Transcend®
EMBEDDED SOLUTIONS

JetFlash USB 3.0

JF180I

Datasheet

Products
TS8GJF180I
TS16GJF180I

Product Description
JF180I, SLC mode, USB 3.0, wide-temp

Flash Brand
8GB: WD BICS4
16GB: WD BICS5

Datasheet version
1.0

Revision History

Revision No.	History	Released Date	Editor by
1.0	First version (WD BICS4 / BICS5)	2023/07/17	PM

JF180I series

Description

Transcend JetFlash offers greater design flexibility and cost savings. Despite their compact size, the USB drives have excellent temperature flexibility from -40℃ to 85℃. The USB drives are manufactured with high-quality controller and 3D TLC NAND flash chips, providing excellent high endurance and performance that help to bring the quality and reliability.

Features

- Transcend's 3D TLC NAND flash with SLC mode technology
- Fully compatible with USB 3.0
- Downward compatible with USB2.0
- Easy Plug and Play installation
- USB powered. No external power or battery needed
- Built-in ECC and Wear leveling
- LED indicates the usage status (Optional)
- Wide temperature operation
- Support UFD Security Toolbox

Product Features

1. Built-in ECC Engine

In event of errors, the combined data allow the recovery of the original data. The number of errors that can be recovered depends on the algorithm used.

2. Wear-leveling

This function means the data are no longer tied to a single physical area, which can extend drive life expectancy.

3. Read Retry

The function allows the read voltage to be dynamically adjusted such that read errors are decreased or even eliminated.

4. UFD Security Toolbox

The UFD Security Toolbox support as below

1. Get Device Feature

   The function show device FW Version, write protect, and disk security runtime status.

2. Write Protect

   The function used software write protection of the storage device to prevent important data in the equipment from being written or deleted by mistake.

3. Security

   The function can set the security partition with password and support one-time password function.

Specifications

Physical Specification		
Connector Form Factor		USB Type-A
USB specification		USB3.0
NAND flash		3D TLC with SLC mode
Dimensions (mm)	**Length**	61.5 ±0.4
	Width	18.6 ±0.2
	Height	8.7 ±0.2

Performance		
Model P/N	**Sequential Read (MB/s)***	**Sequential Write (MB/s)***
TS8GJF180I	155	125
TS16GJF180I	155	135

Note: Maximum transfer speed recorded

* 25 ℃ , 4GB DRAM, Windows® 10 64bit, benchmark utility Crystal DiskMark 8.0.4, copied file 1GB, unit MB/s

Endurance		
TeraBytes Written (T.B.W)	TS8GJF180I	279
	TS16GJF180I	1146

*TBW is based on Transcend internal standard with fresh flash to calculate how much data can be written into the drive. TBW may vary due to

different operation.

**1 TeraByte=1,000,000,000,000 bytes

Bus Mode/ Power Consumption			
Power Supply			5V $\pm$ 10%
			Value(Max.)
Super Speed Mode		**Read**	165 mA
		Write	198 mA
		Idle	75 mA

Note: Power consumption is measured based on Transcend internal Test by USB3.0 mode. All values are measured by Transcend internal

standard, and may be different in different environment.

Environmental Specifications	
Operating Temperature	- 40°C to 85°C
Storage Temperature	- 40°C to 85°C
Vibration	20G(peak-to-peak), 20Hz to 2000Hz (Frequency)
Shock	1500G, 0.5ms, 3axis
MTBF	3,000,000 hours

Regulations	
compliance	CE, UKCA, FCC, RoHS

Order information

Capacity	Transcend Part Number
8GB	TS8GJF180I
16GB	TS16GJF180I

The technical information above is based on industry standard data and has been tested to be reliable. However, Transcend makes no warranty, either expressed or implied, as to its accuracy and assumes no liability in connection with the use of this product. Transcend reserves the right to make changes to the specifications at any time without prior notice. Due to the complexity and variety of industrial applications, for special applications and environments, it is strongly suggested to contact Transcend or its authorized resellers beforehand for compatibility confirmation.

TAIWAN
E-mail: sales-tw@transcend-info.com

USA
Los Angeles:
E-mail: sales-us@transcend-info.com

Maryland:
E-mail: sales-us@transcend-info.com

Miami:
E-mail: sales-us@transcend-info.com

Silicon Valley:
E-mail: sales-us@transcend-info.com

GERMANY
E-mail: sales-de@transcend-info.com

THE NETHERLANDS
E-mail: sales-nl@transcend-info.com

United Kingdom
E-mail: sales-uk@transcend-info.com

JAPAN
E-mail: sales-jp@transcend-info.com

KOREA
E-mail: sales-kr@transcend-info.com

CHINA
E-mail: sales@transcendchina.com

HONG KONG
E-mail: sales-hk@transcend-info.com