

Micron Introduces Industry's Broadest Embedded Multichip Package (MCP) Portfolio

Micron NAND and NOR Flash MCP solutions enable advance functionality in space-constrained applications

BOISE, Idaho, Nov 11, 2014 (GLOBE NEWSWIRE) -- Micron Technology, Inc. (Nasdaq: MU), one of the world's leading providers of advanced semiconductor solutions, today introduced the industry's broadest embedded MCP portfolio with a wide range of high- and low-density NAND Flash + RAM and NOR Flash + RAM MCP solutions. As the Internet of Things (IoT) continues to proliferate, OEMs need memory solutions to enable advance functionality in their space-constrained embedded applications, especially for the machine-to-machine and the wearables markets. Micron's MCP portfolio combines high-performance, low-power Flash and DRAM into various density combinations, all packaged in ultra-small solutions to save critical board space and enable customers to design the most optimum and cost-effective products.

"The industry continues to drive connectivity and mobility within smaller form factors for numerous embedded applications," said Kris Baxter, senior director of marketing in Micron's embedded business unit. "Micron's unique position as a total memory solutions provider enables us to optimize our MCP offering across a wide range of technologies for our customers, including those applications requiring industrial temperatures (-40°C to +85°C), automotive-grade capabilities, or more than five years of product longevity."

"The IoT market is clearly on the upswing, with the global market for M2M services reaching just over \$16 billion and nearly 1.7 billion M2M connections worldwide in 2013," said John Byrne, directing analyst for M2M and The Internet of Things at Infonetics Research. "OEMs are clearly looking for flexible memory solutions that optimize space, density and functionality, to accommodate a diverse array of M2M use cases." "Micron leads the industry in providing high-quality MCPs for industrial and automotive applications in small form factors," said Ross Gray, Vice President, Product Management for Sierra Wireless. "Leveraging Micron's technology leadership in that area has been instrumental in enabling Sierra Wireless to offer the AirPrime® HL Series, which are the smallest embedded wireless modules to be completely interchangeable across 2G, 3G, and 4G technologies."

Micron's MCPs combine both the critical nonvolatile and volatile memory components needed for an application to function and operate. The nonvolatile memory, either NAND or Parallel NOR Flash, is used for the critical boot, operating system (OS), and application code storage. The volatile memory, consisting of either low-power DRAM (LPDRAM) or pseudo-SRAM (PSRAM), is used for temporary storage, working memory, and high-speed operation. High-density NAND-based MCPs enable store-and-download (SnD) operation where code is shadowed into DRAM for data-intensive applications, while lower-density NOR-based MCPs enable fast execute-in-place (XiP) operation for enhanced boot-up performance and longer battery life.

Micron's MCP product portfolio includes a broad range of solutions from 8Gb SLC NAND Flash + 4Gb LPDDR2 DRAM to 32Mb Parallel NOR Flash + 16Mb PSRAM. Each MCP comes in scalable, industry-standard package sizes—such as 6 x 4mm (NOR + PSRAM), 8 x 9mm (NAND + LPDDR), and 8 x 10.5mm (NAND + LPDDR2)—providing very small, low-pin count form factors that can simplify space-constrained applications. By combining the common address and data pins of the Flash and DRAM, Micron's MCPs significantly reduce the overall package ball count and required board space when compared to discrete solutions, thereby improving customers' manufacturing reliability while reducing their overall system costs. For more information on how Micron's NAND and NOR MCP portfolio can benefit embedded applications, visit www.micron.com.

CONTACT: Micron Media Contact: Greg Wood Zeno Group 650-801-7958 greg.wood@zenogroup.com