

Date: 2-14-90

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From: G. Becker

Subject: Information on new D.G. RAMS disks

I have been informed that the new Data General 1.2 GB RAMS drive (Model 6621) is in reality two Maxtor 8760E disks. Data General converts the ESDI disk interface to their RAMS disk interface. (This process must have some overhead associated with it). The Maxtor 8760E drive has the following characteristics compared to the 330 Mb and 601 MB Wrens we use.

	<u>Maxtor</u>	<u>Wren V(601MB)</u>	<u>Wren Runner</u>
Capacity Unformatted	765 MB	702 MB	385 MB
Formatted Capacity	600 MB	601 MB	330 MB
Transfer Rate	15 Mbits/s	12-16 Mbits/s	15-16 Mbits/s
Seek Times			
AVG	18 ms	16.5 ms	10.7 ms
TRK to TRK	2 ms	3 ms	3 ms
MAX	35 ms	38 ms	22.5 ms
Avg. Latency	8.3 ms	8.3 ms	8.3 ms
Data Heads	15	15	15
Disks	8	8	8
Buffer in Drive	No	32K	32K
Read Ahead in Drive	No	Yes	Yes

This translates that the Zetaco SKS-HP601 product will outperform this RAMS product because of its lower seek times and SCSI buffering. The SKS-HP330 will give even greater performance compared to RAMS because of it's even lower average seek times and SCSI buffering. I also have to believe they have some additional overhead converting ESDI to RAMS.

I would be interested in running our transaction per second test on their RAMS product, so if anyone knew where we can do this, let me know.

BMC-1 SMD DISK DRIVE COMPARISON CHART

Manufacturer/Model	Dia.	Heads	Cyl.	Max. Sec.	Type	M.B. Unformatted Cap.	RODS EMULATION SUPPORTED M.B.				AOS-AOS/VS EMULATION SUPPORTED M.B.		Remarks
							6060, 6061, 6067 (24 Sec.)	606X Expanded (32 Sec.)	RODS 7.0 & Above		6060, 6061, 6067 (24 Sec.)	616X Expanded (64 Sec. Max.)	
									6160, 6161, 6122 (35 Sec.)	616X Expanded (64 Sec. Max.)			
DC Lark II 9457	8	2/2	624	32	R/F	24/24	15/15	20/20	X	X	6160, 6161, 6122 & 6214 (35 Sec. Max.)	Fixed sectors	
RSD 9710	8	5	823	35	R	82	50	67	73	73	50	73	
FSD 9715-160	8	10	823	35	F	165	101	134	147	147	50	147	AOS 60XX Inefficient
FSD 9715-340	8	24	711	35	F	340	209	280	306	306	X	X	
MWD 9730-80	14	5	823	35	F	80	50	67	73	73	50	73	60XX (24 Sec) Inefficient
MWD 9730-160	14	10	823	35	F	160	101	134	147	147	50	147	AOS 60XX Inefficient
SMD 9762	14	5	823	35	R	80	50	67	73	73	50	73	60XX (24 Sec) Inefficient
SMD 9766	14	19	823	35	R	300	192	256	280	280	190	277	
SMD 9775	14	40	843	35	F	675	413	551	602	602	190	602	
ATA PERIPHERAL D160Q	14	7	1116	35	F	144	96	130	139	139	50	73	AOS Inefficient
ISC TECH ONE 3306	14	12	352	35	F	84	51	69	75	75	X	X	
SHIMADZU 2280	14	5	823	35	F	84	50	67	73	73	50	73	
SHIMADZU 2284	14	10	823	35	F	168	101	134	147	147	50	147	AOS 60XX Inefficient
SHIMADZU 2294	14	16	1024	35	F	335	201	268	293	293	50	147	AOS Inefficient
SHIMADZU 2311	8	4	589	35	F	48	29	38	42	42	X	X	
SHIMADZU 2312	8	7	589	35	F	84	50	67	73	73	X	X	
Eagle 2351	10.5	20	842	24/24	F	475	207/207	207/207	277	405	190/190	277	61XX (35 Sec) Inefficient
EMMEDY 5380	14	5	823	35	F	80	50	67	73	73	50	73	
EMMEDY 7340	14	5	411	35	F	41	25	33	36	36	X	X	
EMMEDY 7380	14	5	823	35	F	82	50	67	73	73	50	73	
EMMEDY 53160	14	5	823	35	F	80	50	67	73	73	50	73	
REGAVault 83	8	5	823	35	F	83	50	67	73	73	50	73	
REGAVault 116	8	7	823	35	F	116	70	94	103	103	50	73	AOS 60XX Inefficient
EMMEDY 213	8	4	589	35	F	48	30	38	42	42	X	X	
EMMEDY 214	8	7	589	35	F	84	50	67	73	73	X	X	
REGAVault 677-30	14	11	823	35	R	312	192	256	280	280	190	277	
REGAVault 677-70	14	19	823	23	R	206	184	182	X	X	X	X	
EMMEDY 2220	8	3	415	35	F	25	15	20	22	22	X	X	
EMMEDY 2230	8	5	415	35	F	42	25	34	37	37	X	X	
EMMEDY 2246	8	6	692	35	F	85	51	68	74	74	X	X	

BMX-1 SMD DISK DRIVE COMPARISON CHART

Manufacturer/Model	Dia.	Heads	Cyl.	Max. Sec.	Type	M.B. Unformatted Cap.	RODS EMULATION SUPPORTED M.B.				AOS-AOS/VS EMULATION SUPPORTED M.B.		Remarks
							6060, 6061, 6067 (24 Sec.)	606X Expanded (32 Sec.)	6160, 6161, 6122 (35 Sec.)	616X Expanded (64 Sec. Max.)	6060, 6061, 6067 (24 Sec.)	6160, 6161, 6122 & 6214 (35 Sec. Max.)	
DOYNE													
110	8	2/2	642	32	F/R	26/26	16/16	20/20	X	X	X	6160, 6161, 6122 & 6214 (35 Sec. Max.)	Fixed sector AOS 60XX Inefficient
160	8	10	823	35	F	165	101	134	147	147	147		
EX													
corplo 48	8	3	823	35	F	48	30	40	44	44	X		
corplo 80	8	5	823	35	F	82	50	67	73	73	X		
apricorn 165	14	10	823	35	F	166	101	134	147	147	50		AOS 60XX Inefficient
apricorn 330	14	16	1024	35	F	330	201	268	293	293	50		AOS 60XX Inefficient
EX													
660	14	16	2048	35	F	660	402	536	586	586	50		AOS Inefficient
932	14	1/1	823	35	R/F	16/16	10/10	13/13	14/14	14/14	X		
964	14	1/3	823	35	R/F	16/48	10/30	13/40	14/44	14/44	X		
(PM) 980	14	5	823	35	R	82	50	67	73	73	50		
996	14	1/5	823	35	R/F	16/80	10/50	13/67	14/73	14/73	X		
9160	14	5	1645	35	F	160	101	135	147	147	50		AOS Inefficient
-202 MB 4830-4835	14	6	823	35/35	F	202	50	50	73/73	73/73	50		60XX Inefficient
-337 MB 4830-4835	14	10	823	35/35	F	337	101	134	147/147	147/147	50		60XX Inefficient
-404 MB 4830-4835	14	12	823	35/35	F	404	121	162/162	177/177	177/177	50		60XX (24 Sec.) Inefficient
-640 MB 4865	14	19	823	35/35	F	640	190/190	190/190	280/280	277/277	190/190		
TIURY DATA													
82	14	5	823	35	R	82	50	67	73	73	50		
300, 302, 306	14	19	823	35	R	315	192	256	280	280	190		
315	14	19	823	35	F	315	192	256	280	280	190		
AMS 380	14	14	845	55	F	380	145	193	212	212	50		
AMS 513	14	19	845	24/24	F	513	190/190	190/190	277	277	190/190		
2048	8	2/4	424	32	F/R	16/32	10/20	14/28	14/28	14/28	X		Can be run at 55 Sec.
C-FINCH 9410-8	8	1	605	23	F	8	7	7	7	7	X		
9410-24	8	3	605	23	F	24	21	21	21	21	X		
9410-32	8	4	605	23	F	32	28	28	28	28	X		
9410-40	8	5	605	23	F	40	35	35	35	35	X		
C-WINDSOR 9412	8	5	772	35	F	80	47	63	X	X	X		
9448-32	14	1/1	823	35	R/F	16/16	10/10	13/13	14/14	14/14	X		
9448-64	14	1/3	823	35	R/F	16/48	10/30	13/40	14/44	14/44	X		
9448-96	14	1/5	823	35	R/F	16/80	10/50	13/67	14/73	14/73	X		
Lark I -9455	8	2/2	206	32	R/F	8/8	5/5	6.7/6.7	X	X	X		Fixed Sector 1/23/84

BMX-1 SMD DISK DRIVE COMPARISON CHART

Manufacturer/Model	Dia.	Heads	Cyl.	Max. Sec.	Type	M.B. Unformatted Cap.	RDO5 EMULATION SUPPORTED M.B.				AOS-AOS/VS EMULATION SUPPORTED M.B.		Remarks
							6060, 6061, 6067 (24 Sec.)	606X Expanded (32 Sec.)	6160, 6161, 6122 (35 Sec.)	616X Expanded (64 Sec. Max.)	6060, 6061, 6067 (24 Sec.)	6160, 6161, 6122 & 6214 (35 Sec. Max.)	
IAM	804	5	1049	35	F	105	64	86	94	94	50	73	AOS 60XX Inefficient
	3350	14	561	35	F	34	20	27	30	30	X	X	
	3450	8	525	23	F	35	30	30	X	X	X	X	
	7050	8	1049	23	F	70	61	61	X	X	X	X	
	6650	14	3	1024	35	F	61	37	50	55	X	X	
ESTOR	15450	14	7	1121	35	F	144	96	128	128	50	73	AOS 60XX Inefficient
	85	14	5	823	35	F	82	50	67	73	50	73	
	160	14	12	700	35	F	169	103	137	150	X	X	
	165	14	10	823	35	F	165	101	134	147	50	147	AOS 60XX Inefficient
	200	14	12	823	35	F	199	121	161	176	50	147	AOS 60XX Inefficient
300	14	19	823	35	F	315	192	256	280	190	277		

BMX-1 SMD DISK DRIVE COMPARISON CHART

Manufacturer/Model	Dia.	Heads	Cyl.	Max. Sec.	Type	MB Unformatted Cap.	RDOS EMULATION SUPPORTED MB			AOS-AOS/VS EMULATION SUPPORTED MB		Remarks	
							6060, 6061, 6067 (24 Sec.)	606X Expanded (32 Sec.)	RDOS 7.0 & Above		6060, 6061, 6067 (24 Sec.)		6160, 6161, 6122 & 6214 (35 Sec. Max.)
									6160, 6161 6122 (35 Sec.)	6161 Expanded (64 Sec. Max.)			
6060	14	19	411	24	R	105	96	96	96	96	X		
6061	14	19	815	24	R	209	190	190	190	190	X		
6067	14	5	815	24	R	55	50	50	50	50	X		
6160	14	5	823	35	F	83	67	73	73	50		AOS 60XX Inefficient	
6161	14	10	823	35	F	166	134	147	147	50	147	AOS 60XX Inefficient	
6122	14	19	815	35	R	312	253	277	277	190	277	AOS 60XX Inefficient	
6214	14	40	843	35	F	675	551	602	602	190	602	AOS 60XX Inefficient	

Please see following pages for Disk Drives currently approved for operation with CSI's Model BMX-1 SMD Disk Controller. If the model you are interested in is not listed, please give us a call as this is a dynamic and continuing process.

Note

An X in RDOS, AOS and AOS/VS columns indicates drive Spec is incompatible with the standard driver. CSI does not recommend patching as the patches are most always troublesome and potentially dangerous because of the inter-relationship with the operating system.