

MANUFACTURER	SAMSUNG ELECTRONICS	SAMSUNG ELECTRONICS	SAMSUNG ELECTRONICS	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY
DRIVE					
	SHD-3061A	SHD-3062A	SHD-3101A	ST225	ST251
DISK/TREND GROUP	3	4	4	2	2
MARKET	Captive, OEM	OEM	Captive, OEM	OEM	OEM
MEDIA: Generic type	Fixed	Fixed	Fixed	Fixed	Fixed
Nominal disk diameter	95 mm OD	95 mm OD	95 mm OD	130 mm OD	130 mm OD
Recording medium	25 mm ID Thin Film	25 mm ID Thin Film	25 mm ID Thin Film	40 mm ID Oxide Coated	40 mm ID Thin Film
DRIVE: Heads			MIG	Ferrite	Ferrite
Interface	PC AT	PC AT	PC AT	ST412	ST412
CAPACITY/RECORDING DENSITY					
Total capacity (Mbytes) FIXED	F: 60.5	F: 120	U: 133.52 F: 105	U: 25.6	U: 51.2
REMOVABLE	--	--	--	--	--
Capacity per track (Bytes)	F: 20,480	F: 20,480	F: 20,480	U: 10,416	U: 10,416
Data surfaces per spindle	2	4	4	4	6
Heads per data surface	1	1	1	1	1
Tracks per surface	1478	1478	1282	615	820
Track density (TPI)	1752	1752	1658	588	777
Maximum linear density (BPI) (FCI)	36139 27172	36139 27172	35161 26371	9827	9935
Recording code	1,7 RLL	1,7 RLL	1,7 RLL	MFM	MFM
Rotational speed (RPM)	3600	3600	3600	3600	3600
PERFORMANCE					
Actuator type	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Band, Stepping Motor	Rotary, Band, Stepping Motor
Servo type	Embedded	Embedded	Embedded	Open Loop	Open Loop
Average positioning time (msec)	16	16	16	65 (including settling)	28 (including settling)
Average rotational delay (msec)	8.3	8.3	8.3	8.3	8.3
Average access time (msec)	24.3	24.3	24.3	73.3	36.3
Data transfer rate (KBytes/sec)		1250	6000	625	625
FIRST CUSTOMER SHIPMENT	1992	1992	4Q91	10/84	3Q87
COMMENTS	25.4 mm high	25.4 mm high	25.4 mm high	41.3 mm high	41.3 mm high

1992 DISK/TREND REPORT

MANUFACTURER	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY
DRIVE					
	ST351A/X	ST9052A	ST3096A	ST4096	ST7075
DISK/TREND GROUP	2	2	3	3	3
MARKET	OEM	OEM	OEM	OEM	OEM
MEDIA: Generic type	Fixed	Fixed	Fixed	Fixed	Fixed
Nominal disk diameter	95 mm OD 25 mm ID	65 mm OD 20 mm ID	95 mm OD 25 mm ID	130 mm OD 40 mm ID	48 mm OD 12 mm ID
Recording medium	Thin Film	Thin Film	Thin Film	Thin Film	Thin Film
DRIVE: Heads		Thin Film	Thin Film	Ferrite	Thin Film
Interface	PC AT/XT	PC AT	PC AT	ST412	PC AT
CAPACITY/RECORDING DENSITY					
Total capacity (Mbytes) FIXED	F: 42.8	F: 42.6	F: 89.2	U: 96	F: 65
REMOVABLE	--	--	--	--	--
Capacity per track (Bytes)	*	*	*	U: 10,416	*
Data surfaces per spindle	2	2	3	9	4
Heads per data surface	1	1	1	1	1
Tracks per surface	820	1065	1024	1024	
Track density (TPI)	1290	2165	1760	1031	
Maximum linear density (BPI) (FCI)	28922 19281	40500 27000	34600 23000	9792	
Recording code	2,7 RLL	2,7 RLL	2,7 RLL	MFM	
Rotational speed (RPM)	3048	3450	3528	3600	
PERFORMANCE					
Actuator type	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil	Linear, Voice Coil	Rotary, Voice Coil
Servo type	Embedded	Embedded	Dedicated Surf.	Dedicated Surf.	Embedded
Average positioning time (msec)	28	16	16	28	16
Average rotational delay (msec)	9.8	8.7	8.5	8.3	
Average access time (msec)	37.8	24.7	24.5	36.3	
Data transfer rate (KBytes/sec)	1250-1750	4000	4000 max.	625	
FIRST CUSTOMER SHIPMENT	4Q90	4Q91	1Q90	1Q86	4Q92
COMMENTS	25.4 mm high *Varies by zone	12.5 mm high *Varies by zone	25.4 mm high *Varies by zone		12.5 mm high *Varies by zone

1992 DISK/TREND REPORT

MANUFACTURER	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY
DRIVE	ST9080A	ST9096A	ST2125N ST2125NM Wren 5 HH	ST2182E Wren 6 HH	ST2209N ST2209NM ST2209NV Wren 5 HH
DISK/TREND GROUP	3	3	4	4	4
MARKET	OEM	OEM	OEM	OEM	OEM
MEDIA: Generic type	Fixed	Fixed	Fixed	Fixed	Fixed
Nominal disk diameter	65 mm OD 20 mm ID	65 mm OD 20 mm ID	130 mm OD 40 mm ID	130 mm OD 40 mm ID	130 mm OD 40 mm ID
Recording medium	Thin Film	Thin Film	Thin Film	Thin Film	Thin Film
DRIVE: Heads	Thin Film	Thin Film	Ferrite	Thin Film	Ferrite
Interface	PC AT	PC AT	SCSI	ESDI	SCSI
CAPACITY/RECORDING DENSITY					
Total capacity (Mbytes) FIXED	F: 64.0	F: 85.2	U: 125 F: 107	U: 182	U: 209 F: 183
REMOVABLE	--	--	--	--	--
Capacity per track (Bytes)	*	*	*	U: 31,320	*
Data surfaces per spindle	2	4	3	5	5
Heads per data surface	1	1	1	1	1
Tracks per surface		1065	1544	1453	1544
Track density (TPI)		2165	1280	1459	1280
Maximum linear density (BPI) (FCI)		40500 27000	19213 12808	31699 21132	19213 12808
Recording code	2,7 RLL	2,7 RLL	2,7 RLL	2,7 RLL	2,7 RLL
Rotational speed (RPM)	3450	3450	3600	3600	3600
PERFORMANCE					
Actuator type	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil
Servo type	Embedded	Embedded	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.
Average positioning time (msec)	16	16	18	15	18
Average rotational delay (msec)	8.7	8.7	8.3	8.3	8.3
Average access time (msec)	24.7	24.7	26.3	23.3	26.3
Data transfer rate (KBytes/sec)	4000	4000	4700 synch.	1875	4700 synch.
FIRST CUSTOMER SHIPMENT	3Q92	4Q91	3Q88	1/89	3Q88
COMMENTS	12.5 mm high *Varies by zone	19 mm high *Varies by zone	41.3 mm high *Varies by zone	41.3 mm high	41.3 mm high *Varies by zone

MANUFACTURER	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY
DRIVE	ST2274A Wren 6 HH	ST3120A	ST3144A	ST9144A	ST6344J FSD
DISK/TREND GROUP	4	4	4	4	5
MARKET	OEM	OEM	OEM	OEM	OEM
MEDIA: Generic type	Fixed	Fixed	Fixed	Fixed	Fixed
Nominal disk diameter	130 mm OD	95 mm OD	95 mm OD	65 mm OD	230 mm OD
Recording medium	40 mm ID Thin Film	25 mm ID Thin Film	25 mm ID Thin Film	20 mm ID Thin Film	100 mm ID Oxide Coated
DRIVE: Heads	Thin Film	Thin Film	Thin Film	Thin Film	Thin Film
Interface	PC AT	PC AT	PC AT	PC AT	SMD
CAPACITY/RECORDING DENSITY					
Total capacity (Mbytes) FIXED	F: 193	F: 106.9	F: 130	F: 127.9	U: 344
REMOVABLE	--	--	--	--	--
Capacity per track (Bytes)	F: 27,648	*	*	*	U: 20,160
Data surfaces per spindle	5	3	3	6	12
Heads per data surface	1	1	1	1	2
Tracks per surface	1453	1024	1001	1065	1422
Track density (TPI)	1459	1760		2165	960
Maximum linear density (BPI) (FCI)	31699 21132	34600 23000	34600 23000	40500 27000	10000
Recording code	2,7 RLL	2,7 RLL	2,7 RLL	2,7 RLL	MFM
Rotational speed (RPM)	3600	3528	3528	3450	3600
PERFORMANCE					
Actuator type	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil	Linear, Voice Coil
Servo type	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.	Embedded	Dedicated Surf.
Average positioning time (msec)	16	16	16	16	18
Average rotational delay (msec)	8.3	8.5	8.5	8.7	8.3
Average access time (msec)	24.3	24.5	24.5	24.7	26.3
Data transfer rate (KBytes/sec)	1875	4000	4000	4000	1209
FIRST CUSTOMER SHIPMENT	4/89	1/91	3Q91	4Q91	4Q83
COMMENTS	41.3 mm high	25.4 mm high *Varies by zone	25.4 mm high *Varies by zone	19.05 mm high *Varies by zone	

1992 DISK/TREND REPORT

MANUFACTURER	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY
DRIVE	ST1239A Swift	ST3243A	ST3283A	ST3283N	ST9235A
DISK/TREND GROUP	5	5	5	5	5
MARKET	OEM	OEM	OEM	OEM	OEM
MEDIA: Generic type	Fixed	Fixed	Fixed	Fixed	Fixed
Nominal disk diameter	95 mm OD	95 mm OD	95 mm OD	95 mm OD	65 mm OD
Recording medium	25 mm ID Thin Film	25 mm ID Thin Film	25 mm ID Thin Film	25 mm ID Thin Film	20 mm ID Thin Film
DRIVE: Heads	MIG	Thin Film	Thin Film	Thin Film	Thin Film
Interface	PC AT	PC AT	PC AT	SCSI-2	PC AT
CAPACITY/RECORDING DENSITY					
Total capacity (Mbytes) FIXED	F: 210.7	F: 214	F: 245.38	F: 248.62	F: 209.7
REMOVABLE	--	--	--	--	--
Capacity per track (Bytes)	F: 18,432	*	*	*	*
Data surfaces per spindle	9	4	5	5	6
Heads per data surface	1	1	1	1	1
Tracks per surface	1272		1672	1672	
Track density (TPI)	1543		1960	1960	
Maximum linear density (BPI) (FCI)	28103 18735		35000 26250	35000 26250	
Recording code	2,7 RLL	1,7 RLL	1,7 RLL	1,7 RLL	2,7 RLL
Rotational speed (RPM)	3600	3811	4500	4500	3450
PERFORMANCE					
Actuator type	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil
Servo type	Dedicated Surf.	Embedded	Dedicated Surf.	Dedicated Surf.	Embedded
Average positioning time (msec)	15	16	12	12	16
Average rotational delay (msec)	8.3	7.87	6.7	6.7	8.69
Average access time (msec)	23.3	23.87	18.7	18.7	24.69
Data transfer rate (KBytes/sec)	1250		3000	10000 synchron. 3000 asynchron.	4000
FIRST CUSTOMER SHIPMENT	3Q89	2Q92	1Q92	1Q92	3Q92
COMMENTS	41.3 mm high	25.4 mm high *Varies by zone	25.4 mm high *Varies by zone	25.4 mm high *Varies by zone	19.05 mm high *Varies by zone

MANUFACTURER	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY
DRIVE					
	ST1400A	ST1400N	ST1401A	ST1401N	ST1480A
DISK/TREND GROUP	6	6	6	6	6
MARKET	OEM	OEM	OEM	OEM	OEM
MEDIA: Generic type	Fixed	Fixed	Fixed	Fixed	Fixed
Nominal disk diameter	95 mm OD	95 mm OD	95 mm OD	95 mm OD	95 mm OD
Recording medium	25 mm ID Thin Film	25 mm ID Thin Film	25 mm ID Thin Film	25 mm ID Thin Film	25 mm ID Thin Film
DRIVE: Heads					
Interface	PC AT	SCSI-2	PC AT	SCSI-2	PC AT
CAPACITY/RECORDING DENSITY					
Total capacity (Mbytes) FIXED	U: 383 F: 331	U: 383 F: 331	U: 390 F: 340	U: 390 F: 338	U: 492 F: 426
REMOVABLE	--	--	--	--	--
Capacity per track (Bytes)	*	*	*	*	*
Data surfaces per spindle	7	7	9	9	9
Heads per data surface	1	1	1	1	1
Tracks per surface	1475	1476	1121	1100	1478
Track density (TPI)	1760	1760	1760	1760	1760
Maximum linear density (BPI) (FCI)	36000 27000	36000 27000	36000 27000	36000 27000	36000 27000
Recording code	1,7 RLL	1,7 RLL	1,7 RLL	1,7 RLL	1,7 RLL
Rotational speed (RPM)	4412	4412	4412	4412	4412
PERFORMANCE					
Actuator type	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil
Servo type	Dedicated Surf.	Dedicated Surf.		Dedicated Surf.	Dedicated Surf.
Average positioning time (msec)	14	14	12	12	14
Average rotational delay (msec)	6.8	6.8	6.8	6.8	6.8
Average access time (msec)	20.8	20.8	18.8	18.8	20.8
Data transfer rate (KBytes/sec)	8000	5000 synch. 4000 asynch.	8000	5000 synch. 4000 asynch.	1875-3125*
FIRST CUSTOMER SHIPMENT		1/91		1/91	1/91
COMMENTS	41.3 mm high *Varies by zone	41.3 mm high *Varies by zone	41.3 mm high *Varies by zone	41.3 mm high *Varies by zone	41.3 mm high *Varies by zone

1992 DISK/TREND REPORT

	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY
MANUFACTURER					
DRIVE	ST1480N	ST1481N	ST2383A Wren 6 HH	ST2383E Wren 6 HH	ST2383N ST2383ND ST2383NM Wren 6 HH
DISK/TREND GROUP	6	6	6	6	6
MARKET	OEM	OEM	OEM	OEM	OEM
MEDIA: Generic type	Fixed	Fixed	Fixed	Fixed	Fixed
Nominal disk diameter	95 mm OD	95 mm OD	130 mm OD	130 mm OD	130 mm OD
Recording medium	25 mm ID Thin Film	25 mm ID Thin Film	40 mm ID Thin Film	40 mm ID Thin Film	40 mm ID Thin Film
DRIVE: Heads			Thin Film	Thin Film	Thin Film
Interface	SCSI, SCSI-2	SCSI-2	PC AT	ESDI	SCSI
CAPACITY/RECORDING DENSITY					
Total capacity (Mbytes) FIXED	U: 492 F: 426	U: 492 F: 426	F: 338	U: 383	U: 383 F: 337
REMOVABLE	--	--	--	--	--
Capacity per track (Bytes)	*	*	F: 27,648	U: 31,320	*
Data surfaces per spindle	9	9	7	7	7
Heads per data surface	1	1	1	1	1
Tracks per surface	1478	1476	1747	1747	1261
Track density (TPI)	1760	1760	1459	1459	1459
Maximum linear density (BPI) (FCI)	36000 27000	36000 27000	31699 21132	31699 21132	31674 21116
Recording code	1,7 RLL	1,7 RLL	2,7 RLL	2,7 RLL	2,7 RLL
Rotational speed (RPM)	4400	4412	3600	3600	3600
PERFORMANCE					
Actuator type	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil
Servo type	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.
Average positioning time (msec)	14	14	16	16	14
Average rotational delay (msec)	6.8	6.8	8.3	8.3	8.3
Average access time (msec)	20.8	20.8	24.3	24.3	22.3
Data transfer rate (KBytes/sec)	5000 synch. 4000 asynch.	10000 synch. 4000 asynch.	1875	1875	4700 synch.
FIRST CUSTOMER SHIPMENT:	1/91	3Q91	4/89	1/89	7/89
COMMENTS	41.3 mm high *Varies by zone	41.3 mm high *Varies by zone	41.3 mm high	41.3 mm high	41.3 mm high *Varies by zone

MANUFACTURER	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY
DRIVE	ST2502N ST2502ND ST2502NM ST2502NV Wren 6 HH	ST3500A	ST3500N ST3500ND	ST4350N ST4350NM Wren 4	ST4376N ST4376NM ST4376NV Wren 4
DISK/TREND GROUP	6	6	6	6	6
MARKET	OEM	OEM	OEM	OEM	OEM
MEDIA: Generic type	Fixed	Fixed	Fixed	Fixed	Fixed
Nominal disk diameter	130 mm OD 40 mm ID	95 mm OD 25 mm ID	95 mm OD 25 mm ID	130 mm OD 40 mm ID	130 mm OD 40 mm ID
Recording medium	Thin Film	Thin Film	Thin Film	Thin Film	Thin Film
DRIVE: Heads	Thin Film	Thin Film	Thin Film	Thin Film	Thin Film
Interface	SCSI	PC AT	SCSI-2	SCSI	SCSI
CAPACITY/RECORDING DENSITY					
Total capacity (Mbytes) FIXED	U: 502 F: 442	F: 426	F: 426	U: 350 F: 307	U: 376 F: 330
REMOVABLE	--	--	--	--	--
Capacity per track (Bytes)	*	*	*	*	*
Data surfaces per spindle	7	7	7	9	9
Heads per data surface	1	1	1	1	1
Tracks per surface	1755	1546	1546	1412	1549
Track density (TPI)	1459	2150	2150	1280	1280
Maximum linear density (BPI) (FCI)	31674 21116	46000 34500	46000 34500	19058 12705	19058 12705
Recording code	2,7 RLL	1,7 RLL	1,7 RLL	2,7 RLL	2,7 RLL
Rotational speed (RPM)	3600	4500	4500	3600	3600
PERFORMANCE					
Actuator type	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil
Servo type	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.
Average positioning time (msec)	16	9.9 RD/11.4 WR	9.9 RD/11.4 WR	16.5	17.5
Average rotational delay (msec)	8.3	6.7	6.7	8.3	8.3
Average access time (msec)	24.3	16.6/18.1	16.6/18.1	24.8	25.8
Data transfer rate (KBytes/sec)	4700 synch.	4000	10000 synch. 4000 asynch.	1500 synch.	4700 synch.
FIRST CUSTOMER SHIPMENT	9/89	1Q92	1Q92	3/87	10/87
COMMENTS	41.3 mm high *Varies by zone	25.4 mm high *Varies by zone	25.4 mm high *Varies by zone	*Varies by zone	*Varies by zone

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MANUFACTURER	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY
DRIVE	ST4383E Wren 5	ST4384E Wren 5	ST4385N ST4385NM ST4385NV Wren Runner	ST4442E Wren 5	ST6515J ST6515K FSD
DISK/TREND GROUP	6	6	6	6	6
MARKET	OEM	OEM	OEM	OEM	OEM
MEDIA: Generic type	Fixed	Fixed	Fixed	Fixed	Fixed
Nominal disk diameter	130 mm OD 40 mm ID	130 mm OD 40 mm ID	130 mm OD 40 mm ID	130 mm OD 40 mm ID	230 mm OD 100 mm ID
Recording medium	Thin Film	Thin Film	Thin Film	Thin Film	Oxide Coated
DRIVE: Heads	Thin Film	Thin Film	Thin Film	Thin Film	Thin Film
Interface	ESDI	ESDI	SCSI	ESDI	Mod.SMD, IPI-2
CAPACITY/RECORDING DENSITY					
Total capacity (Mbytes) FIXED	U: 383	U: 383	U: 385 F: 357	U: 442	U: 516
REMOVABLE	--	--	--	--	--
Capacity per track (Bytes)	U: 20,880	U: 20,880	*	U: 20,880	U: 30,240
Data surfaces per spindle	13	15	15	15	12
Heads per data surface	1	1	1	1	2
Tracks per surface	1412	1224	791	1412	1422
Track density (TPI)	1280	1280	1280	1280	960
Maximum linear density (BPI) (FCI)	19600 13066	19600 13066	22000 14666	19600 13066	15159 10106
Recording code	2,7 RLL	2,7 RLL	2,7 RLL	2,7 RLL	2,7 RLL
Rotational speed (RPM)	3600	3600	3600	3600	3600
PERFORMANCE					
Actuator type	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil	Linear, Voice Coil
Servo type	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.
Average positioning time (msec)	18	14.5	10.7	16	18
Average rotational delay (msec)	8.3	8.3	8.3	8.3	8.3
Average access time (msec)	26.3	22.8	19	24.3	26.3
Data transfer rate (KBytes/sec)	1250	1250	4700 synch.	1250	1825
FIRST CUSTOMER SHIPMENT	2/88	2/88	1Q89	2/88	4Q83
COMMENTS			*Varies by zone		

MANUFACTURER	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY
DRIVE	ST1581N	ST1980N ST1980ND	ST3600A	ST3600N ST3600ND	ST41097J Elite 1
DISK/TREND GROUP	7	7	7	7	7
MARKET	OEM	OEM	OEM	OEM	OEM
MEDIA: Generic type	Fixed	Fixed	Fixed	Fixed	Fixed
Nominal disk diameter	95 mm OD 25 mm ID	95 mm OD 25 mm ID Thin Film	95 mm OD 25 mm ID Thin Film	95 mm OD 25 mm ID Thin Film	130 mm OD 40 mm ID Thin Film
Recording medium		Thin Film	Thin Film	Thin Film	Thin Film
DRIVE: Heads		Thin Film	Thin Film	Thin Film	Thin Film
Interface	SCSI-2	SCSI-2	PC AT	SCSI-2	Modified SMD
CAPACITY/RECORDING DENSITY					
Total capacity (Mbytes) FIXED	U: 613 F: 525	U: 980 F: 860	U: 600 F: 525	U: 600 F: 525	U: 1,097
REMOVABLE	--	--	--	--	--
Capacity per track (Bytes)	F:	*	*	*	U: 30,800
Data surfaces per spindle	9	13	7	7	17
Heads per data surface	1	1	1	1	1
Tracks per surface	1476	1717	1877	1877	2101
Track density (TPI)			2150	2150	1801
Maximum linear density (BPI) (FCI)			49000 36750	49000 36750	
Recording code	1,7 RLL	1,7 RLL	1,7 RLL	1,7 RLL	2,7 RLL
Rotational speed (RPM)	4412	5400	4500	4500	5400
PERFORMANCE		Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil
Actuator type		Dedicated Surf.	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.
Servo type					
Average positioning time (msec)	14	9.9 RD/11.4 WR	10.5 RD/12 WR	10.5 RD/12 WR	11.5
Average rotational delay (msec)	6.8	5.56	6.7	6.7	5.56
Average access time (msec)	20.8	15.46/16.96	17.2/18.7	17.2/18.7	17.06
Data transfer rate (KBytes/sec)	10000 synch. 4000 asynch.	10000 synch. 4000 asynch.	4000	10000 synch. 4000 asynch.	2750
FIRST CUSTOMER SHIPMENT		1092	1092	1092	2090
COMMENTS	41.3 mm high	41.3 mm high *Varies by zone	25.4 mm high *Varies by zone	25.4 mm high *Varies by zone	

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MANUFACTURER	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY
DRIVE	ST4702N ST4702NM Wren 5	ST4766E Wren 6	ST4766N ST4766NM ST4766NV Wren 6	ST4767E Wren Runner-2	ST4767N ST4767ND ST4767NM ST4767NV Wren Runner-2
DISK/TREND GROUP	7	7	7	7	7
MARKET	OEM	OEM	OEM	OEM	OEM
MEDIA: Generic type	Fixed	Fixed	Fixed	Fixed	Fixed
Nominal disk diameter	130 mm OD	130 mm OD	130 mm OD	130 mm OD	130 mm OD
Recording medium	40 mm ID Thin Film	40 mm ID Thin Film	40 mm ID Thin Film	40 mm ID Thin Film	40 mm ID Thin Film
DRIVE: Heads	Thin Film	Thin Film	Thin Film	Thin Film	Thin Film
Interface	SCSI	ESDI	SCSI	ESDI	SCSI-2
CAPACITY/RECORDING DENSITY					
Total capacity (Mbytes) FIXED	U: 702 F: 613	U: 766	U: 766 F: 676	U: 788	U: 767 F: 676
REMOVABLE	--	--	--	--	--
Capacity per track (Bytes)	*	U: 31,320	F: 28,672	U:	*
Data surfaces per spindle	15	15	15	15	15
Heads per data surface	1	1	1	1	1
Tracks per surface	1546	1632	1632	1399	1356
Track density (TPI)	1280	1459	1459	1600	1600
Maximum linear density (BPI) (FCI)	26000 17333	30500 20333	30500 20333	30600 22950	30600 22950
Recording code	2,7 RLL	2,7 RLL	2,7 RLL	1,7 RLL	1,7 RLL
Rotational speed (RPM)	3600	3600	3600	4800	4800
PERFORMANCE					
Actuator type	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil
Servo type	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.
Average positioning time (msec)	16.5	15.5	16.5	12.9	11.9
Average rotational delay (msec)	8.3	8.3	8.3	6.25	6.25
Average access time (msec)	24.8	23.8	24.8	19.15	18.15
Data transfer rate (KBytes/sec)	4700 synch.	1875	4700 synch.	3000	4800 synch.
FIRST CUSTOMER SHIPMENT	5/88	8/88	9/88	12/90	3/90
COMMENTS	*Varies by zone				*Varies by zone

MANUFACTURER	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY
DRIVE	ST4769E Wren Runner-2	ST8851J ST8851K Sabre 4	ST8851N Sabre 4	ST11200N ST11200ND	ST41200N ST41200ND ST41200NM ST41200NV Wren 7
DISK/TREND GROUP	7	7	7	8	8
MARKET	OEM	OEM	OEM	OEM	OEM
MEDIA: Generic type	Fixed	Fixed	Fixed	Fixed	Fixed
Nominal disk diameter	130 mm OD	210 mm OD	210 mm OD	95 mm OD	130 mm OD
Recording medium	40 mm ID Thin Film	100 mm ID Oxide Coated	100 mm ID Oxide Coated	25 mm ID Thin Film	40 mm ID Thin Film
DRIVE: Heads	Thin Film	Thin Film	Thin Film	Thin Film	Thin Film
Interface	ESDI	SMD, IPI-2	SCSI	SCSI-2	SCSI-2
CAPACITY/RECORDING DENSITY					
Total capacity (Mbytes) FIXED	U: 802	U: 851	U: 851 F: 727	U: 1,200 F: 1,050	U: 1,200 F: 1,050
REMOVABLE	--	--	--	--	--
Capacity per track (Bytes)	U: 34,450	U: 41,088	F: 34,816	*	*
Data surfaces per spindle	15	15	15	15	15
Heads per data surface	1	1	1	1	1
Tracks per surface	1552	1381	1381	1877	1931
Track density (TPI)	1600	1089	1089	2150	1600
Maximum linear density (BPI) (FCI)	29318 21988	19816 13210	19816 13210	46000 34500	32750 24562
Recording code	1,7 RLL	2,7 RLL	2,7 RLL	1,7 RLL	1,7 RLL
Rotational speed (RPM)	4800	3600	3600	5400	3600
PERFORMANCE					
Actuator type	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil
Servo type	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.
Average positioning time (msec)	12.9	15	15	10.5 RD/12 WR	15
Average rotational delay (msec)	6.25	8.3	8.3	5.56	8.3
Average access time (msec)	19.15	23.3	23.3	16.06/17.56	23.3
Data transfer rate (KBytes/sec)	3000	2465	2465	10000 synch. 4000 asynch.	4800 synch.
FIRST CUSTOMER SHIPMENT	12/90	3Q87	3Q87	2Q92	5/89
COMMENTS				41.3 mm high *Varies by zone	*Varies by zone

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MANUFACTURER	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY
DRIVE	ST41201J ST41201K Elite 1	ST41520N ST41520ND Elite 1	ST41600N ST41600ND ST41601N ST41601ND Elite 1	ST41650N ST41650ND Wren 8	ST41651N ST41651ND Wren 8
DISK/TREND GROUP	8	8	8	8	8
MARKET	OEM	OEM	OEM	OEM	OEM
MEDIA: Generic type	Fixed	Fixed	Fixed	Fixed	Fixed
Nominal disk diameter	130 mm OD 40 mm ID	130 mm OD 40 mm ID	130 mm OD 40 mm ID	130 mm OD 40 mm ID	130 mm OD 40 mm ID
Recording medium	Thin Film	Thin Film	Thin Film	Thin Film	Thin Film
DRIVE: Heads	Thin Film	Thin Film	Thin Film	Thin Film	Thin Film
Interface	Mod. SMD, IPI-2	SCSI-2	SCSI-2	SCSI-2	SCSI-2
CAPACITY/RECORDING DENSITY					
Total capacity (Mbytes) FIXED	U: 1,200	U: 1,600 F: 1,370	U: 1,600 F: 1,370	U: 1,650 F: 1,420	U: 1,650 F: 1,420
REMOVABLE	--	--	--	--	--
Capacity per track (Bytes)	U: 33,600	*	*	*	*
Data surfaces per spindle	17	17	17	15	15
Heads per data surface	1	1	1	1	1
Tracks per surface	2101	2101	2101	2110	2107
Track density (TPI)	1801	1801	1801	1760	1760
Maximum linear density (BPI) (FCI)	33344 22229	*	*		
Recording code	2,7 RLL	2,7 RLL	2,7 RLL	1,7 RLL	1,7 RLL
Rotational speed (RPM)	5400	5400	5400	3600	3600
PERFORMANCE					
Actuator type	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil
Servo type	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.
Average positioning time (msec)	11.5	11.5	11.5	15	15
Average rotational delay (msec)	5.56	5.56	5.56	8.3	8.3
Average access time (msec)	17.06	17.06	17.06	23.3	23.3
Data transfer rate (KBytes/sec)	3000	5000 synch.	5000 synch.	5000 synch.	10000 synch.
FIRST CUSTOMER SHIPMENT	1Q90	12/90	12/90	12/90	9/91
COMMENTS		*Varies by zone	*Varies by zone	*Varies by zone	*Varies by zone

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MANUFACTURER	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY
DRIVE	ST41800K Elite 2	ST42100N Wren 9	ST81123J Sabre 5	ST81154K Sabre 5, 2HP	ST81236J ST81236K Sabre 5
DISK/TREND GROUP	8	8	8	8	8
MARKET	OEM	OEM	OEM	OEM	OEM
MEDIA: Generic type	Fixed	Fixed	Fixed	Fixed	Fixed
Nominal disk diameter	130 mm OD 40 mm ID	130 mm OD 40 mm ID	210 mm OD 100 mm ID	210 mm OD 100 mm ID	210 mm OD 100 mm ID
Recording medium	Thin Film	Thin Film	Thin Film	Thin Film	Thin Film
DRIVE: Heads	Thin Film	Thin Film	Thin Film	Thin Film	Thin Film
Interface	IPI-2	SCSI-2	Mod. SMD	IPI-2	SMD, IPI-2
CAPACITY/RECORDING DENSITY					
Total capacity (Mbytes) FIXED	U: 1,986	U: 2,200 F: 1,900	U: 1,123	U: 1,154	U: 1,236
REMOVABLE	--	--	--	--	--
Capacity per track (Bytes)	U: 84,000	*	U: 45,792	U: 50,400	U: 50,400
Data surfaces per spindle	18	15	15	14	15
Heads per data surface	1	1	1	1	1
Tracks per surface	2627	2574	1635	1635	1635
Track density (TPI)		2150	1289	1289	1289
Maximum linear density (BPI) (FCI)			22955 15303	25264 16842	25264 16842
Recording code	2,7 RLL	1,7 RLL	2,7 RLL	2,7 RLL	2,7 RLL
Rotational speed (RPM)	5400	3600	3600	3600	3600
PERFORMANCE					
Actuator type	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil
Servo type	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.
Average positioning time (msec)	11	12.9	15	15	15
Average rotational delay (msec)	5.56	8.3	8.3	8.3	8.3
Average access time (msec)	16.56	21.2	23.3	23.3	23.3
Data transfer rate (KBytes/sec)	7500	10000 synch.	2747	6000	3000
FIRST CUSTOMER SHIPMENT	3Q91	3Q91	3Q88	4Q88	2Q88
COMMENTS		*Varies by zone	22 MHz version of Sabre 5	2 head parallel version of Sabre 5	

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MANUFACTURER	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY
DRIVE	ST81236N Sabre 5	ST82030J ST82030K Sabre 6	ST82038J Sabre 6	ST82105K 8 HP	ST42000N ST42000ND Elite 2
DISK/TREND GROUP	8	8	8	8	9
MARKET	OEM	OEM	OEM	OEM	OEM
MEDIA: Generic type	Fixed	Fixed	Fixed	Fixed	Fixed
Nominal disk diameter	210 mm OD	210 mm OD	210 mm OD	210 mm OD	130 mm OD
Recording medium	100 mm ID Thin Film	100 mm ID Thin Film	100 mm ID Thin Film	100 mm ID Thin Film	40 mm ID Thin Film
DRIVE: Heads	Thin Film	Thin Film	Thin Film	Thin Film	Thin Film
Interface	SCSI	Mod. SMD, IPI-2	Modified SMD	IPI-2	SCSI-2
CAPACITY/RECORDING DENSITY					
Total capacity (Mbytes) FIXED	U: 1,236 F: 1,056	U: 2,030	U: 2,038	U: 2,105	U: 2,000 F: 1,790
REMOVABLE	--	--	--	--	--
Capacity per track (Bytes)	F: 43,008	U: 50,400	U: 41,088	U: 50,400	*
Data surfaces per spindle	15	19	19	16	19
Heads per data surface	1	1	1	1	1
Tracks per surface	1635	2120	2611	2611	2627
Track density (TPI)	1289		1880	1880	
Maximum linear density (BPI) (FCI)	25264 16842				
Recording code	2,7 RLL	2,7 RLL	2,7 RLL	2,7 RLL	2,7 RLL
Rotational speed (RPM)	3600	3600	3600	3600	5400
PERFORMANCE					
Actuator type	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil
Servo type	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.
Average positioning time (msec)	15	11	12	12	11
Average rotational delay (msec)	8.3	8.3	8.3	8.3	5.56
Average access time (msec)	23.3	19.3	20.3	20.3	16.56
Data transfer rate (KBytes/sec)	3000	3000	2400	24000	10000 synch.
FIRST CUSTOMER SHIPMENT	2Q88	4Q90	3Q90	11/90	3Q92
COMMENTS			20 MHz version of Sabre 6	8 head parallel version of Sabre 6	*Varies by zone

MANUFACTURER	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY
DRIVE	ST42400N ST42400ND Elite 2	ST43200K Elite 3, 2HP	ST43400N ST43400ND Elite 3	ST43401N ST43401ND ST43402ND Elite 3	ST82272J Sabre 6
DISK/TREND GROUP	9	9	9	9	9
MARKET	OEM	OEM	OEM	OEM	OEM
MEDIA: Generic type	Fixed	Fixed	Fixed	Fixed	Fixed
Nominal disk diameter	130 mm OD	130 mm OD	130 mm OD	130 mm OD	210 mm OD
Recording medium	40 mm ID Thin Film	40 mm ID Thin Film	40 mm ID Thin Film	40 mm ID Thin Film	100 mm ID Thin Film
DRIVE: Heads	Thin Film	Thin Film	Thin Film	Thin Film	Thin Film
Interface	SCSI-2	IPI-2	SCSI-2	SCSI-2	Modified SMD
CAPACITY/RECORDING DENSITY					
Total capacity (Mbytes) FIXED	U: 2,500 F: 2,129	U: 3,338	U: 3,557 F: 2,904	U: 3,557 F: 2,904	U: 2,272
REMOVABLE	--	--	--	--	--
Capacity per track (Bytes)	*	*	*	*	U: 45,792
Data surfaces per spindle	19	20	21	21	19
Heads per data surface	1	1	1	1	1
Tracks per surface	2627	2627	2627	2627	2611
Track density (TPI)					1880
Maximum linear density (BPI) (FCI)					21987 14658
Recording code	2,7 RLL	1,7 RLL	1,7 RLL	1,7 RLL	2,7 RLL
Rotational speed (RPM)	5400	5400	5400	5400	3600
PERFORMANCE					
Actuator type	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil
Servo type	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.
Average positioning time (msec)	11	11	11	11	12
Average rotational delay (msec)	5.56	5.56	5.56	5.56	8.3
Average access time (msec)	16.56	16.56	16.56	16.56	20.3
Data transfer rate (KBytes/sec)	5000 synch.	25000	10000 synch. 6000 asynch.	20000 synch.	2747
FIRST CUSTOMER SHIPMENT	3Q91	3/92	2/92	4/92	1Q90
COMMENTS	*Varies by zone	*Varies by zone 2 head parallel version of Elite 3	*Varies by zone	*Varies by zone Dual port optional	22 MHz version of Sabre 6

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	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY	SEAGATE TECHNOLOGY
MANUFACTURER					
DRIVE					
	ST82368K Sabre PTD	ST82500J ST82500K Sabre 6	ST82500N Sabre 6	ST83050K Sabre 7 2HP	ST83220K Sabre 7
DISK/TREND GROUP	9	9	9	9	9
MARKET	OEM	OEM	OEM	OEM	OEM
MEDIA: Generic type	Fixed	Fixed	Fixed	Fixed	Fixed
Nominal disk diameter	210 mm OD	210 mm OD	210 mm OD	210 mm OD	210 mm OD
Recording medium	100 mm ID Thin Film	100 mm ID Thin Film	100 mm ID Thin Film	100 mm ID Thin Film	100 mm ID Thin Film
DRIVE: Heads	Thin Film	Thin Film	Thin Film	Thin Film	Thin Film
Interface	IPI-2	SMD, IPI-2	SCSI	IPI-2	IPI-2
CAPACITY/RECORDING DENSITY					
Total capacity (Mbytes) FIXED	U: 2,368	U: 2,500	U: 2,500 F: 2,140	U: 3,050	U: 3,220
REMOVABLE	--	--	--	--	--
Capacity per track (Bytes)	U: 50,400	U: 50,400	F: 43,142	U: 127,680	U: 63,840
Data surfaces per spindle	18	19	19	18	19
Heads per data surface	1	1	1	1	1
Tracks per surface	2611	2611	2611	2655	2655
Track density (TPI)	1880	1880	1880	1912	1912
Maximum linear density (BPI) (FCI)	24200 16133	25409 16939	25409 16939	32202 24151	32202 24151
Recording code	2,7 RLL	2,7 RLL	2,7 RLL	1,7 RLL	1,7 RLL
Rotational speed (RPM)	3600	3600	3600	4365	4365
PERFORMANCE					
Actuator type	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil	Rotary, Voice Coil
Servo type	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.	Dedicated Surf.
Average positioning time (msec)	12	12	12	12	12
Average rotational delay (msec)	8.3	8.3	8.3	6.87	6.87
Average access time (msec)	20.3	20.3	20.3	18.87	18.87
Data transfer rate (KBytes/sec)	27000	3000	3000	9340	4670
FIRST CUSTOMER SHIPMENT	3Q90	1Q90	2Q90	3/91	1/91
COMMENTS	9 head parallel version of Sabre 6			2 head parallel version of Sabre 7	