

CHEETAH

FORMATTED CAPACITIES OF 9.1 TO 73.4 GBYTES

ULTRA2 SCSI, ULTRA160
SCSI & FIBRE CHANNEL



10,000 RPM

INDUSTRY-LEADING PERFORMANCE FOR THE MOST DEMANDING APPLICATIONS, WORKSTATIONS, NETWORK FILE SERVERS AND ENTERPRISE SERVERS

- > THIRD AND FOURTH GENERATION CHEETAH PERFORMANCE PRODUCES MATURITY IN DESIGN FOR RELIABLE PERFORMANCE
- > 10,000 RPM
- > CACHE RANGING FROM 1MB TO 16MB
- > FORMATTED DATA RATE OF 18.3 TO 40.5 MBYTES/SEC AND AVERAGE SEEK TIMES AS FAST AS 5.2 MSEC
- > SUPPORTS ULTRA2 SCSI, ULTRA160 SCSI AND UP TO 200 MBYTES/SEC PER LOOP IN THE NEW 2 GBIT/SEC FIBRE CHANNEL



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3.5 INCH DISC DRIVE	Cheetah 18LP	Cheetah 36	Cheetah 18XL	Cheetah 18XL	Cheetah 36LP	Cheetah 73
	ST39103LW/LC/FC ST39103LW/LCV/FCV ST39133LW/LCV ST318203LW/LC/FC ST318203LW/LCV/FCV ST318233LW/LCV	ST136403LW/LC/FC ST136403LW/LCV/FCV	NEW ST39204LW/LC	NEW ST318404LW/LC	NEW ST336704LW/LWV ST336704LC/LCV ST336704FC/FCV	NEW ST173404LW/LWV ST173404LC/LCV ST173404FC/FCV
CAPACITY AND INTERFACE						
Formatted Gbytes (512 bytes/sector)	9.10/18.20	36.4	9.2	18.4	36.7	73.4
Interface	Ultra2 SCSI	Ultra2 SCSI				
	Ultra160 SCSI		Ultra160 SCSI	Ultra160 SCSI	Ultra160 SCSI	Ultra160 SCSI
	Fibre Channel (dual port)	Fibre Channel (dual port)			2Gb/s FC (dual port)*	2Gb/s FC (dual port)*
PERFORMANCE						
Internal Transfer Rate, ZBR (Mbits/sec)	193 to 308	193 to 308	284 to 424	284 to 424	280 to 427	280 to 427
Internal Formatted Transfer Rate (Mbytes/sec)	18.3 to 28.0	18.3 to 28.0	26.6 to 40.5	26.6 to 40.5	26.7 to 40.2	26.7 to 40.2
External Transfer Rate (Mbytes/sec)						
Ultra2 SCSI/Ultra160 SCSI/FC (per loop)	80/100	80/100	160	160	160/200	160/200
Multisegmented Cache (Kbytes)						
Ultra2 SCSI/Ultra160 SCSI/FC	1,024	1,024	4,096	4,096	4,096	4,096
Multisegmented Extended Cache (Kbytes)						
Ultra2 SCSI/Ultra160 SCSI/FC	4,096	4,096	NA	NA	16,384	16,384
Track-to-Track Seek, Read/Write (msec)	0.6/0.9	0.6/0.9	0.6/0.8	0.6/0.8	0.6/0.9	0.6/0.9
Average Seek, Read/Write (msec)	5.2/6.0	5.7/6.5	5.2/6.0	5.2/6.0	5.2/6.0	5.6/6.2
Average Latency (msec)	2.99	2.99	2.99	2.99	2.99	2.99
Spindle Speed (RPM)	10,000	10,000	10,000	10,000	10,000	10,000
CONFIGURATION/ORGANIZATION						
Discs/Heads	3/6, 6/12	12/24	2/3	3/6	6/12	12/24
Servo	Embedded	Embedded	Embedded	Embedded	Embedded	Embedded
Sectors per Drive (512 bytes/sector)	17,783,438/35,566,480	71,132,960	17,921,835	35,843,670	71,685,305	143,374,805
Cylinders	9,772	9,772	14,384	14,384	14,100	14,100
Recording Method (PRML)	16/17 PR4	16/17 PR4	NPV**	NPV**	NPV**	NPV**
RELIABILITY/DATA INTEGRITY						
S.M.A.R.T. Capable	Yes	Yes	Yes	Yes	Yes	Yes
Recoverable Read Errors per Bits Read	10 per 10 ¹²	10 per 10 ¹²	10 per 10 ¹²	10 per 10 ¹²	10 per 10 ¹²	10 per 10 ¹²
Nonrecoverable Read Errors per Bits Read	1 per 10 ¹⁵	1 per 10 ¹⁵	1 per 10 ¹⁵	1 per 10 ¹⁵	1 per 10 ¹⁵	1 per 10 ¹⁵
Seek Errors (per seek)	10 per 10 ⁹	10 per 10 ⁹	10 per 10 ⁹	10 per 10 ⁹	10 per 10 ⁹	10 per 10 ⁹
POWER REQUIREMENTS						
+12 VDC ± 5% (amps, typ operating) Ultra2 SCSI/Ultra160 SCSI [FC]	0.73	1.2	0.47	0.57	0.73	1.2
+5 VDC ± 5% (amps, typ operating) Ultra2 SCSI/Ultra160 SCSI [FC]	0.85	0.85	0.83	0.83	0.85	0.85
Power (Idle watts) Ultra2 SCSI/Ultra160 SCSI [FC]	11.0 [13.0]	15.7 [17.0]	8	9	11.0 [12.5]	15.7 [16.5]
ENVIRONMENTAL						
Idle Acoustics (Bels)	4.3	4.7	3.8	3.8	3.9	4.2
Operating Temperature (°C)	5 to 50	5 to 50	5 to 55	5 to 55	5 to 55	5 to 55
Nonoperating Temperature (°C)	-40 to 70	-40 to 70	-40 to 70	-40 to 70	-40 to 70	-40 to 70
Shock (Gs) Operating/Nonoperating	5/200	5/175	15/250	15/250	15/200	15/180
Vibration (Gs) Operating (<400 Hz)	0.5	0.5	0.75	0.75	0.5	0.5
Vibration (Gs) Nonoperating (<400 Hz)	2.0	2.0	2.0	2.0	2.0	2.0
PHYSICAL						
Height (in/mm)	1.0/25.4	1.6/40.64	1.0/25.4	1.0/25.4	1.0/25.4	1.6/40.64
Width (in/mm)	4.0/101.6	4.0/101.6	4.0/101.6	4.0/101.6	4.0/101.6	4.0/101.6
Depth (in/mm)	5.75/146.1	5.75/146.0	5.75/146.1	5.75/146.1	5.75/146.0	5.75/146.0
Weight (lb/kg)	1.3/0.6	2.0/0.907	1.5/0.68	1.5/0.68	1.3/0.6	2.0/0.907

Capacity calculated with typical sparing. Sparing is user-optional. * The 2 Gbit/sec Fibre Channel is capable of arbitrating down to 1 Gbit/sec.
** Noise Predictive Viterbi

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