

BARRACUDA

FORMATTED CAPACITIES OF 9.1 TO 50 GBYTES

ULTRA2 SCSI, ULTRA160
SCSI & FIBRE CHANNEL



7,200 RPM

UNMATCHED PERFORMANCE AND RELIABILITY FOR HIGH-END DESKTOPS, ENTRY-LEVEL WORKSTATIONS, DISC ARRAYS, FILE SERVERS, AND VIDEO

- > FIFTH AND SIXTH GENERATION 7,200 RPM, 4.17 MSEC AVERAGE LATENCY, ULTRA SCSI, ULTRA2 SCSI, ULTRA160 SCSI, AND FIBRE CHANNEL INTERFACES
- > ADVANCED SCSI ARCHITECTURE (ASA II)
- > SELF-MONITORING ANALYSIS AND REPORTING TECHNOLOGY (S.M.A.R.T.)
- > FORMATTED DATA RATE OF 12.9 TO 29.6 MBYTES PER SECOND
- > AVERAGE SEEK TIMES AS FAST AS 5.9 MSEC



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3.5 INCH DISC DRIVE	Barracuda 18LP	Barracuda 36	Barracuda 50	Barracuda 18XL	Barracuda 18XL
	ST39175LW/LC ST318275LW/LC/FC	ST136475LW/LC/FC	ST150176LW/LC/FC	NEW ST39216N/W ST39226LW/LC ST39236LW/LWV ST39236LC/LCV	NEW ST318416N/W ST318426LW/LC ST318436LW/LWV ST318436LC/LCV
CAPACITY AND INTERFACE					
Formatted Gbytes (512 bytes/sector)	9.10/18.20	36.4	50.1	9.2	18.4
Interface	Ultra2 SCSI Fibre Channel (dual port)	Ultra2 SCSI Fibre Channel (dual port)	Ultra2 SCSI Fibre Channel (dual port)	Ultra SCSI (8, 16 bit) Ultra2 SCSI Ultra160 SCSI	Ultra SCSI (8, 16 bit) Ultra2 SCSI Ultra160 SCSI
PERFORMANCE					
Internal Transfer Rate, ZBR (Mbits/sec)	137 to 240	137 to 240	153 to 264	183 to 316	183 to 316
Internal Formatted Transfer Rate (Mbytes/sec)	12.9 to 22.5	12.9 to 22.5	14.9 to 25.7	17.2 to 29.6	17.2 to 29.6
External Transfer Rate (Mbytes/sec) Ultra2 SCSI/Ultra160 SCSI/FC (per loop)	80/100	80/100	80/100	20/40/80/160	20/40/80/160
Multisegmented Cache (Kbytes) Ultra2 SCSI/Ultra160 SCSI/FC	1,024 (4,096 optional)	1,024 (4,096 optional)	1,024	2,048/1,024/2,048	2,048/1,024/2,048
Multisegmented Extended Cache (Kbytes) Ultra2 SCSI/Ultra160 SCSI/FC	NA	NA	NA	4,096	4,096
Track-to-Track Seek, Read/Write (msec)	0.8/1.1	0.8/1.1	0.9/1.2	0.6/0.8	0.6/0.8
Average Seek, Read/Write (msec)	6.9/7.4	7.4/8.2	7.4/8.2	5.9/6.4	5.9/6.4
Average Latency (msec)	4.17	4.17	4.17	4.17	4.17
Spindle Speed (RPM)	7,200	7,200	7,200	7,200	7,200
CONFIGURATION/ORGANIZATION					
Discs/Heads	3/5, 5/10	10/20	11/22	2/3	3/6
Servo	Embedded	Embedded	Embedded	Embedded	Embedded
Sectors per Drive (512 bytes/sector)	17,783,240/35,566,480	71,132,960	97,809,765	17,942,584	35,885,168
Cylinders	11,737	11,737	12,024	14,384	14,384
Recording Method (PRML)	16/17 EPR4	16/17 EPR4	16/17 EPR4	EPRML	EPRML
RELIABILITY/DATA INTEGRITY					
S.M.A.R.T. Capable	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
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
Seek Errors (per seek)	10 per 10 ⁹	10 per 10 ⁹	10 per 10 ⁹	10 per 10 ⁹	10 per 10 ⁹
Service Life/Limited Warranty (years)	5/5	5/5	5/5	5/5	5/5
POWER REQUIREMENTS					
+12 VDC ± 5% (amps, typ operating) Ultra SCSI/Ultra2 SCSI/Ultra160 SCSI [FC]	0.9	1.2	1.2	0.6	0.6
+5 VDC ± 5% (amps, typ operating) Ultra SCSI/Ultra2 SCSI/Ultra160 SCSI [FC]	0.8 [1.2]	1.2 [1.25]	0.81 [1.14]	0.8	0.8
Power (Idle watts) Ultra SCSI/Ultra2 SCSI/Ultra160 SCSI [FC]	9.75 [11.3]	13.35 [15.5]	11.87 [13.67]	6.5	6.8
ENVIRONMENTAL					
Idle Acoustics (Bels)	4.1	4.2	4.0	3.4	3.4
Operating Temperature (°C)	5 to 50	5 to 50	5 to 50	5 to 55	5 to 55
Nonoperating Temperature (°C)	-40 to 70	-40 to 70	-40 to 70	-40 to 70	-40 to 70
Shock (Gs) Operating/Nonoperating	5/150	5/135	5/150	10/250	10/250
Vibration (Gs) Operating (<400 Hz)	0.5	0.5	0.5	1.75	1.75
Vibration (Gs) Nonoperating (<400 Hz)	2.0	2.0	2.0	2.0	2.0
PHYSICAL					
Height (in/mm)	1.0/25.4	1.62/41.1	1.62/41.1	1.0/25.4	1.0/25.4
Width (in/mm)	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	5.75/146.0	5.75/146.1	5.75/146.1
Weight (lb/kg)	1.3/0.6	2.2/0.99	2.2/0.99	1.3/0.6	1.3/0.6

Capacity calculated with typical sparing. Sparing is user-optional.

CORPORATE HEADQUARTERS Seagate Technology 920 Disc Drive, Scotts Valley, California, 95066, UNITED STATES 831-438-6550
ASIA/PACIFIC Seagate Technology International Ltd. 151 Lorong Chuan, New Tech Park #06-01, SINGAPORE 556741, 65-488-7200
EUROPE AND AFRICA Seagate Technology SA 62 bis, avenue André Morizet, 92643 Boulogne-Billancourt Cedex, FRANCE 33 1-41 86 10 00

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