GSD Los Gatos Laboratory
May 1, 1973

MEMORANDUM TO: File

SUBJECT: SCAMP 1, Memo #1
                                    PALM Address, Priority Assignments, and Device Commands

I.   I/O device addresses; interrupt level assignment; commands

          Device Addresses
          0   Processor, CRT
          1   SMS Load Device (temporary)
          2   Unassigned
          3   Shift Instruction
          4   Keyboard, Console
          5   Printer
          6   Reserved for Printer
          7   CE Hex Keyboard, ANR Keyboard
          8   Communications Adaptor (TPA)
          9   Communications Adaptor
          A
          B
          C   } Unassigned
          D
          E   Cassette
          F   I/O Adaptor Reset (See Bit Assignment)

II.   I/O Adaptor Reset Bits

          Device Address "F"
          Bit 0   Communications Adaptor
              1   Cassette
              2   Keyboard
              3   Printer
              4
              5
              6 } Not Assigned
              7

III.   Interrupt Priority Level Assignment

          0   Processing   (Lowest Level)
          1   Communications Adaptor, Keyboard
          2   Cassette, Printer
          3   Reserved for High Speed Devices
          4   Internal Error Interrupt   (Highest Level)

Priority Interrupt Bit Assignment

Level 1   Bit   0   (D) ⎤ Not Assigned
                  1   (C) ⎦
                  2   (B)   Communications Adaptor (Data)
                  3   (A)   Communications Adaptor (Timer)
                  4   (8)   Not Assigned
                  5   (4)   Keyboard Reset Key
                  6   (2)   Keyboard Data or Function Key
                  7   (1)   Not Used

Level 2   Bit   0   ⎤ Not Assigned
                  1   ⎦
                  2   Printer (Timer)
                  3   Printer (Print Emitter)
                  4   Printer (Forms)
                  5   Not Assigned
                  6   Printer (Emitter Test)
                  7   Not Used

Levels 3 & 4   None Assigned

V. Adaptor Commands

1. Cassette   1 of 1

   a. Command = Put (Indirect)

       Bus Out Bits   0 ⎤ Not Used
                      1 ⎦
                      2   Spare Function
                      3   +=Write; -=Read
                      4   +=Motor On
                      5   +=Data Bit 4
                      6   +=Data Bit 2
                      7   +=Data Bit 1

   b. Command = Get Indirect

       Bus In Bits   0 ⎤
                      1 ⎤ Not Used
                      2 ⎦
                      3 ⎦
                      4   Cassette Interrupt Latch On
                      5   Data Counter Bit 4
                      6   Data Counter Bit 2
                      7   Data Counter Bit 1

   c. Command = Get to Register
       Same as b.

   d. Get or Put Command to Cassette Adaptor Resets Interrupt
       Request Latch

Display

a. Command = Control = Display Selected Data Area from Storage

Bus Out Bits 0 X
1 X
2 X
3 X
4 X
5 0

Y_6	Y_7		
0	0	Locations 3072–4095	Hex selector
0	1	2048–3071	switches must
1	0	1024–2047	be set to 00
1	1	0000–1023	for proper operation.

6 }
7 }

b. Command = Control = Blank/Unblank

Bus Out Bits 0 X
1 X
2 X

Y_3	Y_4	
0	0	Reverse Blank/Unblank Condition
0	1	Blank Display
1	0	Unblank Display
1	1	No Change

3 }
4 }
5 X
6 X
7 X

3. Keyboard & Console

a. Keyboard Command = Control

Bus Out Bits 0
1
2
3
4
5
6 "+" = Reset Interrupt Lt.
7 "+" = Set Enable Interrupt Lt.;
"–" = Reset Enable Lt.

b. Keyboard Command Get Byte or Get to Register

Bus In Bits 0 Kbd data bit 0
1 Kbd data bit 1
2 Kbd data bit 2
3 Kbd data bit 3
4 Kbd data bit 4
5 Kbd data bit 5
6 Kbd data bit 6
7. Kbd data bit 7