

REVISIONS				
REV.	DESCRIPTION	BY	DATE	APPROVAL
5.0	REL TO PILOT PROD. PCD#2635 CD 2.078			
A	REL TO PROD PER PCD#2635 CD 2.118			
B	REV PER PCD # 2522 100 11/82			
C	REV PER PCD # 2340 100 11/82			
D	REV PER PCD # 2891 20 11/92			

I/O PROCESSOR
J1

SIGNAL	PIN	PIH	SIGNAL
GND	1	A	GND
Vcc (+5)	2	B	Vcc (+5)
VDD (+12)	3	C	VDD (+12)
VBB (-5)	4	D	VEE (-12)
SELECT OUT 1	5	E	SELECT IN 1
BUS-0	6	F	ACK
BUS-1	7	H	WRITE BYTE
BUS-2	8	J	MRST
BUS-3	9	K	WRITE
BUS-4	10	L	PARITY 0
BUS-5	11	M	CLOCK
BUS-6	12	N	PARITY F
GND	13	P	GND
BUS-7	14	R	READ
BUS-8	15	S	INT LEVEL 0
BUS-9	16	T	INT LEVEL 1
BUS-A	17	U	INT LEVEL 2
BUS-B	18	V	BNK 0
BUS-C	19	W	BNK 1
BUS-D	20	X	BNK 2
BUS-E	21	Y	BNK 3
BUS-F	22	Z	T0
CLOCK 2	23	A	PARITY ERROR
TV 70 RST	24	B	SPARE
GND	25	C	GND
5V LO	26	D	HALT LIGHT
5V HI	27	E	B
12V LO	28	F	A
12V HI	29	H	(NOT USED)
RSS	30	J	(NOT USED)
TO J2, PIN 29	31	K	TO J2, PIN 40
TO J2, PIN 37	32	L	TO J2, PIN 38
TO J2, PIN 35	33	M	TO J2, PIN 36
TO J2, PIN 33	34	N	TO J2, PIN 34
TO J2, PIN 31	35	P	TO J2, PIN 32
TO J2, PIN 29	36	R	TO J2, PIN 30
TO J2, PIN 27	37	S	TO J2, PIN 28
GND	38	T	GND
TO J2, PIN 23	39	U	TO J2, PIN 24
TO J2, PIN 21	40	V	TO J2, PIN 22
TO J2, PIN 19	41	W	TO J2, PIN 20
TO J2, PIN 17	42	X	TO J2, PIN 18
TO J2, PIN 15	43	Y	TO J2, PIN 16
TO J2, PIN 13	44	Z	TO J2, PIN 14
TO J2, PIN 11	45	AA	TO J2, PIN 12
TO J2, PIN 9	46	BB	TO J2, PIN 10
TO J2, PIN 7	47	CC	TO J2, PIN 8
VDD (+12)	48	DD	VDD (+12)
Vcc (+5)	49	EE	Vcc (+5)
GND	50	FF	GND

MEMORY 1
J2

SIGNAL	PIN	PIH	SIGNAL
GND	1	A	GND
Vcc (+5)	2	B	Vcc (+5)
VDD (+12)	3	C	VDD (+12)
VBB (-5)	4	D	VEE (-12)
SELECT OUT 2	5	E	SELECT IN 2
BUS-0	6	F	ACK
BUS-1	7	H	WRITE BYTE
BUS-2	8	J	MRST
BUS-3	9	K	WRITE
BUS-4	10	L	PARITY 0
BUS-5	11	M	CLOCK
BUS-6	12	N	PARITY F
GND	13	P	GND
BUS-7	14	R	READ
BUS-8	15	S	INT LEVEL 0
BUS-9	16	T	INT LEVEL 1
BUS-A	17	U	INT LEVEL 2
BUS-B	18	V	BNK 0
BUS-C	19	W	BNK 1
BUS-D	20	X	BNK 2
BUS-E	21	Y	BNK 3
BUS-F	22	Z	T0
CLOCK 2	23	A	PARITY ERROR
TV 70 RST	24	B	SPARE
GND	25	C	GND
TO J3, PIN 26	26	D	TO J3, PIN D
TO J3, PIN 27	27	E	B
TO J3, PIN 28	28	F	A
TO J3, PIN 29	29	H	TO J3, PIN H
TO J3, PIN 30	30	J	TO J3, PIN J
TO J3, PIN 31	31	K	TO J3, PIN K
TO J3, PIN 32	32	L	TO J3, PIN L
TO J3, PIN 33	33	M	TO J3, PIN M
TO J3, PIN 34	34	N	TO J3, PIN N
TO J3, PIN 35	35	P	TO J3, PIN P
TO J3, PIN 36	36	R	TO J3, PIN R
TO J3, PIN 37	37	S	TO J3, PIN S
GND	38	T	GND
TO J3, PIN 39	39	U	TO J3, PIN U
TO J3, PIN 40	40	V	TO J3, PIN V
TO J3, PIN 41	41	W	TO J3, PIN W
TO J3, PIN 42	42	X	TO J3, PIN X
TO J3, PIN 43	43	Y	TO J3, PIN Y
TO J3, PIN 44	44	Z	TO J3, PIN Z
TO J3, PIN 45	45	AA	TO J3, PIN AA
TO J3, PIN 46	46	BB	TO J3, PIN BB
TO J3, PIN 47	47	CC	TO J3, PIN CC
VDD (+12)	48	DD	VDD (+12)
Vcc (+5)	49	EE	Vcc (+5)
GND	50	FF	GND

MEMORY 2
J3

SIGNAL	PIN	PIH	SIGNAL
GND	1	A	GND
Vcc (+5)	2	B	Vcc (+5)
VDD (+12)	3	C	VDD (+12)
VBB (-5)	4	D	VEE (-12)
SELECT OUT 3	5	E	SELECT IN 3
BUS-0	6	F	ACK
BUS-1	7	H	WRITE BYTE
BUS-2	8	J	MRST
BUS-3	9	K	WRITE
BUS-4	10	L	PARITY 0
BUS-5	11	M	CLOCK
BUS-6	12	N	PARITY F
GND	13	P	GND
BUS-7	14	R	READ
BUS-8	15	S	INT LEVEL 0
BUS-9	16	T	INT LEVEL 1
BUS-A	17	U	INT LEVEL 2
BUS-B	18	V	BNK 0
BUS-C	19	W	BNK 1
BUS-D	20	X	BNK 2
BUS-E	21	Y	BNK 3
BUS-F	22	Z	T0
CLOCK 2	23	A	PARITY ERROR
TV 70 RST	24	B	SPARE
GND	25	C	GND
TO J2, PIN 26	26	D	TO J2, PIN D
TO J2, PIN 27	27	E	B
TO J2, PIN 28	28	F	A
TO J2, PIN 29	29	H	TO J2, PIN H
TO J2, PIN 30	30	J	TO J2, PIN J
TO J2, PIN 31	31	K	TO J2, PIN K
TO J2, PIN 32	32	L	TO J2, PIN L
TO J2, PIN 33	33	M	TO J2, PIN M
TO J2, PIN 34	34	N	TO J2, PIN N
TO J2, PIN 35	35	P	TO J2, PIN P
TO J2, PIN 36	36	R	TO J2, PIN R
TO J2, PIN 37	37	S	TO J2, PIN S
GND	38	T	GND
TO J2, PIN 39	39	U	TO J2, PIN U
TO J2, PIN 40	40	V	TO J2, PIN V
TO J2, PIN 41	41	W	TO J2, PIN W
TO J2, PIN 42	42	X	TO J2, PIN X
TO J2, PIN 43	43	Y	TO J2, PIN Y
TO J2, PIN 44	44	Z	TO J2, PIN Z
TO J2, PIN 45	45	AA	TO J2, PIN AA
TO J2, PIN 46	46	BB	TO J2, PIN BB
TO J2, PIN 47	47	CC	TO J2, PIN CC
VDD (+12)	48	DD	VDD (+12)
Vcc (+5)	49	EE	Vcc (+5)
GND	50	FF	GND

J4

PIN	SIGNAL
1	GND
2	CLK 04
3	GND
4	SEL
5	GND
6	C DAV
7	GND
8	ENA IN
9	GND
10	EN IV 70
11	GND
12	CRSP
13	GND
14	TV 70 CLR
15	GND
16	OP22
17	GND
18	ENA OUT
19	GND
20	OP21
21	GND
22	INT
23	GND
24	OP20
25	GND
26	CDB23
27	GND
28	CDB22
29	CDB1
30	CDB21
31	CDB0
32	CDB20
33	CDB3
34	CDB18
35	CDB2
36	CDB19
37	CDB5
38	CDB16
39	CDB4
40	CDB17
41	CDB7
42	CDB14
43	CDB6
44	CDB15
45	CDB9
46	CDB12
47	CDB8
48	CDB13
49	CDB11
50	CDB10

TV 70 INTERFACE CD
J5

SIGNAL	PIN	PIH	SIGNAL
GND	1	A	GND
Vcc (+5)	2	B	Vcc (+5)
VDD (+12)	3	C	VDD (+12)
VBB (-5)	4	D	VEE (-12)
SELECT OUT 4	5	E	SELECT IN 4
BUS-0	6	F	ACK
BUS-1	7	H	WRITE BYTE
BUS-2	8	J	MRST
BUS-3	9	K	WRITE
BUS-4	10	L	PARITY 0
BUS-5	11	M	-CLOCK
BUS-6	12	N	PARITY F
GND	13	P	GND
BUS-7	14	R	READ
BUS-8	15	S	INT LEVEL 0
BUS-9	16	T	INT LEVEL 1
BUS-A	17	U	INT LEVEL 2
BUS-B	18	V	BNK 0
BUS-C	19	W	BNK 1
BUS-D	20	X	BNK 2
BUS-E	21	Y	BNK 3
BUS-F	22	Z	T0
CLOCK 2	23	A	PARITY ERROR
TV 70 RST	24	B	SPARE
GND	25	C	GND
CDB0	26	D	CDB1
CDB2	27	E	CDB3
CDB4	28	F	CDB5
CDB6	29	H	CDB7
CDB8	30	J	CDB9
CDB10	31	K	CDB11
CDB12	32	L	CDB13
CDB14	33	M	CDB15
CDB16	34	N	CDB17
CDB18	35	P	CDB19
CDB20	36	R	CDB21
CDB22	37	S	CDB23
GND	38	T	GND
OP20	39	U	INT
OP21	40	V	ENA OUT
OP22	41	W	TV 70 CLR
CRSP	42	X	EN IV 70
ENA IN	43	Y	C DAV
SEL	44	Z	CLK 04
GND	45	AA	GND
GND	46	BB	GND
GND	47	CC	GND
VDD (+12)	48	DD	VDD (+12)
Vcc (+5)	49	EE	Vcc (+5)
GND	50	FF	GND

- NOTES: UNLESS OTHERWISE SPECIFIED
- ALL RESISTOR VALUES ARE IN OHMS, 1/4W, 5%.
 - SIGNALS ON J8 AND J10 ARE CONNECTED TO J9 AND J11 RESPECTIVELY.
 - J4 AND J6 ARE CONNECTORS FOR SIGNALS TO IOP DRIVER/RECEIVER, J3, 10, 12, 13, 14, ARE PRESENTLY NOT USED.
 - J20 JUMPERS TO HEADER BOARD:
 - (A) SEL IN 1 (PIN #3) TO SEL OUT 7 (PIN # 10)
 - (B) SEL IN 7 (PIN #7) TO SEL OUT 4 (PIN #13)

90057092-07 D

RM

ITEM NO.	QTY	PART NUMBER	REF DES	DESCRIPTION
				FOUR-PHASE SYSTEMS, INC. 0
				NP80 BACKPLANE ASSEMBLY
				D 90057092-07 D
				SHEET 1 OF 4 REV.

REVISIONS				
ZONE	BY	DESCRIPTION	DATE	APPROVAL

8261 CONTROLLER

J6

PIN	SIGNAL
1	GND
2	READ CLOCK
3	GND
4	WRITE CLOCK
5	GND
6	WRITE DATA
7	GND
8	READ DATA
9	GND
10	SECTOR A
11	GND
12	INDEX
13	GND
14	SEEK INT
15	GND
16	IR
17	UNIT SELECT 2 ³
18	UNIT SELECT 2 ²
19	UNIT SELECT 2 ¹
20	UNIT SELECT 2 ⁰
21	UNIT SELECT
22	TAG 1
23	TAG 2
24	TAG 3
25	BIT 0
26	BIT 1
27	BIT 2
28	BIT 3
29	BIT 4
30	BIT 5
31	BIT 6
32	BIT 7
33	BIT 8
34	BIT 9
35	BIT A
36	NO RESPONSE
37	SEEK ERROR
38	FAULT
39	READY
40	STATUS TO BUS
41	TO J7, PIN H
42	TO J7, PIN 33
43	TO J7, PIN 29
44	TO J7, PIN R
45	TO J7, PIN J
46	TO J7, PIN 32
47	TO J7, PIN 30
48	TO J7, PIN L
49	TO J7, PIN K
50	TO J7, PIN 31

J7

SIGNAL	PIN	PIN	SIGNAL
GND	1	A	GND
Vcc (+5)	2	B	Vcc (+5)
VDD (+12)	3	C	VDD (+12)
VBB (-5)	4	D	VEE (-12)
SELECT OUT 5	5	E	SELECT IN 5
BUS 0	6	F	ACK
BUS 1	7	H	WRITE BYTE
BUS 2	8	J	MRST
BUS 3	9	K	WRITE
BUS 4	10	L	PARITY 0
BUS 5	11	M	CLOCK
BUS 6	12	N	PARITY F
GND	13	P	GND
BUS 7	14	R	READ
BUS 8	15	S	INT LEVEL 0
BUS 9	16	T	INT LEVEL 1
BUS A	17	U	INT LEVEL 2
BUS B	18	V	BNK 0
BUS C	19	W	BNK 1
BUS D	20	X	BNK 2
BUS E	21	Y	BNK 3
BUS F	22	Z	I/O
CLOCK 2	23	A	PARITY ERROR
IV 70 RST	24	B	SPARE
GND	25	C	GND
BIT 6	26	D	BIT 4
BIT A	27	E	BIT 8
READY	28	F	SEEK ERROR
TO J6, PIN 43	29	H	TO J6, PIN 41
TO J6, PIN 47	30	J	TO J6, PIN 45
TO J6, PIN 50	31	K	TO J6, PIN 49
TO J6, PIN 46	32	L	TO J6, PIN 48
TO J6, PIN 42	33	M	TO J6, PIN 44
FAULT	34	N	STATUS TO BUS
BIT 9	35	P	NO RESPONSE
BIT 7	36	R	BIT 5
BIT 3	37	S	BIT 1
GND	38	T	GND
TAG 3	39	U	TAG 1
UNIT SELECT 2 ⁰	40	V	UNIT SELECT 2 ²
IR	41	W	SEEK INT
INDEX	42	X	SECTOR A
READ DATA	43	Y	WRITE DATA
WRITE CLOCK	44	Z	READ CLOCK
UNIT SELECT 2 ¹	45	AA	UNIT SELECT 2 ³
TAG 2	46	BB	UNIT SELECT
BIT 2	47	CC	BIT 0
VDD (+12)	48	DD	VDD (+12)
Vcc (+5)	49	EE	Vcc (+5)
GND	50	FF	GND

J8

PIN	SIGNAL
1	GND
2	TO J9, PIN Z
3	GND
4	TO J9, PIN 44
5	GND
6	TO J9, PIN Y
7	GND
8	TO J9, PIN 43
9	GND
10	TO J9, PIN X
11	GND
12	TO J9, PIN 42
13	GND
14	TO J9, PIN W
15	GND
16	TO J9, PIN 41
17	TO J9, PIN AA
18	TO J9, PIN V
19	TO J9, PIN 45
20	TO J9, PIN 40
21	TO J9, PIN BB
22	TO J9, PIN U
23	TO J9, PIN 46
24	TO J9, PIN 39
25	TO J9, PIN CC
26	TO J9, PIN S
27	TO J9, PIN 47
28	TO J9, PIN 37
29	TO J9, PIN D
30	TO J9, PIN R
31	TO J9, PIN 26
32	TO J9, PIN 36
33	TO J9, PIN E
34	TO J9, PIN 35
35	TO J9, PIN 27
36	TO J9, PIN P
37	TO J9, PIN F
38	TO J9, PIN 34
39	TO J9, PIN 28
40	TO J9, PIN N
41	TO J9, PIN H
42	TO J9, PIN 33
43	TO J9, PIN 29
44	TO J9, PIN M
45	TO J9, PIN J
46	TO J9, PIN 32
47	TO J9, PIN 30
48	TO J9, PIN L
49	TO J9, PIN K
50	TO J9, PIN 31

J9

SIGNAL	PIN	PIN	SIGNAL
GND	1	A	GND
Vcc (+5)	2	B	Vcc (+5)
VDD (+12)	3	C	VDD (+12)
VBB (-5)	4	D	VEE (-12)
SELECT OUT 6	5	E	SELECT IN 6
BUS 0	6	F	ACK
BUS 1	7	H	WRITE BYTE
BUS 2	8	J	MRST
BUS 3	9	K	WRITE
BUS 4	10	L	PARITY 0
BUS 5	11	M	CLOCK
BUS 6	12	N	PARITY F
GND	13	P	GND
BUS 7	14	R	READ
BUS 8	15	S	INT LEVEL 0
BUS 9	16	T	INT LEVEL 1
BUS A	17	U	INT LEVEL 2
BUS B	18	V	BNK 0
BUS C	19	W	BNK 1
BUS D	20	X	BNK 2
BUS E	21	Y	BNK 3
BUS F	22	Z	I/O
CLOCK 2	23	A	PARITY ERROR
IV 70 RST	24	B	SPARE
GND	25	C	GND
TO J8, PIN 31	26	D	TO J8, PIN 29
TO J8, PIN 35	27	E	TO J8, PIN 33
TO J8, PIN 39	28	F	TO J8, PIN 37
TO J8, PIN 43	29	H	TO J8, PIN 41
TO J8, PIN 47	30	J	TO J8, PIN 45
TO J8, PIN 50	31	K	TO J8, PIN 49
TO J8, PIN 46	32	L	TO J8, PIN 48
TO J8, PIN 42	33	M	TO J8, PIN 44
TO J8, PIN 38	34	N	TO J8, PIN 40
TO J8, PIN 34	35	P	TO J8, PIN 36
TO J8, PIN 32	36	R	TO J8, PIN 30
TO J8, PIN 28	37	S	TO J8, PIN 26
GND	38	T	GND
TO J8, PIN 24	39	U	TO J8, PIN 22
TO J8, PIN 20	40	V	TO J8, PIN 18
TO J8, PIN 16	41	W	TO J8, PIN 14
TO J8, PIN 12	42	X	TO J8, PIN 10
TO J8, PIN 8	43	Y	TO J8, PIN 6
TO J8, PIN 4	44	Z	TO J8, PIN 2
TO J8, PIN 19	45	AA	TO J8, PIN 17
TO J8, PIN 23	46	BB	TO J8, PIN 21
TO J8, PIN 27	47	CC	TO J8, PIN 25
VDD (+12)	48	DD	VDD (+12)
Vcc (+5)	49	EE	Vcc (+5)
GND	50	FF	GND

J10

PIN	SIGNAL
1	GND
2	TO J11, PIN Z
3	GND
4	TO J11, PIN 44
5	GND
6	TO J11, PIN Y
7	GND
8	TO J11, PIN 43
9	GND
10	TO J11, PIN X
11	GND
12	TO J11, PIN 42
13	GND
14	TO J11, PIN W
15	GND
16	TO J11, PIN 41
17	TO J11, PIN AA
18	TO J11, PIN V
19	TO J11, PIN 45
20	TO J11, PIN 40
21	TO J11, PIN BB
22	TO J11, PIN U
23	TO J11, PIN 46
24	TO J11, PIN 39
25	TO J11, PIN CC
26	TO J11, PIN S
27	TO J11, PIN 47
28	TO J11, PIN 37
29	TO J11, PIN D
30	TO J11, PIN R
31	TO J11, PIN 26
32	TO J11, PIN 36
33	TO J11, PIN E
34	TO J11, PIN 35
35	TO J11, PIN 27
36	TO J11, PIN P
37	TO J11, PIN F
38	TO J11, PIN 34
39	TO J11, PIN 28
40	TO J11, PIN N
41	TO J11, PIN H
42	TO J11, PIN 33
43	TO J11, PIN 29
44	TO J11, PIN M
45	TO J11, PIN J
46	TO J11, PIN 32
47	TO J11, PIN 30
48	TO J11, PIN L
49	TO J11, PIN K
50	TO J11, PIN 31

J11

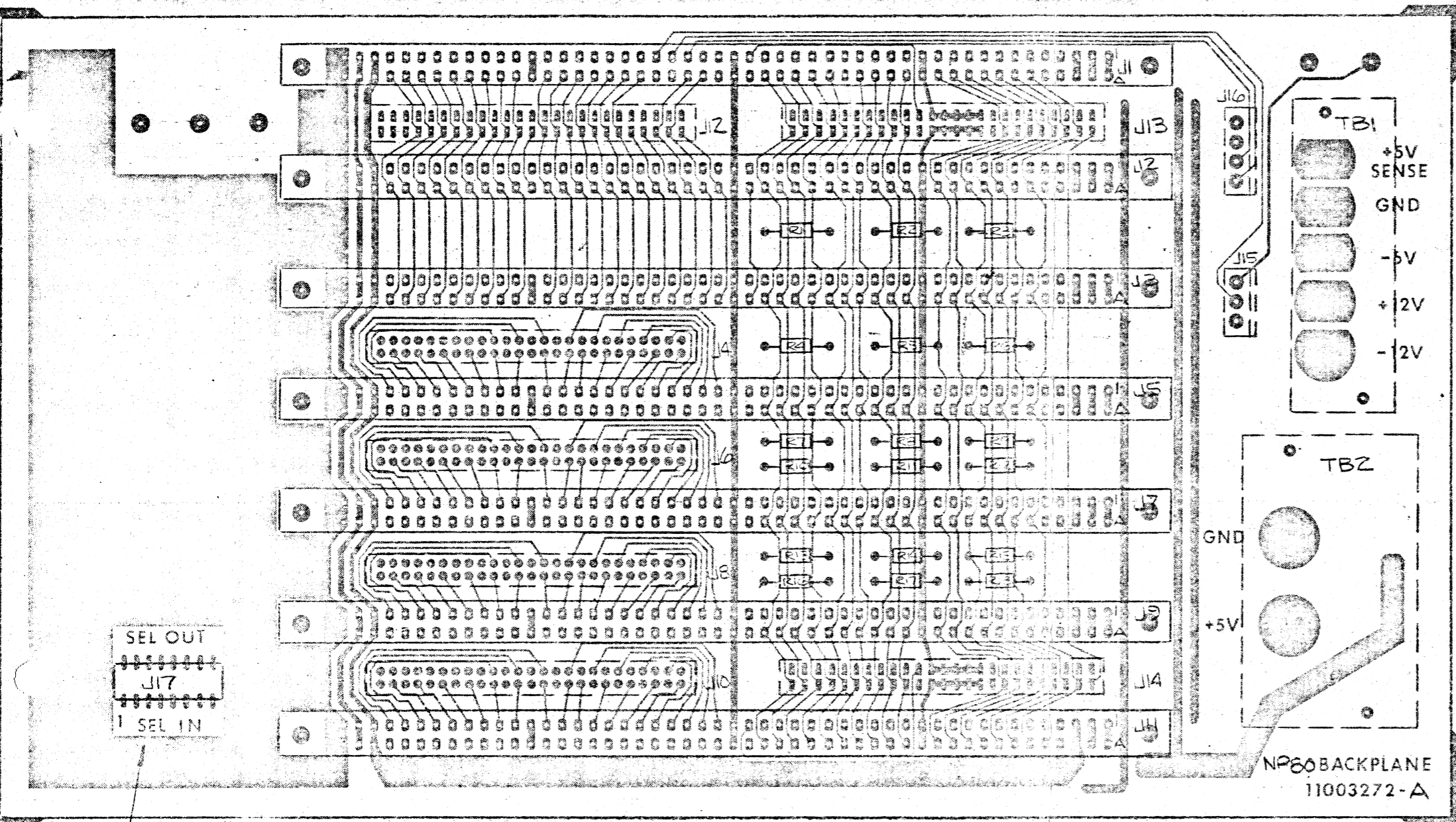
SIGNAL	PIN	PIN	SIGNAL
GND	1	A	GND
Vcc (+5)	2	B	Vcc (+5)
VDD (+12)	3	C	VDD (+12)
VBB (-5)	4	D	VEE (-12)
SELECT OUT 7	5	E	SELECT IN 7
BUS 0	6	F	ACK
BUS 1	7	H	WRITE BYTE
BUS 2	8	J	MRST
BUS 3	9	K	WRITE
BUS 4	10	L	PARITY 0
BUS 5	11	M	CLOCK
BUS 6	12	N	PARITY F
GND	13	P	GND
BUS 7	14	R	READ
BUS 8	15	S	INT LEVEL 0
BUS 9	16	T	INT LEVEL 1
BUS A	17	U	INT LEVEL 2
BUS B	18	V	BNK 0
BUS C	19	W	BNK 1
BUS D	20	X	BNK 2
BUS E	21	Y	BNK 3
BUS F	22	Z	I/O
CLOCK 2	23	A	PARITY ERROR
IV 70 RST	24	B	SPARE
GND	25	C	GND
TO J10, PIN 31	26	D	TO J10, PIN 29
TO J10, PIN 35	27	E	TO J10, PIN 33
TO J10, PIN 39	28	F	TO J10, PIN 37
TO J10, PIN 43	29	H	TO J10, PIN 41
TO J10, PIN 47	30	J	TO J10, PIN 45
TO J10, PIN 50	31	K	TO J10, PIN 49
TO J10, PIN 46	32	L	TO J10, PIN 48
TO J10, PIN 42	33	M	TO J10, PIN 44
TO J10, PIN 38	34	N	TO J10, PIN 40
TO J10, PIN 34	35	P	TO J10, PIN 36
TO J10, PIN 32	36	R	TO J10, PIN 30
TO J10, PIN 28	37	S	TO J10, PIN 26
GND	38	T	GND
TO J10, PIN 24	39	U	TO J10, PIN 22
TO J10, PIN 20	40	V	TO J10, PIN 18
TO J10, PIN 16	41	W	TO J10, PIN 14
TO J10, PIN 12	42	X	TO J10, PIN 10
TO J10, PIN 8	43	Y	TO J10, PIN 6
TO J10, PIN 4	44	Z	TO J10, PIN 2
TO J10, PIN 19	45	AA	TO J10, PIN 17
TO J10, PIN 23	46	BB	TO J10, PIN 21
TO J10, PIN 27	47	CC	TO J10, PIN 25
VDD (+12)	48	DD	VDD (+12)
Vcc (+5)	49	EE	Vcc (+5)
GND	50	FF	GND

90057092-07 D

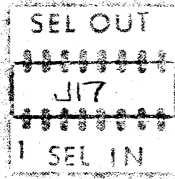
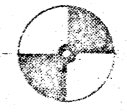
ITEM NO.	QTY	PART NUMBER	REF DES.	DESCRIPTION

MATERIAL:
 WEIGHT:
 PARTS:
 UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES TOLERANCE:
 DECIMAL 3X.0.005 FRACTIONAL 3/16.005 ANGULAR 2.0

FOUR-PHASE SYSTEMS INC. ©
 NP80 BACKPLANE ASSEMBLY
 D 90057092-07 D
 SHEET 2 OF 4 REV.




REDUCE TO 15.500 ± .005



SEE NOTE 4 FOR JUMPER INSTRUCTION

COMPONENT SIDE

DRAWN RICK CLAVÉJO	DATE 2-2-76	 FOUR-PHASE SYSTEMS, INC. CUPERTINO, CALIFORNIA	
CHECKED J LYBERG	2-2-76		
ENGINEER <i>[Signature]</i>	2-2-76	NP80 BACKPLANE ASSEMBLY	
MFG <i>[Signature]</i>	2-11-76	90057092-07	D
RELEASED <i>[Signature]</i>	2-11-76	SHEET 4 OF 4	REV