



Texas Instruments and Micron's Aptina Imaging Deliver HD Quality for IP Surveillance Networks at Analog Video Camera Prices

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Houston and San Jose , Tuesday, March 25, 2008 – As security camera system designers move from aging CCTV to high-quality Internet Protocol (IP) networks, they are challenged with keeping overall system costs down, increasing image quality and reducing camera design complexity and implementation time. Recognizing these challenges, today Texas Instruments Incorporated, (NYSE: TXN) and Aptina Imaging, a division of Micron Technology Inc., announced that they are offering the DM355IPNC-MT5 high-definition (HD) IP network camera reference design based on TI's DaVinci™ TMS320DM355 digital media processor and Aptina's 5-megapixel HD security image sensor. With an electronic bill of materials (eBOM) costs of less than \$40, video surveillance providers can now add these cameras to their existing systems – at the cost of a traditional analog video camera – and gain the flexibility to upgrade to an IP-based, HD network camera when ready. For more information, see www.ti.com/ipnetcampr.

"The rapidly growing market for security and surveillance cameras is fueling the need for increasing levels of image quality and functionality at affordable prices," said Curtis Stith, Director of New Markets for Aptina. "Through our joint development work with TI on this new reference design, we are making it much easier for security system designers to make the shift to high quality IP network video."

Scalability, increased field of view and low power

Unlike traditional CCTV cameras, the DM355IPNC-MT5 allows for simple scalability while providing remote viewing and storage capabilities in a distributed network. Complexity and cost of the network are reduced by utilizing the TI/Aptina reference design, producing a field of view of 1280 x 720 pixels, whereas traditional surveillance systems typically use two D1 cameras each seeing 480 x 720 pixels to capture the same scene. Additionally, by leveraging Aptina's 5-megapixel image sensor, image quality is greatly improved with the sensor delivering exceptionally low noise levels and low-light sensitivity.

The IP camera reference design also supports analog output for existing CCTV customers who are not yet ready to migrate to IP allowing them use the camera system to future-proof their investment. Functioning at 400mW during HD MPEG-4 encode, the TI/Aptina camera can operate at less than 3W, reducing the power requirements of even complex networks.

Optimized reference design reduces development time to four months

From device drivers and application software to hardware and image pipe tuning, a video surveillance camera system can often take more than 150 man months to develop. The DM355IPNC-MT5 reference design reduces system development to less than four months by including complete and optimized schematics, gerber files, as well as free Linux application source code. Included in the source code, for example, is functionality for integrated auto white balance/auto exposure, simple motion detection, dual stream HD MPEG4 and MJPEG video codecs and DaVinci IP network camera software frameworks to quickly bring this camera into production. The reference design further saves time and drives performance by taking advantage of TI's wide portfolio of analog, power management and logic technology including the TLV320AIC26 audio codec and the TPS23750 Power over Ethernet controller.

"The combination of TI's DaVinci DM355 digital media technology with Aptina's leading image sensor makes for a powerful but highly cost effective solution," said Danny Petkevich, video surveillance and imaging business manager, TI. "Working closely with Aptina, we've removed the traditional barriers—like cost, complexity and design skill sets—to implementing IP-based HD video surveillance systems."

Pricing and Availability

Order entry is open for the TI/Aptina HD IP network camera reference design at www.ti.com/ipnetcampr. The \$795 royalty free reference design includes the camera, tripod, cables, and power adaptor as well as a quick start guide and production agreement. The camera system is expected to begin shipping in the second quarter 2008.

For production quantities, TI's DM355 processor is available today at just \$10 and consists of an integrated video processing subsystem, an MPEG-4-JPEG co-processor (MJCP), a 270 MHz ARM926EJ-S core and peripherals. The DM355 also includes an integrated digital to analog converter (DAC) which can be used along with the OPA361 video amplifier to drive composite PAL or NTSC output. The MJCP provides HD MPEG-4 SP encode or decode at 720p and 30 frames per second and JPEG encode or decode at 75 MegaPixels per second. Additional information can be found on TI's website at www.ti.com/dm355.

Both TI and Aptina Imaging will have demonstrations featuring the IP net camera reference design at ISC West, April 2 – 4, 2008; TI will be in the Object Video booth #15097 or visit Aptina Imaging at booth #39008.

About Texas Instruments

Texas Instruments Incorporated provides innovative DSP and analog technologies to meet our customers' real world signal processing requirements. In addition to Semiconductor, the company includes the Educational & Productivity Solutions business. TI is headquartered in Dallas, Texas, and has manufacturing, design or sales operations in more than 25 countries.

Texas Instruments is traded on the New York Stock Exchange under the symbol TXN. More information is located on the World Wide Web at <http://www.ti.com>.

About Aptina Imaging

Aptina Imaging, a division of Micron Technology, Inc., has long piloted the path of pixel performance in CMOS imaging, bringing high-quality picture and video capabilities to mobile phones, digital still cameras, security and surveillance cameras, PC cameras, automotive applications, and more. With its photographic eye and keen understanding of the opportunities for imaging technology, Aptina continues to drive innovation forward with its portfolio of camera solutions creating beautiful and accurate images for the world to see and share. For additional information on Aptina Imaging, visit www.aplina.com.

About Micron

Micron Technology, Inc., is one of the world's leading providers of advanced semiconductor solutions. Through its worldwide operations, Micron manufactures and markets DRAMs, NAND flash memory, CMOS image sensors, other semiconductor components, and memory modules for use in leading-edge computing, consumer, networking, and mobile products. Micron's common stock is traded on the New York Stock Exchange (NYSE) under the MU symbol. To learn more about Micron Technology, Inc. visit www.micron.com.

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