Transcend®
good memories start here

Product Overview
Industrial Products

Solid State Drive

IDE Flash Module
40-pin

Transcend

CFast
CFX600

512GB

SD
2GB
Industrial

Leveraging over 25 years of industrial-grade manufacturing expertise, Transcend has built a great reputation as one of the world's most innovative developers of high quality and reliable industrial-grade memory devices. Continuing research and development investment allows us to create cutting-edge new products for industrial computing applications.

Product Lines

Why Choose Transcend

Guaranteed Quality

Reliable Customization Services

Comprehensive Support System
(strong partnership with key suppliers)

Worldwide Support

Transcend Equals Quality

Transcend qualifies all components and tests all industrial-grade products in every stage of production.
- 100% In-house Development and Manufacturing
- Single-threading and multithreading tests
- All industrial-grade Flash products are tested in High Temperature Dynamic Chamber and pass the four-corner test

Perfect for harsh industrial environments

Our industrial-grade products are specially designed to meet the strict demands of high-end equipment and machines that run at extreme temperatures. Aside from their excellent temperature flexibility, these industrial-grade products are exceptionally resistant to shock, vibration and dust, while consuming less power and maintaining ultra fast data transfer speeds. Their superb compatibility and durability makes them suitable for use in industrial PCs, embedded systems, medical instruments, factory automation systems, network infrastructures and other industrial equipment.

Customized industrial-grade products tailored to your specific demands

Transcend's industrial-grade products target extremely demanding applications in rugged environments in terms of shock, vibration, humidity and temperature. In addition to standard products, we offer customized industrial-grade products to fit your specific application demands. To provide customers with high-quality products which perfectly match the strict requirements of industrial environments, Transcend utilizes its expertise to offer reliable customization services.

- **Fixed BOM Management**
    - Transcend Information System
    - Customized part number
    - PCN (Product Change Notice)

- **Customized Solutions**
    - Hardware
    - Firmware
    - Software

- **Customized Subjects**
    - Customized Sticker and Logo Printing
    - Customized Package Designs
    - Preloaded Device Content
    - Firmware Optimization for specific applications
    - OEM/ODM Services

Industrial PC Applications

Industrial computers (also known as IPCs) are PC-based computer platforms for industrial applications. Our clients include leading vendors of industrial computer equipment, and our products are widely used in factory automation, medical equipment, military applications, data acquisition, banking/ATMs, gaming, transportation, POS/POI, kiosks, vending machines, digital signage, and more.

Automotive	Cash Machines	Cloud Computing	Data Servers	Digital Signage	POS	Vending Machines
Medical Equipment	Military	Tablets/Phones	Panel PCs	Solar Power	Surveillance	Wind Power
DVRs	Embedded Systems	Gaming	Gas-sensing	Hand-held Devices	Traffic Control	Notebooks

Product Features

Key features shown at top of each page

Look for the following icons on each product page to check support for key features such as wide-temperature operation and power-loss protection.

Industrial Temperature
Wide operating temperature ranging from -40°C to 85°C

Advanced Power Shield
(Intelligent Power Shield by request)
Hardware-based
power loss protection

Shock & Vibration
Excellent resistance to
excessive shock and vibration

Zone Protection
Built-in protected area to
secure important data

SSD Scope Pro
Maintain a healthy and efficient SSD

MLC

Features

- Faster load times & lag-free multitasking
- Slim 7mm drive height
- Powerful Transcend controller with ultra-fast MLC flash chips
- Supports TRIM, NCQ, S.M.A.R.T. and firmware updates
- Silent, low-power operation. Resistant to shock and vibration
- Backwards compatible with SATA II (3Gb/s) and SATA I (1.5Gb/s)
- Built-in ECC (Error Correction Code) functionality and Wear-Leveling algorithm ensure reliable data transfer
- Built-in Advanced Power Shield active monitoring circuit prevents data loss in the event of a sudden power outage

● Standard
○ By Request
– Not available

SSD420	–	●	●	–	●
SSD420I	●	●	●	–	●
SSD370	○	●	●	–	●

-40°C   85°C

Industrial: Operating & Storage Temp.

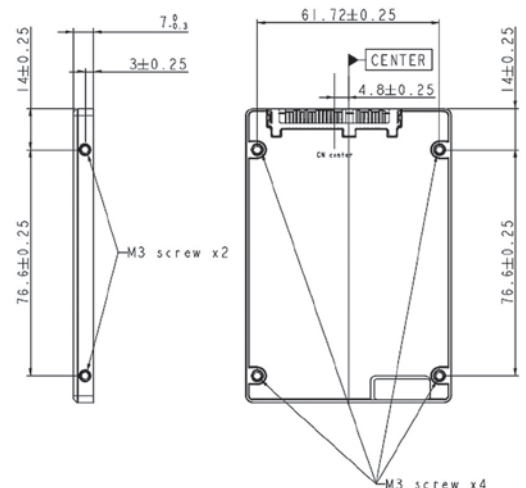## Specifications

Interface	SATA III 6Gb/s (backwards compatible with SATA II/I)
Connection Type	SATA (7+15-pin)
Form Factor	2.5"
Flash Type	Synchronous MLC
Controller	Transcend TS6500
Capacity	32GB/64GB/128GB/256GB/512GB/1TB
Max. Transfer Performance (Varies by density)	SSD420: Seq. Read: 560MB/s, Seq. Write: 460MB/s 　　　　Max. 4k random file read: 75,000 IOPS 　　　　Max. 4k random file write: 75,000 IOPS SSD420I: Seq. Read: 560MB/s, Seq. Write: 460MB/s 　　　　Max. 4k random file read: 75,000 IOPS 　　　　Max. 4k random file write: 75,000 IOPS SSD370: Seq. Read: 560MB/s, Seq. Write: 460MB/s 　　　　Max. 4k random file read: 75,000 IOPS 　　　　Max. 4k random file write: 75,000 IOPS
Operating Voltage	5V±5%
Power Consumption	3.5W (active), 0.35W (idle)
Operating Temp.	Standard: 0°C~70°C Industrial: -40°C~85°C
Storage Temp.	-40°C~85°C
Humidity	0%~95%
Shock	1,500G
Vibration (Hz/G)	5G (Peak-to-Peak), 5Hz to 800Hz (Frequency)
Dimensions	99.8mm x 69.8mm x 7mm
MTBF	1,000,000hrs (SSD420/420I: 1,500,000hrs)
Warranty	3-year Limited

Ordering Information

Series	Model	Capacity
SSD420 Series	TS32GSSD420	32GB
	TS32GSSD420I	32GB
	TS64GSSD420	64GB
	TS64GSSD420I	64GB
	TS128GSSD420	128GB
	TS128GSSD420I	128GB
	TS256GSSD420	256GB
	TS256GSSD420I	256GB
	TS512GSSD420	512GB
	TS512GSSD420I	512GB
	TS1TSSD420	1TB
	TS1TSSD420I	1TB

Series	Model	Capacity
SSD370	TS32GSSD370	32GB
	TS64GSSD370	64GB
	TS128GSSD370	128GB
	TS256GSSD370	256GB
	TS512GSSD370	512GB
	TS1TSSD370	1TB

*Tighten mounting screws with no more than 3.0kg-cm of torque.

2.5" SATA II SSD

MLC **SLC**

Features

- Suitable for wide-temperature applications
- Built-in ECC and Wear-Leveling ensure reliable data transfer
- Supports hot swapping in AHCI mode
- TRIM command and NCQ support
- Advanced S.M.A.R.T. and software monitoring tools
- Built-in Advanced Power Shield active monitoring circuit prevents data loss in the event of a sudden power outage (SSD630)
- Optional support for Write Protect and Hardware Purge security functions

● Standard
○ By Request
– Not available

SSD630	○	●	●	–	○
SSD500	–	–	●	–	○
SSD500I	●	–	●	–	○

-40°C 85°C

Industrial: Operating & Storage Temp.

Specifications

Interface	SATA II 3Gb/s (backwards compatible with SATA I)
Connection Type	SATA (7+15-pin)
Form Factor	2.5"
Flash Type	**MLC** : SSD630, **SLC** : SSD500/500I
Capacity	**MLC** : 16GB/32GB/64GB/128GB/256GB **SLC** : 8GB/16GB/32GB/64GB
Max. Transfer Performance (Varies by density)	**MLC** : Read: 260MB/s, Write: 225MB/s **SLC** : Read: 260MB/s, Write: 240MB/s
Operating Voltage	5V±5%
Power Consumption	4.3W (active), 0.75W (idle)
Operating Temp.	Standard: 0°C~70°C Industrial: -40°C~85°C (optional)
Storage Temp.	-40°C~85°C
Humidity	0%~95%
Shock	1,500G
Vibration (Hz/G)	5G (Peak-to-Peak), 5Hz to 800Hz (Frequency)
Dimensions	SSD500/500I: 100.3mm x 69.85mm x 9.5mm SSD630: 99.8mm x 69.80mm x 7mm
MTBF	1,000,000hrs
Warranty	3-year Limited

Ordering Information

SSD630 MLC	TS16GSSD630	16GB
	TS32GSSD630	32GB
	TS64GSSD630	64GB
	TS128GSSD630	128GB
	TS256GSSD630	256GB
SSD500 Series SLC	TS8GSSD500	8GB
	TS8GSSD500I	8GB
	TS16GSSD500	16GB
	TS32GSSD500	32GB
	TS32GSSD500I	32GB
	TS64GSSD500	64GB

Other Industrial temp. capacities available by request
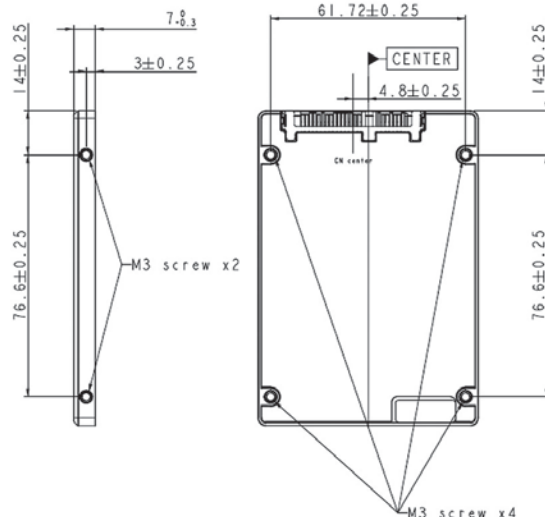
*Tighten mounting screws with no more than 1.0kg-cm (0.07 ft-1bs) of torque.

SATA III M.2 SSD
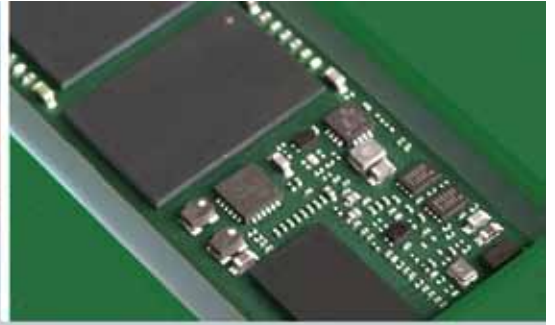
Features

- Fully compliant with the M.2 SATA SSD standard
- Hardware ECC: 40bit/1KB BCH
- Advanced Global Wear-Leveling and Block Management ensure reliable data transfer
- Supports partial, slumber and DEVSLP mode
- Optional support for Hardware Purge and Write Protect function
- DDR3 DRAM cache
- Power Shield to prevent data loss in the event of a sudden power outage

● Standard
○ By Request
- Not available

MTS800	–	–	●	–	–
MTS600	–	–	●	–	–
MTS400	–	–	●	–	–

Specifications

|	
Interface	SATA III 6Gb/s (backwards compatible with SATA II/I)
Connection Type	M.2 module notch B+M
Form Factor	M.2 TYPE 2280-D2-B-M / 2260-D2-B-M / 2242-D2-B-M
Flash Type	Synchronous MLC
Capacity	32GB/64GB/128GB/256GB/512GB
Max. Transfer Performance (Varies by density)	MTS800 Read: 560MB/s, Write: 460MB/s MTS600 Read: 550MB/s, Write: 460MB/s MTS400 Read: 560MB/s, Write: 320MB/s
Operating Voltage	3.3V±5%
Power Consumption	3.10W (active), 0.33W (idle), 2mW (DEVSLP)
Operating Temp.	0°C~70°C
Storage Temp.	-40°C~85°C
Humidity	0%~95%
Shock	1500G, 0.5ms, 3 axis
Vibration (Hz/G)	3G, 5Hz to 800Hz (Operating) 5G, 5Hz to 800Hz (Non-Operating)
Dimensions	22.0mm x 80.0mm x 3.5mm(MTS800) 22.0mm x 60.0mm x 3.5mm(MTS600) 22.0mm x 42.0mm x 3.5mm(MTS400)
MTBF	1,500,000hrs
Warranty	3-year Limited

Ordering Information

MTS800	TS32GMTS800	32GB
	TS64GMTS800	64GB
	TS128GMTS800	128GB
	TS256GMTS800	256GB
	TS512GMTS800	512GB
MTS600	TS32GMTS600	32GB
	TS64GMTS600	64GB
	TS128GMTS600	128GB
	TS256GMTS600	256GB
	TS512GMTS600	512GB
MTS400	TS32GMTS400	32GB
	TS64GMTS400	64GB
	TS128GMTS400	128GB
	TS256GMTS400	256GB

Other capacities available by request

22.00±0.15
(11.0)
MAX 1.35mm
MAX 1.35mm
80±0.15
TOP
TOP SIDE
BOTTOM SIDE
MIN 4.00mm
MIN 5.20mm
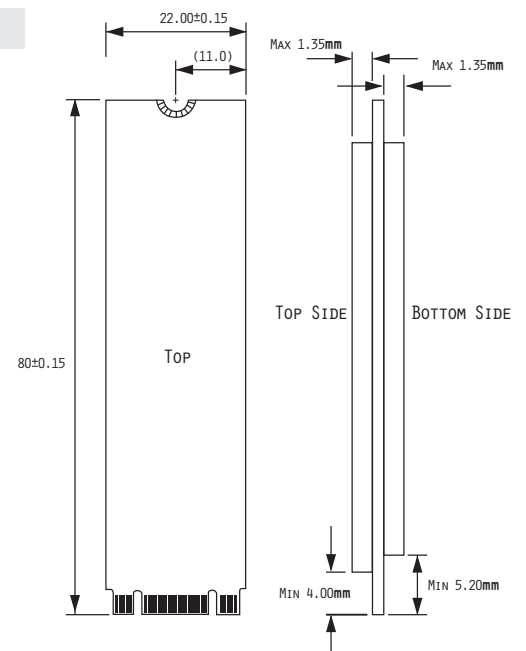
Half-Slim SATA SSD

MLC **SLC**

Features
- Suitable for wide-temperature applications
- On-chip hardware BCH-ECC engine
- Supports AHCI mode, TRIM commands and NCQ
- Supports DEVSLP mode (HSD370/370I)
- Compliant with JEDEC MO-297
- Specifically designed for mobile devices such as tablets and notebooks
- Advanced S.M.A.R.T. and SSD Scope Pro drive health monitoring tools
- Built-in Advanced Power Shield active monitoring circuit prevents data loss in the event of a sudden power outage
- Efficient Global Wear-Leveling and Block Management ensure long-term reliability

● Standard
○ By Request
– Not available

HSD630	○	●	●	–	○
HSD370	○	●	●	–	○
HSD370I	●	●	●	–	○
SSD25H-S	○	○	●	–	○

-40°C   85°C

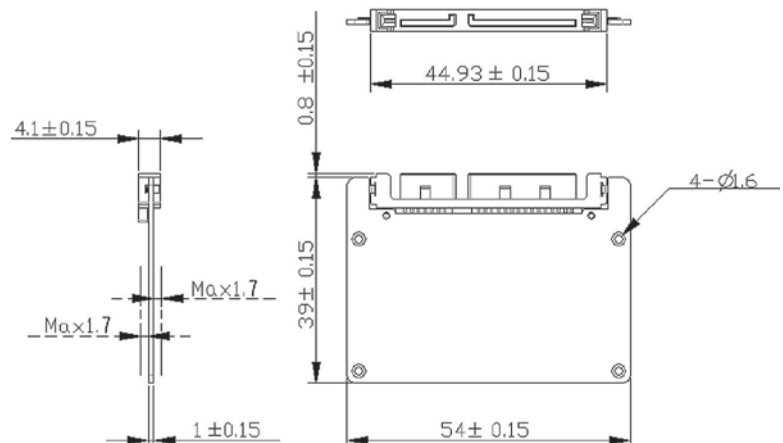Industrial: Operating & Storage Temp.

Specifications

Interface	SATA III 6Gb/s (HSD370/370I, backwards compatible with SATA II/I) SATA II 3Gb/s (HSD630 & SSD25H-S, backwards compatible with SATA I)
Connection Type	SATA (7+15-pin)
Form Factor	Half-Slim MO-297
Flash Type	**MLC** : HSD630,370,370I **SLC** : SSD25H-S
Capacity	SATA III **MLC** : 16GB/32GB/64GB/128GB SATA II **MLC** : 8GB/16GB/32GB/64GB **SLC** : 2GB/4GB
Max. Transfer Performance (Varies by density)	SATA III **MLC** : Read: 550MB/s, Write: 160MB/s SATA II **MLC** : Read: 260MB/s, Write: 80MB/s **SLC** : Read: 95MB/s, Write: 75MB/s
Operating Voltage	5V±5%
Power Consumption (Varies by density)	SATA III: 2.5W (active), 0.5W (idle) SATA II: 1.6W (active), 0.7W (idle)
Operating Temp.	0°C~70°C (Industrial: -40°C~85°C)
Storage Temp.	-40°C~85°C
Humidity	0%~95%
Shock	1,500G, 0.5ms, 3 axis
Vibration (Hz/G)	Operating: 3G (Peak-to-Peak), 5Hz to 800Hz (Frequency)
	Non-Operating: 5G (Peak-to-Peak), 5Hz to 800Hz (Frequency)
Dimensions	54.0mm x 39.8mm x 4.1mm
MTBF	1,500,000hrs
Warranty	3-year Limited

Ordering Information

HSD630 **MLC**	TS8GHSD630	8GB
	TS16GHSD630	16GB
	TS32GHSD630	32GB
	TS64GHSD630	64GB
SSD25H-S **SLC**	TS2GSSD25H-S	2GB
	TS4GSSD25H-S	4GB
HSD370 Series **MLC**	TS16GHSD370	16GB
	TS16GHSD370I	16GB
	TS32GHSD370	32GB
	TS64GHSD370	64GB
	TS128GHSD370	128GB

Industrial temp. capacities available by request

4.1±0.15   44.93 ± 0.15   0.8 ±0.15
Max1.7   Max1.7   39± 0.15   4−Ø1.6
1 ±0.15   54± 0.15

*Tighten mounting screws with no more than 1.0kg-cm (0.07 ft-1bs) of torque.

Half-Slim SATA SSD

Features

- Suitable for wide-temperature applications (industrial versions available upon request)
- On-chip hardware BCH-ECC engine corrects up to 40 bit errors per 1,024 bytes of data
- Built-in Advabced Power Shield active monitoring circuit prevents data loss in the event of a sudden power outage (MSA630 & MSA430I & MSM610 & MSM360)
- Supports Intel® Smart Response Technology (ISRT) and DEVSLP (MSA370 & MSA340)
- Optional support for Write Protect and Hardware Purge security functions
- Supports AHCI mode, TRIM commands and NCQ

● Standard
○ By Request
– Not available

MSM360	○	●	●	–	○
MSA630	○	●	●	–	○
MSM610	○	●	●	–	○
MSA520	○	○	●	–	○
MSA500	○	○	●	–	○
MSA370	○	●	●	–	○

-40°C   85°C

Industrial: Operating & Storage Temp.

Specifications

Interface	SATA III 6Gb/s (MSA370/MSM360 backwards compatible with SATA II/I) SATA II 3Gb/s (MSA630/520/500/MSM610 backwards compatible with SATA I)
Connection Type	mSATA 52-pin
Form Factor	MO-300
Flash Type	MLC : MSA630/370, MSM610/360, SLC : MSA500/520
Capacity	SATA III MLC : 16GB/32GB/64GB/128GB/256GB/512GB SATA II MLC : 16GB/32GB/64GB/128GB SLC : 1GB/2GB/4GB/8GB/16GB/32GB
Max. Transfer Performance (Varies by density)	SATA III MLC : Read: 570MB/s, Write: 450MB/s SATA II MLC : Read: 260MB/s, Write: 80MB/s SLC : Read: 144MB/s, Write: 126MB/s
Operating Voltage	3.3V±5%
Power Consumption (Varies by density)	SATA III: 2.54W (active), 0.5W (idle) SATA II: 1.4W (active), 0.6W (idle)
Operating Temp.	Standard: 0°C~70°C Industrial: -40°C~85°C
Storage Temp.	-40°C~85°C
Humidity	0%~95%
Shock	1,500G, 0.5ms, 3 axis
Vibration (Hz/G)	Operating: 3G (Peak-to-Peak) , 5Hz to 800Hz (Frequency) Non-Operating: 5G (Peak-to-Peak) , 5Hz to 800Hz (Frequency)
Dimensions	SATA III : 50.8mm x 29.85mm x 4.0mm SATA II : 50.8mm x 29.85mm x 3.7mm MSM610 : 26.8mm x 29.85mm x 3.85mm
MTBF	1,000,000hrs
Warranty	3-year Limited

Ordering Information

MSM610 MLC (mSATA Mini SSD)	TS8GMSM610	8GB	
	TS16GMSM610	16GB	
	TS32GMSM610	32GB	
MSM360 MLC	TS128GMSM360	128GB	
MSA630 MLC	TS16GMSA630	16GB	
	TS32GMSA630	32GB	
	TS64GMSA630	64GB	
MSA520 SLC	TS1GMSA520	1GB	
	TS2GMSA520	2GB	
	TS4GMSA520	4GB	
	TS8GMSA520	8GB	

MSA500 SLC	TS1GMSA500*	1GB
	TS2GMSA500	2GB
	TS4GMSA500	4GB
	TS8GMSA500	8GB
MSA370 MLC	TS16GMSA370	16GB
	TS32GMSA370	32GB
	TS64GMSA370	64GB
	TS128GMSA370	128GB
	TS256GMSA370	256GB
	TS512GMSA370	512GB

*Special request item
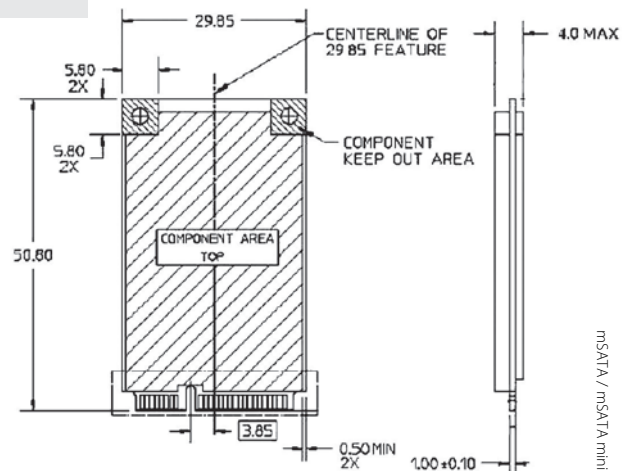
*Tighten mounting screws with no more than 1.0kg-cm (0.07 ft-1bs) of torque.

2.5" PATA SSD

Features

- Suitable for wide-temperature applications (industrial versions available upon request)
- Supports up to Ultra DMA Mode 6, Multi-Word DMA Mode 2, and PIO Mode 4
- Fast system boot-up and smooth software application performance
- Supports security functions, S.M.A.R.T., and monitoring software
- Built-in Advanced Power Shield active monitoring circuit prevents data loss in the event of a sudden power outage
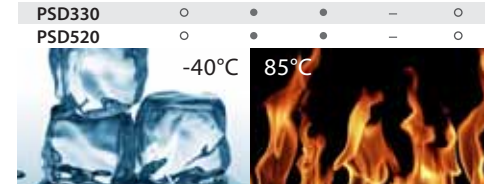- On-chip hardware BCH-ECC engine corrects up to 40 bit errors per 1,024 bytes of data

● Standard
○ By Request
– Not available

PSD330	○	●	●	–	○
PSD520	○	●	●	–	○

-40°C   85°C

Industrial: Operating & Storage Temp.

Specifications

Interface	True IDE
Connection Type	44-pin, 2.0mm pitch
Form Factor	2.5"
Flash Type	MLC : PSD330, SLC : PSD520
Capacity	MLC : 32GB/64GB/128GB SLC : 2GB/4GB/8GB/16GB/32GB/64GB
Max. Transfer Performance (Varies by density)	MLC : Read: 119MB/s, Write: 93MB/s SLC : Read: 118MB/s, Write: 102MB/s
Operating Voltage	5V±5%
Power Consumption	1.3W (active), 0.04W (idle)
Operating Temp.	Standard: 0°C~70°C MLC : -40°C~85°C (optional) SLC : -40°C~85°C (optional)
Storage Temp.	-40°C~85°C
Humidity	0%~95%
Shock	1,500G
Vibration (Hz/G)	20G (Peak-to-Peak), 20Hz to 2000Hz (Frequency)
Dimensions	100.3mm x 69.85mm x 7.4mm
MTBF	1,000,000hrs
Warranty	3-year Limited

Ordering Information

PSD330 MLC	TS32GPSD330	32GB
	TS64GPSD330	64GB
	TS128GPSD330	128GB
PSD520 SLC	TS2GPSD520	2GB
	TS4GPSD520	4GB
	TS8GPSD520	8GB
	TS16GPSD520	16GB
	TS32GPSD520	32GB
	TS64GPSD520	64GB

5.95
11.71
69.85
7.40
100.30
3.95
2.00
10.14
3.00
14.00
90.60
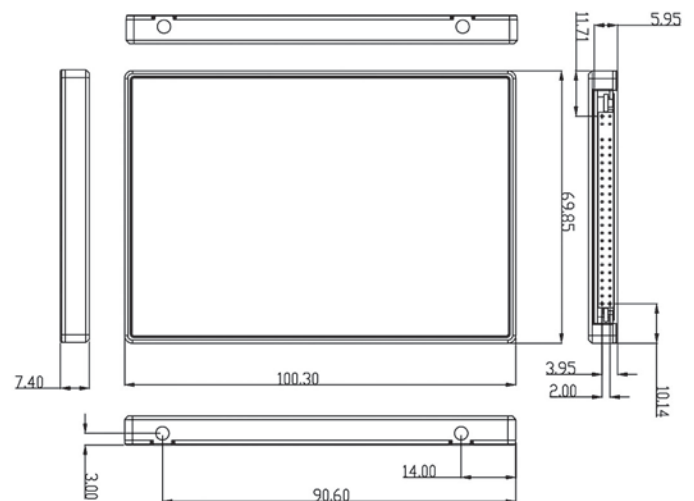
*Tighten mounting screws with no more than 1.0kg-cm (0.07 ft-1bs) of torque.

Half-Slim PATA SSD
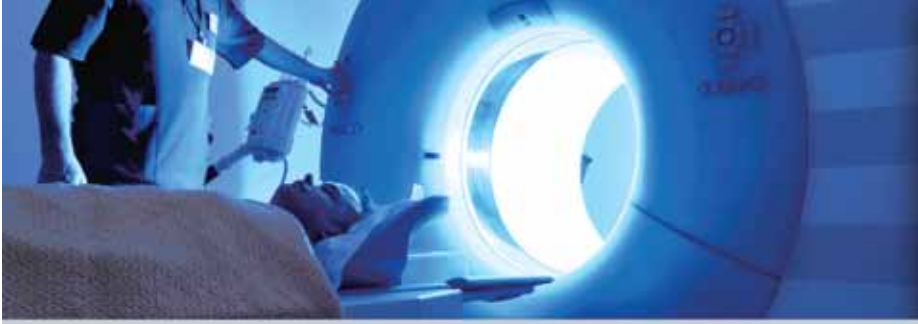
Interface	True IDE
Connection Type	ZIF, 40-pin, 0.5mm pitch
Form Factor	1.8" Half-Slim
Flash Type	**MLC**
Capacity	8GB/16GB/32GB/64GB
Max. Transfer Performance (Varies by density)	Read: 49MB/s, Write: 21MB/s
Operating Voltage	3.3V±5% or 5V±10%
Power Consumption	0.67W
Operating Temp.	0°C~70°C
Storage Temp.	-40°C~85°C
Humidity	0%~95%
Shock	1500G, 0.5ms, 3 axis
Vibration (Hz/G)	20G (Peak-to-Peak), 20Hz to 2000Hz (Frequency)
Dimensions	54mm x 32mm x 3.4mm
MTBF	1,000,000hrs
Warranty	3-year Limited

● Standard
○ By Request
- Not available

PSSD-M	–	–	●	–	○

Features

- Advanced Global Wear-Leveling and Block Management for excellent reliability
- Fully compatible with Parallel-ATA interface
- Supports up to PIO Mode 4, Ultra DMA Mode 5, Multi-Word DMA Mode 2 and PIO Mode 4
- Supports S.M.A.R.T Lifetime Monitor and ATA security commands
- Low power consumption

Ordering Information

TS8GPSSD-M	8GB
TS16GPSSD-M	16GB
TS32GPSSD-M	32GB
TS64GPSSD-M	64GB

1.0" PATA SSD

Interface	True IDE
Connection Type	ZIF, 35-Pin, 0.3mm pitch
Form Factor	1"
Flash Type	**MLC**
Capacity	4GB/8GB/64GB
Max. Transfer Performance (Varies by density)	Read: 30MB/s, Write: 10MB/s
Operating Voltage	3.3V±5%
Power Consumption	0.9W
Operating Temp.	0°C~70°C
Storage Temp.	-40°C~85°C
Humidity	0%~95%
Shock	1500G, 0.5ms, 3 axis
Vibration (Hz/G)	20G (Peak-to-Peak), 20Hz to 2000Hz (Frequency)
Dimensions	40mm x 30mm x 3.8mm
MTBF	1,000,000hrs
Warranty	3-year Limited

● Standard
○ By Request
- Not available

SSD10-M	–	●	●	–	○

Features

- Supports up to Ultra DMA Mode 5, Multi-Word DMA Mode 2, and PIO Mode 4
- Built-in ECC and Wear-Leveling ensure reliable data transfer
- Fully compatible with 1.0-inch hard drive form factor and interface (35-Pin FPC ZIF connector)
- Supports S.M.A.R.T Lifetime Monitor and ATA security commands
- Built-in Intelligent Power Shield active monitoring circuit prevents data loss in the event of a sudden power outage

Ordering Information

TS4GSSD10-M	4GB
TS8GSSD10-M	8GB
TS64GSSD10-M	64GB

eMMC

Features

- Fully compliant with JEDEC e.MMC 4.51 Spec
- Supports HS200 Operation
- Compact size for higher compatibility
- Undergoes comprehensive environmental testing
- Highly reliable MLC Flash
- HW ECC: 53bit / 1KB BCH
- NAND Health Monitor
- Supports on-Site FW update (Vendor Define)
- Delicate design for industrial use

● Standard
○ By Request
– Not available

EMC210	–	–	●	–	–

Specifications

Interface	e.MMC 4.51
Form Factor	BGA-153, pitch 0.5mm (Follow JESD84-C44)
Flash Type	MLC
Capacity	8GB/16GB/32GB
Max. Transfer Performance (Varies by density)	Read up to 140MB/s, Write up to 60MB/s (HS200)
Operating Voltage	VCC: 2.7V~3.6V VCCQ (dual voltage): 1.65V~1.95V or 2.7V~ 3.6V
Operating Temp.	-25°C~85°C
Storage Temp.	-40°C~85°C
Humidity	0%~95%
Shock	500G, 1ms
Vibration (Hz/G)	20G (Peak-to-Peak), 20Hz to 2000Hz (Frequency)
Dimensions	11.5 x 13.0 x 1.0 mm (8/16GB) 11.5 x 13.0 x 1.2 mm (32GB)

Ordering Information

TS8GEMC210	8GB
TS16GEMC210	16GB
TS32GEMC210	32GB
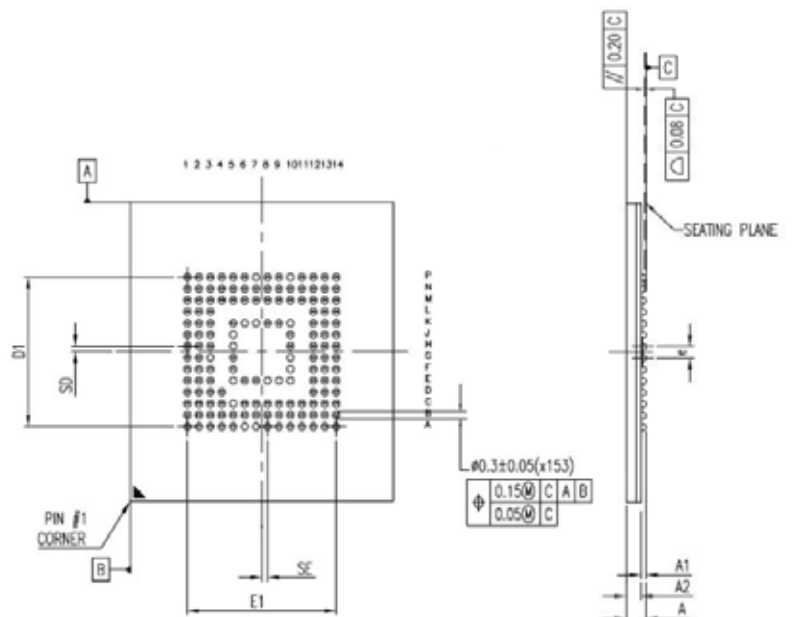
MLC **SLC**

Features

- Suitable for wide-temperature applications (industrial versions available upon request)
- Built-in ECC and Wear-Leveling ensure reliable data transfer
- CFast specification version 2.0/1.1 compliant
- Supports S.M.A.R.T Lifetime Monitor

- ● Standard
- ○ By Request
- – Not available

CFX650	–	●	●	–	○
CFX600	–	●	●	–	○
CFX520	–	●	●	–	○
CFX520I	●	●	●	–	○
CFX500	–	●	●	–	○
CFX500I	●	●	●	–	○

-55°C 100°C

Industrial: Storage Temp.

Specifications

Interface	SATA III 6Gb/s (CFX650/600, backwards compatible with SATA II/I) SATA II 3Gb/s (CFX520/520I/500/500I, backwards compatible with SATA I)
Connection Type	CFast 24-pin
CFast Spec.	CFast 2.0/1.1
Flash Type	**MLC** : CFX650/600, **SLC** : CFX520/520I/500/500I
Capacity	2GB/4GB/8GB/16GB/128GB/256GB/512GB
Max. Transfer Performance (Varies by density)	CFX650: Read 515MB/s, Write 390MB/s CFX600: Read 500MB/s, Write 240MB/s CFX520/520I: Read 95MB/s, Write 85MB/s CFX500/500I: Read 110MB/s, Write 90MB/s
Operating Voltage	3.3V±5%
Power Consumption	1.22W
Operating Temp.	-5°C~70°C (Industrial: -40°C~85°C)
Storage Temp.	-40°C~85°C (Industrial: -55°C~100°C)
Humidity	0%~95%
Shock	1,500G, 0.5ms, 3 axis
Vibration (Hz/G)	3G (Peak-to-Peak), 5Hz to 800Hz (Frequency)
Dimensions	42.8mm x 36.4mm x 3.3mm
MTBF	1,000,000hrs
Warranty	3-year Limited

Industrial

Standard

Ordering Information

CFX650 **MLC**	TS128GCFX650	128GB
	TS256GCFX650	256GB
CFX600 **MLC**	TS128GCFX600	128GB
	TS256GCFX600	256GB
	TS512GCFX600	512GB
CFX520 Series **SLC**	TS4GCFX520	4GB
	TS4GCFX520I	4GB
	TS8GCFX520	8GB
	TS8GCFX520I	8GB
CFX500 Series **SLC**	TS4GCFX500	4GB
	TS8GCFX500	8GB
	TS8GCFX500I	8GB
	TS16GCFX500	16GB

Industrial SD / SDHC / microSDHC Card   `MLC` `SLC`

Features

- Suitable for wide-temperature applications (industrial versions available upon request)
- Built-in ECC and Wear-Leveling ensure reliable data transfer
- Insertion / removal durability: 10,000 cycles
- Mechanical write-protection switch (SD/SDHC/SDXC)
- Supports Copy Protection for Recorded Media (CPRM) for music and
  other commercial media
- SDHC/SDXC Class 10 write performance
- Voltage detect function protects saved data

• Standard ∘ By Request – Not available					
SDHC10I	•	–	•	∘	–
USDC10I	•	–	•	∘	–
SD100I	•	–	•	∘	–
SDHC100I	•	–	•	∘	–
SDHC10M	–	–	•	∘	–
SDXC10M	–	–	•	∘	–
USDC10M	–	–	•	∘	–
SD150	–	–	•	∘	–
SDHC150	–	–	•	∘	–

-40°C   85°C

Industrial: Operating & Storage Temp.

Specifications

Interface	SD 3.0 (backwards compatible with SD 2.0/1.1)
Connection Type	SD/microSD connector
Form Factor	SD/SDHC/microSDHC Flash Card
Flash Type	`MLC` : SDHC10I/USDC10I/SDHC10M/SDXC10M/USDC10M `SLC` : SD100I/SDHC100I/SD150/SDHC150
Capacity	SDHC10I: 8GB/16GB/32GB USDC10I: 8GB/16GB/32GB SDHC/SDXC10M: 8GB/16GB/32GB/64GB USDC10M: 8GB/16GB/32GB SD100I/SDHC100I:128MB/256MB/512MB/1GB/2GB/4GB SD150/SDHC150: 2GB/4GB/8GB
Max. Transfer Performance (Varies by density)	SDHC10I:　　　　　　 Read: 20MB/s, Write: 17MB/s USDC10I:　　　　　　 Read: 20MB/s, Write: 17MB/s SDHC10M/SDXC10M: Read: 20MB/s, Write: 20MB/s USDC10M:　　　　　　Read: 20MB/s, Write: 16MB/s SD100I/SDHC100I:　 Read: 17MB/s, Write: 17MB/s SD150/SDHC150:　　 Read: 20MB/s, Write: 18MB/s
Operating Voltage	2.7V~3.6V
Power Consumption	0.72W
Operating Temp.	SDHC10I/USDC10I/SD100I/SDHC100I: -40°C~85°C SD150/SDHC150/SDHC10M/SDXC10M/USDC10M: -25°C~85°C
Storage Temp.	-40°C~85°C
Humidity	0%~95%
Shock	600G
Vibration (Hz/G)	20G (Peak-to-Peak), 20Hz to 2000Hz (Frequency)
Dimensions	24mm x 32mm x 2.1mm (USDC10I/USDC10M: 11mm x 15mm x 1mm)
MTBF	1,000,000 hrs
Warranty	2-year Limited

Ordering Information

SD100I `SLC`	TS128MSD100I	128MB	**SDHC10I** `MLC`	TS8GSDHC10I	8GB		
	TS256MSD100I	256MB		TS16GSDHC10I	16GB		
	TS512MSD100I	512MB		TS32GSDHC10I	32GB		
	TS1GSD100I	1GB	**USDC10I** `MLC`	TS8GUSDC10I	8GB		
	TS2GSD100I	2GB		TS16GUSDC10I	16GB		
SDHC100I `SLC`	TS4GSDHC100I	4GB		TS32GUSDC10I	32GB		
SDHC10M `MLC`	TS8GSDHC10M	8GB					
	TS16GSDHC10M	16GB					
	TS32GSDHC10M	32GB					
SDXC10M `MLC`	TS64GSDXC10M	64GB					
USDC10M `MLC`	TS8GUSDC10M	8GB					
	TS16GUSDC10M	16GB					
	TS32GUSDC10M	32GB					
SD150 `SLC`	TS2GSD150	2GB					
SDHC150 `SLC`	TS4GSDHC150	4GB					
	TS8GSDHC150	8GB					

Industrial CF Card

Features

- Suitable for wide-temperature applications (industrial versions available upon request)
- Built-in ECC and Wear-Leveling ensure reliable data transfer
- Compliant with CompactFlash specification V4.1 (CF170: V6.0)
- Supports PIO modes 0–6
- Supports Multi-Word DMA modes 0–4 (CF170: 0-2)
- Supports Ultra DMA modes 0–5
- Built-in Advanced Power Shield protects data in the event of a power outage
- Supports S.M.A.R.T

- Standard
∘ By Request
- Not available

CF300	–	●	●	–	∘
CF200I	●	●	●	–	∘
CF220I	●	●	●	–	∘
CF170	–	●	●	–	∘

-55°C 100°C

Industrial: Storage Temp.

Specifications

Interface	PCMCIA / True IDE
Connection Type	CompactFlash, 50-Pin
Form Factor	CompactFlash Card
Flash Type	SLC: CF300/CF220I/CF200I (TS32GCF200I SLC mode) MLC: CF170
Capacity	SLC:128MB/256MB/512MB/1G/2G/4G/8G/16G/32G MLC:4GB/8GB/16GB/32GB/64GB
Max. Transfer Performance (Varies by density)	CF300: Read: 57MB/s, Write: 38MB/s CF220I: Read: 40MB/s, Write: 45MB/s CF200I: Read: 92MB/s, Write: 70MB/s CF170: Read: 90MB/s, Write: 60MB/s
Operating Voltage	3.3V±5% or 5V±10%
Power Consumption	0.76W
Operating Temp.	-25°C~85°C (CF200I/CF220I: -40°C~85°C)
Storage Temp.	-40°C~85°C (CF200I/CF220I: -55°C~100°C)
Humidity	0%~95%
Shock	1500G, 0.5ms, 3 axis
Vibration (Hz/G)	20G (Peak-to-Peak), 20Hz to 2000Hz (Frequency)
Dimensions	42.8mm x 36.4mm x 3.3mm
MTBF	1,000,000hrs (CF200I/220I: 4,000,000hrs)
Warranty	2-year Limited

Ordering Information
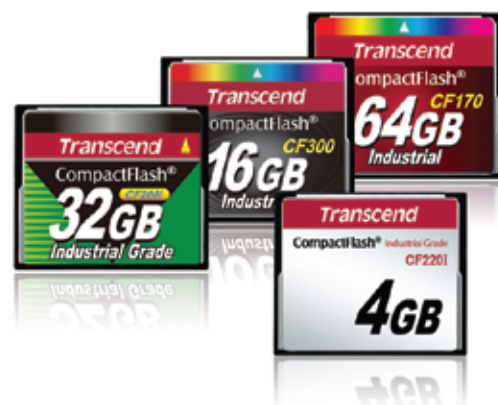
CF300 SLC			CF200I SLC		
	TS128MCF300	128MB		TS128MCF200I	128MB
	TS256MCF300	256MB		TS256MCF200I	256MB
	TS512MCF300	512MB		TS512MCF200I	512MB
	TS1GCF300	1GB		TS1GCF200I	1GB
	TS2GCF300	2GB		TS2GCF200I	2GB
	TS4GCF300	4GB		TS4GCF200I	4GB
	TS8GCF300	8GB		TS8GCF200I	8GB
	TS16GCF300	16GB		TS16GCF200I	16GB
CF220I SLC	TS128MCF220I	128MB		TS32GCF200I(SLC Mode)	32GB
	TS256MCF220I	256MB	CF170 MLC	TS4GCF170	4GB
	TS512MCF220I	512MB		TS8GCF170	8GB
	TS1GCF220I	1GB		TS16GCF170	16GB
	TS2GCF220I	2GB		TS32GCF170	32GB
	TS4GCF220I	4GB		TS64GCF170	64GB
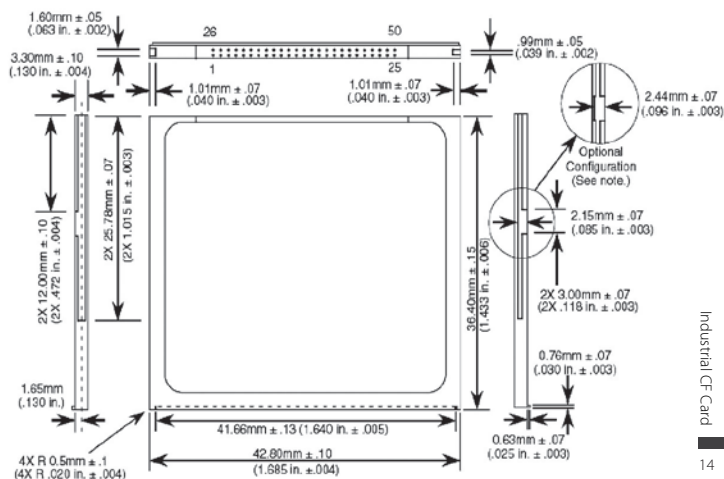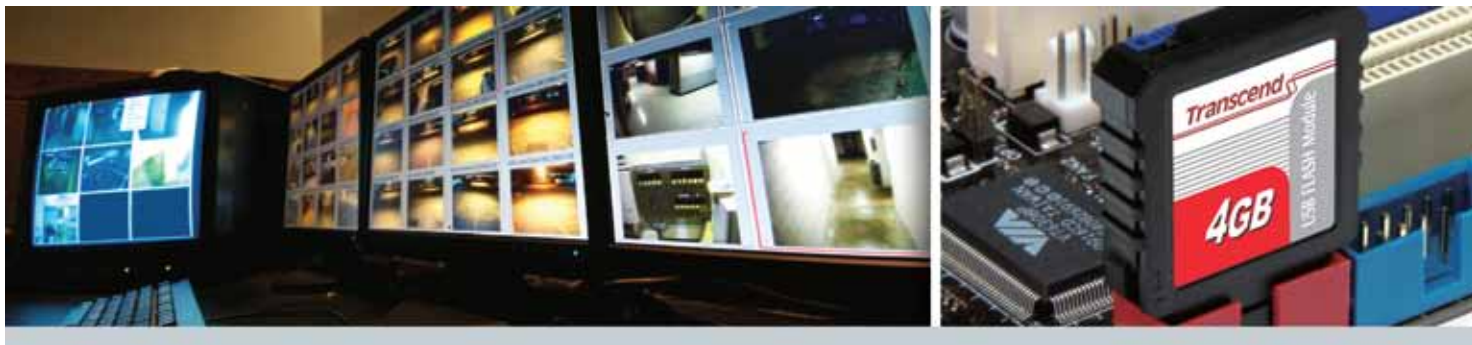
USB Flash Modules

Features

- Suitable for wide-temperature applications (industrial versions available upon request)
- Built-in ECC and Wear-Leveling ensure reliable data transfer
- Hi-Speed USB 2.0 compliant
- Backwards compatible with USB 1.1
- True Plug and Play functionality
- Fully compliant with open industry standards
- Mechanical write-protection switch
- LED transfer activity indicator (for H type)

● Standard
○ By Request
– Not available

UFM-H	–	–	●	–	–
UFM-HI	●	–	●	–	–
UFM-V	○	–	●	–	–

-40°C   85°C

Industrial: Operating & Storage Temp.

Specifications

Interface	USB 2.0 (backwards compatible with USB 1.1)

Connection Type	(H)10-pin USB port:
	    pitch=2.54mm for Normal Type;
	    pitch=2.0mm for Low profile Type
	(V)10-pin USB port: pitch = 2.54mm

Form Factor	Vertical (case) or Horizontal (no case)
Flash Type	SLC
Capacity	512MB/1GB/2GB/4GB
Max. Transfer Performance (Varies by density)	Read: 18MB/s, Write: 16MB/s
Operating Voltage	5V±10%
Power Consumption (Max.)	0.6W
Operating Temp.	0°C~70°C (Industrial: -40°C~85°C)
Storage Temp.	-40°C~85°C
Humidity	0%~95%
Shock	1500G, 0.5ms, 3 axis
Vibration (Hz/G)	20G (Peak-to-Peak), 20Hz to 2000Hz (Frequency)
Dimensions	(UFM-H) 37.80mm x 26.65mm x 9.7mm (UFM-V) 31.80mm x 26.00mm x 7.00mm
MTBF	1,000,000hrs
Waranty	2-year Limited

Ordering Information

UFM-H	TS512MUFM-H	512MB
	TS512MUFM-HI*	512MB
	TS1GUFM-H	1GB
	TS2GUFM-H	2GB
	TS4GUFM-H	4GB
UFM-V	TS512MUFM-V	512MB
	TS1GUFM-V	1GB
	TS2GUFM-V	2GB
	TS4GUFM-V	4GB

*Industrial temp. version available by request

CENTER

26.65±0.15
20.7±0.15
13.325±0.1
2.785±0.1
Ø2
37.8±0.15
3.77±0.1
27.5±0.15
pin 1
2.54±0.1
8.25±0.1
3.23±0.1
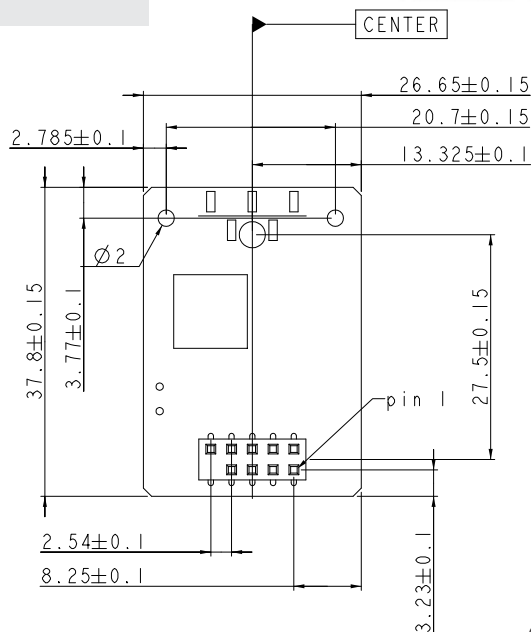
(UFM-H)

*Tighten mounting screws with no more than 1.0kg-cm (0.07 ft-1bs) of torque.

Features

- Suitable for wide-temperature applications (industrial versions available upon request)
- Built-in ECC and Wear-Leveling ensure reliable data transfer
- On-chip hardware 13/24 bit BCH-ECC engines correct up to 24 bit errors per 1,024 bytes of data
- Fully compatible with devices and operating systems that support the SATA III 6Gb/s interface (STM360)
- Supports up to Ultra DMA Mode 5
- Hardware write-protect switch (STM360/STM500-7H)
- Supports AHCI mode, TRIM command and NCQ (STM360/STM500-7H)
- Optional: Supports hardware purge function (STM360/STM500-7H)

● Standard
○ By Request
– Not available

SDOM22V	–	–	●	–	○
STM500-7H	○	–	●	–	○
STM360	○	–	●	–	○

-40°C 85°C

Industrial: Operating & Storage Temp.

Specifications

Interface	SATA III 6Gb/s (STM360), SATA II 3Gb/s (STM500-7H), SATA I 1.5Gb/s (SDOM22V)
Connection Type	SATA (7-pin/22-pin)
Form Factor	SATA Flash Module (V)ertical/(H)orizontal
Flash Type	`SLC`
Capacity	SATA III: 16GB SATA II : 2GB/4GB/8GB SATA I : 1GB/2GB/4GB
Max. Transfer Performance (Varies by density)	SATA III: Read: 130MB/s, Write: 21MB/s SATA II : Read: 130MB/s, Write: 123MB/s SATA I : Read: 47MB/s, Write: 29MB/s
Operating Voltage	SATA III/SATA II: 5V±5%, SATA I: 5V±10%
Power Consumption	SATA III: 0.62W, SATA II: 1.06W, SATA I: 1.5W
Operating Temp.	0°C~70°C (Industrial SLC: -40°C~85°C)
Storage Temp.	-40°C~85°C
Humidity	0%~95%
Shock	1500G, 0.5ms, 3 axis
Vibration (Hz/G)	3G (Peak-to-Peak), 5Hz to 800Hz (Frequency)
Dimensions	40.0mm x 30.0mm x 10.85mm (STM360/STM500-7H) 45.8mm x 7.08mm x 33.0mm (SDOM22V)
MTBF	1,000,000hrs
Warranty	2-year Limited

Ordering Information

STM360	TS16GSTM360	16GB
STM500-7H	TS2GSTM500-7H	2GB
	TS4GSTM500-7H	4GB
	TS8GSTM500-7H	8GB
SDOM22V	TS1GSDOM22V	1GB
	TS2GSDOM22V	2GB
	TS4GSDOM22V	4GB

40± 0.1

30± 0.1
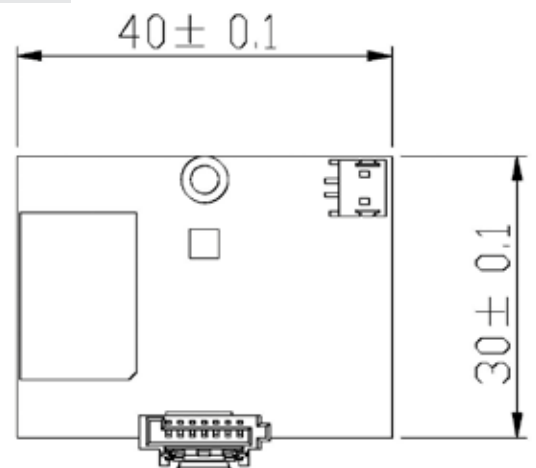
(STM500-7H)
*Tighten mounting screws with no more than 1.0kg-cm (0.07 ft-1bs) of torque.

PATA Flash Modules

Features

- Suitable for wide-temperature applications (industrial versions available upon request)
- Built-in ECC function assures high data transfer reliability
- Enhanced Wear-Leveling algorithm extends product life
- Fully compatible with devices and operating systems that support the IDE/PATA
  interface standard
- Supports S.M.A.R.T Lifetime Monitor
- PTM510: Supports up to PIO Mode 4 & Ultra DMA Mode 5 and Multi-Word DMA Mode 2
- PTM510: Enhanced Power regulator with thermal shutdown and current limit protection

- Standard
○ By Request
- Not available

DOM44H	○	–	●	–	○
DOM40V	○	–	●	–	○
PTM510-40V	○	●	●	–	○
DOM44V	○	–	●	–	○
PTM510-44V	○	●	●	–	○
PTM520	○	●	●	–	○
PTM720	○	●	●	–	○

-40°C   85°C

Industrial: Operating & Storage Temp.

Specifications

Interface	True IDE
Connection Type	44-pin, pitch=2.00mm; 40-pin, pitch=2.54mm
Form Factor	IDE Flash Module (V)ertical/(H)orizontal
Flash Type	SLC
Capacity	128MB/256MB/512MB/ 1GB/2GB/4GB/8GB/16GB
Max. Transfer Performance (Varies by density)	Read: 57MB/s, Write: 38MB/s
Operating Voltage	3.3V±5% or 5V±10%
Power Consumption	0.9W
Operating Temp.	0°C~70°C (Industrial: -40°C~85°C)
Storage Temp.	-40°C~85°C
Humidity	0%~95%
Shock	1500G, 0.5ms, 3 axis
Vibration (Hz/G)	20G (Peak-to-Peak), 20Hz to 2000Hz (Frequency)
Dimensions	61.0mm x 27.1mm x 7.1mm(PTM510-40V/DOM40V/PTM520) 52.0mm x 29.5mm x 7.2mm(PTM510-44V/PTM720/DOM44V) 45.0mm x 28.0mm x 6.0mm(DOM44H)
MTBF	1,000,000hrs
Warranty	2-year Limited

PTM720

PTM520

DOM44H

▲
**Foolproof directions
can be customized**

Ordering Information

DOM44H	TS128MDOM44H-S	128MB	PTM510 40V	TS2GPTM510-40V	2GB
	TS256MDOM44H-S	256MB		TS4GPTM510-40V	4GB
	TS512MDOM44H-S	512MB		TS8GPTM510-40V	8GB
	TS1GDOM44H-S	1GB		TS16GPTM510-40V	16GB
	TS2GDOM44H-S	2GB	DOM44V	TS128MDOM44V-S	128MB
	TS4GDOM44H-S	4GB		TS256MDOM44V-S	256MB
DOM40V	TS128MDOM40V-S	128MB		TS512MDOM44V-S	512MB
	TS256MDOM40V-S	256MB		TS1GDOM44V-S	1GB
	TS512MDOM40V-S	512MB		TS2GDOM44V-S	2GB
	TS1GDOM40V-S	1GB		TS4GDOM44V-S	4GB
	TS2GDOM40V-S	2GB	PTM510 44V	TS2GPTM510-44V	2GB
	TS4GDOM40V-S	4GB		TS4GPTM510-44V	4GB
PTM520	TS512MPTM520	512MB		TS8GPTM510-44V	8GB
PTM720	TS4GPTM720	4GB			

(PTM510-40V/DOM40V)

PATA Flash Modules

USB Flash Drives
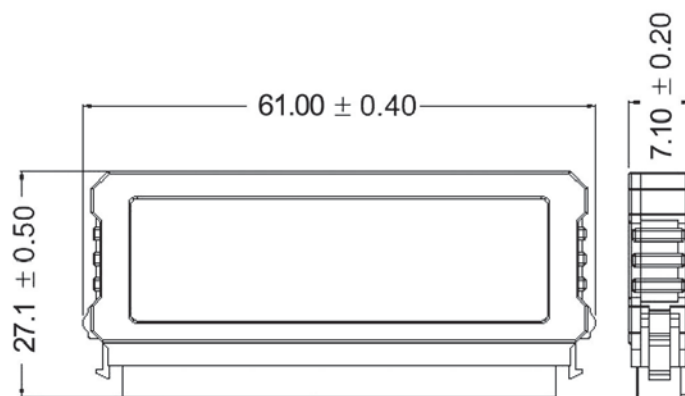
Features

- Gloss finish with contoured edges
- Made with high durability SLC / MLC flash memory
- Efficient Global Wear-Leveling and Block Management ensure excellent long-term reliability
- Ideal for frequent-use applications
- Preloaded with AES encryption software(JF620)

● Standard
○ By Request
– Not available

JF170	–	–	●	–	–
JF600	–	–	●	–	–
JF620	–	–	●	–	–
JF750K	–	–	●	–	–

Specifications

Interface	USB 2.0 / USB 3.0
Connection Type	USB 2.0(JF170/600/620) / USB 3.0(JF750K) A-Type Plug
Flash Type	MLC : JF600/620/750K, SLC : JF170
Capacity	JF170: 512MB/1GB/2GB/4GB/8GB JF600/620: 4GB/8GB/16GB/32GB/64GB JF750K: 16GB/32GB/64GB
Max. Transfer Performance (Varies by density)	JF170: Read: 29MB/s, Write: 21MB/s JF600/620: Read: 32MB/s, Write: 18MB/s JF750K: Read: 130MB/s, Write: 40MB/s
Operating Voltage	5V±10%
Power Consumption	1.1W (max. active), 0.4W (idle)
Operating Temp.	0°C~70°C
Storage Temp.	-20°C~75°C
Humidity	0%~95%
Shock	1,500G, 0.5ms, 3 axis
Vibration (Hz/G)	3G (Peak-to-Peak), 5Hz to 800Hz (Frequency)
Dimensions	60.9mm x 19.3mm x 8.5mm(JF170/600/620) 69.5mm x 19.8mm x 8.8mm(JF750K)
MTBF	1,000,000hrs
Warranty	Limited Lifetime

JF170   JF750K

JF600   JF620

Ordering Information

JF170 SLC		
	TS512MJF170	512MB
	TS1GJF170	1GB
	TS2GJF170	2GB
	TS4GJF170	4GB
	TS8GJF170	8GB

JF600 MLC		
	TS4GJF600	4GB
	TS8GJF600	8GB
	TS16GJF600	16GB
	TS32GJF600	32GB
	TS64GJF600	64GB

JF620 MLC		
	TS4GJF620	4GB
	TS8GJF620	8GB
	TS16GJF620	16GB
	TS32GJF620	32GB
	TS64GJF620	64GB

JF750K MLC		
	TS16GJF750K	16GB
	TS32GJF750K	32GB
	TS64GJF750K	64GB

Industrial Memory Modules

Features

- Suitable for wide-temperature applications (industrial versions available upon request)
- Extra-thick 30u" gold-plated contact pins
- Industrial grade capacitors ensure voltage stability
- Stable operation in extreme temperatures (-40°C to 85°C)
- JEDEC compliant PCB design ensures multi-platform compatibility
- 100% tested for performance and reliability
- Ideal for non-stop, 24/7 applications
- Conformal coating for protection from environmental contaminants(available by request)

	Standard By Request Not available					
DDR2		●	–	●	–	–
DDR3		●	–	●	–	–

-40°C 85°C

Operating Temp.

Specifications DDR3

Module Type	DDR3 LONG DIMM/SO-DIMM
Frequency	1333MHz / 1600MHz
Function	Non-ECC / ECC Unbuffered
Pin Count	240pin(LONG) / 204pin(SO)
Capacity	1GB/2GB/4GB/8GB
DRAM Configuration	128Mx8/256Mx8/512Mx8
Timing	9-9-9 / 11-11-11
Voltage	1.35 / 1.5V
Rank Number	1 Rank / 2 Ranks
PCB Height	1.18 Inches
Operating Temp.	-40°C~85°C
Warranty	Limited Lifetime

ENERGY CONSUMPTION **-20%**

Low Voltage DIMMs

Standard DIMMs
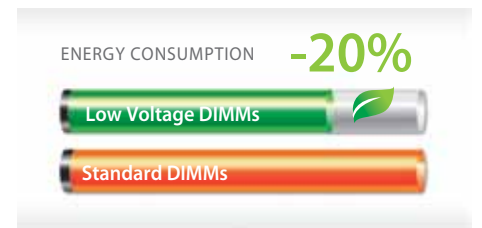
1.35V provide energy savings of up to 20%

Specifications DDR2

Module Type	DDR2 LONG DIMM / SO-DIMM
Frequency	533MHz/667MHz/800MHz
Function	Non-ECC / ECC Unbuffered Memory
Pin Count	240(LONG) / 200 pin(SO)
Capacity	512MB/1GB/2GB
DRAM Configuration	64Mx8/128Mx8
Timing	4-4-4 / 5-5-5 / 6-6-6
Voltage	1.8V
Rank Number	1 Rank / 2 Ranks
PCB Height	1.18 Inches
Operating Temp.	-40°C~85°C
Waranty	Limited Lifetime

Scan the QR code
for Ordering Information
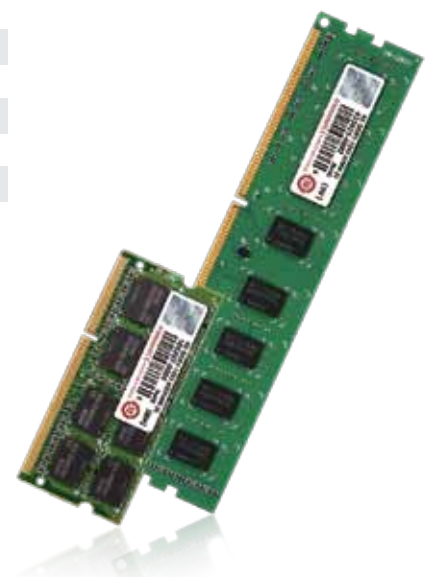
Memory Modules for Server Application

Features

- Higher memory capacity with 8 DIMM per channel (FB-DIMM)
- 100% tested for reliability and quality
- Stable signal integrity at high frequency operation
- 1.35 Voltage at rated speed (DDR3L)
- Meets JEDEC standards & supports ECC function
- Conformal coating for protection from environmental contaminants (available by request)

	Standard ● By Request ○ Not available –				
DDR	○	–	●	–	–
DDR2	○	–	●	–	–
DDR3	○	–	●	–	–
DDR4	○	–	●	–	–

Specifications DDR4 / DDR3

	DDR4	DDR3
Module Type	DDR4	DDR3
Frequency	2133MHz	1066MHz/1333MHz/1600MHz/1866MHz
Function	ECC Unbuffered/Registered	ECC Unbuffered/Registered
Pin Count	288pin(LONG) / 260pin(SO)	240pin(LONG) / 204pin(SO)
Capacity	4GB/8GB/16GB/32GB	1GB/2GB/4GB/8GB/16GB/32GB
DRAM Configuration	512Mx8/1Gx4	128Mx8/256Mx4/256Mx8 512Mx4/512Mx8/1Gx4/2Gx4
Timing	15-15-15	7-7-7 / 9-9-9 / 11-11-11 / 13-13-13
Voltage	1.2V	1.35V /1.5V
Rank Number	1 Rank / 2 Ranks	1Rank / 2 Ranks / 4 Ranks
PCB Height	1.23 Inches	0.74 Inches / 1.18 Inches
Operating Temp.	0℃~85℃	0℃~85℃
Warranty	Limited Lifetime	Limited Lifetime

Onboard thermal sensor
ECC/Registered-DIMM only

Ideal for cloud computing and virtualization

Specifications DDR2 / DDR

	DDR2	DDR
Module Type	DDR2	DDR
Frequency	400MHz/533MHz/667MHz/800MHz	266MHz/333MHz/400MHz
Function	ECC Unbuffered/Registered	ECC Unbuffered/Registered
Pin Count	240pin	184pin
Capacity	512MB/1GB/2GB/4GB	256MB/512MB/1GB
DRAM Configuration	64Mx8/128Mx4/128Mx8/256Mx4	32Mx8/64Mx4/64Mx8/128Mx4
Timing	3-3-3 / 4-4-4 / 5-5-5 / 6-6-6	2.5-2.5-2.5 / 3-3-3
Voltage	1.8V	2.6V
Rank Number	1 Rank / 2 Ranks	1 Rank / 2 Ranks
PCB Height	1.18 Inches	1.2 Inches
Operating Temp.	0℃~85℃	0℃~85℃
Warranty	Limited Lifetime	Limited Lifetime

Scan the QR code
for Ordering Information

Advanced Functions

SSD Scope Pro

Transcend SSD Scope Pro is an advanced diagnostic and maintenance tool to help keep your SSD running fast, clean, and error-free.

Drive Info
Displays standard drive information and quick overview of SSD health

Block Info
View number of valid spare blocks, new bad blocks, and varied blocks

Read/Write
Real-time graphical display of read/write operations between SSD and host

System Health
Displays SSD health history and perform quick or full diagnostic scan

Erase Count
Monitors minimum, average, maximum, and total erase count

Secure Erase
Guarantees the permanent removal of all deleted data on the drive

* SSD Scope Pro does not support all Transcend Industrial SSD models.
  Please contact Transcend staff for software support.

Device Sleep Mode

DevSleep saves power by allowing the host device to completely power off the SATA interface when not in use while maintaining a fast response time of less than 20ms, offering instant-on capabilities akin to a smartphone.

AES (Advanced Encryption Standard)

The Advanced Encryption Standard (AES) is a symmetric-key encryption standard adopted by the U.S. National Institute of Standards and Technology (NIST) to safeguard confidential electronic data. Each cipher has a 128-bit block size, with key sizes of 128, 192 and 256 bits. The AES is now widely implemented in software and hardware.

ISO/TS 16949: 2009 Certification

Transcend recently acquired the ISO/TS 16949:2009 certification, which demonstrates Transcend's continuous improvement in quality management. Transcend employs innovative techniques in the design, development and manufacture of its products in order to satisfy the strict product quality needs and requirements of the automotive industry.

With the certification of ISO/TS 16949:2009, customers have additional assurance that Transcend conforms to international standards and can be trusted to provide the global automotive market with products of the highest quality.
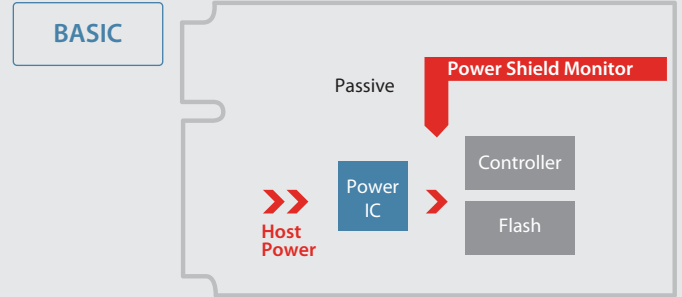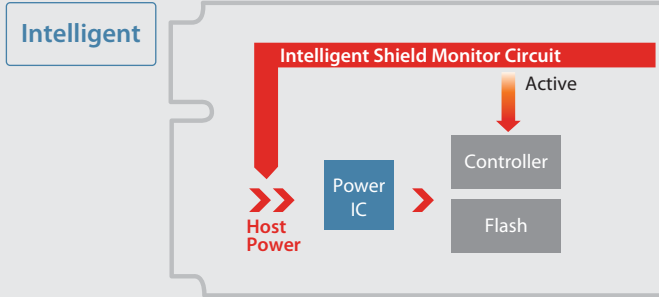
Comparison Table

*-40°C~85°C ● standard ○ optional

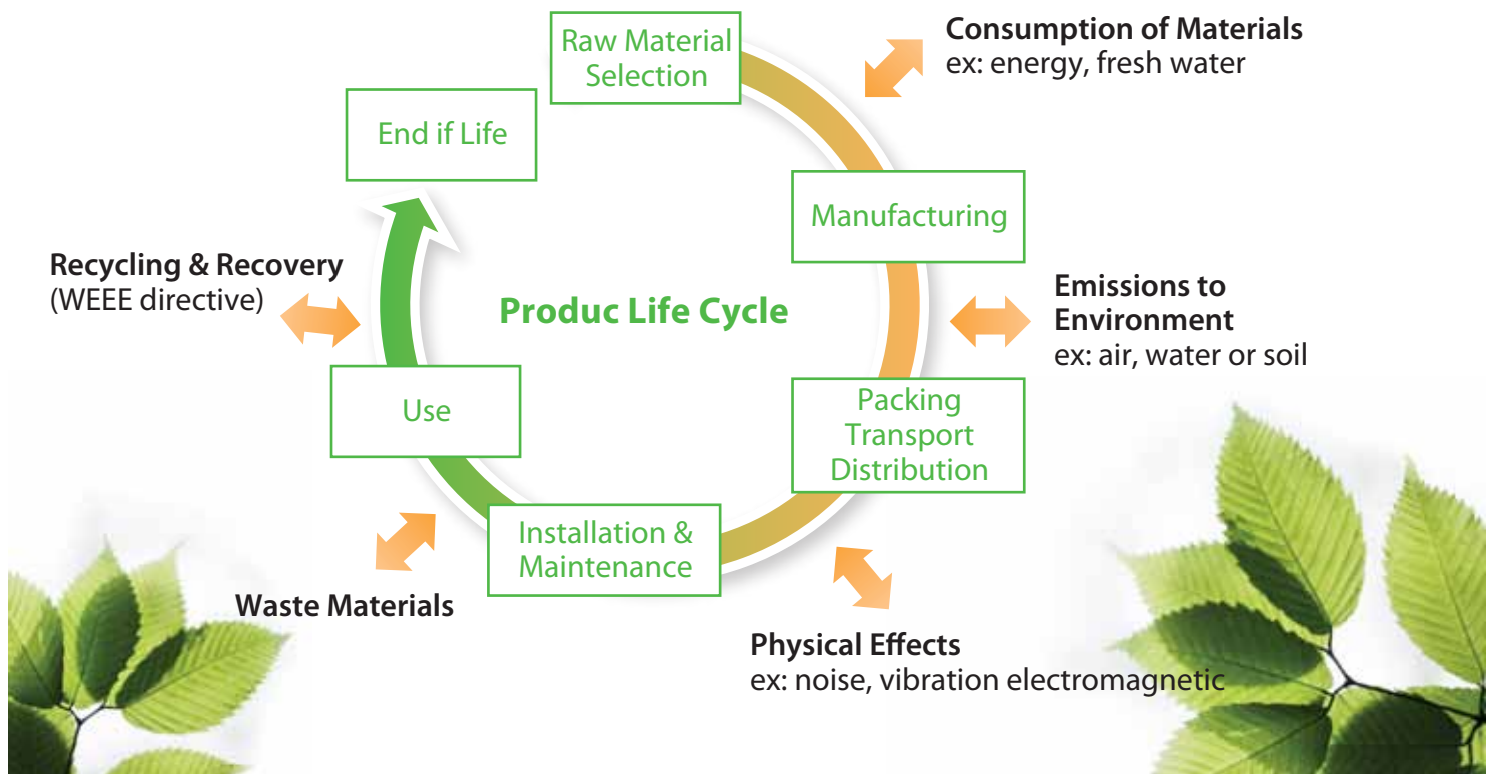| Interface	PATA				CF		SD		USB
Model	2.5" PATA SSD	Half-Slim PATA SSD	1.0" PATA SSD	IDE Flash Modules	CF Card	I-Temp CF Card	SD Card	I-Temp SD/SDHC Card	USB Flash Modules
MLC Flash	●	●	●		●				●
SLC Flash	●	○	○	●	●	●	●	●	●
TRIM & NCQ Support									
Intelligent Power Shield	●		●	● (PTM510)	●	●			
S.M.A.R.T.	●	●	●	●	●	●			
Security Commands	●	●	●	●	○	●	●	●	
Hardware Purge									
Industrial Temperature*	○		○	○	●	●	○	●	○

Intelligent Power Shield

Intelligent Power Shield (IPS) is mainly designed for industrial use. With super capacitors, IPS can prolong the amount of time for the SSD controller to complete write commands and protect the data from corruption in the event of sudden power failure.

1. IPS keeps more data volume written into flash during the event of sudden power loss.

2. After the SSD enters Write Protect mode, IPS enables capacitors with fast discharging to achieve better system compatibility.

Intelligent

Intelligent Shield Monitor Circuit

Active

Host Power → Power IC → Controller / Flash

BASIC

Passive

Power Shield Monitor

Host Power → Power IC → Controller / Flash

Transcend Environmental Technology

To minimize the impact our products have on the environment during their life cycle, Transcend has developed several environmentally-conscious manufacturing techniques, such as using low profile PCBs, new eco-friendly and reduced-size packaging materials, hazardous substance elimination, and many more.

Produc Life Cycle

Raw Material Selection

End if Life

Manufacturing

Recycling & Recovery (WEEE directive)

Emissions to Environment
ex: air, water or soil

Use

Packing Transport Distribution

Consumption of Materials
ex: energy, fresh water

Installation & Maintenance

Waste Materials

Physical Effects
ex: noise, vibration electromagnetic

Comparison Table

*-40°C~85°C ● standard ○ optional

Interface	SATA						eMMC
Model	M.2 SATA III 6Gb/s SSD	2.5" SATA SSD	Half Slim SATA SSD	mSATA/mSATA mini SSD	CFast Card	SATA Flash Modules	eMMC
MLC Flash	●	●	●	●	○	●	●
SLC Flash		●	●	●	●	●	
TRIM & NCQ Support	●	●	●	●		● (STM500)	
Intelligent Power Shield		○					
S.M.A.R.T.	●	●	●	●	●	●	
Security Commands	●	●	●	●	●	●	●
Hardware Purge		○	○	○	○	○ (STM500)	
Industrial Temperature*		○	○	○	○	○	

Transcend®
good memories start here

Custom orders welcome!

Please feel free to contact us with any special requests you might have. Our skilled team of expert engineers will gladly work with you to create a customized solution tailored to your specific application.

TAIWAN
No. 70, XingZhong Rd., NeiHu Dist. Taipei, Taiwan, R.O.C.
Tel: +886-2-2792-8000, Fax: +886-2-2793-2222
E-mail: sales-tw@transcend-info.com

LOS ANGELES
1645 North Brian Street, Orange, CA 92867, U.S.A.
Tel: +1-714-921-2000, Fax: +1-714-921-2111
E-mail: sales-us@transcend-info.com

MARYLAND
10320 Little Patuxent Parkway, Suite 808
Columbia, MD 21044, U.S.A.
Tel: +1-410-689-4900, Fax: +1-410-715-1727
E-mail: sales-us@transcend-info.com

MIAMI
7200 Corporate center Drive, Suite 409,
Miami, Florida 33126, U.S.A.
Tel: +1-305-421-0951, Fax: +1-305-418-8796
E-mail: sales-us@transcend-info.com

SILICON VALLEY
2350 Mission College Blvd. STE 1050,
Santa Clara CA 95054, U.S.A.
Tel: +1-408-454-4085, Fax: +1-408-970-9211
E-mail: sales-us@transcend-info.com

GERMANY
Flughafenstrasse 52b, 22335 Hamburg, Germany
Tel: +49-40-538-907-0, Fax: +49-40-538-907-90
E-mail: sales-de@transcend-info.com

THE NETHERLANDS
Cairostraat 40 , 3047 BC Rotterdam, The Netherlands
Tel: +31-10-298-8500, Fax: +31-10-298-8599
E-mail: sales-nl@transcend-info.com

UNITED KINGDOM
First Floor, Hemel One, Boundary Way, Hemel Hempstead, HP2 7YU, UK
Tel: +44-1442-838-280, Fax: +44-1442-264-598
E-mail: sales-uk@transcend-info.com

JAPAN
1-8-5, Kuramae, Taito-ku Tokyo, 111-0051, Japan
Tel: +81-3-5820-6000, Fax: +81-3-5820-6012
Email: sales-jp@transcend-info.com

KOREA
12th Floor, CBS Bldg., 917-1, Mok-1dong,
Yangcheon-gu, Seoul, Korea 158-701
Tel: +82-2-782-8088, Fax: +82-2-782-8089
E-mail: sales-kr@transcend-info.com

BEIJING, CHINA
A15, E-Wing Center, No.113 Zhi Chun St,
Haidian District, Beijing, China 100086
Tel: +86-10-8265-9969
Fax: +86-10-8265-0677
E-mail: sales@transcendchina.com

SHANGHAI, CHINA
3F, Kaixuan City Industrial Park,
No. 1010, Kaixuan Road, Shanghai, China 200052
Tel: +86-21-6161-9388, Fax: +86-21-6161-9303
E-mail: sales@transcendchina.com

SHENZHEN, CHINA
Room 1603, Tower 1, Kerry Plaza, No 1, Zhongxin Si Road,
Futian CBD, Shenzhen, China 518048
Tel: +86-755-2598-7200, Fax: +86-755-2598-7270
E-mail: sales@transcendchina.com

HONG KONG, CHINA
Unit 17-18, 10/F., Nan Fung Commercial Centre,
19 Lam Lok St., Kowloon Bay, Hong Kong
Tel: +852-2331-8929, Fax: +852-2331-2987
E-mail: sales-hk@transcend-info.com

www.transcend-info.com