

TOTAL TIME
747576777879

AC T/S

+30

35

10

2215

665

2070

620

1880

564

900

270

1100

330

U1 T/S N

55

370

885

1595

2300

3065

U1 T/S O

150

665

930

OS CALC

160

1000

1800

2340

3000

3710

25110220355480650

TOTAL

435

5025

6525

6735

6950

8885

34555

LOW

MOST
LIKELY

HIGH

20,750

34555

52000

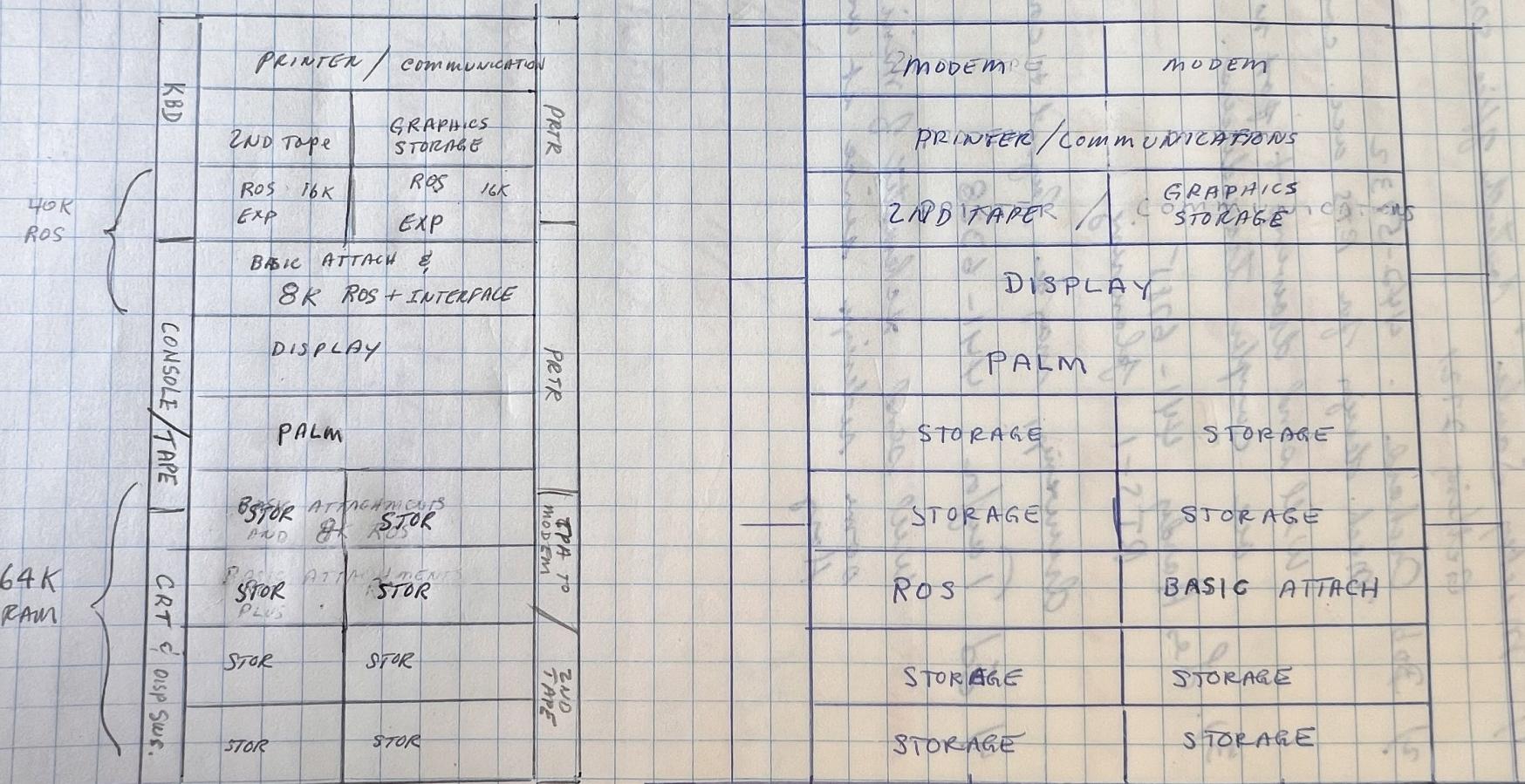
Printers 60%

Acoustic Coupler 25%

2nd Tape Cassette 30%

MODEM ON EXTERNAL
PLANAR BOARD
GPIB SOCKET

8/20/13
JK



8/10/73 -

Don - Roton -

IBM 2706658 P.N.

3149 Don Edwards
Roton SPRITE, SP2B2L; Vendor #

availability of 2nd PALM -
call to Dick Pratt -

check if 2nd Palm has been pd for
display card - ~~\$100~~ \$600

KBD Dutcher Version. Vern Kendrick

Chet RataSKI 442-5678 on vacation today, Back Monday

Vern Kendrick 443-3812

KBD = Dutcher

8/10/73

~~S - 473 - 3011~~

8/10/73 Call from Les Hardy
Info for Bill Radke

We should call Ed Sinnoma 6355, Rob.
Engs mgr. (Frank Smalto 5924) \leftarrow Ed's mgr.

~~They~~ has 1 min $\frac{3}{2}$

or K Meigo slept 815
Fujizawa

8/10/73 Mark Silverman Shot Dr.

Will honor Radke & flag

FOX will leave them here until 10/1/73.

8/13/73 Mark Silverman 7249

Bill Radke is GSD

Mark would like to terminate Bill's contract
Pacific Medical Center.

8/13/73 - Time-life -

They wanted 16 b.t machines.

powerful ALU \rightarrow number-cruncher.

No decision on Basic -

Impact to speed 65K.

8/14

Call from
Karl Cockerell - 456 1929.

Needs scamp failure rate.
Refer him to Lee Wilson 3159.

KBD

CRT

PALM.

P.S.

Dutchie.

VTC

Tape

A.C.

PTR

Digital tape.

discussed software support.

suggested that customer not be given
ability to change his software package.

make CE tape available ~~with~~ ^{to CE only}
supervisor capability ~~to~~ ^{the} ability
to modify program. Ø.

8/15/73

Wayne Peterson 2511.

5993434 Custom Systems -

Larry Scilley - March /72 -
456-1414 or Tom Porter -

Est. based on 15K qty - \$50⁰⁰ ~~per~~ ^{each} ~~unit~~ ^{each} copy

8/14/73

Jem Lendginst.

Unit Qty - R/W

unit
Qty. {
418.50
146.60
30. -

Transport + Single head
servo
R/W amp / drivers -

avail. 60 days -

1K Qty. {
114.80
77.75
13.20

Audio - Minicom - w.

10 Qty {
346.75
132.60
24.00

stripped version - Chicago - 3M.

3M drive -

Unit Qty - Complete electronic package 961.45
4 channel
1. channel. 891.25

Avail. 45 days -

1K Qty 4 channel.

545.00

1K Qty Transport & Servo. 262.45
1K Qty head 1 chan. 66.90
4 ch 94.80

1K. Qty Read empty peek detector.
& write driver

1 chan 45.40
2 - 4 chan 57.25

8/15/73

Mod. I

Design Comparison Cost

L&R - 73 Rochester

Ultimate Hour

77 CD costs

NO Contingency

Avg → 130

Mem. \$ 764

3 cards 311

Basic = display, Palm, attach.

(15) 46 board

50 power

88 KB1

49 Cassette ~~①~~

112 CRT

10 fan *

65 Cover

28 cables

66 Asm & test

12 maintenance

10 remainder

Line Item

\$ 1611

Program Avg slightly higher..

Preliminary - Mod II

\$ 775 storage

7 CRT left cable

136 Comm

.51 Printer

136 2nd Cassette

195 Graphics

21 Ros.

Cost of Basic

1611

775

2386 - APL base machine.

Cost

8/16 Mark Silverman.

372 - 7249

Call - 8/16/73.

High speed search very important.

Suggested we order two additional 64K byte of
storage for POS-Simulation.

8/17- Call to Bill Morrison - 372-7349

8/16/73.

Call from Bill Corderer, 3M corp. Chicago.
Sales manager - OEM Dr.

OEM drives 1 7/8 IPS. 3 3/4 avail - restricted usage

AC induction motor
wow/rutter $\pm 2\%$ - drive to drive interchange

auto reversal has 24V solenoid.
have sent some with 12V S-

Check audio visual components - Edvent Corp, Mass.

Bill to send specs and prices. ASAP.

8/20/73

Bill Teelt -

ROS/RAM 128K selection.

Use Branch instructions. OK -

must define branch boundaries based on feature size -

Looking at shift: may be able to expand function.

SR 1 with zero fill.

Rotate Right 1, ~~2, 3, 4,~~ clv b.t 1.52 use.
2nd use }
Rotate Right 3,
Rotate Right 4,

Would use value cd e f - g if Get byte
would look like get to Register.

100 things to do.

1. check status of present modules.
2. order datchers modules.
3. ask Ed S. for mini-3 card,
4. must get mini-3 reviewed if we are going to use it.

Call Glen on Mixed ROM/RAM - \$64K
Supervisor techniques -
- 3764

Controller instruction set.

no auto handling of program status words.

3 - 3005/8 -

8/1/13 - Diet Fette

Add special What should it be?

Overflow indicators

R/S with command -

Select IPL R/S redefined -

POR = activate IPL line -

use control instruction to Binary command -

load address of R1.

~~SR SRR~~ 1 & zero fill -
SR & R1
3
4

SL 5 = SRR 3 • MASK

0 1 1 0 1 0 0 0
0 0 0 0 1 1 0 1
0 0 0 0 0 0 0 0

ORIGINAL DATA

SRR, 3
CLRIF

SL 4 & zero fill -

rotate right 4

SL 5

SL
SR 5 =
0 0 1 1 0 0 0 1
SR4 0 0 0 1 0 0 1 1
SR.1

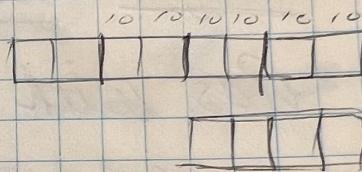
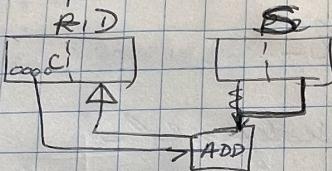
8/21/73.

- 1) Tape byte interrupt
Cannot overlap I/O
Must analyse data while reading -

2 PALM

Instruction Set.

add SPL 1. is used -



R1
0 8
R2
0 6

ADD R1, R2 add bytes

EMIT R2, 10 set up carryout

JNOM R1, R2 Jumps if no carry

SETI carry indicate carry

8/22

8/27 In 1130 Emulation of SRA by 3

- 1) Shift acc lo bits right by 3 bits
- 2) Shift acc hi bits left by 5 bits
- 3) OR the results of 1 & 2
- 4) Shift acc hi bits right by 3 bits

8/21/23 - 1) Shift right & Round ~~not~~ useful to Pat Smith.

- 1) Could use Add SP 2 for Brane and Branchout
Pat does not use SP 2
- 2) Overflow Indicator -
- 3) Add SPL #1

If add SP 2 or use for some other instruction.

More powerful arithmetics should be considered.

e.g. 16 bit A.S.M.D.

8/22/73 Al Ginsburg
Dick Spencer

8/23/73 - ~~365~~ - Rogers 395-3276 -
Dell 939 5231
R&A - scamp? \oplus

8/24/73 Joe Talarico 3088

Joe to see about building a mockup of
next scamp for Sept. 4. Pough - Monday.
Will call in afternoon.

24 YATES Blvd, Pough N.Y. 12691

- Air mail, special —

Input from Ed F.

Consider doing a better Basic program
job for System 3 - Then emulate
S/3 code with PDM and BEM.

8
24
13

2/3 VTL BOARD 818484

	PRINTER CONN	COMM SPLIT	TAPE, CONNS.	KEYBOARDED CONSOLE	TEST SOCKET
PRINTER	PRINTER CONN	SPARE	SPARE		
COMMUNICATIONS		AND MODEM			
2ND TAPE			GRAPHICS		
KBD, TAPE, CONSOLE, MISC CONTROLS					
16 K ROS		12 K ROS			
16 K ROS		16 K ROS			
DISPLAY					
PALM					
EMULATOR AND IPL ROS, AND ROS / RAM INTERFACE (4K)?	E				
STOR		STOR			
STOR		STOR			
STOR		STOR			
STOR		STOR			
TEST SOCKET					

1. ROS PACKING FACTOR ?
 2. SHOULD CONSIDER PLANAR PACKAGE FOR BASIC ROS.
 3. POSSIBILITY OF CUSTOMER INJECTION OF ROS.
 4. 8 Socite Reserves for ROS can become file attachment and control for file revision of SCAMP.

J. D. GEORGE
AUG 2 1973

8/28/13 Chet Rolański - plenary packaging for Palm.

8/29/23

Andy Kosieniak
KOSIENIAK

5251

48KX1 Ros- Emerald

$$\begin{array}{rcl} 24 \times 1 & \approx & 17.30 \text{ were bond} \\ 48 \times 1 & & - 2.50 \text{ ceramic deal} \\ & & \text{in tile} \\ 15.50 & & 48 \text{ per 1 inch} \\ 7.50 & & \end{array}$$

Present 24K is 24 bits wide -

48 parts 2074- 50% higher

Types of errors

1) single bit fails -

1

2) address decoder —

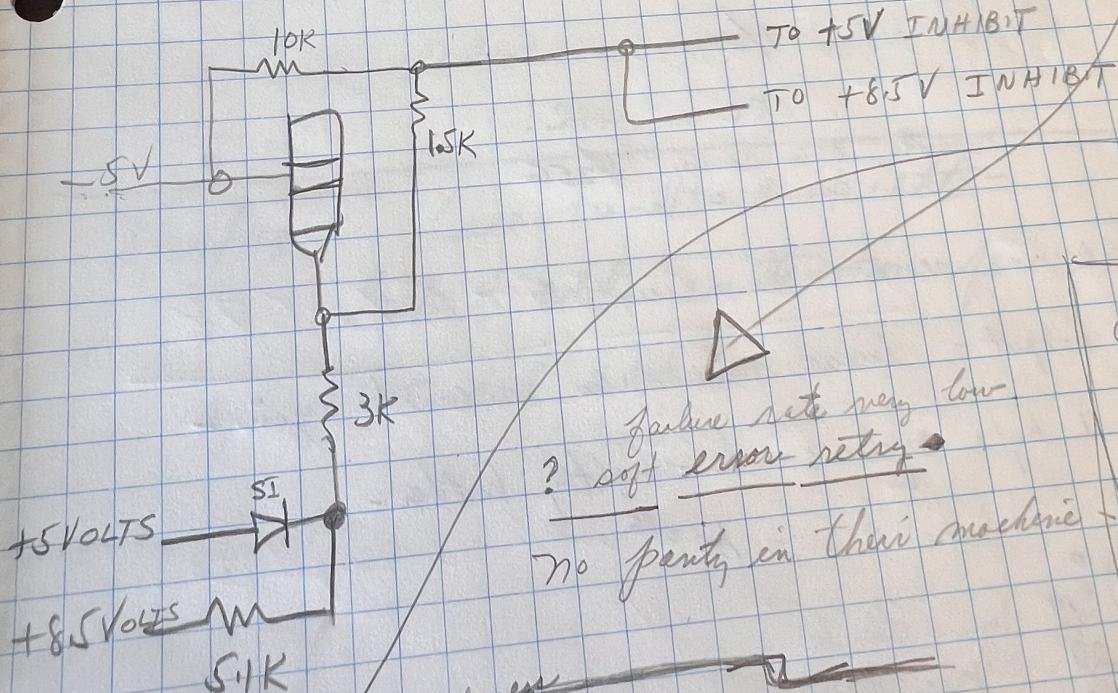
10

→ array -

2

off chip drivers

desiccated bit failure of every -



? soft error retry -

No party in their machine

Considered
Roc diagnostic
on power on.
check each
module -

~~address~~ batched

```

sequenceDiagram
    participant A
    participant B
    A->>B: 3 clocks
    activate B
    B->>A: precharge
    deactivate B
    B->>A: wait for
    deactivate B

```

8/29/73 -

With Paul Friedl

P.

$$\text{MDX} = 30\%$$

1. short - no tags - no m add disp & INC
+ load IAR -
with tags get Indx, add disp - back to index.
+ test sign change
d, + skip -

2. Longer no-tags - get data at address
add displacement
= write back -
test sign check.
skip -

with tags - get end of
add address
write back
sign test
Indirect get data from address.

8/29/73 - Call to Bill Teletti -

Get & add instruction for emulator.

a) GET and add.

8/29/73

Multiple add test.

5000 loops of 10 adds -

HP Basic [270] seconds

present
Scamp own PNL — 50 loops of 10 char = 50 seconds.
 $50 \times 100 = 5000$ seconds.

1130 Mode on Scamp =

500 loops = 80 sec. = 800 sec.

Scamp B. (faster)

$\frac{800}{2.3} = 348$ seconds.

8/30/73 Bell

Gas Panel -

6x40 Char display

$3\frac{1}{2} \times 7\text{.}$

(11x5)

Gene Brossseau

Mon - Kingston -

373-2014

Report KGD 0254-01-678

240 480 Gas discharge
display panel.

Alternate Cost 250 with adaptor -

Liberty - Ship . 4074.

12 x 40