Embedded Twin MONOS Flash Memories with 4ns and 15ns Access Times

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By adding a shared bit diffusion contact to the twin MONOS, a high performance, low voltage, low power NOR-type memory can be achieved. The process is simple and the array maintains its dual density advantage, which makes this flash memory technology suitable for embedded as well as standalone applications. This paper will focus on two fast access embedded designs a) 16Mb with 15ns access time and b) 128Kb with 4ns access time.