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Opinion: TI is scrambling in MCUs

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Jack Welch, the famous and former CEO of General Electric (GE), once said that each of that company's businesses must be number one or number two in its respective marketplaces. If not, that business would be fixed or sold.

That axiom has become commonplace in today's business thinking. That's why I think Texas Instruments Inc. is still unhappy with its position in microcontrollers (MCUs) and needs to do more to expand its wings in the arena.

TI is the world's leading supplier of analog ICs and digital signal processors (DSPs). In 2008, TI had more than \$720 million in microcontroller sales and was ranked No. 8 worldwide, according to Gartner Inc.

To boost its efforts, TI recently acquired Luminary Micro, a supplier of MCUs, for an undisclosed price. Luminary Micro sells ARM Cortex-M3-based 32-bit MCUs.

In a report, Tony Massimini, an analyst with Semico Research Corp., made these observations: "The TI ARM MCU roadmap has appeared stagnant for the last couple of years. The Luminary acquisition changes this and puts TI back on the ARM MCU fast track."

"The acquisition of Luminary Micro is another proof point that TI is getting serious about the embedded processing market," added Amy Leong, an analyst at Gartner, in a recent report. "Amid the economic downturn, TI is shifting its business strategy -- winding down the wireless baseband business and prioritizing embedded market growth. Microcontrollers for embedded applications have been a proven business model in terms of profitability, as evidenced by Microchip's success in the 8-bit market in the last decade."

There's both good and bad news for TI. Good news: "The addition of Luminary Micro's Stellaris family of Cortex-M3 processors will accelerate TI's ability to provide the industry's most-complete MCU portfolio," Leong said. "TI has more than 300 MCU products, including the 16-bit MSP430 family; ARM-Cortex-M3-based 32-bit Stellaris family (from Luminary Micro); DSP-based 32-bit C2000 family for real-time control applications; and ARM7, Cortex-M3 and Cortex R4-based 32-bit controllers for the automotive market."

Bad news: TI will gain little ground in MCUs with the acquisition, as Luminary Micro is a small, niche player. "Luminary Micro has been extremely focused on the industrial market and developed more than 140 products in its Stellaris product family. In 2008, the company had less than \$5 million in revenue and about 65 employees," Leong pointed out.

So, what does TI need to do? Attack the 8-bit market. Leong said: "How does TI plan to attack the lower end of the 8-bit market, where Microchip and Atmel are dominant today in the catalog market? To address this, will TI license ARM-M0 core, given its long-term relationship and understanding of ARM products? Or is another acquisition on the way to shore up TI's product offerings?"

In my opinion, TI will take both routes. Not long ago, there were rumors that TI would buy Atmel. Atmel executives said they were unaware of such a bid.

Microchip has already attempted to buy Atmel, but it ultimately failed. However, if push comes to shove, I could see TI buying Atmel. TI lacks share. Atmel has a strong portfolio of 8- and 32-bit parts, including a proprietary line that is gaining steam.

I don't see TI making a hostile bid for Atmel--it must be a friendly deal. I also can't see TI buying the other MCU powerhouses, such as Renesas, Freescale, NEC Electronics, Fujitsu, Infineon, Microchip, ST or NXP.

Renesas, the world's largest MCU player, is in the process of buying NEC Electronics, the No. 3 player. Others are also scrambling to gain share.

So, TI must buy another MCU player--or it could end up becoming a niche player. Not the best place to be over the long haul. Just ask Semico.

"In early 2009 the MCU market has taken a severe blow due in large part to a slowdown in automotive and steeper than expected ASP declines. Semico foresees improved conditions that will result in a slow recovery in 2H 2009," said Semico's Massimini.

"However, this will not be enough to overcome the 1H 2009 slump. Total MCU sales are projected to drop 12 percent to \$12.1 billion in 2009. Semico foresees pent up demand across several markets refueling growth in 2010. Total MCU sales are expected to grow 14.3 percent to \$13.8 billion in 2010," he said.

If it's not a top player over time, I don't see TI getting out of the MCU business. Welch's thinking may not apply here. But being a laggard is also unacceptable in the halls at Dallas.

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