

SC199 Cheetah V-Series

SATA Solid State Drive

SATA-II speeds with SLC Flash



Foremay's SC199 Cheetah V-series SSDs are the next generation in SSD technology that is designed with rugged applications in mind. With read speed up to 260MB/sec and capacities up to 256GB, the Cheetah is geared for applications that require optimum performance and/or large capacities.

Cheetah SSD uses standard HDD interfaces and dimensions so they can be designed-in to systems with no customizations. All Cheetah SSDs are rigorously qualified in Foremay's compatibility labs with strict hardware and software testing standards for consistency and functionality. Using Foremay's SC199 Cheetah SSDs also reduces maintenance costs, which is essential for rugged markets to lower the total cost of ownership (TOC). The SC199 Cheetah V-Series SSD is backed by a 3 year warranty.

Applications

- High Reliable Enterprise
- High Reliable Telecom
- Disaster Recovery
- Mission Critical
- Rugged Computing
- Public Security
- Vehicle / Ship / Aerospace
- Oil / Gas / Mining Fields
- Industrial / Embedded PC
- Medical Equipment
- High Reliable ATM / Banking
- Government

Physical Specifications

Form Factor	2.5"
*Capacity	32GB – 256GB
Dimension	69.85mm x 100.20mm x 9.50mm
SATA Interface	Serial ATA-II
NAND Flash	SLC
Power Supply	5.0V _{cc} ± 5%
Package	Complete metal housing

Environmental Specifications

Operating Shock	1500G
Operating Vibration	16G
Operating Temp.	0°C to +70°C

Part Numbers For Ordering

32GB	USTS32C25V
64GB	USTS64C25V
128GB	USTS28C25V
256GB	USTS56C25V

Performance Specifications

Sustained Read Speed	260 MB/sec
Sustained Write Speed	250 MB/sec
Random IOPS	42,000

Reliability Specifications

MTBF	+1,000,000 hours
Data Reliability	Built-in EDC/ECC function
Data Integrity	10 years
Wear Leveling Algor.	Patent Pending

Endurance Specifications

Read	Unlimited	
Write	32GB	175 yrs @ 50GB write-erase/day
	64GB	350 yrs @ 50GB write-erase/day
	128GB	700 yrs @ 50GB write-erase/day
	256GB	700 yrs @ 50GB write-erase/day

* Usable capacity may be less than specified after formatting

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SATA Flash Drive Pin Assignment

Power Segment

PIN	Signal Name	Description
P1	Not Used (3.3V)	N/A
P2	Not Used (3.3V)	N/A
P3	Not Used (3.3V Precharge)	
P4	GND	1 st mate
P5	GND	2 nd mate
P6	GND	
P7	5V Precharge	5V Power
P8	5V Precharge	5V Power
P9	5V Precharge	
P10	GND	
P11	Reserved	
P12	GND	1 st mate
P13	Not Used (12V Precharge)	N/A
P14	Not Used (12V)	
P15	Not Used (12V)	

Housing:

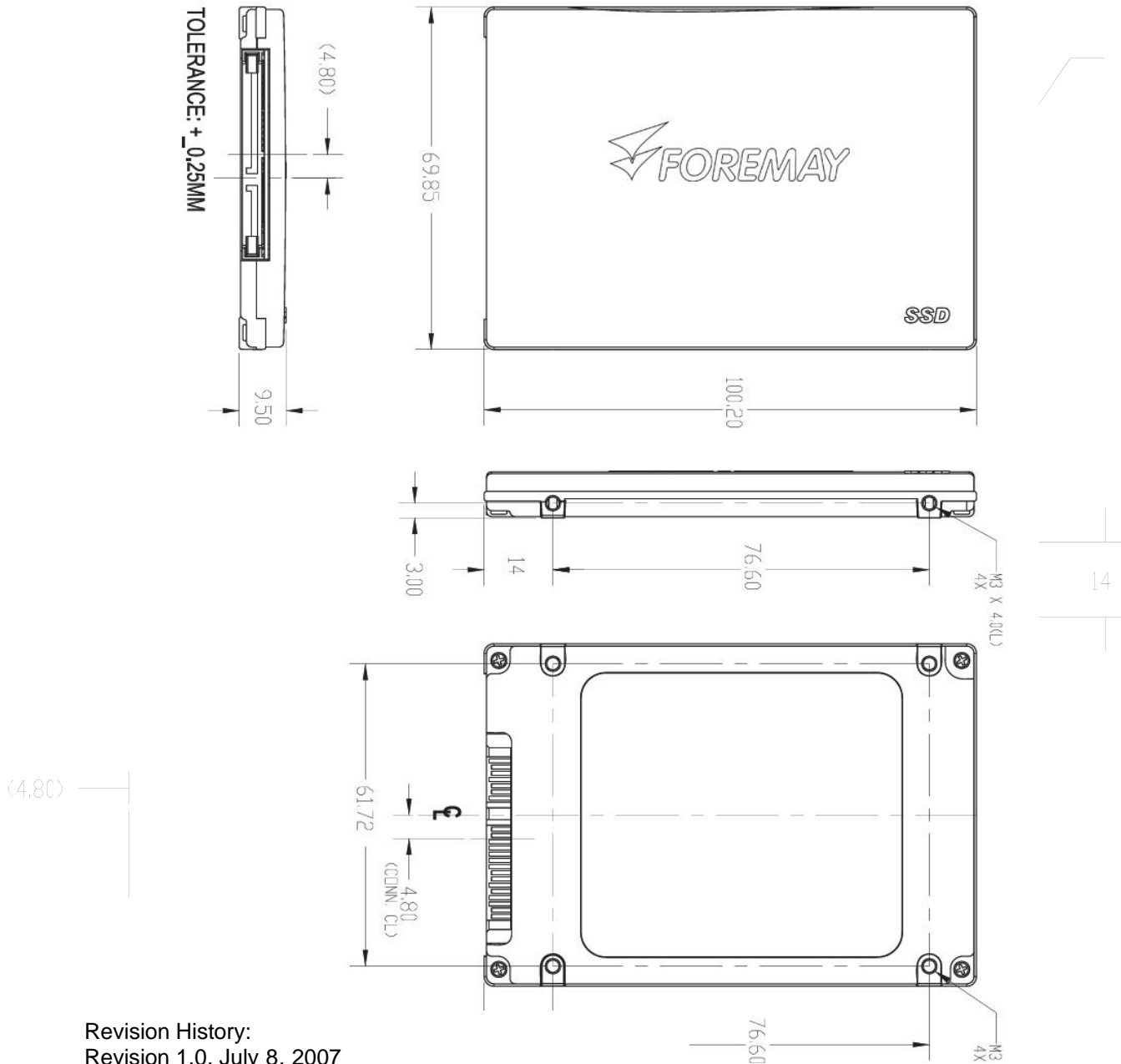


Signal Segment

PIN	Signal Name	Description
S1	GND	
S2	RxP	Differential Signal pair for Receive
S3	RxN	
S4	GND	
S5	TxN	Differential Signal pair for Transmit
S6	TxP	
S7	GND	

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Mechanical Specifications



Revision History:
 Revision 1.0, July 8, 2007
 Revision 2.0, August 11, 2008
 Revision 3.0, December 5, 2008, added 256GB
 Revision 4.0, May 28, 2009, speed updated to 260MB/Sec