

MTBF Reliability Report

SQFlash 920 U.2 SSD

Reliability Prediction	
Operating Temperature	30°C
Failure Rate (FIT)	651.803203
MTBF (hrs)	1,534,205hr

Product Information

Model: SQF-C25 920

Prediction Method

Analysis Software: [Relex7.3](#)

Analysis Method: [Telcordia SR-332, Reliability Prediction of Electronic Equipment.](#)

Parts Coverage

Product	Advantech PN
SQF PCIe/NVMe U.2 2.5" SSD 920 240G 3D TLC BiCS3 (0~70°C)	SQF-C25V4-240G-ECC
SQF PCIe/NVMe U.2 2.5" SSD 920 480G 3D TLC BiCS3 (0~70°C)	SQF-C25V8-480G-ECC
SQF PCIe/NVMe U.2 2.5" SSD 920 960G 3D TLC BiCS3 (0~70°C)	SQF-C25V8-960G-ECC
SQF PCIe/NVMe U.2 2.5" SSD 920 1920G 3D TLC BiCS3 (0~70°C)	SQF-C25VF-1K9G-ECC
SQF PCIe/NVMe U.2 2.5" SSD 920 3840G 3D TLC BiCS3 (0~70°C)	SQF-C25VF-3K8G-ECC
SQF PCIe/NVMe U.2 2.5" SSD 920 7680G 3D TLC BiCS3 (0~70°C)	SQF-C25VF-7K6G-ECC
SQF PCIe/NVMe U.2 2.5" SSD 920 240G 3D TLC BiCS3 (-40~85°C)	SQF-C25V4-240G-ECE
SQF PCIe/NVMe U.2 2.5" SSD 920 480G 3D TLC BiCS3 (-40~85°C)	SQF-C25V8-480G-ECE
SQF PCIe/NVMe U.2 2.5" SSD 920 960G 3D TLC BiCS3 (-40~85°C)	SQF-C25V8-960G-ECE
SQF PCIe/NVMe U.2 2.5" SSD920 1920G 3D TLC BiCS3 (-40~85°C)	SQF-C25VF-1K9G-ECE
SQF PCIe/NVMe U.2 2.5" SSD 920 3840G 3D TLC BiCS3 (-40~85°C)	SQF-C25VF-3K8G-ECE
SQF PCIe/NVMe U.2 2.5" SSD 920 7680G 3D TLC BiCS4 (-40~85°C)	SQF-C25VF-7K6G-ECE

Part Number	Reference Des Date	Environment	Temperature	Description
SQF-C25VF-7K6G-ECC	Jul, 25, 2019	GB, GC-Ground Benign, Controlled	30.00 °C	BGA-level assembly
	Time	Failure Rate	MTBF	
	11:01 AM	651.803203	1,534,205 hrs	

Assembly Name	Part Number	Ref Des	Qty	Failure Rate	MTBF
SQF-C25VF-7K6G-ECC	SQF-C25VF-7K6G-ECC		1.00	651.803203	1,534,205
			1.00	651.803203	1,534,205
Part Number	Category	Ref Des	Failure Rate, Unit	Quantity	Failure Rate
00-10S0000111	Integrated Circuit		1.000000	1.00	67.638458
00-10S0000097	Integrated Circuit		67.638458	16.00	4.000000
30-T0UA0RP015	Connection		1.000000	1.00	8.000000
22-5012BB1271	Integrated Circuit		1.000000	1.00	2.000000
00-10S0000113	Integrated Circuit		0.500000	3.00	6.500000
00-10S0000112	Capacitor		0.500000	2.00	1.000000
00-00S0000000	Capacitor		0.500000	8.00	1.000000
00-00S0000009	Capacitor		0.500000	4.00	0.500000
00-00S0000025	Capacitor		0.500000	13.00	2.500000
00-00S0000034	Resistor		0.500000	2.00	0.500000
00-00S0000076	Resistor		0.500000	2.00	1.000000
00-00S0000113	Resistor		0.500000	1.00	1.000000
00-00S0000194	Resistor		0.500000	5.00	0.500000
00-00S0000195	Resistor		0.500000	1.00	1.000000
00-00S0000198	Resistor		0.500000	2.00	1.000000
00-00S0000216	Resistor		0.500000	2.00	1.000000
00-00S0000234	Resistor		0.500000	1.00	0.500000
00-00S0000247	Resistor		1.000000	2.00	2.000000
00-00S0000295	Resistor		1.000000	2.00	1.000000
00-10S0000004	Resistor		1.000000	2.00	1.000000
00-10S0000049	Resistor		1.000000	1.00	9.000000
00-10S0000061	Resistor		1.000000	2.00	1.000000
00-10S0000062	Capacitor		1.000000	1.00	3.000000
00-10S0000066	Capacitor		1.000000	1.00	1.000000
00-10S0000136	Capacitor		0.500000	9.00	1.000000
00-20S0000021	Capacitor		0.500000	1.00	0.500000
00-30S0000080	Capacitor		0.500000	1.00	0.500000
00-30S0000085	Capacitor		0.500000	2.00	0.500000
00-30S0000086	Inductor		6.000000	1.00	6.000000
00-40S0000043	Inductor		0.000000	1.00	0.000000
04-01S0000036	Inductor		84.389324	1.00	84.389324
06-00S0000200	Inductor		21.789271	1.00	87.157084
06-03S0000227	Semiconductor		8.000000	1.00	8.000000
18-Q035000000	Connection		21.789271	4.00	348.628337