Module with media processor serves imaging applications

August 28, 2012 – MSC Embedded today announced their compact Qseven MSC Q7-TI8168 module in a new, higher-performance variant with a DaVinci DM8168 digital media processor by Texas Instruments (TI). The processor integrates an ARM Cortex-A8 RISC MPU (up to 1.5 GHz), the C674x Floating Point VLIW digital signal processor (DSP) with up to 8000 MIPS and 6000 MFLOPS, as well as video and graphics accelerators.

The DaVinci DM8168 digital media processor processes up to three 1080p 60 fps video streams simultaneously and is perfectly suited for multichannel HD video monitoring systems, video conference systems and media hubs and servers. The DSP also manages the compute-intensive image processing in real time, thus reducing the load on the ARM processor. TI offers comprehensive software support for numerous imaging tasks, including digital filtering, complex mathematical calculations, image processing and image analysis.

The high-performance Qseven MSC Q7-TI8168 module is specifically suited to handle demanding visualization and multimedia tasks, e.g., in industrial automation, medicine and biometrics, as well as in high-end measurement technology or even the fields of tracking and safety engineering.

As standard interfaces, the embedded platform features an HDMI / DVI interface with resolution up to 1920 x 1080 pixels and a single channel LVDS 24 bit with up to 1280 x 720 pixels. In addition to a PCI Express x1 port, the platform also has a Gbit

Ethernet interface, six USB 2.0 connections, SPI, HD AC97 audio and a camera interface. User data can be saved using either of two SATA II channels. A memory card can be connected using the SD/SDIO interface. The Qseven module integrates a fast, 1 GB DDR3-1600 SRAM, up to 8 GB NAND flash and an on-board soldered flash SSD with 2 GB capacity.

Mike Miller, CEO of MSC EMBEDDED notes, “Our new MSC Q7-TI8168 platform combines the strengths of the ARM CPU with the advantages of TI digital signal processing. The DSP implements the compute-intensive image processing in real-time, thereby freeing the ARM processor to perform other tasks.”

A special ARM-based Qseven MSC Q7-TI8168 module will also be available in the fourth quarter of 2012 that can handle an expanded range of temperatures, from -40 °C to +85 °C.

Since the Qseven module complies with specification 1.20, it can be easily attached to a standard Qseven baseboard or a customer-developed baseboard. Numerous development platforms are available, enabling quick evaluation and simple Design-In.

Pricing and Availability

The Qseven MSC Q7-TI8168 module is available immediately, and is priced at $190 is OEM quantities.

For more information, visit www.mscembedded.com [1]

Links:
[1] http://www.mscembedded.com/