


#### SMT2A



#### GENERAL INFORMATION

TYPE	mSATA			
INTERFACE	Serial ATA Revision 3.2			
DATA TRANSFER MODE	SATA 1.5Gbps, 3.0Gbps, 6.0Gbps			
CONNECTOR	52 pin. Edge			
OUTLINE DIMENSIONS	50.8 x 29.85 mm			
SERIES	SMT2A			
CONTROLLER TYPE 	TDK GBDriver GS2			
FLASH TYPE	3D - SLC mode		3D - TLC mode	
	3D - Gen3	3D - Gen5	3D - Gen3	3D - Gen5
DENSITY RANGE	16 GB - 128 GB	16 GB - 256 GB	50 GB - 400 GB	50 GB - 800 GB
DATA RETENTION	10 years @ life begin 1 year @ life end			
ENDURANCE	30,000 P/E Cycles		3,000 P/E Cycles	
ENTERPRISE WL	*Flash Block Level		*Flash Block Level	

#### TEMPERATURE

OPERATING TEMPERATURE	Commercial: 0°C to +70°C Industrial: -40°C to +85°C
STORAGE TEMPERATURE	Commercial: -25°C to +85°C Industrial: -40°C to +85°C

#### PERFORMANCE

Read (max.)	345 MByte/sec
Write (max.)	295 MByte/sec

#### ROBUSTNESS

MTBF	≥ 2,000,000 hours
SHOCK	1500G,0.5ms
VIBRATION	20G,10-2000Hz
HUMIDITY	0 to 90 % RH (No condensation)

#### ELECTRICAL DATA

VOLTAGE	3.3 V ± 5 %
POWER CONSUMPTION (*RT)	- Read: 1140 mW max. - Write: 1370 mW max. - Slumber: 200mW

#### FEATURE LIST

FEATURES & TOOLS	<ul style="list-style-type: none"> <li>- In-House Designed Controller (HW/FW)</li> <li>- SLC Cache, LDPC-ECC, RAID</li> <li>- Temperature monitoring function</li> <li>- Write-protected area setting tool (on request)                             <ul style="list-style-type: none"> <li>- DRAM-less Design</li> <li>- Power Fail Data Safety</li> <li>- Power Back-up Circuit</li> </ul> </li> <li>- Global static wear leveling                             <ul style="list-style-type: none"> <li>- SMART (life monitor)</li> <li>- NCQ, TRIM</li> </ul> </li> <li>- AES 256 bit encryption, TCG-OPAL (on request)</li> </ul>
PART NUMBER	SMT2AxxxxKHxxA00ESA0   SMT2AxxxxKMxxA00ESA0   SMT2AxxxxKGxxA00ESA0   SMT2AxxxxKLxxA00ESA0