

1,2,3,4,5

serchip 2.00

#5 ... #6 - C & A fubar everything else good

#7 C & A fubar, everything else good

47 at 116

65 at 116

~~LSB at 111~~

~~busy T at 109~~

~~TRN at 142~~

MBN at 161

~~busy ↓ at 140~~

~~addr to 0x10 at 143~~

~~to 0x13 at 162~~

~~starting at 145 11101 on B~~

~~134 all 1s on A~~

~~at 127 1-1 on C~~

#7 A & C?

#6 A & C??

#3??

#6 data ...
??
TRN, MBN, SIB good
LSB

ZComp -1464
MBN FWZ=10

LSB at 111

busy T at 109

a 1 on C at 127

all 1s on A bits at 134

TRN at 142

busy ↓ at 140

addr to 0x10 at 143

11101 on B start at 145

MBN at 161

addr to 0x13 at 162 (last ↓ at 139)

basic test

Verbal (got busy 2 before LSB

0 0
0 1
0 1
1 1
LSB SIB

serchip 1.0 - all good at 10MHz - #7 exhaustively checked

serchip 2.00 - 1,2,4,5,8 good at 10MHz

3,6,7 problem



4



module "TrMbr"

in: E<0:48¹⁵>HEP2
D22HSP2
D31HSP2
<A,B,C,I>TOLSP1
PORH

out: SRBHSP1
TRRHSP1
MBRHSP1
LSBHSP1

clocks: Ph1, LoadHPh1, SletH1
SidPh1, ShiftPh1
ShiftLPh1
Ph2, PWordHPh2
IWordHPh2

module "ITokSh"

in: E<0:48>HEP2
out: ITOLSP1
clocks: Ph1, LoadHPh1, SletH1, SidPh1
Ph2, IWordHPh2

module "decoder"

in: D<23:30>HSP1
DNA<23:26>HSP1
PWord<H,L>SP1

out: E<0:48>HEP2
clocks: Ph1, Ph2

39

400

-3231-432
-3051-397

U, 24-375 600FF

1954

1954
1954
1954
1954

1954
1954
1954
1954

1954
1954
1954
1954

1954
1954
1954
1954

1954
1954

no flex

ph2 - ph2

y 17658

126, 2959

ph2 - ph2

y 17702

126, 3144

bidir

85, 2977

73, 3018

66, 3030

66, 3041

66, 3055 66, 3064

3080, 3085, 3097

85, 3144, 3200, 3216, 2913, 2921

not vHot (85, 3176, 3184, 2937, 2945)

node don't drive anything

1657, 2455 pullup on SB04, ok!

175, 871 - unused INI output

~~bidirectional y = + word ph2 865, 2219~~

x, y

x, y 3

7

138

131-2, 8

131-2
144
146

1 bex

2 plain

3 c

4 bx

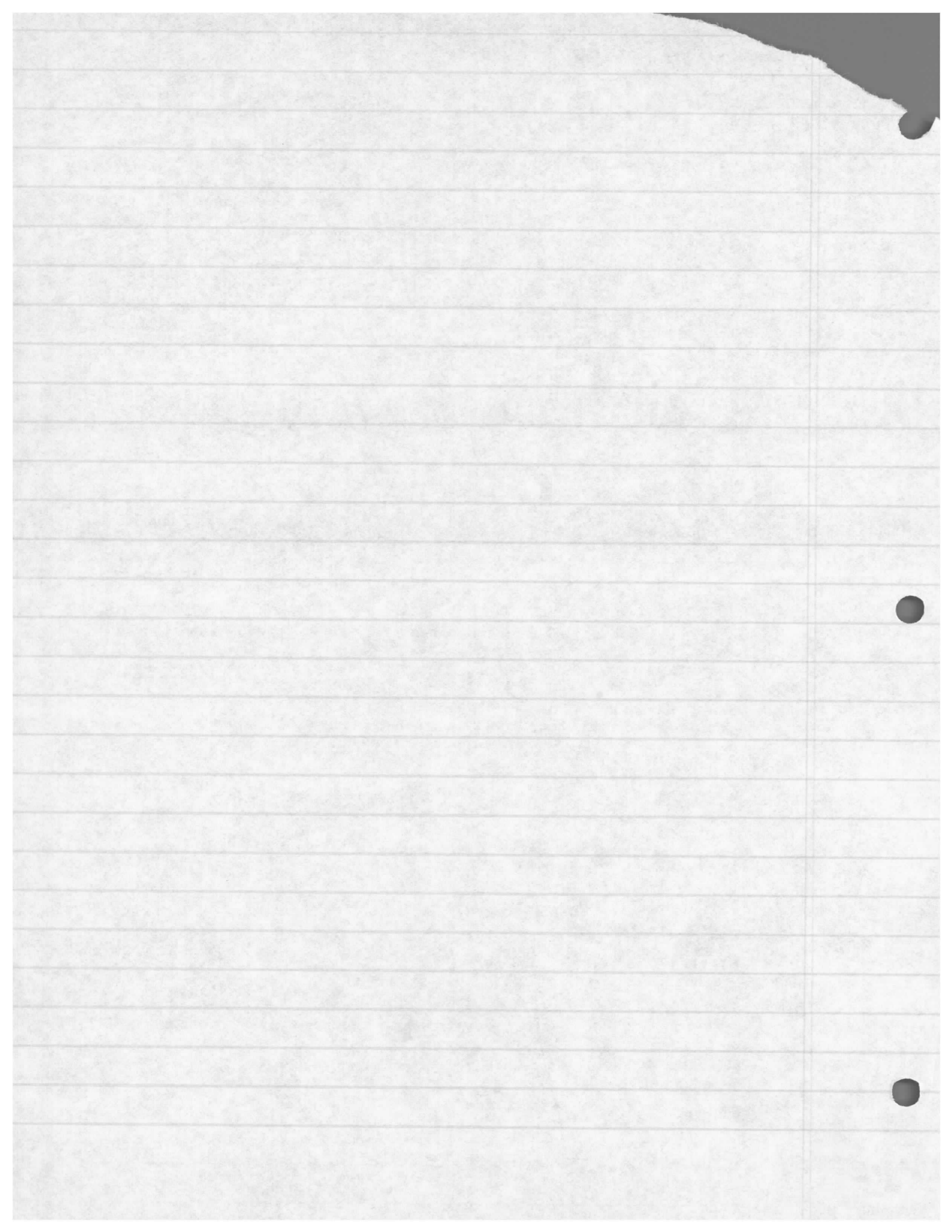
5 x

cells with both drivers

quad ph1	complete =
word ph2	?
decc ph2	
decc lox	

n, sp n sp2 - sp 2 pin sp #

bidirectionals:
for XNOR gates in
sepcom
(use CR: A# on both)



plots, DMurray, wbst@XEROX
"Dan"

Connections to Serializata Chg Nov. 6, 1984

<u>inputs</u> (45)	<u>outputs</u> (7)	<u>other</u> (6)
D ϕ - D31	SubHSP1	substrate
DNA 23-26	TrvHSP1	GND
AwordLLPN	MbHSP1	Vdd
BwordLLPN	AcofHSP1	clock
CwordLLPN	BcofHSP1	Vhot
IwordLLPN	CcofHSP1	CCLKGND
PwordLLPN	LSPHSP1	
LoadLLPN		
ShiftLLPN		
PORL		
RBIT		

For complete IGC:

<u>outputs</u>	<u>interface</u>	<u>other</u>
A ϕ - A6	D ϕ - D31	substrate
WRT ϕ - 1	T ϕ - T2	GND
TrvStop	WrEnLLPN	Vdd
ALU ϕ - 8	PhiH	
LdEn	1-4	
<A,B,C>cofH	D ϕ - D31	
LSP		
DoneHLLPN		
BusyHLLPF		



Hot Clocks & Clock Rails for Pxl Serializer Chip

ABCZ Token Shifters

- Ⓐ WordPh2 - all on left
- Ⓑ Ph1 - hooked on right
- Ⓒ LeadPh1 - all on right
- Ⓓ SlrPh1 - " -330
- Ⓔ SlDPh1 - " -300
- Ⓕ Ph2 - hooked on left

top stop, bot stop

Ph1 - hooked on right

mbin, etc

- Pword Ph2 - all on left
- Ph1 - hooked on right
- Lead Ph1 - }
- Slr Ph1 - }
- Slc Ph1 - } all on right
- Slr Ph1 - }
- SlD Ph1 - }
- Ph2 - all on left (done w/qualifier for "return" signal)

decoder

- Ph1 - all on right (use qualifier for "return")
- 13x Ph2s - snubbed on right, yanked on left

ACOFHSPR ADJ

INTERNAL

D3
SRB
TRR

AWORDLLPR
BCOFHSPR
BWORDLLPR
CCOFHSPR
CLOCK
CWORDLLPR
D0HLPR
D10HLPR
D11HLPR
D12HLPR
D13HLPR
D14HLPR
D15HLPR
D16HLPR
D17HLPR
D18HLPR
D19HLPR
D1HLPR
D20HLPR
D21HLPR
D22HLPR
D23HLPR
D24HLPR
D25HLPR
D26HLPR
D27HLPR
D28HLPR
D29HLPR
D2HLPR
D30HLPR
D31HLPR
D3HLPR
D4HLPR
D5HLPR
D6HLPR
D7HLPR
D8HLPR
D9HLPR
DNA23HLPR
DNA24HLPR
DNA25HLPR
DNA26HLPR
GND
IWORDLLPR
LOADLLPR
LRW0
LRW1
LRW2
LSBHSPR
MBRHSPR
PH1
PH2
PORLLPR
PWORDLLPR
RBITHLPR
SHIFTLPR
SRBHSPR
SUBSTRATE
TRRHSPR
Vdd
Vdd

ABDHSP1
ABSYHSP1
ACOF
ACOF
ASHOHSP1
ATOHSP1
AWORDHPH2x2
AWORDLSP1
BBDHSP1
BBSYHSP1
BCOF
BCOF
BSHOHSP1
BTOHSP1
BUSYHSP1
BUSYHSP1
BWORDHPH2x2
BWORDLSP1
CBDHSP1
CBSYHSP1
CCOF
CCOF
CSHOHSP1
CTOHSP1
CVIHSP1
CVILSP1x3
CWORDHPH2x2
CWORDLSP1
D0
D1
D10
D11
D12
D13
D14
D15
D16
D17
D18
D19
D2
D20
D21
D22
D22
D22HSP2
D23
D23HPH2
D23LPH2
D24
D24HPH2
D24LPH2
D25
D25HPH2
D25LPH2
D26
D26HPH2
D26LPH2
D27
D27HPH2
D27LPH2
D28
D28HPH2
D28LPH2
D29

D30
D31
D31
D31HSP2
D4
D5
D6
D7
D8
D9
DI22LSP1
DI31LSP1
DINRPH2
DNA23
DNA24
DNA25
DNA26
E28
E29
E30
E31
E32
E33
E34
E35
E36
E37
E38
E39
E40
E41
E42
E43
E44
E45
E46
E47
E48
IBSYHSP1
IBSYHSP2
ITOHSP1
IWORDHPH2x2
IWORDLSP1
LOAD
LOADHPH1x10
LSB
LSBHSP1
LSBLSP2
MBILSP1
MBILSP1
MBR
ONEHPH1
ONEHPH2
PH1RTNL
PORH
PWORDHPH2
PWORDHSP1
PWORDLSP1
RBIT
SHIFT
SHIFTBAR
SHIFTHPH1x4
SHIFTLPH1x4
SLDPH1x10
SLDPH1x10

(Labels for
Jevchip1)