

## ALCOM TIPS FOR ELECTRONIC DESIGNERS



### DEAR ELECTRONIC DESIGNER



Klik [hier](#) voor gratis toegangskaarten. Stand: 8B080. Maak kennis met [Bridgelux](#) op 28 mei.

Bezoek Alcom ook tijdens de Bits&Chips Hardware Conference op 18 juni 2009 in de Brabanthallen in Den Bosch. [Meer informatie](#)

Alcom's fabrikaat XMOS zal tijdens dit evenement een lezing geven. [Lees meer](#)



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### 400mA Line Switch with Low ON Resistance



The XC8102 is a low voltage P-Channel MOSFET power switch for high load switching applications. The XC8102 has ON/OFF control and is a perfect solution when you need to provide a series of stable voltage outputs.

Features:

- On Resistance: 0.35  $\Omega$  @  $V_{in}=2.9V$  (typ)
- Input Voltage Range: 1.2V~6.0V
- Output Current: 400mA (current limit=480mA)
- High Speed Discharge Function
- Low Power Consumption: 4 $\mu$ A (@ $V_{in}=6.0V$ )
- Stand-by Current: 0.1 $\mu$ A

Datasheet: [XC8102](#)

### AC Current Sensor Low Cost



Isolated AC Current Sensors

The Si850x/1x products are unidirectional ac current sensors available in full scale ranges of 5, 10 and 20 A. These products offer size and performance advantages over current transformers, Hall effect devices, DCR circuits and other approaches. The Si850x/1x are extremely low loss, adding less than 1.3 m $\Omega$  of series resistance and less than 2 nH of series inductance in the sensing path at 25  $^{\circ}$ C. Current-sensing terminals are isolated from the other package pins to a maximum voltage of 1KVDC.

High-Side DC Current Sensor

The Si8540 is a uni-directional, high-side current sense amplifier for use in applications that require current monitoring and control. This cost-effective, high-side current sense amplifier operates with common mode voltages to 36 V (max). It operates over a frequency range of DC-20 KHz, and can be configured to measure full-scale currents from 100 mA to 10 A.

Datasheet: [Si850x/1x](#)

Datasheet: [Si8540](#)

### Multicore Capabilities of Software Defined Silicon



Imagine a chip that uses multiple processors to execute real-time programs concurrently....

A chip that implements complete systems using interface, DSP and control software....

A chip that makes execution, response and communication times completely predictable....

A chip that uses event-driven execution to minimise energy....

Welcome to XMOS - We make that chip.



- 32 real-time programs
- 1600 MIPS
- Single cycle MAC
- 400 million events/second
- 256KBytes RAM
- 256 I/O

[XC-1 Development Kit](#)

[XC-2 Ethernet Kit](#)

[XC-3 LED Tile Control Kit](#)

[Ethernet-Based LED Systems](#)

[XS1-G4 Product Brief](#)

Bezoek ons tijdens de Bits&Chips [Hardware Conference](#) op 18 juni

### Stellaris® Single Board Computer Intelligent Display Module RDK



The Luminary Micro Stellaris® 3.5-inch Landscape Single Board Computer Intelligent Display Reference Design Kit (RDK-IDM-SBC) offers a complete, open-tool graphical touch-screen user interface design solution for control, automation, and instrumentation applications. Based on the feature-rich Stellaris LM3S9B92 microcontroller featuring Ethernet, USB OTG/Host/Device, and CAN, the new intelligent display module featured in the kit (MDL-IDM-SBC) combines a complete 3.5-inch QVGA landscape-oriented touch-screen user interface with several serial, digital, and analog connectivity options for easy implementation as a Human Machine Interface (HMI) touch display panel in an embedded control device. Software development for the RDK-IDM-SBC is simplified by using Luminary Micro's comprehensive StellarisWare™ Peripheral Driver Library, Graphics Library, and USB Library in conjunction with ARM development tools from ARM tools partners. [Product Brief](#)

### Triple DACs Optimized for Video and Graphics Applications



CADEKA introduces a family of 8- and 10-bit triple DACs ranging from 100 to 180MSPS; CDK3400/CDK3401, CDK3402/CDK3403, and CDK3404. These high-speed digital-to-analog (D/A) converters are optimized for use in video, display, and graphics applications. The 8-bit CDK3404 offers a sampling frequency of 180MSPS making it well suited for display standards of 60Hz VGA (640 x 480), 72Hz SVGA (800 x 600), 75Hz XGA (1024 x 768), and 60Hz SXGA (1280 x 1024). It offers video signal conversion for RGB, YCBCR, and Composite, Y, C signals.

[DACs Overview](#)

Datasheets : [CDK3400/CDK3401](#) - [CDK3402/CDK3403](#) - [CDK3404](#)

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### M2M & WIRELESS MODULES

AP-10A-01 World's smallest GPS high performance antenna



Using extremely sensitive high dielectric constant powder formulation and tight process control the 10mm x 10mm x 4mm patch antenna is accurately tuned to have its frequency band right at 1575.42MHz for GPS systems. With an ultra low power consumption one stage LNA, this small active patch has the performance of an ordinary active patch, but at only a quarter of the size. This product is suited to small form factor mobile devices such as GPS Smartphones, Personal Location, Medical devices, Telematic devices and Automotive navigation and tracking. Custom gain, connector and cable versions are available.

[Datasheet](#)

### Industrial 6-Port Managed PoE Plus Switch



JetNet 4706f is the first PoE-plus switch in the world. It is equipped with 4 PoE ports and 2 fiber links. The design of JetNet 4706f is the most suitable model for long-distance IP surveillance, and wireless surveillance integrated with wireless LAN and WiMax. The management features of JetNet 4706f, including RSTP network redundancy and IGMP multicast management, guarantee the reliability and quality of video transmission. In addition JetNet 4706f supports the advanced redundancy technology Rapid Super Ring, the Korenix-owned patented technology which recovers a link failure within 5ms. Datasheet: [JetNet 4706f](#)

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## TFT & EMBEDDED COMPUTING

### 17inch SXGA Industrial TFT-LCD Module



The new G170EG01 V0 TFT-LCD Module offers a 3-year min. product life support and features industrial needs such as :

- High Brightness (350nits)
- PSWG Compatible
- TCO-03 Compatible

Applications:

- Touch Monitor
- Industrial PC
- CCTV
- Medical
- KIOSK

[Product Brief](#)

## Newest Embedded System with Rich Expandability



EPS-910



The EPS-910 is based on the Intel® Celeron® M 600MHz with a 512K L2 cache processor. The system memory is DDR2 SDRAM 1GB (up to 2GB). The EPS-910 boasts both the advantages of industrial-level stability and cost-efficiency. The hard disk and memory are relocated closer to the bottom for easier maintenance by only removing four screws. The power connector is set with a cable fixer that makes the power cord reliable. In addition, you can also select a phoenix-type power connector or an optional, lockable power connector that secures the machine against power outages. The EPS-910 also adopts a wide voltage input from 8Vdc to 36Vdc, increasing its stability while used as an in-vehicle system. Datasheet: [EPS-910](#)

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## DISPLAYS & OPTO

### New 5.5 inch Passive Matrix OLED



Densitron's new 5.5 display is the largest commercially available Passive Matrix OLED on the market today.

The module features:

- Mechanical size of 146 mm x 45 mm x 2 mm
- Resolution of 64 x 256 with a 16 gray scale
- Display contrast ratio of 2000:1
- Comes with a standard ZIF connector
- Supports various interfaces, such as 8 bit Intel or Motorola and 3 or 4 wire SPI.

The new PMOLED also comes with other renowned benefits associated with OLED displays, including being energy efficient and offering an almost 180° viewing angle. The size and resolution of the module make it perfect for 1 DIN size apertures and a wide variety of applications, ranging from instrumentation and industrial equipment in general to DAB radio and Point-of-Sale systems. The new display is available in green as a standard colour and Densitron is pleased to offer customisation service to meet individual colour requirements. Datasheet: [5.5" display](#)

### Hot New SpiceLED

## DOMINANT Semiconductors

DOMINANT introduced a new hot SpiceLED series, the SSx-NLD-xxx. The devices of this LED series are able to withstand a high operating temperature of up to 110°C. The high operating temperature of up to 110°C of this SpiceLED series is setting the benchmark for similar competitor's products. This miniature device uses an industry-standard 0603 (S-Spice) package outline but with a package height of only 0.6mm! Its small, efficient and highly reliable design has a superb wide viewing angle of 160° with enhanced thermal dissipation capability via its copper base. [SpiceLED](#)



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## PASSIVES & ELECTROMECHANICAL

### AdvancedTCA / $\mu$ TCA and MicroTCA Power Input connectors



- MicroTCA Power Input board mounted connectors. The MicroTCA board mounted connectors were designed for wave soldering or THR processing.
- AdvancedTCA<sup>®</sup> AMC B+. Signal connector in press-fit technology for AdvancedTCA<sup>®</sup> applications in con:card+<sup>®</sup> quality.
- AdvancedTCA<sup>®</sup> Power connector. Power connector in press-fit technology for AdvancedTCA<sup>®</sup> backplanes and daughter cards.
- MicroTCA<sup>™</sup> connector. Signal connector in press-fit technology for MicroTCA<sup>™</sup> applications in con:card+<sup>®</sup> quality.
- MicroTCA<sup>™</sup> Power connector. MicroTCA<sup>™</sup> Power connector in press-fit technology according to PICMG<sup>®</sup> specification MTCA.0 R1.0

[MicroTCA Power Input](#)

[TCA Connectors](#)

### Piezo Keypads - Resistant to Extreme Conditions



For use in extreme ambient conditions, particularly outdoor applications

With the new piezo keypads SCHURTER provides input systems that are impervious to all kinds of dirt and fluids. The keypads are particularly suitable for use in outdoor applications due to their ability to resist extreme ambient conditions such as negative temperatures, ice and snow. The keypads fulfill the IP 69K protection class and have a reliable operating temperature from 25°C to +85°C. The mounting accessory kit from SCHURTER enables the keypad to be sealed into the housing with the IP 68 protection class. The piezo keypads can be mounted into the housing from the front or the rear.

[Overview](#)  
[General Product Information](#)

## POWER CONVERSION

### 10-100W Single output DIN rack type

**COTEK**



Cotek presents a new range of high efficient and reliable DIN rail power supplies on the market. These miniature single output power supplies in the range of 20 W – 100W AC/DC have an universal AC input with active PFC which makes them very suitable for every application where a precise function is required. Take a look and find out how these power supplies fit perfectly into your application.

#### Features:

- Universal AC input with active PFC
- Installed on DIN rail TS35/7.5 or 15
- Protections: Short circuit/Over load/Over voltage/Over temperature
- All using 105°C long life electrolytic capacitors
- High operation temperature up to 70°C
- True DC OK relay contact
- Withstand 5G vibration test
- High efficiency, long life and high reliability
- UL508 (Industrial control equipment) listed
- UL1310 Class 2 Power unit/LPS pass
- 3 years warranty

Datasheet: [DN-series](#)

### Single Range Power Supplies



The line of single range power supplies (SP) substitutes the entire program of linear products. FRIWO presents the SPs power supplies with a range of 3 to 24 Watts which are more compact and lighter but, at the same time, downright powerful. This type of power supply meets the tight requirements of the environmental authorities as to high efficiency and low standby losses.



#### More advantages:

- compact design,
- single range input,
- DC voltage of 5 - 24 V,
- minimal power loss of = 0,3 Watts and
- leakage currents of = 10µA.

These products are usually used for Bluetooth/WLAN, audio, modems, DSL, VDSL, communication as well as for measuring, weighing- und safety technology.

Datasheet: [SP series](#)



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