

## 75 Word Abstract Format

### Highly Manufacturable 90nm NOR Flash Technology with 0.081 $\mu\text{m}^2$ Cell Size

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A manufacturable 90nm NOR Flash technology has been developed with extremely small cell size of 0.081 $\mu\text{m}^2$ , which is the smallest cell size of NOR cell, for high density code storage memory featuring with low voltage operation. The small cell size of 0.081 $\mu\text{m}^2$  is successfully achieved with three key main technologies such as an advanced KrF lithography with off-axis illumination system, appropriate dielectric thin film and junction scaling and optimized oxidation encroachment of inter-poly oxide nitride oxide (ONO) and tunnel oxide.