Industry`s Thinnest 4GB DDR2 Memory Modules for Servers

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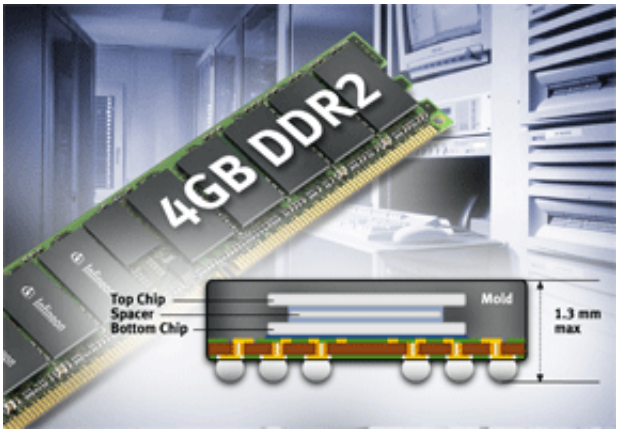

Infineon Technologies AG , demonstrating its leadership as memory supplier, announced that it is sampling the industry's first dual-die based 4GB (Gigabyte) DDR2 registered DIMMs (Dual Inline Memory Modules) for server applications. The new module is based on eighteen 2Gbit (Gigabit) DDR2 components, realized by stacking two 1Gbit DDR2 SDRAMs. This approach called Dual Die technology allows to double memory density while increasing component height by only 0.1mm.

Infineon's 4GB DDR2 registered DIMMs with 4.1mm module thickness and standard-size 30mm height are by around 40 thinner than comparable solutions, hence outperforming JEDEC (Joint Electronic

Device Engineering Council) requirements for stacked solutions. Thinner modules improve airflow and thermal conditions in current high-end DDR2 server systems, which can use up to four 4GB modules achieving a total memory capacity of 16GB per server system.

Dual Die technology is realized by stacking two identical dies in one BGA (Ball Grid Array) package. As an industry first, Infineon has mastered the challenges for volume manufacturing of high-speed DDR2 dual die chips. To meet production requirements, Infineon has developed additional process steps necessary to handle the complex interaction of several factors, from thermal and electrical factors to density, size and power consumption.

Opposed to conventional package stacking technologies, where two separate chip packages are stacked, Infineon's Dual Die technology enables smaller package footprints with superior electrical and thermal characteristics.