

SFM128/256/512/1/2/ 4/8G40/44 HP/VP

Flash Disk Module

Highlights

Super Talent Flash Disk Module provide non-volatile storage in a compact design perfectly fit in embedded applications. It combines advanced and proven Flash Disk Module technology with a standard IDE interface to complement the Flash Disk Module product line.

Flash Disk Module Features

- NAND flash-based technology
- High performance
- Platform independence
- Fast time to market - no driver required
- 40-pin or 44-pin IDE connector
- Hamming code-based EDC/ECC
- 16-bit internal and external operation from 128Mbyte (MB) capacity to 8GB
- IDE Master/Slave modes of operation

IDE Modes

- PIO modes 0-4

Power Requirements

- Single power supply: 5V ($\pm 10\%$)
- Current
 - Active Mode (Max.): 55 mA
 - Sleep/Idle Mode (Max): 0.18 mA

Specifications

- OS Support : All
- Reliability :
 - MTBF : > 1,000,000 hours
 - Data reliability : Built-in EDC/ECC function
- Endurance :
 - Write/Erase: 100,000 cycles (typ.)
 - Read : Unlimited
- System Performance :
 - Access time : < 0.1ms
 - Track to track seek time : < 0.1ms
 - Bus transfer speed : 16.7Mbytes/Sec (Peak time).

Absolute Maximum Ratings

Symbol	Parameter	Min	Max	Unit
VDD-VSS	DC Power Supply	-0.3	+5.5	V
V _{IN}	Input Voltage	V _{SS} -0.3	V _{DD} +0.3	V
T _{st}	Storage Temperature	-55	+80	°C

Environmental Conditions

- Vibration: 1G, each axis
- Shock: 10G, 3 axis

System Compatibility

- Compatible with devices that support the ATA-4 Attachment (without DMA support) for Disk Drives Standard.

Capacity and Packaging

- Available in 512MB to 8GB capacity
- Vertical and Horizontal available
- * Industrial Grade FDM is also available.

Product Photos

- SFM128/256/512/1/2/4/8G40HP



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- SFM128/256/512/1/2/4/8G44VP



Flash Disk Module

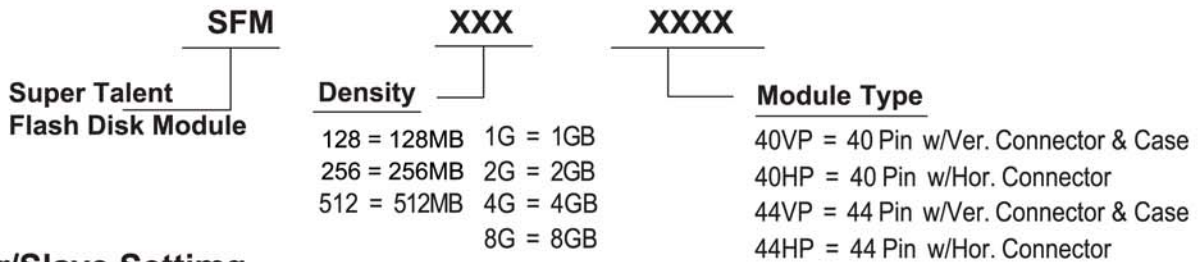
Pin Assignment

Pin No.	Signal	Function	Pin No.	Signal	Function
1	RESET#	Host reset	2	GND	Ground
3	HD7	Host Data bit 7	4	HD8	Host Data bit 8
5	HD6	Host Data bit 6	6	HD9	Host Data bit 9
7	HD5	Host Data bit 5	8	HD10	Host Data bit 10
9	HD4	Host Data bit 4	10	HD11	Host Data bit 11
11	HD3	Host Data bit 3	12	HD12	Host Data bit 12
13	HD2	Host Data bit 1	14	HD13	Host Data bit 13
15	HD1	Host Data bit 1	16	HD14	Host Data bit 14
17	HD0	Host Data bit 0	18	HD15	Host Data bit 15
19	GND	Ground	20	NC	Not Connected
21	DMARQ		22	GND	Ground
23	HIOW#	Host I/O Write	24	GND	Ground
25	HIOR#	Host I/O Read	26	GND	Ground
27	IORDY	I/O Ready	28	CSEL	Master/Slave Select
29	DMACK#		30	GND	Ground
31	INTRQ	Interrupt Request	32	IOIS16#	CS I/O 16-bit
33	HA1	Host Address bit 1	34	PDIAG#	Passed Diagnostics
35	HA0	Host Address bit 0	36	HA2	Host Address bit 2
37	CS0#	Chip Select 0	38	CS1#	Chip Select 1
39	DASP#	Drive Active/Drive 1 Present	40	GND	Ground
41 ¹⁾	VCC	Supply Voltage	42 ¹⁾	VCC	Supply Voltage
43 ¹⁾	GND	Ground	44 ¹⁾	RESERVED	Reserved

1) Flash Disk Module 40-pin version does not contain pins 41 -44.

NC = These pins are not connected internally. RESERVED = All reserved signals must be left floating

Part Numbering System



Master/Slave Setting

