

## Embedded Solutions



### USB Flash Modules

## UFM510H USB Flash Module (Horizontal)

Transcend's USB Flash modules are convenient, easy to implement solutions for expanding the memory capacity of industrial computers. These compact storage devices consume a minimal amount of power and feature a mechanical write protection switch. Due to their minimalist dimensions, these USB modules are suitable for use in small embedded systems.

### Hardware Features

- Compliant with RoHS 2.0 standards
- MLC NAND flash
- Low power consumption

### Firmware Features

- Advanced Global Wear-Leveling and Block management for reliability
- Advanced Garbage Collection
- Built-in BCH ECC (Error Correction Code) functionality

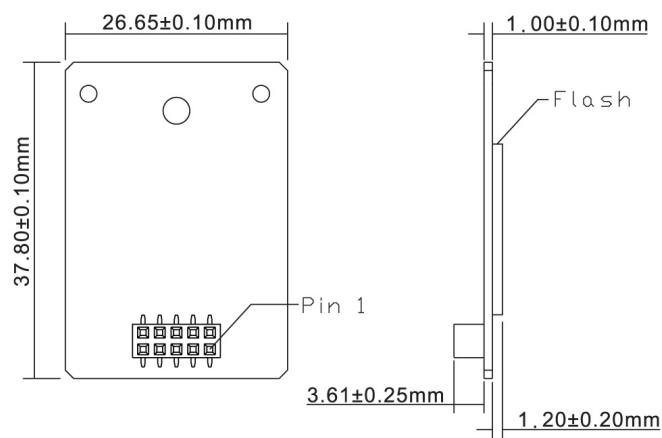
### Ordering Information

|      |              |
|------|--------------|
| 8GB  | TS8GUFM510H  |
| 32GB | TS32GUFM510H |

## Specifications

|                       |                                   |   |
|-----------------------|-----------------------------------|---|
| Appearance            | Dimensions                        | 37.8 mm x 26.65 mm x 5.81 mm (1.49" x 1.05" x 0.23")  |
|                       | Weight                            | 2 g (0.07 oz)   |
|                       | Pin Count                         | 10 pin  |
|                       | Pitch                             | 2.0mm (low profile type)<br>2.54mm (optional)   |
| Interface             | Connection Interface              | USB 2.0   |
| Storage               | Flash Type                        | MLC NAND flash  |
|                       | Capacity                          | 8 GB / 32 GB  |
| Operating Environment | Operating Voltage                 | 5V±10%  |
|                       | Operating Temperature             | 0°C (32°F) ~ 70°C (158°F)   |
|                       | Storage Temperature               | -40°C (-40°F) ~ 85°C (185°F)  |
|                       | Humidity                          | 5% ~ 95%  |
|                       | Shock                             | 15 G, 11 ms, 3 axis   |
|                       | Vibration (Operating)             | 20 G (peak-to-peak), 7 Hz ~ 2,000 Hz (frequency)  |
|                       | Note                              | Default operating voltage: 5V±10% ; 3.3V±10% by request.  |
| Power                 | Power Consumption (Operation)     | 0.69 watt(s)  |
| Performance           | Read Speed (Max.)                 | Up to 33 MB/s   |
|                       | Write Speed (Max.)                | Up to 18 MB/s   |
|                       | Terabytes Written (TBW)           | Up to 56 TBW  |
|                       | Mean Time Between Failures (MTBF) | 3,000,000 hour(s)   |
|                       | Note                              | Speed may vary due to host hardware, software, usage, and storage capacity.<br>Terabytes Written (TBW) expresses the endurance under the highest capacity.  |
| Warranty              | Warranty                          | Three-year Limited Warranty   |
|                       | Warranty Policy                   | Please click <a href="#">here</a> for more information about the Transcend Warranty Policy.<br>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.