# Grade Selection Tool

| Industrial Grade | Industrial pSLC | Industrial MLC | Industrial 3D | Consumer |
|---|---|---|---|---|
| **SLC NAND**<br>Single Level Cell<br>1 Bit/Cell | **pSLC NAND**<br>Pseudo SLC<br>MLC or 3D in 1-Bit/Cell Mode | **MLC NAND**<br>Multi Level Cell<br>2-Bit/Cell | **INDUSTRIAL 3D TLC NAND**<br>Tri Level Cell<br>3-Bit/Cell | **TLC NAND (non-industrial 3D)**<br>Tri Level Cell<br>3-Bit/Cell |

**PRODUCTS OFFERED BY CACTUS TECH**

**NAND Geometry (aka Trace Width) Memory Manufactured**

| 32nm | 24nm | 15nm or 3D(N/A) | 15nm | N/A | N/A |
|---|---|---|---|---|---|

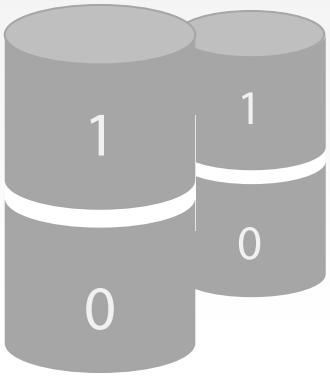
**Endurance Cycles (aka Write Cycles) of Physical NAND Memory Blocks**

| 70,000 | 60,000 | 20,000 | 3,000 | 3,000 | 1,000 |
|---|---|---|---|---|---|

**Write Abort / Cell Cross Talk / Read Disturb / Data Corruption / Data Retention**

Extreme Reliability & Long Life Cycles

Lowest Cost, Limited Life & Reliability



KIOXIA INDUSTRIAL
-40C to 85C Operation

**Largest SLC NAND Geometry** → ***HIGHEST RELIABILITY***

**Smaller NAND Geometry** → Smaller cell size & more bits/cell → Less space between Bits → ***LESS RELIABILITY***