

Table 1: Evolution of High-Density Micron SLC/MLC Devices

	2006	2007	2008	2009	2010
Characteristics					
<i>Monolithic Die Density</i>	2Gb	8Gb	8Gb/16Gb	16Gb/32Gb	32Gb/64Gb
<i>Geometry (nm)</i>	90	72	50	34	25
<i>^tPROG (μs TYP)</i>	~300	~700	~300/~900	~300/~900	~300/~1300
<i>Page Size (bytes)</i>	2112	2112	4314	4320	8640
<i>Number of Planes</i>	1	2	2	2	2
<i>Number of Pages (SLC/MLC)</i>	64	128	64/128	128/256	128/256
<i>Block Size (KB)</i>	128	256	256/512	512/1024	1024/2048
<i>^tR (μs)</i>	25	50	25/50	25/50	35/75
<i>ECC Required/ Code Word</i>	1/528	4/528	4/539, 8/539	4/540, 12/540	8/540, 24/1080
<i>NOP (Number of Partial-Page Operations)</i>	8	1	4/1	4/1	4/1
<i>Endurance</i>	100,000	10,000	100,000/ 10,000	100,000/ 5000	60,000/ 3000
<i>Interface (MT/s)</i>	SDR 40	SDR 50	SDR 50	DDR 166	DDR 200
<i>Packages</i>	TSOP	TSOP	TSOP	TSOP, LGA, BGA*	TSOP, LGA, BGA*
<i>Temperature Range</i>	C	C	C	C, I	C, I
<p><i>Notes: Timeline years are approximate. Values specific to MLC devices are in bold. Shaded columns identify the NAND devices used for most of our comparisons. *Up to 8-die BGA packages offered.</i></p>					