

## ALCOM TIPS FOR ELECTRONIC DESIGNERS



### DEAR ELECTRONIC DESIGNER

Noteer alvast in uw agenda: 27-29 mei Electronics & Automation, Jaarbeurs - Utrecht.

Standnummer: 8B080

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### SEMICONDUCTORS

#### EZRadio and EZRadioPRO Wireless Solutions



While including all the attractive features of the EZRadio® products such as high integration, low cost, flexibility, low BOM, and easy design-in, these parts are targeted to more sophisticated applications and offer several enhanced parameters and features, including continuous frequency coverage from 240 - 960 MHz, and output power up to +20 dBm. Also included are built-in features like wake-up timer, low battery detector, transmit and receive data FIFOs, power-on reset circuit, and general purpose digital I/Os. [EZRadio and](#)



## [EZRadioPRO Wireless Solutions](#)

## Low-Power MEMS oscillator debuts

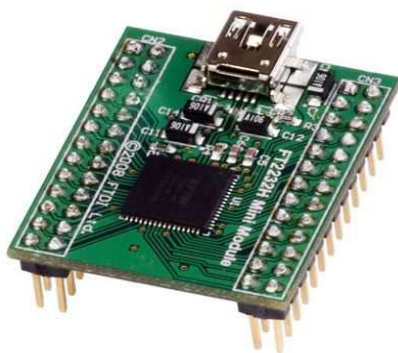


SiTime, the leader in MEMS-based silicon timing solutions, introduced a new family of programmable oscillators that are designed to extend battery life in portable and consumer electronics by delivering the industry's lowest power consumption and fastest start-up time. These devices are highly programmable – with frequencies, voltages and tolerances that can be configured easily – enabling shipment of customized samples in 24 hours and production quantities in two weeks. Additionally, the oscillator packages have standard footprints and can be used as drop-in replacements for quartz devices.

The first three solutions in this product family include:

- [SiT8003](#) – a low power programmable oscillator;
- [SiT8003XT](#) – the world's thinnest programmable oscillator at 0.25mm; and
- [SiT8033](#) – a two-frequency, low power programmable oscillator.

## Compact evaluation modules eases integration and development of USB 2.0 High Speed interfaces



Future Technology Devices International (FTDI) today announced the availability of two evaluation modules to support their recently announced FT2232H and FT4232H USB 2.0 High Speed devices, which have the capability of being configured in a variety of industry standard serial or parallel interfaces such as UART or FIFO. The module PCB measures just 36mm (L) x 30mm (W) x 12mm (H—including connector pins). Each module provides access to all the required signals through two 26 way (2 rows, 0.1 pitch) male headers measuring 32.9mm x 5.08mm. The pin length is 6mm. The FT2232H\_mini-module provides two independent configurable interfaces while the FT4232H\_mini\_module offers four such channels. Datasheets: [FT2232H](#) and [FT4232H](#)

## CoreSolid Storage Introduces the Gaia Industrial Storage Solution



CoreSolid Storage introduces the Gaia Disk-on-Module (DOM) series for industrial storage solutions, including 40pin & 44pin PATA, USB, and industrial CF specifications to match the needs of customers. The Gaia product family takes advantage of SLC chips with high stability and performance with capacity of up to 16GB. The advanced static wear-leveling algorithm and ECC technology ensures the high stability and reliability of these DOM products. CoreSolid Storage also provides customized services to match different needs.

[Read more](#)



**XS1-G4: 4-core processor. Multicore programming has never been so easy !**



The XS1-G4 has four XCore tiles with up to 32 software threads, 1600 total MIPS and 256 KBytes of single cycle memory. This programmable device is capable of implementing multiple interfaces, data processing and integrated software stacks.

[Product Brief](#)

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## M2M & WIRELESS MODULES

**Bluegiga provides Health Device Profile for its Bluetooth OEM Modules**



Bluegiga announced that its OEM Bluetooth modules are now available with Bluetooth Health Device Profile (HDP). The Health Device profile is integrated into Bluegiga's iWRAP firmware, running inside the Bluegiga module, significantly simplifying and reducing the need for engineering and testing time for any type of health or medical device. Bluegiga's Health Device Bluetooth profile with Bluegiga OEM module helps to develop wireless features into existing or new devices with very limited amount of engineering. The Health Device Profile is available for both Bluegiga WT11 Class 1 module and Bluegiga WT12 Class 2 module which use CSR silicon and run Bluegiga's iWRAP Bluetooth connectivity firmware. Bluegiga is the first in the world to offer HDP for CSR based silicon. Bluegiga Access Servers and Access Points will support the HDP Bluetooth Profile later in 2009, enabling integrators to setup secure and reliable telehealth networks utilizing Bluetooth. [BlueGiga Health Device Profile](#)

**Fully integrated development environment for automotive**



Wavecom announced the launch of M2M Studio, a fully integrated suite of tools for the development of embedded software applications for industrial wireless devices based on Wavecom Wireless CPU@s. M2M Studio enables developers to create, develop, compile, download, debug and test their applications. Replacing the existing Open AT@ IDE, M2M Studio fully integrates previously isolated tools such as the source code editor, project build wizard, target download, RTE mode monitor, JTAG debugger, traces emulator and development tool chain, all within the Eclipse Ganymede framework. Eclipse and CDT (C/C++ Development Tools plug-in) are becoming the industry standard for C and C++ development in the embedded world.

The development environment features an easy-to-use graphical user interface (GUI) as well as improved and integrated GUI-based documentation. It comes with a new Enhanced Build System, a new Wireless CPU@ Connector, and a new Software Package Manager for managing Open AT OS, Firmware and Plug-Ins bundles. Datasheet: [M2M Studio](#)

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## TFT & EMBEDDED COMPUTING

### 42.0 inch Public Information TFT G420XW02 V0



This LCD module has a TFT active matrix type liquid crystal panel 1366x768 pixels, and diagonal size of 42.0 inch. It supports 1366x768 XGA-Wide modes (Non-interlace). Each pixel is divided into Red, Green and Blue sub-pixels or dots which are arranged in vertical stripes. Gray scale or the brightness of the sub-pixel color is determined with a 8-bit gray scale signal for each dot.

The G420XW02 V0 has been designed to apply the 8-bit 1 channel LVDS interface operation. It is intended to support displays where high brightness, wide viewing angle, high color saturation, and high color depth are very important. [Specifications](#)

### Atom-based small form factor boards from Avalue



Avalue released Atom platform on full-line small form factors, such as 3.5 SBCs, 5.25 SBCs, COM Express modules, ETX modules, EPIC, and Mini-ITX, Nano-ITX motherboards, etc for wide range of applications and purposes; as well providing the most suitable cards and boards solutions, integrated with powerful networking functions and outstanding designs. Furthermore, taking advantages of incredible small footprint of Atom platform, Avalue developed a series of mini systems and e-service products which enable drive higher performance, lower power and longer extended life and no fan. Avalue products will be extended to energy-saving applications, portable / handheld devices, medical terminals and gaming, etc;



and even versatile space-constrained environments, such as in-vehicle systems, retail-floor devices, and infotainment systems.

The [ECM-945GSE](#) adopts Atom N270 processor and Intel 945GSE / ICH7-M chipsets. It is a fanless and functional board with 2 sets of COM, 8 sets of USB 2.0, 2 sets of Gigabit LAN, 1 set of PCIe mini-card slot, DVI, TV-out, and LVDS.

Based on low power consumption, slim, fanless, and cost-effective requirements, the [EBM-945GSE](#) adopts Atom N270 1.6GHz processor, with Hyper-Threading Technology provides higher performance and 2.5W only power consumption to prolong its life cycle. The EBM-945GSE supports dual views, CRT, LVDS, TV-out, 2 sets of gigabit LANs, and rich I/O, which make it perfectly be embedded in kiosks, digital signage, POI systems, and home gateways.

Adopting the Atom N270 processor, the [ESM-945GSE](#) supports DDR2 memory, HD audio, Gigabit Ethernet and SATA. It is suitable for internet purpose usages. And with the 945GSE and ICH7-M chipsets, which support GMA 950, PCI-Express and SATA, the system performance is enhanced; COM express module facilitates flexible and scalable performing abilities as well.

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## DISPLAYS & OPTO

### Plug-and-Play TFT 4.3inch- the first intelligent TFT display

**ELECTRONIC ASSEMBLY**



For the first time we provide a TFT display with 4.3", which is immediately running and it provides from the first minute the full functionality. The display does require a single supply 5V= and an interface RS-232, I<sup>2</sup>C or SPI only.

All character sets and control /graphic functions for the display and the touch panel are immediately available.

- no PC / embedded system necessary
- low power with 900mW (0.9W)
- no training for a new software and programming tools necessary
- full function already 200ms after power-on
- drastically reduced time-to-market
- tested functions validated hundreds of times
- unparalleled flexibility thanks to powerful commands and a variety of interfaces (RS-232, I<sup>2</sup>C, SPI)
- extremely compact construction
- and not the least important benefit: a clear price advantage compared to individualized solutions

Flyer: [4.3" TFT](#)

### Versatile ARM-9 platform speeds evaluation of AMOLED & TFT displays

**DENSITRON TECHNOLOGIES**

Densitron announced the release of a new proprietary display development platform – the V-DUO (Video Densitron USB OLED) Kit for 3.5 & 4.3 Active Matrix OLEDs (AMOLEDs).

V-DUO utilizes TI ARM-9 processor (DM355) with a Linux based



real-time operating system, and supports display resolutions up to 1366x768. Each kit comes with Display Driver Interface, Touch-screen Drivers, Video & Still Image Playback, Micro-SD Interface, 1Gb Internal Flash shared with 128Mb of Internal DDR2, Rechargeable Battery (via USB or power supply), and Composite Video Input. Also available are RS232, USB host & slave, and 6 input keypad interfaces.

The versatile evaluation kit has a baseboard which is compatible with the transition boards of most Densitron AMOLED and TFT panels. V-DUO is the only tool you will need for evaluating the wide-ranging displays offered by Densitron!  
 Datasheet: [AMOLED](#)

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## PASSIVES & ELECTROMECHANICAL

### Schurter expands by introducing Radial Leaded Varistors AVTS, AVTP and AVTT



SCHURTER now offers radial leaded varistors, also referred to as MOV (Metal Oxide Varistors), which help protect electronic circuits against surge transients, such as can be caused by lightning strikes and switching of contacts and inductive loads. Varistors are suited to a wide variety of applications including switching mode power supplies, ballasts and motor protection used in areas such as industry, telecom and medical technology as well as in consumer goods.

There are different types for various applications fields available: AVTS for secondary protection, AVTP for primary protection, and AVTT for 3-phase applications. The varistors, all approved according to IEC 61051, UL 1449, UL 1414 as well as CSA C22.2 and conforming to RoHS regulations, are available in plastic bags, taped and reeled and in ammo packaging. [Product Overview](#)

### Torodial core transformer 50 - 500VA



- Safety transformer
- nach EN 61558
- UL 506 / CSA
- Temperature class ta 70°C/B
- IP00
- Thermoswitch 120°C
- CLASSE B
- free ends 130mm lengths

[Datasheet](#)

## POWER CONVERSION

### SynQor Introduces Triple Output 500W Medical Grade Power Supplies



ACuQor units measure just 3.6 x 5.25 x 1.63" x 5 x 1U, which the company claims makes them the highest power density medical PSUs available. Primary output options are 12/24/36/48V semi-regulated outputs and include regulated 5V (10W) and 12V (50W) 'always on' standby outputs. ACuQor PSUs feature a universal (85-264Vrms) input range, active power factor correction and very high efficiency – up to 90% for the 48Vout model at 500W. ACuQor supplies meet EN-61000-3-2 for PFC and EN60601-1 Low Leakage Current, along with EN55011/EN55022 Class B compliance for radiated & conducted emissions out of the box. In addition, the devices provide: Over-current, Over-voltage, and Over-temperature protection; DC Power Good; AC Power Good signals; and Remote enable and Fan status/enable functionality.

[Datasheet](#)

### Newest PCB DC/DC Power Solutions up to 40W



Standard DC/DC converters range from 1W to 30W. High performance models are available with a wide variety of features, input/output combinations and isolation levels. Package types include SMT, SIP, DIP and MiniDIP. All have industry standard pin-outs. Many families are already UL approved and more are being added on a regular basis.

#### [New DC/DC Converters](#)

[A500RHI-Datasheet](#)

[B1500ERW-Datasheet](#)

[C4000RW-Datasheet](#)

[F2000ERW-Datasheet](#)

[F2500RU-Datasheet](#)



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