

SATA II 3Gb/s SSD



- Super slim thickness of 7mm
- Fully compatible with devices and OS that support the SATA II 3Gb/s standard
- Non-volatile Flash Memory for outstanding data retention
- Built-in ECC (Error Correction Code) functionality and wear-leveling algorithm ensures reliable data transfer
- Advanced Power Shield
- Advanced Garbage Collection
- Hardware Purge and Write Protect
- Supports Transcend's SSD Scope Pro

SSD630 Benefits

Transcend's SSD630 is a SATA II 3Gb/s SSD device built with high performance, quality Flash Memory assembled on a printed circuit board. It features cutting-edge technology to enhance product life and data retention. Designed with multitasking power users in mind, the SSD630 is capable of running many demanding system applications, including specialized multimedia computing and advanced gaming. As a result, SSD630 is the perfect storage device for industrial PCs, Laptops, gaming systems, and handheld devices.

Enhanced Performance

SSD630 is able to offer incredible transfer speeds of up to 260MB/s read and 225MB/s write. This fast speed translates into significantly faster system boot up, application launch speed, data transfers, and overall system responsiveness. Moreover, support for Native Command Queuing (NCQ), increases the performance and efficiency of the SSD630 by optimizing the order in which received read and write commands are executed.

Applications

The SSD630 boasts a super slim thickness of just 7mm to address the size limitations of today's modern Ultrabooks, notebooks, and other thin and light form factor devices. The 7mm SSD630 uses the same SATA connector used on a 2.5" hard disk drive (HDD) thus is a great update for all computers even the industrial PCs. SSD630 not only provides resistance from shock and vibration, but also offers low power consumption and cool, silent operation to greatly benefit notebook users with increased efficiency and longer battery runtime. SSD630 also supports hardware purge which may quickly erase all data with a push of a button or write protect which may prevent any data from being modify.

Built-In Reliability

SSD630 is built with advanced power shield which prevent the SSD from damage during sudden power off or power failure. SSD 630 also utilizes advanced garbage collection algorithm which maintains SSD high performance even after long time operation. To further increase the lifespan of the SSD, built-in wear-leveling and Error Correction Code (ECC) ensure reliable data transfer, while full support of the S.M.A.R.T. command helps detect possible hard drive failures before they occur.

Placement



Dimensions

Side	Millimeters	Inches
A	99.80 ± 0.25	3.929 ± 0.01
B	69.80 ± 0.25	2.748 ± 0.01
C	7.00 ± 0.15	0.276 ± 0.006

Specifications

Environmental Specifications		
Operating Temperature		0 to 70
		- 40 to 85 (Optional)
Storage Temperature		- 40 to 85
Humidity	Operating	0% to 95% (Non-condensing)
	Non-Operating	0% to 95% (Non-condensing)

Physical Specification	
Form Factor	2.5-inch HDD
Storage Capacities	16 GB to 256 GB
Input Voltage	5V ± 5%
Weight	48g
Connector	SATA 7+15 pins combo connector

Performance

Model P/N	Sequential Read*	Sequential Write*	Random Read (4KB QD32)*	Random Write (4KB QD32)*	IOPS Random Read (4KB QD32)**	IOPS Random Write (4KB QD32)**
TS16GSSD630	120	20	65	15	13700	2100
TS32GSSD630	240	40	70	40	14400	3600
TS64GSSD630	260	85	70	65	14600	4100
TS96GSSD630	225	120	70	70	14200	4100
TS128GSSD630	255	150	70	70	14800	4600
TS256GSSD630	260	225	60	15	12600	2700

Note: Maximum transfer speed recorded

* 25 °C, test on ASUS P8H77-M Pro + Intel Core i5, 2GB, Windows[®] 7 with AHCI mode, benchmark utility Crystal DiskMark (version 3.0), copied file 1000MB, unit MB/s

** Random read/write performance based on IOMeter2006 with 4K file size and queue depth of 32 at full size LBA address, unit IOPS

*** The recorded performance is obtained while the SSD is not operating as an OS disk

Power Consumption		
Model P/N / Power Consumption		Typical (mA)
TS16GSSD630	READ	121
	WRITE	207
	IDLE	153
TS32GSSD630	READ	160
	WRITE	237
	IDLE	154
TS64GSSD630	READ	272
	WRITE	278
	IDLE	165
TS96GSSD630	READ	301
	WRITE	422
	IDLE	152
TS128GSSD630	READ	305
	WRITE	452
	IDLE	150
TS256GSSD630	READ	332
	WRITE	569
	IDLE	161

*Tested reads/writes with IOmeter running sequential and idle mode

Reliability	
Data Reliability	Supports 40 bits per 1024 bytes
MTBF	1,000,000 hours
Endurance (TeraBytes Written)	16G: 17.0 (TB) 32G: 35.0 (TB) 64G: 76.0 (TB) 96G: 110.0 (TB) 128G: 175.0 (TB) 256G: 275.0 (TB)

*Note: Based on JEDEC JESD218 & 219A specification, Client

Application Class. And based on the following scenario: Active use:

40°C, 8hrs/day; Retention use: 30°C 1year

Vibration	
Operating	5.0G(peak-to-peak), 5 - 800Hz
Non-Operating	20.0G(peak-to-peak), 5 - 800Hz

*Note: Reference to the IEC 60068-2-6 Testing procedures; Operating-Sine wave, 5-800Hz/1 oct., 1.5mm, 3g, 0.5 hr./axis, total 1.5hrs.

Shock	
Operating	1500G, 0.5ms
Non-Operating	1500G, 0.5ms

SATA II 3Gb/s Industrial SSD



- Super slim thickness of 7mm
- Fully compatible with devices and OS that support the SATA II 3Gb/s standard
- Industrial Wide Temperature (-40 to 85 °C) Non-volatile Flash Memory for outstanding data retention
- Built-in ECC (Error Correction Code) functionality and wear-leveling algorithm ensures reliable data transfer
- Advanced Power Shield
- Advanced Garbage Collection
- Hardware Purge and Write Protect
- Supports Transcend's SSD Scope Pro

Industrial SSD630 Benefits

Transcend's Industrial SSD630I is a SATA II 3Gb/s SSD device built with high performance, quality Flash Memory assembled on a printed circuit board. It features cutting-edge technology to enhance product life and data retention. Designed with multitasking power users in mind, the SSD630I is capable of running many demanding system applications, including specialized multimedia computing and advanced gaming. As a result, SSD630I is the perfect storage device for industrial PCs, Laptops, gaming systems, and handheld devices.

Enhanced Performance

SSD630I is able to offer incredible transfer speeds of up to 260MB/s read and 225MB/s write. This fast speed translates into significantly faster system boot up, application launch speed, data transfers, and overall system responsiveness. Moreover, support for Native Command Queuing (NCQ), increases the performance and efficiency of the SSD630 by optimizing the order in which received read and write commands are executed.

Applications

The SSD630I boasts a super slim thickness of just 7mm to address the size limitations of today's modern Ultrabooks, notebooks, and other thin and light form factor devices. The 7mm SSD630I uses the same SATA connector used on a 2.5" hard disk drive (HDD) thus is a great update for all computers even the industrial PCs. SSD630I not only provides resistance from shock and vibration, but also offers low power consumption and cool, silent operation to greatly benefit notebook users with increased efficiency and longer battery runtime. SSD630I also supports hardware purge which may quickly erase all data with a push of a button or write protect which may prevent any data from being modify.

Built-In Reliability

SSD630I is built with advanced power shield which prevent the SSD from damage during sudden power off or power failure. SSD630I also utilizes advanced garbage collection algorithm which maintains SSD high performance even after long time operation. To further increase the lifespan of the SSD, built-in wear-leveling and Error Correction Code (ECC) ensure reliable data transfer, while full support of the S.M.A.R.T. command helps detect possible hard drive failures before they occur.

Placement



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Side	Millimeters	Inches
A	99.80 ± 0.25	3.929 ± 0.01
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TS32GSSD630I	240	40	70	40	14400	3600
TS64GSSD630I	260	85	70	65	14600	4100
TS128GSSD630I	255	150	70	70	14800	4600
TS256GSSD630I	260	225	60	15	12600	2700

Note: Maximum transfer speed recorded while the SSD is not operating as an OS disk

* 25 , test on ASUS P8H77-M Pro + Intel i5, 2GB, Windows® 7 AHCI mode, Crystal DiskMark (version 3.0), copied file 1000MB, unit MB/s

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