

Silicon disk drive 2.5 inches type

PC-ESD-A series



This product is a silicon disk drive interchangeable with a 2.5-inch IDE hard disks.

* Specifications, color and design of the products are subject to change without notice.

Model	Size
PC-ESD500-A	512MB
PC-ESD1000-A	1024MB
PC-ESD2000-A	2048MB
PC-ESD4000-A	4096MB
PC-ESD8000-A	8192MB

Features

Containing no rotating or moving part as in hard disk drives, thus best suited for applications which require high environmental resistance (to temperature, humidity, vibration, shock) and for continuous operation for extended periods of time.

Never making any sound such as motor rotation sound or access noise during seeking, thus best suited for applications which require complete silence.

Lower in power consumption than hard disk drives

The product comes with a protective function that minimizes disk failures during an instantaneous stop. *1

*1 This function is not designed to protect files (or data) written onto the disk.

Connector Pin Assignment

Pin	Signal	Function	I/O	Pin	Signal	Function	I/O
1	RESET-	Bus Reset	I	2	GND	Signal Ground	
3	DB7	Data Bus Bit 7	I/O	4	DB8	Data Bus Bit 8	I/O
5	DB6	Data Bus Bit 6	I/O	6	DB9	Data Bus Bit 9	I/O
7	DB5	Data Bus Bit 5	I/O	8	DB10	Data Bus Bit 10	I/O
9	DB4	Data Bus Bit 4	I/O	10	DB11	Data Bus Bit 11	I/O
11	DB3	Data Bus Bit 3	I/O	12	DB12	Data Bus Bit 12	I/O
13	DB2	Data Bus Bit 2	I/O	14	DB13	Data Bus Bit 13	I/O
15	DB1	Data Bus Bit 1	I/O	16	DB14	Data Bus Bit 14	I/O
17	DB0	Data Bus Bit 0	I/O	18	DB15	Data Bus Bit 15	I/O
19	GND	Signal Ground	I/O	20	KEY	Key Pin	
21	DMAREG	DMA Request	O	22	GND	Signal Ground	
23	IOW-	Host I/O Write	I	24	GND	Signal Ground	
25	IOR-	Host I/O Read	I	26	GND	Signal Ground	
27	IORDY	I/O ch RDY	O	28		Reserved	
29	DMAACK	DMA Acknowledge	I	30	GND	Signal Ground	
31	INTRQ+	Interrupt Request	O	32	IOCS16-	Drive 16 Bit I/O	O
33	ADD1	Host Address 1	I	34	PDIAG-	Passed Diagnostic	I/O
35	ADD0	Host Address 0	I	36	ADD2	Host Address 2	I
37	CS0-	Chip Select 0	I	38	CS1-	Chip Select 1	I
39	DASP-	Active (LED)	O	40	GND	Signal Ground	
41	+5V	+5VDC		42	+5V	+5VDC	
43	GND	Signal Ground		44		Reserved	

Packing List

- Product ... 1
- User's Guide ... 1
- Mounting screws... 1 set (M3 x 6mm, M3 nylon washers 4pcs)
- Jumper ... 1

Specification

Item	Specifications				
	PC-ESD500-A	PC-ESD1000-A	PC-ESD2000-A	PC-ESD4000-A	PC-ESD8000-A
Format capacity	512MB	1024MB	2048MB	4096MB	8192MB
Bus specification	ATA (IDE-AT 44 pin)				
ATA bus transfer rate	23Mbyte/sec (Read) 10Mbyte/sec (Write)				
Transfer mode	PIO mode 4, Multiword DMA mode 2, Ultra DMA mode 2				
Write endurance	2,100,000 times or more *1				
Rated voltage	5VDC ±5%				
Consumed power					
Sleep	5mW (Typ.)				
(read) / (write)	700mW (Max.) / 700mW (Max.)				
Ambient temperature					
(Operating)	0 - 60°C				
(Non-operating)	-20 - 80°C				
Storage temperature (Operating)	10 - 90%RH (No condensation)				
Corrosive gases	None				
Anti-vibration (Operating)	15G or less				
Anti-shock (Operating)	1000G or less				
Physical dimensions (mm)	69.85(W) x 100(D) x 12.5(H)				
Weight	About 100g				

*1 It is different according to the state of operation of the rewriting longevity.

Physical Dimensions and Master / Slave Settings

