TI Design Forum
November 12, 2008 - ICM Munich

During electronica 2008
Make the most of your time and attend both events, finding out about TI's latest products and technology and gaining in-depth technical insight to help you use them better.

Register now on: www.ti.com/designforum

Visit TI at electronica
November 11 - 14, 2008
Hall A4.420
In 2008 the great minds of the Analog and Embedded Processing industry will come to Munich for the TI Design Forum, which is taking place during electronica 2008 at the ICM (adjacent to west entrance). This gives you a unique opportunity to really make the most of your time and attend both events. At the TI Design Forum, experts in development, design and research, as well as engineering management and other key influencers will be in attendance. And for investing their valuable time, they will leave with solutions on how to attack their new design problems, solve their applications issue or create the world’s next ‘must have’ product.

Gain technical knowledge about TI and learn how we can help you create innovative applications that make life smarter, healthier, greener, safer and more fun.

Put Your Mind in Motion
The TI Design Forum is designed to put everyone’s mind in motion. That’s what happens when TI executives and technology leaders get together with hundreds of industry experts and technology users to swap insight, ideas and recommendations. Among the networking opportunities are:
- Interaction: You’ll have plenty of opportunities to build your business by talking with peers and industry experts.
- Consultation: TI engineers and other industry gurus will be available for both scheduled and impromptu consultations.

Innovate
Make sure you have the right skills, tools, ideas and connections to shape the future. You’ll find them all at the TI Design Forum in Munich on November 12, 2008, during electronica.

Collaborate
If you’re looking for experts in signal processing, you’ll find them here:
- Explore the Technology and Applications Center: See the industry’s leading products and systems brought to life in an array of demos.
- Networking Lunch: Network with your counterparts and TI experts.
- After Hours: Take time to relax and converse with other conference attendees at the cocktail party.

Participate
Register now on www.ti.com/designforum
Places are limited.
Registration is free before Oct. 28.
- Standard registration fee for 1 day Forum package: 99€ (excl. VAT)

Concentrate on a single track or pick and choose from one of 31 technical modules in 12 tracks.
Automotive
Learn about TI's strong commitment to Automotive, with innovative analog, interface and power solutions for dashboard, infotainment, body controller and many more applications, as well as TI's Class-D Audio solutions to achieve your cost and quality goals.

Module 1 - TI - strong Automotive commitment paired with 40 years of semiconductor experience
Discover TI's innovative analog, interface and power solutions for dashboard, infotainment, body controller and many more applications designed for the harsh requirements of the automotive industry and how TI's support can help you meet your quality and cost goals.

Module 2 - Class-D in Automotive, a class of its own
Find out how TI's Automotive Class-D Audio solutions bring efficiency to the infotainment world and help our customers achieve cost and quality goals with higher channel count in car radios, head units and external amplifiers.

Energy efficiency
See how TI's C28x™ 32-bit microcontroller offer a solution to industrial green challenges, making them ideal for solar inverter, power line communication, digital power supply or variable speed motor control.

Module 1 - Enabling green technology
Discover the key benefits of the C2000™ microcontroller platform for developing innovative solutions in energy conversion and how it is the perfect fit for solar inverter, power line communication and digital power or variable speed motor control.

Module 2 - Digital power supply: DC/DC and isolated AC/DC power supply design made easy with C2000™ microcontroller
Get full details on the implementation of a fully programmable solution for a DC/DC (multi-phase buck converter) and an isolated AC/DC power supply (full-bridge with PFC) using a C2000 microcontroller, including the algorithms and the software architecture, using the modular C2000 Digital Power Supply software library.

Industrial
Faster, better, cheaper – and more integrated. Discover how to meet design challenges in the industrial application space with TI analog and digital solutions.

Module 1 - Meeting design challenges in industrial applications with TI newest analog and digital solutions (1)
In two different sessions discover innovative TI solutions in a variety of industrial applications that help to address key design concerns such as time to market, flexibility, reliability, cost and high precision, with a range of application examples.

Module 2 - Meeting design challenges in industrial applications with TI newest analog and digital solutions (2)
In two different sessions discover innovative TI solutions in a variety of industrial applications that help to address key design concerns such as time to market, flexibility, reliability, cost and high precision, with a range of application examples.

Medical
Innovations in embedded processing, high-speed and precision analog, portable energy, and low power connectivity are all fueling the growth of novel applications and products in the medical arena. Discover some of these new applications and how to leverage the power of TI products and technology to enable success.

Module 1 - Wireless connectivity and functional integration - TI semiconductor solutions for more flexible Medical equipment
Learn about TI's wireless capabilities and new catalog products as well as dedicated devices that target the medical market and allow analog designers to develop application platforms suitable for their applications.

Module 2 - Medical equipment to go - TI semiconductor solutions enable portability, security and high-precision
Discover some of the developments from TI that support portability, security and high-precision in applications and explore some of the capabilities of TI’s embedded processor families tailored for medical applications.

Minds in Motion
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## Security
Learn about the security market and its success stories, and get into the details of an IP net camera reference design using TI’s DaVinci™ processors. Discover how to enable smart security systems with the MSP430 microcontroller.

### Module 1 - IP net camera reference design based on DM355 processor: Standardized video surveillance software architecture, application framework & network connectivity
Learn how the DaVinci™ architecture integrates a processor, video accelerators and external memory and storage interfaces specifically tuned for video/imaging, and see how it is applied in a standard IP network video surveillance software architecture, application framework and network connectivity configuration.

### Module 2 - Enabling smart security systems with the MSP430 microcontroller
Discover how the high performance, integrated analog peripherals of TI’s MSP430 ultra low power microcontroller can help to enable the next generation of smart sensing, wireless products such as robust glass breakage detectors, PIR detectors and smoke detectors, all with significant power saving.

## Start with TI
In this track you will discover and explore TI's interactive design support and third party tools, as well as learn how to use MATLAB and Simulink software to easily design and verify algorithms.

### Module 1 - Implementing video tracking systems on the DM6437 EVM using MATLAB and Simulink
In this session MathWorks engineers will demonstrate the concepts of using MATLAB and Simulink to design and verify signal and video processing algorithms. A video tracking and stabilization system will be used as an example.

### Module 2 - Explore TI's interactive and online design support
Speak or chat directly with a technical support engineer or visit our online design support offering that includes engineer to engineer communities, blogs, podcasts, webcasts and design tools to help you improve your daily design activities.

## Digital processors
Discover the world of TI digital processors with the new OMAP35x™ platform and learn about the product’s positioning, target applications and technical aspects. Discover TI’s new low power processors for portability and performance, and its multi-core high-performance processors for performance and power optimized applications.

### Module 1 - OMAP™35x application processors for graphics, multi-media and high-performance embedded processing at best performance/power ratio
Discover the whole OMAP35x™ application processor family, which provides the best general purpose, multimedia and graphics processing in any combination and offers customers the right hardware, software and partner ecosystem to develop next generation high performance embedded processing applications.

### Module 2 - New low power processors for portability and performance
Discover the new low power, multi-architecture processors for portability and performance, including the new lowest power C674x floating-point device that enables portability for traditionally wired applications and the new OMAP L1 applications processor, which combines rich multimedia capabilities with low power consumption.

### Module 3 - High-performance multi-core processors for performance and power optimized applications
Get an update on TI’s high-performance processor strategy and the most recent DSP-only multi-core performance and power-optimized products that spread the workload over multiple cores for lower power requirements. Target applications range from telecommunications to audio/video applications to cellular network infrastructure.

## Low power RF solutions
Learn about both proprietary and RF4CE based wireless remote controls, interoperable and identify the HW and SW considerations for a robust wireless solution.

### Module 1 - Wireless remote controls - proprietary and RF4CE based
As RF replaces infrared in home applications, learn about the RF solution proposed by the RF4CE Alliance, with features such as two way communications, non-line of sight operation, added security and support for intelligent control functionality.

### Module 2 - Interoperable and robust wireless network with ZigBee
Discover the latest in the ZigBee® interoperable RF mesh-networking standard, with an overview of the technology and the technology to which it is being applied.

### Session 3 - Hardware and software considerations for a robust wireless solution
As the use of wireless communication increases in all ISM bands, learn how to counter interference issues during the design phase. Cover critical hardware and software design considerations such as antenna design, RF link robustness, protocol considerations and more.
Microcontrollers

Get an introduction to the MSP430 Ultra Low Power Microcontroller, including the latest MSP430F5xx device generation. Learn about advanced debugging techniques with MSP430 and Code Composer™ Essentials v3 and make sure you’re up to date on TI’s new 32-bit microcontroller platform and tools.

Module 1 - Introduction to the MSP430 ultra low power microcontroller, including latest MSP430F5xx device generation.

Building on the MSP430 microcontroller’s market leadership, the new ultra low power generation of devices feature a wide range of intelligent analog peripherals and a modern 16bit RISC CPU architecture. Discover the breakthrough performance to power consumption ratio they offer.

Module 2 - Advanced debugging techniques with MSP430 and Code Composer™ Essentials v3.

Examine how the MSP430 Enhanced Emulation Module (EEM) can be used for both precision analog and full-speed digital advanced debugging with the Code Composer Essentials v3 IDE. Also learn about code analysis/verification features and automation.

Module 3 - 32-bit microcontrollers – Get the latest on the new platform and tools.

Discover the newly announced C2000™ 32-bit microcontrollers platform products from TI and its partners, as well as new low cost tools and software solutions that provide the best performance, integration and ease of use for industrial control applications.

Power management

Learn about power solutions for embedded systems, power management techniques for efficiency and increasing density, as well as isolated AC-DC power supply, PFC interleaved solutions and green mode controllers.

Module 1 - Power solutions for embedded systems

Learn about the different common power management requirements for TI’s latest processors (sequencing) and different design approaches for each requirement.

Module 2 - Power management techniques for efficiency and density increase

Understand advanced power management design techniques such as multiphase interleaving that allow power designs to achieve high efficiency and high density, in line with today’s requirements.

Module 3 - Isolated AC-DC power supply, higher efficiency and higher density in the power supply area, PFC interleaved solutions, green mode controllers

As applications require more power density and even higher efficiency in AC/DC supplies, discover innovative solutions such as interleaved PFC and intermediate bus architecture that help in today’s designs.

Signal chain

Refresh your memory on high-speed design fundamentals and discover how to drive clock and power high-speed ADCs. Simplify your amplifier decision with regard to noise behavior and learn how to choose the right op amp and R-C combination for optimal CDAC SAR performance. Discover TI’s solutions for delta-sigma ADC in multiplexed designs.

Module 1 - Latest high precision data converter solution (< 10 MSPS)

Discover TI’s innovative data converter solution covering Delta-Sigma, precision successive approximation register analog-to-digital converters and digital-to-analog conversion products. Learn about new products based on TI’s revolutionary analog CMOS and bipolar technology to offer differentiated features for designers.

Module 2 - Latest high precision amplifier and linear solution

Take a look at innovative amplifier and linear solutions from TI in the operational amplifier, current shunt and instrumentation amplifier product range. Learn about new products based on TI’s revolutionary analog CMOS and bipolar technology to offer differentiated features for designers.

Module 3 - Signal chain design and evaluation tools: saving time and money

See how TI offers customers a comprehensive set of tools to speed up design cycles, including the TI’s Analog eLAB™, with real time demonstrations and verifications.

Interface/isolation

Learn about circuit isolation techniques and their implementation, and understand the clock chain and how to design with it.

Module 1 - Isolation techniques and implementation methods

Learn about the concept of isolation and the most common isolation techniques on the market, as well as the standards which regulate isolation requirements and an overview of the TI product portfolio.

Module 2 - Understanding clocking requirements and designing appropriate solutions

Understand the highly accurate clocking requirements of many components and discover examples of how to fulfill these needs. Learn how to simplify the selection of the most suitable clocking or timing devices for a given application.

Module 3 - Emerging industrial interfaces

Review industrial interfaces such as USB, PCI Express and other emerging interfaces, comparing advantages and suitability for a range of applications. Discover the TI product portfolio for each of these technologies and new product developments specific to industrial applications.
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Who should attend?
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