

Reliability Summary Report

Product Type: 8-128GB SD

Capacity	Part Number
8GB	KTSD8GP3ASIM1
16GB	KTSDAGP2AKIU1
32GB	KTSDBGP1AMIT1
64GB	KTSDCGP2AKIT1
128GB	KTSDDGP2AKIT1

1. Product Information

Product No.	Dimensions	JEDEC Standard
KTSDxGPxAxlx1	32 x 24 x 2.1 mm	SD v6.1

2. Test Summary

Product Test Result				
<input checked="" type="checkbox"/> PASS <input type="checkbox"/> FAIL				
	Test Items	Test Results		Notes
1	Performance	<input checked="" type="checkbox"/> PASS	<input type="checkbox"/> FAIL	
2	Electrical Performance	<input checked="" type="checkbox"/> PASS	<input type="checkbox"/> FAIL	
3	Reliability	<input checked="" type="checkbox"/> PASS	<input type="checkbox"/> FAIL	

3. Performance

3.1. Crystal-Disk Mark Benchmark V5.0.2

Capacity	Sequential (Q32T1)		Random 4KB (Q32T1)		Sequential		Random 4KB	
	Read	Write	Read	Write	Read	Write	Read	Write
8GB	92.05	31.96	11.73	0.618	92.29	31.88	10.46	0.677
16GB	91.55	77.99	6.493	4.828	90.18	77.39	6.329	4.757
32GB	93.91	14.63	8.435	1.828	93.74	15.94	8.097	2.623
64GB	90.55	52.33	6.315	4.118	95.43	48.87	6.285	4.107
128GB	94.03	80.25	16.06	9.197	93.75	80.53	14.1	9.145

(Unit : MB/s)

3.2. TestMetrix_Performance

Drive	Configuration	Sequential Read (MB/s)	Sequential Write (MB/s)
8GB	SDR104 (UHS-I, 1.8V, 208MHz)	95	35
16GB		100	85
32GB		100	15
64GB		100	50
128GB		100	85

(1) Performance measured using Testmetrix VTE-4100.

(2) MLC: 8 GB, pSLC: 16GB, TLC: 32GB/64GB/128GB

4. Electrical Performance

4.1. Power Consumption

Parameter	8GB	16GB	32GB	64GB	128GB	Unit
Read Current	120	100	100	105	105	(RMS) mA
Write Current	85	105	90	110	115	(RMS) mA
Standby Current	1000	1000	1000	1000	1000	(RMS) μ A

(1) Current measured with scope (average value), under SDR104 mode operation.

5. Reliability

Test Item	Test Reference	Sample Size	Test Result
High Temperature Storage Test	IEC 60068-2-2	5	Pass
High Temperature Operation Test	IEC 60068-2-2	5	Pass
Low Temperature Storage Test	IEC 60068-2-1	5	Pass
Low Temperature Operation Test	IEC 60068-2-1	5	Pass
Temperature & Humidity Storage Test	IEC 60068-2-3	5	Pass

Test Item	Test Reference	Sample Size	Test Result
Temperature & Humidity Operation Test	IEC 60068-2-3	5	Pass
Temperature Cycling Operation Test	IEC 60068-2-14	5	Pass
Bending Test	SDA SPEC.	5	Pass
Torque Test	SDA SPEC.	5	Pass
Drop Test	SDA SPEC.	5	Pass
Vibration Test	IEC 60068-2-6	5	Pass
Switch Cycle Test	SDA SPEC.	5	Pass
Durability Test	EIA 364-13	5	Pass
Salt Spray Test	MIL STD-883 Method 1009	5	Pass
Mechanical Shock Test	IEC 60068-2-27	5	Pass
Waterproof Test	IEC 60529	5	Pass
X-Ray Exposure Test	ISO 7816-1	5	Pass