

HAMMER-D Series

Industrial USB Flash Disk Generation 3 Semi-Metal Casing



Product features

- ✦ SLC - NAND type flash technology
- ✦ Tiny and semi-metal casing design
- ✦ USB 2.0 Mass Storage compliant
- ✦ USB2.0 High-Speed and USB1.1 FullSpeed compatible interface
- ✦ Complies with Microsoft Vista Ready-Boost® requirements
- ✦ Capacities from 128MB up to 8GB
- ✦ Performance up to 20.1 MB/sec

Product specifications

Compatibility	✦ USB2.0 High-Speed and USB1.1 FullSpeed compatible interface	Power consumption	Power requirement ✦ 5V ± 10% via USB port
Flash technology	✦ SLC-NAND type flash based	Reading mode	✦ 74.0 mA (Max.)
Performance		Writing mode	✦ 88.0 mA(Max.)
Data transfer rate	✦ USB 2.0 supports transfer rates up to 480 Mb/s (60MB/s)	Idle mode	✦ 63.5 mA (Max.)
Sequential read	✦ 20.1 MB/sec (Max.)	Reliability	
Sequential write	✦ 20.0 MB/sec (Max.)	Wear-leveling	✦ Static wear-leveling algorithms
Random access time	✦ 0.6ms (estimated)	MTBF	✦ > 1,000,000 hours
Environmental specification		Endurance	✦ > 2,000,000 cycles
Operating temp.	✦ STD. 0°C~70°C/W.T. -40°C~+85°C	ECC	✦ 8 bits or 15 bits per 512 bytes block
Non-operating temp.	✦ STD. -20°C~+80°C/W.T. -50°C~+95°C	Physical specification	
Humidity	✦ 10% ~ 95% non-condensing	Weight	✦ 15 g ± 1 g / 0.53 oz.
Vibration	✦ 15G compliance to MIL-STD-810F	Dimension(W x L x H)	✦ 47.30 x 17.60 x 8.40 (mm)
Shock	✦ 1,500G compliance to MIL-STD-810F	Conformal coating	✦ Option for special request
Altitude	✦ 70,000 feet	Warranty	
OS supported	✦ Win Vista, CE, XP Pro, XP Embedded, Server 2003, Linux, Mac9.x, Mac OS X	Industrial grade	✦ 3 years
	✦ Win98SE need driver	Standard grade	✦ 5 years
Functionality	✦ Supports auto-run function		
	✦ A bootable disk for system recovery		
	✦ Supports partition management, password and security		

Operating temperature supports Standard grade 0°C ~ 70°C and Industrial grade -40°C ~ +85°C

Part number list - semi-metal SLC USB flash disk - Generation 3

Product Picture	Capacity	0° C ~ 70° C	-40° C ~ +85° C
	128MB	SMUFD128M-ADCSC-3(/C)	WMUFD128M-ADISI-3(/C)
	256MB	SMUFD256M-ADCSC-3(/C)	WMUFD256M-ADISI-3(/C)
	512MB	SMUFD512M-ADCSC-3(/C)	WMUFD512M-ADISI-3(/C)
	1GB	SMUFD001G-ADCSC-3(/C)	WMUFD001G-ADISI-3(/C)
	2GB	SMUFD002G-ADCSC-3(/C)	WMUFD002G-ADISI-3(/C)
	4GB	SMUFD004G-ADCSC-3(/C)	WMUFD004G-ADISI-3(/C)
	8GB	SMUFD008G-ADCSC-3(/C)	WMUFD008G-ADISI-3(/C)

Part number decoder



X1 ✦ Grade
S : Standard grade operating temp. 0° C ~ 70° C
W : IND. temp. grade operating temp. -40° C ~ +85° C

X2 ✦ The material of casing
M : Semi-metal / metal casing

X3 X4 X5 ✦ Product category
UFD : USB flash disk

X6 X7 X8 X9 ✦ Capacity
128M : 128MB **001G** : 1GB
256M : 256MB **002G** : 2GB
512M : 512MB **004G** : 4GB
008G : 8GB

X11 ✦ Controller
A : Alcor (HAMMER Series)

X12 ✦ Controller version
A,B,C,....

X13 ✦ Controller grade
C : Commercial grade
I : Industrial grade

X14 ✦ Flash IC
S : Samsung flash IC

X15 ✦ Flash IC grade
C : Commercial grade
I : Industrial grade

Z1 ✦ Housing Generation
3 : Generation 3 housing

C ✦ Reserved for specific requirement
C : Conformal-coating

CF Industrial CompactFlash Card

CFast Industrial CFast Card

ATA Industrial PCMCIA ATA Card

MIF Industrial micro IDE Flash Module

MSF Industrial micro SATA Flash Module

MUM Industrial micro USB Flash Module

MPM Industrial mini PCI-e Flash Module

MSM Industrial mini SATA Flash Module

SSD Industrial Solid State Disk

UFD Industrial Rugged Metal USB Flash Disk

SD Industrial SD & SDHC Memory Card

AD Industrial Adapter Card-Drive

CF Industrial CompactFlash Card

CFast Industrial CFast Card

ATA Industrial PCMCIA ATA Card

MIF Industrial micro IDE Flash Module

MSF Industrial micro SATA Flash Module

MUM Industrial micro USB Flash Module

MPM Industrial mini PCI-e Flash Module

MSM Industrial mini SATA Flash Module

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