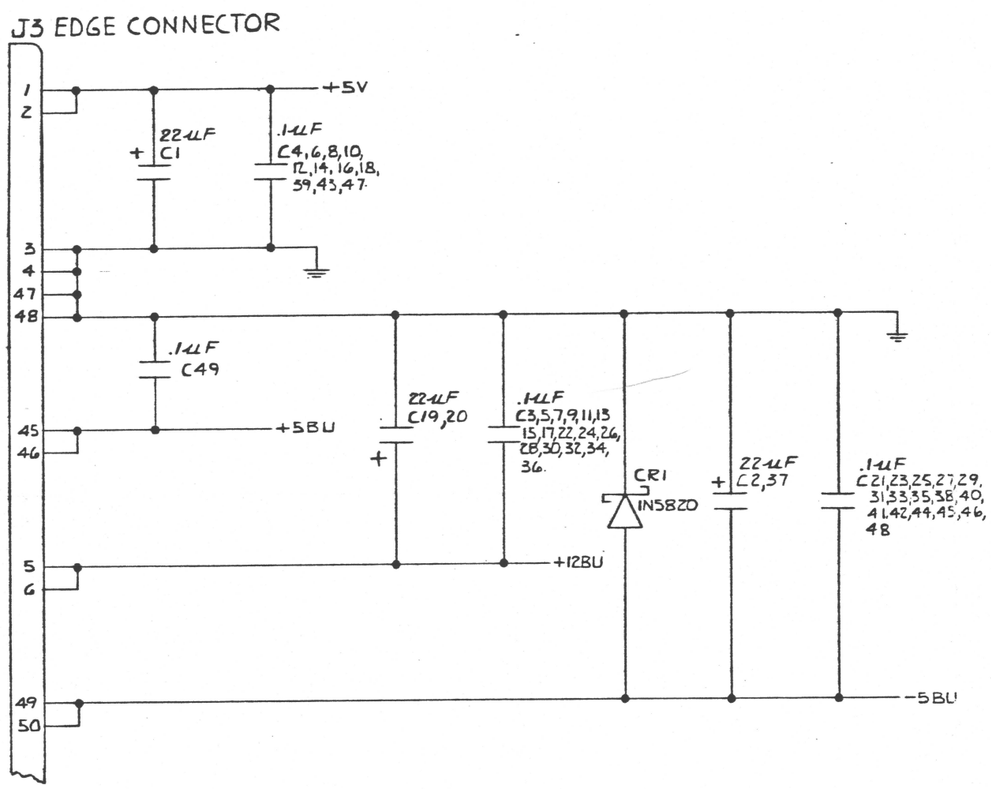
REVISIONS				
PART REV.	DOC REV.	DESCRIPTIONS	DATE	APPROVED
A	A	INITIAL PRODUCTION RELEASE	12-2-81	FV



UNUSED GATES			
REF	TYPE	PIN NUMBER	
		IN	OUT
6A	74S05	3,11,13	4,10,12
1C	74S240	2	18
1B	74LS240	17	3

6. LAST USED REF. DESIGNATORS.
   C. CAPACITOR - C49
   B. DIODE - CR1
   L. RES. SIP. - RN2
5. ALL CAPACITOR VALUES ARE IN PICOFARADS.
4. ALL RESISTOR VALUES ARE IN OHMS, ¼W, 5%
3. FOR PARTS LIST SEE DWG. NO 20102
2. FOR ASSY SEE DWG. NO 20103
1. FOR P.C. BOARD DETAIL SEE DWG. NO. 20100

NOTES: UNLESS OTHERWISE SPECIFIED

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ARE:
FRACTIONS ± DECIMALS .XX ± .XXX ± ANGLES ±

APPROVALS	DATE
DRAWN W. MASCHHAUPT	4-25-8
CHECKED JOE BARALYA	11-25-81
PRODUCTION	11-25-81

POINT 4 DATA CORPORATION
Irvine, California 92714

SCHEMATIC DIAGRAM CPU PIGGYBACK MARK 3 (EXTENDED MEMORY)

SIZE	NEXT ASSEMBLY	DRAWING NO.	REV
D	20103	20104	A

SCALE — DO NOT SCALE DRAWING SHEET 1 OF 3

REVISIONS				
PART REV.	DOC REV.	DESCRIPTIONS	DATE	APPROVED

J3
13 MA6+
11 MA5+
12 MA4+
8 MA3+
7 MA2+
10 MA1+
9 MA0+
31 REFR-
+5BU
38 MECPU-Z
35 B.RAS+
42 MS1+
41 RAS+
39 MS0+
37 BU-Z
40 MS1-
44 CAS+
43 R.MWE+

1C: NC 2, 4, 6, 8, 11, 13, 15, 17 → MA6- 18, MA5- 16, MA4- 14, MA3- 12, MA2- 9, MA1- 7, MA0- 5, NC 3; 1, 19 S240

1A: NC 6, 5, 4, 3; 9 L, 1 R; P T; 2 7 10 LS161; QD 11, QC 12, QB 13, QA 14 → 1B

1B: 11, 13, 15, 2, 4, 6, 8, 17 → 7, 5, 18, 16, 14, 12, 3; 1, 19 LS240

2A: NC 6, 5, 4, 3; 9 L, 1 R; P T; 2 7 10 LS161; QD 11, QC 12, QB 13, QA 14

+5BU → 1, 1; 2 → RN2 470Ω 5, 6, 8, 4, 7, 3; RN1 470Ω 7, 4, 6, 2, 8, 3

505: 1 GA 2 MECPU-Z → MEREF-; 5 GA 6 B.RAS+ → RAS3-; 9 GA 8 MS1- → RAS2-

522: 7A 1, 4, 2, 5 MS1+, RAS+, MS0+, BU-Z → 6; 7A 10, 12, 9, 13 → 8

503: 8A 10, 9 CAS+ → 8 CAS3-; 13, 12 → 11 CAS2-; 4, 5 R.MWE+ → 6 MWE3-; 1, 2 → 3 MWE2-

17C: IN 2, 5, 6, 5, 7, 4, 10, 3, 11, 2, 12, 1, 13; OUT 14; RAS CAS WE 4, 15, 3 4116
RAS3-
CAS3-
MWE3-

17B: IN 2, 5, 6, 5, 7, 4, 10, 3, 11, 2, 12, 1, 13; OUT 14; 8 +12BU, 9 +5V, 1 -5BU, 16; RAS CAS WE 4, 15, 3 4116
RAS2-
CAS2-
MWE2-

RAM LOCATION CHART		
	32-48K	48-64K
	RAS2	RAS3
B1+	16 B	16 C
B2+	15 B	15 C
B3+	14 B	14 C
B4+	13 B	13 C
B5+	12 B	12 C
B6+	11 B	11 C
B7+	10 B	10 C
B8+	9 B	9 C
B9+	8 B	8 C
B10+	7 B	7 C
B11+	6 B	6 C
B12+	5 B	5 C
B13+	4 B	4 C
B14+	3 B	3 C
B15+	2 B	2 C

4A: M0+ 17, M1+ 15, M2+ 13, M3+ 11, M4+ 8, M5+ 6, M6+ 4, M7+ 2 → 3, 5, 7, 9, 12, 14, 16, 18 B0+, B1+, B2+, B3+, B4+, B5+, B6+, B7+; 1, 19 S244

3A: M8+ 17, M9+ 15, M10+ 13, M11+ 11, M12+ 8, M13+ 6, M14+ 4, M15+ 2 → 3, 5, 7, 9, 12, 14, 16, 18 B8+, B9+, B10+, B11+, B12+, B13+, B14+, B15+; 1, 19 S244

J3 → J3
33 DBEMA-
36 DBEM-
34 DBEAM-

500: 5A 2, 1 DBEMA- → 3; 12, 13 → 11 DBEML-2

500: 5A 5, 4 DBEAM- → 6; 10, 9 MS0+ → 8 DBEMR-2

NOTES: UNLESS OTHERWISE SPECIFIED

SIZE	NEXT ASSEMBLY	DRAWING NO.	REV
D	20103	20104	A
SCALE	DO NOT SCALE DRAWING	SHEET 2 OF 3	

REVISIONS				
PART REV.	DOC REV.	DESCRIPTIONS	DATE	APPROVED

J3

TOP	SIGNAL	DIRECT	TOP	SIGNAL	DIRECT
1	+5V	IN	2	+5V	IN
3	GND	IN	4	GND	IN
5	+12BU	IN	6	+12BU	IN
7	MA2+	IN	8	MA3+	IN
9	MA0+	IN	10	MA1+	IN
11	MA5+	IN	12	MA4+	IN
13	MA6+	IN	14		
15	B8+	BI	16	B15+	BI
17	B9+	BI	18	B14+	BI
19	B10+	BI	20	B13+	BI
21	B11+	BI	22	B12+	BI
23	B4+	BI	24	B3+	BI
25	B5+	BI	26	B2+	BI
27	B6+	BI	28	B1+	BI
29	B7+	BI	30	B0+	BI
31	REFR-	IN	32		
33	DBEMA-	IN	34	DBEAM-	IN
35	B.RAS+	IN	36	DBEM-	IN
37	BU-2	IN	38	MECPU-2	IN
39	MS0+	IN	40	MSI-	IN
41	RAS+	IN	42	MSI+	IN
43	R.MWE+	IN	44	CAS+	IN
45	+5BU	IN	46	+5BU	IN
47	GND	IN	48	GND	IN
49	-5BU	IN	50	-5BU	IN

J3A

TOP	SIGNAL	DIRECT	TOP	SIGNAL	DIRECT
1	+5V	IN	2	+5V	IN
3	GND	IN	4	GND	IN
5	+12BU	IN	6	+12BU	IN
7	MA2+	IN	8	MA3+	IN
9	MA0+	IN	10	MA1+	IN
11	MA5+	IN	12	MA4+	IN
13	MA6+	IN	14		
15	B8+	BI	16	B15+	BI
17	B9+	BI	18	B14+	BI
19	B10+	BI	20	B13+	BI
21	B11+	BI	22	B12+	BI
23	B4+	BI	24	B3+	BI
25	B5+	BI	26	B2+	BI
27	B6+	BI	28	B1+	BI
29	B7+	BI	30	B0+	BI
31	REFR-	IN	32		
33	DBEMA-	IN	34	DBEAM-	IN
35	B.RAS+	IN	36	DBEM-	IN
37	BU-2	IN	38	MECPU-2	IN
39	MS0+	IN	40	MSI-	IN
41	RAS+	IN	42	MSI+	IN
43	R.MWE+	IN	44	CAS+	IN
45	+5BU	IN	46	+5BU	IN
47	GND	IN	48	GND	IN
49	-5BU	IN	50	-5BU	IN

NOTES: UNLESS OTHERWISE SPECIFIED

SIZE	NEXT ASSEMBLY	DRAWING NO.	REV
D	20103	20104	A
SCALE	DO NOT SCALE DRAWING	SHEET 3 OF 3	