

Embedded Solutions

Transcend eMMC

EMC410T eMMC Memory

Transcend's EMC410T embedded MultiMediaCard (eMMC) integrates flash memory, storage controller, and MMC interface into a small 153-ball BGA package. The simplified interface makes it extremely compact, facilitating manufacturing process and effectively shortening time-to-market for end devices. The EMC410T complies with JEDEC eMMC 5.1 specification. The top-tier 3D NAND flash delivers high performance and stability. The small form factor, simplified design, and high speed are ideal for embedded systems, medical devices, infotainment systems, set-top boxes, and kiosks.

Hardware Features

- Core voltage (VCC) 2.7-3.6V
- I/O (VCCQ) voltage: either 1.7-1.95V or 2.7-3.6V
- 153-ball BGA
- Complies with JEDEC eMMC Specification Ver. 5.1 (JESD84-B51A)
- High-quality 3D NAND flash

Firmware Features

- Wear-Leveling
- TRIM command for better performance
- Bus widths supported: x1, x4, x8
- Clock frequencies supported: 0~200MHz
- Built-in LDPC ECC (Error Correction Code) functionality

Ordering Information

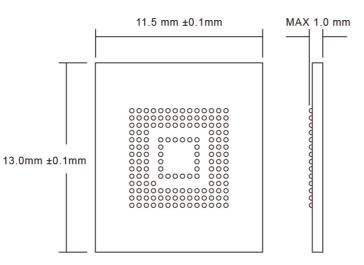
32GB TS32GEMC410T 64GB TS64GEMC410T



Specifications

| Appearance | Dimensions | 32GB: 11.5 mm x 13 mm x 1.0 mm (0.45" x 0.51" x 0.04") 64GB: 11.5 mm x 13 mm x 0.8 mm (0.45" x 0.51" x 0.03") |
|--------------------------|---------------------------|--|
| | Form Factor | eMMC5.1 (BGA-153) |
| | Bus Speed Mode | HS400 |
| Storage | Flash Type | 3D NAND flash |
| | Capacity | 32 GB |
| Operating Environment | Operating Temperature | Standard Temp. -25°C (-13°F) ∼ 85°C (185°F) |
| | Storage Temperature | -40°C (-40°F) ~ 85°C (185°F) |
| | Humidity | 0% ~ 95% |
| | Clock Frequency Supported | 0 MHz ~ 200 MHz |
| | Bus Width Supported | x1, x4, x8 |
| Performance | Read Speed (Max.) | Up to 290 MB/s |
| | Write Speed (Max.) | Up to 155 MB/s |
| | Note | Speed may vary due to host hardware, software, usage, and storage capacity. |
| Warranty | Warranty | Three-year Limited Warranty |
| | | Please click <u>here</u> for more information about the Transcend Warranty Policy. |
| | Warranty Policy | Due to the complexity and variety of industrial applications, Transcend cannot guarantee 100% compatibility with all platforms and under all scenarios. For special applications and environments, it is strongly suggested that you contact Transcend beforehand for clarification. |

Mechanical Dimensions



Product specifications are subject to change without notice. Pictures shown may differ from actual products. Total accessible capacity varies depending on operating environment. Due to the complexity and variety of industrial applications, Transcend cannot guarantee 100% compatibility with all platforms and under all scenarios. For special applications and environments, it is strongly suggested that you contact Transcend beforehand for clarification.