

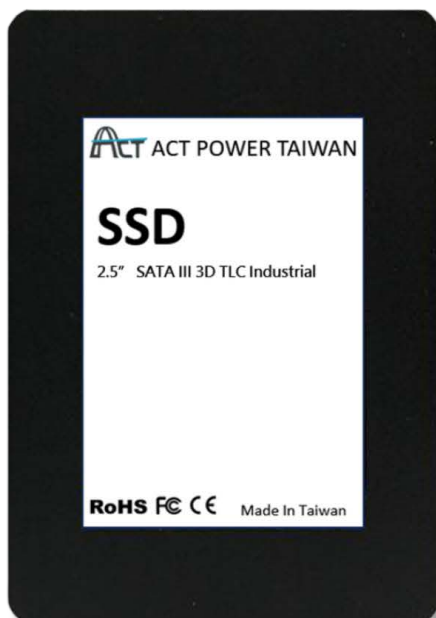
ACP-S0003

Industrial 3D TLC SATA Solid State Drive Series

Features

- SATA 3.3 6Gbps Interface
- Flash Type: 3D TLC
- Support ECC Error Checking Function
- Support NCQ (Native Command Queuing) Command
- Read up to 560 MB/s , Write up to 540 MB/s
- Operation Temperature: Wide: -25°C - 85°C
- MTBF: 2,000,000 Hours

Appearance





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Revision Table

Date	Revision	Content	By
2025/10/15	0.1	First Draft	Mark



ACP-S0003

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Specification

Capacity	
TLC	960GB up to 7680 GB
Electrical/Physical Interface	
Interface	Compliant with SATA 3.3 (6Gb/s) Compatible ATA/ATAPI-7 Compatible ATA/ATAPI-8 ACS4 Forced Command
Other	Support S.M.A.R.T Command Support NCQ (Native Command Queuing) Command Support AES 128/256 Support End-to-End Protection and Power Failure Protection Support Secure Boot and Hot-Plug Support 4K LDPC ECC Error Correction Technology

Device Capacity

Capacity	Cash
960GB	1024MB
1920GB	2048MB
3840GB	4096MB
7680GB	8192MB

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Performance

Capacity	Sequential	
	Read (MB/s)	Write (MB/s)
960GB	560	540
1920GB	560	540
3840GB	560	540
7680Gb	560	540

Notes:

The read/write performance is to use F103.27 to test the read/write speed of the solid state disk on the Linux Ubuntu 20.04 platform, and the I/O queue depth QD is 32.

Environment Compliance

Operating Temp.	-25°C to +85°C
Storage Temp.	-55°C to +95°C
Humidity	5% to 95%
Shock	1500G 0-p with Half Sine Wave (0.5ms)
Vibration	20G (80Hz to 2000Hz)

Environmental performance may vary according to the integration method or final integration scenario.

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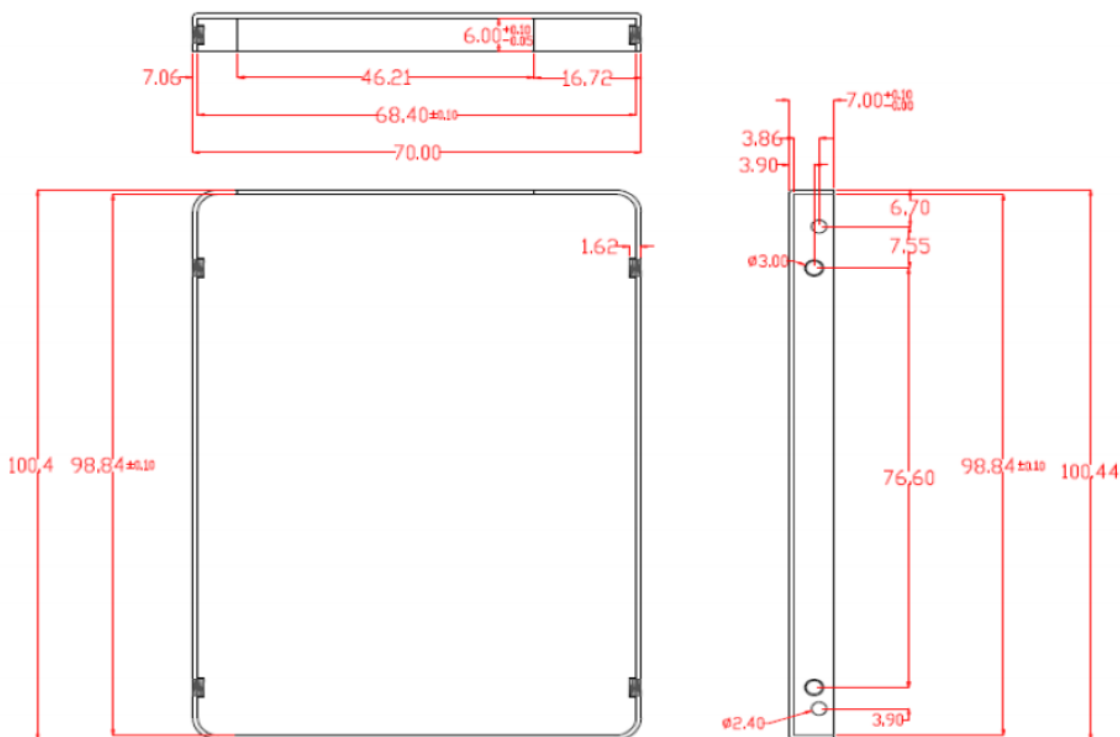
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TBW (Terabytes Written)

MTBF	2,000,000 Hrs	
Capacity	Flash Type	TBW
960GB	YMTC 3D LTC	1000
1920GB	YMTC 3D LTC	2000
3840GB	YMTC 3D LTC	4000
7680Gb	YMTC 3D LTC	8000

Device Dimensions (mm)

2.5 Inch, L100.4mm*W70.0mm*H7.0mm+/-0.15mm(e.g. Figure 1)





ACP-S0003

Industrial 3D TLC SATA Solid State Drive Series

Deliverables

1	Industrial 3D TLC SATA Solid State Drive Series
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Ordering Information

Model Name	Description	Unit
ACP-S0003-960	Industrial SATA 960GB Solid State Drive	1
ACP-S0003-2T	Industrial SATA 1.92TB Solid State Drive	1
ACP-S0003-4T	Industrial SATA 3.84TB Solid State Drive	1
ACP-S0003-8T	Industrial SATA 7.68TB Solid State Drive	1

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