

## News Release

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### **Texas Instruments demonstrates its commitment to the Industrial market by embedding EtherCAT® technology on its ARM®-based processors**

- *New license demonstrates TI's commitment to industrial markets*
- *TI implementation of EtherCAT technology allows design flexibility as industrial standards evolve*
- *TI devices featuring EtherCAT technology coming in 4Q 2011*

**Hannover, Germany (April 4, 2011)** — In conjunction with Hannover Fair, the world's largest industrial trade show, Texas Instruments (TI) (NYSE: TXN) demonstrates its commitment to the industrial market and announces it is the first semiconductor company to license Ethernet for Control Automation Technology (EtherCAT®) for its [ARM®](#)-based embedded processors. This new, ground-breaking industrial Ethernet technology will be featured in TI's upcoming [Sitara™ ARM microprocessors \(MPUs\)](#) planned for the beginning of the fourth quarter of 2011 and in further processor platforms beginning in 2012.

### **Benefits of EtherCAT technology**

- **Increases efficiency:** EtherCAT technology is based on the principle of fast processing on the fly. EtherCAT messages are passed from node to node and processed while they are passed, which improves speed and efficiency in industrial systems. Overall industrial application performance is also improved with shorter reaction times, enabling increased operational efficiency.
- **Ease of use:** EtherCAT uses the standard IEEE 802.3 frames and physical layer. No external switches or hubs are necessary because the EtherCAT slave controllers forward the frames automatically. Most devices embed two RJ-45 ports, which are commonly utilized data ports for Ethernet connections. Auto-configuration of the EtherCAT technology is supported. No manual address setting is required and no network tuning is needed.
- **Lowers costs:** With the use of standard cabling and no external hubs or switches needed, this lowers the EtherCAT technology costs. There are also lower configuration costs with the auto-configuration support.

### **Benefits of TI embedded ARM-based solutions:**

- **Integration:** System-on-chip solution based on TI's most advanced silicon technology, integrating the EtherCAT slave controller. This on-chip integration allows the user to be tightly coupled to the application processor which provides high throughput, low latency access, board space savings and lower total costs.
- **Flexibility:** The programmable real-time unit (PRU) allows for flexible implementation that can more easily adapt as industrial standards evolve over time.

“The EtherCAT Protocol technology sets new standards for real-time performance and flexibility which is critical for TI embedded ARM devices geared toward the industrial market. As a leading Industrial Communication protocol the growing popularity of EtherCAT in industrial drive and I/O applications, is based on its robustness and simplicity allowing master and slave controllers to communicate with each other without a host computer in high-noise industrial environments,” said Matthias Poppel, Director for Embedded Processing at TI, EMEA. “The TI approach to EtherCAT with the programmable real-time unit (PRU) on TI’s ARM<sup>®</sup>-based processors allows for flexible implementation that can more easily adapt as industrial standards evolve over time. Real-time control and –communication become available on a single chip”

“A market leading microcontroller company integrates an EtherCAT interface in several product lines: this turns EtherCAT into a mainstream technology also beyond the automation world! We are thrilled about this milestone development which will open entirely new markets for EtherCAT. I am convinced that this will help EtherCAT to establish a strong position in a wide range of embedded applications and further accelerate the adoption of EtherCAT in the automation market.”, said Martin Rostan, EtherCAT Technology Group Executive Director.

### **Learn more about EtherCAT at Hannover Fair**

To learn more about EtherCAT technology, please visit the EtherCAT Technology Group at the Hannover Fair, Hall 9, booth D18.

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### **About Texas Instruments**

Texas Instruments semiconductor innovations help 80,000 customers unlock the possibilities of the world as it could be – smarter, safer, greener, healthier and more fun. Our commitment to building a better future is ingrained in everything we do – from the responsible manufacturing of our semiconductors, to caring for our employees, to giving back inside our communities. This is just the beginning of our story. Learn more at [www.ti.com](http://www.ti.com).

### **About EtherCAT<sup>®</sup> Technology Group**

The EtherCAT Technology Group (ETG) is the forum in which key user companies from various industries and leading automation suppliers join forces to support, promote and advance the EtherCAT technology. Learn more at [www.ethercat.org](http://www.ethercat.org).

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