CS410 | SATA | 2.5" SSD

SMART's CS410 SATA 2.5" solid state drives are designed to meet the demand for a cost-effective solution in general-purpose industrial applications, such as POS/Kiosk, embedded automation and lite-IPC, with advanced features that ensure the high level of operational stability and reliability over the lifetime of the SSDs.

Incorporating the 3D NAND technology, the CS410 SATA SSDs utilize an advanced DRAM-less controller design for the best balance in performance and power consumption. Advanced error detection and correction, and thermal management ensure exceptional data integrity and reliability under variable operating environments.

Features & Benefits

- DRAM-less Controller Design
- 3D NAND Technology with High Endurance
- Thermal Throttling Management
- LDPC Error Detection / Correction Circuitry for Superior Data Reliability
- Self-Monitoring Analysis and Reporting Technology (S.M.A.R.T.) Support

Applications

- Edge Computing
- Industrial Automation Control
- POS Systems
- Networking Routers and Switches
- Single-Board Computers for Gaming

Product Family Overview

Form Factor	Capacity	Sequential Performance
2.5" SSD	128GB to 1TB	R 550MB/s, W 450MB/s
M.2 2242 SSD	128GB to 512GB	R 550MB/s, W 500MB/s
M.2 2280 SSD	128GB to 1TB	R 550MB/s, W 450MB/s
mSATA SSD	128GB to 1TB	R 550MB/s, W 450MB/s

Specifications

	CS410 | SATA | 2.5" SSD
NAND Type	TLC
Performance	
Host Interface Rate (maximum)	SATA 3.0 6Gb/s
Capacities	128GB to 1TB
Sequential Read (maximum)	Up to 550 MB/s
Sequential Write (maximum)	Up to 450 MB/s
Random Read (maximum)	Up to 89K IOPS
Random Write (maximum)	Up to 64K IOPS
Reliability	
MTBF	> 1,500,000 hours
Endurance (JEDEC Client Workload)[1]	1TB: 1440 TBW 512GB: 720 TBW 256GB: 360 TBW 128GB: 180 TBW
Error Correction	LDPC
Power	
Input Voltage	VCC: 5 V ± 5%
Environmental	
Shock	1500 g half-sine, 0.5 msec, 1 shock along each axis, X, Y, Z in each direction
Vibration	20G rms 80-2000Hz, 1.52mm 20-80Hz, 3 axis
Operating Temperature	Commercial: 0°C to +70°C
Storage Temperature	-40°C to +85°C
Humidity	40°C, Operation: 90% RH, Storage: 93% RH
Physical	
Length	100 mm
Width	69.85 mm
Height	6.9 mm

[1]Endurance is directly related to the User Specific Workload.

Ordering Information

Part Number	Density
CS410 | SATA | 2.5" SSD **Commercial Operating Temperature (0°C to +70°C)**	
FDS251024TCYC282	1TB
FDS25512GTCYC282	512GB
FDS25256GTCYC282	256GB
FDS25128GTCYC282	128GB

SMART
Modular Technologies
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For more information, please visit: **www.smartm.com**

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Headquarters/North America:

T: (+1) 800-956-7627 • T: (+1) 510-623-1231

F: (+1) 510-623-1434 • E: info@smartm.com

Latin America:

T: (+55) 11 4417-7200 • E: sales.br@smartm.com

Asia/Pacific:

T: (+65) 6678-7670 • E: sales.asia@smartm.com

EMEA:

T: (+44) 0 7826-064-745 • E: sales.euro@smartm.com

Customer Service:

T: (+1) 510-623-1231 • E: customers@smartm.com