

## SATA III M.2 Solid State Drive M.2 SSD 400S

Transcend's SATA III 6Gb/s M.2 SSD 400S boasts ultra compact dimensions to address the high performance needs and strict size limitations of small form factor devices, best suited for Ultrabooks and thin, light notebooks. Featuring a powerful controller, exceptional transfer speeds, and MLC NAND flash memory, the M.2 SSD 400S easily handles everyday computing tasks as well as demanding multimedia applications, delivering steadfast reliability.



### Perfect for your Ultrabook

Compliant with all M.2 form factors from Type 2242, 2260, to 2280, Transcend's MLC M.2 SSDs are perfect for use in Ultrabooks and lightweight notebooks. Measured at just 42mm in length, the M.2 SSD 400S makes for an easy upgrade to your computer, taking up little space while giving it a much needed energy boost.



### Superior transfer speeds

Transcend's M.2 SSD 400S reaches incredible read and write speeds of up to 500MB/s and 450MB/s. When used as a cache, the M.2 SSD 400S provides 1.5 times faster boot time than conventional hard drives.



#### Store more in less space

The M.2 form factor enables expansion and integration of functions onto a single form factor module solution. M.2 SSDs include a smaller form factor but with larger capacities than that of mSATA and half-slim SSDs.





# SATA III M.2 Solid State Drive M.2 SSD 400S

### Features

- · Space-saving M.2 Type 2242 form factor
- Up to 512GB storage capacity
- Up to 500 MB/s read; 450 MB/s write
- MLC NAND flash memory and DDR3 DRAM cache
- Supports DevSleep ultra low power state, S.M.A.R.T., TRIM, and NCQ commands

### Transcend SSD

Transcend SSD Scope is advanced, user-friendly software that makes it easy to ensure your Transcend SSD remains healthy, and continues to run fast and error-free by determining the condition and optimizing the performance of your drive.

SSD Scope Software

### Specifications

| Warranty                             | Three-year Limited Warranty                                                |
|--------------------------------------|----------------------------------------------------------------------------|
| Certificate                          | CE/FCC/BSMI                                                                |
| Warranty                             |                                                                            |
| Note                                 | Speed may vary due to host hardware, software, usage and storage capacity. |
| Drive Writes Per Day<br>(DWPD)       | 2 (3 yrs)                                                                  |
| Terabytes Written (Max.)             | 1,100 TB                                                                   |
| Mean Time Between Failures<br>(MTBF) | 1,500,000 hour(s)                                                          |
| (lOmeter, max.)                      | Write: 70,000 IOPS                                                         |
| 4K Random Read/Write                 | Read: 70,000 IOPS                                                          |
| (CrystalDiskMark, max.)              | Write: 450 MB/s                                                            |
| Sequential Read/Write                | Read: 500 MB/s                                                             |
| Performance                          |                                                                            |
| Operating Voltage                    | 3.3V±5%                                                                    |
| Operating Temperature                | 0°C (32°F) ~ 70°C (158°F)                                                  |
| Operating Environmer                 | nt                                                                         |
| Capacity                             | 32 GB/64 GB/128 GB/256 GB/512 GB                                           |
| Flash Type                           | MLC NAND flash                                                             |
| Storage                              |                                                                            |
| Bus Interface                        | SATA III 6Gb/s                                                             |
| Interface                            |                                                                            |
| Weight (Max.)                        | 5 g (0.18 oz)                                                              |
| Dimensions (Max.)                    | 42.0 mm x 22.0 mm x 3.58 mm (1.65" x 0.87" x 0.14")                        |
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### **Ordering Information**

| 0     |               |
|-------|---------------|
| 32GB  | TS32GMTS400S  |
| 64GB  | TS64GMTS400S  |
| 128GB | TS128GMTS400S |
| 256GB | TS256GMTS400S |
| 512GB | TS512GMTS400S |

Product specifications are subject to change without notice. Pictures shown may differ from actual products. When used as a storage capacity unit, one terabyte (TB) = one trillion bytes. Total accessible capacity varies depending on operating environment.



| SATA III M.2 SSDs<br>Comparison                  | Table and the second se | TERMINE<br>TERMINE                                     |                                                        |  |  |
|--------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|--------------------------------------------------------|--|--|
|                                                  | SATA III 6Gb/s<br>M.2 SSD 400S                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | SATA III 6Gb/s<br>M.2 SSD 600                          | SATA III 6Gb/s<br>M.2 SSD 800S                         |  |  |
| Appearance                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                        |                                                        |  |  |
| Dimensions (Max.)                                | 42.0 mm x 22.0 mm x 3.58 mm<br>(1.65" x 0.87" x 0.14")                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 60.0 mm x 22.0 mm x 3.58 mm<br>(2.36" x 0.87" x 0.14") | 80.0 mm x 22.0 mm x 3.58 mm<br>(3.15" x 0.87" x 0.14") |  |  |
| Weight (Max.)                                    | 5 g (0.18 oz)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 7 g (0.25 oz)                                          | 9 g (0.32 oz)                                          |  |  |
| Storage                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                        |                                                        |  |  |
| Flash Type                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | MLC NAND flash                                         |                                                        |  |  |
| Capacity                                         | 32GB ~ 512GB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 32GB ~ 512GB                                           | 32GB ~ 1TB                                             |  |  |
| Operating Environment                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                        |                                                        |  |  |
| Operating Temperature                            | 0°C (32°F) ~ 70°C (158°F)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                        |                                                        |  |  |
|                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                        |                                                        |  |  |
| Performance                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                        |                                                        |  |  |
| Sequential Read/Write<br>(ATTO, max.)            | -                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Read: 550 MB/s<br>Write: 460 MB/s                      | -                                                      |  |  |
| Sequential Read/Write<br>(CrystalDiskMark, max.) | Read: 500 MB/s<br>Write: 450 MB/s                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Read: 520 MB/s<br>Write: 460 MB/s                      | Read: 500 MB/s<br>Write: 430 MB/s                      |  |  |
| 4K Random Read/Write<br>(IOmeter, max.)          | Read: 70,000 IOPS<br>Write: 70,000 IOPS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Read: 75,000 IOPS<br>Write: 75,000 IOPS                | Read: 70,000 IOPS<br>Write: 75,000 IOPS                |  |  |
| Mean Time Between Failures<br>(MTBF)             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 1,500,000 hour(s)                                      |                                                        |  |  |
| Terabytes Written (Max.)                         | 1,100 TB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 1,480 TB                                               | 2,360 TB                                               |  |  |
| Drive Writes Per Day (DWPD)                      | 2 (3 yrs)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 2.6 (3 yrs)                                            | 2 (3 yrs)                                              |  |  |
|                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                        |                                                        |  |  |
| Warranty                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                        |                                                        |  |  |
| Warranty                                         | Three-year Limited Warranty                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                        |                                                        |  |  |
|                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                        |                                                        |  |  |
| Technology                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                        |                                                        |  |  |
| TRIM & NCQ Command                               | $\checkmark$                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | $\checkmark$                                           | $\checkmark$                                           |  |  |
| S.M.A.R.T.                                       | $\checkmark$                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | $\checkmark$                                           | $\checkmark$                                           |  |  |
| DDR3 DRAM Cache                                  | $\checkmark$                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | $\checkmark$                                           | $\checkmark$                                           |  |  |
| Advanced Garbage Collection                      | $\checkmark$                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | $\checkmark$                                           | $\checkmark$                                           |  |  |
| DevSleep Mode                                    | $\checkmark$                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | $\checkmark$                                           | $\checkmark$                                           |  |  |
| RAID Engine                                      | -                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | -                                                      | -                                                      |  |  |
| LDPC Coding                                      | -                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | -                                                      | -                                                      |  |  |

\*Speed may vary due to host hardware, software, usage, and storage capacity.