Premium Line: Best TCO Value for Cost per TBW/DWPD Endurance

ATP’ s Premium Line uses advanced controller and firmware technologies to make sure that the offerings meet and even exceed the endurance requirements of demanding applications.

Premium Line storage solutions are purpose-built for applications that require uncompromising endurance and reliability at lower user capacities. These embedded flash storage devices are configured with pseudo single-level cell (pSLC) to extend the general endurance to more than 10 times of the same triple-level cell (TLC) products. The pSLC technology dramatically improves the sustained write performance and reliability of the drives, making them suitable for write-intensive applications. By storing only 1 bit per cell, Premium Line solutions drive down TCO with longer service life using the most cost-effective NAND flash technology available.

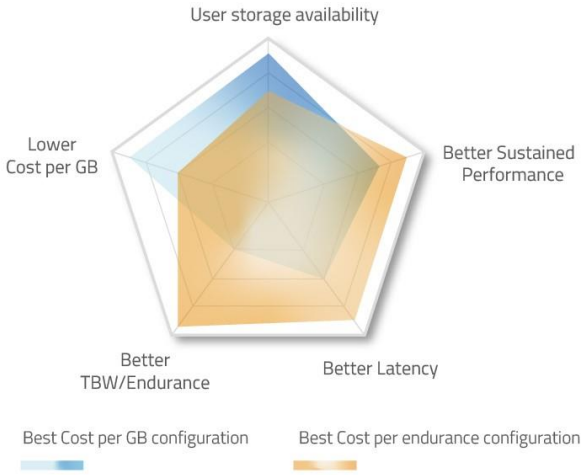


Figure 1. ATP’ s Customizable Premium Line with 3D TLC NAND flash configured as pSLC offers a balance in usable density at a better price point (Cost per GB), and impressive improvements in reliability, sustained performance, and endurance (Cost per TBW), which all boil down to best TCO value.

The following graph shows the new customizable pSLC-configured SATA III SSDs demonstrating significant improvements in endurance compared with default 3D TLC offerings.

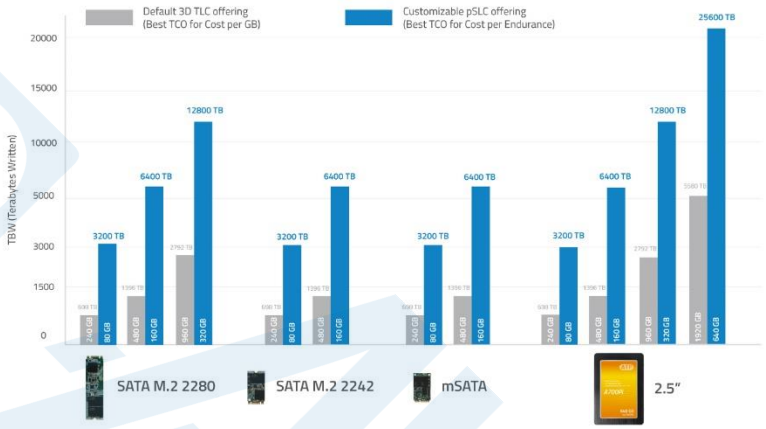
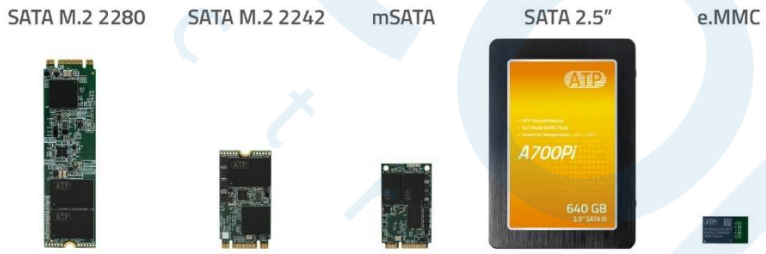


Figure 2. Comparison of endurance ratings between default 3D TLC offerings and ATP' s new customizable pSLC-configured SATA SSDs.

ATP' s new Premium Line is available in both raw and managed NAND.Key specifications are provided in the succeeding table.



Flash Mode	Pseudo SLC (pSLC)					3D TLC					Pseudo SLC (pSLC)		3D MLC & TLC	
Product name	A700Pi					A600Pi					E700Pi		E600Si	
Interface/ Form Factor	SATA III										e.MMC			
Operating Temperature	-40°C to 85°C										-40°C to 85°C			
Form factor		M.2 2280	M.2 2242	mSATA	2.5"		M.2 2280	M.2 2242	mSATA	2.5"	153-ball FBGA			
	Max. Endurance*					Max. Endurance*					Max. Endurance*		Max. Endurance*	
Capacity	80 GB	3,200 TB				240 GB	698 TB				21 GB	296 TB	64 GB (TLC)	27 TB
	160 GB	6,400 TB				480 GB	1,396 TB				64 GB	1,320 TB	64 GB (MLC)	412 TB
	320 GB	12,800 TB			12,800 TB	960 GB	2,792 TB						128 GB (MLC)	824 TB
	640 GB				25,600 TB	1920 GB				5,585 TB				

*Under highest Sequential write value. May vary by density, configuration and applications