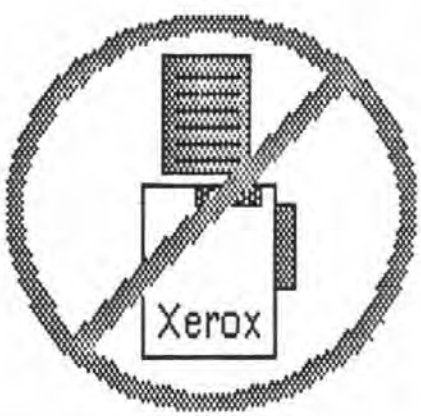
Preliminary
MACINTOSH
BUSINESS PLAN

12 July 1981



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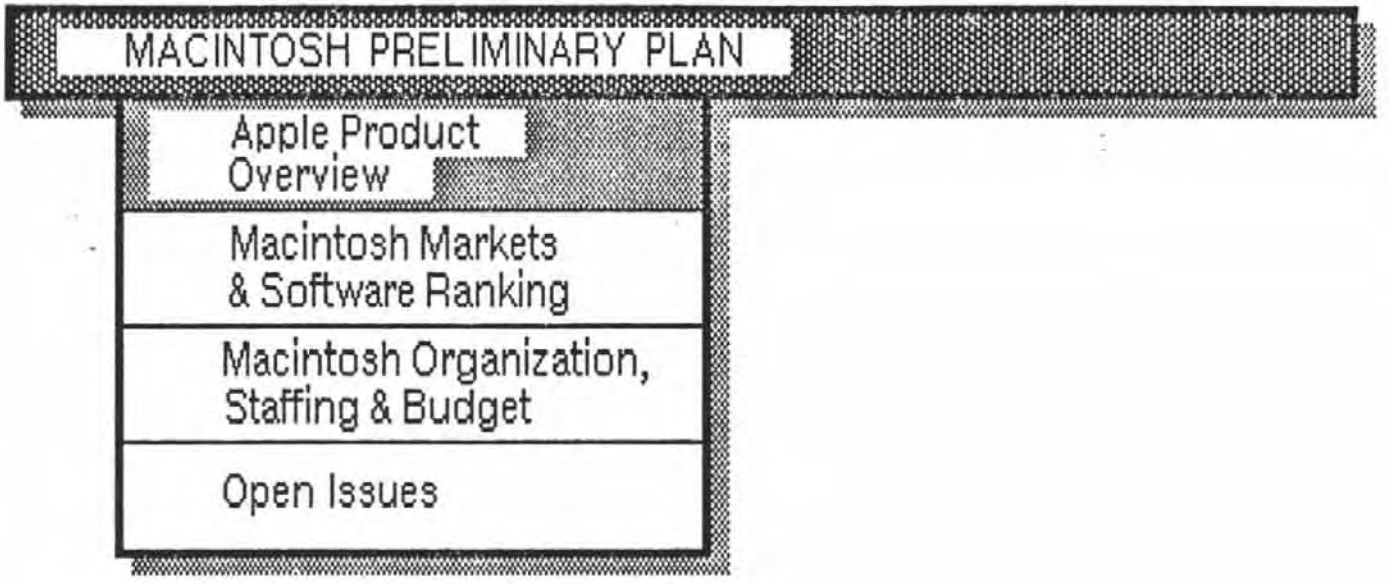
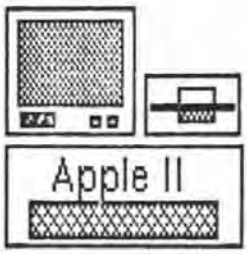
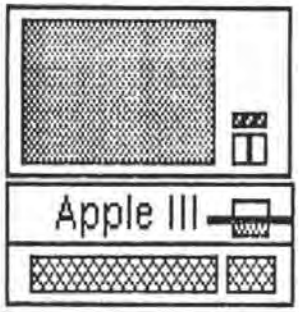
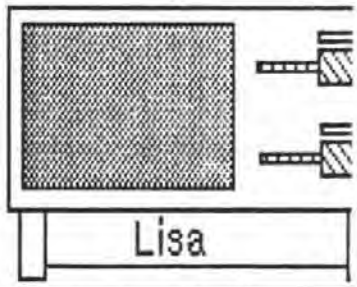
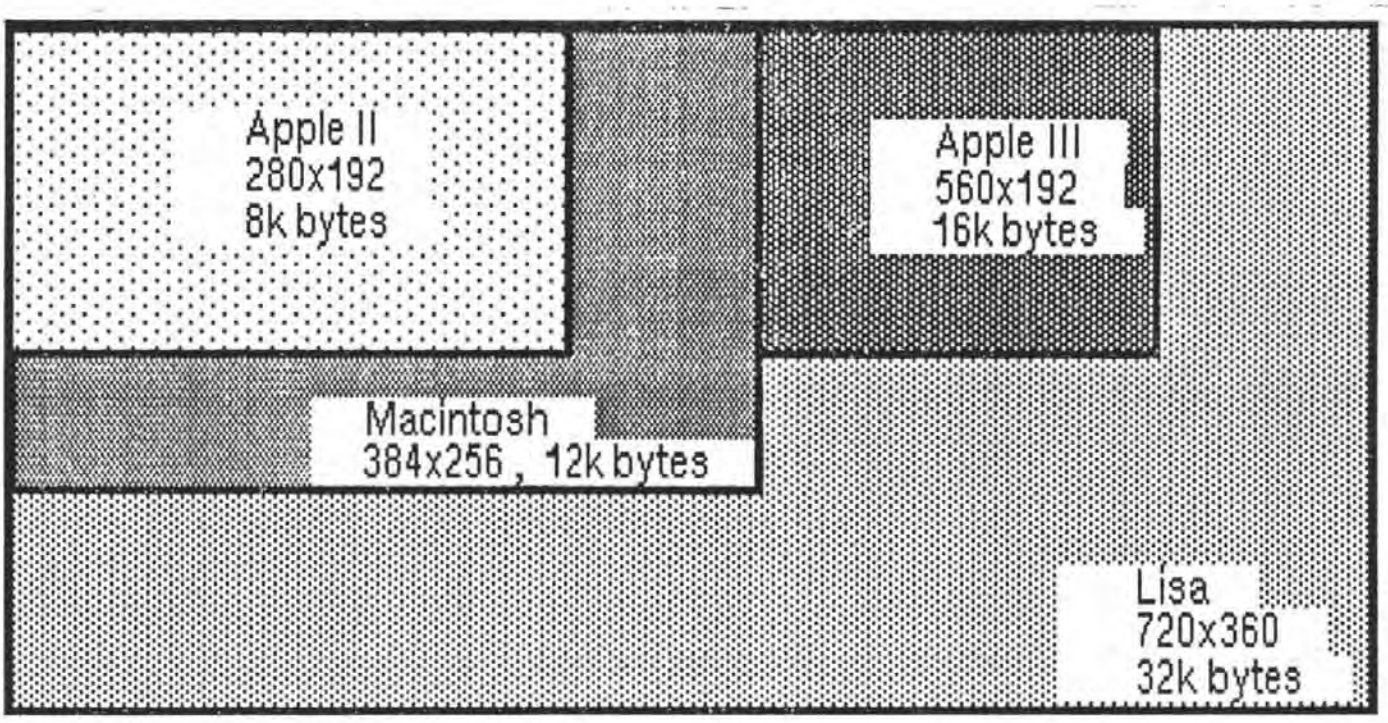

MACINTOSH PRELIMINARY PLAN
Apple Product Overview
Macintosh Markets & Software Ranking
Macintosh Organization, Staffing & Budget
Open Issues

Product Hardware Comparisons

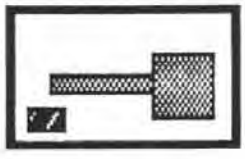
Product Lines	 Apple II	 Apple III	Mac	 Lisa
Introduced	1977 / 78	1980 / 81	1982	1982
Retail Price	$ 2500	$ 4500	$ 1500	$5000 +
Weight	15 to 30 lbs	26 to 40 lbs	15 to 18 lbs	45 + lbs
Microprocessor	6502	6502	68000	68000
Memory size	32 to 64 k	128 to 256 k	64 to 128 k	256 to 1000 k
Display	External	External	Built-in 9"	Built-in 12"
Chroma	Color & BW	Color & BW	BW only	BW only
Resolution	280 x 192	560 x 192	384 x 256	720 x 360
Graphics memory	8k bytes	16k bytes	12k bytes	32k bytes
Keyboard	Built-in	Built-in	Detached	Detached
Numeric Pad	No	Yes	No	Yes
Pointing Device	2 arrows	4 arrows	Mouse	Mouse
Integral Disks	0	1	1	2
Add-on Disks	2 to 4	1 to 3	1	0
Capacity / Disk	143 k bytes	143 k bytes	143 k bytes	850 k bytes
Slots	8	4	0	3
RS-232 ports	0	1	2	2
Other ports	Game I/O	Silentype	none	Parallel
Sound	1 bit	6 bit a/d	5 bit	Delta-mod
Clock	No	Yes (?)	Yes	Yes
C Boards	6	6	5	10

Screen Size Comparisons



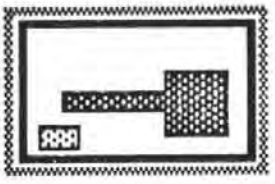
Disk Compatability Between Products

143 k Bytes
16 sector

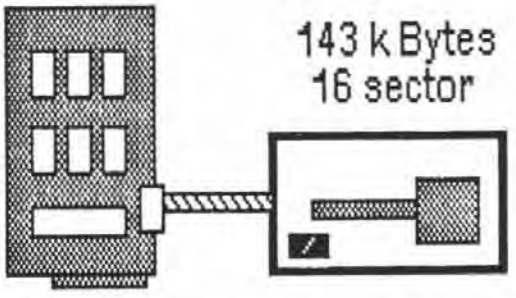


Apple II
Apple III
Macintosh
VLC

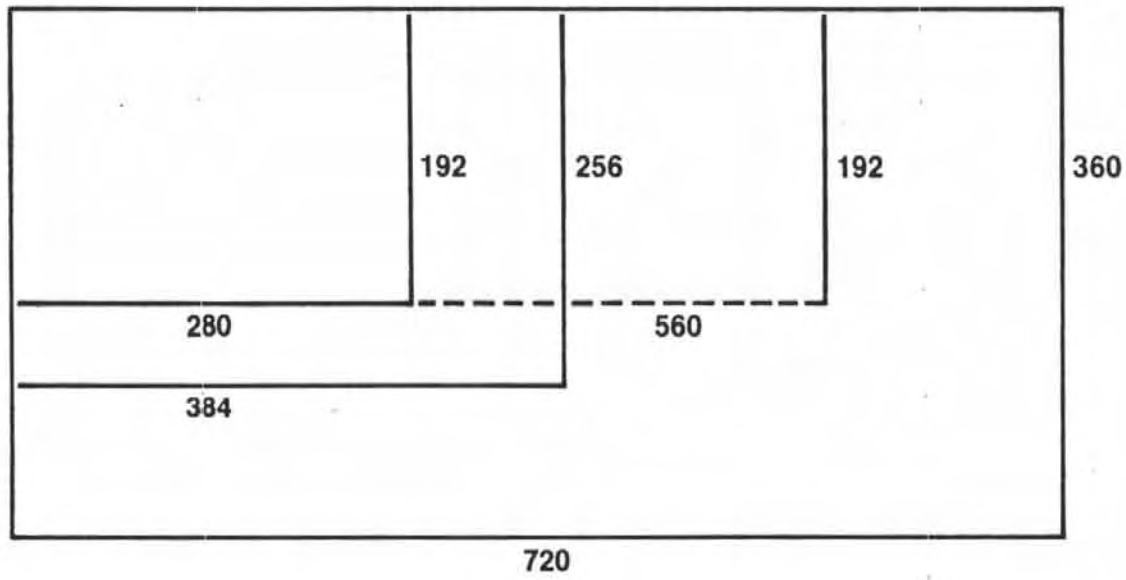
850 k Bytes
16 sector



Lisa
Doublemint



Card plugs into Lisa slot and 143k byte disk drive. Lisa can then read & write Macintosh, VLC, Apple II & Apple III diskettes.

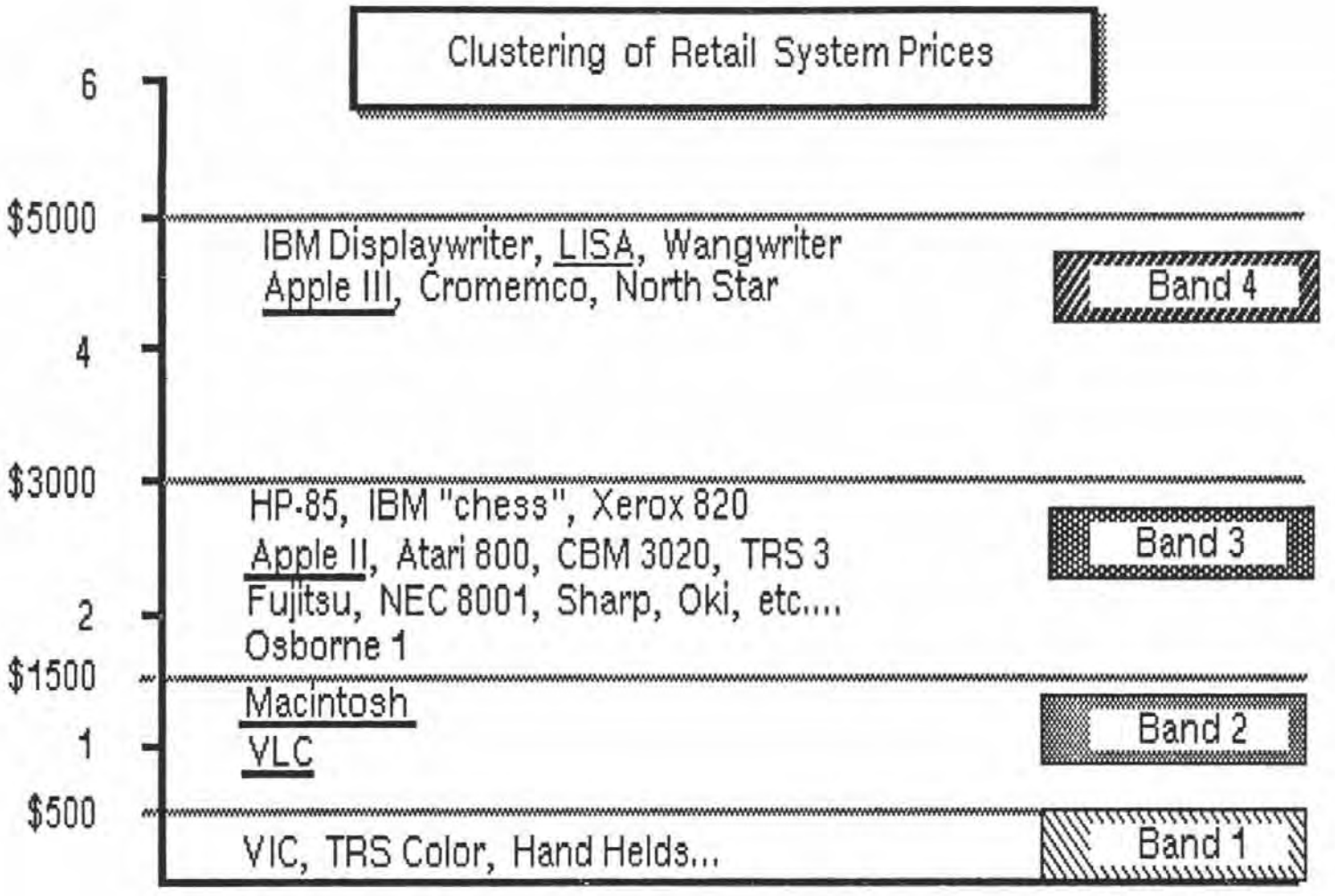


LISA
720 X 360
32K bytes

MAC
384 X 256
12K bytes

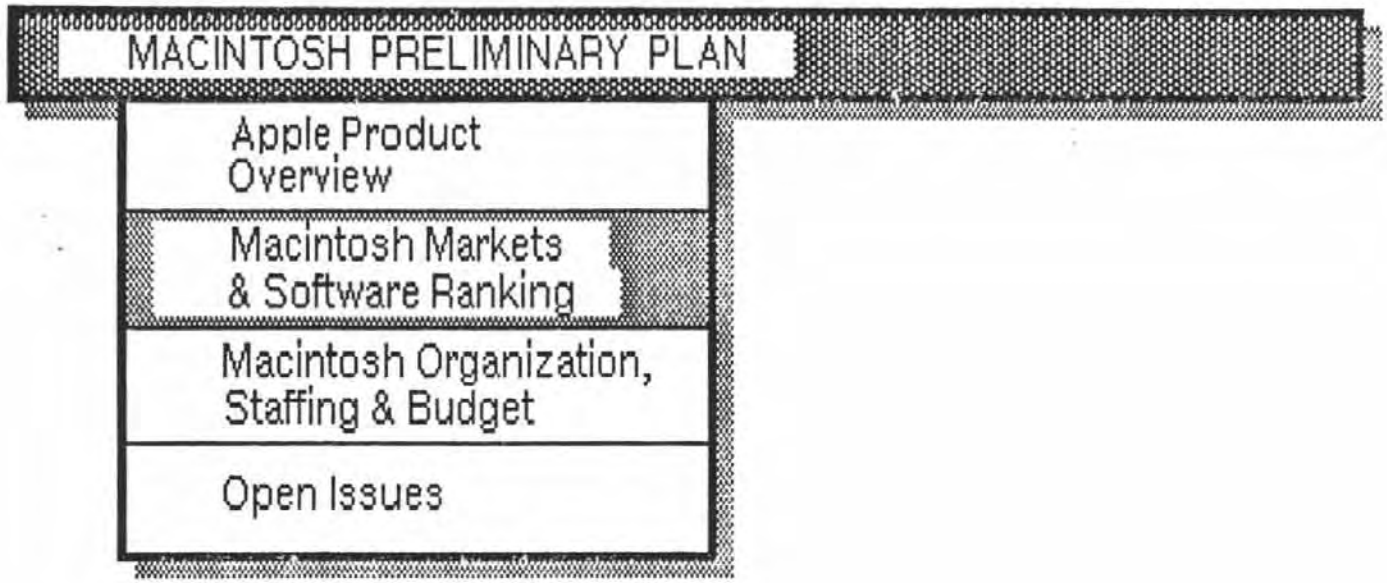
AII
280 X 192
8K bytes

AIII
560 X 192
16K bytes



Notes:
Observe that everyone is introducing products in Band 3 (Apple II's band). Also, the upper end of Band 4 is really $10-12,000 today, but I expect it to fall to the $5000 level in '82. I expect LISA, IBM Displaywriter, Wangwriter, etc. to lower their prices to just under the $5000 wire.

I currently know of no products being developed by competition for Band 2 (unfortunately this doesn't mean there arn't any!). One would expect serious business customers will move up to Band 4 and the job of Macintosh and VLC is to migrate the remaining Band 3 customers down to Band 2, leaving Band 3 manufacturers out in the cold!!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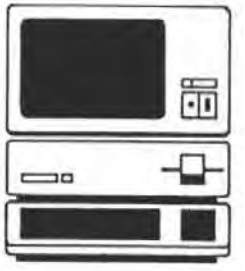
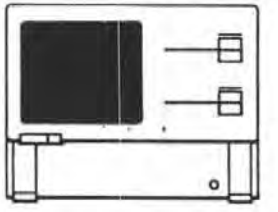
The Advantage
of a Product Line

is that

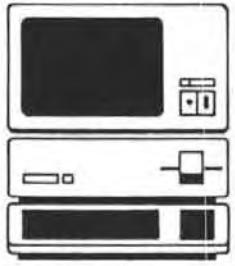
Each Individual Product
Does not have to
Do Everything.

(and today is the first day of the rest of your life...)

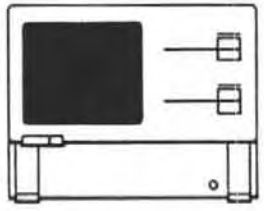
PRODUCT LINE				
Year of introduction	1977/78	1980/81	1982	1982
current retail price	$2000 to $2500	$4500	$1000 to $1500	$6000 to $7000
weight	15-30 lbs	26-40 lbs	15-18 lbs	45+ lbs
Microprocessor	6502 (1 MHz)	6502 (2 MHz)	68000 (8 MHz)	68000 (6 MHz)
memory size	32 to 64K bytes	128 to 256K bytes	64 to 128K bytes	256 to 1,000K bytes
Display CRT	External	External (look-alike)	Built-in, 9"	Built-in, 12"
croma	color or B&W	color or B&W	B&W	B&W
graphics resolution	280 X 192	560 X 192	384 X 256	720 X 360
graphics memory	8K bytes	16K bytes	12K bytes	32K bytes
Keyboard	Built-in	Built-in	Detached	Detached
numeric pad	no	yes	no	yes
pointing device	2 cursor arrows	4 cursor arrows	mouse	mouse
Slots	8	4	0	3
built-in I/O	game I/O	1 RS232, silentype	2 RS232	2 RS232, Parallel
sound	1 bit speaker	6 bit speaker	1 bit speaker	delta-mod speaker

CONFIDENTIAL

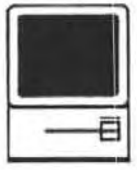
48K All plus	1530
disk w/controller	645
monitor, 9" B/W	150
software	150
	Total $2475



128K AIII including information analyst package and 12" B/W monitor	4690
	Total $4690

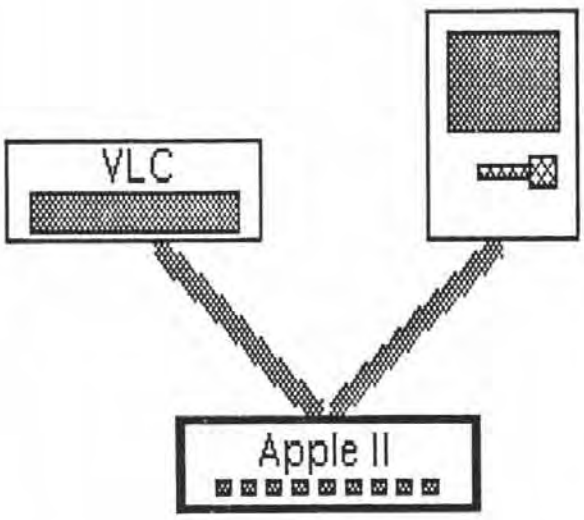


256K LISA w/software	
	Total 6000+



64K/128K Macintosh w/software	
	Total $1000 to $1500

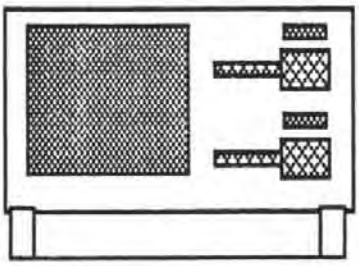
Macintosh Positioning



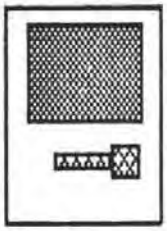
THE MOST SUCCESSFUL
PERSONAL COMPUTER
IN THE WORLD
BEARS FRUIT

Imagine two posters next fall, the first appearing in retail dealers and Sears. The message; "Apple II has evolved into two new products, each one the best in its class and both low cost. Buy one... Or both !!"

THE MOST SUCCESSFUL
BUSINESS TOOL
FOR THE 80's

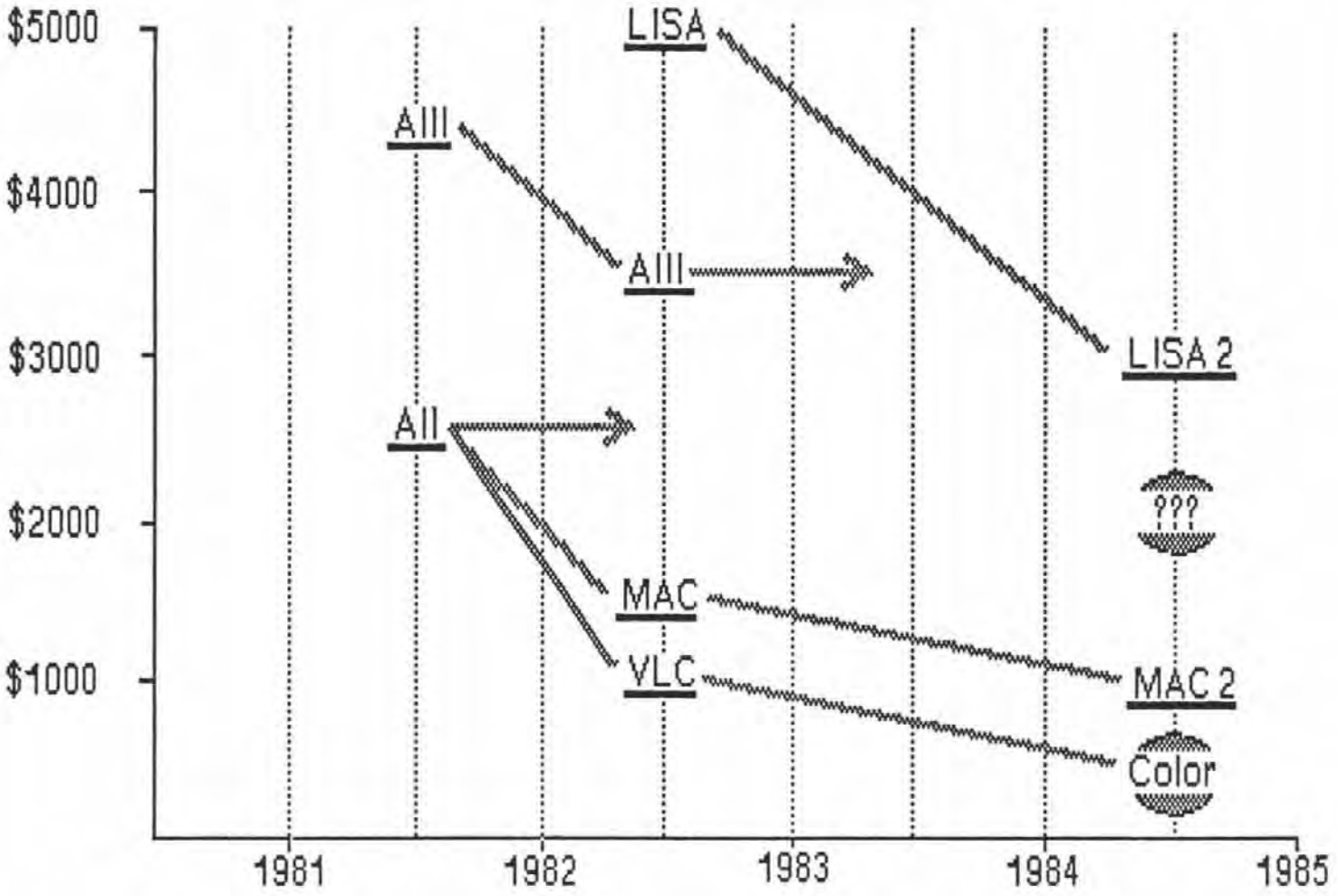


And Its
Younger Brother.....



And a second poster for LISA dealers positioning MAC as "LISA's younger brother".

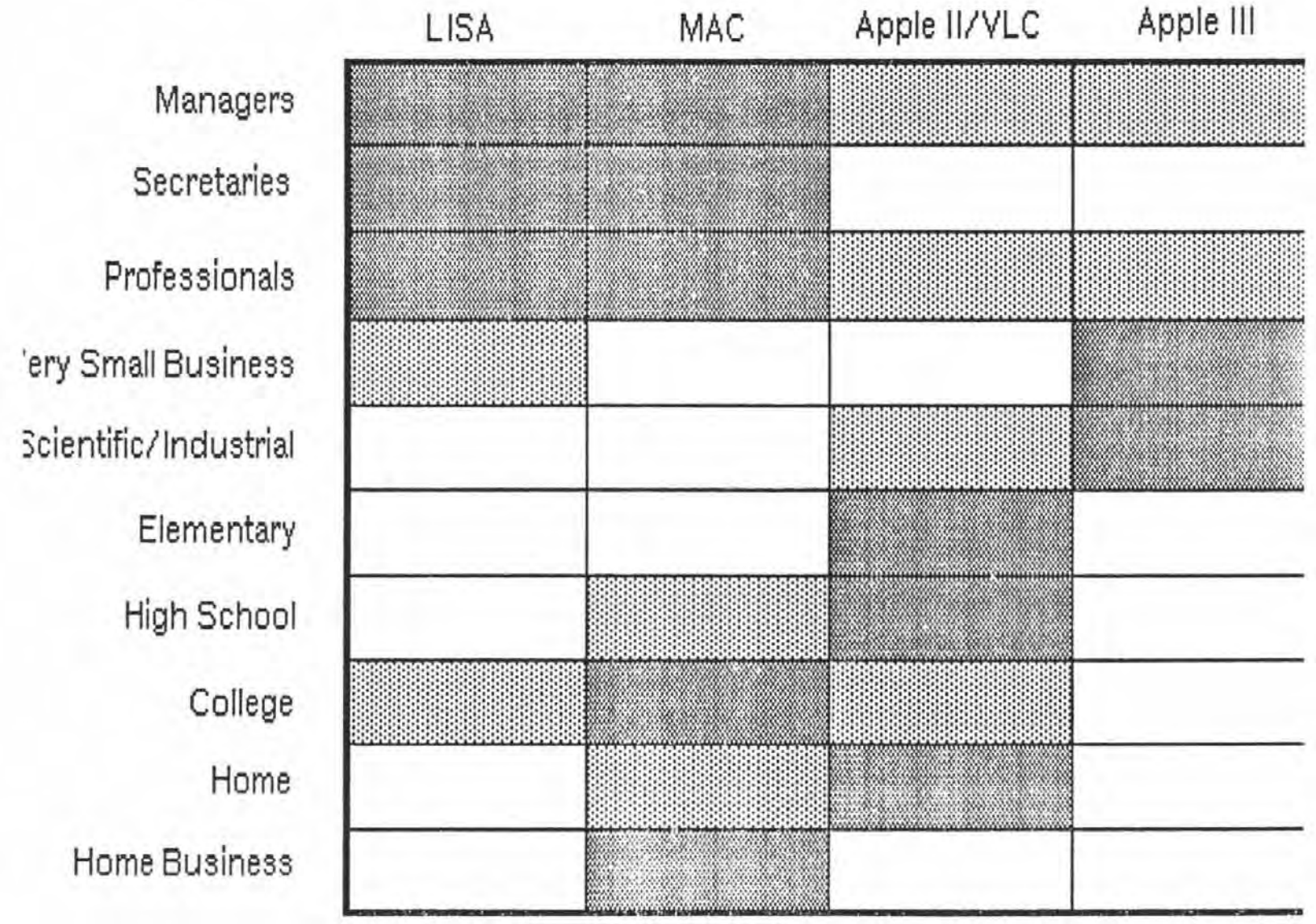
Jobs' Product Timeline



Notes:

1. Prices are retail prices for a "usable" system including a disk and some software, but not including a printer.
2. Lisa 2 is a least as powerful and runs all Lisa 1 software.
3. ??? is a product opportunity. Any ideas??
4. Macintosh 2 runs all Mac 1 software, incorporates a flat-panel display and is physically smaller and lighter.
5. Color is a product opportunity for a low-end color computer (VLC 2 ??). Any ideas??

Market Segment Emphasis



SOFTWARE EVALUATION

Software:	OFFICE		EDUCATIONAL		HOME		Total
	Manager / Professional	Low End Clerical / Secretarial	College Word Processing	High Schools	Consumer Home	Home Business	
MacWriter	3	3	3	3	2	2	16
MacFile	3	3	1	1	3	3	14
MacCalc	3	3	1	1	2	2	12
MacBasic	1	1	3	3	3	2	13
MacSketch	2	1	2	2	3	1	11
MacGraph	3	2	1	1	1	2	10
Games	2	1	3	3	3	1	13
Typing Tutor	1	1	2	3	2	1	10
Telecommunications	2	1	1	1	3	2	10
Personal Finance Manager	2	1	1	1	3	3	11
Mail List	1	2	1	1	3	3	11
PASCAL	1	1	3	2	1	1	9
Tax Planner	2	1	1	1	3	2	10
Calendar	2	2	1	1	2	2	10
Sesame St.	1	1	1	1	3	1	8
SmallTalk	1	1	3	1	2	1	9

OFFICE RELATED

	Manager / Professional		Low End Clerical/Secretarial
	"Every Manager's Tool"	"Little Lisa" Market	
Positioning	Every day, more managers rely on computers to help perform their functions effectively and efficiently. MAC makes it possible for *any* manager to experience the automated office with minimum investment of time and money. MAC will be a rewarding first computer experience.	MAC will substantially increase the productivity of every manager by providing some of Lisa's advanced capabilities at an entry level price. 1) With promotion and associated increase in responsibility, a manager will be ready to graduate to a Lisa. 2) Managers already using Lisa can use MAC when away from the office (Traveling, Home).	MAC can help every secretary grow into an area associate. With Macintosh secretaries can take on more interesting assignments and more responsibility which can make the manager more productive.
Applications	Modeling & Forecasting Communications, Data Management, Document Preparation, Time Management	Same as "Every Manager's Tool"	Document Preparation, Communications, Form Fillin, Some Data Management, Time Management
Software	MACCalc, MACBASIC, Communications Software, Personal DBM, MACWriter, MACGraph, Calendar	Same as "First Computer" Market	MACWriter, MACGraph, MACCalc, Communications Software, Calendar
Competition	Japanese, Xerox 820, IBM, Radio Shack, Commodore	none	WangWriter, DisplayWriter, Xerox 820, Radio Shack, Commodore
Distribution	Apple Dealers	Lisa Dealers	NAD, Office Supply Stores, Apple Dealers, (Sears?)
Acceptable Price Range (with software, without printer)	<2,000	<2,000	<1,500

EDUCATION

	College Student Word Processing	High Schools
Positioning	In colleges, MAC will revolutionize paper writing much as calculators revolutionized number crunching	As Word Processors are replacing typewriters in the real world, students need to learn word processing, not just typing. MAC will help the student of the 80's learn the tools of the 80's and prepare Computer Literate students for colleges and employment.
Applications	Paper Writing, General Homework preparation (Computer Literacy)	Typing, Computer Literacy, Science courses
Software	MACWriter, MACSketch, MACBASIC, PASCAL	Typing courseware, MACBASIC, PASCAL, Science courseware
Competition	none	Apple II, Commodore, Tandy, Atari
Distribution	Direct to Colleges	Apple Dealers, Direct
Acceptable Price Range (with software, without printer)	<1,000	<1,500

MacIntosh Market (U.S. only)

	Office Related			Education		Home	
	Manager / Professional		Low End Clerical / Secretarial	College Student WP	High Schools	Consumer Home	Home Business
	Every Manager's Tool	"Little Lisa" Market					
Total Available Market	9M	4M	4.7M	11.2M	19,000 (schools)	16M ($35K+)	2.5M**
1985 Industry Penetration	.2		.3	.1	.35×20 units	.2	.2
'82-'85 Industry Sales	1.8M		1.4M	1.1M	133K	3.2M	500K
MacIntosh Share	20%		25%	50%	20%	10%	33%
MacIntosh Sales '82-'85	360K	480K*	350K	550K	27K	320K	167K
		Office Total: 1,190K		Education Total: 577K		Home Total: 487K	

Total MacIntosh Sales '82-'85 2254K (563K/yr. or 47K/mo.)

*2:1 ratio to Lisa Sales (in offices which buy a Lisa).
(300K×.8×2)

**Worldwide Amway, Shaklee, Mary Kay, Avon, Fuller Brush, and Tupperware.

HOME

	Consumer Home	Home Business
Positioning	The family Macintosh facilitates management of personal finances and records, makes it possible to take advantage of convenient services such as home banking and home shopping. MAC also provides Entertainment and Education for every member of the family.	The powerful tools the big businesses have been using to decrease their paperwork and increase effectiveness are made affordable to every home business by Macintosh. MAC simplifies the task of the headoffice, by allowing every home businessperson to use the same advanced means of running his business.
Applications	Managing Time and Money, Home Shopping, Correspondence, Animation, Games, Computer Literacy, Education	Correspondence, Inventory Control, Bookkeeping, Order Entry, Personal File Systems, Communication with Central Office.
Software	Information Services, Personal Finance Management, Personal DBM, Mail List, MACWriter, Space Shuttle, Chess, MACSketch, Other games, MACBASIC, Sesame Street Software	MACWriter, Inventory Control, DBM, Mail List, Single Entry Ledger, Communications Software
Competition	Apple II, Japanese, Atari 400/800, Radio Shack color computer, Commodore (VIC 20)	Radio Shack, Atari 800, Commodore, Japanese
Distribution	Retail outlets (Macy's, Sears, etc.), Apple Dealers	Direct to Sponsors (Avon, Amway, Mary Kay, Fuller, Insurance, etc.), Apple Dealers
Acceptable Price Range (with software, without printer)	<1,000	<2,000

1982

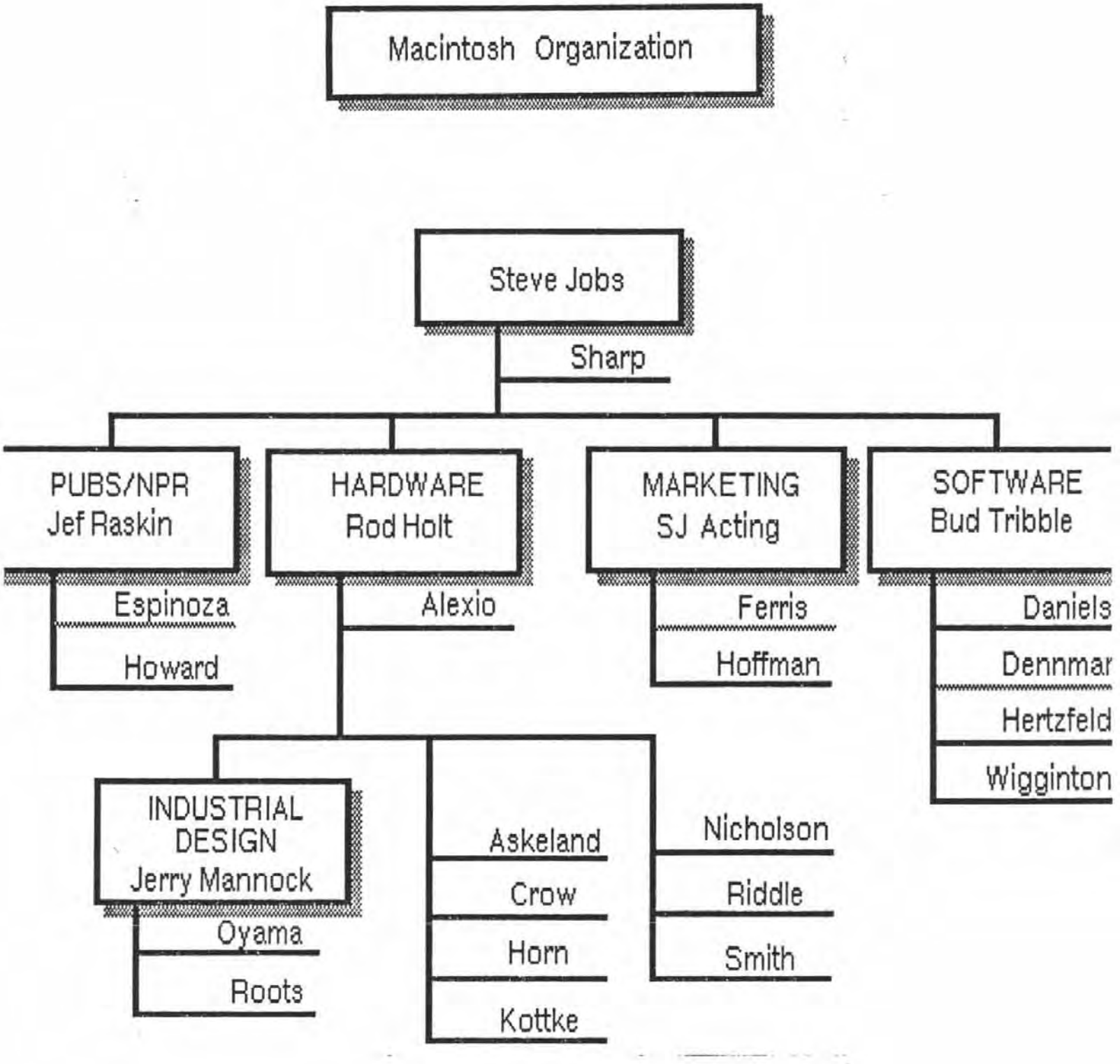
"Get the Train out of the Station"

	Software	Hardware
Introduction Q1, '81	1. Mac Writer 2. Mac Calc 3. Mac Basic	1. 64K/128K Mac Intosh 2. 2nd floppy disk drive 3. RS-232 cables
Q3-Q4 1982	4. Mac Graph 5. Mac Sketch 6. Mac Pascal	4. 300 baud Mac Phone 5. RS-232 Mac Net 6. Mac Intosh w/o disk drive
Q2 1983	7. Mac Dow Jones 8. Mac File	

Curatorial staff at the Computer History Museum have determined that the chapter header for this section is missing.

It should read:

Macintosh Organization, Staffing and Budget


Macintosh Organization
Steve Jobs
Sharp
PUBS/NPR
Jef Raskin
Espinoza
Howard
HARDWARE
Rod Holt
Alexio
MARKETING
SJ Acting
Ferris
Hoffman
SOFTWARE
Bud Tribble
Daniels
Dennmar
Hertzfeld
Wigginton
INDUSTRIAL
DESIGN
Jerry Mannock
Oyama
Roots
Askeland
Crow
Horn
Kottke
Nicholson
Riddle
Smith

MACINTOSH HEADCOUNT 1981

	ACTUAL	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
PRODUCTION ENG.	0		1 (MGR)					
TAIWAN LIAISON	0							1
KEYBOARD/ DISK LIAISON	0							1
DOCUMENTATION	0			1 (ANALYST)	2 (DRAFTER)			3 (MISC)
JIGS & FIXTURES	0		1 (DESIGN/PROTO)					
QA	0							2 (MECH & ELEC)
TEST EQUIP	0			1 (MGR)		2 (ASSOC)	3 (TECH)	4 (TECH)
SPECIALS	0				1 (ENG)	2 (ENG)	3 (ENG)	4 (ENG)
STANDARD	0				1 (ENG)			
SOFTWARE TEST/ MAIN	0			2		3		4
SUBTOTAL	0	0	2	6	9	12	14	22
GRAND TOTAL	16	18	28	39	47	52	55	63

MACINTOSH HEADCOUNT 1981

	ACTUAL	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
ADMIN	4		5 (ASSOC)					
MARKETING	1			2 (PMM)	4 (PME) (ASSOC)	5 (PMM)		
PUBS/NPR	2 (BASIC, DBM, OS, OEM PROGRAMERS)			3	4		5	
SUBTOTAL	7	7	8	10	13	14	15	15
ENGINEERING	1							
MAIN LOGIC BD	1		2 (MTS)					
SR RFI ENG	0			1				
VIDEO/POWER SUP	0		1 (ANAL ENG)	2 (TECH)		3 (SUPPORT ENG)		
KEYBOARD	2		3 (SOFT/HDWARE)					
DISK	0	1 (HORN)	2 (TECH)		3 (ANALOG/TEST EQUIP)			
PACKAGING	3		4 (DRAFTER)	4.5 (LAZLO)				
SOFTWARE	2	3 (NUM) (BASIC)	5 (BASIC) (OS)	7.5 (DBM) (DEMO) (MACWRITER)	8.5 (ASSOC)			
SUBTOTAL	9	11	18	23	25	26	26	26

Macintosh Costing = $ 397

Logic PC Board	$ 139
Analog PC, CRT & Yoke	55
Floppy Disk Mechanism	40
Disk Analog PC Board	12
Plastic & Metal Housing	14
TOTAL MAIN UNIT	$ 260

Manuals & Lit.	$ 3
Shipping Box	5
Software & Manuals	9
Power Cord	1
Mouse	30
TOTAL MISC	$ 48

Keyboard Matrix with electronics	$ 17
Keyboard plastic	5
Instruction cards	2
Keyboard cable	1
TOTAL KEYBOARD	$ 25

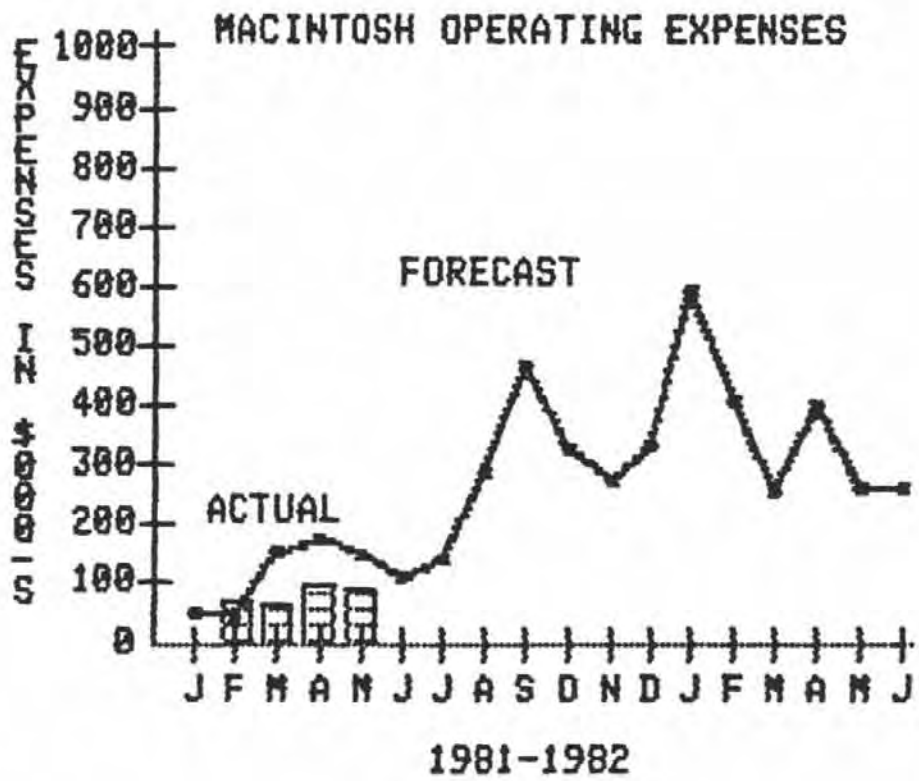
Assembly, Test & IQC (3 hrs @ $20/hr.)	$ 60
Tooling & Maint.	2
Production Engr.	2
TOTAL ASSEMBLY	$ 64

Distribution Margin Anaylsis

Macintosh Retail Price	$995	$1095	$1195	$1295	$1395	$1495
Operating Profit (assuming 40% cost of distribution and $400 cost.)	$197	$257	$317	$377	$437	$497
% Operating Profit	33%	39%	44%	49%	52%	55%
Distribution Margin (assuming $800 Fasp)	20%	27%	33%	38%	43%	46%

SPECIAL TASK FORCE BUDGET

DEPT: 6500 6/30/81	ACTUAL	FORECAST 1981		1982			
	Q2	Q3	Q4	Q1	Q2	Q3	TOTAL
SALARIES & FRINGE	75.61	212.10	392.81	610.26	708.29	736.57	2735.64
EXPENDABLE TOOLS	0.25	0.27	200.30	20.40	296.50	1.50	519.22
OUTSIDE SERVICES	0.21	5.91	84.50	6.00	84.50	84.50	265.62
OPR/OFFICE SUPLS	45.48	36.29	43.00	99.00	53.00	15.00	291.77
TOTAL EXPENSES	133.08	294.63	889.97	931.84	1258.17	929.67	4437.36



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Open Issues

1. Europe has not been given much consideration yet. Although the unit is being designed to meet VDE, etc. we still have much work to do for Europe (software, manuals, et al.)

2. We are designing our packaging to accept a door-less disk drive only. We feel Vennard will come through. Should we be taking this risk?

3. Who will manufacture Macintosh? Should we, should PCS, Singapore, Alps ???

4. Is our schedule realistic?

5. How do we get PCS to feel a "part" of Macintosh?

We will announce no Apple before its time.