POINT 4
DATA CORPORATION

June 7, 1985

Dear POINT 4 Distributor:

Enclosed is a copy of the new POINT 4 Competitive Comparison. This represents an extensive research project comparing various POINT 4 systems (MARK 2, MARK 4, MARK 5, and MARK 9) and other vendors' systems that support the small to medium business system market. The analysis is divided into four categories based on vendor classification: Major Suppliers, Minicomputer Suppliers, Microcomputer Suppliers, and Suppliers of systems in a tower configuration.

The Analysis was constructed from various trade sources (Datapro reports on Mini, Micro, Small Computer Systems, Data Sources, Auerback and individual company literature). It therefore represents a degree of objectivity.
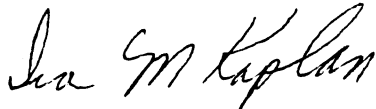
I have tried to establish a one-on-one relationship using POINT 4's most competitive offering in each of the following categories as the basis for my Analysis:

> System Type
> Memory Size
> Disk Capacity
> Back-up Capacity
> Operating System
> Price

The Analysis will continue to be expanded and refined on an on-going basis. In order to accomplish this task I would appreciate any assistance in the way of information or price lists that you could send me.

I think you'll agree that this package contains some valuable information, and it is my sincerest wish that it will help overcome some of the objections that you encounter in your daily selling efforts.

Good Luck and good selling,

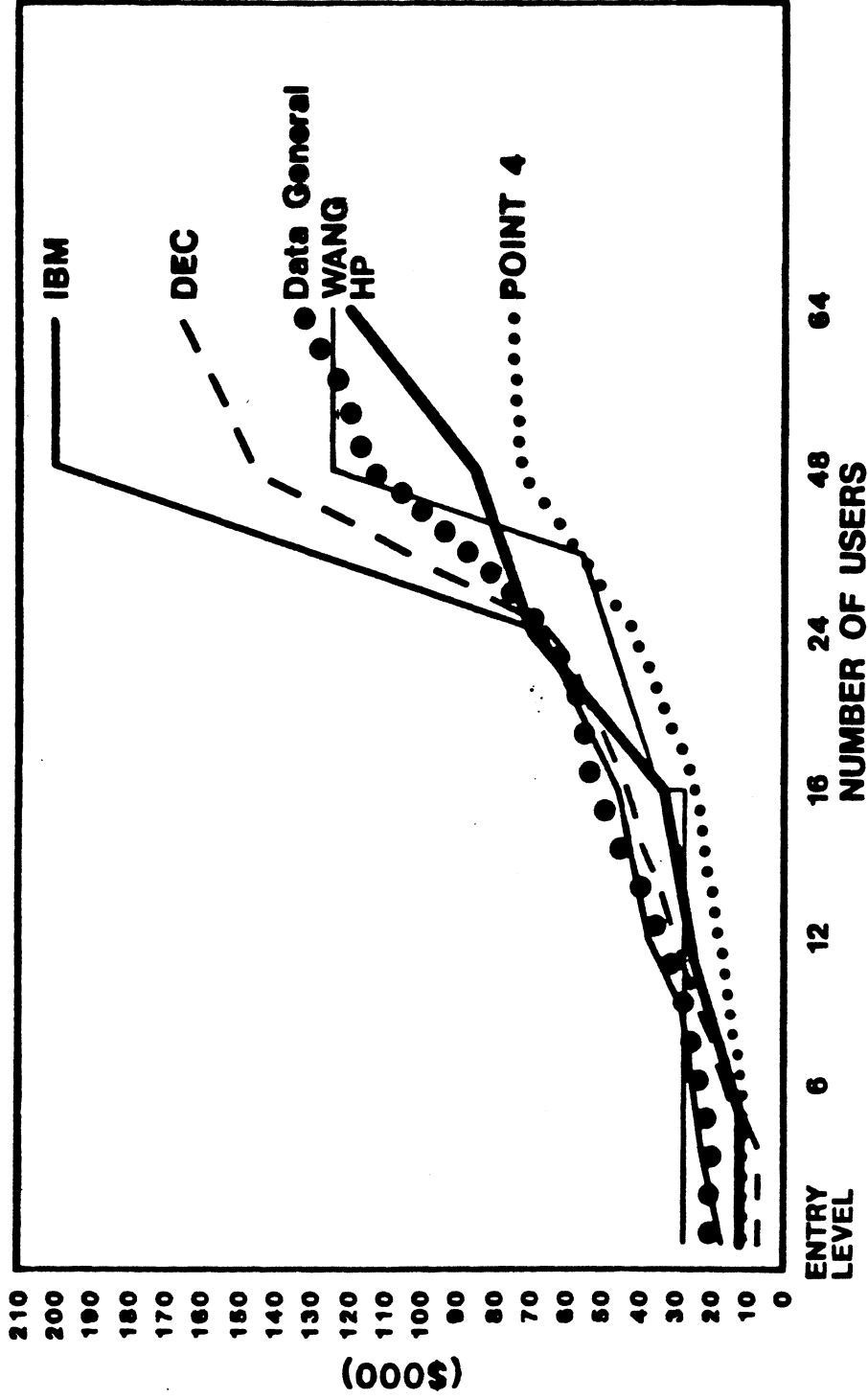Ira M. Kaplan
Product Manager

IMK/ts

POINT4
DATA CORPORATION

COMPETITIVE ANALYSIS

MAJOR SUPPLIERS

MAY 1985

POINT 4 VERSUS MAJOR SUPPLIERS

May 1985

MAJOR SUPPLIERS

OVERVIEW

PORTS	POINT 4	IBM	WANG	HP	DEC	DATA GENERAL
6	MARK 2 (4) MARK 2 (7)			250/26 (5)	MICRO-PDP/11 (6)	S/20 (4) S/120 (6)
12		SERIES 1 (8) SYSTEM 34 (8)	VS25-8A (16)	250/30 (10)		
18	MARK 4 (16)	SYSTEM 36 (16)		MICRO 1000 (16)	PDP11/23 PLUS (16)	S/140 (16)
24		SYSTEM 38 (24)		3000/39 (24)	VAX 11/730 (24)	
30	MARK 5 (32)		VS80-16C (32)			S/280 (32)
36						
42			VS100/16F (64)	3000/42 (48)		MV/4000 (48)
48	MARK 9 (64)	4331-J11 (72)			VAX 11/750 (72)	
54				3000/48 (64)		MV/UX 8000 II (72)
60						
66						
72						

May 1985

MAJOR SUPPLIERS

ENTRY LEVEL

Supplier	POINT 4	IBM	IBM	IBM	Wang	HP	DEC	Data General
Model	Mark 2	Series 1	System 34 5340 Cl1	System 36 5362/E4	VS-25-8A	250/26	Micro-PDP/11	S/20
Processor	Proprietary 16 Bits	Proprietary 16 Bits	Proprietary 16 Bits	Proprietary 16 Bits	Proprietary 16 Bits	Proprietary 16 Bits	Proprietary 16 Bits	Proprietary 16 Bits
Memory	64KB	64KB	64KB	128KB	512KB	192KB Memory 64KB user memory	256KB Parity Memory	128KB
Disk	13MB	9MB	8.6MB	30MB	34MB	14.7MB	10MB	12MB
Back-up	1MB Diskette	20MB Tape	1.0MB Diskette	8.6MB Diskette Magazine	14MB Tape	16MB Tape	800KB Diskette	15MB Tape
Ports	4	8	4	8	16	5	6	4
Operating Systems	IRIS	EDX, RPS	SSP	SSP	VS-OS	B.06.01	RSTS/E	RDOS
Price	$8,995	$27,825	$19,480	$31,100	$29,500	$13,750	$10,125	$21,145
Comments:	Streamer tape not available		Streamer tape not available	Only other backup available is 92MB Mag Tape for $11,660. Streamer not available.			Streamer tape not available	

Note: Unless otherwise specified all disks are fixed Winchester devices.

Unless otherwise specified all Back-up is 1/4" streamer cartridge.

MAJOR SUPPLIERS

6 PORTS

Supplier	POINT 4	IBM	IBM	WANG	HP	DEC	DATA GENERAL
Model	MARK 2	System 34 5340 E4	System 36 5362 A21	VS-25-8A	250/30	Micro-PDP11	S-120
Processor	Proprietary 16 Bits	Proprietary 16 Bits	Proprietary 16 Bits	Proprietary 16 Bits	Proprietary 16 Bits	Proprietary 16 Bits	Proprietary 16 Bits
Memory	128KB	128KB	128KB	512KB	192KB (System) 128KB (User)	256KB Parity Mem.	256KB
Disk	* 19MB	27.1MB	30MB	34MB	19.6MB Removeable	20MB	25MB
Back-up	20MB Tape	1MB Diskette	8.6MB Diskette Magazine	14MB Tape	14MB Tape	800KB Dual Diskette	15MB Tape
Ports	7	8	8	16	10	6	8
Operating Systems	IRIS	SSP	SSP	VS-OS	B.06.01	RSTS/E	RDOS
Price	$12,895	$28,255	$31,100	$29,500	$27,265	$15,420	$29,490
Comments:	* Add $2000 for 46MB Disk	Streamer tape not available.	Only other backup available is 92MB Mag Tape for $11,660. Streamer not available.			Streamer tape not available.	

MAJOR SUPPLIERS

12 PORTS

Supplier	POINT 4	IBM	WANG	HP	DEC	DATA GENERAL
Model	MARK 4	System 36 5360-A12	VS-25-8AN	Micro/1000	11/23 Plus	S140
Processor	Proprietary 16 Bits	Proprietary 16 Bits	Proprietary 16 Bits	Proprietary 16 Bits	Proprietary 16 Bits	Proprietary Micro Eclipse 16 Bits
Memory	512KB	128KB	512KB	512KB	256KB	128KB
Disk	86MB	60MB	76MB	65.6MB	62MB (2) (31MB) Removeable	73MB Disk
Back-up	45MB	13.2MB Diskette Magazine	14MB	46MB Mag Tape	46MB	46MB
Ports	16	12	16	16	16	16
Operating Systems	IRIS	SSP	VS-OS	RTE-A	RSTS/E	RDOS
Price	$24,290	$38,700	$36,100	$34,570	$42,085	$52,140
Comments:	Streamer tape not available. Only other backup avail- able is 92MB tape for $11,660				46MB Tape Provided as a load device	

MAJOR SUPPLIERS

16 PORTS

Supplier	POINT 4	IBM	WANG	HP	DEC	DATA GENERAL
Model	MARK 4	System 36 5360/A22	VS25-8AN	Micro/1000 2486A	11/23 Plus	S140
Processor	Proprietary 16 Bits	Proprietary 16 Bits	Proprietary 16 Bits	Proprietary 16 Bits	Proprietary 16 Bits	Proprietary Micro Eclipse 16 Bits
Memory	512KB	128KB	512KB	512KB	256KB	128KB
Disk	86MB	60MB	76MB	65.6MB	62MB (2) (31MB) Removeable	73MB
Back-up	45MB	13.2MB Diskette Magazine	14MB Tape Cartridge	46MB	46MB	46MB
Ports	16	16	16	16	16	16
Operating Systems	IRIS	RPGII	VS-OS	RTE-A	RSX 11M+	RDOS
Price	$24,290	$44,700	$36,100	$34,570	$42,085	$52,140
Comments:	Streamer tape not available. Only other backup avail- able is 92MB Mag tape for $11,660				46MB Tape provided as a load device	

MAJOR SUPPLIERS

24 PORTS

Supplier	POINT 4	IBM	WANG	HP	DEC	DATA GENERAL
Model	Mark 5	System 38 Model 442	VS-80-16C	3000 Series 39	VAX 11/730	MV/4000
Processor	Proprietary 16 Bits	Proprietary 16 Bits	Proprietary 16 Bits	Proprietary 16 Bits	Proprietary 32 Bits	Proprietary 32 Bits
Memory	128KB 1MB Cache	1MB Memory	512KB Memory	512KB	2MB Memory	1MB
Disk	168MB	129MB	150MB (2) 75MB Removeable	132MB	140MB	147MB
Back-up	45MB	92MB 1/2" Mag Tape	300KB Diskette	20MB	46MB	46MB
Ports	24	24	32	264	24 (3) DMF/32's	24
Operating Systems	IRIS	RPG	VS-OS	RPG	VMS	AOS/VS DG/UX
Price	$41,625	$67,065	$57,800	$67,900	$60,900	$64,285
Comments:	Add $8,100 for 1/2" Mag Tape	Streamer tape not available	1/2" Mag Tape available for an add'l $13,000	Async Communications controls controls up to 264 line 1/2 " Mag Tape available for an additional $8,250	92MB 1/2" Tape available for backup at $15,900	Uses Dasher 460 terminal at $1,785 each Unix O/S cost additional $1,850

MAJOR SUPPLIERS

48 PORTS

Supplier	POINT 4	IBM	WANG	HP	DEC	DATA GENERAL
Model	Mark 9	4331-J11	VS100-16F	3000/42	VAX 11/750	MV 4000
Processor	Proprietary 16 Bits	Proprietary 32 Bits	Proprietary 32 Bits	Proprietary 32 Bits	Proprietary 32 Bits	Proprietary 32 Bits
Memory	512KB 1MB Cache	1MB 4KB Cache	1MB 32KB Cache	1MB	2MB	1MB
Disk	336MB (2) 168MB	440MB (2) 200MB	288MB Removeable	400MB	456MB RA81 disk HSC 50 Controller	354MB
Back-up	* 92MB 1/2-inch Mag Tape	92MB 1/2-inch Mag Tape	92MB 1/2" Mag Tape	92MB 1/2" Mag Tape	92MB 1/2-inch Mag Tape	92MB 1/2-inch Mag Tape
Ports	48	* 352	48	264	48 (6) DMF/32's Serial	48
Operating Systems	IRIS	DOS/VSE	VS DMS	RPG	VAX/VMS	AOS/VS DG/UX
Price	$73,030	$201,935	$126,500	$85,180	$147,300	$111,160
Comments:	Communications Controller controls up to 352 Ports.		Only other available backup is 300KB diskette	Unix O/S costs $2,600 additional. Async communications controller controls up to 264 lines.		Uses Dasher 460 terminal at $1,785 ea. Unix costs an additional $1,850

MAJOR SUPPLIERS

64 PORTS

Supplier	POINT 4	IBM	WANG	HP	DEC	DATA GENERAL
Model	Mark 9	4331-J11	VS100-16F	3000/48	VAX 11/750	MV/UX 8000II
Processor	Proprietary 16 Bits	Proprietary 32 Bits	Proprietary 32 Bits	Proprietary 32 Bits	Proprietary 32 Bits	Proprietary 32 Bits
Memory	512KB 1MB Cache	1MB 4KB Cache	1MB	2MB	2MB	2MB
Disk	336MB (2) 168MB	400MB (2) 200MB	288MB Removable	400MB	456MB	354BM
Back-up	92MB 1/2" Mag Tape	92MB 1/2" Mag Tape	92MB 1/2" Mag Tape	92MB 1/2" Mag Tape	92MB 1/2" Mag Tape	92MB 1/2" Mag Tape
Ports	64	352	64	264	64 Serial (8) DMF/32's	64 (4) line boards
Operating Systems	IRIS	DOS/VSE	VS/DMS	HP-UX	VAX/VMS	AOS/VS DG/UX
Price	$75,710	$201,935	$126,500	$120,356	$165,300	$132,000
Comments:		Communications controller controls up to 352 Ports.	Only other available backup is 300KB diskette	Unix O/S costs an additional $2,600 Async Communications controller controls up to 264 lines.		Unix O/S costs an additional $1,850. Requires Dasher 410 terminal at $1,850 each.

POINT⁄4
DATA CORPORATION

COMPETITIVE ANALYSIS

MINICOMPUTER SUPPLIERS

MAY 1985

POINT 4 VERSUS MINICOMPUTERS
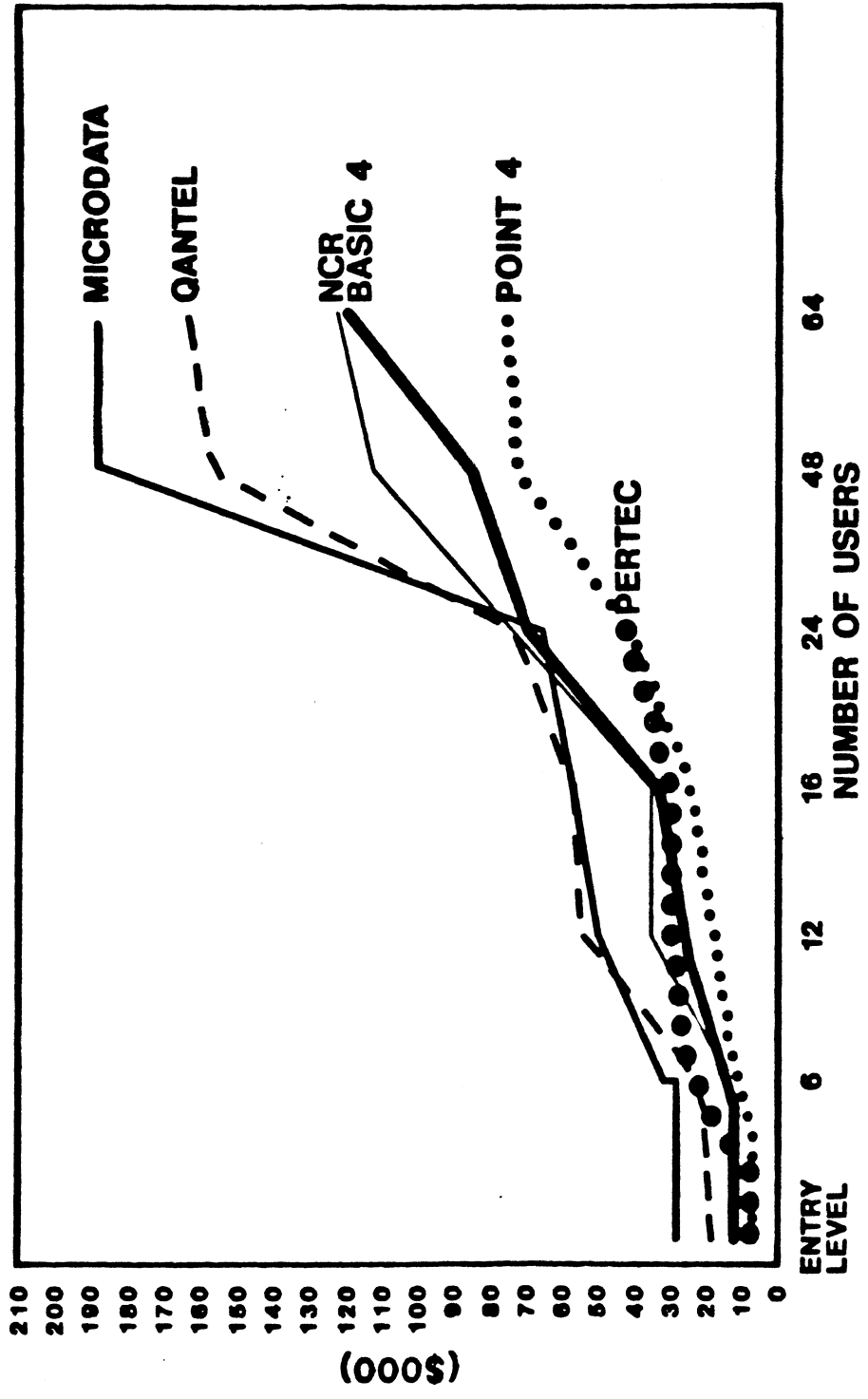
May 1985

MINICOMPUTER SUPPLIERS

OVERVIEW

PORTS	POINT 4	BASIC 4	MICRODATA	QANTEL	NCR	PERTEC
6	MARK 2 (4)	SYSTEM 1600 (16)			1632 Tower (2)	3205 (3)
	MARK 2 (7)				1632 Tower (6)	
12	MARK 4 (16)	SYSTEM 1600 (16)		SYSTEM 10 (31)	1632 Tower (12)	3215 (11)
18					1632 Tower I (16)	3230 (16)
24		SYSTEM 810 (28)	REALITY 4700 (48)	SYSTEM 40 (31)		
30	MARK 5 (32)					
36						3240 (32)
42	MARK 9 (64)	SYSTEM 8020 (52)		SYSTEM 64 (62)	9300/5425 (64)	
48						
54		SYSTEM 8030 (65)	SYSTEM 9000 (64)			
60						
66						
72						

May 1985

MINICOMPUTER SUPPLIERS

ENTRY LEVEL

Supplier	POINT 4	BASIC 4	MICRODATA	QANTEL	NCR	PERTEC
Model	Mark 2	System 1600	Reality 4700	System 10	1632 System	3205 (68000)
Processor	Proprietary 16 Bits	BF15-1345 8 Bits	Proprietary 8 Bits	Proprietary 16 Bits (Bit Slice)	32 Bits	32 Bits
Memory	64KB	128KB	64KB	96KB	512KB	256KB
Disk	13MB	22MB	32MB	20MB	46MB	13MB
Back-up	1MB Diskette	9.2MB	46MB	20MB	1MB Diskette	1MB Diskette
Ports	4	8	8	* 31	6	3
Operating Systems	IRIS	BOSS 4	DMS	Best/AOS	UNIX	OS/3200
Price	$8,995	$18,300	$29,895	$19,450	$14,645	$7,640
Comments:				Requires a non-standard terminal. Terminals cost $1,735 each.	Streamer backup not available. Expansion can be accomplished by adding on an auxiliary tower.	An additional cost of $1,750 for Unix O/S. 3205 System cannot be expanded.

Note: Unless otherwise specified all disks are fixed Winchester devices.

Unless otherwise specified all Back-up is 1/4" streamer cartridge.

* Communications controller controls up to 31 lines

MINICOMPUTER SUPPLIERS

6 PORTS

Supplier	POINT 4	BASIC 4	MICRODATA	QANTEL	NCR	PERTEC
Model	Mark 2	System 1600	Reality 4700	System 10	1632 System	3215 (68000)
Processor	Proprietary 16 Bits	BF15-1345 8 Bits	Proprietary 8 Bits	Proprietary 16 Bits (Bit Slice)	32 Bits	32 Bits
Memory	128KB	128KB	128KB	128KB	512KB	256KB
Disk	* 19MB	22MB	32MB	20MB	46MB	26MB
Back-up	20MB	9.2MB	20MB	20MB	1MB Diskette	1MB Diskette
Ports	7	8	8	31	6	11
Operating Systems	IRIS	BOSS 4	DMS	Best/AOS	UNIX	OS/3200
Price	$12,895	$18,300	$33,895	$21,950	$14,645	$24,660
Comments:	* Add $2000 for 46MB			Communications controller controls multiple lines (31 serial) Communication controller uses QSP (Qantel Standard Protocol) and requires non-standard terminals. Terminals cost $1,735 each.	Streamer tape not available.	Streamer tape not available. An additional charge of $1,750 for Unix O/S.

MINICOMPUTER SUPPLIERS

12 PORTS

Supplier	POINT 4	BASIC 4	MICRODATA	QANTEL	NCR	PERTEC
Model	Mark 4	System 1600	Reality 4700	System 40	1632 Standard I Tower	3230 (68000)
Processor	Proprietary 16 Bits	Proprietary 8 Bits	Proprietary 8 Bits	Proprietary 16 Bits	32 Bits	32 Bits
Memory	512KB	512KB	128KB	256KB	512KB	512KB
Disk	86MB	86MB	64MB	75MB	92MB (2) 46MB	70MB
Back-up	45MB	9.2MB	26MB	14MB	45MB	21MB
Ports	16	16	32	31	12	16
Operating Systems	IRIS	BOSS/VS	VMOS	Best/AOS	RM/COS	OS/3200
Price	$24,290	$42,900	$52,595	$55,900	$35,760	$30,085
Comments:				Commun. controller uses QSP (Qantel Standard Protocol) and requires non-standard terminals. Terminals cost $1,735 each.	Does not support any other operating system at this time. In order to run UNIX, modifications have to be made.	An additional charge of $1,750 for Unix O/S.

MINICOMPUTER SUPPLIERS

16 PORTS

Supplier	POINT 4	BASIC 4	MICRODATA	QANTEL	NCR	PERTEC
Model	Mark 4	System 1600	Reality 4700	System 40	1632 Standard I Tower	3230 (68000)
Processor	Proprietary 16 Bits	Proprietary 16 Bits	Proprietary 8 Bits	Proprietary 16 Bits	32 Bits	32 Bits
Memory	512KB	512KB	512KB	512KB	512KB	512KB
Disk	86MB	86MB	64MB	75MB	92MB (2) 46MB	70MB
Back-up	45MB	9.2MB	26MB	14MB	45MB	21MB
Ports	16	16	32	31	16	16
Operating Systems	IRIS	BOSS/VS	DMS	Best/AOS	UNIX	OS/3200
Price	$24,290	$42,900	$55,795	$57,295	$37,245	$30,085
Comments:				Requires non standard terminals due to use of QSP (Qantel Standard Protocol). Terminals cost $1,735 each.		An additional charge of $1,750 for Unix O/S.

MINICOMPUTER SUPPLIERS

24 PORTS

Supplier	POINT 4	BASIC 4	MICRODATA	QANTEL	NCR	PERTEC
Model	Mark 5	8010	Reality 4700	System 40	9300/5425 (68000)	3240 (68000)
Processor	Proprietary 16 Bits	Proprietary 32 Bits	Proprietary 8 Bits	16 Bits	32 Bits	32 Bits
Memory	128KB 1 MB Cache	1MB	512KB	512KB	2MB	1MB
Disk	168MB	144MB	128.7MB	150MB	135MB	140MB 2 (70MB)
Back-up	* 45MB	92MB 1/2" Mag Tape	92MB 1/2" Mag Tape	92MB 1/2" Tape	46MB	21MB
Ports	24	32	32	31	28	20 (RS-232) 12 (RS-422)
Operating Systems	IRIS	BOSS/VS	DMS	Best/AOS	ITX	OS/3200
Price	$41,625	$75,505	$67,895	$74,600	$73,925	$43,970
Comments:	* Add $8100 for 1/2" Mag Tape			Requires non standard terminals due to use of QSP (Qantel Standard Protocol). Terminals cost $1,735 each	For UNIX add an additional $1,800	Requires use of Pertec terminals. Additional charge of $1,750 for Unix O/S. Terminals cost $1,685 each.

MINICOMPUTER SUPPLIERS

48 PORTS

Supplier	POINT 4	BASIC 4	MICRODATA	QANTEL	NCR
Model	Mark 9	8030	9000	System 64	9300/5425
Processor	Proprietary 16 Bits	Proprietary Dual 16 Bits	Proprietary 32 Bits	32 Bits	32 Bits
Memory	512KB 1MB Cache	1MB	512KB	512KB	2MB
Disk	336MB (2) 168MB Fixed	285MB	390MB (130MB) (260MB)	300MB (2) 150MB	351MB (1) 270MB (1) 81MB
Back-up	92MB Mag Tape	92MB 1/2" Mag Tape	92MB Mag Tape	92MB Mag Tape	92MB Mag Tape
Ports	48	52	64	62	48
Operating Systems	IRIS	BOSS/VS	DMS	Best/AOS	ITX
Price	$73,030	$88,930	$189,275	$159,350	$112,970
Comments:			8-ports not RS232C Standard	Requires non standard terminals due to use of QSP (Qantel Standard Protocol). Terminals cost $1,735 each.	For UNIX O/S add an additional $1,800

MINICOMPUTER SUPPLIERS

64 PORTS

Supplier	POINT 4	BASIC 4	MICRODATA	QANTEL	NCR
Model	Mark 9	8030	9000	System 64	9300/5425 (68000)
Processor	Proprietary 16 Bits	Proprietary Triple 16 Bits	Proprietary 32 Bits	32 Bits	32 Bits
Memory	512KB 1MB Cache	1MB	512KB	512KB	2MB
Disk	336MB (2) 168MB	360MB 285 Remove 75 Fixed	390MB (130MB) (260MB)	400MB	351MB (270MB) (81MB)
Back-up	92MB Mag Tape	92MB Mag Tape	92MB Mag Tape	92MB Mag Tape	92MB Mag Tape
Ports	64	65	64	62	63
Operating Systems	IRIS	BOSS/VS	DMS	Best/Net-Local	ITX
Price	$75,715	$117,800	$189,275	$168,700	$123,390
Comments:		.	8 ports not RS232C Standard	Controls 31 lines requires non-standard terminals due to use of QSP (Qantel Standard Protocol). Terminals cost $1,735 each.	For UNIX O/S add an additional $1,800

POINT 4
DATA CORPORATION

COMPETITIVE ANALYSIS

MICROCOMPUTER SUPPLIERS

MAY 1985

POINT 4 VERSUS MICROCOMPUTERS
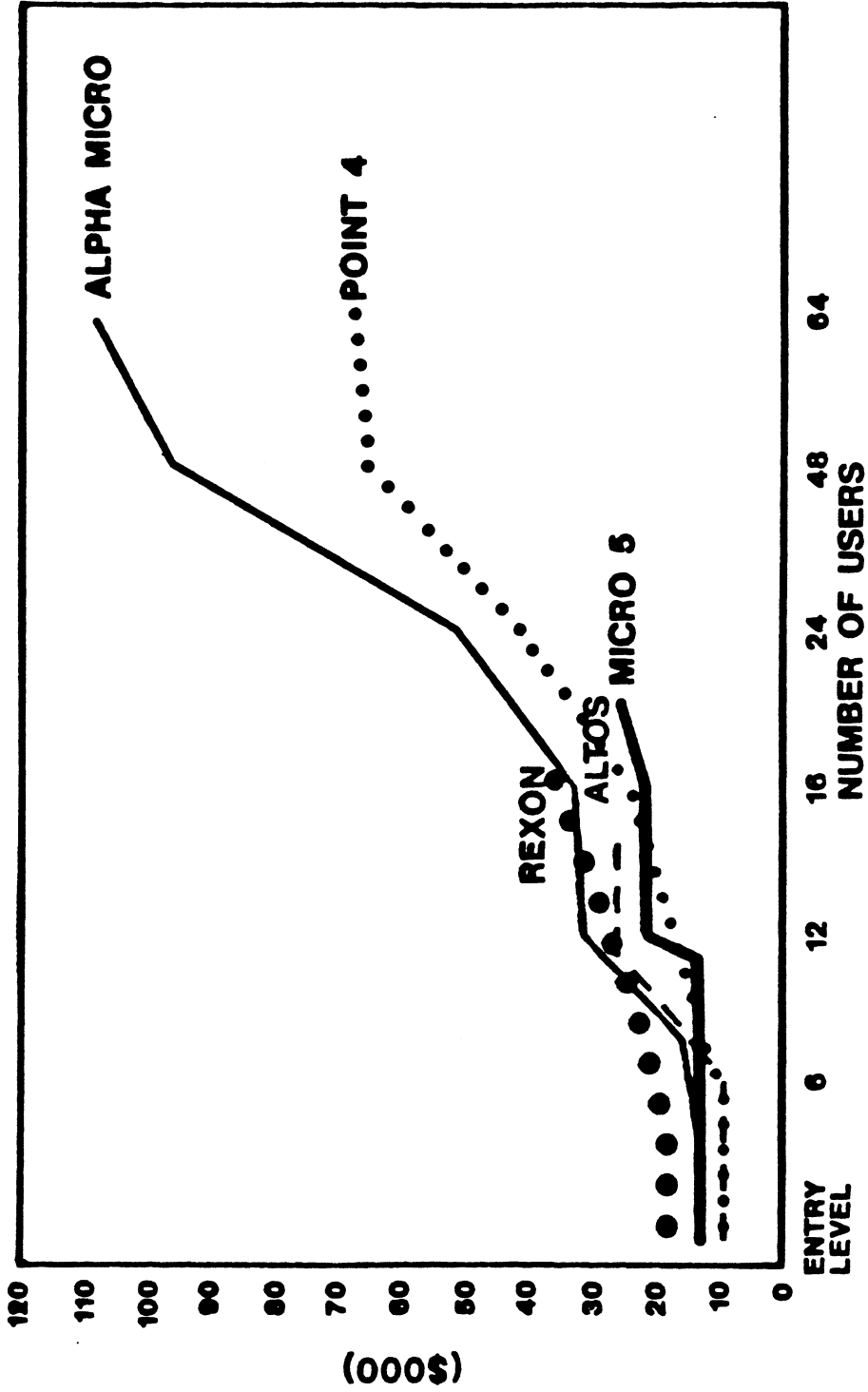
MICROCOMPUTER SUPPLIERS

OVERVIEW

PORTS	POINT 4	REXON	ALPHA MICRO	ALTOS	MICRO 5
6	MARK 2 (7)	RX50 (4)	AM1000E (7)	586-10 (10)	1640-ET (8)
12	MARK 4 (16)	RX100 (8)	AM1042ES-75 (16)	S986T-80 (14)	1740-ET (16)
18		RX200 (12)			TI800 (20)
24	MARK 5 (32)	RX400 (16)	AM10725-23 (24)		
30					
36	MARK 9 (64)		AM1082M-43 (64)		
42					
48					
54					
60					
66					
72					

MICROCOMPUTER SUPPLIERS

ENTRY LEVEL

	POINT 4	REXON	ALPHA MICRO	ALTOS	MICRO 5
Supplier					
Model	Mark 2	RX50	AM1000E	586-10	1640-ET
Processor	Proprietary 16 Bit	8086-2 16 Bit	68000 16 Bit	8086 16 Bit	8088 16 Bit
Memory	64KB	128KB	256KB	512KB	256KB
Disk	13MB	15MB	30MB	12MB	40MB
Back-up	1MB Diskette	20MB	800KB Floppy	1MB Floppy	20MB
Ports	4	4	3	6	4
Operating Systems	IRIS	MP/M-86	AMOS	UNIX	MP/M-86
Price	$8,995	$16,855	$13,270	$9,990	$12,995
Comments:			Alternative to 800KB is VCR interface. AMOS is sold on VHS tape for $1,000. 20MB streamer is an additional $5,000.	Tape Streamer unavailable. PICK sold separately for an additional $1,500. Includes one parallel port.	

MICROCOMPUTER SUPPLIERS

6 PORTS

Supplier	POINT 4	REXON	ALPHA MICRO	ALTOS	MICRO 5
Model	Mark 2	RX105 L082-DL	AM1000E	586-10	1640
Processor	Proprietary 16 Bits	8086-2 16 Bits	68000 16 Bits	8086 16 Bits	8088 16 Bits
Memory	128KB	128KB	256KB	512KB	256KB
Disk	* 19MB	28MB	30MB	40MB	40MB
Back-up	20MB	20MB	800KB Floppy	1MB Floppy	20MB
Ports	7	8	7	6	8
Operating Systems	IRIS	MP/M-86	AMOS	UNIX	MP/M-86
Price	$12,895	$23,115	$14,186	$9,990	$13,845
Comments:	* Add $2000 for 46MB disk		Alternative to 800KB is VCR interface. AMOS is sold on VSH tape for $1,000 20MB Streamer is an additional $5,000	Tape Streamer not available. PICK sold separately for an additional $1,500 Includes 1 parallel port.	

MICROCOMPUTER SUPPLIERS

12 PORTS

Supplier	POINT 4	REXON	ALPHA MICRO	ALTOS	MICRO 5
Model	Mark 4	RX205 083-D3	AM1042ES-75	586-14	1740ET
Processor	Proprietary 16 Bits	8086-2 16 Bits	68000 16 Bits	8086 16 Bits	80186 16 Bits
Memory	512KB	128KB	512KB	512KB	256KB
Disk	86MB	70MB	60MB	80MB	80MB
Back-up	45MB	20MB	20MB	1MB Floppy	20MB
Ports	16	12	12	10	12
Operating Systems	IRIS	MP/M-86	AMOS	UNIX	MP/M-86
Price	$24,290	$28,645	$32,332	$25,810	$21,695
Comments:			AMOS is offered on streamer tape for an additional $200 above VHS tape.	Streamer Tape not available. PICK sold separately for an additional $1,500 Includes 1 parallel port.	

MICROCOMPUTER SUPPLIERS

16 PORTS

Supplier	POINT 4	REXON	ALPHA MICRO	ALTOS	MICRO 5
Model	Mark 4	RX405 L084-D4	AM1042ES-75	8986T-80	1740
Processor	Proprietary 16 Bits	8086-2 16 Bits	68000 16 Bits	8086 16 Bits	80186 16 Bits
Memory	512KB	256KB	512KB	1MB	256KB
Disk	86MB	56MB	60MB	80MB	80MB
Back-up	45MB	46MB	20MB	60MB	20MB
Ports	16	16	16	14	16
Operating Systems	IRIS	MP/M-86	AMOS	XENIX	MP/M-86 SMC BASIC
Price	$24,290	$35,145	$33,248	$26,685	$22,545
Comments:			AMOS is sold on streamer tape for an additional $200 above VHS tape.	Includes 1 parallel port.	

MICROCOMPUTER SUPPLIERS

24 PORTS

	POINT 4	ALPHA MICRO	ALTOS	MICRO 5
Supplier				
Model	Mark 5	AM10725-23	3068	TI800
Processor	Proprietary 16 Bits	68000 16 Bits	MC68020 32 Bits	80186 16 Bits
Memory	128KB 1MB LCM	512KB	1MB	256KB
Disk	168MB	140MB (2) 70MB	136MB (2) 68MB	144MB
Back-up	45MB	20MB	60MB	60MB
Ports	24	24	30	20
Operating Systems	IRIS	AMOS	UNIX V	SMC BASIC
Price	$41,625	$53,079		$25,895
Comments:	Add an additional $8,100 for 1/2" Mag Tape	AMOS is sold on streamer tape for an additional $200 above VHS tape.	Price not available at this time. Delivery not scheduled until late 1985. Can only support up to 3 (68MB) disks. Includes 2 parallel ports.	

MICROCOMPUTER SUPPLIERS

48 PORTS

	POINT 4	ALPHA MICRO
Supplier		
Model	Mark 9	AM1082M-43
Processor	Proprietary 16 Bits	68000 16 Bits
Memory	512KB	512KB
Disk	336MB	280MB
Back-up	92MB Mag Tape	92MB Mag Tape
Ports	48	48
Operating Systems	IRIS	AMOS
Price	$66,925	$96,091
Comments:		AMOS is sold on VHS tape for $1000. This system would require a VCR controller for an additional $1,166

MICROCOMPUTER SUPPLIERS

64 PORTS

	POINT 4	ALPHA MICRO
Supplier	POINT 4	ALPHA MICRO
Model	Mark 9	AM1082M-43
Processor	Proprietary 16 Bits	68000 16 Bits
Memory	512KB	512KB
Disk	336MB	350MB
Back-up	92MB Mag Tape	92MB Mag Tape
Ports	64	62
Operating Systems	IRIS	AMOS
Price	$69,235	$109,005
Comments:		AMOS is sold on VHS tape for $1000
		This system would require a VCR controller for an additional $1,166

POINT 4
DATA CORPORATION

COMPETITIVE ANALYSIS

MARK 4 TOWER

MAY 1985

COMPANY	MODEL	PROCESSOR	MEMORY	DISK CAPACITY	TAPE BACK-UP	PORTS	O/S	PRICE	COMMENTS
POINT 4	MARK 4	16 Bits Proprietary	512KB	86MB	45MB	8	IRIS	$21,995	Expandable to 16 ports and 258MB Disk
Convergent Tech	MiniFrame	MC68010	512KB	50MB	640KB Floppy	10	UNIX	17,220	Add'l cost of approx. $1600 for software
Pertec	3230	MC68000	256KB	70MB	21MB	11	CPM2.2 UNIX	31,590	
Perkin-Elmer	3205	32 Bits Proprietary	1MB	25MB	25MB Diskette	8	OS/32 XELOS	27,950	
NCR	1632 Tower	68000	512KB	32MB	1MB Diskette	6	UNIX RM/COS	14,645	OS price not included/ cannot add streamer on entry level unit
NCR	I-Tower	68000	512KB	46MB	45MB	12	UNIX RM/COS RM/COS	31,300	Does not include $1800 for OS software
Micro 5	Series 3000/3511	16 Bits Intel 8086	512KB	68MB	13MB	8	MP/M-86	24,485	
Perkin-Elmer	3203	32 Bits Proprietary	512KB	51MB	60MB	8	OS/32	16,600	
Momentum	32/E	16/32 Bits MC68000	512KB	80MB	20MB	8	UNIX System III	22,395	Add $875 for 3 add'l ports
Wicat	System 160	16 Bit MC68000	512KB	80MB	20MB	6	MCS	31,850	
Victory	Factor	16 Bit MC68000	256KB	85MB	800KB Diskette	8	UNIX System III	22,250	Add $2000 for 16 add'l ports
Honeywell	DPS 6/40	16 Bit Proprietary	512KB	67MB	13MB Diskette	16	GCOS	29,995	Communications controller supports up to 16 lines
Burroughs	B96-41	16 Bit Proprietary	512KB	80MB	1MB Diskette	10	MCP	26,300	
Wang	VS15-8AN	16 Bit Proprietary	512KB	76MB	14MB	16	VS/OS UNIX	24,500	Communications controller supports up to 16 lines
Callan Data Systems	Unistar 300	32 Bit 68010	512KB	86MB	45MB	8	UNIX System 5	26,450	
CIE Systems	680/40	16/32 Bit MC68000	512KB	84MB	20MB	8	UNIX RM/CIS	24,695	
Datapoint	3250	32 Bit Proprietary	1MB	120MB	45MB Tape	12	UNOS	35,400	

POINT 4 DATA CORP

Regional Sales Seminar

William F. Rigby, President

BUSINESS ORIENTED
MULTI-TERMINAL INTERACTIVE
OPERATING SYSTEMS

NAME	APPROXIMATE NUMBER INSTALLED	SALES POINTS
IRIS	18,000	159
BOSS	17,000	200
PICK	11,700	300 - 400

IRIS INSTALLED BASE

12/31/82

POINT 4	4,081
DCC	3,000
KERONIX	3,000
NIXDORF	2,000
RANDAL	1,200
SCI (SWEDA, ROYAL, PERTEC)	500
UK (STAR, TKT, AEM)	500
HERTZKE	300
IBIS	200
LEAR SIEGLER	150
AMPEX	100
BEE HIVE	20
MISCELLANEOUS (DG, ETC.)	3,000
TOTAL	18,051

CLASSIFICATION	ESTABLISHMENTS	APPROXIMATE AVERAGE SIZE	SATURATION (3)
> 25 MILLION ANNUAL REVENUE	20,000	150 MILLION	100%
1-25 MILLION ANNUAL REVENUE	350,000	1.4 MILLION	65%
< 1 MILLION ANNUAL REVENUE	15 MILLION	60K	3%

CLASSIFICATION	EMPHASIS	EXPERTISE	USEAGE	ORIENTATION	END USER DISTRIBUTION
> 25 MILLION ANNUAL REVENUE	COMPLEX TOOLS	INTERNAL STAFF	INTEGRATED MANAGEMENT SYSTEMS	EFFICIENCY	DIRECT SALES FORCE (> 80K)
1-25 MILLION ANNUAL REVENUE	TURNKEY	EXTERNAL STAFF	INTEGRATED ACCOUNTING SYSTEMS	EASE OF USE	VALUE ADDED RESELLERS (15-80K)
< 1 MILLION ANNUAL REVENUE	SIMPLE TOOLS & APPLICATIONS	NO STAFF	TOOLS & SINGLE APPLICATIONS	EASE OF UNDERSTANDING	RETAIL STORES (< 15K)

MARKET GROWTH
(SMALL BUSINESS COMPUTERS)
DATAQUEST

	1981	Δ	1982	Δ	1983	Δ
VSBC	669	(83%)	908	(36%)	1223	(35%)
SBC	1676	(12%)	1800	(7%)	2208	(23%)
LBS	1776	(29%)	2128	(20%)	2544	(20%)
TOTAL	4121	(45%)	4836	(17%)	5975	(24%)

*In Millions

	1981	%	1982	%	1983	%
$ 0 - 1M						
VSBC	323	84	442	37	615	39
SBC	132	14	140	6	172	16
LBS	-	-	-	-	-	-
$ 1 - 25M						
VSBC	228	71	293	29	315	8
SBC	1264	10	1360	8	1640	21
LBS	1168	24	1344	15	1520	13
$25 + M						
VSBC	118	100	173	47	293	69
SBC	280	21	300	7	396	32
LBS	608	41	784	29	1024	31

SMALL BUSINESS COMPUTERS
(1-25 MILLION)

CLASSIFICATION	PURCHASE VALUE (HW)	PURCHASE VALUE (SW)	PROJECTED 83 GROWTH %	83 MARKET POTENTIAL
VSBC	5-15K	2-10K	35%	315 MILLION
SBC	15-80K	10-50K	23%	1.6 BILLION
LBS	80-300K	25-100K	20%	1.5 BILLION

LEADING VSBC SUPPLIERS
(5K - 15K)

	PERCENT OF IF SOLD VALUE		PERCENT OF UNITS SHIPPED	
	1980	1981	1980	1981
IBM	22.1%	19.4%	14.0%	13.7%
APPLE	3.8	5.1	6.2	8.1
TANDY/TRS80	16.6	17.2	21.1	21.4
DATAPOINT	8.7	7.1	8.1	6.5
VECTOR GRAPHIC	3.2	3.1	4.0	3.4
NORTH STAR	2.5	3.3	2.5	3.4
OTHER	43.1	44.8	44.1	43.5
TOTAL	100.0%	100.0%	100.0%	100.0%

VSBC
COMPETITIVE TRENDS

o MANY PARTICIPANTS INCLUDING RECENT ENTRY OF MAJOR VENDORS
  (IBM, DEC, WANG)

o HEAVY PRICE COMPETITION

o MULTIPLE ALTERNATE DISTRIBUTION CHANNELS EVOLVING

o FUNCTIONALITY EXTENSIONS CONTINUE

LEADING SBC SUPPLIERS

(15K - 80K)

	PERCENT OF IF SOLD VALUE		PERCENT OF UNITS SHIPPED	
	1980	1981	1980	1981
IBM	28.8%	26.3%	24.9%	22.4%
WANG	7.3	7.8	9.0	9.5
HONEYWELL	4.5	5.9	3.6	4.6
BURROUGHS	7.7	5.2	9.8	5.7
BASIC FOUR	4.5	4.5	4.0	3.9
TRIAD	3.1	4.2	2.2	3.0
DEC	3.5	3.4	3.5	3.4
MICRODATA	2.6	2.8	1.4	1.5
HEWLETT-PACKARD	1.6	1.7	1.6	1.8
QANTEL	.9	1.0	1.2	1.5
OTHER	35.5	37.2	38.8	42.7
TOTAL	100.0%	100.0%	100.0%	100.0%

SBC
COMPETITIVE TRENDS

o   HEAVY VERTICAL FOCUS CONTINUES

o   TRADITIONAL VENDORS MOVING TOWARD ALTERNATE DISTRIBUTION CHANNELS

o   CONTINUED PRICE PRESSURE

o   VSBC SYSTEMS BEING EXTENDED AND ACCEPTED TO COVER SBC RANGE

LBS

COMPETITIVE TRENDS

o LAN, DBMS, MULTIPLE LANGUAGES AND OFFICE AUTOMATION ARE
   REQUIRED FOR SIGNIFICANT PARTICIPATION

o SYSTEM INTEGRITY (I.E., 100% UP TIME) INCREASING IN IMPORTANCE

o HARDWARE IS BECOMING A UTILITY CONCEPT; IT MUST BE MULTI-
   FUNCTIONAL TO EVENTUALLY HANDLE DP, WP, GRAPHICS, TELEPHONE
   AS REQUIRED