Memory : Multi-Chip Package

Gigabyte-Class NAND Flash Memory Housed in a 1.2-mm-Thick Package

Memory:Multi-Chip Package 存储器:多芯片封装
在1.2mm薄型封装内堆栈Gigabyte级NAND闪存

- Toshiba has begun volume production of multi-chip package (MCP) memory for cellular phones that integrates an SD card interface controller and a gigabyte-class NAND flash memory (GBNAND™) with a capacity range of up to 2 GB.
- The new MCP allows integration of a variety of memory chips, including LP SDRAMs as working memory, standard NAND flash memories for storing program code and a gigabyte-class NAND flash memory for storing user's data.
- Future MCPs will combine gigabyte-class NAND flash memory with pseudo-SRAM and NOR flash memory.

- 东芝已经实现了手机用多芯片封装(MCP)存储器的量产。MCP将SD卡接口控制器和最大容量达到2GB的gigabyte级NAND闪存 (GBNAND™)集成在一个封装内。
- 该种新MCP可以集成各种存储芯片, 包括LP SDRAM作为运行存储器, 用于存储程序编码的标准型NAND闪存以及用于保存用户数据的gigabyte级NAND闪存。
- 未来的MCP将虚拟SRAM、NOR闪存与gigabyte级NAND闪存结合在一起。

Features
特 征

- ◆Various types of memory can be combined in a single package.
- ◆Up to nine layers can be stacked up (including inter-die spacers) in a package with a thickness of 1.4 mm. Up to five layers can be stacked up in a package with a thickness of 1.0mm.
- ◆The new MCP can integrate LP SDRAMs of 512 Mb to 1Gb, standard NAND flash memories of 1Gb to 2Gb and a GBNAND™※ flash memory of 512 MB to 2 GB. (Future MCPs will combine a GBNAND™ flash memory with pseudo-SRAM and NOR flash memory.)

※ : GBNAND™ is a trademark for the combination of a Toshiba gigabyte-class NAND flash memory with an SD card interface controller.

- ◆单一封装内可以结合各种类型的存储器。
- ◆封装内可以最多堆栈九层(包括内部晶元间隔), 厚度仅1.4 mm.封装内堆栈五层的厚度仅1.0mm.
- ◆新MCP可以将512Mb-1Gb的LP SDRAM, 1Gb-2Gb的标准型NAND闪存以及512Mb-2Gb的GBNAND™※闪存集成在一起。(未来的MCP将虚拟SRAM、NOR闪存与GBNAND™闪存结合在一起.)

※:GBNAND™是东芝gigabyte级NAND闪存和SD卡接口控制器结合在一起的注册商标。