

ALCOM TIPS FOR ELECTRONIC DESIGNERS



DEAR ELECTRONIC DESIGNER



Bezoek Alcom tijdens de [Bits&Chips Hardware Conference](#) 17 juni - Evoluon Eindhoven.

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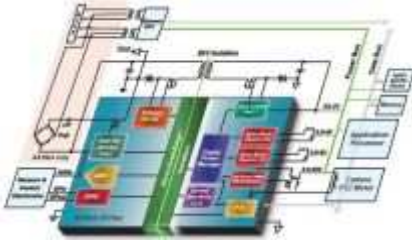
SEMICONDUCTORS

GreenEdge PoE Power SoC



GreenEdge™ PoE/PoE+ Power SoC: Integrated PD Controller, 2kV digital isolation, and Quad DC-DC Outputs with I2C based Management and Diagnostics

The AS18x4 product family integrates Akros GreenEdge™ high-voltage and high-speed isolation technology with next-generation Power-over-Ethernet (PoE) PD and power conversion technology to deliver groundbreaking power



integration and enable a new range of Digital Power PoE PD capabilities and solutions.

[AS1824](#) : GreenEdge™ IEEE802.3af PoE PD Controller with HV Isolation and Quad DC-DC outputs

[AS1834](#) : GreenEdge™ IEEE802.3af PoE PD Controller with HV Isolation, Quad DC-DC Outputs with I2C based Management & Diagnostics

[AS1844](#) : GreenEdge™ IEEE802.3af/802.3at (13W-30W) PoE PD Controller with HV Isolation and Quad DC-DC outputs

[AS1854](#) : GreenEdge™ IEEE802.3af/802.3at (13-30W) PoE PD Controller with HV Isolation, Quad DC-DC Outputs with I2C based Management & Diagnostics

Atmel lower power LIN transceivers support automotive body electronics and powertrain applications



The new Atmel LIN families serve automotive body electronics applications such as door modules, seat control or intelligent sensors, and powertrain applications such as engine control systems. In addition, Atmel's ATA6663/64 transceivers are suited for other body electronic applications where low-speed data communication and low cost are important.

Atmel's ATA6663 and ATA6664 are stand-alone LIN bus transceiver ICs, while the ATA6628/29/30/31 LIN transceivers are system basis chips (SBCs). When compared to a stand-alone LIN transceiver, SBCs are more integrated to include a voltage regulator, a Watchdog Timer (WDT), and high precise voltage divider for supply voltage measurements. The devices' low-power management also enables mixed-supplied LIN bus systems and short circuit-to-ground at the LIN bus with a lower power consumption.

[ATA6663/64](#)

[ATA6628/30](#)

[ATA6629/31](#)

[Automotive Solutions](#)

Atmel Showcased Microcontroller, Touch, Automotive and Wireless Solutions at Embedded World



Microcontroller solutions. Atmel presented a wide range of [8- and 32-bit AVR®](#) and [ARM®-based solutions](#). Atmel's AVR demos showed low-power audio, [ZigBee®](#) and consumer capabilities of these applications.

On the wireless MCU solution front, Atmel demonstrated an intuitive lighting control reference design platform based on its [AVR ATmega128RFA1 microcontroller](#).

Touch solutions. This platform allows designers to experiment with Atmel's touch technologies using its [QTouch® Suite](#).

As a leading provider of [automotive solutions](#), Atmel showcased various car sub-systems, including an automotive motor control demo with QTouch and 32-bit AVR, a system solution for 3-phase brushless DC motor control, and an advanced RKE car access system demo.

PCI Express Clock IC, 250MHz, 2.5V & 3.3V Operation



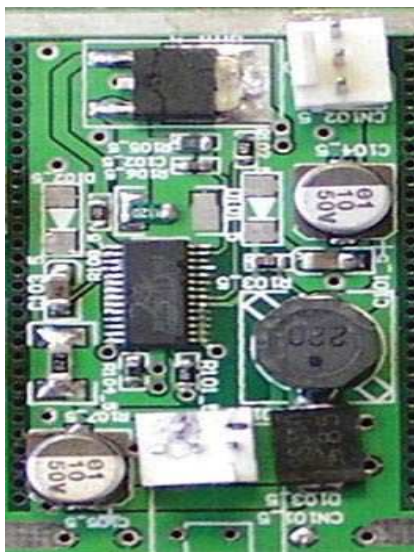
PhaseLink Corporation, a leader in frequency source generation and the inventor of Analog Frequency Multiplier (industry's best performing XO and VCXO clock multiplier ICs), and PicoPLL



(world's smallest and lowest power programmable clocks) announced the availability of the newest member of PhaseLink's extensive product portfolio, PL602-2X for PCI Express applications. PhaseLink's PCI Express product family is the industry's first PCIe clock IC that operates up to 250MHz, offers the smallest footprint, and runs at 2.5V or 3.3V supply.

Datasheet: [PL602-2X](#)

Universal High Brightness LED Driver



The ZD810 is a dimmable current-mode constant current LED driver IC. It drives an external MOSFET to accurately regulate the current in the LED string. The MOSFET can be sized for all types of LEDs including Power and HB LEDs beyond 1W. Its robust 450V rating makes it universally applicable to systems powered directly from Mains sources or from popular PFC sources. Its low voltage rating of 8V makes it suitable as well for low/medium voltage sources. Datasheets: [ZD1680DM-N](#), [ZD810EVB](#)

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M2M & WIRELESS MODULES

Industry's first 'foolproof' programmable ZigBee module



Isolated wireless software speeds ZigBee development. The XBee-PRO ZB from Digi International is the industry's first foolproof programmable ZigBee module for easy and safe ZigBee application development. Customer applications can be programmed directly on the module, eliminating the need and cost of a separate processor and reducing time-to-market. Because the Digi-provided wireless software is isolated, customers can easily develop applications with no risk to RF performance and security. As part of iDigi, customers can also use the iDigi platform to easily integrate XBee ZigBee endpoints into their systems.

[XBee® & XBee-PRO® ZB ZigBee® PRO RF Modules](#)

[Get Started for USD 299,00 ex VAT](#)

EDGE and HSDPA connectivity in standard LGA form factor



The new product line offers EDGE and HSDPA connectivity in a compact and lightweight form factor based on standard 25x30 mm LGA (Land Grid Array). It offers an easy upgrade path to new network technologies and enables fully automated surface-mount manufacturing.

[AirPrime™ SL Series Intelligent Embedded Modules](#)
Overview : [Intelligent Embedded Modules for mobile computing and M2M](#)

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TFT & EMBEDDED COMPUTING

3.5-Inch Embedded Board, ECM-PNV Featuring the New Dual Core Intel® Atom™ Processor D510



Avalue released a new 3.5-inch single board computer, ECM-PNV which is powered by the Intel® Atom™ processor D510 and Intel® 82801HM I/O Controller. Based on 45nm process technology, the new Intel® Atom™ processor D510 is part of the next generation of Intel® Atom™ processors, bringing the memory controllers and graphics cores on the same die as the CPU. This new two-chip solution will provide system builders with supports for slimmer housing designs.
Datasheet: [ECM-PNV](#)

ITX, Nano-ITX and Pico-ITX Mainboards



[VIA EPIA-T700 Mobile-ITX Board : The smallest x86 computer-on-module](#)

The VIA EPIA-T700 is the first product based on the Mobile-ITX form factor. Measuring a mere 6cm x 6cm, the VIA EPIA-T700 is a uniquely compact computer-on-module that is designed for a range of ultra-compact embedded devices in medical, military and in-vehicle applications.

[VIA EPIA-P820 Pico-ITX Board : Palm-sized, powerful Pico-ITX performance](#)

Based on the VIA Nano processor, the VIA EPIA-P820 offers customers a range of advantages over competitor offerings, including full 64-bit software support, a high-performance superscalar architecture and full support of the latest virtualization technologies for next generation server and virtual machine applications.

[VIA EPIA-M800 : Combines the VIA Nano processor with VIA VX800 MSP for smooth HD video playback on dual displays](#)

The VIA EPIA-M800 is the first EPIA Mini-ITX board to combine both the VIA Nano processor and the all-in-one VIA VX800 digital media IGP chipset.

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DISPLAYS & OPTO

New Seiko 2.4 inch - 7.0 inch Fringe Field Switching (FFS) Industrial TFTs with touch options

DENSITRON
TECHNOLOGIES



Densitron introduced a new range of Seiko industrial TFT displays which is available in 2.4, 2.8, 3.5, 4.3 and 7.0 and offers long-term availability guarantee. The 2.4, 2.8 and 4.3 displays in the series utilize the Fringe Field Switching (FFS) technology to create an extended viewing angle of up to 170° in both horizontal and vertical directions. The modules also have very good contrast ratios (500:1 for 2.4 & 2.8 and 400:1 for 4.3) and excellent sunlight readability through the use of highly energy efficient, ultra bright backlights of 450 cd/sqm. Seiko displays' compact construction of just 3.3mm in thickness makes them perfect for the design of instrumentation and portable applications. Resistive touch screen version is available for all TFT modules in the range with the 2.4 and 2.8 displays come with optically bonded touch sensors to enable excellent performance in sunlight conditions. [Datasheets overview](#)

Longer Life and Higher Light Intensity of PLCC 4 Package – Power DomiLED

DOMINANT Semiconductors



DOMINANT introduced new high intensity InGaN devices, DWx-LJG of its Power DomiLED series, alternative to the existing DWx-YJG device and completing their product portfolio of medium power LEDs. With an operating current of only 30mA, this LED features a luminous intensity of 1800mcd (typical) for true green and 560mcd (typical) for blue. The new InGaN Power DomiLED provides an outstanding long product lifetime due to its silicone encapsulation and low thermal resistance of the housing, turning it into the most durable product in PLCC-4 package. In terms of design and dimensions, the package is the same as their other Power DomiLEDs (4.2(L) x 1.2 (W) x 1.3(H) mm). This new devices perfect fit for various illumination applications where space is limited such as channel lighting and signage. It also fulfills the stringent requirements of the automotive industry.

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PASSIVES & ELECTROMECHANICAL

High Frequency, High Current Miniature Power Inductors

COOPER

- Halogen free



- 125°C maximum total temperature operation
- 4.7x4.31x1.2, 1.5mm maximum surface mount package
- Magnetically shielded
- Handles high transient inrush current spikes
- Inductance range from 0.09μH to 4.7μH
- Current range from 0.78A to 32.0A
- Frequency range 20kHz to 10MHz
- RoHS compliant

Datasheet: [MPI4040](#)

Product launch: [MPI4040](#)

High-End-Compact 2-Stage 3-Phase EMC Filters



SCHURTER expands its filter product portfolio, introducing power line filter series FMBC NEO for 3-phase-systems and FMBD NEO for 3-phase-systems with neutral.

The FMBC NEO 3-phase filters are arranged for use with 3x 277/480 VAC and 3x 300/520 VAC installations and the FMBD NEO 3-phase filters with neutral are arranged for use with 3x 300/520 VAC installations. The FMBC NEO filter is available from 7A and the FMBD NEO filter is available from 8A. These new compact EMC filters in NEO design are especially suited for use in drive systems, engineering installations and places where frequency inverters cause electromagnetic disturbances.

Datasheet: [FMBC_Neo](#), [FMBD_Neo](#)

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POWER CONVERSION

Compact AC-DC Solutions for low-power and standby mode applications



[BPS](#) Signature Line, now up to 4 watts, -30 to +70°, 85-265 VAC, 50/60 Hz AC input

[BPW](#) Wide Input Range Line, up to 4 watts, -30 to +70°, 90-308 VAC, 50/60 Hz AC input

[BPSX](#) Signature Extended Temperature, up to 4 watts, -40 to +85°, 85-265 VAC, 50/60 Hz AC input

[BPWX](#) Wide Input Extended Temperature, up to 4 watts, -40 to +85°, 90-308 VAC, 50/60 Hz AC input

- Compact footprint and height
- Drop-in modular solution
- No de-rating over full temperature range
- 30mW no load consumption
- Optional zero-crossing detection, when a signal aligned to the input AC is needed
- Universal input voltage – “one SKU for your world – 85-265 or 90-308
- Fully encapsulated construction protects the supply and simplifies assembly
- Constant Voltage/Constant Power application flexibility

- “Last gasp power down enabling with a supercap
- Easy to configure for N+1 Redundancy
- Reduces design burden and time-to-market
- UL recognized / FCC compliant (Part 15 class B) EN 55022, CE

Leading edge technology configurable 600 watt power supplies



The Vox products are leading edge technology configurable 600 watt power supplies. The product itself is 3 x 5 inches in size and can deliver 600 watts with up to 4 separate isolated outputs, each output module can deliver a maximum of 150 watts.

The Nevo products are made up of 4 different front end AC sections i.e. Nevo600S(Standard – EN60950 Approvals), Nevo600M (Medical – EN60601 Approvals), Nevo+600S (Standard with higher power specification at low I/P AC levels), Nevo+600M (Medical with higher power specification at low i/p AC levels). There are presently 4 O/P modules available which slot into the front ends i.e.5V, 12V,24V & 48V. Each O/P module has a voltage trim range which allows the customer trim the voltage to any level from 1V5 to 58V.

Datasheets :

[NEVO600S](#)
[NEVO+600S](#)
[NEVO600M](#)
[NEVO+600M](#)

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