flash with a blistering speed equivalent to 400Mhz!! The A25LQ032 offers a 32Mbit serial Flash memory with write protection mechanisms accessed by a high speed SPI compatible dual or quad I/O bus. The memory can be programmed 1 to 256 bytes at a time using the page mode program instruction. The whole memory can be erased using the block erase instruction or a sector at a time by means of the sector erase instruction. An additional 64-byte user lockable, OTP area, allows proprietary data storage. Datasheet: [A25LQ032](#)

World's fastest, highest density HD FIFO



The AL460 consists of 128Mbit of memory density, and is configured as 8,192K x 16 bits FIFO (First-In-First-Out), the optimized access scheme offers maximum R/W operating speed up to 150 MHz. The FIFO provides simple and easy-to-use user interfaces facilitating usage in a wide range of applications, such as Multimedia systems, video capture systems, and various video data buffering applications. [Product Flyer](#), [Video FIFO Selection Guide](#)

Highly efficient LED driver prolongs lifetime of solid-state lighting systems



Supertex introduced the HV9918, a buck-mode LED driver IC with hysteretic current control and high-side current sensing. It is ideal for a variety of solid-state lighting applications, such as low voltage industrial and architectural LED lighting, signage or decorative lighting, indicator or emergency lighting, as well as a general



purpose constant current source. The hysteretic control function of the HV9918 maintains a constant output current to the LED string at all times, regardless of input voltage fluctuations. LEDs are proven to be far more reliable and long lasting when driven by a constant current than by a direct voltage source. It drives loads of up to 1.0A at over 90% efficiency with +/-5% current accuracy from input voltages of 4.5 to 40V. The IC also features an embedded FET for cost and parts count reduction in solid-state lighting applications. Datasheet: [HV9918](#)



600mA Synch Buck DC/DC + Dual LDO



The XCM520 series is the latest multi chip module (MCM) to be released by Torex and features a 600mA synchronous step-down DC/DC plus a dual LDO enabling high efficiency, low noise and low output voltages to be supplied with minimal external component count! The DC/DC block has an operating voltage range of 2.7V~6.0V and switching frequency can be selected from 1.2MHz & 3MHz. Control can be either PWM or PWM/PFM automatic switching. Output voltage can be selected within a range of 0.8V~4.0V for the DC/DC output and 0.8V~5.0V for the dual LDO outputs. [Product Brief](#)
[Datasheet XCM520](#)

[top](#)

M2M & WIRELESS MODULES

3G Cellular Router with Wi-Fi, GPS and Telemetry



The multi-function Digi TransPort® WR44 provides high-speed connectivity to remote devices by combining a 3G cellular router, state-of-the-art security, advanced routing, an Ethernet switch, global positioning system (GPS), telemetry and Wi-Fi access point all in one device. This unique combination of enterprise-class features and flexible wireless functionality makes the router ideal for connecting remote devices in vertical applications such as transportation, remote office and retail point-of-sale. Configuration options for the Digi TransPort WR44 include multiple serial ports (async or sync), GPS or I/O telemetry modules. Available high-speed cellular connections include GPRS, EDGE, HSDPA and EV-DO. Datasheet: [TransPort WR44](#)

150 Mbps Single Stream 802.11n Wi-Fi® Chips



The products include the RS9115 2.4 GHz chip with PCI interface, the RS9116 2.4 GHz chip with SDIO and SPI



interfaces, the RS9117 dual-band 2.4/5 GHz chip with SDIO and SPI interfaces, and the RS9118 dual-band 2.4/5 GHz chip with PCI, SDIO and SPI interfaces. The Maxi-Fi® BEAM150™ device family complements Redpine Signals' highly successful ultra-low power 802.11n Lite-Fi® device family, which in January 2008 was the world's first Wi-Fi certified single stream 802.11n client device. [Product Brief](#)

[top](#)

TFT & EMBEDDED COMPUTING

Compact COM Express Module conga-CS45 with Superior Graphics Performance



The module features the Intel® GS45 small form factor (SFF) chipset, which enables significant performance increases despite a smaller footprint and lower power consumption. The module is particularly suitable for mobile applications which require high graphics performance such as portable ultrasound devices. The module offers true high-end graphics performance which was hitherto unprecedented at such small dimensions. Even hardware implemented decompression for HDTV videos is already integrated in the chipset. In addition, the module offers a large choice of graphics interfaces ranging from SDVO, DVI and HDMI to DisplayPort. [conga-CS45 specs](#)

The highest performance Industrial TFT-panels from 7inch to 15,4inch

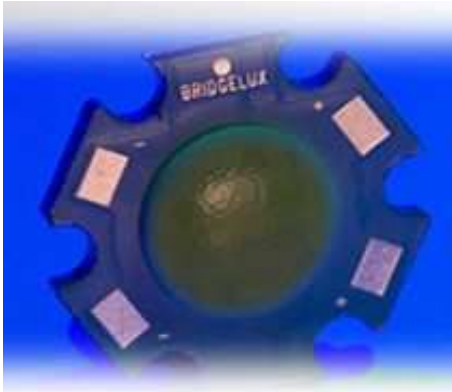


- Long Term Support
 - Forward Compatibility
 - Wide aperture in industrial market
 - Performing outstanding spec:
 - High brightness: 400 ~ 550 cd/m2 minimum
 - Wide-temp range : -30oC~+80oC (MVA); -30oC~+85oC (TN)
 - Wide viewing angle: S-MVA / (e-WV) on TN
 - Long life MTBF CCFL/ LED: 50,000 hours
 - Flexibility business models:
 - Dedication team support the application products
 - Full line up of product support: M/N/V models from IT and TV product line in PID (Public Information Display)
 - Green Products
- [Overview](#)

[top](#)

DISPLAYS & OPTO

High power, energy-efficient and cost-effective LED solutions



The Bridgelux LED Array product line provides high performance, compact and cost-effective light sources for solid-state lighting (SSL). These products have been specifically developed to provide SSL lamp and luminaire manufacturers with a solution that will simplify system level integration, further reducing the system cost. The Bridgelux LED Array product suite offers uniform and high quality light, improved energy efficiency and environmentally friendly packaging. Typical applications include task, accent, spot, track, down light, wide area and security lighting. [LED Arrays Product Brief](#)

The New High CRI Primax White 0.5-Watt – Energy Star Guideline Compliance

DOMINANT Semiconductors



DOMINANT is now extending its Primax series with a high Color Rendering Index (CRI) product in a 0.5-Watt white version, the NAW-BSC. This high CRI LED is compliant to the United States Energy Star guidelines; fulfilling the required minimum CRI of 75. With an operating current of 150mA, this new generation of white LED is capable to achieve typical 20lm at a low thermal resistance. The CRI of min 75 and typical 80 of this new product reveals its ability being the perfect fit for all lighting applications. The package dimensions of just 3.5mm (L) x 3.5mm (W) x 1.2mm (H) and a wide viewing angle of 120° are optimized for applications where space is limited and being therefore the decisive factor. The Primax LED series, featured by its small package outline, high intensity and excellent efficiency is the ideal choice for backlighting of displays and decorative lighting. This outstanding LED also enhances and supports to a great extend creative illuminations in General Lighting, Channel Lighting and high sophisticated automotive applications. Datasheet: [Primax](#)

[top](#) ↕

PASSIVES & ELECTROMECHANICAL

TA35 Circuit Breaker with Rotary Knob Actuation



Description:

- Thermal circuit breaker 1-, 2- or 3-pole
- Supplementary protector for general industrial use
- Positively trip-free release
- Bezel/knob snap-on
- Easy actuation with gloves
- Front elements can be done by customer

[Datasheet](#)



Waterproof Connectors



Waterproof Connectors produced by [LTW](#) according to the protection classes IP67/68 as well as accessories completed our product range recently :

- RJ Connectors
- USB Connectors
- D-Sub/HD-D-Sub Connectors

[Overview](#)

[top](#)

POWER CONVERSION

C4000RW Series Wide 2:1 Input, 40W Single, Dual & Triple Output DC/DC Converters



The C4000RW series is a family of 40W DC/DC converters packaged in a compact, 2 x 2 case. High performance features include a wide 2:1 input range; single, dual & triple outputs; high efficiency and wide temperature operation.

Key Features:

- 40W Output Power
- Wide 4:1 Input Range
- 1,600 VDC I/O Isolation
- Efficiency to 87%
- Remote On/Off Control
- Industry Standard Pin-Out
- 550 kHour MTBF
- Compact 2 x 2 Case
- Single, Dual & Triple Output

Datasheet: [C4000RW](#)

SynQor Expands its Portfolio of Semi-Regulated Bus Converters



SynQor announced the release of several new entries in its SQ60 series, expanding its BusQor family of isolated semi-regulated dc-dc converters for intermediate bus architecture applications. The SQ60 series accepts the full Telco input range of 36-75V and provides a semi-regulated 12V for point-of-load converters. These converters incorporate next-



generation, board-mountable, fixed switching frequency technology, and use synchronous rectification to achieve full load power conversion efficiencies approaching 96%. The SQ60120ETA17 provides 204W in an open-frame, eighth brick package with power dissipation so low that it does not require a heatsink. Datasheets: [BusQor Semi-Regulated DC/DC Bus Converters](#)

[top](#) 



Alcom Belgium - Singel 3 - 2550 Kontich
Tel.: +32 (0)3 458.30.33 - Fax: +32 (0)3 458.31.26 - info@alcom.be

Alcom Netherlands - Rivium 1e straat 52 - 2909 LE Capelle a/d IJssel
Tel.: +31 (0)10 288.25.00 - Fax: +31 (0)10 288.25.25 - info@alcom.nl

If you no longer wish to receive these emails, click [here](#)