

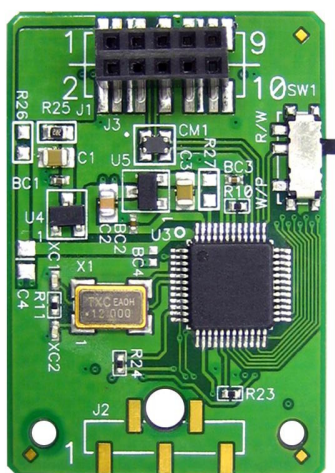
128MB~8GB USB Flash Module (Horizontal) TS128M~8GUFM-H (low profile version)



Description

Compatible with Hi-Speed USB 2.0, consume less power and feature a write protection switch, Transcend Industrial USB Flash Modules provide the perfect solution for reliable high capacity memory storage in specialized industrial machines.

Placement



Features

- RoHS compliant products
- Hi-Speed USB 2.0 compliant; backward compatible with USB 1.1
- True Plug and Play functionality
- Fully compatible with devices and Operating Systems (OS) that support the USB standard
- Integrated 80C51 compatible 8-bit microprocessor with enhanced feature
- Leading 0.16um CMOS technology, 1.8 Volt low power core operation
- Operates on a single power supply (Vdd = 5.0V)
- Lower Power Consumption
- Support single / dual channel for Flash memory with enhanced performance
- Fully compliant with open industry standards
- LED indicates the access status of USB Flash Module
- Write protection switch

System Requirement

- Hardware: An available 10-pin male USB port (pitch = 2.54mm for Normal Type; pitch = 2.0mm for Low profile Type) from Host side.
- Operating System: Windows® 98SE, Windows® Me, Windows® 2000, Windows® XP, Mac OS 9.x and above, Linux™ Kernel 2.4 and above

Dimensions

Side	Millimeters	Inches
A	37.80 ± 1.00	1.49 ± 0.04
B	26.65 ± 1.00	1.05 ± 0.04
C	6.80 ± 1.00	0.27 ± 0.04

* Please refer to Mechanical Drawing

LED Status

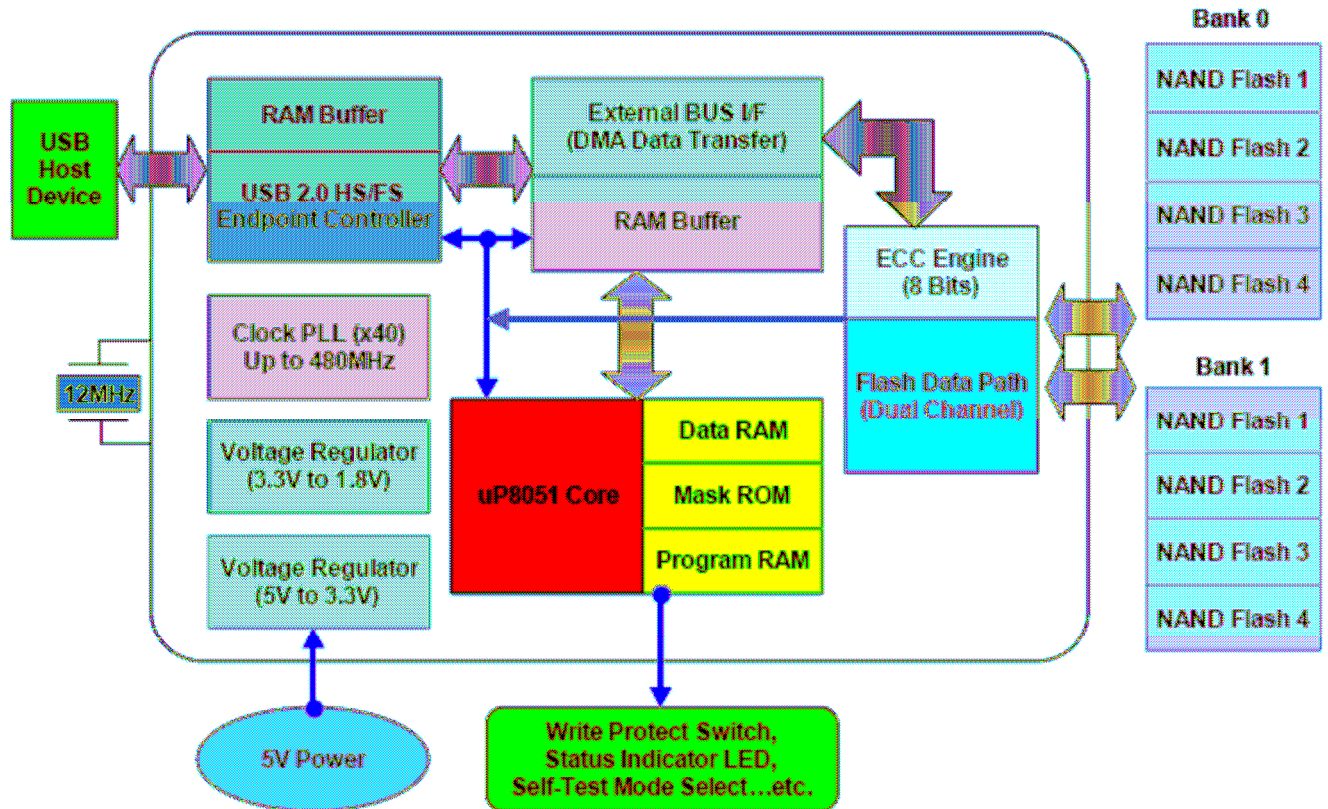
Mode	Potential	LED
Idle	VCC	OFF
Read/Write	VCC/GND	GLITTER

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Block Diagram

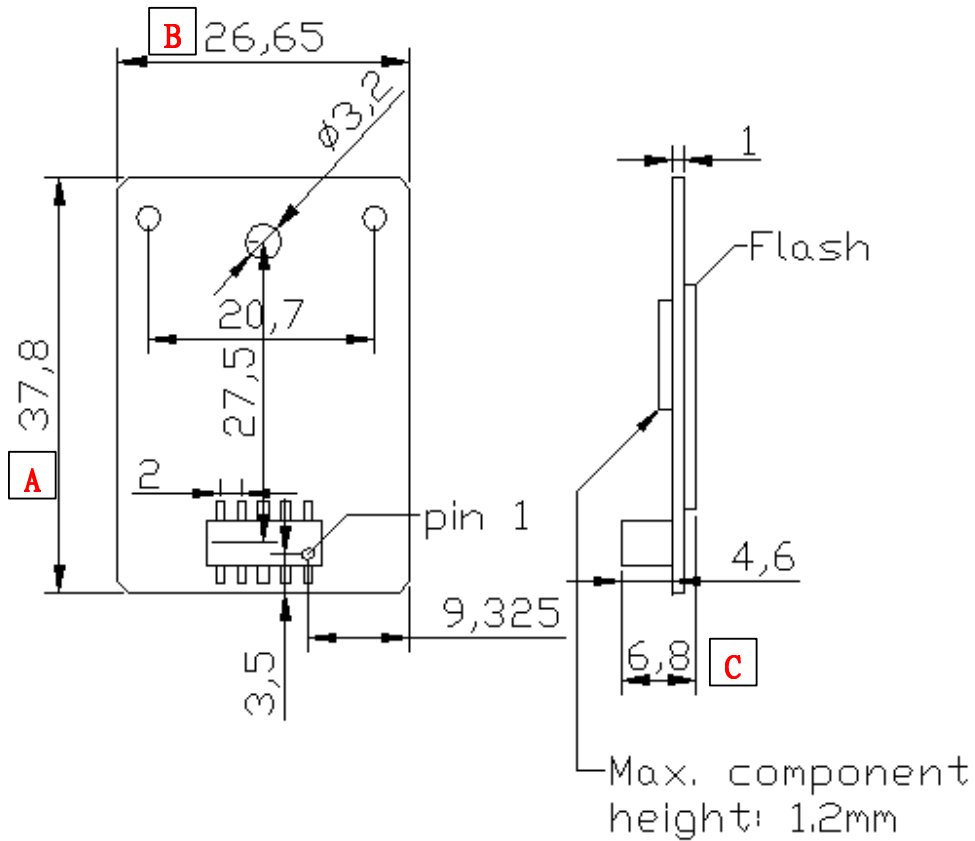
- USB Flash Drive controller



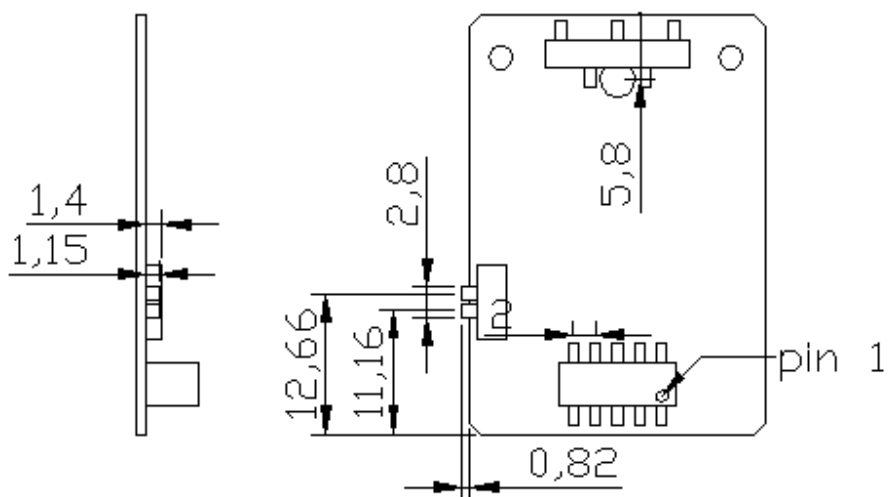
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Mechanical Drawing (unit: mm)



UFM-H (Low profile Type)



Write-Protect Switch Location

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Pinouts

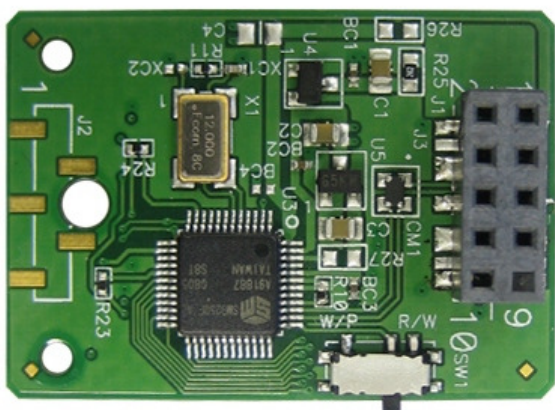
Pin No.	Pin Name
01	VCC
02	NC
03	USB(-)
04	NC
05	USB(+)
06	NC
07	VSS
08	NC
09	NC
10	NC

Pin Identification

Symbol	Function
USB(-) USB(+)	USB differential signal: The pairs are used to transmit Data/Address/Command
VSS	Ground
VCC	USB power input

Information Setting

Item	Setting
Product Name	TS128M~8GUFM-H
Manufactures String	Transcend
Product String	TS128M~8GUFM-H
Disk Type	USB-ZIP



B ←→ A

Switch Setting

Setting	Potential	Write-Protect
A	Open	OFF
B	GND	ON

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Specifications

Environment		
Capacity		128MB~8GB
Temperature	Operating	0 °C to 70 °C
	Non-Operating	-40 °C to 85 °C
System Performance	Single-Channel Read/Write	20/10 MB/sec (Max.)
	Dual-Channel Read/Write	30/23 MB/sec (Max.)
Power Requirement	Voltage	DC 5V ± 10%
Data Retention		10 years
Connector Durability		10,000 times
Erase Cycles		>2,000,000

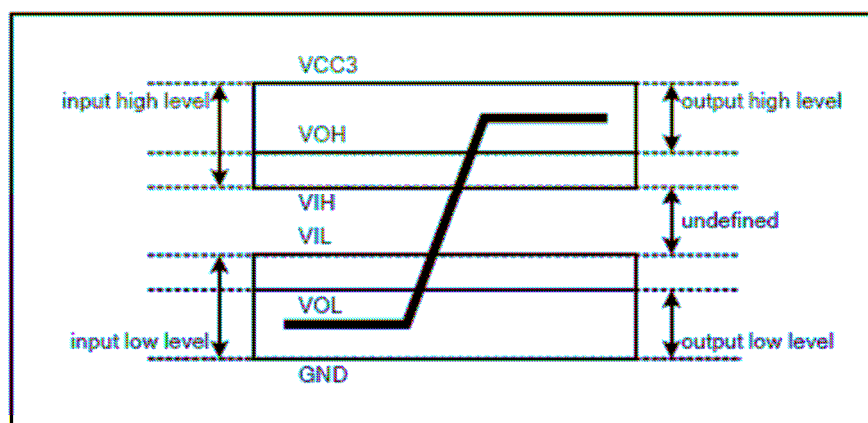
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AD/DC Characteristics

Parameter	Symbol	Min.	Max.	Unit	Remark
Peak voltage on all lines		-0.5	3.6	V	Except VCC5V input
All input leakage current		-10	10	uA	
All output leakage current		-10	10	uA	
Supply voltage	VCC3	2.7	3.6	V	

Bus Signal Level



Parameter	Symbol	Min.	Max.	Unit	Remark
Output High voltage	V_{OH}	2.4		V	
Output Low voltage	V_{OL}		0.4	V	
Input High voltage	V_{IH}	2.0		V	
Input Low voltage	V_{IL}		0.8	V	

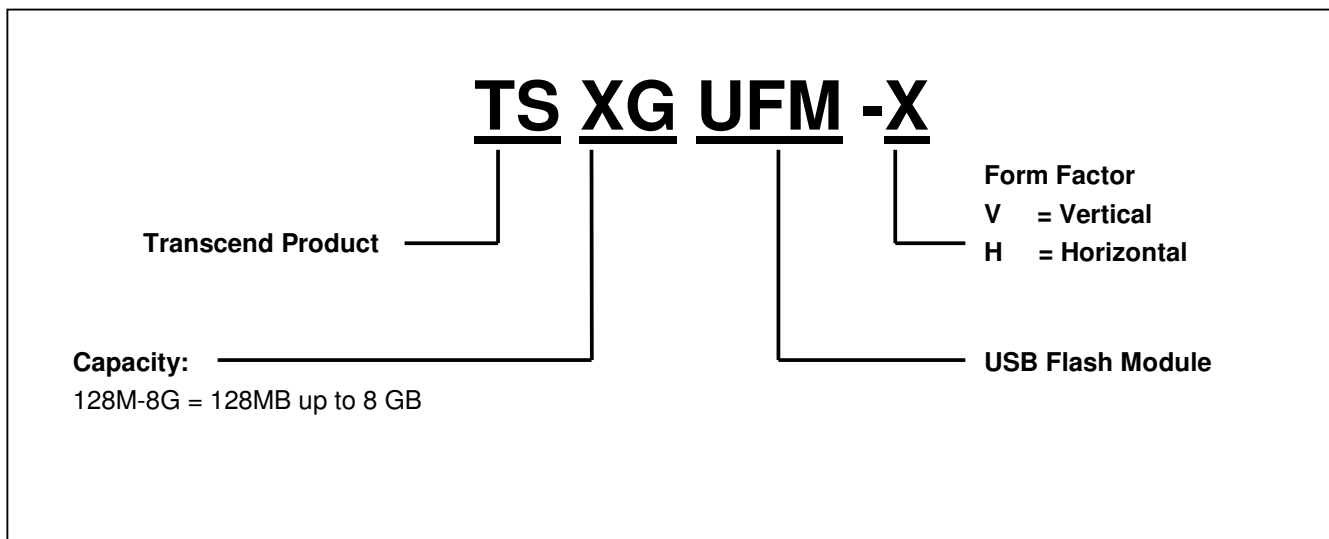
Bus Signal Line Loading

Parameter	Symbol	Min.	Max.	Unit	Remark
Bus line capacitance	C_L		20	pF	

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Ordering Information



1. The above technical information 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.

2. For specific capacity, performance, and reliability requirement, please contact with sales.



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