

MtekVision spins out cognition processor unit

Mark LaPedus

10/13/2009 5:30 AM EDT

SEOUL -- MtekVision Co. Ltd., one of South Korea's largest fabless chip makers, has altered its strategy and spun-off its Canadian IC design unit.

MtekVision has been primarily developing multimedia processors for mobile phones and related products. Now, the company will continue to develop those products, but it will also enter the application processor market.

At the same time, it had a Canadian design unit. Now, the unit is being spun off into a new and separate company called CogniVue Corp. (Gatineau, Quebec).

The company specializes in programmable image cognition processors (ICPs). These ARM-based devices enable real-time embedded image and video analytics applications in automotive smart cameras, Internet Protocol (IP) video surveillance, and mobile consumer devices, said Simon Morris, chief executive of the company. Most recently, Morris spent just over a year as director at BDC Venture Capital.

When it was a part of MtekVision, CogniVue developed three generations of so-called Maple multimedia processors, Maple-2, Maple-3 and Maple-3X. The key to the technology is the so-called Apex DSP Sub-System, a next-generation IP core technology for video and image processing.

"The advantage of Apex over traditional DSP is power and speed. Traditional DSP increases the operating clock and adds parallelism by minimally increasing the number of parallel multiply-accumulate (MAC) units," according to the company's Web site.

"This burns significantly more power as the clock speeds ramp higher and higher, but as importantly places an extreme load on the external memory to be able to keep up with the read and writes necessary to feed the MAC units. Apex solves these problems by locating memory in conjunction with the local CU," according to the company.

In an interview at the 11th International Semiconductor 2009 (i-Sedex) trade show here, Morris said the company will continue to develop designs with MtekVision. Speaking on behalf of MtekVision, Morris said that the company's move into the applications processor business makes sense.

In general, the company's multimedia processors were used as the "slave functions" for a baseband processor in a mobile device. Now the company is going after more value in the food chain by devising an application processor.

For example, it is pushing the MV8762, an application processor based on a 350-MHz Arm9 device. It is said to have lower power at comparable performances with competitive devices.